



A MITEL
PRODUCT
GUIDE

Unify OpenScape 4000 Assistant/Manager

Collecting Agent / HiPath COL

Administrator Documentation

08/2024

Notices

The information contained in this document is believed to be accurate in all respects but is not warranted by Mitel Europe Limited. The information is subject to change without notice and should not be construed in any way as a commitment by Mitel or any of its affiliates or subsidiaries. Mitel and its affiliates and subsidiaries assume no responsibility for any errors or omissions in this document. Revisions of this document or new editions of it may be issued to incorporate such changes. No part of this document can be reproduced or transmitted in any form or by any means - electronic or mechanical - for any purpose without written permission from Mitel Networks Corporation.

Trademarks

The trademarks, service marks, logos, and graphics (collectively “Trademarks”) appearing on Mitel’s Internet sites or in its publications are registered and unregistered trademarks of Mitel Networks Corporation (MNC) or its subsidiaries (collectively “Mitel”), Unify Software and Solutions GmbH & Co. KG or its affiliates (collectively “Unify”) or others. Use of the Trademarks is prohibited without the express consent from Mitel and/or Unify. Please contact our legal department at iplegal@mitel.com for additional information. For a list of the worldwide Mitel and Unify registered trademarks, please refer to the website: <http://www.mitel.com/trademarks>.

© Copyright 2024, Mitel Networks Corporation

All rights reserved

Contents

1 PM/COL Installation Instructions - Getting Started.....	7
1.1 Important Hints Before Starting -- Overview.....	7
1.1.1 OpenScape 4000 Manager - Performance Management (PM).....	7
1.1.2 Performance Management (PM) - Connection Types.....	8
1.1.3 Call Charge Data Registration.....	8
1.1.4 Data Volume.....	9
1.1.5 Collecting Agent (COL).....	10
1.1.6 Restrictions.....	11
1.1.7 Error Messages.....	11
1.1.8 Collecting Agent (COL) - Important Notes.....	12
1.1.9 Security Notes.....	12
1.2 Installation Hints for Performance Management (PM).....	13
1.2.1 Installation Prerequisites.....	13
1.2.2 OpenScape 4000 System Installation - Step 1.....	14
1.2.3 OpenScape 4000 System Installation - Step 2.....	15
1.2.4 OpenScape 4000 System Installation - Step 3.....	16
1.2.5 OpenScape 4000 System Installation - Step 4.....	17
1.2.6 Installing PM on the OpenScape 4000 Manager - Step 1.....	18
1.2.7 Installing PM on the OpenScape 4000 Manager - Step 2.....	19
1.2.8 Installing PM on the OpenScape 4000 Manager - Step 3.....	20
1.2.9 Installing PM on the OpenScape 4000 Manager - Step 4.....	21
1.2.10 Installing PM on the OpenScape 4000 Manager - Step 5.....	22
1.2.11 AMO DAGR - Notes.....	22
1.2.11.1 Increased Security -- Automatic Copying of FT_INTERN_FILE.....	23
1.2.12 Transferring FTBL batch from OpenScape 4000 Manager to Client PC.....	24
1.2.13 Adapting the FTBL File.....	25
1.3 Trunk Group Measurement for Separating AM and PM Data in Collecting Agent.....	25
1.3.1 Trunk Group Measurement on OpenScape/HiPath 4000 Systems.....	26
1.3.2 AMO SELG -- Block Size Parameters.....	26
2 Collecting Agent - Overview.....	27
3 Functionality.....	28
3.1 Collecting Agent User Interface.....	28
3.2 Launching the Collecting Agent in OpenScape 4000 Assistant/Manager.....	29
3.3 Collecting Agent - Homepage.....	30
3.3.1 Menu Bar.....	31
3.3.2 Toolbar.....	32
3.3.3 Navigation Pane and Application Tree.....	33
3.3.4 Content Pane.....	34
3.3.5 Multiple Selection of Records in List View.....	35
3.3.6 Sorting of Records.....	36
3.3.7 Switching from List View to Object View by Double Click.....	37
3.4 COL Features.....	37
3.5 Controlling.....	38
3.6 Collecting Status.....	39
3.7 Output Line Status.....	41
3.8 Definition of Input Lines.....	42
3.8.1 Definition of Input Lines Using the Collecting Agent in OpenScape 4000 Assistant/Manager.....	42
3.8.1.1 Object List (System Management - OpenScape 4000 Administration).....	43
3.8.1.2 Collecting Agent tab sheet (System Management - OpenScape 4000 Administration).....	44

Contents

3.8.1.3 COL Administration sub tab.....	44
3.8.1.4 Trunk Group/CDR sub tab.....	46
3.8.1.5 Attendant Consoles sub tab.....	49
3.8.1.6 Node No. Transform sub tab.....	50
3.8.1.7 ISDN Access Codes sub tab.....	51
3.9 Input Format Editor.....	52
3.10 Pre-defined Formats for Defining CDR Input and Output Formats.....	53
3.11 Input Format Editor - Object view.....	54
3.12 Input Format Editor - Object List view.....	57
3.13 Input Format Editor - Set Default Value.....	58
3.14 Input Format Editor - Configure Input Element.....	59
3.15 Definition of Output Lines.....	60
3.15.1 Parallel Output of CDR Data on Multiple Output Devices in OpenScape 4000.....	62
3.16 Output Line Definition - Object List.....	62
3.17 Output Format Editor.....	63
3.18 Output Format Editor - Object List view.....	66
3.19 Configure Output Element.....	67
3.20 Filter Editor.....	68
3.21 Filter Editor - Object List.....	70
3.22 Filter Editor - Set Default Value.....	71
3.23 Translation Tables.....	72
3.24 Translation Table Editor, Object List view.....	73
3.25 Translation Table Editor, Object view.....	74
3.26 Translation Group Editor, Object List view.....	75
3.27 Translation Group Editor, Object view.....	76
3.28 Incorrect Records - Send Back To Input.....	78
3.29 Saved CDRs in Backup File.....	80
3.30 Files Ready for Output Lines.....	81
3.31 Options.....	81
3.31.1 Options - COL Paths tab sheet.....	82
3.31.2 Options - Settings tab sheet.....	83
3.31.3 Options - Process Controlling tab sheet.....	85
3.32 Logging.....	85
3.33 COL Logging Events.....	86
3.34 CDR Viewer.....	88
3.35 Exporting Log Reports.....	89
3.35.1 Run Report Dialog - Output Tab.....	89
3.35.2 Run Report Dialog - E-mail Tab.....	90
3.35.3 Run Report Dialog - Export Tab.....	91
3.35.4 Run Report - Status Window.....	91
3.35.5 COL Logging Events Report.....	92
4 Field and Controls Descriptions.....	94
4.1 Collecting Agent Homepage, field descriptions.....	95
4.2 Fields displayed when Controlling link is active.....	95
4.3 Collecting Status dialog, field descriptions.....	96
4.4 Output Line Status dialog, field descriptions.....	98
4.5 Input Format Editor - Object view, field descriptions.....	100
4.6 Input Format Editor - Object List view, field descriptions.....	104
4.7 Input Format Editor - Set Default Value, field descriptions.....	105
4.8 Input Format Editor - Configure Input Element, field descriptions.....	106
4.9 Output Line Definition - Object view, field descriptions.....	106
4.10 Output Line Definition - Object List view, field descriptions.....	109
4.11 Output Format Editor - Object view, field descriptions.....	110
4.12 Output Format Editor - Object List view, field descriptions.....	113
4.13 Output Format Editor - Configure Output Element, field descriptions.....	114

4.14 Filter Editor - Object view, field descriptions.....	115
4.15 Filter Editor - Object List view, field descriptions.....	117
4.16 Filter Editor - Set Default Value, field descriptions.....	118
4.17 Translation Table Editor - Object view, field descriptions.....	119
4.18 Translation Table Editor - Object List view, field descriptions.....	121
4.19 Translation Group Editor - Object view, field descriptions.....	122
4.20 Translation Group Editor - Object List view, field descriptions.....	124
4.21 Incorrect Records dialog, field descriptions.....	125
4.22 Saved CDRs in Backup File.....	126
4.23 Files Ready for Output Lines.....	127
4.24 COL Paths tab sheet, Options dialog, field descriptions.....	128
4.25 Settings tab sheet, Options dialog, field descriptions.....	129
4.26 Process Controlling tab sheet, Options dialog, field descriptions.....	132
4.27 Options dialog, Save button description.....	134
4.28 Logging dialog (log file).....	134
4.28.1 COL Logging Events dialog.....	135
4.28.2 COL Logging Events Report.....	136
4.29 CDR Viewer.....	138
4.30 Collecting Agent tab sheet in System Management.....	138
4.30.1 COL Administration sub tab.....	139
4.30.2 Trunk Group/CDR sub tab.....	144
4.30.3 Attendant Consoles sub tab.....	151
4.30.4 Node No. Transform sub tab.....	151
4.31 Fields and Controls in the Run Report Dialog.....	153
5 Step-By-Step Instructions.....	157
5.1 COL Homepage and Navigation Tree.....	157
5.2 Controlling.....	160
5.3 Collecting Status.....	161
5.4 Output Line Status.....	162
5.5 Adding a System in OpenScape 4000 Assistant/Manager System Management.....	162
5.6 System Management dialog, Object List view in COL.....	163
5.7 Input Format Editor.....	163
5.8 Input Format Editor - Set Default Value.....	165
5.9 Input Format Editor - Configure Input Element.....	166
5.10 Start/Stop PM Collecting.....	166
5.11 Format Assignment/Format Change.....	166
5.12 Output Line Definition.....	167
5.13 Output Format Editor.....	168
5.14 Output Format Editor - Configure Output Element.....	170
5.15 Filter Editor.....	170
5.16 Filter Editor - Set Default Value.....	171
5.17 Translation Tables.....	172
5.17.1 Translation Table Editor.....	172
5.17.2 Translation Group Editor.....	175
5.18 Incorrect Records.....	178
5.19 Saved CDRs in Backup File.....	179
5.20 Files Ready for Output Lines.....	180
5.21 CDR Viewer.....	180
5.22 Options.....	181
5.23 Logging.....	182
6 Reference Material.....	184
6.1 Field Descriptions and User Actions.....	184
6.2 Elements for Defining Input and Output Formats for COL CDRs.....	214
6.2.1 Fixed Values in FTBL Elements.....	247

6.2.2 AMO Text Elements.....	257
6.3 Pre-defined Formats for Output Format Definition.....	269
6.4 Pre-defined Formats for Input Format Definition.....	310
6.5 Additional CM Elements for Defining CDR Output Formats.....	320
6.5.1 CM Elements Used for Generating History Output.....	320
6.5.2 CM Elements Used for Transforming Virtual to Physical Node Numbers.....	323
6.5.2.1 Loading the col_port and col_switch Tables.....	325
7 Configuration Examples - Data Collection.....	326
7.1 HiPath AM FTP Collecting.....	326
7.2 Call Collecting from OpenScape 4000 Manager/Assistant.....	326
7.2.1 OpenScape 4000 Manager Collecting Agent.....	327
7.2.2 Configuring OpenScape 4000 Manager Collecting Agent.....	327
7.2.3 OpenScape 4000 Manager Collecting Agent - HiPath AM.....	329
7.2.4 OpenScape 4000 Manager Collecting Agent - OpenScape 4000 Manager Exchange.....	332
7.2.4.1 Creating a Login in OpenScape 4000 Manager for HiPath AM (Customer Data).....	332
7.2.4.2 OpenScape 4000 Manager Collecting Agent - Activate Access Rights for the XIE Interface.....	333
7.2.4.3 Special Items with OpenScape 4000 Manager - XIE Interface.....	333
7.2.5 OpenScape 4000 Assistant Collecting Agent.....	334
7.2.6 Configuration of OpenScape 4000 Assistant Collecting Agent.....	335
7.2.6.1 OpenScape 4000 Assistant Collecting Agent - Setting Up Output Lines.....	335
7.2.7 OpenScape 4000 Assistant Collecting Agent - HiPath AM.....	336
7.2.8 OpenScape 4000 Assistant Collecting Agent - OpenScape 4000 Assistant Exchange.....	337
7.2.9 OpenScape 4000 Assistant Collecting Agent - Activate Access Rights for the XIE Interface.....	337
7.2.9.1 Special Items with OpenScape 4000 Assistant - XIE Interface.....	337
7.3 OpenScape 4000 Manager Collecting Agent - Configuration for AM/PM.....	337
7.3.1 How Do I Add an Additional Output Line for PM in COL, Having One Existing AM Output Line?.....	338
7.3.2 OpenScape/HiPath 4000 Node.....	338
7.4 Retrieving AM Data Manually.....	340
7.5 Deactivating the AM Input Line.....	340
7.6 Creating an Input Format for a specific Variant.....	341
7.7 Activating the AM and PM Input Lines.....	342
7.8 Setting the AM Filter for the AM Output Line.....	343
7.9 Verifying the AM Filter.....	343
7.10 Verifying the PM Filter.....	344
7.11 Enhancing the AM Filter.....	344
7.12 Activating a Measurement.....	345
7.13 AMO Text - Configuration for OpenScape 4000.....	345
8 Automatic Forwarding of Alarms to Fault Management.....	352
9 Attachments to the Installation Steps.....	353
9.1 DISPLAY-DAGR; ... DISPLAY-FBTN:TAB=TN;.....	353
9.2 Examples: B01 - B71.....	420
10 Using the Help.....	455
10.1 Layout.....	455
10.2 Overview of Key Functions.....	456
10.3 How to Use the Help.....	456
10.3.1 Open the Help Window.....	457
10.3.2 Search Within the Help.....	457
10.3.3 Printing Help Topics.....	458
10.3.4 Key Combinations in the Help.....	458
Index.....	460

1 PM/COL Installation Instructions - Getting Started

[Important Hints Before Starting -- Overview](#)

[Installation Hints for Performance Management \(PM\)](#)

1.1 Important Hints Before Starting -- Overview

[OpenScape 4000 Manager - Performance Management \(PM\)](#)

[Performance Management \(PM\) - Connection Types](#)

[Call Charge Data Registration](#)

[Data Volume](#)

[Collecting Agent \(COL\)](#)

[Restrictions](#)

[Error Messages](#)

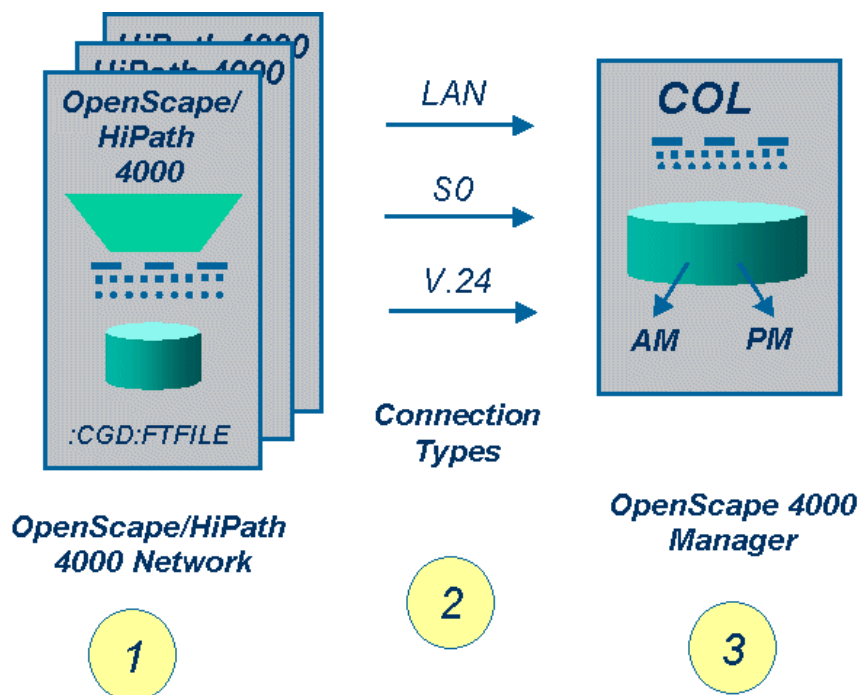
[Collecting Agent \(COL\) -- Important Notes](#)

[Security Notes](#)

1.1.1 OpenScape 4000 Manager - Performance Management (PM)

- PM is a WEB based application providing statistics on the traffic load of lines and trunk groups (PM-N), and analysis results regarding the call activity of subscribers/stations, hunt groups, attendant consoles and attendant console groups.
- PM-N (Network) replaces PM-Charts, and is operational on OpenScape 4000 systems.
- PM-E (Enhanced) replaces CTM, and is operational on OpenScape 4000 systems.
- PM in its current version is based on the evaluation of call charge data records (CDRs). To support this feature, the Call Charge Registration (incoming, outgoing) must be configured on all switches.
- The call charge data records are collected network-wide by the Collecting Agent (COL) and stored separately for AM and PM.

1.1.2 Performance Management (PM) - Connection Types



1.1.3 Call Charge Data Registration

OpenScape 4000



All types of call data (incoming, outgoing, internal) can be filtered selectively and saved in the CGD area (30 MB) of the switch hard disk in a file (FTFILE). A combined AM+PM call data record has a size of approximately 328 bytes. Depending on the traffic load and on the security buffer settings, the file (FTFILE) will have to be collected by COL at correspondingly frequent intervals.

Number of data records/day * 328 bytes -> Collecting Frequency

Example: 45,000 data records/day = 14 MB/day = 2 MB/h (calculated for an 8-hours work day).

Basic Rules for Activating PM on a Switch

Empirical Formula (similar to CDR-E): Activating PM causes a 15% reduction of the BHCA capacity, which corresponds to a 20% increase of the CPU load on running systems (e.g. 70%*1.2 = 84%).

Data throughput (flow rate): The output data throughput volume of the Call Charge Registration is approximately 16,000 CDRs per hour. If the data volume exceeds this limit, CDR data loss may occur. For calculating the threshold (limit) value, the peak load must be used.

Metering objects in PM for calculating the CDR volume: B Channels (Lines/Trunks), Subscribers/Stations, Attendant Consoles (AC), Hunt Groups, Trunk Groups (multiplied with the number of B Channels in a trunk group), Attendant Console Groups (multiplied with the number of Attendant Consoles in a group), and ADP/SWU Load.

1.1.4 Data Volume

Factors to be Used with Metering Objects

Line/B-Channel factor = 1,4

Subscriber/station factor = 3,5

Attendant Console (AC) factor = 3,7

Hunt Group factor = (1,4 * number of stations in hunt group)

AC Group factor = (3,7 * number of ACs in a group)

Trunk Group factor = 1,4

SWU/ADP Load = 6 data records per minute (no factor)

Assumptions for Number of Calls per Metering Object (sample values)

Subscriber/station - approx. 20 calls per day

AC - approx. 200 calls per day

Hunt Group - approx. 100 calls per day

Trunk Group - approx. 3000 calls per day

These sample values need to be adapted to the existing (real) values.

For ADP/SWU, a total of 8640 call charge data records is created per switch and per day (provided that metering is active).

Formula for Calculating the FTFIELD Size per Day

(number of calls for metering object <X> per day *

metering objects * factor <X>* data record length per CDR) +

(number of calls for metering object <Y> per day *

metering objects * factor <Y>* data record length per CDR) +

...

(number of calls for metering object <ADP/SWU Load> per day or time period *
data record length per CDR) +

...

= Size of FTFIELD in Byte (/1024 = KB)

NOTICE: For a switch running with a load of 80% (new value would be 80% * 1.2 = 96%, i. e. a critical value) it does not make sense to activate all trunk groups for metering.

1.1.5 Collecting Agent (COL)

Connection Types



The data transfer duration is calculated based on the size of the file to be transferred divided by the transfer rate of the respective connection:

- LAN: 10 Mbit/s
Bsp: 15 MByte / 10 Mbit/s = 12 s
- S0: 64 kbit/s
Bsp: 15 MByte / 64 kbit/s = 1920 s = 32 min
- V.24: 9600 bit/s
Bsp: 15 MByte / 9600 bit/s = 13120 s = 3,6 h

Note: Due to initialisation, connection setup or other connection-specific delays these theoretical values are not reached in practice.

OpenScape 4000 Manager



The Server Database stores all data records from all platforms. The sum of all file sizes multiplied with the number of days in the observation period adds up to the hard disk space required on the server.

Example:

15 MByte/day * 36 systems = 540 MByte/day

540 MByte/day * 30 days = 16 GByte

Attention: All CDRs are stored in the CDB. In addition to this, separate output files for AM and PM can be generated for further processing. Additional hard disk space is necessary to account for these files. Therefore, you need to give special attention to archiving/moving and deleting data, respectively.

The formula used to calculate the size of the database is a continuation of the formula used for calculating the size of the FTFILE. If an exact calculation of the FTFILE size per switch already exists then there is no need to add another factor for additional CDRs in the customer network. The main difference lies in the number of bytes per CDR. In PM this is a fixed value of approximately 350 Bytes/CDR in the Server Database.

Step 1: Determining the PM CDRs per switch

(number of calls for metering object <X> per day *

metering objects * factor <X>) +

(number of calls for metering object <Y> per day *

metering objects * factor <Y>) +
 ...
 (number of calls for metering object <ADP/SWU load> +
 ...
 = number of PM CDRs per switch

Step 2: Calculating the PM data storage requirements in the CDB

(number of PM CDRs switch <A> +
 number of PM CDRs switch +
 ... <X>) * 350 Bytes PM CDRs *
 number of days of storage in PM DB (attention: work days)
 = PM storage requirements in Bytes (/1024 = KB)

Please take into consideration the threshold value for the PM database size in the CommonDB (CDB) here. Default setting = 50% of CDB size. This value can be changed in PM.

1.1.6 Restrictions

Due to the large data volume that can be generated when activating PM metering objects, the following restrictions have to be taken into consideration:

- 1) The data throughput volume on the switch is approx. 16,000 CDRs per hour (Warning: higher throughput values may cause data loss). Attention: The value measured at peak load times is the decisive one.
- 2) The size of the CDR area is limited to approx. 30 MB (Attention: The collecting cycles need to be adjusted to the volume of data created).
- 3) In case of performance problems on the OpenScape systems please use the empirical formula for the CPU load calculation (old load% * 1.2 = new load %).
- 4) The data transfer rate depends on the communication type used (MSV1, S0). Is it possible at all to transfer the created CDRs (collecting frequency, transfer time, security buffer)?
- 5) The hard disk space capacity on the Manager is limited.
- 6) Higher load on the Manager when processing/integrating the data records.
- 7) Longer evaluation period in Performance Management due to large amounts of data.

1.1.7 Error Messages

Error situations may occur in the Collecting Agent (COL) and Performance Management (PM) applications, possibly causing data loss and damaging the entire system. If one of the following error situations occurs error messages are forwarded to the Fault Management (FM)/RSP (Remote Service Platform) application. If the customer does not have FM installed the error messages are also displayed in Logging Management):

- 1) COL: A system cannot be reached during a collecting cycle -> in FM the respective system is displayed in "RED" color - RETRY EXCEEDED.

Solution: Restart the Switch/Manager communication.

- 2) COL: If the threshold value set for the free disk space left on the /var/col partition has been reached, COL will stop collecting further call charge data since there is not enough free space available on the /var/col partition any more (default setting = 10% of free space must be left on the device) -> in FM the Manager is displayed in "RED" color - NOT ENOUGH SPACE.

Solution: Delete data on the /var/col partition.

- 3) PM: When the threshold value set for the size of the PM database is reached (default setting = 50%) in the CommonDB -> in FM the Manager is displayed in "RED" color - PM-DB FULL.

Solution: Delete/archive data from the PM CDB.

See Also

[Automatic Forwarding of Alarms to Fault Management](#)

1.1.8 Collecting Agent (COL) - Important Notes

Important Notes

- Verify the estimated traffic load on every switch from time to time, and adjust the collecting frequency, disk space requirements and archiving cycles accordingly.
- Activate PM operation sequentially, one by one, on individual switches, and keep an eye on the traffic load.
- Explain the background reason and the necessity of regular archiving to the customer. Archiving only a few essential reports in HTML format might be sufficient in some cases, thus making it unnecessary to save/store all CDRs.
- Especially with PM-E, be sure to make a meaningful selection of metering objects and metering durations.
- The CDR data from AM and PM are stored in the /var/col partition of the hard disk, provided that the default settings have not been changed.

1.1.9 Security Notes

- CDR backup or additional output line activated? -> /var/col partition must be set to a minimum of 2 GB.
- Activate automatic forwarding of error messages from the OpenScape 4000 Manager to FM, if possible.
- OpenScape alarm in case of CDR overflow activated?
- Has the size of the CGD area been verified?
- Has the number of metering objects been verified/reduced via list of metering objects?
- Load the patch that prevents the defect of the CGD area. MSC06309 + MSC06341.

1.2 Installation Hints for Performance Management (PM)

This document describes how to install Performance Management on OpenScape 4000 systems and the installation steps required for creating PM reports on OpenScape 4000 Manager and OpenScape 4000 Assistant systems, respectively.

The [Important Hints Before Starting -- Overview](#) section provides a short overview on the PM features and basic security hints.

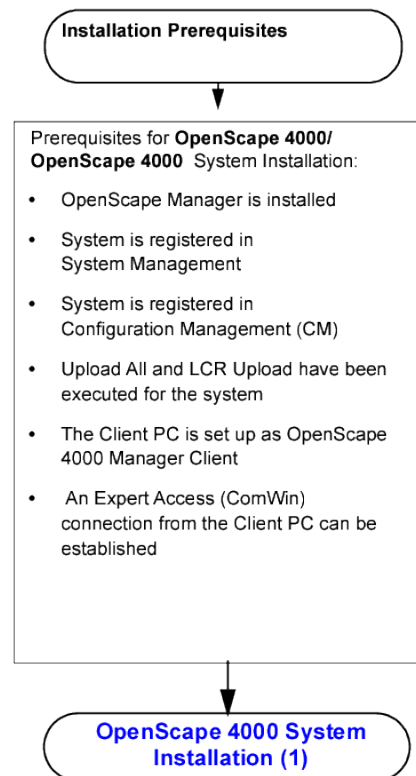
This document is structured as follows:

- 1) Flowchart for installing PM on a OpenScape 4000 system
- 2) Flowchart for installing PM on the OpenScape 4000 Assistant/Manager
- 3) Error detection hints
- 4) Cross references containing detailed information and examples referring to the flowchart contents

Steps 1 or 2, respectively, and step 3 have to be repeated for each system on which PM is to be activated.

Important Note: Before you start activating the PM metering objects on a switch you should familiarize yourself with the facts in the customer network. Please read the [Important Hints Before Starting -- Overview](#) section for this purpose.

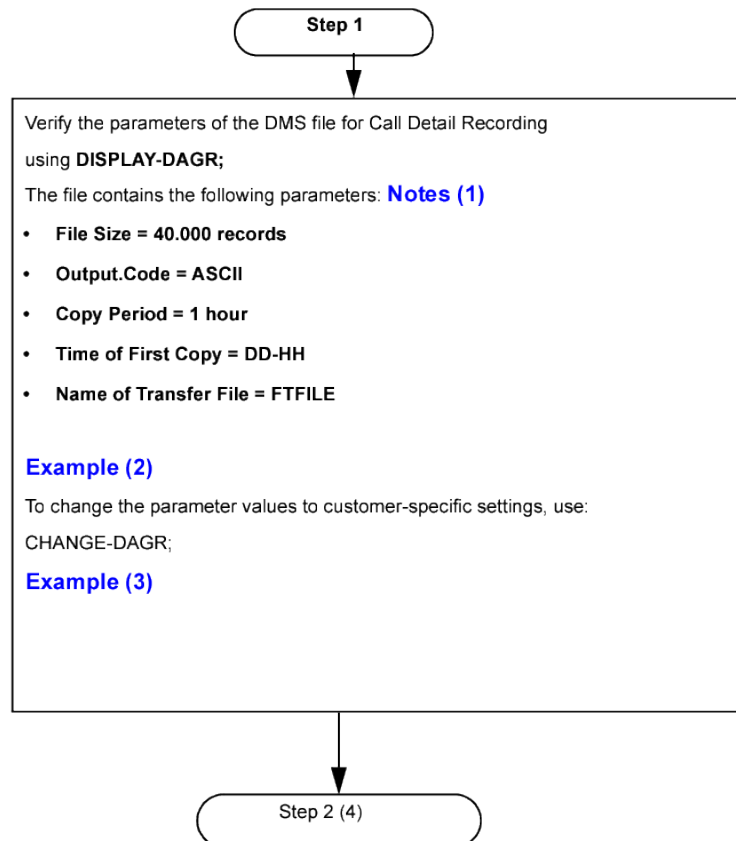
1.2.1 Installation Prerequisites



For more information please click the corresponding link below.

[OpenScape 4000 System Installation - Step 1](#) on page 14

1.2.2 OpenScape 4000 System Installation - Step 1



For more information please click the corresponding link below.

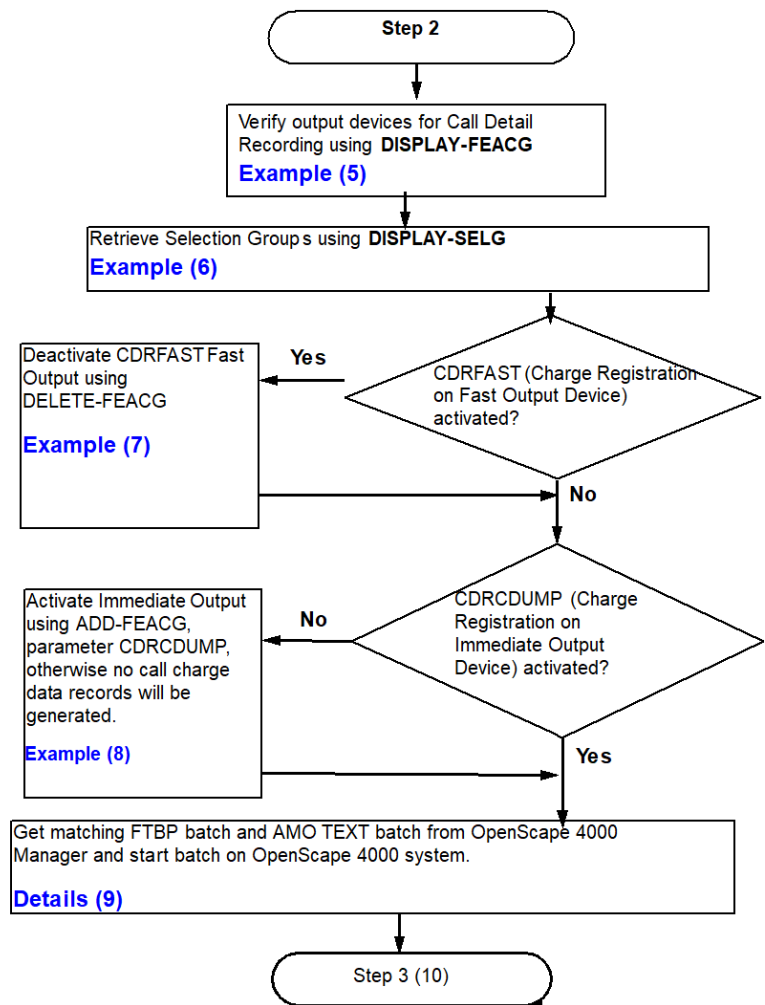
Notes (1): [AMO DAGR - Notes](#) on page 22

Example (2): [DISPLAY-DAGR](#); on page 399

Example (3): [CHANGE-DAGR:FT,40000,ASC,12-10,001,FTFILE](#); on page 355

Step 2 (4): [OpenScape 4000 System Installation - Step 2](#) on page 15

1.2.3 OpenScape 4000 System Installation - Step 2



For more information please click the corresponding link below.

Example (5): [DISPLAY-FEACG](#); on page 355

Example (6): [DISPLAY-SELG](#); on page 356

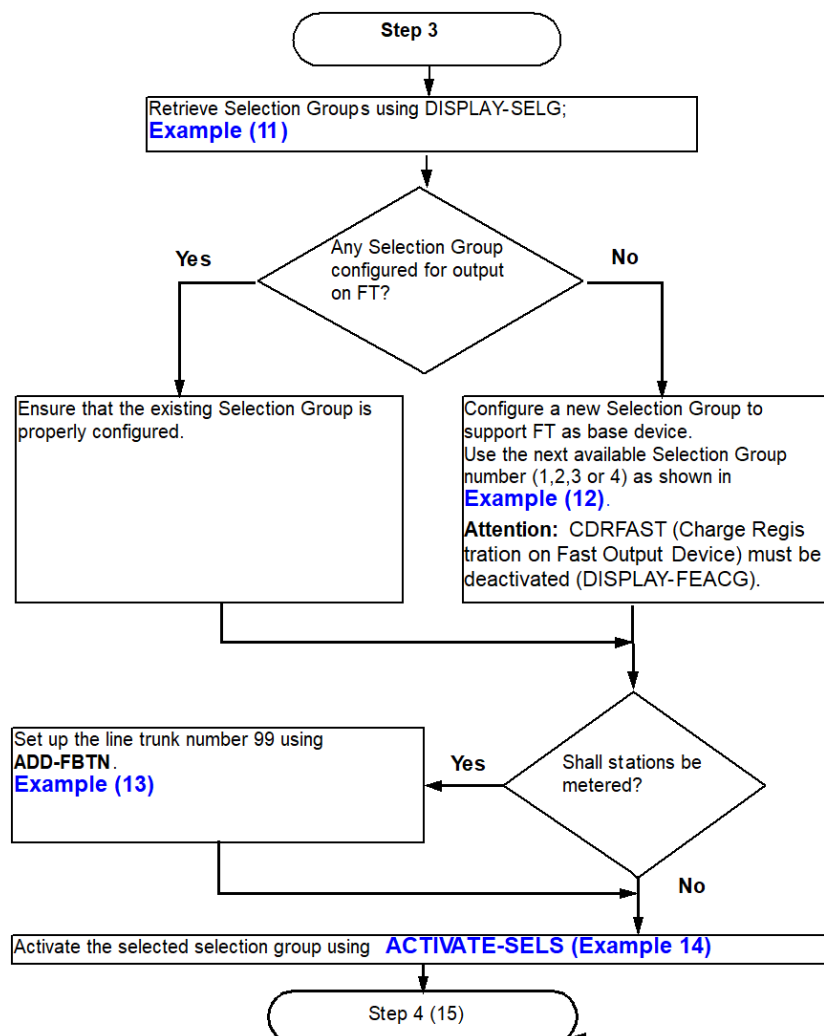
Example (7): [DELETE-FEACG:CDRFAST](#); on page 356

Example (8): [ADD-FEACG:CDRCDUMP](#); on page 356

Details (9): [Transferring FTBL batch from OpenScape 4000 Manager to Client PC](#) on page 24

Step 3 (10): [OpenScape 4000 System Installation - Step 3](#) on page 16

1.2.4 OpenScape 4000 System Installation - Step 3



For more information please click the corresponding link below.

Example (11): [DISPLAY-SELG](#); on page 356

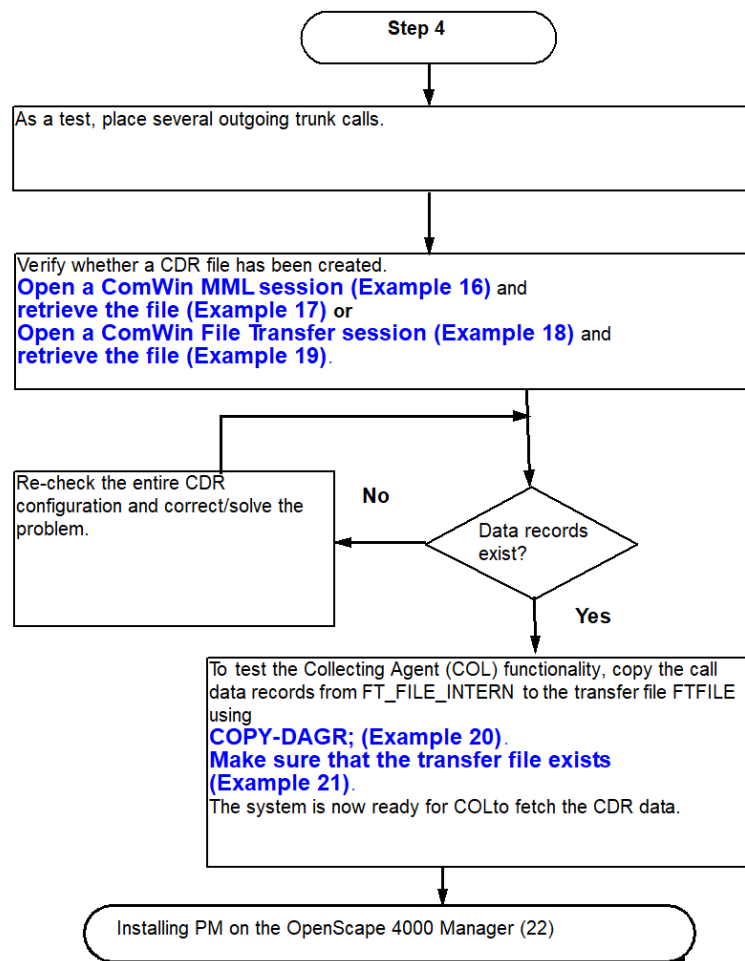
Example (12): [Setting Up Selection Group 1 in Two Steps](#) on page 362

Example (13): [ADD-FBTN:TBL=TRKNO,LTG=99,LTU=1,SLOT=1,CCT=1,BCHAN=1,VTRKNO=111111](#);
on page 419

ACTIVATE-SELS Example (14): [ACTIVATE-SELS:1](#); on page 394

Step 4 (15): [OpenScape 4000 System Installation - Step 4](#) on page 17

1.2.5 OpenScape 4000 System Installation - Step 4



For more information please click the corresponding link.

Example (16): [Example: B18](#) on page 430

Example (17): [STA-INFO:":CGD:FT_FILE_INTERN",L](#); on page 357

Example (18): [Example: B18](#) on page 430

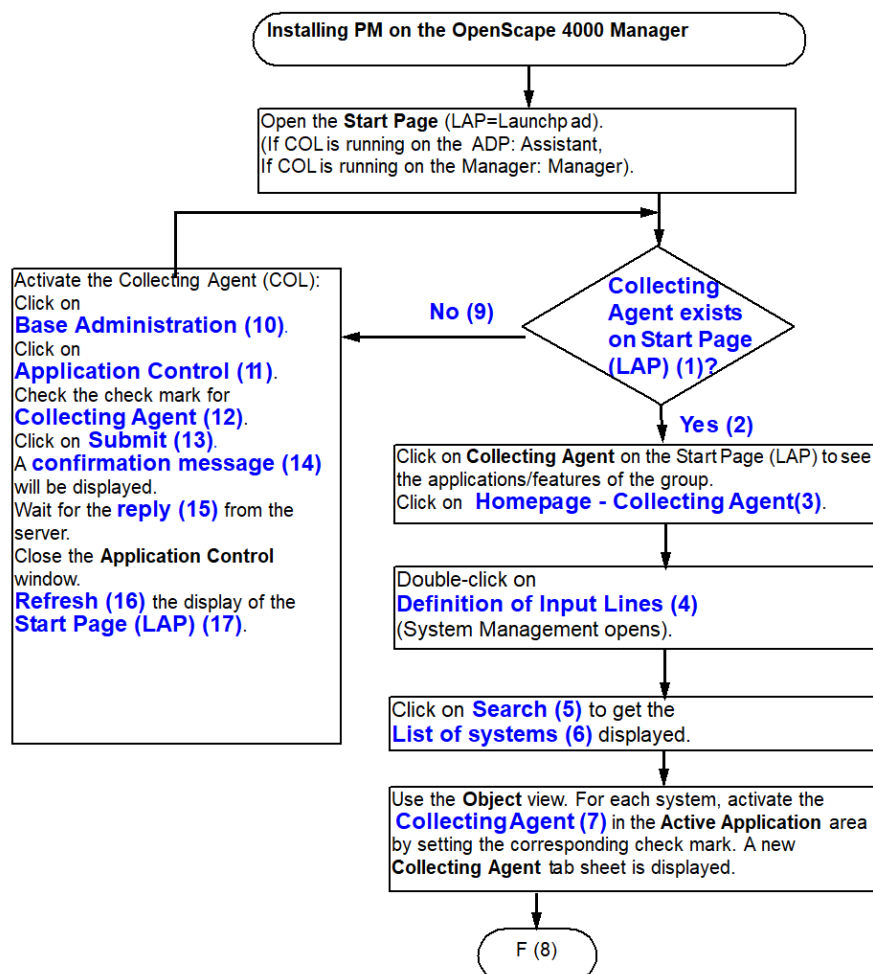
Example (19): [Example: B19](#) on page 431

Example (20): [COPY-DAGR](#); on page 357

Example (21): [Example: B21](#) on page 431

[Installing PM on the OpenScape 4000 Manager - Step 1](#) on page 18

1.2.6 Installing PM on the OpenScope 4000 Manager - Step 1



For more information please click the corresponding link.

Collecting Agent exists on Start Page (LAP)(1)?: [Example: B24](#) on page 433

Yes (2): [Example: B32](#) on page 436

Homepage - Collecting Agent (3): [Example: B34](#) on page 437

Definition of Input Lines (4): [Example: B35](#) on page 438

Search (5): [Example: B36](#) on page 438

List of Systems (6): [Example: B37](#) on page 438

Collecting Agent (7): [Example: B38](#) on page 439

F (8): [Installing PM on the OpenScope 4000 Manager - Step 2](#) on page 19

No (9): [Example: B33](#) on page 437

Base Administration (10): [Example: B26](#) on page 434

Application Control (11): [Example: B27](#) on page 434

Collecting Agent (12): [Example: B28](#) on page 435

Submit (13): [Example: B28](#) on page 435

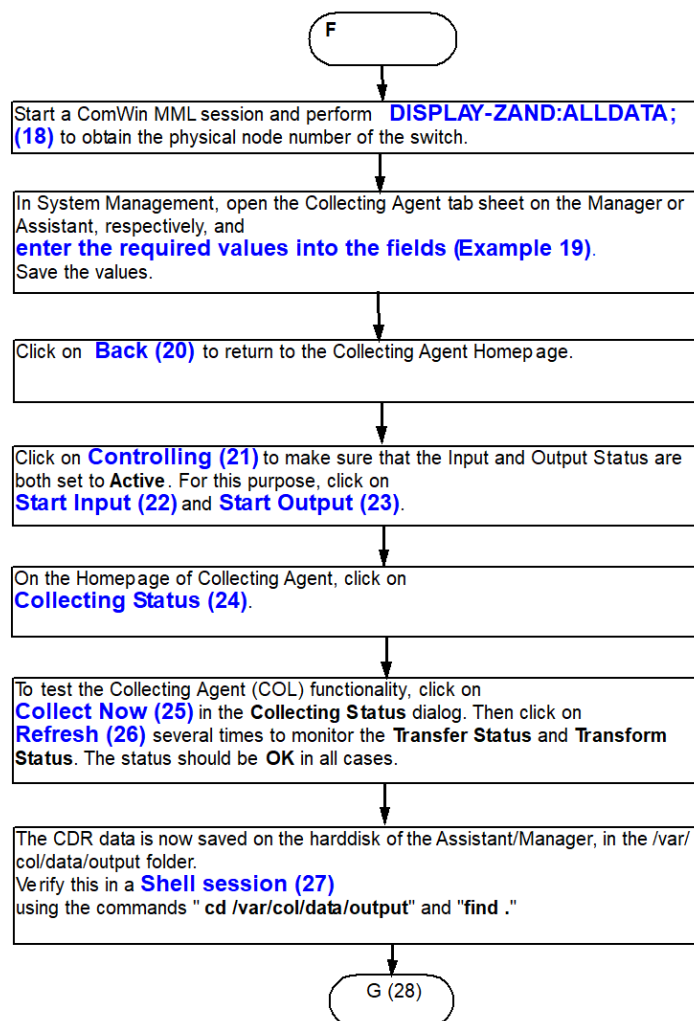
Configuration Message (14): [Example: B29](#) on page 435

Reply (15): [Example: B30](#) on page 436

Refresh (16): [Example: B31](#) on page 436

Start Page (LAP) (17): [Example: B32](#) on page 436

1.2.7 Installing PM on the OpenScope 4000 Manager - Step 2



For more information please click the corresponding link.

AB-ZAND:ALLDATA; (18): [DISPLAY-ZAND:ALLDATA;](#) on page 395

Example (19): [Example: B39](#) on page 439

Back (20): [Example: B41](#) on page 439

Controlling (21): [Example: B41](#) on page 439

Start Input (22): [Example: B42](#) on page 440

Start Output (23): [Example: B42](#) on page 440

Collecting Status (24): [Example: B43](#) on page 440

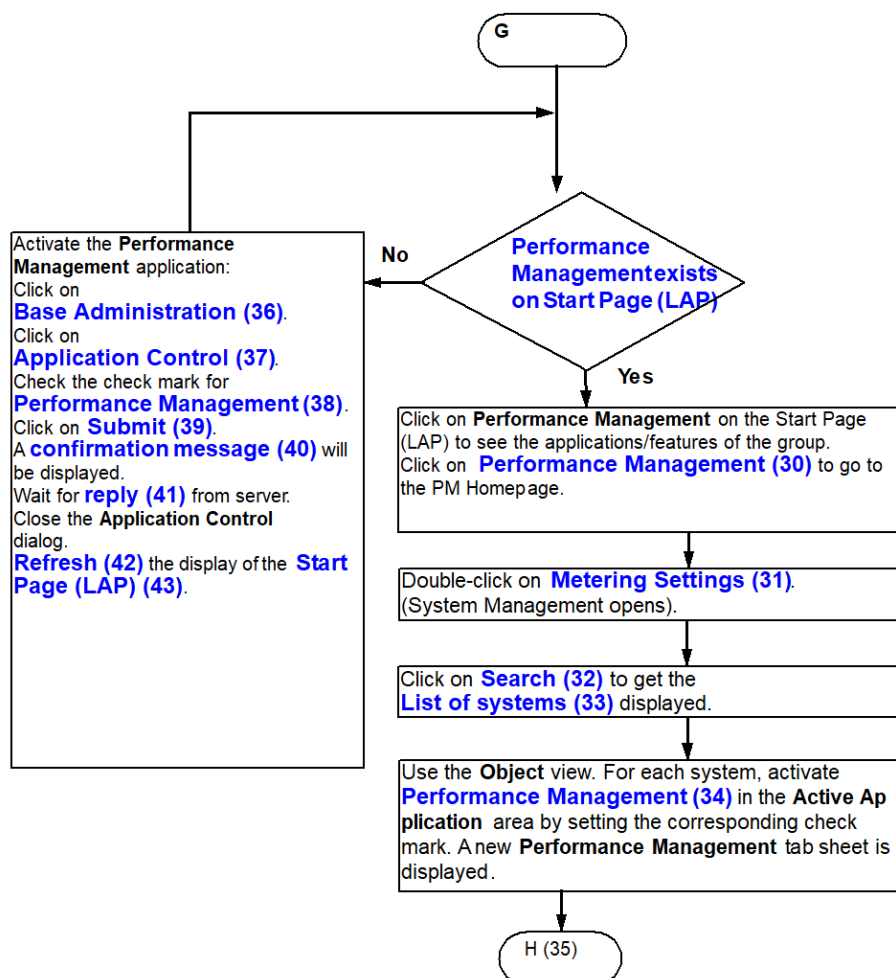
Collect Now (25): [Example: B44](#) on page 440

Refresh (26): [Example: B45](#) on page 441

Shell session (27): [Example: B46](#) on page 441

G (28): [Installing PM on the OpenScape 4000 Manager - Step 3](#) on page 20

1.2.8 Installing PM on the OpenScape 4000 Manager - Step 3



For more information please click the corresponding link.

Performance Management exists on Start Page (LAP) (29): [Example: B33](#) on page 437

Performance Management (30): [Attachments to the Installation Steps](#) on page 353

Metering Settings (31): [Example: B51](#) on page 444

Search message (32): [Example: B36](#) on page 438

List of System (33): [Example: B37](#) on page 438

Performance Management (34): [Example: B38](#) on page 439

H (35): [Installing PM on the OpenScape 4000 Manager - Step 4](#) on page 21

Base Administration (36): [Example: B26](#) on page 434

Application Control (37): [Example: B26](#) on page 434

Performance Management (38): [Example: B47](#) on page 442

Submit (39): [Example: B48](#) on page 442

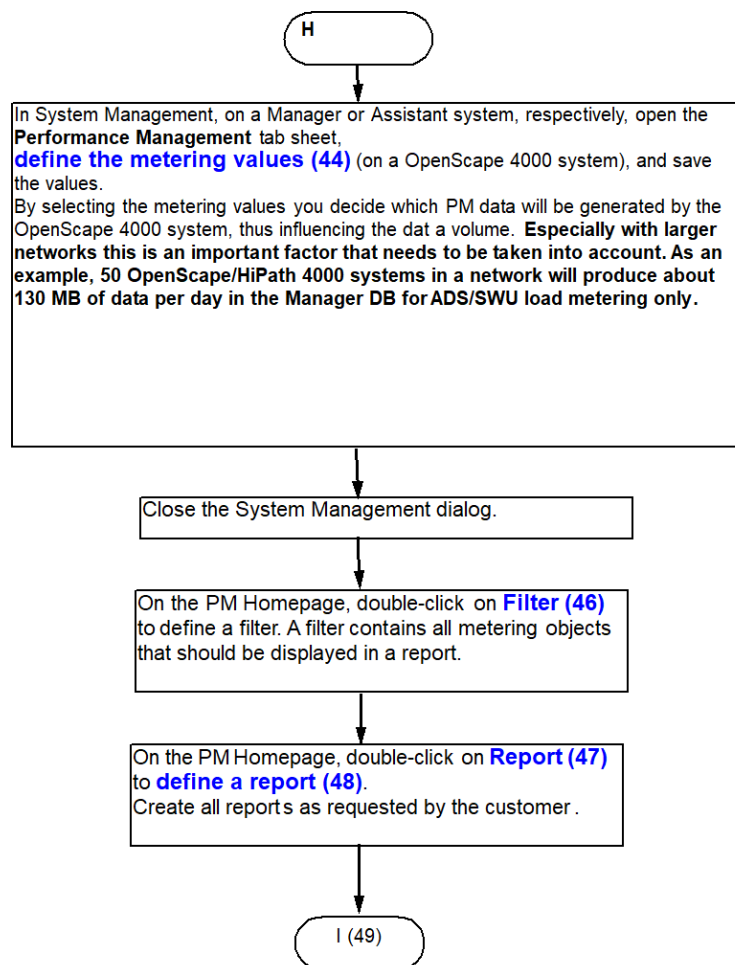
Confirmation message (40): [Example: B29](#) on page 435

Reply (41): [Example: B30](#) on page 436

Refresh (42): [Example: B31](#) on page 436

Start Page (LAP) (43): [Example: B49](#) on page 443

1.2.9 Installing PM on the OpenScope 4000 Manager - Step 4



For more information please click the corresponding link below.

Define the metering values (44): [Example: B52](#) on page 444

Not possible to set metering values (45): [Attachments to the Installation Steps](#) on page 353

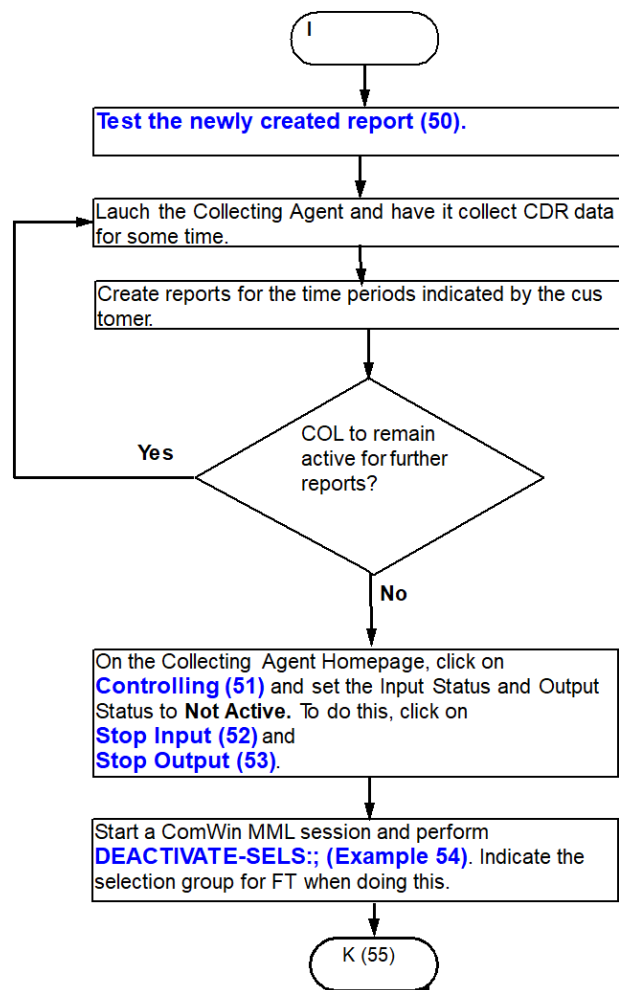
Filter (46): [Example: B54](#) on page 445

Report (47): [Example: B22](#) on page 432

Define a report (48): [Example: B61](#) on page 449

I (49): [Installing PM on the OpenScope 4000 Manager - Step 5](#) on page 22

1.2.10 Installing PM on the OpenScape 4000 Manager - Step 5



For more information please click the corresponding link below.

Test the newly created report (50): [Attachments to the Installation Steps](#) on page 353

Controlling (51): [Example: B41](#) on page 439

Stop Input (52): [Example: B62](#) on page 449

Stop Output (53): [Example: B62](#) on page 449

DEACTIVATE-SELS;; (Example 54): [DEACTIVATE-SELS:1](#); on page 396

1.2.11 AMO DAGR - Notes

AMO DAGR -- Important Notes

File Size = nnnnn data records

Maximum value: 65535

This value sets the maximum size for the FT file. If this file size limit is reached while saving the data records, a copy process is triggered for the file (before the automatic copy process is started (see Copy Period parameter)). If the customer specific file has not been fetched yet (see Name of Transfer File parameter, e.g. "FTFILE"), then the FT file will be appended to this file.

Required disk space evaluation: Number of call data records * 350 Bytes (approximate size of data record, depending on FTBL, e.g. AMPM_UV1.0.GE) * 2 (data is saved **both** in the FT file **and** in the customer-specific file. Example: 45000 * 350 Bytes * 2 = 31500000 Bytes (i.e. approx. 30 MB).

Output.Code = ASCII

Note: If the output code is changed (from EBCDIC to ASCII) a notification message will be issued. In this case you need to copy the file manually to ensure that the file can be fetched, and also to avoid having data records with different formatting in the file:

1. Set the selection group to COLLECT (AMO SELS).
2. Start the file copy process (AMO K-DAGR).
3. Fetch the customer-specific **FT file**.
4. Change the file parameters (output code).
5. Activate the selection group.

Copy Period = hhh

Value given in hours; In case of high traffic set the minimum value 1. See also "Required disk space evaluation", **File Size** parameter).

Time of First Copy = DD-HH

Sets the start time for the copy process from FT_FILE-INTERN to FTFILE.

Format: **DD** = Day in current or next month, **HH** = Hour. You can set the start time of the copy process to a later time using this parameter. Recommended: current day, next clock hour).

Name of Transfer File = FTFILE

This is the pre-set default name in OpenScape 4000 Manager, System Management area - Collecting Agent).

1.2.11.1 Increased Security -- Automatic Copying of FT_INTERN_FILE

Increased security through Automatic Copying of FT_INTERN_FILE with Every Data Collection Cycle (F53382).

By executing the AMO command COPY-DAGR with every data collection cycle in COL the FT_INTERN_FILE is automatically appended to the FT file (FTFILE) to be fetched. This ensures that for each collecting cycle all existing call charge data will be fetched.

1.2.12 Transferring FTBL batch from OpenScape 4000 Manager to Client PC

To transfer the FTBL batch from the OpenScape 4000 Manager to the Client PC, proceed as follows:

- 1) Create a directory for the FTBL files on the client PC (either using **Windows Explorer** or via **Start -> Execute -> md directory_name**).
- [see Example](#)
- 2) Start the SFTP client on the client PC (using **Start -> Execute -> FTP**).
- 3) In the SFTP client, open the connection to the OpenScape 4000 Manager by entering the following command: open IP-Adresse.
- 4) Log on to the system as user engr or rsca by entering the corresponding password.
- 5) Change to the FTBL directory using `cd /var/col/data/ftbl`.
- 6) Set the target directory on the client PC to the directory name created in step 1.
- 7) Set the transfer mode to "binary".
- 8) Copy the files from the current directory on the OpenScape 4000 Manager to the client PC.
- 9) Quit the SFTP client by entering bye.

[see also Example](#)

- 10) If a value other than FORM01 is specified for FT in the selection group, then you need to **adjust** the FTBL batch accordingly.

[see Example](#)

Execute the required FTBL command batch on the OpenScape 4000 system.

- 11) Open an Expert Access (ComWin) connection to the system.
- 12) In the Expert Access (ComWin) toolbar, click Macro -> Start -> Open.

[see Example](#)

- 13) Select the required FTBL command batch from the directory created in step 1.

[see Example](#)

- 14) Start the FTBL command batch by clicking Start -> Start in the Expert Access (ComWin) toolbar.

[see Example](#)

Execute the required TEXT command batch on the OpenScape 4000 system:

- 15) In the Expert Access (ComWin) toolbar, click Macro -> Start -> Open.
- 16) Select the required TEXT command batch from the directory created in step 1.
- 17) Start the TEXT command batch by clicking Start -> Start in the Expert Access (ComWin) toolbar.

Selecting the FTBL and TEXT command batch file, respectively:

The file names are selected according to the following scheme:

<PurposeOfUse_SystemversionProgramversion.LANGUAGE>:

- Purpose of Use:
 - "AM" FTBL file only for **A**ccounting **M**anagement
 - "**AMPM_**" FTBL file for **A**ccounting **M**anagement and **P**erformance **M**anagement
 - "**PM_**" FTBL file only for Performance Management
 - "**AMO_TEXT_AMPM_**" batch file for AMO TEXT
- System Version:
 - "**UV**" OpenScape/HiPath 4000
 - Program version: **8.0** for version 8.0, ...
 - Language: **GE** for german, ...

The files are provided in both English (filename extension ".EN" or ".ENG", respectively) and German version (filename extension ".GE" or ".GER", respectively).

Examples:

AMPM_UV8.GE FTBL file for Accounting Management **and** Performance Management in an OpenScope 4000 V8.0 system with German AMO language.

AMO_TEXT_AMPM_UV8.GER file for AMO TEXT in a OpenScape 4000 V8.0 system with German AMO language.

1.2.13 Adapting the FTBL File

A FORM number is specified in each line of the FTBL file:

[illegible]

Use **AB-SELG** to query and retrieve the required value.

If necessary, change the FORM number in each line of the FTBL file.

1.3 Trunk Group Measurement for Separating AM and PM Data in Collecting Agent

The aim of this feature is to separate the AM and PM data generated by an OpenScope/HiPath switch by measuring of trunk groups.

The separation of AM and PM data is necessary in order to avoid calls to be recorded twice if CDRs for PM are being generated on the switch.

This can only be achieved if the administrator has the possibility to define trunk groups relevant for AM only, for PM only, or for both AM and PM.

Trunk Group Measurement on OpenScape/HiPath 4000 Systems

1.3.1 Trunk Group Measurement on OpenScape/HiPath 4000 Systems

OpenScape 4000 generates an element RECTYPE for call charge data recording in the CDRs. The value for RECTYPE specifies whether the data record is intended for HiPath AM only, for PM only, for both AM and PM or for none of the two -- see table below.

Table 1: RECTYPE/COLTYPE Values

RECTYPE/COLTYPE Value	0	1	2	3
Relevant for	None	AM	PM	AM + PM

On OpenScape/HiPath 4000 systems no additional recording of AM CDRs is necessary, and therefore for these systems the loading of data described in the next sections is not necessary.

To separate AM and PM data on OpenScape/HiPath 4000 systems it is sufficient to use the output filter for the RECTYPE element. The output filter can also be set for the new COLTYPE element, as COLTYPE and RECTYPE always have the same value on OpenScape/HiPath 4000 systems. COLTYPE is a calculated element, i.e. it never appears on the input. During the CDR evaluation COL calculates the value of COLTYPE, and COLTYPE can be used in output files as any other standard element.

1.3.2 AMO SELG -- Block Size Parameters

AMO SELG administers block size parameters for the Base Device (BLBAS) and for the Reserve Device (BLRES). If you enter the value **1** every record is immediately written to the output device. Larger values cause the system to store the data records until the number of records specified by the value is reached. Only then will the data records be written blockwise to the output device. This increases the output rate. The best results are achieved with a value of **10**.

NOTICE: For OpenScape 4000 systems only the value **1** makes sense.

Attention: Before changing the block size the status of the selection group needs to be set to OFF using the AMO COLLECT-SELS. Only then should you change the block size.

After this you can start the output again with ACTIVATE-SELS. Another side-effect: Individual CDRs are not output until the specified number of CDRs is reached. This can be confusing, especially with tests having only a small amount of calls.

2 Collecting Agent - Overview

The **Collecting Agent** is used to collect accounting data in an OpenScape/HiPath network. Collecting Agent is a basic function of Accounting Management (AM).

Collecting Agent covers the following topics:

- Providing CDR output files for AM
- Flexible format support of CDRs in input and output files
- Support of CDR output filter according to certain call detail elements
- Administration of COL (activate/deactivate, scheduling of collecting, etc.)
- Logging of COL activities
- Client/server architecture of COL

Related Topics

[Collecting Agent User Interface, page 36](#)

[Launching the Collecting Agent in OpenScape 4000 Assistant/Manager, page 37](#)

[Collecting Agent - Homepage, page 38](#)

[COL Features, page 48](#)

3 Functionality

Main Functional Areas / Features of the Collecting Agent

[Collecting Agent User Interface, page 3-36](#)

[Launching the Collecting Agent in OpenScape 4000 Assistant/Manager, page 37](#)

[Collecting Agent - Homepage, page 38](#)

[COL Features, page 48](#)

[Controlling, page 49](#)

[Collecting Status, page 51](#)

[Output Line Status, page 53](#)

[Definition of Input Lines, page 55](#)

[Input Format Editor, page 69](#)

[Definition of Output Lines, page 80](#)

[Output Format Editor, page 85](#)

[Filter Editor, page 91](#)

[Translation Tables, page 96](#)

[Incorrect Records - Send Back To Input, page 106](#)

[Saved CDRs in Backup File, page 108](#)

[Files Ready for Output Lines, page 109](#)

[Options, page 110](#)

[Logging, page 116](#)

[COL Logging Events, page 117](#)

[CDR Viewer, page 119](#)

[Exporting Log Reports, page 3-120](#)

3.1 Collecting Agent User Interface

Collecting Agent provides a web-based user interface for COL administration tasks, which can be grouped into the following functional categories:

- Administration of switch-specific COL parameters, e.g. enabling/disabling AM collecting as well as the scheduling data for collecting
- Other administrative tasks, e.g. definition of input and output formats, definition of output lines and filters, and monitoring of the COL status.

All administration tasks are launched by using the links on the COL Homepage. COL supports the following features and functional areas:

[Collecting Agent - Homepage, page 38](#)

[Launching the Collecting Agent in OpenScape 4000 Assistant/Manager, page 37](#)

[Toolbar, page 40](#)
[Menu Bar, page 39](#)
[Navigation Pane and Application Tree, page 41](#)
[Content Pane, page 43](#)
[Controlling, page 49](#)
[Collecting Status, page 51](#)
[Output Line Status, page 53](#)
[Definition of Input Lines, page 55](#)
[Input Format Editor, page 69](#)
[Definition of Output Lines, page 80](#)
[Output Format Editor, page 85](#)
[Filter Editor, page 91](#)
[Translation Tables, page 96](#)
[Incorrect Records - Send Back To Input, page 106](#)
[Options, page 110](#)
[Logging, page 116](#)

Related Topics

[Important Hints Before Starting -- Overview, page 7](#)
[Installation Hints for Performance Management \(PM\), page 15](#)
[PM/COL Installation Instructions -- Getting Started, page 7](#)
[CDR Viewer, page 119](#)
[Exporting Log Reports, page 120](#)

3.2 Launching the Collecting Agent in OpenScape 4000 Assistant/Manager

- To launch the **Homepage** of the **Collecting Agent** in **OpenScape 4000 Assistant/Manager**:
 - Enter the URL for the **OpenScape 4000 Assistant/Manager Homepage** in a web browser, e. g. `https://servername/` To access the **OpenScape 4000 Assistant/Manager Start Page** you must be a licensed user, and you have to log in by entering your valid username and password.
 - Select the desired application, in this case **Collecting Agent**, by clicking the application link on the **OpenScape 4000 Assistant/Manager Start Page**. The following links will be displayed:
 - **Collecting Agent** Double-clicking this link will open the **Collecting Agent Homepage**, showing all available COL features in an application tree. To launch one of these features and get its user interface displayed, just double-click it.
 - **Collecting Status** Double-clicking this link will open the COL **Collecting Status** dialog where all configured input lines will be displayed.

Functionality

Collecting Agent - Homepage

- **Output Line Status** Double-clicking this link will open the COL **Output Line Status** dialog where all configured output lines will be displayed.
- On the COL Homepage in the application tree, double-click the link of the COL feature you want to use, e.g. **Collecting Status** or **Output Format Editor**. The user interface of the selected COL feature will be displayed in your browser.

Related Topics

[Collecting Agent - Homepage, page 38](#)

[Toolbar, page 40](#)

[Menu Bar, page 39](#)

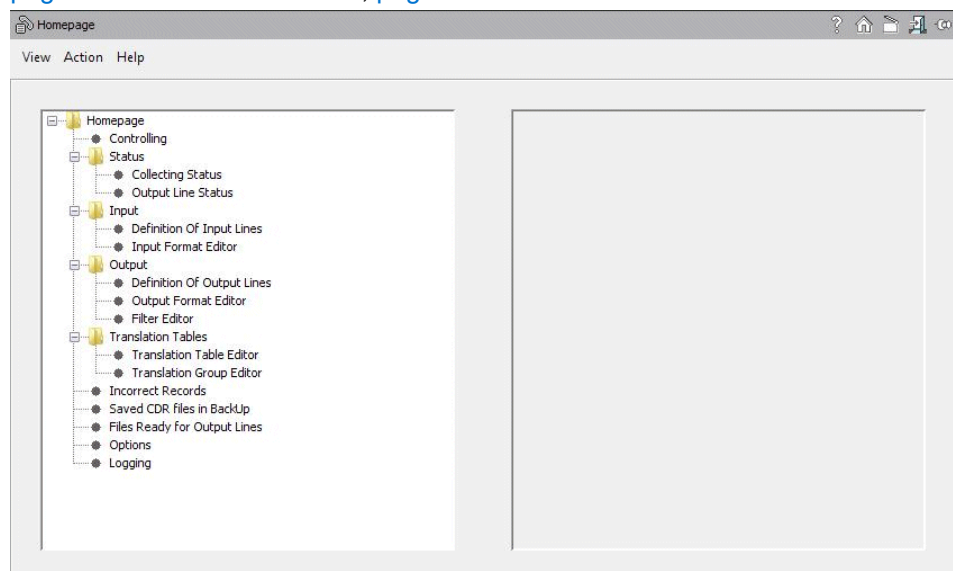
[Navigation Pane and Application Tree, page 41](#)

[Content Pane, page 43](#)

3.3 Collecting Agent - Homepage

For **OpenScope 4000 Assistant/Manager**, the **Collecting Agent Homepage** is started via the OpenScope 4000 Assistant/Manager Start Page or via the Desktop - see [Launching the Collecting Agent in OpenScope 4000 Assistant/Manager](#).

The **Collecting Agent Homepage** contains the [Menu Bar](#), the [Toolbar](#), the [Navigation Pane and Application Tree](#) with links to the various COL features and dialogs used to display and set COL parameters (on the left-hand side of the dialog), and the [Content Pane](#) (on the right-hand side of the dialog) showing a short description of the currently selected item from the application tree. An overview of the COL functionality can be found in [Collecting Agent - Overview, page 33](#) and in [COL Features, page 48](#).



Field and Controls Descriptions

[Application tree](#)

[Description of the selected tree item](#)

Related Topics

[Collecting Agent User Interface, page 36](#)

[Launching the Collecting Agent in OpenScape 4000 Assistant/Manager, page 37](#)

[COL Features, page 48](#)

[Menu Bar, page 39](#)

[Navigation Pane and Application Tree, page 41](#)

[Content Pane, page 43](#)

[Multiple Selection of Records in List View, page 43](#)

[Sorting of Records, page 45](#)

[Switching from List View to Object View by Double Click, page 47](#)

[COL Homepage - Field Descriptions and User Actions, page 243](#)

[Menu Bar - Description of the Menu Options, page 239](#)

[Important Hints Before Starting -- Overview, page 7](#)

[Installation Hints for Performance Management \(PM\), page 15](#)

[PM/COL Installation Instructions -- Getting Started, page 7](#)

Step-By-Step Instructions

[COL Homepage and Navigation Tree](#)

3.3.1 Menu Bar

The **Menu Bar** in Collecting Agent contains the following menus:

- **View,**
- **Action,**
- **Help,**
- **Object.**

Depending on the functionality of the feature selected, different and specific menu options may be displayed in the menus.

For a detailed description of the individual menu options please refer to the [Menu Bar - Description of the Menu Options](#)

Related Topics

[Collecting Agent User Interface, page 36](#)

[Collecting Agent - Homepage, page 38](#)

[Toolbar, page 40](#)

[Navigation Pane and Application Tree, page 41](#)

[Content Pane, page 43](#)

[Multiple Selection of Records in List View, page 43](#)

[Sorting of Records, page 45](#)

[Switching from List View to Object View by Double Click, page 47](#)

3.3.2 Toolbar

Homepage	
Print 	* Printing is only supported by the Collecting Agent in OpenScape 4000 Assistant/Manager. The Print icon is not displayed on the Homepage of the Collecting Agent; the icon is only displayed in some dialogs supporting the Print feature, e.g. Collecting Status and Output Line Status. The current screen content is written to an HTML file and displayed in a separate browser window. This separate browser window contains a Print icon of its own. If you click on this icon, the currently displayed content of the separate browser window is sent to the configured printer. Same function as the Print Report option in the Object menu. * Printing is only supported using the Print button from the separate browser window. * Activating the Definition of Input Lines feature will launch the System Management application (in the Collecting Agent). Clicking the Print icon in the System Management toolbar activates the Report Generator.
Help 	Activates the Context Help. The mouse pointer is displayed as an arrow with an adjacent question mark. When you click on an element in your browser window with this pointer, the corresponding context-specific Help topic will be displayed in a separate Help browser window. You can also activate the Context Help by pointing and clicking on a specific location in the user interface and pressing CTRL+F1. Same functionality as the Context Help option in Help menu.
Homepage 	Goes back to the Homepage of Collecting Agent. Same function as the Home option in the View menu.
Start(*) 	Jumps back to the OpenScape 4000 Assistant/Manager Start Page. Opens a new browser window and displays the OpenScape 4000 Assistant/Manager Start Page. Same function as the Start option in the View menu. * This feature is only supported in OpenScape 4000 Assistant/Manager.

Logoff 	When you click the Logoff icon in the toolbar, a message dialog is displayed, warning you that all unsaved data will be lost, prompting you to save all unsaved data from the current session and to confirm with OK that you want to log off. After logging off the program returns to the Logon screen. Same function as the Logoff option in the Action menu.
Pin (Sticky Page) 	Clicking on the Pin pushbutton switches the sticky page mode ON or OFF. • OFF (default): a new applet will be launched in the currently opened browser window. • ON: a new applet will be launched in a new browser window. Same function as the Sticky Page option in the View menu.

Related Topics

[Collecting Agent - Homepage, page 38](#)

[Menu Bar, page 39](#)

[Menu Bar - Description of the Menu Options](#)

[Navigation Pane and Application Tree, page 41](#)

[Content Pane, page 43](#)

[Multiple Selection of Records in List View, page 43](#)

[Sorting of Records, page 45](#)

[Switching from List View to Object View by Double Click, page 47](#)

[Collecting Agent User Interface, page 36](#)

[Launching the Collecting Agent in OpenScape 4000 Assistant/Manager, page 37](#)

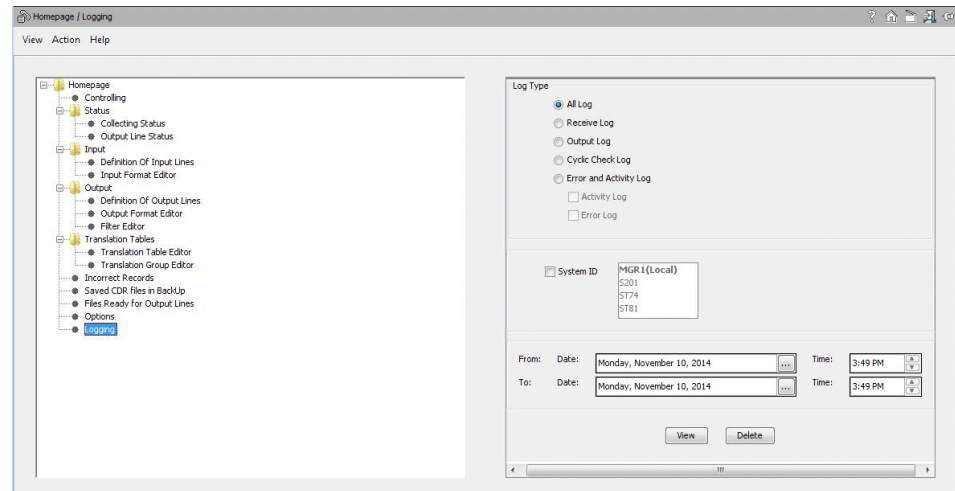
3.3.3 Navigation Pane and Application Tree

The Navigation Pane on the left-hand side of the **COL Homepages** shows the Application Tree. The application tree is similar to a menu folder structure, displaying all COL features in the form of links the user can activate.

When a link in the navigation pane is selected with a single mouse click, a short description of the selected feature will be displayed in the right-hand pane of the Homepage, called Content Pane. If **Controlling** has been selected in the tree, the description will not be visible. See also [Controlling](#).

If **Logging** is selected, the Content pane will display the 3 different types of logs, and a **View** and **Delete** button near each type, thus allowing the user to view or delete the desired log. See also [Logging](#).

COL features are launched by double-clicking on the corresponding link in the application tree.



Related Topics

[Collecting Agent - Homepage, page 38](#)

[Toolbar, page 40](#)

[Menu Bar, page 39](#)

[Content Pane, page 43](#)

[Multiple Selection of Records in List View, page 43](#)

[Sorting of Records, page 45](#)

[Switching from List View to Object View by Double Click, page 47](#)

[Collecting Agent User Interface, page 36](#)

3.3.4 Content Pane

When a link in the navigation pane (on the left-hand side of the COL Homepage) is selected with a single click, a short description of the selected link will be displayed in the right-hand pane, called Content Pane.

If **Logging** is selected, the Content Pane will display the 3 different types of logs, and a **View** and **Delete** button near each type, thus allowing the user to view or delete the desired log. See also [Logging](#).

Related Topics

[Collecting Agent User Interface, page 36](#)

[Launching the Collecting Agent in OpenScape 4000 Assistant/Manager, page 37](#)

[Toolbar, page 40](#)

[Collecting Agent - Homepage, page 38](#)

[Menu Bar, page 39](#)

[Navigation Pane and Application Tree, page 41](#)

[Multiple Selection of Records in List View, page 43](#)

[Sorting of Records, page 45](#)

[Switching from List View to Object View by Double Click, page 47](#)

3.3.5 Multiple Selection of Records in List View

Multiple selection of records in list view is possible in the following pages:

- [Input Format Editor - Object List view, page 3-75](#)
- [Output Line Definition - Object List, page 3-83](#)
- [Output Format Editor - Object List view, page 3-89](#)
- [Filter Editor - Object List, page 3-94](#)
- [Translation Table Editor, Object List view, page 3-98](#)
- [Translation Group Editor, Object List view, page 3-102](#)
- [Incorrect Records - Send Back To Input, page 3-106](#)
- [Saved CDRs in Backup File, page 3-108](#)
- [Files Ready for Output Lines, page 3-109](#)

After having selected more than one line, it is possible to delete the complete selection by clicking the **Delete** button on the bottom of the page.

A dialog box is displayed showing the selection and prompting to confirm the deletion of all the entries.

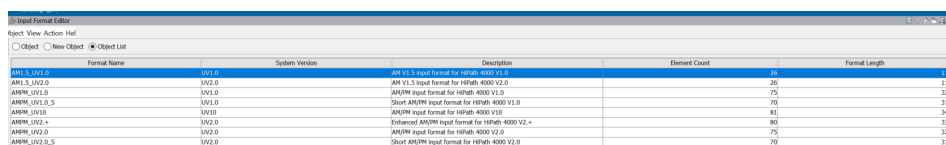
In case of an error in deleting one of the entries in the selection (e.g. the entry is locked etc.), an error message is displayed, and the deletion procedure will stop. All remaining entries of the selection will not be deleted.

The functionalities that have no meaning in a multi selection context will be disabled. Thus, for example the **Copy** button will become disabled.

Selection of multiple entries in a table is done by using the mouse together with the shift or the Ctrl-key.

Multiple selection of a range of lines

By keeping the Shift key pressed you can select a range of values with the mouse.

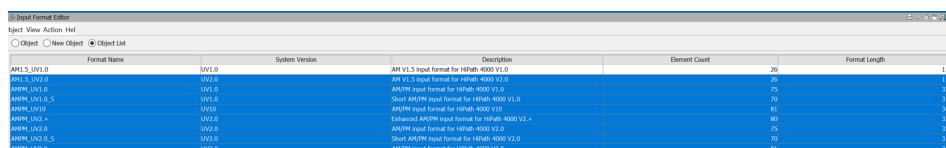


Format Name	System Version	Description	Element Count	Format Length
ANM1_S_V01.0	V01.0	ANM V1.5 input format for HiPath 4000 V1.0	26	114
ANM1_S_V02.0	V02.0	ANM V1.5 input format for HiPath 4000 V2.0	26	114
ANM1_V01.0	V01.0	ANM input format for HiPath 4000 V1.0	75	327
ANM1_V01.0_5	V01.0	Short ANM input format for HiPath 4000 V1.0	75	318
ANM1_V01.0_5	V01.0	ANM input format for HiPath 4000 V1.0	81	340
ANM1_V02.0	V02.0	Enhanced ANM input format for HiPath 4000 V2.0	86	337
ANM1_V02.0_5	V02.0	ANM input format for HiPath 4000 V2.0	75	327
ANM1_V02.0_5	V02.0	Short ANM input format for HiPath 4000 V2.0	76	318

When the Shift key is released selection reverts back to normal mode.

Multiple selection of a separate lines

By keeping the Ctrl-key pressed you can select multiple separate entries with the mouse.



Format Name	System Version	Description	Element Count	Format Length
ANM1_S_V01.0	V01.0	ANM V1.5 input format for HiPath 4000 V1.0	26	114
ANM1_S_V02.0	V02.0	ANM V1.5 input format for HiPath 4000 V2.0	26	114
ANM1_V01.0	V01.0	ANM input format for HiPath 4000 V1.0	75	327
ANM1_V01.0_5	V01.0	Short ANM input format for HiPath 4000 V1.0	75	318
ANM1_V01.0_5	V01.0	ANM input format for HiPath 4000 V1.0	81	340
ANM1_V02.0	V02.0	Enhanced ANM input format for HiPath 4000 V2.0	86	337
ANM1_V02.0_5	V02.0	ANM input format for HiPath 4000 V2.0	75	327
ANM1_V02.0_5	V02.0	Short ANM input format for HiPath 4000 V2.0	76	318
ANM1_V02.0	V02.0	ANM input format for HiPath 4000 V2.0	81	340

When the Ctrl-key is released selection reverts back to normal mode.

Related Topics

- [Collecting Agent User Interface, page 36](#)
- [Launching the Collecting Agent in OpenScape 4000 Assistant/Manager, page 37](#)
- [COL Features, page 48](#)
- [Menu Bar, page 39](#)
- [Navigation Pane and Application Tree, page 41](#)
- [Content Pane, page 43](#)
- [Sorting of Records, page 45](#)
- [Switching from List View to Object View by Double Click, page 47](#)

3.3.6 Sorting of Records

Sorting of records in a table is possible in the following pages:

- [Collecting Status, page 3-51](#)
- [Output Line Status, page 3-53](#)
- [Input Format Editor - Object view, page 3-72](#)
- [Input Format Editor - Object List view, page 3-75](#)
- [Output Line Definition - Object List, page 3-83](#)
- [Output Format Editor, page 3-85](#)
- [Output Format Editor - Object List view, page 3-89](#)
- [Filter Editor, page 3-91](#)
- [Filter Editor - Object List, page 3-94](#)
- [Translation Table Editor, Object List view, page 3-98](#)
- [Translation Table Editor, Object view, page 3-100](#)
- [Translation Group Editor, Object List view, page 3-102](#)
- [Translation Group Editor, Object view, page 3-104](#)
- [Incorrect Records - Send Back To Input, page 3-106](#)
- [Saved CDRs in Backup File, page 3-108](#)
- [Files Ready for Output Lines, page 3-109](#)

Sorting in ascending and descending order

Clicking the header of any of the table columns will sort the records in ascending order of the contents of this column first.

Clicking the same header again, will sort in descending order.

Format Name	System Version	Description	Element Count	Format Length
ANPM_V1_0	V1.0	ANPM V1.0 input format for HiPath 4000 V1.0	9	114
ANPM_V1_0_0	V1.0	ANPM V1.0 input format for HiPath 4000 V1.0	26	114
ANPM_V1_0_1	V1.0	ANPM V1.0 input format for HiPath 4000 V1.0	75	327
ANPM_V1_0_2	V1.0	Short ANPM input format for HiPath 4000 V1.0	76	334
ANPM_V1_0_3	V1.0	ANPM input format for HiPath 4000 V1.0	81	340
ANPM_V1_0_4	V1.0	Enhanced ANPM input format for HiPath 4000 V2.0	88	357
ANPM_V1_0_5	V1.0	ANPM input format for HiPath 4000 V2.0	75	327
ANPM_V1_0_6	V1.0	Short ANPM input format for HiPath 4000 V2.0	76	334

Related Topics

- [Collecting Agent User Interface, page 36](#)
- [Launching the Collecting Agent in OpenScape 4000 Assistant/Manager, page 37](#)
- [COL Features, page 48](#)
- [Menu Bar, page 39](#)

[Navigation Pane and Application Tree, page 41](#)

[Content Pane, page 43](#)

[Multiple Selection of Records in List View, page 43](#)

[Switching from List View to Object View by Double Click, page 47](#)

3.3.7 Switching from List View to Object View by Double Click

Double clicking a record in a line of the table will display the details of the corresponding record in object view.

This feature is available in the following pages:

- [Collecting Status, page 3-51](#)
- [Output Line Status, page 3-53](#)
- [Input Format Editor - Object List view, page 3-75](#)
- [Output Line Definition - Object List, page 3-83](#)
- [Output Format Editor - Object List view, page 3-89](#)
- [Filter Editor - Object List, page 3-94](#)
- [Translation Table Editor, Object List view, page 3-98](#)
- [Translation Group Editor, Object List view, page 3-102](#)

Format Name	System Version	Description	Element Count	Format Length
ANP_V1_LV1.0	LV1.0	ANP V1.0 input format for HiPath 4000 V1.0	26	114
ANP_V1_LV2.0	LV2.0	ANP V1.0 input format for HiPath 4000 V2.0	26	114
ANP_V1_LV1.0	LV1.0	ANP V1.0 input format for HiPath 4000 V1.0	75	327
ANP_V1_LV1.0_5	LV1.0	Short ANP V1.0 input format for HiPath 4000 V1.0	70	318
ANP_V1_LV2.0	LV2.0	ANP V1.0 input format for HiPath 4000 V2.0	81	340
ANP_V1_LV2.0_5	LV2.0	Enhanced ANP V1.0 input format for HiPath 4000 V2.0	80	337
ANP_V1_LV2.0	LV2.0	ANP V1.0 input format for HiPath 4000 V2.0	75	327
ANP_V1_LV2.0_5	LV2.0	Short ANP V1.0 input format for HiPath 4000 V2.0	70	318

Related Topics

[Collecting Agent User Interface, page 36](#)

[Launching the Collecting Agent in OpenScope 4000 Assistant/Manager, page 37](#)

[COL Features, page 48](#)

[Menu Bar, page 39](#)

[Navigation Pane and Application Tree, page 41](#)

[Content Pane, page 43](#)

[Multiple Selection of Records in List View, page 43](#)

[Sorting of Records, page 45](#)

3.4 COL Features

COL supports the following features:

[Collecting Agent - Homepage, page 38](#)

[Controlling, page 49](#)

[Collecting Status, page 51](#)

[Output Line Status, page 53](#)

[Definition of Input Lines, page 55](#)

[Input Format Editor, page 69](#)
[Definition of Output Lines, page 80](#)
[Output Format Editor, page 85](#)
[Filter Editor, page 91](#)
[Translation Tables, page 96](#)
[Incorrect Records - Send Back To Input, page 106](#)
[Options, page 110](#)
[Logging, page 116](#)

Related Topics

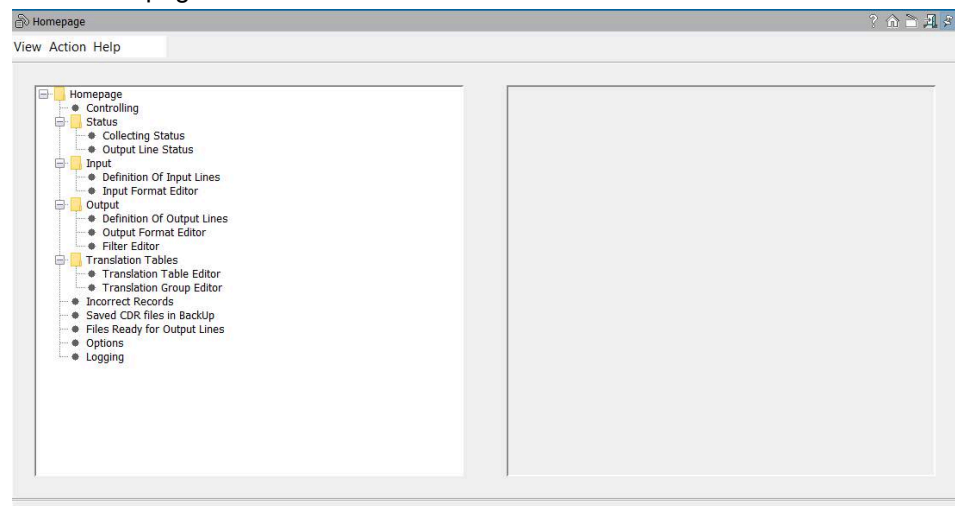
[Collecting Agent User Interface, page 36](#)
[Collecting Agent - Homepage, page 38](#)
[Important Hints Before Starting -- Overview, page 7](#)
[Installation Hints for Performance Management \(PM\), page 15](#)
[PM/COL Installation Instructions -- Getting Started, page 7](#)

Lists of all pre-defined elements and formats available for defining the CDR input and output formats for COL can be found in:

[Pre-defined Formats for Defining CDR Input and Output Formats](#)

3.5 Controlling

When **Controlling** is selected, the status displays **Input Status: Active** and **Output Status: Active** and the buttons **Start/Stop Input** and **Start/Stop Output** will be displayed in the Content pane on the right hand side area of the COL Homepage.



Field and Controls Descriptions

[Input Active](#)

[Output Active](#)

[Start/Stop Input](#)

[Start/Stop Output](#)

Step-By-Step Instructions

[Controlling](#)

[Installation Hints for Performance Management \(PM\)](#)

Related Topics

[Collecting Agent User Interface](#)

[Collecting Agent - Homepage](#)

[COL Features](#)

[Important Hints Before Starting -- Overview](#)

[Installation Hints for Performance Management \(PM\)](#)

[PM/COL Installation Instructions -- Getting Started](#)

3.6 Collecting Status

The **Collecting Status** feature allows the administrator to get information about the collecting status of switches for which collecting is configured in SysM.

This dialog can be started either from the **COL Homepage** or from the **OpenScape 4000 Assistant/Manager Start Page**.

To navigate to a different object in the list, you can either select the object by clicking on the list row, or use the arrow keys at the bottom of the screen, or select **View -> Go To** and choose one of the navigation options **First Object**, **Previous Object**, **Next Object** or **Last Object**.

System ID	System Type	Input Format	Active Collecting	Next Transfer	Last Transfer	Transfer Status	Transform Stat...	Line Status
0001	H4000	AMPM_UV10	AM/PM	Mar 29, 2022 2:55:55 ...	Mar 29, 2022 1:55:56 ...	RMX:No Data - ADP:N/A/N/A		N/A

Description

The list of configured input lines is displayed in a table. Only switches for which the collecting has been configured in SysM are displayed. When the dialog is displayed, table rows are sorted by start time of the next transfer in ascending order.

NOTICE: Displayed data is **not** refreshed automatically. In order to view the latest data the user should restart the window or refresh the data display by pressing the **Refresh** button.

When the user starts immediate collecting with **Collect now**, the operation is carried out asynchronously. So, the user is not informed directly about the status of collecting due to the possibly long duration of the collecting.

The fields "Input format" and "Transform completed" are not applicable to Backup PC, because a Backup PC can hold files in different formats from different systems. These files are transferred together, and the whole operation is shown in a table as a single transfer. The error code of the multiple transfer is **OK** only if all files have been transferred correctly and at least one file is not empty. Error code is **No data** only if all files are empty or non-existent.

Note: Even if a particular input format does not appear in the table, some input files from a Backup-PC in that format could still be processed by COL. Transform action errors can occur and the input files can be rejected if the user changes a format that is already being processed.

The table allows multiple selection of rows for the action **Collect Now**. For the **Configure** action only selection of the single row is allowed.

Field and Controls Descriptions

[Number Of Configured Input Lines](#)

[Collecting Active \(Check box for status display, read-only\)](#)

[Timecontrolled switch ON for CDR transformation / output in COL](#)

[Collecting Status, table columns](#)

[Collect Now \(button\)](#)

[Configure \(button\)](#)

[Refresh \(button\)](#)

Related Topics

[Collecting Status - Field Descriptions and User Actions, page 244](#)

[Collecting Agent User Interface](#)

[Collecting Agent - Homepage](#)

[COL Features](#)

[Important Hints Before Starting -- Overview](#)

[Installation Hints for Performance Management \(PM\)](#)

[PM/COL Installation Instructions -- Getting Started](#)

Lists of all pre-defined elements and formats available for defining the CDR input and output formats for COL can be found in:

[Pre-defined Formats for Defining CDR Input and Output Formats](#)

Step-By-Step Instructions

[Collecting Status](#)

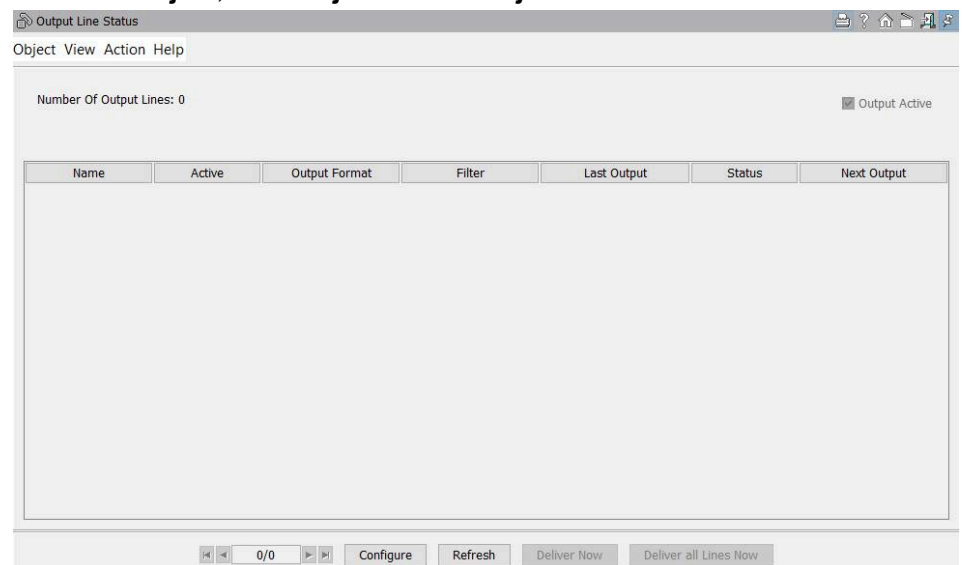
[Installation Hints for Performance Management \(PM\)](#)

3.7 Output Line Status

The **Output Line Status** function allows the administrator to get information about the output lines created by COL.

This dialog can be started either from the **COL Homepage** or from the **OpenScape 4000 Assistant/Manager Start Page**.

To navigate to a different object in the list, you can either select the object by clicking on the list row, or use the arrow keys at the bottom of the screen, or select **View -> Go To** and choose one of the navigation options **First Object**, **Previous Object**, **Next Object** or **Last Object**.



Description

This dialog shows the output status of CDR output lines. Both active and inactive lines are shown.

If PM is enabled for some switch, PM data is collected and handled by a predefined PM output line that is also shown in this window.

NOTICE: The system does **not** generate any message informing you whether the CDR file has been successfully transformed or not. If the transformation was successful, the file will be deleted, otherwise the file will stay in the list. Displayed data is **not** refreshed automatically. In order to view the latest (current) data, you have to click the **Refresh** button or restart the window.

Field and Controls Descriptions

Number Of Output Lines

Output Active (Read-only check box)

Output Line Status, table columns

Configure (button)

Refresh (button)

[Deliver Now \(button\)](#)

[Deliver all Lines Now \(button\)](#)

Related Topics

[Output Line Status - Field Descriptions and User Actions, page 245](#)

[Collecting Agent User Interface](#)

[Collecting Agent - Homepage](#)

[COL Features](#)

[Definition of Output Lines](#)

[Important Hints Before Starting -- Overview](#)

[Installation Hints for Performance Management \(PM\)](#)

[PM/COL Installation Instructions -- Getting Started](#)

Lists of all pre-defined elements and formats available for defining the CDR input and output formats for COL can be found in:

[Pre-defined Formats for Defining CDR Input and Output Formats](#)

Step-By-Step Instructions

[Output Line Status](#)

[Installation Hints for Performance Management \(PM\)](#)

3.8 Definition of Input Lines

[Definition of Input Lines Using the Collecting Agent in OpenScape 4000 Assistant/Manager](#)

3.8.1 Definition of Input Lines Using the Collecting Agent in OpenScape 4000 Assistant/Manager

The Definition of Input Lines using the **Collecting Agent** in **OpenScape 4000 Assistant/Manager** is done directly in the System Management application. System Management is started automatically when you click on **Definition of Input Lines** on the **Collecting Agent Homepage**.

The functionality of the COL System Management (OpenScape 4000 Administration) are described in the following sections:

[Object List \(System Management - OpenScape 4000 Administration\)](#)

[Collecting Agent tab sheet \(System Management - OpenScape 4000 Administration\)](#)

[COL Administration sub tab](#)

- [Trunk Group/CDR sub tab](#)
- [Attendant Consoles sub tab](#)
- [Node No. Transform sub tab](#)
- [ISDN Access Codes sub tab](#)

For more information regarding the **System Management** application please refer to the relevant documentation and online help, respectively.

Related Topics

[Important Hints Before Starting -- Overview](#)

[Installation Hints for Performance Management \(PM\)](#)

[PM/COL Installation Instructions -- Getting Started](#)

3.8.1.1 Object List (System Management - OpenScape 4000 Administration)

The **Object List** view in **System Management - OpenScape 4000 Administration** displays a list of network objects and their System Management related data in the content area. The columns of the table can be moved forward or backward - the user can determine the ordering of the columns.

Double-clicking on a certain line of the table starts the Object View of the selected object. Within the object list view the user cannot modify the parameters but he/she can select a line and invoke the **Delete** button for removing the network element for the system. Multiple selections are not possible.

For more information regarding the **System Management** application please refer to the relevant documentation and online help, respectively.

See also

[Collecting Agent tab sheet \(System Management - OpenScape 4000 Administration\)](#)

[COL Administration sub tab](#)

[Trunk Group/CDR sub tab](#)

[Attendant Consoles sub tab](#)

[Node No. Transform sub tab](#)

[ISDN Access Codes sub tab](#)

3.8.1.2 Collecting Agent tab sheet (System Management - OpenScape 4000 Administration)

COL provides a separate **Collecting Agent (COL)** tab sheet in **System Management** - OpenScape 4000 Administration for administering COL specific data regarding a network object.

Switch-specific COL parameters (e.g. Activate/Deactivate AM and PM call recording functions as well as scheduling data) are managed by the **System Management** application.

The **Collecting Agent** tab sheet in **System Management** - OpenScape 4000 Administration comprises the following tab sheets:

[COL Administration sub tab](#)

[Trunk Group/CDR sub tab](#)

[Attendant Consoles sub tab](#)

[Node No. Transform sub tab](#)

[ISDN Access Codes sub tab](#)

3.8.1.3 COL Administration sub tab

The **Collecting Agent -> COL Administration** tab sheet is used for entering COL administration and scheduling parameters for call charge data collection.

NOTICE: In order to make the **COL Administration** sub tab available, under **Active Application** the **Collecting Agent** checkbox must be checked!

The screenshot displays the 'OpenScape 4000 Administration' window. The 'Configuration Management' tab is active, showing settings for a switch named 'ST74'. The 'Active Application' section on the right lists 'Access Management', 'Configuration Management', 'Collecting Agent', and 'Performance Management', all of which are checked. The 'Input Format' section includes fields for 'Input Format', 'PM Input Format', and 'Translation Group'. The 'Generating Node Number' is set to '0 - 0 - 0'. The 'CDR Source' is set to 'File', and the 'File / Directory Name' is ':CGD:FTFILE'. The 'Start Date' is 'Oct 30, 2014', the 'Start Time' is '10:02:53 AM', and the 'Cycle' is set to '1' hour and '15' minutes. The 'Number of Retries' is '3' and the 'Retry Time [min]' is '10'. The bottom of the window shows navigation buttons: 'Configure & Save', 'Save only', 'Discard', 'New', and 'Delete'.

When pressing the **Save** button, a check is carried out whether or not the input format is consistent with PM settings. Mandatory fields for PM are checked and in the case of an error an appropriate message is displayed. The retry time multiplied by the number of retries must be less than the cycle time, but not zero. If selected cycle time is 1 minute, the number of retries is set automatically to 0.

Data is only collected if the call charge data collection is activated, i.e. either **Collect AM Data** or **Collect PM Data** must be checked. The scheduling data for the selected switch is used for both AM and PM. A different scheduling for PM collecting is not supported.

The purpose of the PM Input Format field is to provide a short PM input format in order to reduce the length of the PM-N CDR records and thereby reduce the data volume when PM is active.

When the **Collect PM Data** check box is marked (active), the format displayed in the Input Format field will also be displayed in the **PM Input Format** field (default setting).

There is a separate **Performance Management** tab sheet in **System Management** - OpenScape 4000 Administration for PM administration tasks. See Performance Management (PM) Tab Sheet in System Management.

Field Descriptions

[Input Format](#)

[PM Input Format](#)

[Translation Group](#)

[Collect AM Data](#)
[Generating Node Number](#)
[CDR Source: File/Directory](#)
[File/Directory Name](#)
[CDR from Local File System](#)
[Activate Copy CDR from RMX to Unix area](#)
[Number Of Retries](#)
[Retry Time](#)
[Start Date](#)
[Start Time](#)
[Cycle](#)
Hours
Minutes

See Also

[Object List \(System Management - OpenScape 4000 Administration\)](#)
[Trunk Group/CDR sub tab](#)
[Attendant Consoles sub tab](#)
[Node No. Transform sub tab](#)
[ISDN Access Codes sub tab](#)

3.8.1.4 Trunk Group/CDR sub tab

The **Collecting Agent -> Trunk Group/CDR** tab sheet in **System Management** - OpenScape 4000 Administration displays the trunk groups and their attributes. By activating the **Cyclic Check of Trunk Groups** feature you can perform a cyclic check which queries the usage of all available resources (B channels) assigned to a trunk group. To activate the **Cyclic Check of Trunk Groups** feature, check the **Cyclic Check of Trunk Groups Active** check box and set the **Start Date**, **Start Time** and **Cycle** parameters for the switch.

To enable the Cyclic Check for selected trunk groups only, activate the check box of the trunk group in the **PM/TG Check** table column. This reduces communication with the switch and the amount of data.

The screenshot shows the OpenScope 4000 Administration window. The 'Object' tab is selected. The configuration for a Trunk Group (Name: ST74, ID: ST74, Type: HLO) is displayed. The 'Communication Status' is 'Batchjob failed'. The 'Active Application' section shows 'Access Management', 'Configuration Management', 'Collecting Agent', and 'Performance Management' all checked. The 'Collecting Agent' tab is active, showing a table for Trunk Groups and a section for the Cyclic Check of Trunk Groups. The table has columns for Trunk Group, Name, AM, PM, and PM/TG Check. The Cyclic Check section has a checkbox for 'Cyclic Check of Trunk Groups Active' which is checked, and a description 'Cycle Check of 8 channels in the Trunk Group'. Below this, there are fields for Start Date (Oct 30, 2014), Start Time (10:02:59 AM), and Cycle (1 hour, 5 minutes).

The **Cyclic Check of Trunk Groups** feature cyclically queries the status of all available resources (B channels) assigned to a trunk group and stores the resulting trunk usage data in the COL database. The **Collecting Agent** queries the switches, collects the trunk usage data, and stores the data in the COL database. **Performance Management (PM)** then uses these data to provide an analysis report of the trunk group resource usage.

NOTICE: The **Cyclic Check of Trunk Groups** feature is only supported on OpenScope 4000 Assistant/Manager.

The metering is only performed for the selected switch if the following conditions are met:

- The **Cyclic Check of Trunk Groups Active** check box must be checked (enabled) for the particular switch. The check box is located on the right hand side in the **Collecting Agent -> Trunk Groups/CDR** tab sheet.
- The check box in the **PM/TG Check** table column must be checked for at least one of the trunk groups displayed in the table, because the metering is performed only for the trunk groups selected for metering.

Cyclically, in defined time intervals, COL queries the usage of all available resources (B channels) assigned to a trunk group (AMO DIS-BUEND), obtaining the list of trunk groups, the associated trunk cards, and the number of assigned channels. The status of each assigned channel is also determined (AMO DIS-SDSU). Finally, the Collecting Agent calculates the number of available channels for each trunk group. The data obtained through the cyclic check is then stored in the COL database and can be used by PM for further analysis and reporting.

The cyclic check is only performed for trunk groups with **enabled** check box in the **PM/TG Check** table column. After performing the cyclic check you can upload the data of the metered trunk groups back to the switch by clicking the **Activate** button. The PM data generated on the switch will then contain only the selected trunk groups. This reduces the communication with the switch and the amount of PM data.

NOTICE: Data should be collected only for relevant trunk groups in order to minimize communication with the switch and to reduce the amount of PM data. You can edit the displayed data and save them in the COL database by clicking the **Save** button.

Click the **Download** button to download the trunk group data from the system. The download process is performed asynchronously, i. e. you need to click the **Refresh** button in order to get the current data displayed in the table.

Click the **Activate** button to send changed trunk group data back to the system. The **Activate** button is only activated after you have clicked the **Save** button to confirm and apply your changes. The download process is also performed asynchronously.

In addition, you can use the **Activate** feature to upload information about metered trunk groups back to the switch. After that, PM data generated on the switch will contain only the selected trunk groups. In this way, the communication with the switch and the amount of PM data is reduced.

Field Descriptions

Download (button)

Activate (button)

Download Status

Last download passed on (date/time)

Activation Status

Last activation passed on (date/time)

Trunk (table column)

Name (table column)

AM (table column)

PM (table column)

PM/TG Check (table column with check box)

Cyclic Check of Trunk Groups Active (check box)

Start Date

Start Time

Cycle (radio button)

Hours

Minutes

Refresh (button)

[Save \(button\)](#)

[Discard \(button\)](#)

[New \(button\)](#)

[Delete \(button\)](#)

See Also

[Object List \(System Management - OpenScape 4000 Administration\)](#)

[COL Administration sub tab](#)

[Attendant Consoles sub tab](#)

[Node No. Transform sub tab](#)

[ISDN Access Codes sub tab](#)

3.8.1.5 Attendant Consoles sub tab

The **Collecting Agent/Attendant Consoles** tab sheet of the **System Management - OpenScape 4000 Administration** application under OpenScape 4000 Assistant/Manager supports downloading attendant consoles data from the system and retrieving their virtual node numbers.

The transformation from virtual to physical node numbers is generally done based on the data in the `col_port` database table.

The data of all systems configured using the Configuration Management (CM) application are stored in `col_port` database tables.

Attendant consoles are not configured using CM, and therefore their data are not included in the `col_port` database tables, so for attendant consoles it is not possible to perform a transformation from virtual to physical node numbers.

Field Descriptions

[Download](#)

[Refresh](#)

[Generating Node No. \(table\)](#)

See Also

[Object List \(System Management - OpenScape 4000 Administration\)](#)

[COL Administration sub tab](#)

[Trunk Group/CDR sub tab](#)

[Node No. Transform sub tab](#)

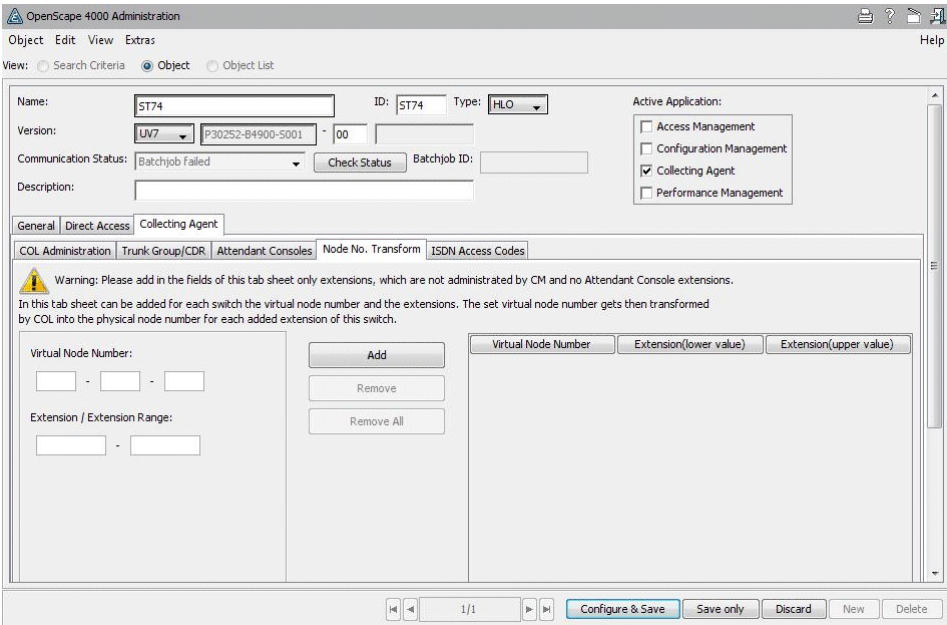
[ISDN Access Codes sub tab](#)

3.8.1.6 Node No. Transform sub tab

In the Node **No. Transform** tab sheet you may assign virtual node numbers to physical node numbers for extensions, which are not managed by CM, in order to make them available for Account Management.

Collecting Agent is responsible for correct transformations of the CDR data in order to hand them over to Performance Management. The transformations are necessary in order for PM to make calculations with switch names and physical node numbers rather than virtual node numbers. This is achieved by mechanisms which query the Informix database, identify the switch name for the coordination of extension/virtual node number from col_port and then use the switch name for finding the physical node number from col_switch. The transformed node number will be delivered to PM.

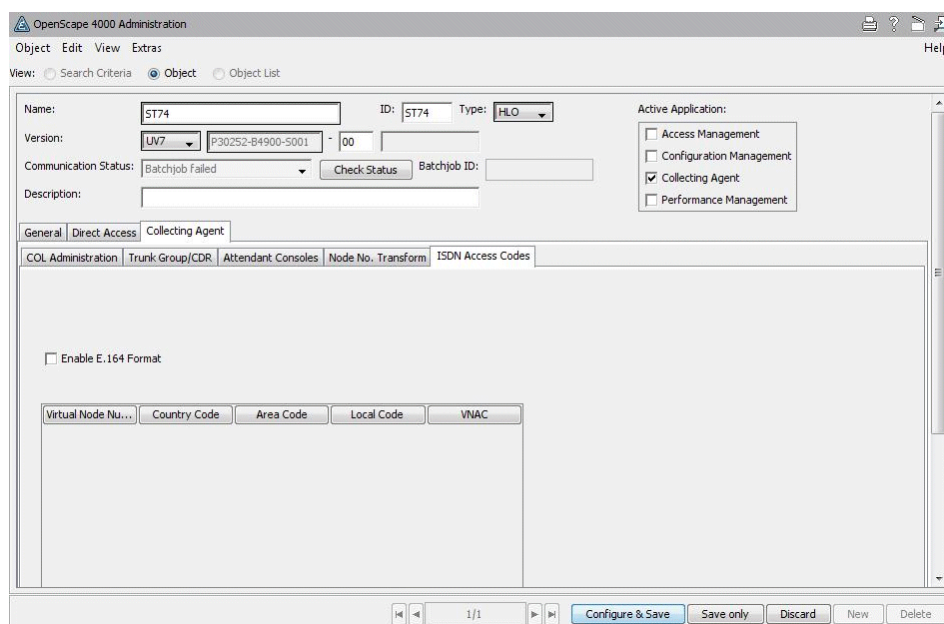
NOTICE: Do not add any Attendant Console extension in this tab sheet - their virtual node numbers must be downloaded in the Attendant Console tab sheet! Also do not add any extension in this tab sheet which is handled by CM!



Field Descriptions[Virtual Node Number](#)[Extension / Extension Range](#)[Add \(button \)](#)[Remove \(button\)](#)[Remove All \(button\)](#)[Virtual Node Number \(table column\)](#)[Extension \(lower value\) \(table column\)](#)[Extension \(upper value\) \(table column\)](#)**See Also**[Object List \(System Management - OpenScape 4000 Administration\)](#)[COL Administration sub tab](#)[Trunk Group/CDR sub tab](#)[Attendant Consoles sub tab](#)[ISDN Access Codes sub tab](#)**3.8.1.7 ISDN Access Codes sub tab**

In order to support mixed networks with OpenScape/HiPath 4000 and OpenScape Voice in a consistent way, CDRs which are collected from OpenScape/HiPath 4000 switches, can be calculated to the E.164 number format. With the **ISDN Access Code** sub tab there is a possibility to recalculate country code, area code and local code (ISDN Access Codes) of a selected switch from the internal number format. If the values from the database can be evaluated and calculated correctly, checking the **Enable E.164 Format** check box displays in the table read-only data from the selected switch:

- Virtual Node Number,
- Country Code,
- Area Code,
- Local Code.



If there is a calculation problem, a warning message is displayed, denoting to check the following criteria:

- Status of CM upload operation
- Configuration of AMO KNDFF
- Validity of Generating Node ID in input line definition screen.

In this error case recalculation will not be completed.

See also

[Object List \(System Management - OpenScape 4000 Administration\)](#)

[COL Administration sub tab](#)

[Trunk Group/CDR sub tab](#)

[Attendant Consoles sub tab](#)

[Node No. Transform sub tab](#)

3.9 Input Format Editor

The **Input Format Editor** allows the administrator to define and edit input formats. An input format describes the structure of the received call charge data records (CDRs). The elements to be used depend on the system version. For each input format an FTBL file is generated. This file contains AMO commands which are copied to the OpenScape/HiPath system and executed there. After the execution of the FTBL file the OpenScape/HiPath system creates CDR data that match the defined input format.

The input format editor is started from the COL Homepage.

There are pre-defined elements and formats available for defining the CDR input and output formats for COL. **Lists of all pre-defined elements and formats** for defining the CDR input and output formats for COL can be found in:

[Pre-defined Formats for Defining CDR Input and Output Formats](#)

Input formats can be displayed, ein three different views: **Object** view, **New Object** view, and **Object List** view.

For details, please refer to the respective sections:

[Important Hints Before Starting -- Overview](#)

[Installation Hints for Performance Management \(PM\)](#)

[PM/COL Installation Instructions -- Getting Started](#)

[Input Format Editor - Object view](#)

[Input Format Editor - Object List view](#)

[Input Format Editor - Set Default Value](#)

[Input Format Editor - Configure Input Element](#)

[Definition of Output Lines](#)

[Output Line Definition - Object List](#)

[Output Format Editor](#)

[Output Format Editor - Object List view](#)

[Configure Output Element](#)

[Filter Editor](#)

3.10 Pre-defined Formats for Defining CDR Input and Output Formats

Important Information: Please read before starting operation of Load CV631, CV645-646 and higher versions.

- [CM Elements Used for Transforming Virtual to Physical Node Numbers](#)

The following tables contain the elements and pre-defined formats that can be selected for defining input and output formats.

- [Elements for Defining Input and Output Formats for COL CDRs](#)
- [Pre-defined Formats for Output Format Definition](#)
 - [AM-WIN 1.0 - Format for AM-WIN 1.0](#)
 - [AM-WIN 2.0 - Format for AM-WIN 2.0](#)
 - [H4000_HP_AM - Output format from OpenScape 4000 for HiPath AM](#)
 - [OpenScape 4000 Manager/Assistant PM - Output format for OpenScape 4000 Assistant PM V1.0](#)
 - [H4000_HPAM_E164 - Output format from OpenScape 4000 for HiPath AM](#)
 - [HP4M_AMPM_UV3.0 - Output format from HiPath 4000 V3](#)
 - [HP4M_AMPM_UV4 - Output format from HiPath 4000 V4](#)
 - [HP4M_AMPM_UV5 - Output format from HiPath 4000 V5](#)
 - [HP4M_AMPM_UV6 - Output format from HiPath 4000 V6](#)
 - [HP4M_AMPM_UV7 - Output format from OpenScape 4000 V7](#)
 - [HP4M_PM_UV7 - Output format from OpenScape 4000 V7](#)
 - [HP4M_AMPM_UV8 - Output format from OpenScape 4000 V8](#)
 - [HP4M_PM_UV8 - Output format from OpenScape 4000 V8](#)
 - [HP4M_AMPM_UV10 - Output format from OpenScape 4000 V10](#)
 - [HP4M_PM_UV10 - Output format from OpenScape 4000 V10](#)

Functionality

Input Format Editor - Object view

- [Pre-defined Formats for Input Format Definition](#)
 - [AMPM_UV1.0](#) - Input format for AM / PM OpenScape 4000
 - [AMPM_UV8](#) - Input format for AM/PM OpenScape 4000
 - [PM_UV8](#) - Input format for OpenScape 4000
- [Additional CM Elements for Defining CDR Output Formats](#)
 - [CM Elements Used for Generating History Output](#)
 - [CM Elements Used for Transforming Virtual to Physical Node Numbers](#)
 - [Loading the col_port and col_switch Tables](#)

Related Topics

[Important Hints Before Starting -- Overview](#)

[Installation Hints for Performance Management \(PM\)](#)

[PM/COL Installation Instructions -- Getting Started](#)

[Input Format Editor - Field Descriptions and User Actions, page 247](#)

[Input Format Editor - Object view](#)

[Input Format Editor - Object List view](#)

[Input Format Editor - Set Default Value](#)

[Input Format Editor - Configure Input Element](#)

[Collecting Agent User Interface](#)

[Collecting Agent - Homepage](#)

[COL Features](#)

Step-By-Step Instructions

[Input Format Editor](#)

[Installation Hints for Performance Management \(PM\)](#)

3.11 Input Format Editor - Object view

The **Input Format Editor - Object View** is used to define and edit input format descriptions and store them in the database.

An input format describes the structure of a received CDR. The elements to be used depend on the system version. For each input format an FTBL file is generated. This file contains AMO commands which are copied to the OpenScape/HiPath system and executed there. After execution of the FTBL file, the OpenScape/HiPath system will create CDR data that will match the defined input format.

The Input Format Editor is started from the COL Homepage.

Lists of all pre-defined elements and formats available for defining the CDR input and output formats for COL can be found in:

[Pre-defined Formats for Defining CDR Input and Output Formats.](#)

Input formats can be displayed in three different views: **Object** view, **New Object** view, and **Object List** view.

Input Format Editor

Object View Action Help

Object New Object Object List

Format Name: AM1.5_UV1.0 System Version: UV1.0 ☒ Predefined

Description: AM V1.5 input format for HiPath 4000 V1.0 End Of Line: CR/LF

Name	Element Description	Allowed
ACDAGTID	ACD agent ID	☒
ACDGID	ACD Group No...	☐
ACDINFO	ACD/Non-ACD	☐
ADPLOAD	ADP load	☒
AOCTYPE	Advice of charge	☒
ATTCALLP	Attendant call ...	☐
ATTCALLR	Attendant inte...	☐
ATTCALLT	Attendant call ...	☐
ATTGRNO	Attendant con...	☒
ATTQUEID	Attendant que...	☐
AUTH	Authorization ...	☐
BAUD	Transmission s...	☒
BCHLCNT	Number of use...	☒
BLNBYT	Block length in ...	☒
BLNREC	No. of records ...	☒
CALCTYPE	Applied type of...	☒
CALLEPTY	Called party; di...	☒
CALLTID	Identification o...	☒
CALLTLV0	Node number o...	☒

Elements in Input Format:

#	Name	Element Description	Length	Alignment
1	PPLV0	Node number of paying party	3	Right
2	PPLV1	Subdomain number of paying ...	3	Right
3	PPLV2	Domain number of paying party	2	Right
4	PAYPART	Paying party; chargee of a co...	22	Left
5	DESTLV0	Node number of destination n...	3	Right
6	DESTLV1	Subdomain number of destinat...	3	Right
7	DESTLV2	Domain number of destination ...	2	Right
8	DESTPTY	Destination number (new/con...	22	Left
9	CONNTYPE	Connection type	1	Left
10	ENDYEAR	End-of-connection year	4	Right
11	ENDMONTH	End-of-connection month	2	Right
12	ENDYDAY	End-of-connection day of the ...	3	Right
13	ENDHOUR	End-of-connection hour	2	Right
14	ENDMIN	End-of-connection minute	2	Right
15	ENDSEC	End-of-connection second	2	Right
16	CONNHOUR	Connection duration of part hour	2	Right
17	CONNMIN	Connection duration of part mi...	2	Right
18	CONNSEC	Connection duration of part s...	2	Right
19	CARRIER	Carrier; communication network	1	Left

Number Of Elements: 26 Format Length: 114

1/28 Save New Delete

Two tables are shown on the **Object** view page:

- Default element table (left-hand side table)
- and
- Input element table (right-hand side table).

Elements in the default element table do not appear in the input file. A default value should be defined for each element in this table. The input element table contains selected elements and their properties. All elements from that table appear in the input file. Element properties for both tables cannot be edited directly in the tables but in separate windows that are started by double-clicking on the selected row.

An additional special element containing fixed text can be added to the input as well. This element is used to represent those parts of the input that are ignored in further processing and do not match any standard element.

The same element cannot appear more than once among input elements in the input table. The only exception is a fixed text element that is allowed to appear several times in input.

The **End-of-Line** sequence is defined separately and does not have to be listed as the last element in the input table.

System version determines the choice of elements in the default table and the input element table. The user can define formats that have no system version assigned by choosing "none" as the system version. Such format is referred to as a 'free format'. If this format is used, all possible elements are allowed and both tables can be modified as desired.

When a new object is created, the default table contents are shown according to the system version. If the system version of an existing object is changed, the table contents are automatically synchronized with the selected system version, and the previous contents are lost.

Predefined input formats cannot be modified. If the user tries to save the changed predefined input format, an appropriate warning message is displayed and the changes are not saved.

Name uniquely identifies the format. If the user changes the name and presses the **Save** button, a dialog box appears if the current object is assigned to some input line.

Both tables only allow the selection of a single row.

If the user wants to change an existing format that is in use, the user will be warned of possible errors, because files in old formats could already have been generated by the system (a warning box appears).

Each format (except free format) has an associated FTBL file. This file contains AMO commands that should be sent to the system. These commands are used to configure the system so that it produces CDRs in a defined format. AMO commands depend on the system type. Therefore each format should have a system type defined. The only exception is the free format.

It is not possible to print changed data that has not been saved.

To navigate to a different object in the list, you can either select the object by clicking on the list row, or use the arrow keys at the bottom of the screen, or select **View -> Go To** and choose one of the navigation options **First Object**, **Previous Object**, **Next Object** or **Last Object**.

Field and Controls Descriptions

[Format Name](#)

[System Version](#)

[Description](#)

[Predefined](#)

[End Of Line](#)

[Default element table \(on left-hand side of dialog\)](#)

[Input element table](#)

[Number Of Elements](#)

[Format Length](#)

[Save \(Button\)](#)

[New \(Button\)](#)

[Delete \(Button\)](#)

Related Topics

[Input Format Editor - Field Descriptions and User Actions, page 247](#)

[Important Hints Before Starting -- Overview](#)

[Installation Hints for Performance Management \(PM\)](#)

[PM/COL Installation Instructions -- Getting Started](#)

Lists of all pre-defined elements and formats available for defining the CDR input and output formats for COL can be found in:

[Pre-defined Formats for Defining CDR Input and Output Formats](#)

Step-By-Step Instructions

[Input Format Editor](#)

Installation Hints for Performance Management (PM)

3.12 Input Format Editor - Object List view

Input Format Editor - Object List is the default view that is shown when the dialog is displayed. The **Object List** view is read-only. It shows the list of all defined input formats, but displays only basic information about the formats. The **Object** view shows the complete set of information for the selected object and can be used to add, modify or delete the selected input format. The **New Object** view is used to define new objects. This view looks similar to the **Object** view.

A search function is not supported.

Format Name	System Version	Description	Element Count	Format Length
AM1_5_UV1.0	UV1.0	AM V1.5 input format for HPPath 4000 V1.0	26	114
AM1_5_UV2.0	UV2.0	AM V1.5 input format for HPPath 4000 V2.0	26	114
AMPM_UV1.0	UV1.0	AM/PM input format for HPPath 4000 V1.0	75	327
AMPM_UV1.0_S	UV1.0	Short AM/PM input format for HPPath 4000 V1.0	70	318
AMPM_UV2.0	UV2.0	Enhanced AM/PM input format for HPPath 4000 ...	80	337
AMPM_UV2.0_S	UV2.0	AM/PM input format for HPPath 4000 V2.0	75	327
AMPM_UV2.0_S	UV2.0	Short AM/PM input format for HPPath 4000 V2.0	70	318
AMPM_UV3.0	UV3.0	AM/PM input format for HPPath 4000 V3.0	81	340
AMPM_UV4	UV4	AM/PM input format for HPPath 4000 V4	81	340

The **Object List** can not be edited. Each row contains information about one format. The table allows only selection of a single row.

To navigate to a different object in the list, you can either select the object by clicking on the list row, or use the arrow keys at the bottom of the screen, or select **View -> Go To** and choose one of the navigation options **First Object**, **Previous Object**, **Next Object** or **Last Object**.

Field and Controls Descriptions

[Input Format Editor, Table columns](#)

[Save \(Button\)](#)

[New \(Button\)](#)

[Delete \(Button\)](#)

Related Topics

[Input Format Editor - Object List - Field Descriptions, page 248](#)

[Important Hints Before Starting -- Overview](#)

[Installation Hints for Performance Management \(PM\)](#)

[PM/COL Installation Instructions -- Getting Started](#)

Lists of all pre-defined elements and formats available for defining the CDR input and output formats for COL can be found in:

[Pre-defined Formats for Defining CDR Input and Output Formats](#)

Step-By-Step Instructions

[Input Format Editor](#)

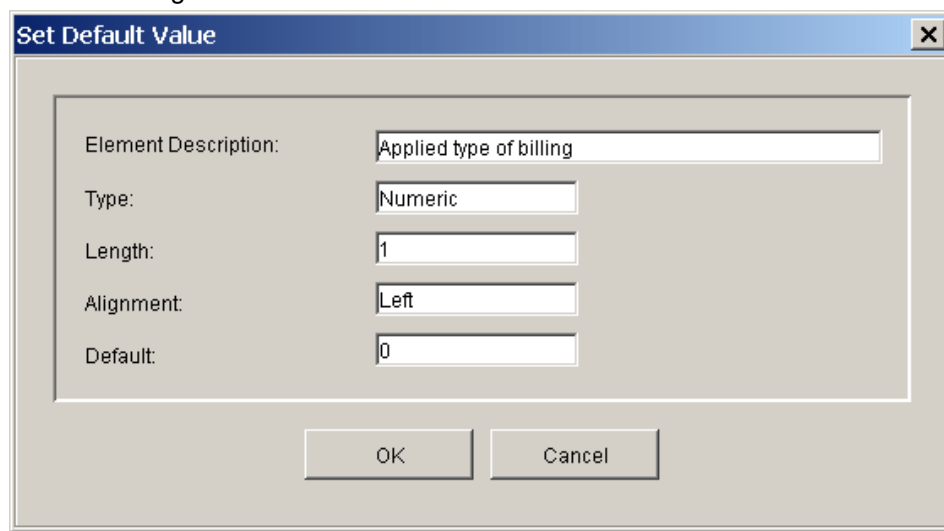
[Installation Hints for Performance Management \(PM\)](#)

3.13 Input Format Editor - Set Default Value

The **Input Format Editor - Set Default Value** dialog allows the administrator to set the default value of a specific CDR element. This value is used as output value, if the element is part of the output data and does not appear in the input data.

Start

The dialog is started from the Input Format Editor - Object View dialog by double-clicking on the row in the default element table.



Description

This is a modal dialog with the title "COL - Set Default Value". It is used to set the default value of the selected input element. Other fields in the dialog are read-only.

Lists of all pre-defined elements and formats that can be selected by the user for defining the CDR input and output formats for COL can be found in:

[Pre-defined Formats for Defining CDR Input and Output Formats](#)

Field and Controls Descriptions

[Element Description](#)

[Type](#)

[Length](#)

[Alignment](#)

[Default](#)

Related Topics

[Input Format Editor - Set Default Value - Field Descriptions and User Actions, page 249](#)

[Important Hints Before Starting -- Overview](#)

[Installation Hints for Performance Management \(PM\)](#)

[PM/COL Installation Instructions -- Getting Started](#)

Step-By-Step Instructions

[Input Format Editor - Set Default Value](#)

[Installation Hints for Performance Management \(PM\)](#)

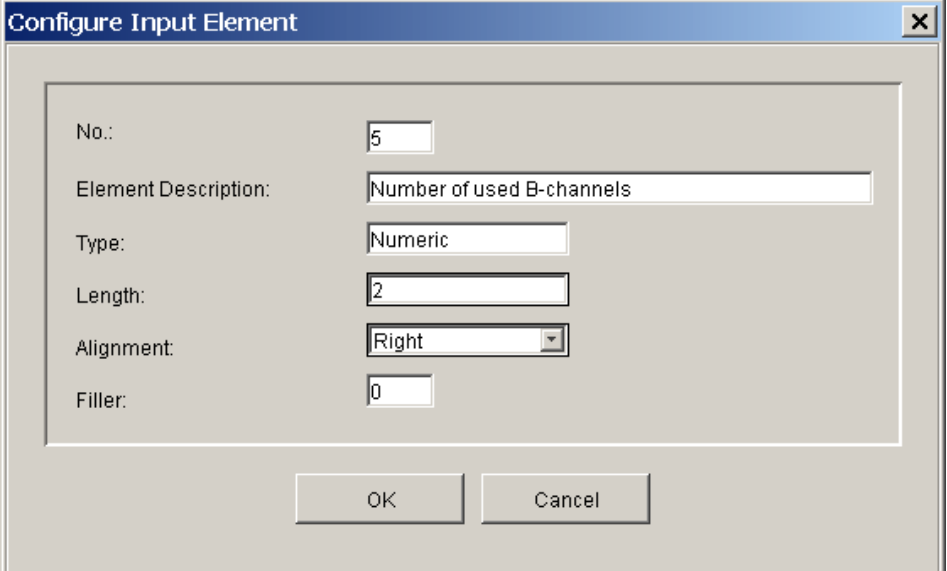
3.14 Input Format Editor - Configure Input Element

Configure Input Element allows the administrator to set the properties of a specific CDR input element.

This dialog is started from the Input Format Editor dialog by double-clicking on the input element table row.

Menu

This dialog does not have a menu.



Description

This is a modal dialog used to modify properties of the selected input element. It is opened by double-clicking on one of the records listed in the **Input** element table.

Lists of all pre-defined elements and formats that can be selected by the user for defining the CDR input and output formats for COL can be found in:

[Pre-defined Formats for Defining CDR Input and Output Formats](#)

Field and Controls Descriptions

[No.](#)

[Element Description](#)

[Type](#)

[Length](#)

[Alignment](#)

[Filler](#)

Related Topics

[Input Format Editor - Configure Input Element - Field Descriptions and User Actions, page 249](#)

[Important Hints Before Starting -- Overview](#)

[Installation Hints for Performance Management \(PM\)](#)

[PM/COL Installation Instructions -- Getting Started](#)

Step-By-Step Instructions

[Input Format Editor - Configure Input Element](#)

[Installation Hints for Performance Management \(PM\)](#)

3.15 Definition of Output Lines

To open the **Output Line Definition** dialog, click the **Definition of Output Lines** link on the COL Homepage. The **Object List** view is the default view displayed after starting this feature.

Definition of Output Lines allows the administrator to define output lines for the Account Management. Each output line is defined by an output CDR file, its specific output format (see [Output Format Editor](#)) and its output filter (see [Filter Editor](#)). The output CDR file is supplied cyclically.

The **Output Line Definition** dialog is started from the COL Homepage.

Lists of all pre-defined elements and formats that can be selected by the user for defining the CDR input and output formats for COL can be found in:

[Pre-defined Formats for Defining CDR Input and Output Formats](#)

Definition of Output Lines - "New Object" view

The screenshot shows the 'Output Line Definition' dialog box with the 'New Object' view selected. The dialog has a menu bar (Object, View, Action, Help) and a tab bar (Object, New Object, Object List). The 'New Object' tab is active. The main area contains the following fields and controls:

- Output Line Name:** Text box containing 'AM-Line'. To its right is a checked checkbox labeled 'Active'.
- Description:** Text box containing 'AM Output line'.
- Output Format:** Dropdown menu showing 'HP-COL_V1.0'.
- Translation Group:** Dropdown menu showing 'Default Group'.
- Filter:** Dropdown menu showing 'DefaultFilter'.
- File Name:** Text box containing 'GCDATA'.
- Start Date:** Date picker showing 'Nov 17, 2014'.
- Start Time:** Time picker showing '10:57:47 AM'.
- Cycle:** Radio buttons for 'Hours' (selected) and 'Minutes'. Below them are two dropdown menus showing '1' and '15' respectively.

At the bottom of the dialog are three buttons: 'Save', 'New', and 'Delete'.

Description

Output lines apply to AM data only. Output of PM data is not shown with other output lines. Output of PM-specific files cannot be stopped if the input is active.

Output lines can be displayed in three different views:

- Object View,
- New Object view,
- Object List.

Object List is the default view that is shown when the dialog is displayed.

Object List is read-only and displays only basic information about lines. The **Object** view, on the other hand, shows complete information about the object and can be used to add, modify or delete the selected line. The **New Object** view is used to define new objects and looks similar to the **Object** view.

A search function is not supported.

To navigate to a different object in the list, choose one of the following actions:

- select the object by clicking on the object in the list row,
or
- use the arrow keys at the bottom of the screen,
or
- select **View -> Go To** and choose one of the navigation options **First Object**, **Previous Object**, **Next Object** or **Last Object**.

Object view

Changes in the output line definition require COL restart to become active. The same applies to adding or deleting an output line.

Field and Controls Descriptions

[Output Line Name](#)

[Description](#)

[Active](#)

[Output Format](#)

[Translation Group](#)

[Filter](#)

[File Name](#)

[Start Date/Time](#)

[Cycle](#)

[Save \(Button\)](#)

[New \(Button\)](#)

[Delete \(Button\)](#)

Related Topics

[Output Line Definition - Object View - Field Descriptions and User Actions, page 250](#)

[Important Hints Before Starting -- Overview](#)

[Installation Hints for Performance Management \(PM\)](#)

[PM/COL Installation Instructions -- Getting Started](#)

Step-By-Step Instructions[Output Line Definition](#)[Installation Hints for Performance Management \(PM\)](#)

3.15.1 Parallel Output of CDR Data on Multiple Output Devices in OpenScape 4000

Parallel output of CDR data onto multiple output devices (e.g. V24 and FT file) is only supported if the CDRFAST parameter in the AMO FEACG is deactivated.

If CDRFAST is activated, only one selection group (SELG1) and thus only one output device is activated; the other selection groups (2 through 4) are deactivated.

Parallel output of CDR data on multiple output devices (e.g. V24 and FT file) is only supported if the CDRFAST parameter in the AMO FEACG is **deactivated**.

In case of high load on the switch, deactivating the CDRFAST parameter can cause performance problems.

CDRFAST optimizes the CDR data output and increases the output performance on the ADP. This is achieved by deactivating the selection groups 2 through 4, thus reducing the output to one selection group, i.e. one output device.

As a general rule, you should only deactivate CDRFAST if you need parallel output of CDR data on multiple output devices.

If you only need the FT file as the target format for CDR data output (i.e. only one output device) you should always activate CDRFAST in order to increase the output performance on the switch.

Related Topics[Important Hints Before Starting -- Overview](#)[Installation Hints for Performance Management \(PM\)](#)[PM/COL Installation Instructions -- Getting Started](#)

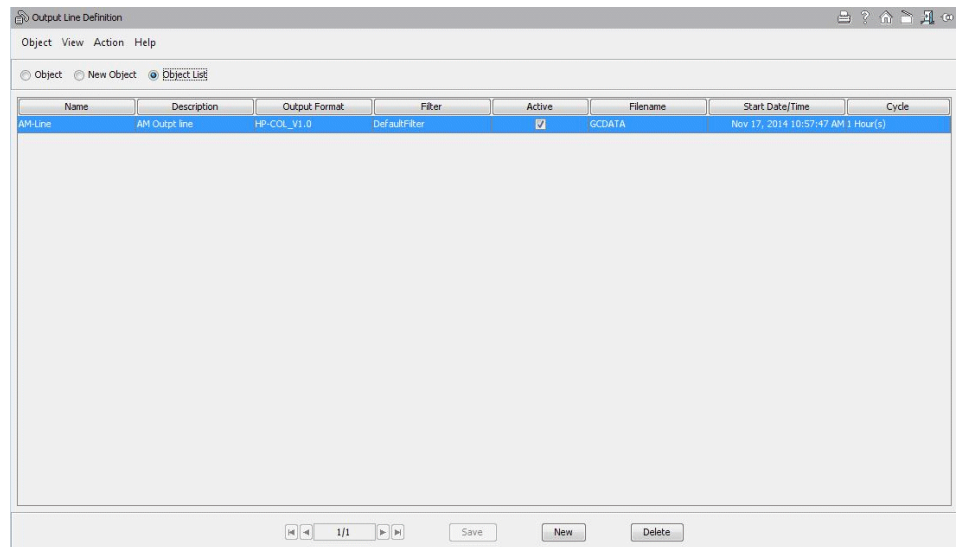
3.16 Output Line Definition - Object List

To open the **Output Line Definition** dialog, click the **Definition of Output Lines** link on the COL Homepage.

The **Output Line Definition - Object List** can not be edited. Each row contains information about one output line.

To navigate to a different object in the list, choose one of the following actions:

- select the object by clicking on the object in the list row,
or
- use the arrow keys at the bottom of the screen,
or
- select **View -> Go To** and choose one of the navigation options **First Object**, **Previous Object**, **Next Object** or **Last Object**.



Field and Controls Descriptions

[Output Line Definition, table columns](#)

[Save \(Button\)](#)

[New \(Button\)](#)

[Delete \(Button\)](#)

Related Topics

[Output Line Definition - Object List - Field Descriptions, page 251](#)

[Important Hints Before Starting -- Overview](#)

[Installation Hints for Performance Management \(PM\)](#)

[PM/COL Installation Instructions -- Getting Started](#)

Lists of all pre-defined elements and formats available for defining the CDR input and output formats for COL can be found in:

[Pre-defined Formats for Defining CDR Input and Output Formats](#)

Step-By-Step Instructions

[Output Line Definition](#)

[Installation Hints for Performance Management \(PM\)](#)

3.17 Output Format Editor

The **Output Format Editor** feature allows the administrator to define and modify output formats. An output format describes the structure of the provided output CDRs. Used OpenScape elements which are not received within the input line are set to the default value. The Output Format Editor is used to edit output format descriptions and store them in the database.

An output CDR can also contain CM elements (e.g. personal data / (elements are only shown if package "with CM-elements" is installed). At least the

structure of the output CDR must be defined in accordance with the used accounting system (e.g. AM).

The output format editor is started from the COL Homepage.

Lists of all pre-defined elements and formats available for defining the CDR input and output formats for COL can be found in:

Pre-defined Formats for Defining CDR Input and Output Formats

Description

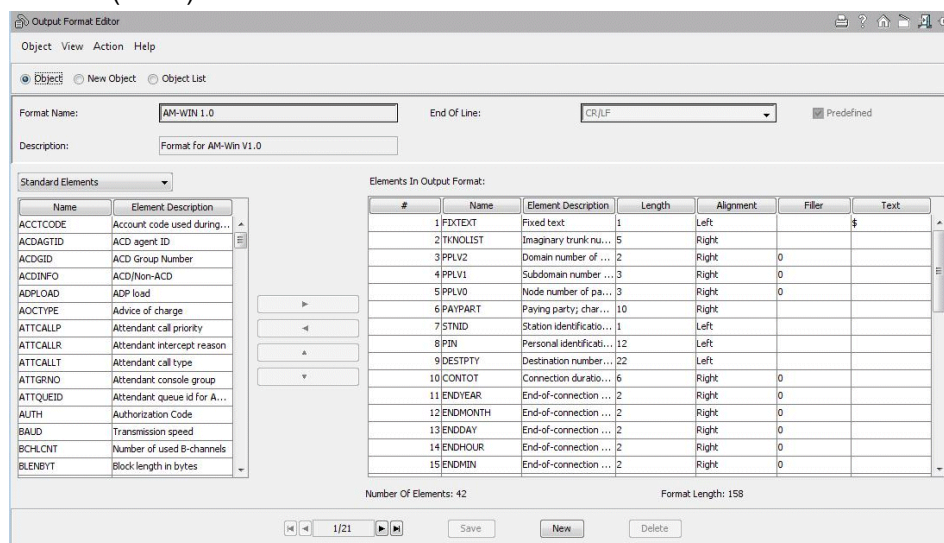
The output format editor is used to edit output format descriptions and store them in the database.

Output formats can be displayed in three different views:

- Object view,
- New Object view,
- Object List.

Object view

The user can choose standard elements and fields from the database (e.g. personal data) and add them to the **Output** elements table. Properties of the elements in the **Output** elements table can be modified in the **Configure Output Element** modal window which is opened by double-clicking on an element (a row).



Element types are:

- Standard elements,
- CM elements Note: On a OpenScope Manager the CM Elements are only displayed if the COL software is installed with the necessary user license rights.
- Fixed text.

For each CM element there is a defined criterion according to which data from the database are selected. This criterion is fixed and cannot be defined by the user.

Fixed text elements have an additional property - Text.

If the user wants to change an existing format that is in use, a warning box is displayed which informs the user that output files might already exist on the server in old format.

The End-of-Line sequence is defined separately and does not have to be listed as the last element in the input table.

Additional special elements containing fixed text can be added to the output as well.

The same element can appear more than once among the elements of the output table.

Special characters can be entered using a backslash as an escape character (\n, \r etc.).

When a new object is created, the output table is empty.

"Format name" uniquely identifies the format. If the name has been changed before, changes are saved to the database, a dialog box appears and the user can decide whether to save the format as a new object or change the name of the current object. If the current object is in use, i.e. assigned to some output line, the name cannot be changed.

Both tables only allow selection of a single line.

If the user wants to change an existing format that is in use, the user is warned of possible errors because files could exist in the system in old format (a warning box appears).

It is not possible to print changed data that has not been saved.

To navigate to a different object in the list, you can either select the object by clicking on the list row, or use the arrow keys at the bottom of the screen, or select **View -> Go To** and choose one of the navigation options **First Object**, **Previous Object**, **Next Object** or **Last Object**.

Field and Controls Descriptions

[Format Name](#)

[Description](#)

[End of Line](#)

[Element group list](#)

[Element table \(on left-hand side of dialog\)](#)

[Output elements table \(on right-hand side of dialog\)](#)

[Number Of Elements](#)

[Format Length](#)

[Save \(Button\)](#)

[New \(Button\)](#)

[Delete \(Button\)](#)

Related Topics

[Output Format Editor - Object View - Field Descriptions and User Actions, page 252](#)

[Important Hints Before Starting -- Overview](#)

[Installation Hints for Performance Management \(PM\)](#)

[PM/COL Installation Instructions -- Getting Started](#)

Lists of all pre-defined elements and formats available for defining the CDR input and output formats for COL can be found in:

[Pre-defined Formats for Defining CDR Input and Output Formats](#)

Step-By-Step Instructions

[Output Format Editor](#)

[Installation Hints for Performance Management \(PM\)](#)

3.18 Output Format Editor - Object List view

Object List is the default view that is shown when the dialog is displayed. The **Object List** view is read-only. It shows the list of all defined input formats, but displays only basic information about the formats. The **Object** view shows the complete set of information for the selected object and can be used to add, modify or delete the selected input format. The **New Object** view is used to define new objects. This view looks similar to the **Object** view.

To navigate to a different object in the list, you can either select the object by clicking on the list row, or use the arrow keys at the bottom of the screen, or select **View -> Go To** and choose one of the navigation options **First Object**, **Previous Object**, **Next Object** or **Last Object**.

A search function is not supported.

Object List

The object list can not be edited. Each row contains information about one output format. The table only allows the selection of a single row.

Format Name	Description	Element Count	Format Length
AM-WIN 1.0	Format for AM-Win V1.0	42	158
AM-WIN 2.0	Format for AM-Win V2.0	56	213
H4000_HPAM_E164	Format for HPath AM with E164 fields	56	240
HP-COL_V1.0	Format for HPath COL V1.0 + HP 4000 Manager AM	56	213
HP4M_AMPM_UV1.0	Format for HPath 4000 Manager AM + PM	74	326
HP4M_AMPM_UV2.0	Format for HPath 4000 Manager AM + PM V2.0	74	326
HP4M_AMPM_UV3.0	Format for HPath 4000 Manager AM + PM V3.0	75	329
HP4M_AMPM_UV4	Format for HPath 4000 Manager AM + PM V4	75	329
HP4M_AMPM_UV5	Format for HPath 4000 Manager AM + PM V5	76	330

Field and Controls Descriptions

[Output Format Editor, table columns](#)

[Save \(Button\)](#)

[New \(Button\)](#)

[Delete \(Button\)](#)

Related Topics

[Output Format Editor - Object List - Field Descriptions, page 253](#)

[Important Hints Before Starting -- Overview](#)

[Installation Hints for Performance Management \(PM\)](#)

[PM/COL Installation Instructions -- Getting Started](#)

Lists of all pre-defined elements and formats available for defining the CDR input and output formats for COL can be found in:

[Pre-defined Formats for Defining CDR Input and Output Formats](#)

Step-By-Step Instructions

[Output Format Editor](#)

[Installation Hints for Performance Management \(PM\)](#)

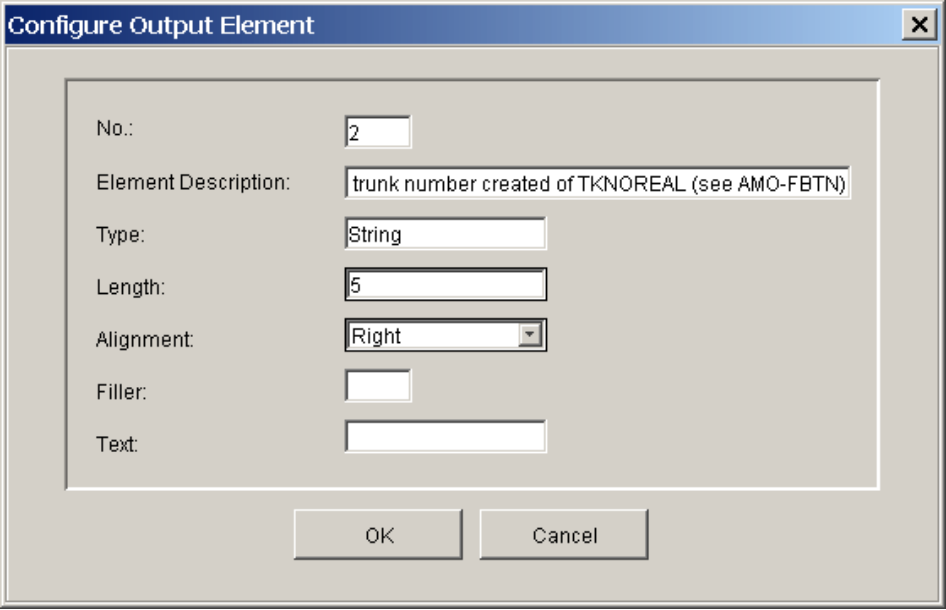
3.19 Configure Output Element

The **Configure Output Element** dialog allows the administrator to set the properties of a specific CDR output element.

This dialog is started from the **Output Format Editor** dialog, **Object** view, by double-clicking on a record (row) in the **Elements in Output Format** table.

Lists of all pre-defined elements and formats available for defining the CDR input and output formats for COL can be found in:

[Pre-defined Formats for Defining CDR Input and Output Formats](#)



The screenshot shows the 'Configure Output Element' dialog box. It has a title bar with the text 'Configure Output Element' and a close button (X). The dialog contains several input fields and a dropdown menu. The fields are labeled 'No.', 'Element Description', 'Type', 'Length', 'Alignment', 'Filler', and 'Text'. The 'No.' field contains the value '2'. The 'Element Description' field contains the text 'trunk number created of TKNOREAL (see AMO-FBTN)'. The 'Type' field contains the value 'String'. The 'Length' field contains the value '5'. The 'Alignment' field is a dropdown menu with 'Right' selected. The 'Filler' and 'Text' fields are empty. At the bottom of the dialog are two buttons: 'OK' and 'Cancel'.

Field and Controls Descriptions

[No.](#)

[Element Description](#)

[Type](#)

[Length](#)

[Alignment](#)

[Filler](#)

Text

Related Topics

- [Output Format Editor - Configure Output Element - Field Descriptions and User Actions, page 254](#)
- [Important Hints Before Starting -- Overview](#)
- [Installation Hints for Performance Management \(PM\)](#)
- [PM/COL Installation Instructions -- Getting Started](#)

Step-By-Step Instructions

- [Output Format Editor - Configure Output Element](#)
- [Installation Hints for Performance Management \(PM\)](#)

3.20 Filter Editor

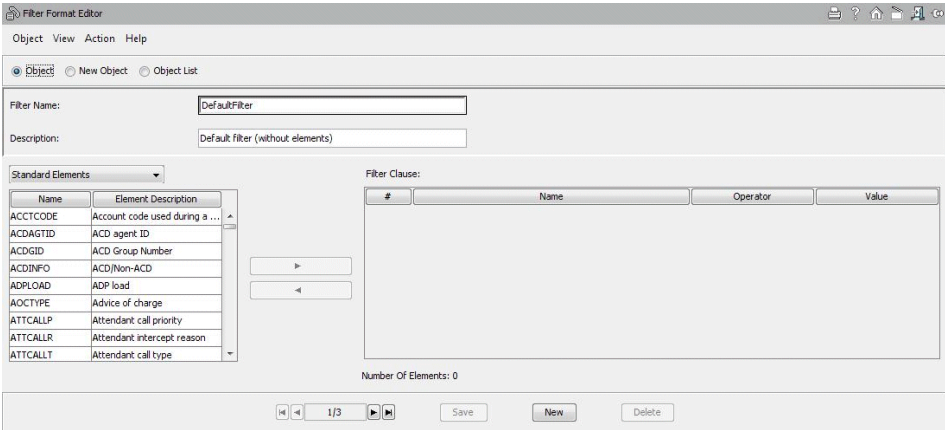
The **Filter Editor** function allows the administrator to define filters for output CDRs. Each system element and each CM element (only if package "with CM-Elements" is installed) supported by COL can be used as a filter criterion (e.g. filtering of CDRs based on "department", as defined in personal data).

The Filter Editor is used to edit filter descriptions and store them in the database. The defined filter is used to select the output. Only CDRs which fulfill the defined filter criteria are sent to the output. Other CDRs are ignored.

The Filter Editor dialog is started from the COL Homepage.

Filters can be displayed in three different views:

- Object view,
- New Object view,
- Object List.



Object view

Two tables are displayed in the object view:

- **Element** table on the left-hand side of the dialog,
- **Filter Clause** table on the right-hand side of the dialog.

The **Element** table contains elements divided into several types. Element types are:

- Standard elements
- CM elements Note: On a OpenScape Manager the CM Elements are only displayed if the COL software is installed with the necessary user license rights.
- Complex elements

The list of CM elements is the same as for the output editor.

The **Filter Clause** table is used to define selection clauses. Selection clause consists of several subclauses. Each subclause has the form: <element><operator><value>. A CDR is included in the output only if it fulfills **all** subclauses from the filter (AND operation).

Operators IN and NOT IN allow a list of values to be specified as parameters. The delimiter for this list is a semicolon (";"). It is also possible to specify a range of values, but only for numeric values. Example: "1-9" has the same meaning as "1;2;3;4;5;6;7;8;9".

Complex elements are special elements that consist of several standard elements. If the filter clause contains such an element, then several values in brackets must be specified (f.e. [1-1-21-4711]). Such elements can appear in lists, f.e. [1-1-20-4711], [1-1-21-4711],[1-1-22-4711]). Complex elements are defined for the most frequent combination of elements. The list of complex elements is predefined and cannot be modified by user. This is necessary because an extension can only be identified in a network with "DOMAIN"- "SUBDOMAIN"- "KNODENR"- "EXTENSION".

Field and Controls Descriptions

[Filter Name](#)

[Description](#)

[Element group list \(combo box with dropdown list\)t](#)

[Filter Editor, table columns \(left-hand side\)](#)

[Filter Editor, table columns \(right-hand side\)](#)

[Number Of Elements](#)

[Save \(Button\)](#)

[New \(Button\)](#)

[Delete \(Button\)](#)

Related Topics

[Filter Editor - Object View - Field Descriptions and User Actions, page 254](#)

[Important Hints Before Starting -- Overview](#)

[Installation Hints for Performance Management \(PM\)](#)

[PM/COL Installation Instructions -- Getting Started](#)

Lists of all pre-defined elements and formats available for defining the CDR input and output formats for COL can be found in:

[Pre-defined Formats for Defining CDR Input and Output Formats](#)

Step-By-Step Instructions

[Filter Editor](#)

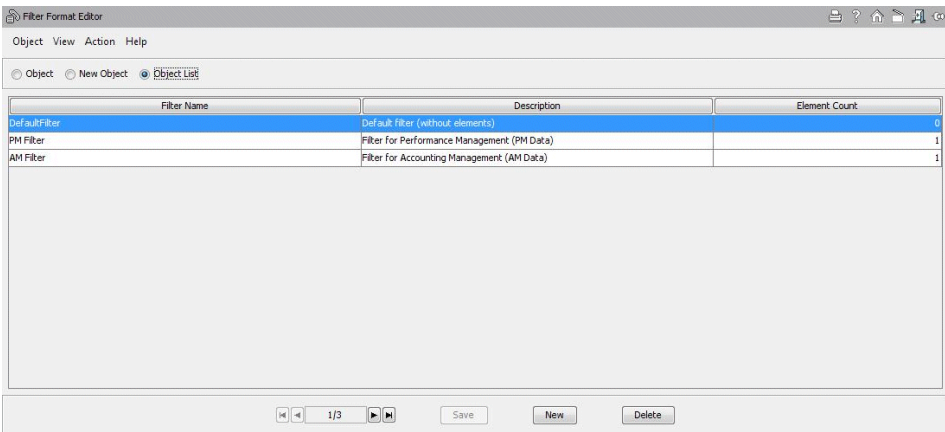
[Installation Hints for Performance Management \(PM\)](#)

3.21 Filter Editor - Object List

Object List is the default view that is shown when the dialog is displayed. The **Object List** view is read-only. It shows the list of all defined filters, but displays only basic information. The **Object** view shows the complete set of information for the selected object and can be used to add, modify or delete the selected object. The **New Object** view is used to define new objects. This view looks similar to the **Object** view.

To navigate to a different object in the list, you can either select the object by clicking on the list row, or use the arrow keys at the bottom of the screen, or select **View -> Go To** and choose one of the navigation options **First Object**, **Previous Object**, **Next Object** or **Last Object**.

A search function is not supported.



Object list

The object can not be edited. Each line contains information about one filter.

Field and Controls Descriptions

[Filter Editor, table columns](#)

[Save \(Button\)](#)

[New \(Button\)](#)

[Delete \(Button\)](#)

Related Topics

[Filter Editor - Object List - Field Descriptions, page 256](#)

[Important Hints Before Starting -- Overview](#)

[Installation Hints for Performance Management \(PM\)](#)

[PM/COL Installation Instructions -- Getting Started](#)

Lists of all pre-defined elements and formats available for defining the CDR input and output formats for COL can be found in:

[Pre-defined Formats for Defining CDR Input and Output Formats](#)

Step-By-Step Instructions

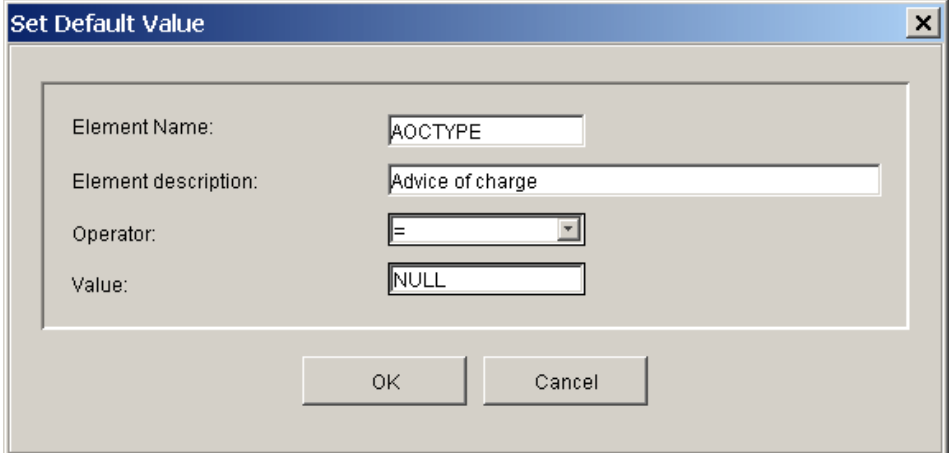
[Filter Editor](#)

[Installation Hints for Performance Management \(PM\)](#)

3.22 Filter Editor - Set Default Value

The **Filter Editor - Set Default Value** dialog allows the administrator to set the filter criteria for an element.

The dialog is started from the **Filter Editor** dialog, **Object** view, by double-clicking on a row in the **Filter Clause** table.



Field and Controls Descriptions

[Element Name](#)

[Element Description](#)

[Operator](#)

[Value](#)

Related Topics

[Filter Editor - Set Default Value - Field Descriptions and User Actions, page 256](#)

[Important Hints Before Starting -- Overview](#)

[Installation Hints for Performance Management \(PM\)](#)

[PM/COL Installation Instructions -- Getting Started](#)

Lists of all pre-defined elements and formats available for defining the CDR input and output formats for COL can be found in:

[Pre-defined Formats for Defining CDR Input and Output Formats](#)

Step-By-Step Instructions

[Filter Editor - Set Default Value](#)

[Installation Hints for Performance Management \(PM\)](#)

3.23 Translation Tables

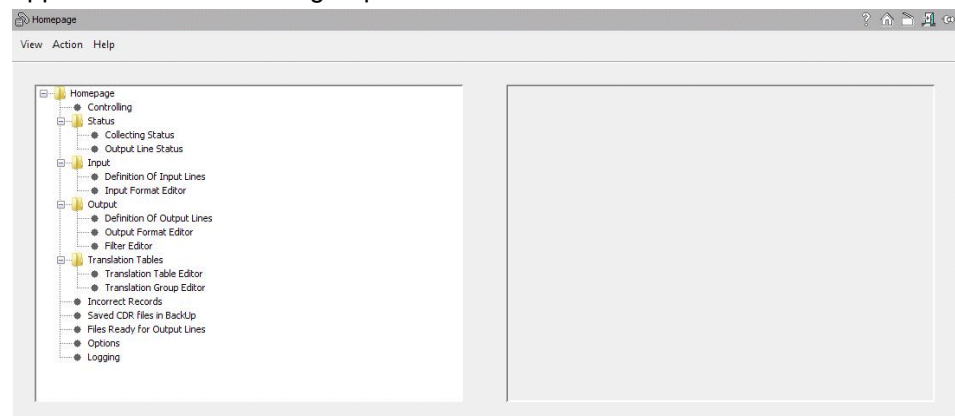
In order to provide all OpenScape/HiPath system CDRs (H150, H5000, H300) in a consistent, "normalized" format, the different values from the CDR elements need to be transformed (i.e. "translated") to the same value in the COL standard elements.

This goal has been achieved Collecting Agent (in OpenScape 4000 Assistant/Manager) by introducing translation tables for both input and output lines.

Translation tables consist of value pairs which define how an element value is translated on input or output. Each translation table is defined for one specific standard element.

Translation tables can be created and edited by the administrator/user, and saved to the database under a unique name.

A translation group consists of several translation tables and can be associated with more than one input or output line. In the same way, a single table can appear in more than one group.



The **Translation Tables** link on the **Homepage** of **Collecting Agent** contains the following links:

- **Translation Table Editor**

The Translation Table Editor allows you to define, modify, save and delete translation tables. Translation tables are used to define value pairs for the transformation of input and output values for specific elements. Translation tables can be used for both input and output.

- Double-click the link to open the Translation Table Editor.

See Also

[Translation Table Editor, Object List view](#) [Translation Table Editor, Object view](#)

- **Translation Group Editor**

The Translation Group Editor allows you to define, modify, save and delete translation groups. A translation group consists of several translation tables and can be associated with more than one input or output line.

- Double-click the link to open the Translation Group Editor.

See Also

[Translation Group Editor, Object List view](#)

[Translation Group Editor, Object view](#)

3.24 Translation Table Editor, Object List view

To start the **Translation Table Editor**, double-click the link on the **Homepage** of **Collecting Agent**.

[Translation Tables](#) are used to define value pairs for the transformation of input and output values for specific elements. Translation tables can be used for both input and output.

You can choose between three different views of this editor:

- **Object**,
- **New Object**,
- **Object List** (default view).

The **Object List** view is the default view displayed when starting the Translation Table Editor. The **Object List** is write-protected (read-only) and contains only the most important data from a translation table.

Each row in the object list contains the data of one translation table. Only one row at a time can be selected in the list.

The **Object** view -- see [Translation Table Editor, Object view](#) - displays the complete set of information from a translation table. This view allows you to add, modify, delete and save translation tables to the database.

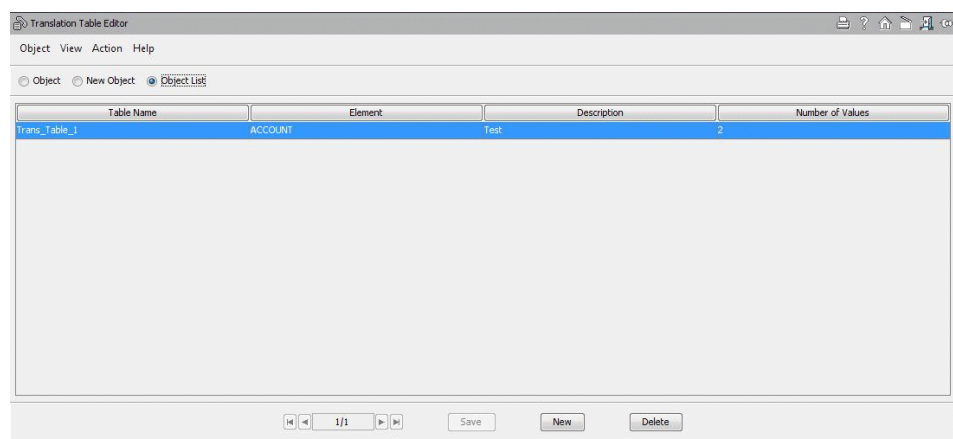
The **New Object** view is used to define new translation tables. This view contains the same elements as the **Object** view.

The menu items in the Translation Table Editor are identical with the elements in the [Input Format Editor](#) and in the [Output Format Editor](#). For descriptions of the menu items please refer to

[Menu Bar - Description of the Menu Options](#).

Functionality

Translation Table Editor, Object view



Field and Controls Descriptions

[Translation Table Editor, table columns](#)

[Save \(Button\)](#)

[New \(Button\)](#)

[Delete \(Button\)](#)

3.25 Translation Table Editor, Object view

To start the **Translation Table Editor**, double-click the link on the **Homepage** of **Collecting Agent**.

The **Object** view displays the complete set of information from a translation table. This view allows you to add, modify, delete and save translation tables to the database.

[Translation Tables](#) are used to define value pairs for the transformation of input and output values for specific elements. Translation tables can be used for both input and output.

You can choose between three different views of this editor:

- **Object**,
- **New Object**,
- **Object List** (default view).

Predefined translation tables are write-protected (read-only) and can not be modified.

The menu items in the Translation Table Editor are identical with the elements in the [Input Format Editor](#) and in the [Output Format Editor](#).

For descriptions of the menu items please refer to [Menu Bar - Description of the Menu Options](#).

The **Object List** view -- see [Translation Table Editor, Object List view](#) - is the default view displayed when starting the Translation Table Editor. The **Object List** is write-protected (read-only) and contains only the most important data from a translation table.

The **New Object** view is used to define new translation tables. This view contains the same elements as the **Object** view.

Field and Controls Descriptions

[Translation Table Name](#)

[Description](#)

[Element](#)

[Translation Table Editor, table columns](#)

[Predefined \(check box\)](#)

[Add New Row \(button\)](#)

[Delete Row \(button\)](#)

[New \(button\)](#)

[Copy \(button\)](#)

[Insert \(button\)](#)

[Save \(button\)](#)

[Delete \(button\)](#)

3.26 Translation Group Editor, Object List view

To start the **Translation Group Editor**, double-click the link on the **Homepage** of **Collecting Agent**.

A translation group consists of several translation tables and can be associated with more than one input or output line. In the same way, a single table can appear in more than one group.

Functionality

Translation Group Editor, Object view

[Translation Tables](#) are used to define value pairs for the transformation of input and output values for specific elements. Translation tables can be used for both input and output.

You can choose between three different views of this editor:

- **Object**,
- **New Object**,
- **Object List** (default view).

The **Object List** view is the default view displayed when starting the Translation Table Editor. The **Object List** is write-protected (read-only) and contains only the most important data of a translation group.

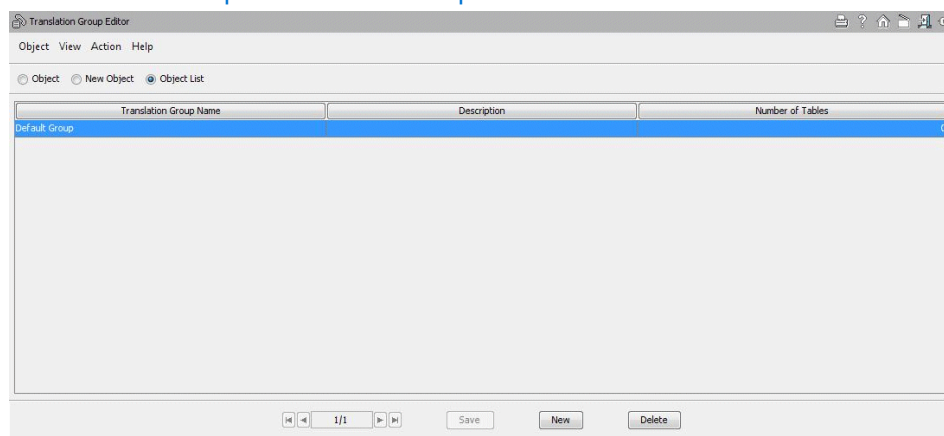
Each row in the object list contains the data of one translation group. Only one row at a time can be selected in the list.

The **Object** view -- see [Translation Group Editor, Object view](#) - displays the data of one translation group. This view allows you to add, modify, delete and save translation groups to the database.

The **New Object** view is used to define new translation groups. This view contains the same elements as the **Object** view.

The menu items in the Translation Table Editor are identical with the elements in the [Input Format Editor](#) and in the [Output Format Editor](#). For descriptions of the menu items please refer to

[Menu Bar - Description of the Menu Options](#).



Field and Controls Descriptions

[Translation Group Editor, table columns](#)

[Save \(button\)](#)

[New \(button\)](#)

[Delete \(button\)](#)

3.27 Translation Group Editor, Object view

To start the **Translation Group Editor**, double-click the link on the **Homepage** of **Collecting Agent**.

A translation group consists of several translation tables and can be associated with more than one input or output line. In the same way, a single table can appear in more than one group.

[Translation Tables](#) are used to define value pairs for the transformation of input and output values for specific elements. Translation tables can be used for both input and output.

You can choose between three different views of this editor:

- **Object**,
- **New Object**,
- **Object List** (default view).

The **Object** view displays the data of one translation group. This view allows you to add, modify, delete and save translation groups to the database.

The **New Object** view is used to define new translation groups. This view contains the same elements as the **Object** view.

The **Object List** view -- see [Translation Group Editor, Object List view](#) -- is the default view displayed when starting the Translation Table Editor. The **Object List** is write-protected (read-only) and contains only the most important data of a translation group.

The menu items in the Translation Table Editor are identical with the elements in the [Input Format Editor](#) and in the [Output Format Editor](#). For descriptions of the menu items please refer to

[Menu Bar - Description of the Menu Options](#).

Adding Translation Tables To A Translation Group

The **Available Tables** area (on the left hand side of the dialog) displays the list of available translation tables.

- Select a table in the **Available Tables** list and add it to the Translation Group by clicking the ">" button.

A translation table (left hand side table) that is added to a translation group (right hand side table) is not displayed in the left hand side table any more,

Functionality

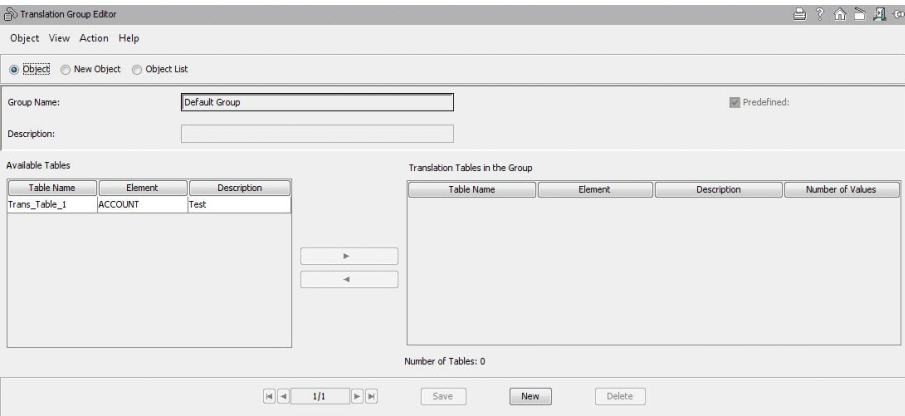
Incorrect Records - Send Back To Input

because a translation table cannot be added to the same translation group twice.

Similarly, translation tables that have been removed from a translation group will be displayed in the **Available tables** list on the left hand side again.

Predefined translation tables are write-protected (read-only) and can not be modified.

Changes made to a translation group are only applied after you have clicked the **Save** button.



Field and Controls Descriptions

- Group Name
- Description
- Predefined (check box)
- Translation Group Editor, table columns (left-hand side)
- Translation Group Editor, table columns (right-hand side)
- Number of Tables
- Save (button)
- New (button)
- Delete (button)

3.28 Incorrect Records - Send Back To Input

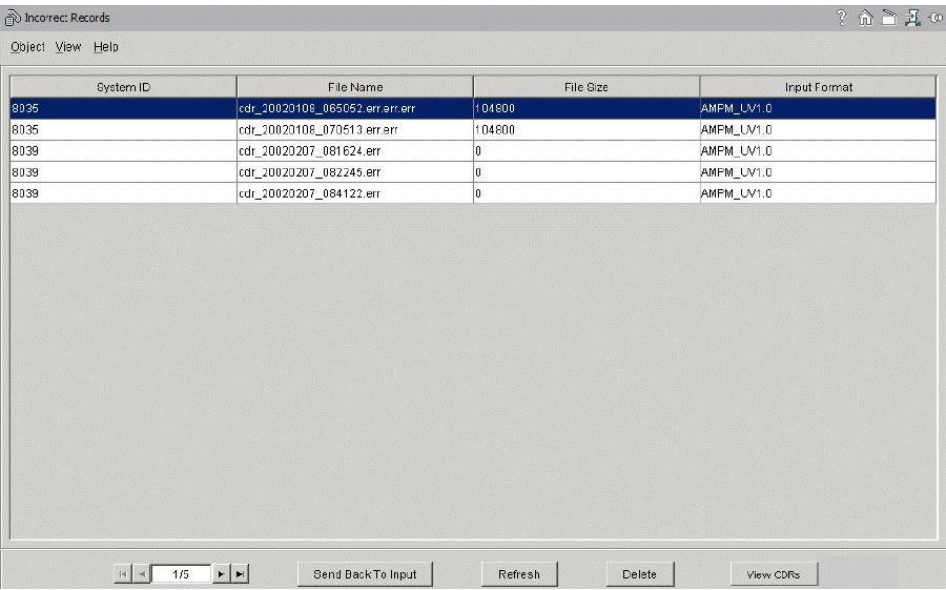
Received CDRs that do not match the input format and therefore could not be processed by the *col_transform* process can be edited and returned to the input. Faulty CDR files are automatically stored in a predefined folder (e.g. ../data/error/[PBX]) and are listed in the **Incorrect Records** dialog. The **Incorrect Records** feature allows the administrator to edit and send files with rejected CDRs back to the input line, and allows COL to process that file again.

NOTICE: There is no message issued by the system whether the CDR file has been successfully transformed or not. If the transformation was successful, the file will be deleted from the list of incorrect records, otherwise the file will stay in the list. Displayed data is **not** refreshed automatically. In order to view

the latest (current) data, you have to click the **Refresh** button or restart the window.

The **Incorrect Records** dialog is started from the COL Homepage.

To navigate to a different object in the list, you can either select the object by clicking on the list row, or use the arrow keys at the bottom of the screen, or select **View -> Go To** and choose one of the navigation options **First Object**, **Previous Object**, **Next Object** or **Last Object**.



Description

Upon starting the **Incorrect Records** window, a list of all CDR error files is displayed. CDR error files generated by COL are stored in a predefined folder (e.g. ../data/error/[PBX]) and are listed in the **Incorrect Records** dialog, as defined in [Definition of Output Lines](#). If there are other files in the mentioned directories, they are also displayed in this list. So the user can generate a new file, store it in an error directory and use this form to send it back to the input processing.

If the user chooses to send the selected file back, the file is sent back and added to the transform queue. After that, the CDR error file is deleted and the added file is processed asynchronously by COL.

Field and Controls Descriptions

[Incorrect Records dialog, table columns](#)

[Send Back To Input \(button\)](#)

[Refresh \(button\)](#)

[Delete \(button\)](#)

[View CDRs](#)

Related Topics

[Incorrect Records - Send Back To Input - Field Descriptions and User Actions, page 261](#)

[CDR Viewer](#)

[Important Hints Before Starting -- Overview](#)

[Installation Hints for Performance Management \(PM\)](#)

[PM/COL Installation Instructions -- Getting Started](#)

Lists of all pre-defined elements and formats available for defining the CDR input and output formats for COL can be found in:

[Pre-defined Formats for Defining CDR Input and Output Formats](#)

Step-By-Step Instructions

[Incorrect Records](#)

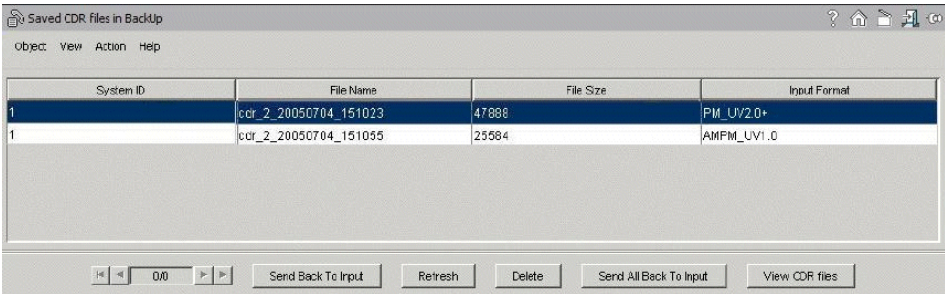
[Installation Hints for Performance Management \(PM\)](#)

3.29 Saved CDRs in Backup File

In this page all saved CDR files in the backup directory are displayed.

The backup feature for CDR files can be activated, deactivated and customized in the COL Options (see [Section 3.31.2, "Options - Settings tab sheet"](#)).

The table is sortable by clicking on the column headers. Also multiple selection is supported for the **Send Back To Input** and **Delete** buttons.



System ID	File Name	File Size	Input Format
1	cdm_2_20050704_151023	47888	PM_UV2.0+
1	cdm_2_20050704_151055	25584	AMFPM_UV1.0

Field and Controls Descriptions

[Saved CDRs in Backup File dialog, table columns](#)

[Send Back To Input](#)

[Refresh](#)

[Delete](#)

[View CDR Files](#)

Related Topics

[CDR Viewer](#)

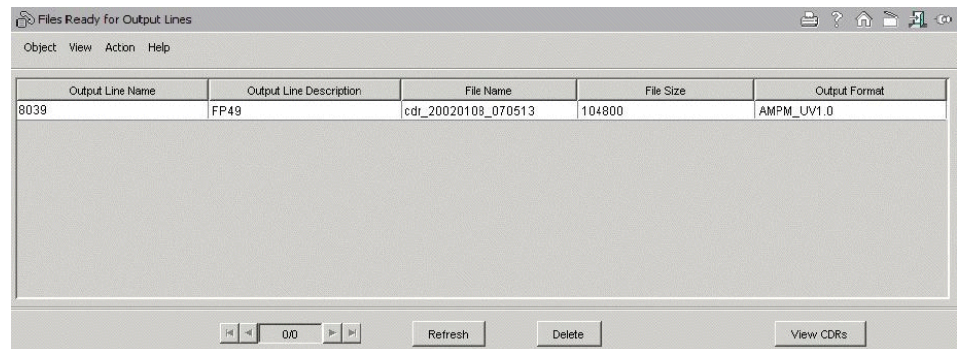
Step-By-Step Instruction

[Saved CDRs in Backup File](#)

3.30 Files Ready for Output Lines

This page is opened after double clicking **Files Ready for Output Lines** on the COL Homepage. It displays a list of available CDR files for output, which are stored in the manager's delivery directories.

The columns can be sorted by clicking on the column header and several lines in the table can be selected (also multiple selection is possible). A multiple selection applies only for the function of the **Delete** button, but not for the **View CDRs** button.



Field and Controls Descriptions

[Files Ready for Output Lines dialog, table columns](#)

[Refresh](#)

[Delete](#)

[View CDRs](#)

Related Topics

[CDR Viewer](#)

Step-By-Step Instruction

[Files Ready for Output Lines](#)

3.31 Options

The **Options** feature allows the administrator to view or to set COL options.

NOTICE: Only authorised users having "rsca" access rights are allowed to change and save values in the **Options** dialog.

The **Options** dialog is started from the COL Homepage; it contains the following three tab sheets:

[Options - COL Paths tab sheet](#)

[Options - Settings tab sheet](#)

[Options - Process Controlling tab sheet](#)

3.31.1 Options - COL Paths tab sheet

This tab sheet is used to set the paths for the folders where Collecting Agent administers and stores the different types of information.

The screenshot shows the 'Options' window with the 'COL Paths' tab selected. The window has a menu bar with 'Object', 'View', 'Action', and 'Help'. Below the menu bar, there are three tabs: 'Col Paths', 'Settings', and 'Process Controlling'. The 'Col Paths' tab is active, displaying a list of paths for various data types. The paths are:

- Input Path: /var/col/data/input
- Transform Path: /var/col/data/transform
- Output Path (internal): /var/col/data/output
- AM Deliver Path: /var/col/data/deliver
- PM Deliver Path: /var/col/data/pm
- Path of Incorrect Records: /var/col/data/error
- FTBL Path: /var/col/data/ftbl
- Trunk Group Metering Path: /var/col/data/tm

At the bottom of the window, there is a 'Save' button. A note at the bottom of the list states: '*Any change of the paths requires a restart of the COL processes'.

After pressing the **Save** button, the parameters are stored in the database. However, a restart of the whole system (COL) is needed for the parameter changes to take effect.

Only authorised users having "rsca" access rights are allowed to change and save values.

The COL Paths tab sheet allows you to set the paths for folders and types of information.

Field and Controls Descriptions

[Input Path](#)

[Transform Path](#)

[Output Path \(internal\)](#)

[AM Deliver Path](#)

[PM Deliver Path](#)

[Path of Incorrect Records](#)

[FTBL Path](#)

[Trunk Group Metering Path](#)

[Save \(button\)](#)

Related Topics

[Options - Settings tab sheet](#)

[Options - Process Controlling tab sheet](#)

Step-By-Step Instructions

[Options](#)

3.31.2 Options - Settings tab sheet

This tab sheet allows you to set the system parameters used by Collecting Agent for data collection, processing, administration and archiving, for example the number of receive threads, transform threads and line threads, the size of the required free (disk) space, the retention period for CM history data, for logging entries, and for the cyclic check of trunk group data.

Only authorised users having "rsca" access rights are allowed to change and save values.

The **Settings** tab sheet allows you to set the following parameters or values.

Field and Controls Descriptions

Required Free Space

Retention Period for CM History Data ... Day(s)

Activate fast mode for transformation of virtual to physical node number only for the PM output line (check box)

Activate/Deactivate Automatic Delecte of Logging Entries in COL (check box)

Retention Period for Logging Entries ... Day(s)

[Retention Period for Trunk Group Data from the Cyclic Check of the B Channels ... Day\(s\)](#)

[Save Input Files \(CDRs\)](#)

[Retention Period for AC Configuration Data ... Day\(s\)](#)

[Send email notification if free space/collection thresholds exceeds](#)

[Select email recipients](#)

[Activate/Deactivate automatic Cleanup](#)

[Retention Period for the Back Up CDR files ... Day\(s\)](#)

[Activate/Deactivate Define Backup and check of BackUp Directory](#)

[Retention Period for "File Transfer" \(receive\) Process Monitor](#)

[Retrieve CDRs alive time](#)

[Save \(button\)](#)

Related Topics

[Options - Field Descriptions and User Actions, page 262](#)

[Important Hints Before Starting -- Overview](#)

[Installation Hints for Performance Management \(PM\)](#)

[PM/COL Installation Instructions -- Getting Started](#)

Lists of all pre-defined elements and formats available for defining the CDR input and output formats for COL can be found in:

[Pre-defined Formats for Defining CDR Input and Output Formats](#)

Related Topics

[Options - COL Paths tab sheet](#)

[Options - Process Controlling tab sheet](#)

Step-By-Step Instructions

[Options](#)

[Installation Hints for Performance Management \(PM\)](#)

3.31.3 Options - Process Controlling tab sheet

The **Process Controlling** tab sheet allows you to set the following parameters or values.

Field and Controls Descriptions

[Number of Receive \(CDR collecting\) Processes](#)

[Number of Transform \(CDR standardisation\) Processes](#)

[Number of Line \(CDR output\) Processes](#)

[Number of Metering Processes](#)

[Number of TG-Check \(Cyclic check of Trunk Groups\) Processes](#)

[Schedule Incorporation of CDR Processing Active](#)

[Start Time](#)

[Stop Time](#)

[Save \(button\)](#)

Related Topics

[Options - COL Paths tab sheet](#)

[Options - Settings tab sheet](#)

Step-By-Step Instructions

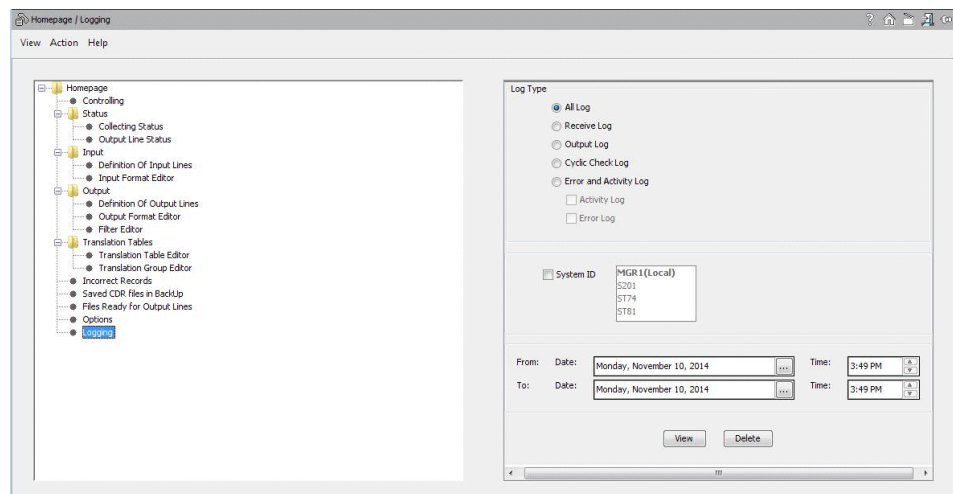
[Options](#)

3.32 Logging

Click on **Logging** on the **Homepage** of **Collecting Agent** to display and/or delete different types of message logs listed in the upper right pane.

Functionality

COL Logging Events



Field and Controls Descriptions

[Log Type:](#)

[System ID](#)

[From: \(Date: / Time:\)](#)

[To: \(Date: / Time:\)](#)

[View \(button\)](#)

[Delete \(button\)](#)

Related Topics

[COL Logging Events](#)

[COL Logging Events Report](#)

[Important Hints Before Starting -- Overview](#)

[Installation Hints for Performance Management \(PM\)](#)

[PM/COL Installation Instructions -- Getting Started](#)

[Logging Report - Field Descriptions](#)

Step-By-Step Instructions

[Logging](#)

3.33 COL Logging Events

The following example screen for Call Logging Events is based on the **Receive Log** selection. For each log message the following information is displayed:

File Help

Log Type: Receive Log
Logging Period: From: 12/02/2006 03:29 PM
To: 12/06/2006 03:29 PM

Date	Category	Error	System ID	Short message	Long message	Severity
12/03/2006 12:16:56...	receive log	301		Data is received from line FP44 - RM...	File 'CGD:FTFILE' is received from line 'FP44' with 1356 bytes	0
12/04/2006 12:16:56...	receive log	301		Data is received from line FP44 - RM...	File 'CGD:FTFILE' is received from line 'FP44' with 1356 bytes	0
12/04/2006 04:16:56...	receive log	301		Data is received from line FP44 - RM...	File 'CGD:FTFILE' is received from line 'FP44' with 339 bytes	0
12/05/2006 12:16:56...	receive log	301		Data is received from line FP44 - RM...	File 'CGD:FTFILE' is received from line 'FP44' with 1356 bytes	0
12/05/2006 10:16:56...	receive log	301		Data is received from line FP44 - RM...	File 'CGD:FTFILE' is received from line 'FP44' with 1356 bytes	0
12/05/2006 12:16:56...	receive log	301		Data is received from line FP44 - RM...	File 'CGD:FTFILE' is received from line 'FP44' with 1017 bytes	0
12/06/2006 12:16:56...	receive log	301		Data is received from line FP44 - RM...	File 'CGD:FTFILE' is received from line 'FP44' with 1356 bytes	0
12/06/2006 03:17:01...	receive log	301		Data is received from line FP44 - RM...	File 'CGD:FTFILE' is received from line 'FP44' with 1695 bytes	0
12/02/2006 08:16:43...	receive log	302		Data is not received from line 'FP44'	File 'CGD:FTFILE' is not received from line 'FP44' (error: -1)	0
12/03/2006 02:16:43...	receive log	302		Data is not received from line 'FP44'	File 'CGD:FTFILE' is not received from line 'FP44' (error: -1)	0
12/04/2006 02:16:43...	receive log	302		Data is not received from line 'FP44'	File 'CGD:FTFILE' is not received from line 'FP44' (error: -1)	0
12/06/2006 01:16:42...	receive log	302		Data is not received from line 'FP44'	File 'CGD:FTFILE' is not received from line 'FP44' (error: -1)	0
12/02/2006 04:16:55...	receive log	303		No data from line 'FP44 - RMX Partitio...	File 'CGD:FTFILE' from line 'FP44 - RMX Partition' does not exist	0
12/02/2006 05:16:55...	receive log	303		No data from line 'FP44 - RMX Partitio...	File 'CGD:FTFILE' from line 'FP44 - RMX Partition' does not exist	0
12/02/2006 06:16:56...	receive log	303		No data from line 'FP44 - RMX Partitio...	File 'CGD:FTFILE' from line 'FP44 - RMX Partition' does not exist	0
12/02/2006 07:16:55...	receive log	303		No data from line 'FP44 - RMX Partitio...	File 'CGD:FTFILE' from line 'FP44 - RMX Partition' does not exist	0
12/02/2006 08:26:57...	receive log	303		No data from line 'FP44 - RMX Partitio...	File 'CGD:FTFILE' from line 'FP44 - RMX Partition' does not exist	0
12/02/2006 09:16:55...	receive log	303		No data from line 'FP44 - RMX Partitio...	File 'CGD:FTFILE' from line 'FP44 - RMX Partition' does not exist	0
12/02/2006 10:16:55...	receive log	303		No data from line 'FP44 - RMX Partitio...	File 'CGD:FTFILE' from line 'FP44 - RMX Partition' does not exist	0
12/02/2006 11:16:55...	receive log	303		No data from line 'FP44 - RMX Partitio...	File 'CGD:FTFILE' from line 'FP44 - RMX Partition' does not exist	0
12/03/2006 01:16:56...	receive log	303		No data from line 'FP44 - RMX Partitio...	File 'CGD:FTFILE' from line 'FP44 - RMX Partition' does not exist	0
12/03/2006 02:16:55...	receive log	303		No data from line 'FP44 - RMX Partitio...	File 'CGD:FTFILE' from line 'FP44 - RMX Partition' does not exist	0
12/03/2006 03:16:56...	receive log	303		No data from line 'FP44 - RMX Partitio...	File 'CGD:FTFILE' from line 'FP44 - RMX Partition' does not exist	0

Print/Export

Number of Events Found: 108

Some of the columns may be left blank without values. The completeness of the presented data is limited by the information which is recorded during the logging of each event. This is dependent from the settings in each COL section, whether loggings are to be recorded or not.

The columns of the table grid are sortable by clickin in the column headers.

Field and Controls Descriptions

Columns in the Log Table:

- Logging Type
- Logging Period
- Date (column)
- Category (column)
- Error (column)
- System ID (column)
- Short message (column)
- Long message (column)
- Severity (column)

Print/Export (Button)

Related Topics

[Logging](#)

[COL Logging Events Report](#)

[Exporting Log Reports](#)

[Important Hints Before Starting -- Overview](#)

[Installation Hints for Performance Management \(PM\)](#)

[PM/COL Installation Instructions -- Getting Started](#)

[Logging Report - Field Descriptions](#)

Step-By-Step Instructions

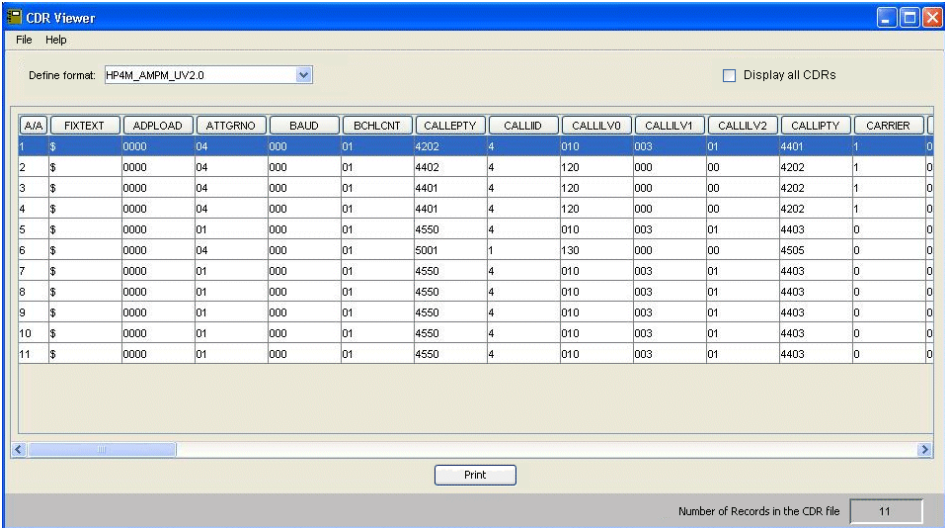
[Logging](#)

3.34 CDR Viewer

The **CDR Viewer** dialog opens by clicking the **View CDRs** button from pages **Incorrect Records**, **Saved CDR files in Backup** or **Files Ready for Output Lines**.

This dialog has two different formats:

- If the selected Input/Output format is unknown, unassigned or the length of the CDR doesn't fit to the selected format, the dialog is displayed in the 'Undefined Format' layout. The column header in this case is a scale which represents the length of the CDR.
- In all other cases, with defined and valid record formats, the dialog displays a scrollable table with rows of CDRs, showing the content of a single CDRs column by column.



Field and Controls Descriptions

[Define Format](#)

[Display all CDRs](#)

[Columns in the CDR table](#)

[Print](#)

[Number of Records in the CDR File](#)

Related Topics

[Incorrect Records - Send Back To Input](#)

[Saved CDRs in Backup File](#)

[Files Ready for Output Lines](#)

3.35 Exporting Log Reports

After clicking the **Export/Print** button in the Call Logging Events page the Run Report Dialog window is displayed. In this dialog the following options for the export of the log file can be configured:

- Output Format
- Email Recipients
- Export File Locations

Related Topics

[Run Report Dialog - Output Tab, page 3-121](#)

[Run Report Dialog - E-mail Tab, page 3-122](#)

[Run Report Dialog - Export Tab, page 3-123](#)

[Run Report - Status Window, page 3-124](#)

[COL Logging Events Report, page 3-125](#)

3.35.1 Run Report Dialog - Output Tab

The Output tab of the Run Report dialog allows you to select the template and different output media and output file formats for the log file.

Multiple selection for display and/or export options is possible in general.

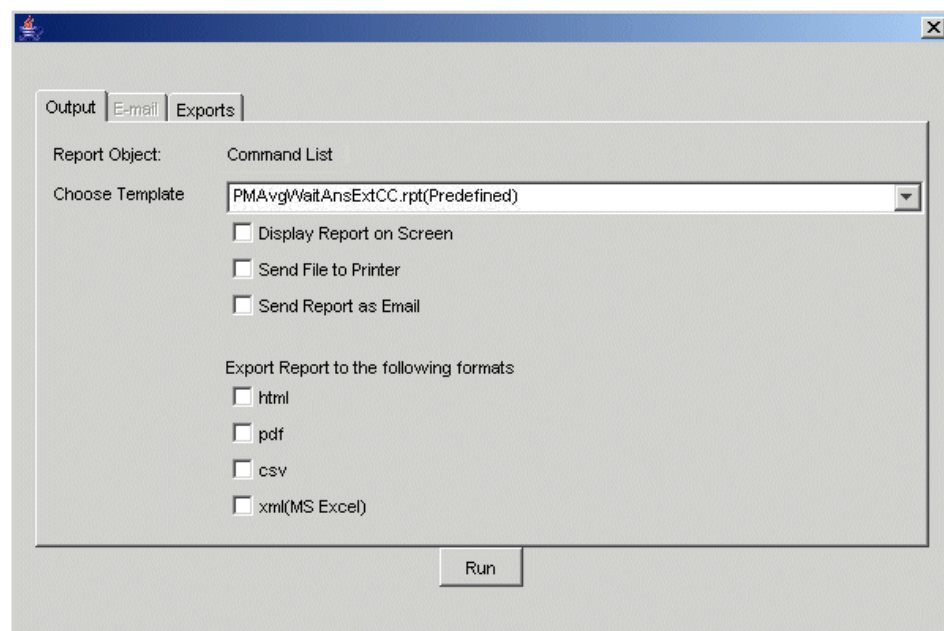


Figure 1: Run Report Dialog - Output Tab

Field and Controls Descriptions

[Report Object:](#)

[Choose template](#)

[Display Report on Screen](#)

[Send File to Printer](#)

[Send Report as Email](#)

[Export Report to the following formats](#)

[Run](#)

Related Topics

[Run Report Dialog - E-mail Tab, page 3-122](#)

[Run Report Dialog - Export Tab, page 3-123](#)

[Run Report - Status Window, page 3-124](#)

[COL Logging Events Report, page 3-125](#)

3.35.2 Run Report Dialog - E-mail Tab

The E-mail tab of the Run Report dialog allows you to send the report to selectable e-mail recipients.

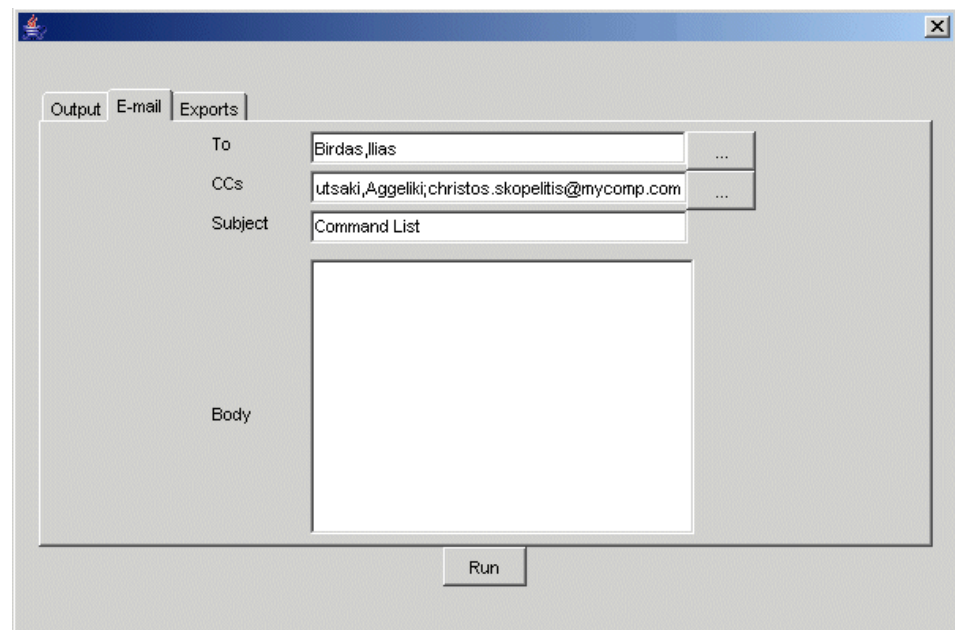


Figure 2: Run Report Dialog - Email Tab

Field and Controls Descriptions

[To](#)

[CCs](#)

[Subject](#)

[Body](#)

[Run](#)

Related Topics

[Run Report Dialog - Output Tab, page 3-121](#)

[Run Report Dialog - Export Tab, page 3-123](#)

[Run Report - Status Window, page 3-124](#)

[COL Logging Events Report, page 3-125](#)

3.35.3 Run Report Dialog - Export Tab

The Export tab of the Run Report dialog allows you to define file locations for each output format for saving the report.

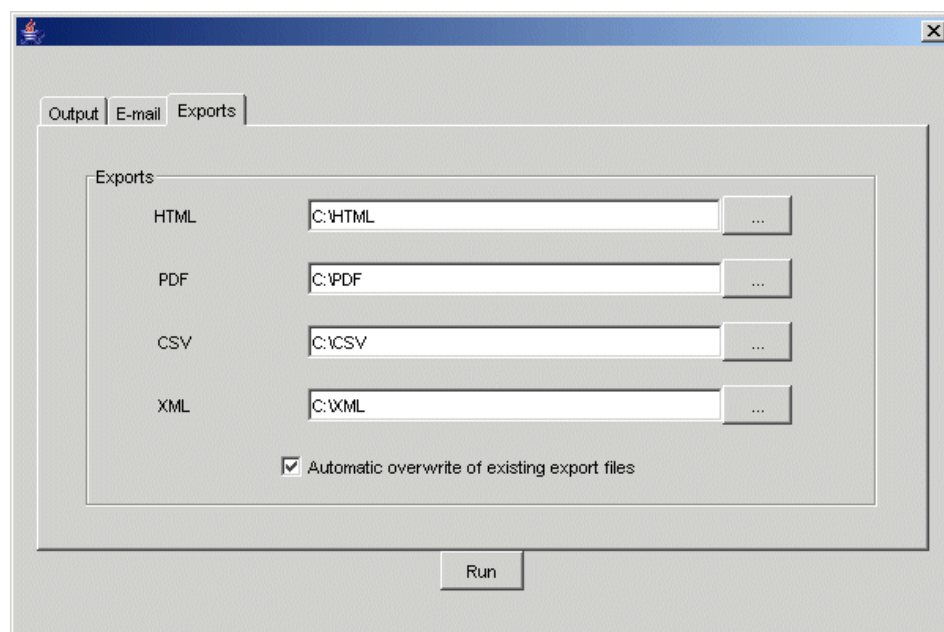


Figure 3: Run Report Dialog - Exports Tab

Field and Controls Descriptions

[Exports](#) (*HTML* , *PDF* , *CSV* , *XML*)

[Automatic overwrite of existing export files](#)

[Run](#)

Related Topics

[Run Report Dialog - Output Tab, page 3-121](#)

[Run Report Dialog - E-mail Tab, page 3-122](#)

[Run Report - Status Window, page 3-124](#)

[COL Logging Events Report, page 3-125](#)

3.35.4 Run Report - Status Window

After clicking the **Run** button in the Run Report Dialog the generation of the report according to the selected settings is started and the status window is displayed, showing information about the current progress of the report export/generation.

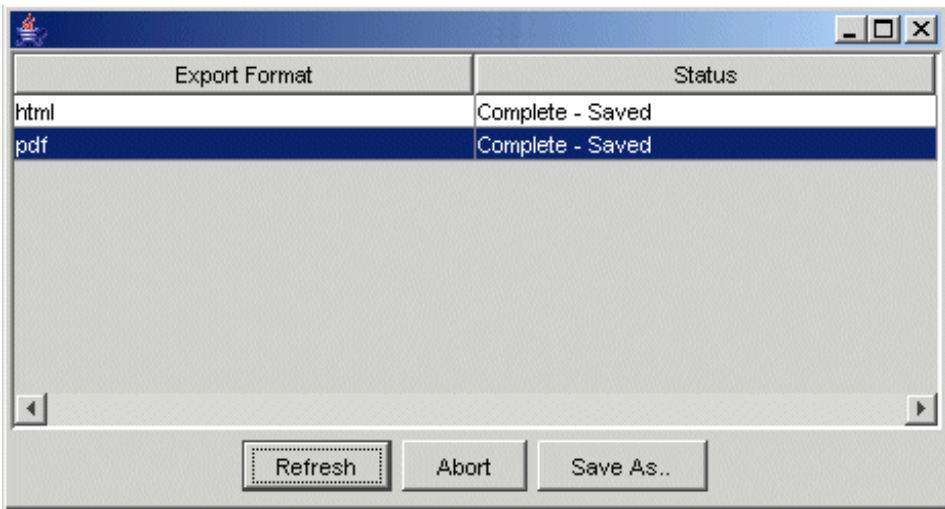


Figure 4: Run Report - Status Window

Field and Controls Descriptions

[Export Format](#)

[Status](#)

[Refresh](#)

[Abort](#)

[Save As...](#)

Related Topics

[Run Report Dialog - Output Tab, page 3-121](#)

[Run Report Dialog - E-mail Tab, page 3-122](#)

[Run Report Dialog - Export Tab, page 3-123](#)

[COL Logging Events Report, page 3-125](#)

3.35.5 COL Logging Events Report

The following example for a Call Logging Events Report is based on the **Receive Log** selection. Depending on the selection after clicking the **Print/Export** button in the **COL Loggin Events** dialog, the report will be displayed in HTML, XML or PDF export format

Logging Events						
Log Type: Receive Log						
Logging Period : From: 2005-11-02 10:10 To: 2005-11-02 10:20						
Date	Category	Error	System ID	Short Message	Long message	Severity
2005-11-02 10:10:35.2	receive	101	FP49	Data is transformed from line FP49	File \var\col\data\input\FP49\cdr_2_20050824_080735' from	1
2005-11-02 10:10:35.2	receive	101	0001	RMX Partition 121701 bytes	line 'FP49' is transformed with 359 records	1
2005-11-02 10:10:35.2	receive	101	0002	Data is transformed from line FP49	File \CGD\FTFILE' is received from line 'FP49' with 121701 bytes	1
2005-11-02 10:10:35.2	receive	101	AX30	RMX Partition 121701 bytes	File \CGD\FTFILE' is received from line 'FP49' with 121701 bytes	1

Related Topics

[Logging](#)

[COL Logging Events](#)

[Important Hints Before Starting -- Overview](#)

[Installation Hints for Performance Management \(PM\)](#)

[PM/COL Installation Instructions -- Getting Started](#)

[Logging Report - Field Descriptions](#)

Step-By-Step Instructions

[Logging](#)

4 Field and Controls Descriptions

The following links contain the fields and controls descriptions of the Collecting Agent, sorted by topics.

[Collecting Agent Homepage, field descriptions, page 128](#)

[Fields displayed when Controlling link is active, page 129](#)

[Collecting Status dialog, field descriptions, page 130](#)

[Output Line Status dialog, field descriptions, page 133](#)

[Input Format Editor - Object view, field descriptions, page 136](#)

[Input Format Editor - Object List view, field descriptions, page 140](#)

[Input Format Editor - Set Default Value, field descriptions, page 142](#)

[Input Format Editor - Configure Input Element, field descriptions, page 143](#)

[Output Line Definition - Object view, field descriptions, page 144](#)

[Output Line Definition - Object List view, field descriptions, page 147](#)

[Output Format Editor - Object view, field descriptions, page 149](#)

[Output Format Editor - Object List view, field descriptions, page 152](#)

[Output Format Editor - Configure Output Element, field descriptions, page 154](#)

[Filter Editor - Object view, field descriptions, page 155](#)

[Filter Editor - Object List view, field descriptions, page 158](#)

[Filter Editor - Set Default Value, field descriptions, page 159](#)

[Translation Table Editor - Object view, field descriptions, page 160](#)

[Translation Table Editor - Object List view, field descriptions, page 163](#)

[Translation Group Editor - Object view, field descriptions, page 165](#)

[Translation Group Editor - Object List view, field descriptions, page 168](#)

[Incorrect Records dialog, field descriptions, page 169](#)

[Saved CDRs in Backup File, page 170](#)

[Files Ready for Output Lines, page 171](#)

[COL Paths tab sheet, Options dialog, field descriptions, page 172](#)

[Settings tab sheet, Options dialog, field descriptions, page 174](#)

[Process Controlling tab sheet, Options dialog, field descriptions, page 178](#)

[Options dialog, Save button description, page 180](#)

[Logging dialog \(log file\), page 180](#)

[CDR Viewer, page 185](#)

[Collecting Agent tab sheet in System Management, page 186](#)

[Trunk Group/CDR sub tab, page 193](#)

[Node No. Transform sub tab, page 202](#)

4.1 Collecting Agent Homepage, field descriptions

[Application tree](#)

[Description of the selected tree item](#)

Application tree

The application tree is similar to a menu folder structure, displaying all COL features in the form of links the user can activate from the COL Homepage. The Application Tree is displayed on the left-hand side of the COL Homepage in the Navigation Pane.

Read-only.

Description of the selected tree item

A short description of the currently selected feature/link from the application tree is displayed in the [Content Pane](#) on the right-hand side of the Homepage. If **Controlling** is selected in the tree, the description will not be visible, and the Content pane will show the status displays **Input Status: Active** and **Output Status: Active** and the buttons **Start/Stop Input** and **Start/Stop Output**.

Read-only.

4.2 Fields displayed when Controlling link is active

[Input Active](#)

[Output Active](#)

[Start/Stop Input](#)

[Start/Stop Output](#)

Input Active

Shows status of collecting files from system (applies to both AM and PM files). Visible only if **Controlling** is selected in tree.

Use the [Start/Stop Input](#) button to activate or deactivate the input of CDR data, respectively. The status display changes accordingly, showing the current status of the system, i. e. either **Input: Active** or **Input: Not active**.

Active/Not active.

Read-only.

Output Active

Shows status of producing output files (applies only to CDR files). Visible only if **Controlling** is selected in tree.

Use the [Start/Stop Output](#) button to activate or deactivate the output of CDR data, respectively. The status display changes accordingly, showing the current status of the system, i. e. either **Input: Active** or **Input: Not active**.

Active/Not active.

Read-only.

Field and Controls Descriptions

Collecting Status dialog, field descriptions

Start/Stop Input

Toggle button to start/stop collecting files from system (applies to both AM and PM files). Visible only if **Controlling** is selected in tree.

Use this button to activate or deactivate the input of CDR data, respectively. The status display changes accordingly, showing the current status of the system, i. e. either **Input: Active** or **Input: Not active**.

Warning Box.

Start/Stop Output

Toggle button to start/stop producing output files (applies only to CDR files). Visible only if **Controlling** is selected in tree.

Use this button to activate or deactivate the output of CDR data, respectively. The status display changes accordingly, showing the current status of the system, i. e. either **Input: Active** or **Input: Not active**.

Warning Box.

4.3 Collecting Status dialog, field descriptions

Number Of Configured Input Lines

Collecting Active (Check box for status display, read-only)

Timecontrolled switch ON for CDR transformation / output in COL

Collecting Status, table columns

Collect Now (button)

Configure (button)

Refresh (button)

Number Of Configured Input Lines

Number of switches for which the collecting is configured in SysM

Integer

Read-only

Collecting Active (Check box for status display, read-only)

Check-box shows whether collecting has been activated for all switches

Checked/unchecked

Read-only

Timecontrolled switch ON for CDR transformation / output in COL

The status 'Timecontrolled switch ON for CDR transformation / output in COL' is displayed only if you have checked the **Schedule Incorporation of CDR Processing Active** check box in the [Options - Process Controlling tab sheet](#), otherwise nothing is displayed. Next to this label is displayed the **Start** and **Stop** time, which is also defined in the [Options - Process Controlling tab sheet](#).

Collecting Status, table columns

The table displays the following columns:

System ID

System ID

String

Read-only

System Type

System type

String

Read-only

Input Format

Input format

String

Read-only.

Active Collecting

Shows whether collecting has been activated for the switch.

AM, PM, AM/PM, empty

Read-only

Next Transfer

Start time of the next transfer

String in format "hh:mm dd.mm.yyyy"

Read-only. Empty if collecting for that switch is not active.

Last Transfer

Start time of the last transfer

String in format "hh:mm dd.mm.yyyy"

Read-only

Transfer Status

Status of the last transfer

Values:

RMX:OK, RMX:Waiting, RMX:Running, RMX:Retrying, RMX>Error, RMX:N/A, RMX:No Data, RMX:No Space

Next to each value an extra field will be displayed **only** if you have checked the **Activate Copy CDR from RMX to UNIX area** check Box in SysM -> Collecting Agent (Tab-sheet) -> COL Administration (Tab-sheet); the possible values of this extra field are the following:

ADP:OK, ADP:Waiting, ADP:Running, ADP:Retrying, ADP>Error, ADP:No Data, ADP:No Space

Field and Controls Descriptions

Output Line Status dialog, field descriptions

Read-only. "No Data" means that the input file was empty or non-existing.

Transform Status

Shows whether transfer files have been transferred into standard format.

Values:

Yes, No, N/A, Waiting, Error, Started, Line Started, Line Error, Processing, Stopped

Read-only. N/A for Backup PC.

Possible values will be either **Processing** or **Stopped** when the **Schedule Incorporation of CDR Processing Active** checkbox is checked. Otherwise, the possible values for these columns will not be affected.

Line Status

Values:

Waiting, Error, N/A, Started, Line Started, Line Error, Processing, Stopped

Possible values will be either **Processing** or **Stopped** when the **Schedule Incorporation of CDR Processing Active** checkbox is checked. Otherwise, the possible values for these columns will not be affected.

Collect Now (button)

Immediately starts the recording of CDRs.

The operation is carried out in asynchronous mode. Processing of several lines (data records) at a time is supported

Configure (button)

Configure input line. In the **Collecting Agent** under **OpenScape 4000 Assistant/Manager**, clicking this button will launch the **System Management** application.

Only one line at a time can be selected and configured.

Refresh (button)

Refreshes the contents of the configured input lines and displays the current contents.

4.4 Output Line Status dialog, field descriptions

[Number Of Output Lines](#)

[Output Active \(Read-only check box\)](#)

[Output Line Status, table columns](#)

[Configure \(button\)](#)

[Refresh \(button\)](#)

The table allows selection of a single row only.

Number Of Output Lines

Number of defined output lines

Integer

Read-only

Output Active (Read-only check box)

If the check-box is unchecked, output has been deactivated for all lines

Checked/unchecked.

Read-only

Output Line Status, table columns

The table displays the following columns:

Name (table column)

Output line name

String

Read-only

Active (read-only check box)

Is output line activated?

Yes/No

Read-only

Output Format

Output format

String

Read-only

Filter

Filter

String

Read-only. N/A for Backup PC

Last Output

Start time of the last output

hh:mm dd.mm.yyyy; N/A for PM output line

Read-only

Status

Status of the last output

OK/Error/No data

Read-only. "No data" means that the output file was empty or non-existing.

Next Output

Start time of the next output

Field and Controls Descriptions

Input Format Editor - Object view, field descriptions

hh:mm dd.mm.yyyy; N/A for PM output

Read-only

The table allows selection of a single row only.

Configure (button)

Launches the **Output Line Definition** dialog used for configuring and displaying configured output lines.

Only one line at a time can be selected and configured. See also [Definition of Output Lines](#).

Refresh (button)

Refreshes the contents of the dialog, showing the current contents of the configured output lines.

Deliver Now (button)

The files in the **selected** output lines will be delivered immediately to the delivery directory. Normally `/var/col/data/output/<output_id>` on server side for each output line:

```
/var/col/data/output/1 /var/col/data/output/2 /var/col/
data/output/3 ....
```

In the table the **Last Output** and **Status** fields are updated.

All files gathered within these directories will be moved to `/var/col/data/deliver` and appended in one file for each output line under the name specified for each output line. The OpenScape Application Management (AM) is able to retrieve the data.

Deliver all Lines Now (button)

Files of **all** output lines will be delivered to the delivery directory. Normally `/var/col/data/output/<output_id>` on server side for each output line:

```
/var/col/data/output/1 /var/col/data/output/2 /var/col/
data/output/3 ....
```

In the table the **Last Output** and **Status** fields are updated.

All files gathered within these directories will be moved to `/var/col/data/deliver` and appended in one file for each output line under the name specified for each output line. The OpenScape Application Management (AM) is able to retrieve the data.

4.5 Input Format Editor - Object view, field descriptions

[Format Name](#)

[System Version](#)

[Description](#)

[Predefined](#)

[End Of Line](#)

[Default element table \(on left-hand side of dialog\)](#)

Input element table

Number Of Elements

Format Length

Save (Button)

New (Button)

Delete (Button)

Format Name

Name of the selected format

String (max. length 30)

Required, unique

System Version

Combo-box with the system version to which the format applies

Required. When changed, a warning box is displayed. If the user accepts the action, default values for default and input table are displayed. The value "none" defines "free format".

Description

Short format description

String (max. length 255)

Optional

Predefined

Check-box is checked for predefined elements

Checked, unchecked

Read-only

End Of Line

Combo-box to choose End of Line sequence

List of values: LF, CR, CR/LF, none)

Default element table (on left-hand side of dialog)

Combo-box to select or edit a default element for CDR input format

Values: List of default input formats, stored in the form of database records. The input format describes the structure of a received CDR. The elements to be used depend on the system version. For each input format an FTBL file is generated. This file contains AMO commands which are copied to the OpenScape/HiPath system and executed there. After execution of the FTBL file, the OpenScape/HiPath system will create CDR data that will match the defined input format.

Two tables are shown on the **Input Editor - Object View** page:

- **Default** element table (left-hand side table)

and

- **Input** element table (right-hand side table).

Elements in the **Default** element table do not appear in the input file. A default value should be defined for each element in this table. Element properties for both tables cannot be edited directly in the tables but in separate windows that are started by double-clicking on the selected row.

An additional special element containing fixed text can be added to the input as well. This element is used to represent those parts of the input that are ignored in further processing and do not match any standard element.

The same element cannot appear more than once among input elements in the input table. The only exception is a fixed text element that is allowed to appear several times in input.

The table displays the following columns:

Name

Element name, e.g. ACCTCODE for "Account code used during a call"

Value: String; Length: 12 characters

Read-only

Element Description

Element description, e.g. "Account code used during a call" for ACCTCODE

String, Numeric

Read-only

Allowed

Value to be assigned to the element if it is a permitted field.

check box - Permitted fields are checked, not permitted fields are unchecked.

Read-only

Input element table

Combo-box containing the selected input format elements for configuring the structure of received CDR data.

Values: List of selected input formats stored in the form of database records. The input format describes the structure of a received CDR. The elements to be used depend on the system version. For each input format an FTBL file is generated. This file contains AMO commands which are copied to the OpenScape/HiPath system and executed there. After execution of the FTBL file, the OpenScape/HiPath system will create CDR data that will match the defined input format.

Two tables are shown on the **Input Editor - Object View** page:

- **Default** element table (left-hand side table)

and

- **Input** element table (right-hand side table).

Only the elements from the **Input** element table will appear in the input file. A default value should be defined for each element in this table. Element properties for both tables cannot be edited directly in the tables but in separate windows that are started by double-clicking on the selected row.

An additional special element containing fixed text can be added to the input as well. This element is used to represent those parts of the input that are ignored in further processing and do not match any standard element.

The same element cannot appear more than once among input elements in the input table. The only exception is a fixed text element that is allowed to appear several times in input.

The table displays the following columns:

(Number)

Position number of input element

Integer

Read-only; Automatically generated by program

Name

Element name, e.g. ACCTCODE for "Account code used during a call"

Value: String; Length: 12 characters

Read-only

Element Description

Element description, e.g. "Account code used during a call" for ACCTCODE

String, Numeric

Read-only

Length

Length in bytes of the element.

Integer

Read-only

Alignment

Alignment

Left, Right

Read-only

Number Of Elements

Number of elements in the Input element table

Integer

Read-only; Automatically generated by program

Format Length

Total length in bytes of an input row

Integer

Read-only; Automatically generated by program

Field and Controls Descriptions

Input Format Editor - Object List view, field descriptions

Save (Button)

Saves changes to the database

An error message will be issued for wrong values.

New (Button)

Creates a new object and switches to the **New Object** view.

None

Delete (Button)

Deletes the selected object(s) (only available in **Object List** view)

A warning box will be displayed before deletion is carried out.

4.6 Input Format Editor - Object List view, field descriptions

[Input Format Editor, Table columns](#)

[Save \(Button\)](#)

[New \(Button\)](#)

[Delete \(Button\)](#)

The object list can not be edited. Each row contains information about one format. The table allows only selection of a single row.

Input Format Editor, Table columns

The table displays the following columns:

Format Name

Name of the selected format

String (max. length 30)

Read-only, unique.

System Version

System version to which the format applies

Read-only

Description

Short format description

String (max. length 255)

Read-only

Element Count

Number of elements in the element table.

Integer

Read-only

Format Length

Total length in bytes of an input row.

Integer

Read-only

Save (Button)

Saves changes to the database

An error message will be issued for wrong values.

New (Button)

Creates a new object and switches to the **New Object** view.

None

Delete (Button)

Deletes the selected object(s) (only available in **Object List** view)

A warning box will be displayed before deletion is carried out.

4.7 Input Format Editor - Set Default Value, field descriptions

[Element Description](#)

[Type](#)

[Length](#)

[Alignment](#)

[Default](#)

This is a modal dialog with the title **COL - Set Default Value**. It is used to set the default value of the selected input element. Other fields in the dialog are read-only.

Element Description

Element name

String Read-only

Type

Combo-box with the type of the element.

String, Numeric Read-only

Length

Length in bytes of the element.

Integer Read-only

Alignment

Alignment

Left, Right Read-only

Field and Controls Descriptions

Input Format Editor - Configure Input Element, field descriptions

Default

Value to be assigned to the element if it does not appear in input.

String Required.

4.8 Input Format Editor - Configure Input Element, field descriptions

No.

Element Description

Type

Length

Alignment

Filler

This is a modal dialog with the title "COL - Configure Input Element". It is used to modify properties of the selected input element.

No.

Row position

Integer Read-only

Element Description

Element name

String Read-only

Type

Combo-box with the type of the element.

String, Numeric Required

Length

Length in bytes of the element.

Integer Required only if Type is String.

Alignment

Combo-box to define alignment

Left, Right

Filler

Character used for padding (filling empty text spaces)

Char Default: space

4.9 Output Line Definition - Object view, field descriptions

Output Line Name

Description

Active

File Name

Output Format

Translation Group

Filter

Start Date/Time

Cycle

Save (Button)

New (Button)

Delete (Button)

Output Line Name

Output line name

String, max. length 32

Mandatory. Unique.

Description

Short description of the output line

String, max. length 256

Optional

Active

Check-box shows whether the line has been activated

Checked/unchecked

Output Format

Assigned output format

List of defined output formats

Mandatory

Translation Group

This field displays the available translation groups in a selection list. You can either select one of the defined translation groups or -- if NO transformation is necessary -- take over the predefined **Default Translation Group**.

Changed data that have not been saved yet cannot be printed.

A translation group consists of one or more translation tables -- see [Translation Table Editor, Object List view](#) and [Translation Table Editor, Object view](#). A single translation group can be assigned to more than one input or output lines.

To define new translation groups, use the Translation Group Editor.

To define new translation tables, use the Translation Table Editor.

Not editable (read-only).

Filter

Assigned filter or empty

List of defined filters

Optional

File Name

File destination

String

Mandatory. If the file name does not start with "/" the file name is relative to \$COL_DELIVER. If the file name is complete, \$COL_DELIVER is ignored. Directory should already exist. Name must be unique.

Start Date/Time

hh:mm dd.mm.yyyy

Mandatory. Default: current time and date.

Cycle

Choice of cycle format

Hours or Minutes

Mandatory

Hours:

- Combo-box with cycle-time in hours
- 1,2,3,4,6,8,12,24
- Enabled only if Cycle=Hours, not mandatory. Default: 1

Minutes

- Combo-box with cycle-time in minutes
- 1,2,3,4,5,6,10,12,15,30
- Enabled only if Cycle=Minutes, not mandatory. Default 15.

Save (Button)

Saves changes to the database

An error message will be issued for wrong values.

New (Button)

Creates a new object and switches to the **New Object** view.

None

Delete (Button)

Deletes the selected object(s) (only available in **Object List** view)

A warning box will be displayed before deletion is carried out.

4.10 Output Line Definition - Object List view, field descriptions

[Output Line Definition, table columns](#)

[Save \(Button\)](#)

[New \(Button\)](#)

[Delete \(Button\)](#)

The object can not be edited. Each row contains information about one output line.

Output Line Definition, table columns

The table displays the following columns:

Name

Output line name

String, max. length 32

Read-only

Description

Short description of the output line

String, max. length 256

Read-only

Output format

Assigned output format

List of defined output formats

Read-only

Filter

Assigned filter or empty

List of defined filters

Read-only

Active

Status check: Is line activated?

Yes/No

Read-only

Filename

File destination

String

Read-only

Field and Controls Descriptions

Output Format Editor - Object view, field descriptions

Start Date/Time

hh:mm dd.mm.yyyy

Read-only

Cycle

Cycle time in hours or minutes. Possible values for minutes are: 1,2,3,4,5,6,10,12,15,30. Possible values for hours are: 1,2,3,4,6,8,12,24.

Hours or Minutes

Read-only

Save (Button)

Saves changes to the database

An error message will be issued for wrong values.

New (Button)

Creates a new object and switches to the **New Object** view.

None

Delete (Button)

Deletes the selected object(s) (only available in **Object List** view)

A warning box will be displayed before deletion is carried out.

4.11 Output Format Editor - Object view, field descriptions

[Format Name](#)

[Description](#)

[End of Line](#)

[Element group list](#)

[Element table \(on left-hand side of dialog\)](#)

[Output elements table \(on right-hand side of dialog\)](#)

[Number Of Elements](#)

[Format Length](#)

[Save \(Button\)](#)

[New \(Button\)](#)

[Delete \(Button\)](#)

Format Name

Name of the selected format.

String (max. length 30)

Required, unique

Description

Short format description

String (max. length 255)

End of Line

Combo-box to choose End of Line sequence

List of values: LF, CR, CR/LF, none)

Element group list

Selection of the element group. Combo-box with the list of element groups.

Values: Standard Elements, CM Elements, Text Elements

Read-only

Note: On an OpenScape Manager the CM Elements are only displayed if the COL software is installed with the necessary user license rights. No licence is needed for an OpenScape Assistant.

Predefined

This box is checked (activated) with predefined, non-editable tables.

Possible values: Activated, Not activated.

Read-only.

Element table (on left-hand side of dialog)

List of elements available in the database. Allows selection of the element to be added to the **Output** table.

Values: String

Read-only

The table displays the following columns:

Name

Element name, e.g. "BCHLCNT" for "Number of used B channels"

Value: String

Read-only

Description

Element description, e.g. "Number of used B channels" for "BCHLCNT"

Value: String

Read-only

Output elements table (on right-hand side of dialog)

List of output elements added by the user to the **Output** elements table. Output elements can be edited by double-clicking on a record (row) in the **Output** elements table. The modal window **Configure Output Element** is then opened and allows editing of the selected output element.

Values: String

Field and Controls Descriptions

The table displays the following columns:

(Count number)

Position number

Integer

Read-only. Position number is automatically generated by program.

Name

Element name, e.g. "BCHLCNT" for "Number of used B channels"

Value: String

Read-only

Description

Element description, e.g. "Number of used B channels" for "BCHLCNT"

String

Read-only

Length

Length in bytes of the element.

Integer

Read-only

Alignment

Alignment

Left, Right

Read-only

Filler

Character for padding.

Char

Read-only

Text

Text is defined only for fixed text elements

String

Read-only

Number Of Elements

Number of elements in the **Output** table

Integer

Read-only

Format Length

Total length in bytes of an output row.

Integer

Read-only

Save (Button)

Saves changes to the database

An error message will be issued for wrong values.

New (Button)

Creates a new object and switches to the **New Object** view.

None

Delete (Button)

Deletes the selected object(s) (only available in **Object List** view)

A warning box will be displayed before deletion is carried out.

4.12 Output Format Editor - Object List view, field descriptions

[Output Format Editor, table columns](#)

[Save \(Button\)](#)

[New \(Button\)](#)

[Delete \(Button\)](#)

The object list can not be edited. Each row contains information about one output format. The table only allows the selection of a single row.

Output Format Editor, table columns

The table displays the following columns:

Format Name

Name of the selected format

String (max. length 30)

Read-only, unique.

Description

Short format description

String (max. length 255)

Read-only

Element Count

Number of elements in the output element table.

Integer

Read-only

Field and Controls Descriptions

Output Format Editor - Configure Output Element, field descriptions

Format Length

Total length in bytes of an output row.

Integer

Read-only

Save (Button)

Saves changes to the database

An error message will be issued for wrong values.

New (Button)

Creates a new object and switches to the **New Object** view.

None

Delete (Button)

Deletes the selected object(s) (only available in **Object List** view)

A warning box will be displayed before deletion is carried out.

4.13 Output Format Editor - Configure Output Element, field descriptions

No.

Element Description

Type

Length

Alignment

Filler

Text

No.

Position number

Integer

Read-only

Element Description

Element name

String

Read-only

Type

Combo-box with the type of the element.

String, Numeric

Required

Length

Length in bytes of the element.

Integer

Required only if Type is String.

Alignment

Combo-box to define alignment

Left, Right

Filler

Character used for padding

Char

Text

Text property for fixed text elements

String

Enabled and required only for fixed text elements.

4.14 Filter Editor - Object view, field descriptions

Filter Name

Description

Element group list (combo box with dropdown list)t

Filter Editor, table columns (left-hand side)

Filter Editor, table columns (right-hand side)

Number Of Elements

Save (Button)

New (Button)

Delete (Button)

Filter Name

String, max. length 32

Mandatory

Description

String, max. length 256

Optional

Element group list (combo box with dropdown list)t

Selection of the element group. Combo-box with dropdown list of element groups.

Values: Standard Elements, CM Elements, Complex Elements

Read-only

Note: On an OpenScape Manager the CM Elements are only displayed if the COL software is installed with the necessary user license rights.

Filter Editor, table columns (left-hand side)

List of elements available in selected element group. Allows selection of an element. The table displays the following columns:

Name

Table column with element names

Values: String, e.g. "ACCOUNT" for "Account Number"

Read-only

Element Description

Table column with element descriptions

Values: String, e.g. "Account Number" for "ACCOUNT"

Read-only

Filter Editor, table columns (right-hand side)

List of elements added by the user to the **Filter Clause** table. Filter Clause elements can be edited by double-clicking on a record (row) in the **Filter Clause** elements table. The modal window **Configure Filter Element** is then opened and allows editing of the selected output element.

#

Position number

Integer

Read-only. Position number is generated automatically by program.

Name

Table column with element names

String

Read-only

Operator

Table column with operators

=, <>, <, >, <=, >=, IN, NOT IN

Required

Value

Table column with values. In case of multiple values, comma is used as the delimiter.

String; eg [1-1-20-4711]

Required

Number Of Elements

Number of rows in the selection clause

Integer

Read-only

Save (Button)

Saves changes to the database

An error message will be issued for wrong values.

New (Button)

Creates a new object and switches to the **New Object** view.

None

Delete (Button)

Deletes the selected object(s) (only available in **Object List** view)

A warning box will be displayed before deletion is carried out.

4.15 Filter Editor - Object List view, field descriptions

[Filter Editor, table columns](#)

[Save \(Button\)](#)

[New \(Button\)](#)

[Delete \(Button\)](#)

The object can not be edited. Each line contains information about one filter.
To edit one of the records from this table, double click on it to open the modal dialog **Set Default Value**.

Filter Editor, table columns

The table displays the following columns:

Filter Name

Name of the filter

String (max. length 30)

Read-only, unique.

Description

Short format description

String (max. length 255)

Read-only

Element Count

Number of elements in the filter table.

Integer

Field and Controls Descriptions

Filter Editor - Set Default Value, field descriptions

Read-only

Save (Button)

Saves changes to the database

An error message will be issued for wrong values.

New (Button)

Creates a new object and switches to the **New Object** view.

None

Delete (Button)

Deletes the selected object(s) (only available in **Object List** view)

A warning box will be displayed before deletion is carried out.

4.16 Filter Editor - Set Default Value, field descriptions

Element Name

Element Description

Operator

Value

Element Name

Name of element selected in the **Filter Clause** table.

String

Read-only

Element Description

Description of the element selected in the **Filter Clause** table.

String

Read-only

Operator

Combo-box with operators

=, <>, <, >, <=, >=, IN, NOT IN

Required

Value

Value

String, range for numeric values and values in brackets []

Required

4.17 Translation Table Editor - Object view, field descriptions

Translation Table Name

Description

Element

Translation Table Editor, table columns

Predefined (check box)

Add New Row (button)

Delete Row (button)

Save (button)

New (button)

Delete (button)

Translation Table Name

Name of selected translation table.

String (max. 30 characters).

Unique.

Mandatory.

Description

Short description of translation table.

String (max. 255 characters).

Optional.

Element

This combo box contains the list of Standard Elements and CM Elements.

The list of Standard Elements also contains generated elements which do not appear in the input (e.g. SYSTYPE).

The CM Elements are only displayed if the COL software is installed with the necessary user license rights.

Mandatory.

Translation Table Editor, table columns

This table is used to define or change the input and output values for the translation table. The table displays the following columns:

Position

Displays the sequential number of each table row.

The sequential numbers of all table rows are automatically assigned or updated, respectively, upon creation or deletion of a row. If a row is added or deleted between already existing rows at a later time, the sequential numbers of all following rows will be updated automatically.

Read-only.

In Value

Enter the input value for the translation (transformation) here.

String, max. 100 characters.

Value must be unique within one table.

Out Value

Enter the output value for the translation (transformation) here.

String, max. 100 characters.

Value must be unique within one table.

Optional.

Comment

String, max. 255 characters.

Optional.

Number of Values (xx)

The total number of rows in the table is displayed here.

Integer.

Read-only.

Predefined (check box)

This box is checked (activated) with predefined, non-editable tables.

Possible values: Activated, Not activated.

Read-only.

Add New Row (button)

Click this button to add a new row to the table.

A new, empty row is inserted into the table below the currently selected row.
The cursor is positioned in the In Value column in the new row.

The sequential numbers of all rows following the newly inserted row are updated automatically.

Delete Row (button)

Click this button to delete the selected row from the translation table.

The sequential numbers of all rows following the deleted row are updated automatically.

New (button)

Click this button to create a new object and to switch to the new object.

Copy (button)

Copy the current object to the clipboard.

This button is only enabled in the **Object** view.

Insert (button)

Insert the previously copied object from the clipboard into the current view.

This button is only enabled in the **Object** view.

Save (button)

Save changes to the database.

An error message is issued if wrong or illegal values are entered.

This button is only enabled in the **Object** view.

Delete (button)

Delete the selected object.

A warning message is issued before irreversible deletion.

This button is only enabled in the **Object List** view.

4.18 Translation Table Editor - Object List view, field descriptions

[Translation Table Editor, table columns](#)

[Save \(Button\)](#)

[New \(Button\)](#)

[Delete \(Button\)](#)

Translation Table Editor, table columns

The table shows the following values:

Table Name

Name of the selected translation table.

String (max. 30 characters).

Unique, mandatory.

Read-only.

Element

This combo box contains the list of Standard Elements and CM Elements - see [Translation Table Editor - Object view, field descriptions](#).

The list of Standard Elements also contains generated elements which do not appear in the input (e.g. SYSTYPE).

The CM Elements are only displayed if the COL software is installed with the necessary user license rights.

Read-only.

Description

Short description of translation table.

String (max. 255 characters)

Optional.

Field and Controls Descriptions

Translation Group Editor - Object view, field descriptions

Read-only.

Number of Values

Number of elements in the translation table.

Integer.

Read-only.

Mandatory.

Save (Button)

Save changes to the database.

An error message is issued if wrong or illegal values are entered.

This button is only enabled in the **Object** view.

New (Button)

Create a new object and switch to this new object.

Delete (Button)

Delete selected object.

A warning message is issued before irreversible deletion.

This button is only enabled in the **Object List** view.

4.19 Translation Group Editor - Object view, field descriptions

[Group Name](#)

[Description](#)

[Predefined \(check box\)](#)

[Translation Group Editor, table columns \(left-hand side\)](#)

[Translation Group Editor, table columns \(right-hand side\)](#)

[Number of Tables](#)

[Save \(button\)](#)

[New \(button\)](#)

[Delete \(button\)](#)

Group Name

Unique name of translation group.

String (max. 30 characters).

Unique,

Mandatory.

Description

Short description of translation group.

String (max. 255 characters).

Optional.

Predefined (check box)

This box is checked (activated) with predefined, non-editable tables.

Possible values: Activated, Not activated.

Read-only.

Translation Group Editor, table columns (left-hand side)

The table located in left hand side area of **Translation Group Editor** dialog, **Object.** view displays the available translation tables that can be added to a translation group.

Table Name (table column)

Table column in **Available tables** list located in left hand side area of **Translation Group Editor** dialog, **Object.** view.

Displays the name of the translation table.

String, max. 30 characters.

Read-only.

Element (table column)

Table column in **Available tables** list located in left hand side area of **Translation Group Editor** dialog, **Object.** view.

Displays the element for which a value transformation (translation) is defined in the table.

String, max. 30 characters.

Read-only.

Description (table column)

Short description of translation table.

String (max. 255 characters).

Read-only.

Optional.

Translation Group Editor, table columns (right-hand side)

Titel of table located in right hand side area of **Translation Group Editor** dialog, **Object.** view.

This table displays the translation tables that have been added to a translation group.

Table Name

Name of selected translation table.

String (max. 30 characters).

Read-only.

Field and Controls Descriptions

Translation Group Editor - Object List view, field descriptions

Element

Table column in the **Translation Tables in the Group** table located in right hand side area of **Translation Group Editor** dialog, **Object** view.

Displays the element for which a value transformation (translation) is defined in the table.

String (max. 30 characters).

Read-only.

Description

Short description of translation table.

String (max. 255 characters).

Read-only.

Optional.

Number of Values

Number of values in the translation table.

Integer.

Read-only.

Number of Tables

Number of tables in the group.

Integer.

Read-only.

Save (button)

Save changes to the database.

An error message is issued if wrong or illegal values are entered.

This button is only enabled in the **Object** view.

New (button)

Create a new object and switch to this new object.

Delete (button)

Delete selected object.

A warning message is issued before irreversible deletion.

This button is only enabled in the **Object List** view.

4.20 Translation Group Editor - Object List view, field descriptions

[Translation Group Editor, table columns](#)

[Save \(button\)](#)

[New \(button\)](#)

[Delete \(button\)](#)

Translation Group Editor, table columns

The table displays the following values:

Translation Group Name

Name of the translation group.

String, max. 30 characters. Read-only. Mandatory.

Description

Short description of translation group.

String (max. 255 characters). Read-only. Optional.

Number of Tables

Number of tables in the group.

Integer. Read-only.

Save (button)

Save changes to the database.

An error message is issued if wrong or illegal values are entered.

This button is only enabled in the **Object** view.

New (button)

Create a new object and switch to this new object.

Delete (button)

Delete selected object.

A warning message is issued before irreversible deletion.

This button is only enabled in the **Object List** view.

4.21 Incorrect Records dialog, field descriptions

[Incorrect Records dialog, table columns](#)

[Send Back To Input \(button\)](#)

[Refresh \(button\)](#)

[Delete \(button\)](#)

[View CDRs](#)

Incorrect Records dialog, table columns

The table displays the following columns:

System ID

System ID

String

Field and Controls Descriptions

Saved CDRs in Backup File

Read-only. System ID is extracted from the directory name. If the file is stored in the wrong directory, the System ID is wrong as well.

File Name

File name (without directory name)

String

Read-only

File Size

File size in kilobytes

Integer

Read-only

Input Format

Input format for the switch

String

Read-only. Current format for the switch is fetched from the database. It is not necessarily the original format of the file.

Send Back To Input (button)

Sends the incorrect data back to the input.

Refresh (button)

Updates the display of the incorrect data sets.

The system does **not** issue any message informing you whether the processing of the CDR data was successful or not. If the processing was successful, the CDR file will automatically be deleted from the list. If processing was not successful, the CDR file will continue to be displayed in the list of incorrect data sets. The display is not updated automatically. To make sure that you have the current data displayed, we recommend to re-open the dialog and to click on **Refresh**.

Delete (button)

Deletes the data sets from the displayed list.

View CDRs

Displays the content of the selected CDR in the CDR Viewer (see [CDR Viewer](#), page 119).

4.22 Saved CDRs in Backup File

[Saved CDRs in Backup File dialog, table columns](#)

[Send Back To Input](#)

[Refresh](#)

[Delete](#)

[Send All Back To Input](#)

[View CDR Files](#)

Saved CDRs in Backup File dialog, table columns

The existing CDR files in the backup directory will be displayed in a table, showing file information about:

- System ID
- File Name
- File Size
- Input Format

The columns of the table are sortable by clicking on the column header.

Also multiple selection is available for the functions of the **Send Back To Input** and **Delete** buttons.

Send Back To Input

All **selected** files are transformed from the input format to the standard format.

Refresh

Updates the list.

Delete

Deletes the **selected** entries from the backup directory.

Send All Back To Input

All files from the table are transformed from the input format to the standard format.

View CDR Files

Displays the content of the selected CDR in the CDR Viewer (see [CDR Viewer](#), page 119).

4.23 Files Ready for Output Lines

[Files Ready for Output Lines dialog, table columns](#)

[Refresh](#)

[Delete](#)

[View CDRs](#)

Files Ready for Output Lines dialog, table columns

- **Output Line Name** Name of the output line which produced the CDR
- **Output Line Description** Description/switch of the output line which produced the CDR
- **File Name** CDR file name.
- **File Size** Size of the CDR file (in kilobytes)
- **Output Format** Output format of the CDR file, if recognized.

Field and Controls Descriptions

COL Paths tab sheet, Options dialog, field descriptions

Refresh

Re-reads the manager's delivery directories and updates the list.

Delete

Deletes the selected CDR file(s).

View CDRs

Displays the content of the selected CDR in the CDR Viewer (see [CDR Viewer](#), page 119).

4.24 COL Paths tab sheet, Options dialog, field descriptions

[Input Path](#)

[Transform Path](#)

[Output Path \(internal\)](#)

[AM Deliver Path](#)

[PM Deliver Path](#)

[Path of Incorrect Records](#)

[FTBL Path](#)

[Trunk Group Metering Path](#)

[Save \(button\)](#)

Input Path

Directory where to store input files.

String.

Also referred to as \$COL_INPUT.

Transform Path

Directory where to store transformed files.

String.

Also referred to as \$COL_TRANSFORM.

Output Path (internal)

Directory where to store output files.

String.

Also referred to as \$COL_OUTPUT.

AM Deliver Path

Directory where to deliver files for AM.

String.

Also referred to as \$COL_DELIVER.

PM Deliver Path

Directory where to deliver files for PM.

String.

Path of Incorrect Records

Directory where to store rejected CDRs.

String.

Also referred to as \$COL_ERROR.

FTBL Path

Directory where FTBL files are stored.

String.

Also referred to as \$COL_FTBL.

Trunk Group Metering Path

Path where the traffic metering files will be saved.

String

4.25 Settings tab sheet, Options dialog, field descriptions

Required Free Space

Retention Period for CM History Data ... Day(s)

Activate fast mode for transformation of virtual to physical node number only for the PM output line (check box)

Activate/Deactivate Automatic Delecte of Logging Entries in COL (check box)

Retention Period for Logging Entries ... Day(s)

Retention Period for Trunk Group Data from the Cyclic Check of the B Channels ... Day(s)

Save Input Files (CDRs)

Retention Period for AC Configuration Data ... Day(s)

Send email notification if free space/collection thresholds exceeds

Select email recipients

Activate/Deactivate automatic Cleanup

Retention Period for the Back Up CDR files ... Day(s)

Activate/Deactivate Define Backup and check of BackUp Directory

Retention Period for "File Transfer" (receive) Process Monitor

Retrieve CDRs alive time

Save (button)

Required Free Space

Required free space on disk in % for input files.

Integer (0-100).

Retention Period for CM History Data ... Day(s)

Use this field to enter the duration (in number of days) for the retention period of CM history data.

Integer.

Default value: 20 days.

Activate fast mode for transformation of virtual to physical node number only for the PM output line (check box)

When this check box is marked, the fast mode for transformation of virtual to physical node numbers is activated for the PM output line only.

Activate/Deactivate Automatic Delete of Logging Entries in COL (check box)

Using this check box you can specify whether the logging entries in COL should be automatically deleted or saved and retained for a certain period.

When this check box is marked, the logging entries will automatically be deleted.

Retention Period for Logging Entries ... Day(s)

Use this field to enter the duration (in number of days) for the retention period of the logging entries.

The value entered here will only become active and can only be administered if you activated the **Activate/Deactivate Automatic Delete of Logging Entries in COL** option by marking the check box.

Integer, 1-3 digits

Possible values: 1 - 366 day(s)

Retention Period for Trunk Group Data from the Cyclic Check of the B Channels ... Day(s)

Use this field to enter the period - defined in days - for the retention period of the trunk usage data obtained by the **Cyclic Check of Trunk Groups** feature and stored in the COL database.

Data older than the retention period defined in this field will be deleted.

Integer.

Default value: 100 days.

Max. value: 366 days.

Save Input Files (CDRs)

Use this check box to enable/disable the backing up of input files (CDRs). If this check box is enabled, the input files containing the call data record sets (CDRs) will be saved to a backup directory under the path `..\var\col\data`.

Important: If this feature is enabled you need to make sure that the data stored in the backup directory is archived/deleted regularly, otherwise the disk storage capacity will be exceeded.

When activating this feature, all collected input data is saved in the `/var/col/data/backup/<System-ID>/<cdr_filename>` directory. At present the Collecting Agent does not support a feature for deleting the data in the `/var/col/data/backup` directory. Therefore, the user who activated this feature is responsible for the administration/deletion of the backup data. This feature is used to read in and thus recover from the backup directory CDR data that has been lost in the recording and evaluation system.

In order to read in the CDR records, the required CDR files can be copied to the `/var/col/data/error/<System-ID>` directory. The data records are then read in via the **Incorrect Records** dialog by selecting the file and pressing the **Send Back to Input** button.

If this feature is enabled the `/var/col` partition may be completely filled with data (depending on the value set for **Required Free Space** in the **Options** dialog). This may result in a complete stop of the data collection process by the Collecting Agent. The stopping of the CDR collection process may result in a loss of CDR data.

Therefore, you should regularly delete this data in order to avoid exceeding the storage capacity of the `/var/col` partition.

Retention Period for AC Configuration Data ... Day(s)

Check this checkbox to set the period of days in the **Day(s)** spinner box for the retention period of the Attendant Console usage data, which are obtained by the Download of Attendant Consoles feature and stored in the COL database (System Management).

Data older than the retention period defined in this field will be deleted.

Integer. Default value: 366 days. Possible values: 366 - 999 days.

Send email notification if free space/collection thresholds exceeds

If this option is enabled, you can select e-mail recipients from a list of subscribers defined in the CM application (Configuration Management -> Personal Data -> Subscriber).

For details setting up the e-mail server, please refer to **Email Settings in the RepGen Administration Page** in:

- [Report Generator Manual](#) (English)
- [Report Generator Manual](#) (German)

Select email recipients

By clicking the Lookup button (...) button on the right of the text input field, you can select e-mail recipients from a list of subscribers defined in the CM application (Configuration Management -> Personal Data -> Subscriber).

For details setting up the e-mail server, please refer to **Email Settings in the RepGen Administration Page** in:

- [Report Generator Manual](#) (English)
- [Report Generator Manual](#) (German)

Activate/Deactivate automatic Cleanup

When the checkbox **Save Input Files (CDRs)** in this tab is checked, the CDR files are stored in a directory per system. After this, you can activate and deactivate an automatic cleanup of stored CDR files by checking/unchecking

Field and Controls Descriptions

Process Controlling tab sheet, Options dialog, field descriptions

the **Activate/Deactivate automatic Cleanup** checkbox and set parameters for time and size of the cleanup:

Retention Period for the Back Up CDR files ... Day(s)

Set the retention time for the saved CDR files in the **Day(s)** spinner box. Data older than the retention period defined in this field will be cleaned. The default time for the cleanup is 40 days.

- **Day(s)** If the checkbox is checked, the **Day(s)** spinner box will be enabled, otherwise this will be disabled.

Activate/Deactivate Define Backup and check of BackUp Directory

Activate this checkbox, if you want to limit the size of the backup directory. If the checkbox is checked, then the edit field **Size of backup Directory** will be enabled, otherwise this will be disabled.

- **Size of backup Directory** The size of CDR files which can be saved in the backup directory will set in MB. The default size will be 512 MBs.

Retention Period for "File Transfer" (receive) Process Monitor

By setting a number of minutes in the spin field **Retrieve CDRs alive time** you can define the interval how often the size of the CDR file being retrieved will be checked in order to ensure that the `col_receive` process is still active and has not been blocked.

- **Retrieve CDRs alive time**
- The range of values for the retention period. The spin field can be scrolled from 10 to 60 minutes. Default value: 20 minutes.

4.26 Process Controlling tab sheet, Options dialog, field descriptions

Number of Receive (CDR collecting) Processes

Number of Transform (CDR standardisation) Processes

Number of Line (CDR output) Processes

Number of Metering Processes

Number of TG-Check (Cyclic check of Trunk Groups) Processes

Schedule Incorporation of CDR Processing Active

Start Time

Stop Time

Save (button)

Number of Receive (CDR collecting) Processes

Number of receive processes.

Integer.

Default value: 1

Number of Transform (CDR standardisation) Processes

Number of transform processes. The number of Transform processes must always be equal to the number of Line processes.

Integer.

Default value: 1

Maximum value: 10

Number of Line (CDR output) Processes

Number of line processes. The number of Transform processes must always be equal to the number of Line processes.

Integer.

Default value: 1

Maximum value: 10

Number of Metering Processes

Number of metering processes.

Integer.

Default value: 1

Number of TG-Check (Cyclic check of Trunk Groups) Processes

Number of TG-Check processes.

Integer.

Default value: 1

Schedule Incorporation of CDR Processing Active

With this feature it is possible to configure time-controlled transformation and output of CDR data in COL. However, this does not apply to performance extensive transformation and collecting of call charge data, which will be done during times of lower system load.

Schedule incorporation is supported for both Manager and Assistant.

NOTICE: Multiple Processes are not supported for Assistant.

Activation and Deactivation

The feature can be activated by the the **Schedule Incorporation of CDR Processing Active** checkbox.

If the checkbox is checked, the feature is be enabled. If the checkbox is unchecked, the feature is deactivated.

Default value: unchecked

Start Time

Define a start time.

Start Time selector will be enabled only if the **Schedule Incorporation of CDR Processing Active** checkbox is checked.

Field and Controls Descriptions

Options dialog, Save button description

The difference between the Stop and Start times must be more than or equals to 1 hour and less than or equals to 18 hours.

Stop Time

Define a stop time.

Stop Time selector will be enabled only if the **Schedule Incorporation of CDR Processing Active** checkbox is checked.

The difference between the Stop and Start times must be more than or equals to 1 hour and less than or equals to 18 hours.

4.27 Options dialog, Save button description

[Save \(button\)](#)

Save (button)

This button applies to all of the tab sheets in the **Options** dialog.

The parameter values entered are saved in the database. The changed settings are applied after COL system restart only. You must be an authorized user with "rsca" access rights to be allowed to make changes and save values.

An error message is issued if wrong values are entered.

4.28 Logging dialog (log file)

Log Type:

- Receive Log
- Output Log
- Cyclic Check Log
- Error and Activity Log

[System ID](#)

[From: \(Date: / Time:\)](#)

[To: \(Date: / Time:\)](#)

[View \(button\)](#)

[Delete \(button\)](#)

Log Type:

- **All Log**

Selects as logging type all logging categories in the list.

- **Receive Log**

Contains the error log for the receive lines.

- **Output Log**

Contains the error log for the output lines.

- **Cyclic Check Log**

Contains the error log that informs you whether the Cyclic Check has started, finished or if an error has occurred for a specific system ID. The

Error and Activity Log is also updated if necessary, i.e. if an error occurs for a specific system ID, then the Error and Activity Log will display additional information regarding to this error.

- **Error and Activity Log**

Selects as logging type only the Receive Loggings. Selecting this radio button activates the sub-checkboxes **Activity Log** and **Error Log** (default: both checked, both log types will be included in the result).

- **Activity Log**

Option checked/unchecked: Includes/excludes Activity Loggings in the results.

- **Error Log**

Option checked/unchecked: Includes/excludes Error Loggings in the results.

System ID

The **System ID** list box is activated only if the corresponding **System ID** checkbox to the left is enabled. If the checkbox is unchecked, all the available system IDs are taken into account after the **View** button is clicked. The system ID is selectable from the list box (multiple selection is possible), where all existing system IDs in SysM are displayed. For events, which are created by Manager the System ID is **Local** which is the default value of the list box.

From: (Date: / Time:)

Define the beginning for the period of time for which the selected log should be generated. You can either select the date from the Calendar view and the time from the spinner box or enter both manually.

To: (Date: / Time:)

Define the end for the period of time for which the selected log should be generated. You can either select the date from the Calendar view and the time from the spinner box or enter both manually.

View (button)

To view the selected message logs, click the **View** button.

Delete (button)

To delete a message log, click the **Delete** button next to the selected log type for the entered period of time.

4.28.1 COL Logging Events dialog

Columns in the Log Table:

- Logging Type
- Logging Period
- Date (column)
- Category (column)
- Error (column)
- System ID (column)
- Short message (column)

- Long message (column)
- Severity (column)

Button

[Print/Export](#)

Columns in the Log Table

Indicates the amount of log entries for the selected logging events within the selected period and shows in the bottom of the page on the right the total of **Number of events found**.

The read only columns indicate:

- **Logging Type**
Displays the log type selected in the Logging Dialog.
- **Logging Period**
Displays the logging period for the log type selected in the Logging Dialog.
- **Date**
Displays the date and time when the log message was issued.
- **Category**
Indicates the category of the logged activity, e.g. "start application" or "exit application".
- **Error**
List of possible errors in error codes
- **System ID**
The ID of the network node (switch) that is being logged and issued the log message.
- **Short message**
Displays a short description of the logged activity or error, e.g. "COL process dbproxy started."
- **Long message**
Displays a short description of the logged activity or error, e.g. "COL process dbproxy started."
- **Severity**
Indicates the severity of the log message. Values: 0 indicates lowest severity.

Print/Export

Prints or exports the displayed loggings. After clicking this button the **Run Report** dialog is displayed to select the output format (for export: HTML, XML, PDF) for the file, output options (screen, printer) and to send the log file as e-mail.

4.28.2 COL Logging Events Report

[Logging Type](#)

[Logging Period](#)

[Date](#)

Category

Error

System ID

Short message

Long message

Severity

Logging Type

Displays the log type selected in the Logging Dialog.

Logging Period

Displays the logging period for the log type selected in the Logging Dialog.

Date

Displays the date and time when the log message was issued.

Column

Category

Indicates the category of the logged activity, e.g. "start application" or "exit application".

Column

Read only

Error

List of possible errors

Error code

System ID

The ID of the network node (switch) that is being logged and issued the log message.

Column

Short message

Displays a short description of the logged activity or error, e.g. "COL process dbproxy started."

Long message

Displays a short description of the logged activity or error, e.g. "COL process dbproxy started."

Severity

Indicates the severity of the log message.

Values: 0 indicates lowest severity.

4.29 CDR Viewer

[Define Format](#)

[Display all CDRs](#)

[Columns in the CDR table](#)

[Print](#)

[Number of Records in the CDR File](#)

Define Format

DropDown list for defining the format of the displayed CDR.

For the record format descriptions refer to the tables in the Reference Material, e.g. [Pre-defined Formats for Output Format Definition, page 308](#).

When you change the type of Input/Output Format and the length of the CDR still fits to this choice, the CDR Viewer dialog will retain its layout.

If the CDR's length does not fit to the selected Input/Output format, the CDR Viewer dialog automatically switches to the alternative 'Undefined' layout.

Display all CDRs

If this checkbox is selected, all CDRs will be displayed in the table.

if the total number of Records in the CDR file is greater than 500 and you check this checkbox a message window is displayed, informing that it might take a while to display all records. You can confirm or abort the action in this message window.

If this checkbox is not selected, only the first 20 CDRs will be displayed, if the format is known valid. Related to the loaded files the format description will be displayed as column header.

If the checkbox is not selected and the format is undefined, only the first CDR is displayed in 'undefined' layout.

Columns in the CDR table

Depending on the selected and displayed file format (not for 'undefined'), the fields of the CDR and the column headers of the table columns vary. For the field descriptions refer to the tables in the Reference Material, e.g. [Pre-defined Formats for Output Format Definition, page 308](#).

Print

Pressing this button, the CDR record is exported in to the defined standard printer.

Number of Records in the CDR File

Read only field, gives information, how many CDRs are listed in the CDR file.

4.30 Collecting Agent tab sheet in System Management

The Collecting Agent tab sheet in System Management comprises five sub tabs:

COL Administration sub tab
 Trunk Group/CDR sub tab
 Attendant Consoles sub tab
 Node No. Transform sub tab

4.30.1 COL Administration sub tab

Input Format
 PM Input Format
 Translation Group
 Number Of Retries
 Retry Time
 Collect AM Data
 Generating Node Number
 CDR Source: File/Directory
 File/Directory Name
 CDR from Local File System
 Activate Copy CDR from RMX to Unix area
 Start Date
 Start Time
 Cycle
Hours
Minutes

Input Format

Combo box with the list of all supported input formats. The drop down list of all supported input formats is shown in this box.

PM Input Format

Combo box with the list of supported PM input formats.

The **PM Input Format** field provides a a combo box of short PM input formats in order to reduce the length of the PM-N CDR records and thereby reduce the data volume when PM is active.

The **PM Input Format** field is only active, when the **Collect PM Data** checkbox is checked.

When the **Collect PM Data** checkbox is checked, the **PM Input Format** field displays the same format as the **Input Format** field (default).

The PM input formats is available for the following switch versions:

- UV8
- UV7
- UV6

Field and Controls Descriptions

- UV5
- UV4
- UV3.0
- UV2.0 (Version 2.0 only),
- UV1.0,

All formats contain RECTYPE as leading element. The names of the new PM input formats are:

- PM-N_UV4
- PM-N_UV2.0 (Version 2.0 only),
- PM-N_UV1.0,

The PM-N_xxx formats contain the following elements:

PM-N input formats

No	Element	Type	Length
1	FIXTEXT	\$	1
1	RECTYPE	number	1
2	CALLILV0	number	3
3	CALLILV1	number	3
4	CALLILV2	number	2
5	CALLIPTY	string	22
6	CONNTYPE	string	1
7	CONTOT	number	6
8	DESTLV0	number	3
9	DESTLV1	number	3
10	DESTLV2	number	2
11	DESTPTY	string	22
12	END10	number	1
13	ENDDAY	number	2
14	ENDHOUR	number	2
15	ENDMIN	number	2
16	ENDMONTH	number	2
17	ENDSEC	number	2
18	ENDYEAR	number	4
19	QUEUEDUR	number	5
20	RINGDUR	number	3
21	SUPLSERV	string	2

No	Element	Type	Length
22	THRESEQ	number	8
23	TKNOREAL	number	5
24	TKNOTRGR	number	3
		SUM:	109

The output format to PM remains unchanged and is not affected.

The RECTYPE element can have 4 different values. The value of the RECTYPE element defines whether a CDR record is relevant for AM only, PM only, AM + PM or for none of the two (see following table).

To separate AM data from PM data it is therefore sufficient to check the value of the RECTYPE element for each CDR record.

Table 2: RECTYPE/COLTYPE - possible values

RECTYPE/COLTYPE value	0	1	2	3
Relevant for	None	AM	PM	AM and PM

Translation Group

This combo box displays a selection list of available translation groups. You can either select one of the defined translations groups, or - if NO translation group is required - you can use the **Default Translation Group**.

Changed data that has not been saved yet can not be printed.

In order to provide all CDRs for OpenScape/HiPath systems in a consistent, "normalized" format, the different values of the CDR elements need to be transformed or "translated" in such a way that they all have the same value in the COL standard elements. This is reached by translation tables for the input and output lines.

A translation group consists of several translation tables and can be assigned to several input or output lines. Likewise, a translation table can be used in several translation groups.

Translation tables consist of value pairs that define how the value of an element is being "translated" in the input or output process.

Every translation table is defined for a specific standard element.

Translation tables and translation groups can be created and edited by the user, and they can be saved in the database under a unique name.

This field is not editable (read-only).

Collect AM Data

Check box to activate AM collecting.

Checked/not checked.

Generating Node Number

3 numeric entry fields for the node number.

Values: 0 to 9

Field lengths: 2,3,3; Mask: 11-111-111

CDR Source: File/Directory

Select the CDR data source in **CDR Source** field. **File** or **Directory** can be specified as source.

File: Click this radio button if a file is to be specified as CDR data source.

Directory: Click this radio button if a directory is to be specified as CDR data source.

Radio buttons to choose input from file or directory.

File/Directory Name

The name of the file or directory as CDR data source can be specified on this field.

String

Default: FTFIL

CDR from Local File System

If this check box is enabled, the input files containing the call data record sets (CDRs) will be saved to a backup directory under the path `..\var\COL\data`.

When activating this feature, all collected input data is saved in the `/var/col/data/backup/<System-ID>/<cdr_filename>` directory. At present the Collecting Agent does not support a feature for deleting the data in the `/var/col/data/backup` directory. Therefore, the user who activated this feature is responsible for the administration/deletion of the backup data. This feature is used to read in and thus recover from the backup directory CDR data that has been lost in the recording and evaluation system.

In order to read in the CDR records, the required CDR files can be copied to the `/var/col/data/error/<System-ID>` directory. The data records are then read in via the **Incorrect Records** dialog by selecting the file and clicking the **Send Back to Input** button.

Therefore, you should regularly delete this data in order to avoid exceeding the storage capacity of the `/var/col` partition.

Activate Copy CDR from RMX to Unix area

If this check box is enabled, the input files containing the call data record sets (CDRs) will be copied from the RMX to the Unix area.

Number Of Retries

The number of retries for data transfer is entered in this field.

Integer.

Values: 1 to 100 or [0] in case of selected collection period defined by Cycle Time 1 minute.

Default: 3.

Example description: in case of any error in the collection process, at the configured time, COL will try to collect 3 further transfers in "Retry Time" intervals. This is done in order to collect the call data from the RMX.

If all 3 retries fail a corresponding error message is added to the "Receive Log" and the next transfer starts at the configured time.

Retry Time

The time interval (in minutes) until the next retry for data transfer is entered in this field.

Integer.

Values: 1 to 1000.

Default: 15 minutes.

Example description: This means that the waiting interval between 3 retries has a duration of 15 minutes.

NOTICE: The result of Number Of Retries multiplied by number of Retry Time has to be smaller than the collection period defined by Cycle Time in minutes.

Start Date

The date to begin the collecting process is entered on this field.

Date.

Default: today.

Start Time

The time to begin the collecting process is entered on this field.

Time in format "hh:mm".

Default: current time.

Cycle

The time length of a collecting cycle is entered on this field.

The duration can be specified in hours or minutes.

Default: hours.

Hours

Combo box with hours. Select this field if the duration for one cycle is to be in hours. The desired numerical values can be chosen from the selection list below the field.

1, 2, 3, 4, 6, 8, 12, 24

Enabled only if Cycle = Hours, not mandatory.

Default: 1.

Minutes

Combo box with minutes. Select this field if the duration for one cycle is to be in minutes. The desired numerical values can be chosen from the selection list below the field.

1, 2, 3, 4, 5, 6, 10, 12, 15 ,30

Enabled only if Cycle = Minutes, not mandatory.

Default: 15.

The image displays two screenshots of the OpenScope 4000 Administration interface, specifically the 'Performance Management' tab. The top screenshot shows the 'General' section with fields for Name, Version, ID, and Active Application. The bottom screenshot shows the 'Performance Management' section with fields for Input Format, PM Input Format, Translation Group, Number of Batches, Retry Time (min), Cycle (min), Start Date, Start Time, and Cycle. The 'Cycle' field is highlighted with a red box in both screenshots, showing a dropdown menu with options: 1, 2, 3, 4, 5, 6, 10, 12, 15, 30. The 'Cycle' field is set to 15 in both screenshots.

4.30.2 Trunk Group/CDR sub tab

- Download (button)
- Activate (button)
- Download Status
- Last download passed on (date/time)
- Activation Status
- Last activation passed on (date/time)
- Trunk (table column)

Name (table column)

AM (table column)

PM (table column)

PM/TG Check (table column with check box)

Cyclic Check of Trunk Groups Active (check box)

Start Date

Start Time

Cycle (radio button)

Hours

Minutes

Refresh (button)

Save (button)

Discard (button)

Download (button)

Click the **Download** button to download the trunk group data from the system. The download process is performed asynchronously, i. e. you need to click the **Refresh** button in order to get the current download status displayed in the table. Click the **Save** button to save changed attributes and new data to a COL database.

When you start a data transfer by clicking the **Activate** or **Download** button, the status is set to "Running".

During a running upload or download process (Status: "Running" is displayed) you can click the **Refresh** button to get the current status displayed.

Activate (button)

Click the **Activate** button to send changed trunk group data back to the system. The **Activate** button is deactivated as long as you are editing and/or changing data; the **Activate** button is only activated after you have clicked the **Save** button to confirm and apply your changes. The upload process is also performed asynchronously, i.e. you need to click the **Refresh** button in order to get the current data displayed in the table.

When you start a data transfer by clicking the **Activate** or **Download** button, the status is set to "Running".

During a running upload or download process (Status: "Running" is displayed) you can click the **Refresh** button to get the current status displayed.

After having performed the Cyclic Check for selected trunk groups, the user can upload information about metered trunk groups back to the switch by pressing the **Activate** button. The PM data generated on the switch will then contain only the selected trunk groups. This reduces the communication with the switch and the amount of PM data.

Download Status

The status of the last download is displayed here. When you click the **Download** button, the displayed value changes, and a new download process

starts. When the page is opened in the browser, the status of the last download is shown.

Possible values: OK; Error; Running; N/A if undefined.

Read-only

Start value: N/A

When you start a data transfer by clicking the **Activate** or **Download** button, the status is set to "Running".

During a running upload or download process (Status: "Running" is displayed) you can click the **Refresh** button to get the current status displayed.

Last download passed on (date/time)

The date/time of the last download is displayed. When you click the **Download** button, the displayed value changes, and a new download process starts. When the page is opened in browser, the date/time of the last download is shown.

Display format: "dd:MM:yyyy hh:mm"; N/A if undefined.

Read-only.

Start value: N/A.

Activation Status

The status of the last upload is displayed here. When you click the **Activate** button, the displayed value changes, and a new upload process starts. When the page is opened in the browser, the status of the last upload is shown.

Possible values: OK; Error; Running; N/A if undefined.

Read-only.

Not displayed on OpenScape/HiPath 4000 systems.

Start value: N/A

When you start a data transfer by clicking the **Activate** or **Download** button, the status is set to "Running".

Last activation passed on (date/time)

The date/time of the last upload is displayed here. When you click the **Activate** button, the displayed value changes, and a new upload process starts. When the page is opened in the browser, the date/time of the last upload is shown.

Display format: "dd:MM:yyyy hh:mm"; N/A if undefined.

Read-only.

Not displayed on OpenScape/HiPath 4000 systems.

Start value: N/A

Table of Trunk Group Data

This table serves the following purposes:

- Displays the trunk group data
- and
- Allows you to select individual trunk groups to be metered and to be sent back to the system.

The metering is only performed for the selected switch if the following conditions are met:

- The **Cyclic Check of Trunk Groups Active** check box must be checked (enabled) for the particular switch. The check box is located on the right hand side in the **Collecting Agent -> Trunk Groups/CDR** tab sheet.
- The check box in the **PM/TG Check** table column must be checked for at least one of the trunk groups displayed in the table, because the metering is performed only for the trunk groups selected for metering.

After having performed the Cyclic Check for selected trunk groups, the user can upload information about metered trunk groups back to the switch by pressing the **Activate** button. The PM data generated on the switch will then contain only the selected trunk groups. This reduces the communication with the switch and the amount of PM data.

The **Start Date**, **Start Time** and **Cycle Time** parameters for the cyclic check have to be defined individually for each switch.

The table contains the following columns:

[Trunk \(table column\)](#)

[Name \(table column\)](#)

[AM \(table column\)](#)

[PM \(table column\)](#)

[PM/TG Check \(table column with check box\)](#)

Trunk (table column)

ID number of the trunk group.

Integer.

Read-only;

Unique for selected switch.

Name (table column)

Trunk group name.

String (max. length 30 characters).

Read-only;

Unique for selected switch.

AM (table column)

Check box is checked if trunk group is relevant for AM.

Possible values: Checked, unchecked.

Not displayed on OpenScape/HiPath 4000 systems.

Default value: unchecked.

PM (table column)

Check box is checked if trunk group is relevant for PM.

Possible values: Checked, unchecked.

Not displayed on OpenScape/HiPath 4000 systems.

Default value: unchecked.

PM/TG Check (table column with check box)

The check box in this table column allows you to enable or disable the **Cyclic Check of Trunk Groups** feature for selected trunk groups only. Activating the Cyclic Check only for selected trunk groups reduces communication with the switch and the amount of data.

NOTICE: The **Cyclic Check of Trunk Groups** feature is only supported on OpenScape 4000 Assistant/Manager.

By activating the **Cyclic Check of Trunk Groups** feature you can perform a cyclic check which queries the usage of all available resources (B channels) assigned to a trunk group in defined time intervals (cyclically). This feature makes sure that only the actually available resources (status READY) assigned to a trunk group are collected and counted in a report. The **Collecting Agent** stores the resulting trunk group usage data in the COL database, and **Performance Management (PM)** can then create correct trunk usage reports based on these data.

The metering is only performed for the selected switch if the following conditions are met:

- The **Cyclic Check of Trunk Groups Active** check box must be checked (enabled) for the particular switch. The check box is located on the right hand side in the **Collecting Agent -> Trunk Groups/CDR** tab sheet.
- The check box in the **PM/TG Check** table column must be checked for at least one of the trunk groups displayed in the table, because the metering is performed only for the trunk groups selected for metering.

After having performed the Cyclic Check for selected trunk groups, the user can upload information about metered trunk groups back to the switch by pressing the **Activate** button. The PM data generated on the switch will then contain only the selected trunk groups. This reduces the communication with the switch and the amount of PM data.

The **Start Date**, **Start Time** and **Cycle Time** parameters for the cyclic check have to be defined individually for each switch.

Possible values: Checked, unchecked.

Default value: unchecked.

Cyclic Check of Trunk Groups Active (check box)

Use this check box to activate or deactivate the **Cyclic Check of Trunk Groups** feature for the selected switch. By activating the **Cyclic Check of Trunk Groups** feature you can perform a cyclic check which queries the usage of all available resources (B channels) assigned to a trunk group. This feature makes sure that only the actually available resources (status READY) assigned to a trunk group are collected and counted in a report. The **Collecting Agent** stores the resulting trunk group usage data in the COL database, and **Performance Management (PM)** can then create correct trunk usage reports based on these data.

NOTICE: The **Cyclic Check of Trunk Groups** feature is only supported on OpenScape 4000 Assistant/Manager.

The metering is only performed for the selected switch if the following conditions are met:

- The **Cyclic Check of Trunk Groups Active** check box must be checked (enabled) for the particular switch. The check box is located on the right hand side in the **Collecting Agent -> Trunk Groups/CDR** tab sheet.
- The check box in the **PM/TG Check** table column must be checked for at least one of the trunk groups displayed in the table, because the metering is performed only for the trunk groups selected for metering.

In order to reduce communication with the switch and the amount of data, the user can enable or disable the cyclic check individually for selected trunk groups by checking or unchecking the check box in the **PM/TG Check** column. In this way, the user can select trunk groups for which the cyclic check is performed.

Cyclically, in defined time intervals, COL queries the usage of all available resources (B channels) assigned to a trunk group (AMO DIS-BUEND), obtaining the list of trunk groups, the associated trunk cards, and the number of assigned channels. The status of each assigned channel is also determined (AMO DIS-SDSU). Finally, the Collecting Agent calculates the number of available channels for each trunk group. The data obtained through the Cyclic Check is then stored in the COL database and can be used by PM for further analysis and reporting.

The **Start Date**, **Start Time** and **Cycle Time** parameters for the cyclic check have to be defined individually for each switch.

Additionally, the user can upload information about metered trunk groups back to the switch by pressing the **Activate** button. The PM data generated on the switch will then contain only the selected trunk groups. This reduces the communication with the switch and the amount of PM data.

Possible values: Checked, unchecked.

Default value: unchecked.

Start Date

The date to begin the cyclic check of trunk group resources is entered into this field.

The **Start Date**, **Start Time** and **Cycle Time** parameters for the cyclic check have to be defined individually for each switch. The user can activate or deactivate the **Cyclic Check of Trunk Groups** feature for the selected switch by checking/unchecking the **Cyclic Check of Trunk Groups Active** check box.

Format: Date.

Default: today.

Start Time

The time to begin the cyclic check of trunk group resources is entered into this field.

The **Start Date**, **Start Time** and **Cycle Time** parameters for the cyclic check have to be defined individually for each switch. The user can activate or deactivate the **Cyclic Check of Trunk Groups** feature for the selected switch by checking/unchecking the **Cyclic Check of Trunk Groups Active** check box.

Time format: "hh:mm".

Default: current time.

Cycle (radio button)

Enter the time interval for one metering cycle into this field.

The time interval can be specified either in hours or in minutes. Check the **Hours** or **Minutes** radio button to specify the time unit for the cycle time period. The cycle time can be specified either in hours or in minutes.

The **Start Date**, **Start Time** and **Cycle Time** parameters for the cyclic check have to be defined individually for each switch. The user can activate or deactivate the **Cyclic Check of Trunk Groups** feature for the selected switch by checking/unchecking the **Cyclic Check of Trunk Groups Active** check box.

Default: hours.

Hours

Combo box with hours. Select this field if the duration for one cycle is to be in hours. The desired numerical values can be chosen from the selection list below the field.

1, 2, 3, 4, 6, 8, 12, 24

Enabled only if Cycle = Hours

Default: 1

Not mandatory.

Minutes

Combo box with minutes. Select this field if the duration for one cycle is to be in minutes. The desired numerical values can be chosen from the selection list below the field.

Values:

1) 5, 6, 10, 12, 15, 30 for OpenScape/HiPath 4000 and 15, 30 for H300

Enabled only if Cycle = Minutes

Default: 15

Not mandatory.

Refresh (button)

Click **Refresh** to load the data from the database again and to display the current data.

When you start a data transfer by clicking the **Activate** or **Download** button, the status is set to "Running". During a running upload or download process (Status: "Running" is displayed) you can click the **Refresh** button to get the current status displayed.

Save (button)

Saves the changed data to the database.

The **Activate** button is deactivated as long as you are editing and/or changing trunk group data; the **Activate** button is only activated after you have clicked the **Save** button to confirm and save your changes to the database.

Discard (button)

Changes that have not been saved yet are ignored and will be lost.

New (button)

Creates a new item/entry.

Delete (button)

Deletes the selected item/entry.

4.30.3 Attendant Consoles sub tab

Download

Click the **Download** button to download available Attendant Consoles data from the system.

When you start a data transfer by clicking **Download** button, the status is set to "Running" and displayed on the right side of the **Download** button and downloaded data are displayed in the table below.

The download process is performed asynchronously, i. e. you need to click the **Refresh** button in order to get the current download status displayed in the table.

Refresh

Since the download process is performed asynchronously, you need to click the **Refresh** button in order to get the current download status displayed.

Generating Node No. (table)

The currently downloaded and generated data of Attendant Consoles are displayed in the table:

- Attendant Group: Assigned Group of the Attendant Console
- Extension: Assigned Extension of the Attendant Console
- Attendant Group Type: Group Type of the Attendant Console
- Virtual Node Number : Assigned virtual node number of the Attendant Console

4.30.4 Node No. Transform sub tab

Virtual Node Number

Extension / Extension Range

Add (button)

Remove (button)

Remove All (button)

Virtual Node Number (table column)

Extension (lower value) (table column)

Extension (upper value) (table column)

Virtual Node Number

Enter the address of the extension into this field.

The Virtual Node Number is the three-level node number of the system to which the extension belongs to (or of the system on which the extension is to be installed, respectively).

Virtual node numbers are composed of the following parts:

- aa = node number/area number in subnetwork level 2 (0 - 29)
- bbb = node number/area number in subnetwork level 1 (0 - 253)
- ccc = node number/area number in subnetwork level 0 (0 - 999)

The **Collecting Agent/Attendant Consoles** tab sheet of the **System Management** application under OpenScape 4000 Assistant/Manager supports adding and setting up of extensions.

Extension / Extension Range

Consists of 2 entry fields.

If only one extension number has been allocated then this is to be entered in the first (left hand side) field which holds the "lower value". The second (right hand side) field remains empty in this case.

If an extension range comprises several extension numbers, then the lower value is to be entered in the first (left hand side) field, and the upper value in the second (right hand side) field.

Add (button)

Use this button to add the data listed from the left hand side of the dialog to the extension table on the right hand side of the dialog.

Remove (button)

Removes the selected entry (the selected line) from the extensions table.

Remove All (button)

Deletes all entries (all lines) from the extensions table.

Virtual Node Number (table column)

Displays the virtual three-level node number in the following format:

"aa-bbb-ccc".

Not editable.

Extension (lower value) (table column)

Displays the extension number, if only one extension number has been allocated.

If an extension range comprises several extension numbers, the lower value of the extension range is displayed in this field.

Not editable.

Extension (upper value) (table column)

If only one extension number has been assigned to the extension, this field remains empty.

If an extension range comprises several extension numbers , the upper value of the extension range is displayed in this field.

Not editable.

4.31 Fields and Controls in the Run Report Dialog

The **Run Report** output dialog consists of the following items:

Items in the Output Tab

Report Object:

Choose template

Display Report on Screen

Send File to Printer

Send Report as Email

Export Report to the following formats

Items in the E-mail Tab

To

CCs

Subject

Body

Items in the Exports Tab

Exports (*HTML , PDF , CSV , XML*)

Automatic overwrite of existing export files

Button

Run

Items in the Status Window

Export Format

Status

Refresh

Abort

Save As...

Report Object:

Indicates the selected report type to be generated (read only).

Choose template

You may select the report template from a drop down list of the available report templates for the selected report.

By default the report template file previously specified in the RepGen Report Designing Page is displayed.

The report template name has the following structure:

template filename {(Predefined)}

The notation "predefined" is indicated in parentheses at the end of template name only if the template is a predefined one.

Display Report on Screen

The report will be displayed in a browser window.

Send File to Printer

The report will be sent to your configured printer.

Send Report as Email

Activating the e-mail option activates the E-mail tab to select e-mail recipients for the report and to enter the subject and a comment.

Export Report to the following formats

It is possible to export from the server and save the report in the following formats on your local computer; multiple selection is possible:

- html
- pdf
- csv
- xml (MS Excel)

NOTICE: If you have chosen a template which generates a report in chart form, **xml** and **csv** options are disabled, because chart form is not supported for these formats. This is due to limitations of Microsoft Excel application itself and its xml document format.

To

By default the field is automatically filled with the default main address previously specified in the RepGen Administration Page.

By clicking the Lookup button (...) button on the right of the **To** input field, you can select e-mail recipients from a list of subscribers defined in the CM application (Configuration Management -> Personal Data -> Subscriber).

For details setting up the e-mail server, please refer to **Email Settings in the RepGen Administration Page** in:

- [Report Generator Manual](#) (English)
- [Report Generator Manual](#) (German)

CCs

By default the field is automatically filled with the CC address previously specified in the RepGen Administration Page.

By clicking the Lookup button (...) button on the right of the **CC** input field, you can select e-mail recipients from a list of subscribers defined in the CM application (Configuration Management -> Personal Data -> Subscriber).

For details setting up the e-mail server, please refer to **Email Settings in the RepGen Administration Page** in:

- [Report Generator Manual](#) (English)
- [Report Generator Manual](#) (German)

Subject

Subject field of the e-mail - default: name of the report.

Body

E-mail body for entering the e-mail text.

Exports

Displays the export directory for each output file format. You may select for each desired output format a different file location by clicking the Lookup button (...) on the right of the path name for

- HTML
- PDF
- CSV
- XML

Automatic overwrite of existing export files

Option activated: Existing files in the selected export directories will be overwritten automatically.

Option deactivated: If a report is to be downloaded in a directory in which a report with the same filename exists, the download process is aborted. The report files to be downloaded remain on the server and will not be lost.

Run

Clicking this button finally confirms your selections and settings of the Flexible Report Output dialog and initiates the generation and export of the report. The Status window is displayed, informing about the status of the export.

Export Format

Displays the output formats from the selection in the Output tab to be generated/exported.

Status

Information about the status of the export of each selected output format separately. The possible status values are:

- Not started: The exporting of this format has been enqueued but not yet started.
- Error: An error has occurred while exporting to this format.

- **Running:** The exporting has been started, but is not yet completed.
- **Complete - Saved:** The exporting has been completed and the result has been downloaded to the export path indicated in the export tabsheet of the **Run Report** dialog.
- **Complete - Not Saved:** The exporting has been completed, but the result has not been downloaded. The cause is that the checkbox "overwrite existing export files" has not been checked, and a file with the intended name already exists in the specified local export path.

Refresh

Clicking the Refresh button displays the current status of the running export/generation immediately instead of waiting for the automatic cyclic refresh.

Abort

In case an export file has not been produced due to some error, clicking the **Abort** button closes this window.

Save As...

Copy the downloaded report(s) to a another directory (e.g. to a flash card) than defined before in the Exports tab of the **Run Report** dialog. Select a directory in which the file(s) will be copied.

5 Step-By-Step Instructions

This section contains step-by-step instructions for executing COL operations.

[COL Homepage and Navigation Tree, page 210](#)

[Controlling, page 213](#)

[Collecting Status, page 214](#)

[Output Line Status, page 215](#)

[System Management dialog, Object List view in COL, page 217](#)

[Input Format Editor, page 217](#)

[Input Format Editor - Set Default Value, page 219](#)

[Input Format Editor - Configure Input Element, page 219](#)

[Start/Stop PM Collecting, page 220](#)

[Format Assignment/Format Change, page 220](#)

[Output Line Definition, page 221](#)

[Output Format Editor, page 222](#)

[Output Format Editor - Configure Output Element, page 224](#)

[Filter Editor, page 224](#)

[Filter Editor - Set Default Value, page 225](#)

[Translation Tables, page 225](#)

[Incorrect Records, page 230](#)

[Saved CDRs in Backup File, page 231](#)

[Files Ready for Output Lines, page 232](#)

[CDR Viewer, page 233](#)

[Options, page 233](#)

[Logging, page 235](#)

5.1 COL Homepage and Navigation Tree

Launching OpenScape 4000 Assistant/Manager Collecting Agent

The OpenScape 4000 Assistant/Manager Collecting Agent Homepage can be launched via the OpenScape 4000 Start Page/Desktop.

COL Homepage

The COL Homepage contains:

- the [Menu Bar](#) containing the View, Action and Help options,
- the [Toolbar](#),
- the [COL Features](#) and dialogs used to display and set COL parameters.

The Navigation Pane on the left-hand side of the COL Homepage shows the Application Tree. The application tree is similar to a menu folder structure, displaying all COL functions in the form of links the user can activate.

Step-By-Step Instructions

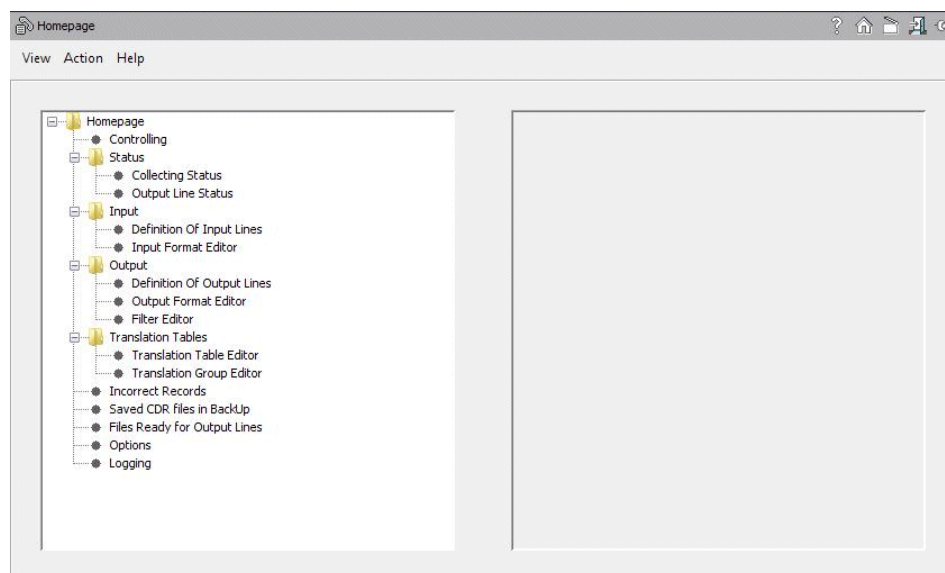
When a link in the navigation pane is selected with a single click, a short description of the selected link will be displayed in the right-hand pane, called Content pane.

If **Logging** is selected, the Content pane will display the 3 different types of logs, and a **View** and **Delete** button near each type, thus allowing the user to view or delete the desired log.

Double clicking on a link in the navigation pane launches the dialog of the corresponding COL feature.

Launching COL Features via the COL Homepage

The individual COL features like setting up the input and output line format, and displaying the collecting status or the output line status, can be started via the COL Homepage. As detailed above, the COL Homepage itself is launched in a browser by entering the IP address followed by the COL alias, e.g. `https://<IP-ADR>/COL`.



Related Topics

[Collecting Agent - Homepage, page 38](#)

[Toolbar, page 40](#)

[Menu Bar, page 39](#)

[Content Pane, page 43](#)

[Collecting Agent User Interface, page 36](#)

COL Features

An overview of the COL functionality can be found in [Collecting Agent - Overview, page 33](#) and in [COL Features, page 48](#).

Description of User Actions

Table 3: Description of actions performed on the COL Homepage

Action	Description	Next Form
Click on link/feature in application tree	Shows a short description of the currently selected item from the application tree. If Controlling is selected, the status displays Input Status: Active and Output Status: Active and the toggle buttons Start/Stop Input and Start/Stop Output are displayed in the content pane on the right-hand side of the window.	None.
Start/Stop Input	Toggle button to start/stop collecting files from system (applies to both AM and PM files). Visible only if Controlling is selected in tree.	Warning Box
Start/Stop Output	Toggle button to start/stop producing output files (applies only to CDR files). Visible only if Controlling is selected in tree.	Warning Box
Double-click on Collecting Status	Link to the dialog that shows collecting status for all switches.	Collecting status
Double-click on Output Line Status	Link to the dialog that shows status of output lines.	Output Line Status
Double-click on Definition of Input Lines	Link to SysM	System Management
Double-click on Definition of Output Lines	Link to the dialog for administration of output lines.	Output Line Definition
Double-click on Input Format Editor	Link to the dialog for definition of input formats.	Input Format Editor
Double-click on Output Format Editor	Link to the dialog for definition of output formats.	Output Format Editor
Double-click on Filter Editor	Link to the dialog for definition of filters	Filter Editor
Double-click on Translation Table Editor	Opens the Translation Table Editor used to create, add, modify and delete translation tables.	Translation Table Editor

Action	Description	Next Form
Double-click on Translation Group Editor	Opens the Translation Group Editor used to create, add, modify and delete translation group.	Translation Group Editor
Double-click on Incorrect Records	Link to the dialog to send the rejected CDRs back to the input.	Incorrect Records
Double-click on Options	Link to Options dialog	Options
Click on "?" (Help), Home Page, Start, Logoff or Pin (Sticky Page) icon in Toolbar	See Toolbar - Icon Descriptions and User Actions .	

5.2 Controlling

Table 4: Description of fields on the COL Homepage

Field	Description	Values	Notes
Application tree	The application tree is similar to a menu folder structure, displaying all COL features in the form of links the user can activate from the COL Homepage. The Application Tree is displayed on the left-hand side of the COL Homepage in the Navigation Pane.		Read-only.
Description of the selected tree item.	A short description of the currently selected feature/link from the application tree is displayed in the Content Pane on the right-hand side of the Homepage. If Controlling is selected in the tree, the description will not be visible, and the Content pane will show the status displays Input Status: Active and Output Status: Active and the buttons Start/Stop Input and Start/Stop Output .	Strings are listed in Action table.	Read-only.
Input Active	Shows status of collecting files from system (applies to both AM and PM files). Visible only if Controlling is selected in tree.	Active/Not active	Read-only
Output Active	Shows status of producing output files (applies only to CDR files). Visible only if Controlling is selected in tree.	Active/Not active	Read-only

Description of User Actions

Table 5: Description of actions on the COL Homepage

Action	Description	Next Form
Click on link/feature in application tree	Shows a short description of the currently selected item from the application tree. If Controlling is selected, the status displays Input Status: Active and Output Status: Active and the toggle buttons Start/Stop Input and Start/Stop Output are displayed in the content pane on the right-hand side of the window.	None.
Start/Stop Input	Toggle button to start/stop collecting files from system (applies to both AM and PM files). Visible only if Controlling is selected in tree. Button caption is	Warning Box
Start/Stop Output	Toggle button to start/stop producing output files (applies only to CDR files). Visible only if Controlling is selected in tree.	Warning Box

5.3 Collecting Status

Description of User Actions

Table 6: Description of actions in the Collecting Status dialog.

Action	Description	Next Form
Collect now	Start immediate collecting for selected switches (multiple selection possible).	Warning-Box
Configure	Configure collecting parameters for the selected switch in SysM.	SysM (COL tab sheet)
Refresh	Refresh displayed data.	None
First record	Select first row	None
Previous record	Select previous row	None
Next record	Select next row	None
Last record	Select last row	None
Click on Print , "?" (Help) , Home Page , Start , Logoff or Pin (Sticky Page) icon in Toolbar	See Toolbar - Icon Descriptions and User Actions .	

NOTICE: You can transfer files from RMX without further processing. When the link `/var/col.transfer_only` exists, you can suppress further processing (transform and line) and transfer only RMX col data from RMX to filesystem. `/var/col.transfer_only` needs to direct to the existing directory, which has proper filesystem rights that allow writing for col user,

since the created files are stored in this directory. This directory must not be used as the standard input directory, because transformation and line processing is still running and it would process files from input.

5.4 Output Line Status

Description of User Actions

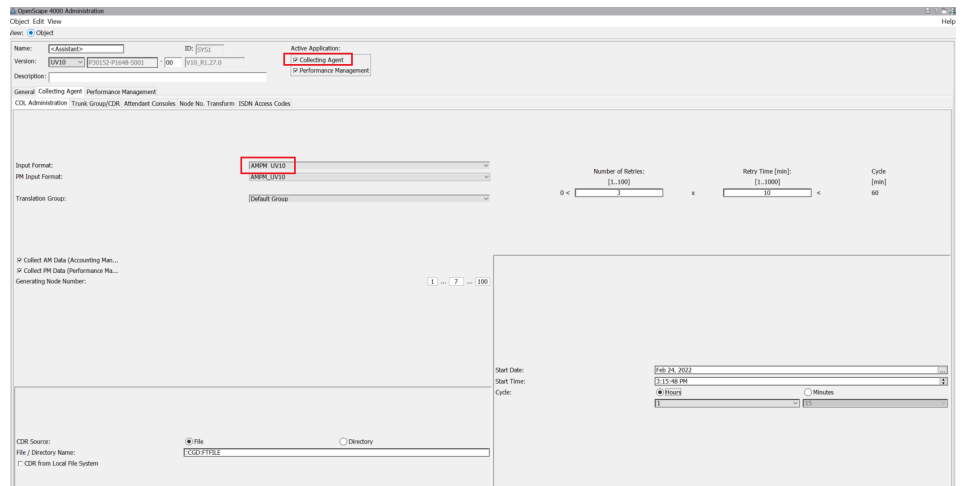
Table 7: Description of actions in the Output Line Status dialog

Action	Description	Next Form
Configure	Configure output line.	Output Line Definition
Refresh	Refresh displayed data.	None
Deliver Now	Files in the selected output lines will be delivered immediately to the delivery directory.	None
Deliver all Lines Now	Files of all output lines will be delivered to the delivery directory.	None
First record	Select first row	None
Previous record	Select previous row	None
Next record	Select next row	None
Last record	Select last row	None
Click on Print , "?" (Help) , Home Page , Start , Logoff or Pin (Sticky Page) icon in Toolbar	See Toolbar - Icon Descriptions and User Actions .	

5.5 Adding a System in OpenScape 4000 Assistant/Manager System Management

As described in [Output Line Definition](#) on [page 221](#) the **System Management** application used for setting up a system is launched by double clicking the **Definition of Input Lines** feature link on the COL Homepage. The **Collecting Agent** check box in **System Management** has to be enabled to get the required dialog displayed. In this configuration example the charge collecting data for AM and PM is collected in CDR_UV1.0. The communication parameters will be set up directly in **System Management**.

Please refer to the **System Management** Online Help for more information and for detailed field descriptions.



5.6 System Management dialog, Object List view in COL

Table 8: System Management dialog, Object List view in COL, field descriptions

Field	Description	Values	Notes
System ID	System name / retrieved system	String (char 4)	Read-only
Description	Description of system-ID	String (char 32)	Read-only
IP Address	IP-Adress of the retrieved system	String	Read-only

5.7 Input Format Editor

Setting Up Input Formats

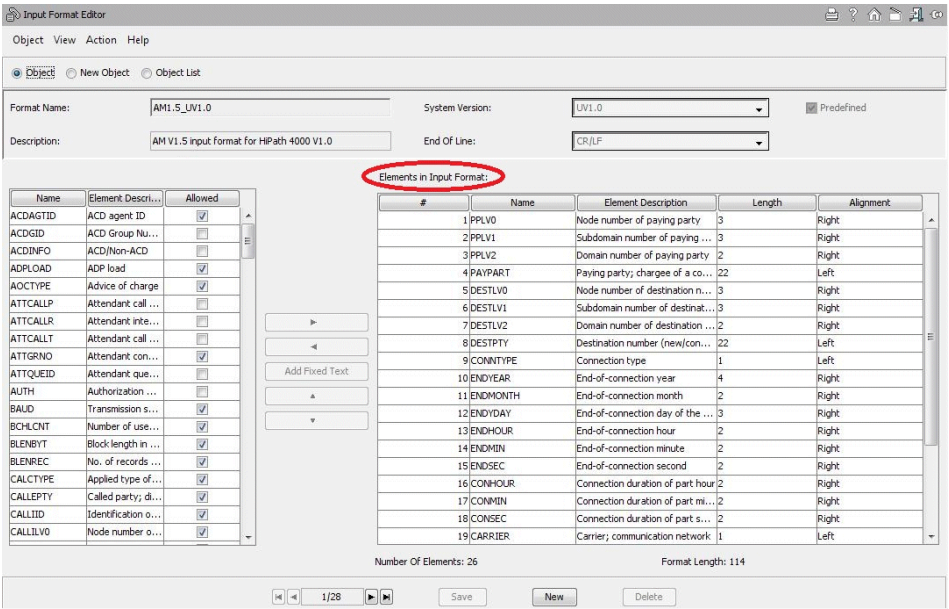
Use the **Input Format Editor** link on the COL Homepage to set up the COL input format. On the right-hand side of the dialog, beneath the **Input** label, you will see the list of charge collecting elements used in the input format (FTBL). The names of the charge collecting elements are not system version-dependent. The element names (see **Name** column) are the identifiers for the charge collecting elements used again in the output format. The names are chosen in dependence on OpenScape 4000. The mapping of a format to a specific system is done using COL System Management.

For AM/PM (AM...) pre-defined formats have been set up. Moreover, one format (CDR...) covering all charge elements has been set up for each system version.

The newly created or pre-defined input format will then be used to automatically create the corresponding FTBL of the selected system version during the storage process. The FTBL AMO batches are created in both English and German. The files are stored at the location indicated in the FTBL path under **Options** (reachable via the COL Homepage), e.g. AM_UV7.0_S.GE (German) or AM_UV7.0_S.EN (English).

NOTICE: You can use an existing format as a template for creating a new format by copying the existing format to the clipboard using the **Copy** feature in the **Object** menu.

The basic prerequisite is that all elements needed in the output format are specified in the input format creation process. It is also possible to create more than one output format from one input.



Description of User Actions

Table 9: Input Format Editor dialog, action descriptions

Action	Description	Next Form
Double click in the Default element table	Edit default value for the selected element	Set Default Value dialog.
Double click in the Input element table	Edit properties for the selected element	Configure Input Element dialog.
<	Move selected element from the default table to the element table. Position numbers are automatically adjusted. Button is enabled according to system type.	None.
>	Move selected element from the element table to default table. Position numbers are automatically adjusted. Button is enabled according to system versions.	None.
Up	Move up selected element in the element table. Position numbers are automatically adjusted.	None.
Down	Move down selected element in the element table. Position numbers are automatically adjusted.	None.

Action	Description	Next Form
Save	Save changes to the database. Before saving the format is tested (mandatory elements) and FTPL file is generated. Enabled only in object view.	Error message for wrong format
New	Create a new object and switch to New Object.	None.
Delete	Delete selected object. Enabled only in list view.	Warning box
Add fixed text	Add fixed text to input.	None.
First record	Show first format from the database	None
Previous record	Show previous format from the database	None
Next record	Show next format from the database	None
Last record	Show last format from the database	None
Click on Print, "?" (Help), Home Page, Start, Logoff or Pin (Sticky Page) icon in Toolbar	See Toolbar - Icon Descriptions and User Actions .	
Object	Change to object view	Same form in object view
New Object	Open new format in object view	Same form in object view
Object List	Change to list view.	Same form in list view

5.8 Input Format Editor - Set Default Value

Description of User Actions

Table 10: Set Default Value dialog, action descriptions

Action	Description	Next Form
OK	Accept values and close dialog	Input Format Editor
Cancel	Close without accepting values	Input Format Editor

5.9 Input Format Editor - Configure Input Element

Description of User Actions

Table 11: Configure Input Element dialog, action descriptions

Action	Description	Next Form
OK	Accept values and close dialog	Input Format Editor
Cancel	Close without accepting values	Input Format Editor

5.10 Start/Stop PM Collecting

When PM collecting from some switch is started/stopped, it is necessary to ensure that the appropriate format has already been assigned to the switch. Therefore, starting/stopping PM collecting should be carried out with great care and attention. When PM collecting is started, the assigned input format is checked and, if mandatory PM fields are not included in the format, an error message is displayed.

Necessary steps for assigning/changing a format are described in [Format Assignment/Format Change](#).

5.11 Format Assignment/Format Change

Before a different format is assigned to an input line (switch) or the current format is modified, it is necessary to ensure that no data in old format exists in the COL system. Therefore, changing/assigning formats should be carried out with great care and attention.

When an existing format is modified, the following step should be carried out:

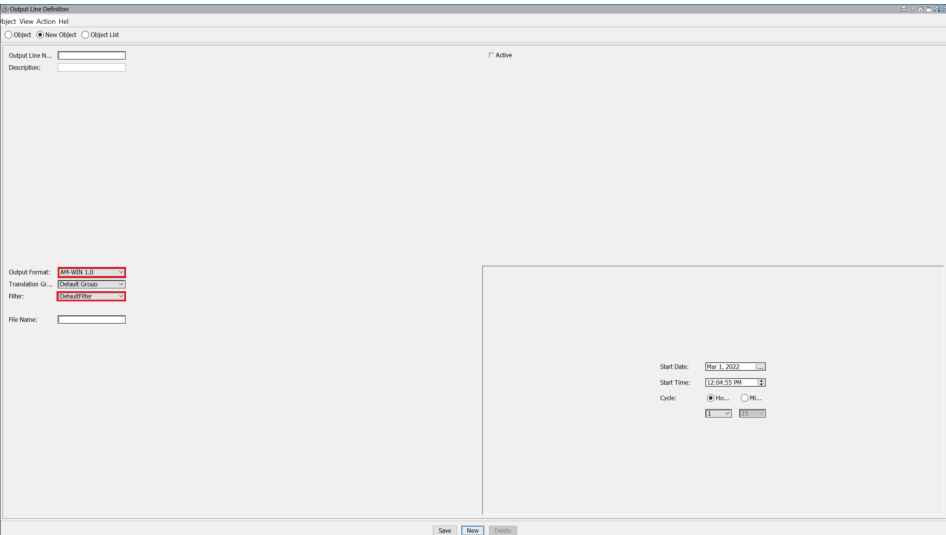
- Input format - change old format and save changes. When the changes are saved, the FTBL file for the new format will be automatically generated.

When a different format is assigned to a switch, the following steps should be carried out:

- Expert Access - Stop CDR creation on OpenScape/HiPath, if possible
- Input status - Execute "Collect Now"
- SysM - deactivate collecting for the switch
- Input status - wait until all data is processed into standard format
- SysM - Assign new format to the switch
- Expert Access - Send FTBL to system
- SysM - Start collecting for system

5.12 Output Line Definition

For each output file an output line has to be set up. The COL feature for the definition of output lines is launched by double-clicking the **Definition of Output Lines** link on the COL Homepage. Each output line must have a specific output format assigned to it. You can create and edit output formats using the **Output Format Editor**. If you want all charge collecting data to be written to the output line, you have to select the **Default Filter** setting in the **Filter** dropdown list.



Description of User Actions

Table 12: Output Line Definition dialog, action descriptions

Action	Description	Next Form
New	Add new output line	None.
Delete	Delete selected output line (enabled only in object list)	Warning Box.
New	Create a new object and switch to new object.	None.
Save	Save values (enabled only in Object view).	None.
Active	Activate/deactivate selected input line	Warning Box
First record	Show first filter from the database	None
Previous record	Show previous filter from the database	None
Next record	Show next filter from the database	None
Last record	Show last filter from the database	None
Object	Change to object view	Same form in object view

Action	Description	Next Form
New Object	Open new filter in object view	Same form in object view
Object List	Change to list view.	Same form in list view
Click on Print , "?" (Help) , Home Page , Start, Logoff or Pin (Sticky Page) icon in Toolbar	See Toolbar - Icon Descriptions and User Actions .	

5.13 Output Format Editor

Setting Up Output Formats

The Output Format Editor is launched by double-clicking on the the **Output Format Editor** link on the COL Homepage. The Output Format Editor is used to set up the output formats. The **Output** table on the right-hand side of the screen displays the charge collecting elements used in the output format. The names are identical to the ones of the charge collecting elements used in the input. Multiple instances of one charge collecting element can be written into the output file. It is also possible to insert text and CM elements into the output file. The format mapping is done in the output line.

Note: On a OpenScope Manager the CM Elements are only displayed if the COL software is installed with the necessary user license rights.

NOTICE: You can use an existing format as a template for creating a new format by copying the existing format to the clipboard using the **Copy** feature in the **Object** menu.

Output Format Editor

Object View Action Help

☐ Object ☒ New Object ☐ Object List

Format Name: End Of Line: If Predefined

Description:

Standard Elements

Name	Element Description
ACCTCODE	Account code used during a call
ACDAGENTID	ACD agent ID
ACDGRP	ACD Group Number
ACDGRPNO	ACD Group Number
ACDNEWACD	ACD New ACD
ADPLOAD	ADP load
ADPTIME	Admission of charge
ATTICALLP	Attendant call priority
ATTICALLR	Attendant internal reason
ATTICALLT	Attendant call type
ATTIGRNO	Attendant console group
ATTIGRNO	Attendant queue in for AC/Wait Multiple Queue (WQ)
AUTH	Authorization Code
BAUD	Transmission speed
BOLENT	Number of used B-channels
BLNBYT	Block length in bytes
BLNSEC	No. of records per block
CALLTYPE	Applied type of billing
CALLID	Identification of calling party number
CALLNO	Node number of calling party
CALLNO	Subdomain number of calling party
CALLNO	Domain number of calling party
CALLNO	Originating Network ID of the calling party (private/public)
CALLNO	Calling party party that initiated connection
CARRIER	Carrier - communication network
CAUSE	Cause - if connection interrupt / clear down
OTR	Indicates forwarded calls
CHOPCON	Type of connection

Elements in Output Format

#	Name	Element Description	Length	Alignment	Filter	Text
1	1/ACDGRP	ACD Group Number	3	Left		
2	2/ACDGRP	ACD Group Number	3	Left		
3	3/ACDGRP	Attendant queue in for AC/Wait	3	Right		
4	4/CALLPTY	Calling party - billed number	32	Left		

Number Of Elements: 4

Format Length: 30

Save New Cancel

Description of User Actions

Table 13: Output Format Editor dialog, description of actions

Action	Description	Next Form
>	Copy selected element from the standard element list to the output table. Selected element is not deleted from the original table. Position numbers are automatically adjusted.	None
<	Delete selected element from the output element table. Position numbers are automatically adjusted.	None
Double click in Output table	Edit properties for the selected element	Configure Output Element dialog.
Up	Move up selected element in the output element table. Position numbers are automatically adjusted.	None
Down	Move down selected element in the output element table. Position numbers are automatically adjusted.	None
Save	Save changes to the database. Enabled only in object view.	None
New	Create a new object and switch to New Object.	None.
Delete	Delete selected object. Enabled only in list view.	Warning Box
First record	Show first format from the database	None
Previous record	Show previous format from the database	None
Next record	Show next format from the database	None
Last record	Show last format from the database	None

Step-By-Step Instructions

Output Format Editor - Configure Output Element

Action	Description	Next Form
Click on Print , "?" (Help) , Home Page , Start , Logoff or Pin (Sticky Page) icon in Toolbar	See Toolbar - Icon Descriptions and User Actions .	
Object	Change to object view	Same form in object view
New Object	Open new format in object view	Same form in object view
Object List	Change to list view.	Same form in list view

5.14 Output Format Editor - Configure Output Element

Description of User Actions

Table 14: Configure Output Element dialog, description of actions

Action	Description	Next Form
OK	Accept values and close dialog	Output Format Editor
Cancel	Close without accepting values	Output Format Editor

5.15 Filter Editor

Description of User Actions

Table 15: Filter Editor dialog, description of actions

Action	Description	Next Form
Double-click in the Filter Clause table	Modify selected row from the filter table.	Set Default Value dialog.
>	Copy selected element from the element table to the filter table. Position numbers are adjusted automatically.	None
<	Delete selected element from the filter table. Position numbers are adjusted automatically.	None

Action	Description	Next Form
Save	Save changes to the database. Enabled only in object view.	None
New	Create a new object and switch to New Object.	None.
Delete	Delete selected object. Enabled only in list view.	Warning box
First record	Show first filter from the database	None
Previous record	Show previous filter from the database	None
Next record	Show next filter from the database	None
Last record	Show last filter from the database	None
Click on Print , "?" (Help) , Home Page , Start , Logoff or Pin (Sticky Page) icon in Toolbar	See Toolbar - Icon Descriptions and User Actions .	
Object	Change to object view.	Same form in Object view.
New Object	Open new filter in object view.	Same form in Object view.
Object List	Change to list view.	Same form in Object List view.

5.16 Filter Editor - Set Default Value

Description of User Actions

Table 16: Set Default Value dialog, description of actions

Action	Description	Next Form
OK	Accept values and close dialog	Filter Editor
Cancel	Close without accepting values	Filter Editor

5.17 Translation Tables

Description of User Actions

Table 17: Translation Tables link on Homepage of Collecting Agent, description of actions

Action	Description	Next Form
Click on Translation Table Editor link.	Short description of selected element is displayed. Description: "Double-click on link to open page for administration of translation tables".	None.
Click on Translation Group Editor link.	Short description of selected element is displayed. Description: "Double-click on link to open page for administration of translation groups".	None.
Double-click on Translation Table Editor link.	Link to Translation Table Editor used for adding, editing and deleting translation tables.	Translation Table Editor
Double-click on Translation Group Editor link.	Link to Translation Group Editor used for adding, editing and deleting translation groups.	Translation Group Editor

5.17.1 Translation Table Editor

Description of User Actions

Table 18: Translation Table Editor, description of actions

Action	Description	Next Form
Add new row (icon)	Add new row to the translation table. New empty row is inserted below the currently selected row. Cursor is positioned to the In Value field in the new row. The sequential number of the new row is automatically generated. Sequential numbers are updated for all rows below the new row. Changes are not saved to the database. Only in Object and New Object view.	None.

Action	Description	Next Form
Delete row (icon)	Delete selected row from the translation table. The sequential number of the new row is automatically generated. Sequential numbers are updated for all rows below the new row. Changes are not saved to the database. Only in Object and New Object view.	None.
New	Create new object and switch to this object.	None.
Copy	Copy the current object to the clipboard. This button is only enabled in the Object view.	None.
Insert	Insert the previously copied object from the clipboard into the current view. This button is only enabled in the Object view.	None.
Save	Save changes to the database. This button is only enabled in the Object view.	An error message is issued if wrong or illegal values are entered.
Delete	Delete the selected object. This button is only enabled in the Object List view.	A warning message is issued before irreversible deletion.
Homepage	Goes back to the Homepage of Collecting Agent , respectively. Same function as the Homepage icon in the Toolbar .	Homepage of Collecting Agent .
Start	Jumps back to the OpenScape 4000 Assistant/Manager Start Page . Opens a new browser window and displays the OpenScape 4000 Assistant/Manager Start Page. Same function as the Start(*) option in the Toolbar .* This feature is only supported in OpenScape 4000 Assistant/Manager.	Start Page of OpenScape 4000 Assistant/Manager .
Object	Change to Object view.	Same form in Object view.
New Objekt	Open new form in Object view.	Same form in Object view.

Action	Description	Next Form
Object List	Change to Object List view.	Same form in Object List view.
First Record	Show first record from database. Not displayed in New Object view.	None.
Previous Record	Show previous record from database. Not displayed in New Object view.	None.
Next Record	Show next record from database. Not displayed in New Object view.	None.
Last Record	Show last record from database. Not displayed in New Object view.	None.
Refresh	Reload data from database and refresh the display.	None.
Pin	Check box for turning on and off the Sticky Page mode. Defines whether a new browser page is opened in the same window or in a new window. • OFF (default): a new applet will be launched in the currently opened browser window. • ON: a new applet will be launched in a new browser window. Same function as the Sticky Page option in the View menu.	None.
Logoff	When you click the Logoff icon in the toolbar, a message dialog is displayed, warning you that all unsaved data will be lost, prompting you to save all unsaved data from the current session and to confirm with OK that you want to log off. After logging off the program returns to the Logon screen. Same function as the Logoff option in the Action menu.	Warning message, then logon screen.

Action	Description	Next Form
Context Help	Activates the Context Help . The mouse pointer is displayed as an arrow with an adjacent question mark. When you click on an element in your browser window with this pointer, the corresponding context-specific Help topic will be displayed in a separate Help browser window. You can also activate the Context Help by pointing and clicking on a specific location in the user interface and pressing CTRL +F1 . Same functionality as the Context Help option in Help menu.	None.
Help Topics	Show the Help topics.	Help topics are displayed in new window.
Info	Shows the software version and the copyright data of the application.	Info box is displayed in new dialog.

5.17.2 Translation Group Editor

Description of User Actions

Table 19: Translation Group Editor, description of actions

Action	Description	Next Form
>	Add selected table from list of available tables to translation group. The selected table is removed from the list of available tables. The changes are not saved to the database.	None.
<	Delete selected row (translation table) from translation group and move translation table to list of available tables. The changes are not saved to the database.	None.
New	Create new object and switch to this object.	None.
Copy	Copy the current object to the clipboard. This button is only enabled in the Object view.	None.

Action	Description	Next Form
Insert	Insert the previously copied object from the clipboard into the current view. This button is only enabled in the Object view.	None.
Save	Save changes to the database. This button is only enabled in the Object view.	An error message is issued if wrong or illegal values are entered.
Delete	Delete the selected object. This button is only enabled in the Object List view.	A warning message is issued before irreversible deletion.
Homepage	Goes back to the Homepage of Collecting Agent . Same function as the Homepage icon in the Toolbar .	Homepage Collecting Agent .
Start	Jumps back to the OpenScape 4000 Assistant/Manager Start Page . Opens a new browser window and displays the OpenScape 4000 Assistant/Manager Start Page. Same function as the Start(*) option in the Toolbar .* This feature is only supported in OpenScape 4000 Assistant/Manager.	Start Page of OpenScape 4000 Assistant/Manager .
Object	Change to Object view.	Same form in Object view.
New Object	Open new form in Object view.	Same form in Object view.
Object List	Change to Object List view.	Same form in Object List view.
First Record	Show first record from database. Not displayed in New Object view.	None.
Previous Record	Show previous record from database. Not displayed in New Object view.	None.
Next Record	Show next record from database. Not displayed in New Object view.	None.

Action	Description	Next Form
Last Record	Show last record from database. Not displayed in New Object view.	None.
Refresh	Reload data from database and refresh the display.	None.
Pin	Check box for turning on and off the Sticky Page mode. Defines whether a new browser page is opened in the same window or in a new window. • OFF (default): a new applet will be launched in the currently opened browser window. • ON: a new applet will be launched in a new browser window. Same function as the Sticky Page option in the View menu.	None.
Logoff	When you click the Logoff icon in the toolbar, a message dialog is displayed, warning you that all unsaved data will be lost, prompting you to save all unsaved data from the current session and to confirm with OK that you want to log off. After logging off the program returns to the Logon screen. Same function as the Logoff option in the Action menu.	Warning message, then logon screen.
Context Help	Activates the Context Help. The mouse pointer is displayed as an arrow with an adjacent question mark. When you click on an element in your browser window with this pointer, the corresponding context-specific Help topic will be displayed in a separate Help browser window. You can also activate the Context Help by pointing and clicking on a specific location in the user interface and pressing CTRL+F1. Same functionality as the Context Help option in Help menu.	None.

Action	Description	Next Form
Help Topics	Show the Help topics.	Help topics are displayed in new window.
Info	Shows the software version and the copyright data of the application.	Info box is displayed in new dialog.

5.18 Incorrect Records

In general, CDRs are rejected if a mismatch is detected between the received CDRs and the assigned input format. A list of all rejected CDRs is displayed using the **Incorrect Records** dialog (see [Incorrect Records - Send Back To Input](#)).

The following error situations are possible:

- The assigned format is wrong.
- The format setup in system is wrong.

Before a CDR can be processed again, the associated error file and the input format must match. In order to achieve this, either the error file must be corrected on the server using a standard ASCII editor or the input format must be changed. Afterwards the rejected CDR can be sent back to the input using the **Send Back To Input** button in this dialog (see [Incorrect Records - Send Back To Input](#)). Single CDR files can be selected and transferred to the [CDR Viewer](#) to be viewed in detail, printed or exported.

Description of User Actions

Table 20: Description of actions in the Incorrect Records dialog

Action	Description	Next Form
Send Back to Input	Send selected file back to input. If the input format is correct and the file can be processed, it will automatically be deleted afterwards. In order to view the latest data, press the Refresh button or restart the window.	None
Delete	Delete selected file	None
Refresh	Refresh displayed data.	None.
View CDR files	Display details of a selected CDR file.	CDR Viewer
First record	Select first row	None
Previous record	Select previous row	None
Next record	Select next row	None
Last record	Select last row	None

Action	Description	Next Form
Click on Print, "?" (Help), Home Page, Start, Logoff or Pin (Sticky Page) icon in Toolbar	See Toolbar - Icon Descriptions and User Actions .	

5.19 Saved CDRs in Backup File

Using the **Saved CDR files in BackUp** dialog, a list of all available saved CDRs from the server's backup directory is displayed (see [Saved CDRs in Backup File](#)).

Selected CDR files can be deleted or sent back to the input.

Single CDR files can be selected and transferred to the [CDR Viewer](#) to be viewed in detail, printed or exported.

Description of User Actions

Table 21: Description of actions in the Saved CDR files in BackUp dialog

Action	Description	Next Form
Send Back to Input	Send selected file back to input - multiple selection is possible. If the input format is correct and the file can be processed. In order to view the latest data, press the Refresh button or restart the window.	None
Refresh	Refresh displayed data.	None.
Delete	Delete selected file - multiple selection is possible.	None
View CDR files	Display details of a selected CDR file.	CDR Viewer
First record	Select first row	None
Previous record	Select previous row	None
Next record	Select next row	None
Last record	Select last row	None
Click on Print, "?" (Help), Home Page, Start, Logoff or Pin (Sticky Page) icon in Toolbar	See Toolbar - Icon Descriptions and User Actions .	

5.20 Files Ready for Output Lines

Using the **Files Ready for Output Lines** dialog, a list of all available CDRs from the manager's delivery directories is displayed (see [Files Ready for Output Lines](#)).

Selected CDR files can be deleted.

Single CDR files can be selected and transferred to the [CDR Viewer](#) to be viewed in detail, printed or exported.

Description of User Actions

Table 22: Description of actions in the Files Ready for Output Lines dialog

Action	Description	Next Form
Refresh	Refresh displayed data.	None.
Delete	Delete selected file - multiple selection is possible.	None
View CDR files	Display details of a selected CDR file.	CDR Viewer
First record	Select first row	None
Previous record	Select previous row	None
Next record	Select next row	None
Last record	Select last row	None
Click on Print , "?" (Help) , Home Page , Start , Logoff or Pin (Sticky Page) icon in Toolbar	See Toolbar - Icon Descriptions and User Actions .	

5.21 CDR Viewer

The **CDR Viewer** dialog opens by clicking the **View CDRs** button from pages **Incorrect Records**, **Saved CDR files in Backup** or **Files Ready for Output Lines**.

The CDR file is displayed either in a valid or in an undefined format.

Description of User Actions

Table 23: Description of actions in the Files Ready for Output Lines dialog

Action	Description	Next Form
Define Format	Select format for displayed file - Refresh displayed data.	None.

Action	Description	Next Form
Export/Print	Export the displayed file in standard MS Excel format.	None.
Display all DCRs	Refresh displayed data - toggle all CDRs/ first 20 CDRs	CDR Viewer
Click on Print , "?" (Help) , Home Page , Start , Logoff or Pin (Sticky Page) icon in Toolbar	See Toolbar - Icon Descriptions and User Actions .	

5.22 Options

Only authorised users having "rsca" access rights are allowed to change and save values in the **Options** dialog.

Description of User Actions

Table 24: Description of actions in the Options dialog.

Action	Description	Next Form
Select tab sheet	Activate/deactivate functions and enter values.	Select tab sheet
Save	Save values. Enabled only for "rsca" user.	Warning box.
Click on Print , "?" (Help) , Home Page , Start , Logoff or Pin (Sticky Page) icon in Toolbar	See Toolbar - Icon Descriptions and User Actions .	

Field and Controls Descriptions

Path tab

- [Input Path](#)
- [Transform Path](#)
- [Output Path \(internal\)](#)
- [AM Deliver Path](#)
- [PM Deliver Path](#)
- [Path of Incorrect Records](#)
- [FTBL Path](#)
- [Trunk Group Metering Path](#)

Settings tab

- [Required Free Space](#)
- [Retention Period for CM History Data ... Day\(s\)](#)
- [Activate fast mode for transformation of virtual to physical node number only for the PM output line \(check box\)](#)
- [Activate/Deactivate Automatic Delecte of Logging Entries in COL \(check box\)](#)
- [Retention Period for Logging Entries ... Day\(s\)](#)
- [Retention Period for Trunk Group Data from the Cyclic Check of the B Channels ... Day\(s\)](#)
- [Save Input Files \(CDRs\)](#)
- [Retention Period for AC Configuration Data ... Day\(s\)](#)
- [Send email notification if free space/collection thresholds exceeds](#)
- [Select email recipients](#)
- [Activate/Deactivate automatic Cleanup](#)
- [Retention Period for "File Transfer" \(receive\) Process Monitor](#)
- **[Retrieve CDRs alive time](#)**

Process Controlling tab

- [Number of Receive \(CDR collecting\) Processes](#)
- [Number of Transform \(CDR standardisation\) Processes](#)
- [Number of Line \(CDR output\) Processes](#)
- [Number of Metering Processes](#)
- [Number of TG-Check \(Cyclic check of Trunk Groups\) Processes](#)
- [Schedule Incorporation of CDR Processing Active](#)
- [Start Time](#)
- [Stop Time](#)
- [Retention Period for "File Transfer" \(receive\) Process Monitor](#)
- **[Retrieve CDRs alive time](#)**
- [Send email notification if free space/collection thresholds exceeds](#)
- [Select email recipients](#)

Button

[Save \(button\)](#)

Related Topics

[Options - Field Descriptions and User Actions, page 262](#)

5.23 Logging

Field and Controls Descriptions in the Logging Page

Log Type:

- [Receive Log](#)
- [Output Log](#)
- [Cyclic Check Log](#)
- [Error and Activity Log](#)

[System ID](#)

[From: \(Date: / Time:\)](#)

[To: \(Date: / Time:\)](#)

[View \(button\)](#)

[Delete \(button\)](#)

Field and Controls Descriptions in the Logging Events Table

Table 25: Description of fields in the Logging dialog

Field	Description	Values	Notes
Date	Displays the date and time when the log message was issued.		Column; Read-only
Category	Indicates the category of the logged activity, e.g. "start application" or "exit application".		Column; Read-only
System ID	The ID of the network node (switch) that is being logged and issued the log message.	String	Also referred as <i>\$COL_TRANSFORM</i>
Error	Error code		Also referred as <i>\$COL_INPUT</i>
Short message	Displays a short description of the logged activity or error, e.g. "COL process dbproxy started."		Column; Read-only
Long message	Displays a more detailed description of the logged activity or error, e.g. "COL process dbproxy started."		Column; Read-only
Severity	Indicates the severity of the log message.	0 indicates lowest severity.	Column; Read-only
Print/Export	Opens Run Report dialog to define various log output formats for Exporting Log Reports and send log files as e-mail attachment.		Button

Columns in the Log Table:

- Logging Type
- Logging Period
- Date (column)
- Category (column)
- Error (column)
- System ID (column)
- Short message (column)
- Long message (column)
- Severity (column)

[Print/Export \(Button\)](#)

Related Topics

[Logging Report - Field Descriptions, page 264](#)

6 Reference Material

[Menu Bar - Description of the Menu Options](#)

[Toolbar - Icon Descriptions and User Actions](#)

[Field Descriptions and User Actions](#)

[Elements for Defining Input and Output Formats for COL CDRs](#)

[Pre-defined Formats for Output Format Definition:](#)

- [AM-WIN 1.0 - Format for AM-WIN 1.0](#)
- [AM-WIN 2.0 - Format for AM-WIN 2.0](#)
- [H4000_HP_AM - Output format from OpenScape 4000 for HiPath AM](#)
- [OpenScape 4000 Manager/Assistant PM - Output format for OpenScape 4000 Assistant PM V1.0](#)
- [H4000_HPAM_E164 - Output format from OpenScape 4000 for HiPath AM](#)
- [HP4M_AMPM_UV3.0 - Output format from HiPath 4000 V3](#)
- [HP4M_AMPM_UV4 - Output format from HiPath 4000 V4](#)
- [HP4M_AMPM_UV5 - Output format from HiPath 4000 V5](#)
- [HP4M_AMPM_UV6 - Output format from HiPath 4000 V6](#)
- [HP4M_AMPM_UV7 - Output format from OpenScape 4000 V7](#)
- [HP4M_PM_UV7 - Output format from OpenScape 4000 V7](#)
- [HP4M_AMPM_UV8 - Output format from OpenScape 4000 V8](#)
- [HP4M_PM_UV8 - Output format from OpenScape 4000 V8](#)
- [HP4M_AMPM_UV10 - Output format from OpenScape 4000 V10](#)
- [HP4M_PM_UV10 - Output format from OpenScape 4000 V10](#)
- [Pre-defined Formats for Input Format Definition](#)
 - [AMPM_UV1.0 - Input format for AM / PM OpenScape 4000](#)
 - [AMPM_UV8 - Input format for AM/PM OpenScape 4000](#)
 - [PM_UV8 - Input format for OpenScape 4000](#)
- [Additional CM Elements for Defining CDR Output Formats](#)
 - [CM Elements Used for Generating History Output](#)
 - [CM Elements Used for Transforming Virtual to Physical Node Numbers](#)
 - [Loading the col_port and col_switch Tables](#)

6.1 Field Descriptions and User Actions

[Menu Bar - Description of the Menu Options, page 239](#)

[Toolbar - Icon Descriptions and User Actions, page 242](#)

[COL Homepage - Field Descriptions and User Actions, page 243](#)

[Collecting Status - Field Descriptions and User Actions, page 244](#)

[Output Line Status - Field Descriptions and User Actions, page 245](#)

[Input Format Editor - Field Descriptions and User Actions, page 247](#)

[Input Format Editor - Object List - Field Descriptions, page 248](#)

[Input Format Editor - Set Default Value - Field Descriptions and User Actions, page 249](#)

[Input Format Editor - Configure Input Element - Field Descriptions and User Actions, page 249](#)

[Output Line Definition - Object View - Field Descriptions and User Actions, page 250](#)

[Output Line Definition - Object List - Field Descriptions, page 251](#)

[Output Format Editor - Object View - Field Descriptions and User Actions, page 252](#)

[Output Format Editor - Object List - Field Descriptions, page 253](#)

[Output Format Editor - Configure Output Element - Field Descriptions and User Actions, page 254](#)

[Filter Editor - Object View - Field Descriptions and User Actions, page 254](#)

[Filter Editor - Object List - Field Descriptions, page 256](#)

[Filter Editor - Set Default Value - Field Descriptions and User Actions, page 256](#)

[Translation Table Editor -- Field Descriptions and User Actions, page 256](#)

[Translation Group Editor -- Field Descriptions and User Actions, page 259](#)

[Incorrect Records - Send Back To Input - Field Descriptions and User Actions, page 261](#)

[Options - Field Descriptions and User Actions, page 262](#)

[Logging Report - Field Descriptions, page 264](#)

Menu Bar - Description of the Menu Options

Depending on the functionality of the COL feature selected, different or only specific menu options may be displayed in the menus.

Table 26: Menu Bar - Description of Menu Options

Top Level Menu	Second Level Menu	Description
Object		The Object menu contains the options for creating and editing network objects, e.g. New , Copy , Insert , Save , Delete and Print Report .
Object	Start/Stop Input	Toggle button used to start/stop the call charge data input. Same function as Start/Stop Input button. Only available in Controlling dialog.
Object	Start/Stop Output	Toggle button used to start/stop the creation of output files (only CDR files). Same function as Start/Stop Output button. Only available in Controlling dialog.
Object	Collect Now	Immediately starts the recording of CDRs. The operation is carried out in asynchronous mode. Processing of several lines (data records) at a time is supported. Same function as Collect Now (button) .
Object	Configure	Configure input line. In the Collecting Agent under OpenScape 4000 Assistant/Manager , clicking this button will launch the System Management application. Only one line at a time can be selected and configured. Same function as Configure (button) .

Top Level Menu	Second Level Menu	Description
Object	Print Report	The current screen content is written to an HTML file and displayed in a separate browser window. This separate browser window contains a Print icon of its own. If you click on this icon, the currently displayed content of the separate browser window is sent to the configured printer. Same function as the Print icon in the toolbar. * Printing is only supported by the Collecting Agent in OpenScope 4000 Assistant/Manager. The Print icon is not displayed on the Homepage of the Collecting Agent; the icon is only displayed in some dialogs supporting the Print feature, e.g. Collecting Status and Output Line Status. * Printing is only supported using the Print button from the separate browser window. * Activating the Definition of Input Lines feature will launch the System Management application. Clicking the Print icon in the System Management toolbar activates the Report Generator.
Object	New	Use this option to create a new object. The view switches to New Object . After entering the required parameters you need to save the new object in order to store its configurations settings.
Object	Copy	Use this option to copy existing input and output formats to the clipboard and to paste the existing format parameters into new formats using Insert , thus creating new formats.
Object	Insert	Use this option to paste the formats or settings previously copied (using Copy) to the clipboard into the new formats.
Object	Save	Use this option to store changed or new configuration settings of objects and formats to the database.
Object	Delete	Use this option to delete the selected format or object, respectively, from the displayed list. The selected format/object is only deleted from the list view, not from the database. For most COL features, this option is only available in the Object List view in order to avoid accidental deletion of formats or objects.
Object	Save Input Files (CDRs)	Use this check box to enable/disable the saving of input files. This option is only available in the Options dialog. See detailed description in Save Input Files (CDRs).
View		
View	Home	Goes back to the Homepage of Collecting Agent. Same function as the Homepage icon in the Toolbar.
View	Start	Jumps back to the OpenScope 4000 Assistant/Manager Start Page. Opens a new browser window and displays the OpenScope 4000 Assistant/Manager Start Page. Same function as the Start(*) icon in the Toolbar. * This feature is only supported in OpenScope 4000 Assistant/Manager.

Top Level Menu	Second Level Menu	Description
View	Object	Use the Object menu option to change to the Object view used to display the configuration settings of a single selected object. With most of the COL features you can switch between the Object List, Object and New Object view by either selecting the respective option in the View menu or by clicking the corresponding radio button beneath the menu bar. Same function as the Object radio button beneath the menu bar.
View	Object List	Use the Object List menu option to change to the Object List view. This is the default view with most COL features. It displays the list of all configured network objects. The Object List cannot be edited and contains only general information about the displayed objects. With most of the COL features you can switch between the Object List, Object and New Object view by either selecting the respective option in the View menu or by clicking the corresponding radio button beneath the menu bar. Same function as the Object List radio button beneath the menu bar.
View	Go To	Use the First Object, Previous Object, Next Object and Last Object menu options in the Go To menu to navigate to the respective object in the line of configured network objects.
View	Refresh	Use this option to upload the current data from the database and to refresh the contents of the screen. Same function as Refresh (button).
View	Sticky Page	The Sticky Page (Pin) option in the View menu switches the sticky page mode ON or OFF. • OFF (default): a new applet will be launched in the currently opened browser window. • ON: a new applet will be launched in a new browser window. Same function as the Pin (Sticky Page) icon in the Toolbar.
Action		
Action	Logoff	When you click the Logoff option in the Action menu, a message dialog is displayed, warning you that all unsaved data will be lost, prompting you to save all unsaved data from the current session, and to confirm with OK that you want to log off. After logging off the program returns to the Logon screen. Same function as the Logoff icon in the Toolbar.
Help		

Top Level Menu	Second Level Menu	Description
Help	Context Help	Use this menu option to activate the Context Help . The mouse pointer is displayed as an arrow with an adjacent question mark. When you click on an element in your browser window with this pointer, the corresponding context-specific Help topic will be displayed in a separate Help browser window. You can also activate the Context Help by pointing and clicking on a specific location in the user interface and pressing CTRL+F1 . Same functionality as the ? (Help) icon in the Toolbar .
Help	Help Topics	Use the Help Topics option to open the Online Help Table of Contents. You can also invoke the Online Help Table of Contents by pressing the F1 key.
Help	About	Use the About option to display information about the program software version, the release date, and the copyright provisions.

Toolbar - Icon Descriptions and User Actions

Table 27: Toolbar - Icon descriptions and user actions

Print(*) Click on Print toolbar icon(*) 	* Printing is only supported using the Print button from the separate browser window. The current screen content is written to an HTML file and displayed in a separate browser window. This separate browser window contains a Print icon of its own. If you click on this icon, the currently displayed content of the separate browser window is sent to the configured printer. Same function as the Print Report option in the Object menu. * Printing is only supported by the Collecting Agent in OpenScape 4000 Assistant/Manager. The Print icon is not displayed on the Homepage of the Collecting Agent; the icon is only displayed in some dialogs supporting the Print feature, e.g. Collecting Status and Output Line Status. * Printing is only supported using the Print button from the separate browser window. * Activating the Definition of Input Lines feature will launch the System Management application. Clicking the Print icon in the System Management toolbar activates the Report Generator.	None (or modal print dialog)
Help Click on ? (Help) toolbar icon 	Activates the Context Help. The mouse pointer is displayed as an arrow with an adjacent question mark. When you click on an element in your browser window with this pointer, the corresponding context-specific Help topic will be displayed in a separate Help browser window. You can also activate the Context Help by pointing and clicking on a specific location in the user interface and pressing CTRL+F1. Same functionality as the Context Help option in Help menu.	Online Help browser

Home Page Click on Home Page toolbar icon 	Goes back to the Homepage of Collecting Agent . Same function as the Home option in the View menu.	Homepage of Collecting Agent
Start (*) Click on Start toolbar icon(*) 	Jumps back to the OpenScape 4000 Assistant/Manager Start Page . Opens a new browser window and displays the OpenScape 4000 Assistant/Manager Start Page. Same function as the Start option in the View menu. * This feature is only supported in OpenScape 4000 Assistant/Manager.	Start Page of OpenScape 4000 Assistant/Manager
Logoff  Click on Logoff toolbar icon	When you click the Logoff icon in the toolbar, a message dialog is displayed, warning you that all unsaved data will be lost, prompting you to save all unsaved data from the current session and to confirm with OK that you want to log off. After logging off the program returns to the Logon screen. Same function as the Logoff option in the Action menu.	Logon screen of OpenScape 4000 Assistant/Manager
Pin (Sticky Page) Click on Pin toolbar icon 	Clicking on the Pin pushbutton switches the sticky page mode ON or OFF. • OFF (default): a new applet will be launched in the currently opened browser window. • ON: a new applet will be launched in a new browser window. Same function as the Sticky Page option in the View menu.	None

COL Homepage - Field Descriptions and User Actions

Table 28: Description of fields on the COL Homepage

Field	Description	Values	Notes
Application tree	The application tree is similar to a menu folder structure, displaying all COL features in the form of links the user can activate from the COL Homepage. The Application Tree is displayed on the left-hand side of the COL Homepage in the Navigation Pane.		Read-only.

Reference Material

Field	Description	Values	Notes
Description of the selected tree item.	A short description of the currently selected feature/link from the application tree is displayed in the Content Pane on the right-hand side of the Homepage. If Controlling is selected in the tree, the description will not be visible, and the Content pane will show the status displays Input Status: Active and Output Status: Active and the buttons Start/Stop Input and Start/Stop Output .		Read-only.
Input Status: Active	Shows status of collecting files from system (applies to both AM and PM files). Visible only if Controlling is selected in tree.	Active/Not active	Read-only
Output Status: Active	Shows status of producing output files (applies only to CDR files). Visible only if Controlling is selected in tree.	Active/Not active	Read-only

Table 29: Description of actions on the Collecting Agent Homepage

Action	Description	Next Form
Click on link/feature in application tree	Shows a short description of the currently selected item from the application tree. If Controlling is selected, the status displays Input Status: Active and Output Status: Active and the toggle buttons Start/Stop Input and Start/Stop Output are displayed in the content pane on the right-hand side of the window.	None.
Start/Stop Input	Toggle button to start/stop collecting files from system (applies to both AM and PM files). Visible only if Controlling is selected in tree. Button caption is	Warning Box
Start/Stop Output	Toggle button to start/stop producing output files (applies only to CDR files). Visible only if Controlling is selected in tree.	Warning Box
Double-click on Collecting Status	Link to the dialog that shows collecting status for all switches.	Collecting status
Double-click on Output Line Status	Link to the dialog that shows status of output lines.	Output Line Status
Double-click on Definition of Input Lines	Link to System Management.	System Management
Double-click on Definition of Output Lines	Link to the dialog for administration of output lines.	Output Line Definition

Action	Description	Next Form
Double-click on Input Format Editor	Link to the dialog for definition of input formats.	Input Format Editor
Double-click on Output Format Editor	Link to the dialog for definition of output formats.	Output Format Editor
Double-click on Filter Editor	Link to the dialog for definition of filters	Filter Editor
Double-click on Translation Table Editor	Opens the Translation Table Editor used to create, add, modify and delete translation tables.	Translation Table Editor
Double-click on Translation Group Editor	Opens the Translation Group Editor used to create, add, modify and delete translation group.	Translation Group Editor
Double-click on Incorrect Records	Link to the dialog to send the rejected CDRs back to the input.	Incorrect Records
Double-click on Options	Link to Options dialog	Options
Click on "?" (Help), Home Page, Start, Logoff or Pin (Sticky Page) icon in Toolbar	See Toolbar - Icon Descriptions and User Actions .	

Collecting Status - Field Descriptions and User Actions

Table 30: Description of fields in the Collecting Status dialog

Field	Description	Values	Notes
Number Of Configured Input Lines	Number of switches for which collecting is configured in SysM	Integer	Read-only.
Collecting Active	Check-box shows whether collecting has been activated for all switches	Checked/unchecked	Read-only.
Table column: System ID	System ID	String	Read-only.
Table column: System Type	System type	String	Read-only.
Table column: Input Format	Input format	String	Read-only.

Reference Material

Field	Description	Values	Notes
Table column: Active Collecting	Shows whether collecting has been activated for the switch.	AM, PM, AM/PM, empty	Read-only.
Table column: Next Transfer	Start time of the next transfer	String in format "hh:mm dd.mm.yyyy"	Read-only. Empty if collecting for that switch is not active.
Table column: Last Transfer	Start time of the last transfer	String in format "hh:mm dd.mm.yyyy"	Read-only.
Table column: Transfer Status	Status of the last transfer	OK/Error/No data/Running	Read-only. "No data" means that the input file was empty or non-existing.
Table column: Transform Completed	Shows whether transfer files have been transferred into standard format.	Yes, No, N/A	Read-only. .

Table 31: Description of actions in the Collecting Status dialog

Action	Description	Next Form
Collect now	Start immediate collecting for selected switches (multiple selection possible).	Warning-Box
Configure	Configure collecting parameters for the selected switch in SysM. COL tabsheet in SysM is opened.	SysM (COL tabsheet)
Refresh	Refresh displayed data.	None
First record	Select first row	None
Previous record	Select previous row	None
Next record	Select next row	None
Last record	Select last row	None
Click on Print , "?" (Help) , Home Page , Start , Logoff or Pin (Sticky Page) icon in Toolbar	See Toolbar - Icon Descriptions and User Actions .	

Output Line Status - Field Descriptions and User Actions

Table 32: Description of fields in the Output Line Status dialog

Field	Description	Values	Notes
Number Of Output Lines	Number of defined output lines	Integer	Read-only.
Output Active	If the check-box is unchecked, output has been deactivated for all lines	Checked/unchecked.	Read-only.
Table column: Name	Output line name	String	Read-only.
Table column - Active	Is output line activated?	Yes/No	Read-only.
Table column: Output Format	Output format	String	Read-only.
Table column: Filter	Filter	String	Read-only. N/A for Backup PC
Table column: Last Output	Start time of the last output	hh:mm dd.mm.yyyy N/A for PM output line	Read-only.
Table column: Status	Status of the last output	OK/Error/No data	Read-only. "No data" means that the output file was empty or non-existing.
Table column: Next Output	Start time of the next output	hh:mm dd.mm.yyyy N/A for PM output	Read-only.

Table 33: Description of actions in the Output Line Status dialog

Action	Description	Next Form
Configure	Configure output line.	Output Line Definition
Refresh	Refresh displayed data.	None
Deliver	Deliver selected output line(s) to the delivery directory	None
Deliver all Lines Now	Deliver all output line(s) to the delivery directory	None
First record	Select first row	None
Previous record	Select previous row	None
Next record	Select next row	None
Last record	Select last row	None

Action	Description	Next Form
Click on Print , "?" (Help) , Home Page , Start , Logoff or Pin (Sticky Page) icon in Toolbar	See Toolbar - Icon Descriptions and User Actions .	

The table allows selection of a single row at a time only.

Input Format Editor - Field Descriptions and User Actions

Table 34: Description of fields in the Input Format Editor dialog - Object view

Field	Description	Values	Notes
Format Name	Name of the selected format	String (max. length 30)	Required, unique
Description	Short format description	String (max. length 255)	Optional
Predefined	Check-box is checked for predefined elements	Checked, unchecked	Read-only
End of Line	Combo-box to choose End of Line sequence	List of values: LF, CR, CR/LF, none)	
Default element table (on left-hand side of dialog)	Combo-box to select or edit a default element for CDR input format		
Name (Default element table)	Element name, e.g. ACCTCODE for "Account code used during a call"	String; Length: 12 characters	Read-only
Element Description (Default element table)	Element description, e.g. "Account code used during a call" for ACCTCODE	String, Numeric	Read-only
Allowed (Default element table)	Value to be assigned to the element if it is a mandatory field	check box	Read-only
Input element table (on right-hand side of dialog)	Combo-box containing the selected input format elements for configuring the structure of received CDR data.		
# (Input element table)	Position number of input element	Integer	Read-only. Automatically generated by program.
Name (Input element table)	Element name, e.g. ACCTCODE for "Account code used during a call"	String; Length: 12 characters	Read-only

Field	Description	Values	Notes
Element Description (Input element table)	Element description, e.g. "Account code used during a call" for ACCTCODE.	String, Numeric	Read-only
Length (Input element table)	Length in bytes of the element.	Integer	Read-only
Alignment (Input element table)	Alignment	Left, Right	Read-only
Number Of Elements	Number of elements in the Input element table.	Integer	Read-only; Automatically generated by program
Format Length	Total length in bytes of an input row.	Integer	Read-only; Automatically generated by program

Table 35: Description of actions in the Input Format Editor dialog

Action	Description	Next Form
Double click in the Default element table	Edit default value for the selected element	Set Default Value dialog.
Double click in the Input element table	Edit properties for the selected element	Configure Input Element dialog.
>	Move selected element from the element table to default table. Position numbers are automatically adjusted. Button is enabled according to the system versions.	None.
<	Move selected element from the default table to the element table. Position numbers are automatically adjusted. Button is enabled according to the System type.	None.
Up	Move up selected element in the element table. Position numbers are automatically adjusted.	None.
Down	Move down selected element in the element table. Position numbers are automatically adjusted.	None.
Save	Save changes to the database. Before saving the format is tested (mandatory elements) and FTBL file is generated. Enabled only in .	Error message for wrong format
New	Create a new object and switch to New Object.	None.
Delete	Delete selected object. Enabled only in list view.	Warning box
Add fixed text	Add fixed text to input.	None.

Reference Material

Action	Description	Next Form
First record	Show first format from the database	None
Previous record	Show previous format from the database	None
Next record	Show next format from the database	None
Last record	Show last format from the database	None
Click on Print , "?" (Help) , Home Page , Start , Logoff or Pin (Sticky Page) icon in Toolbar	See Toolbar - Icon Descriptions and User Actions .	
Object	Change to Object view.	Same form in Object view.
New Object	Open new format in Object view.	Same form in Object view.
Object List	Change to Object List view.	Same form in Object List view.

Input Format Editor - Object List - Field Descriptions

The object list can not be edited. Each row contains information about one format. The table allows only selection of a single row.

Table 36: Description of fields in the Input Format Editor dialog - Object List view

Field	Description	Values	Notes
Format Name	Name of the selected format	String (max. length 30)	Read-only, unique.
System Version	System version to which format applies	Free format, OpenScape 4000	Read-only.
Description	Short format description	String (max. length 255)	Read-only.
Element Count	Number of elements in the element table.	Integer	Read-only
Format Length	Total length in bytes of an input row.	Integer	Read-only

Input Format Editor - Set Default Value - Field Descriptions and User Actions

This is a modal dialog with the title "COL - Set Default Value". It is used to set the default value of the selected input element. Other fields in the dialog are read-only.

Table 37: Description of fields in the Input Format Editor/Set Default Value dialog

Field	Description	Values	Notes
Name	Element name	String	Read-only
Type	Combo-box with the type of the element.	String, Numeric	Read-only
Length	Length in bytes of the element.	Integer	Read-only
Alignment	Alignment	Left, Right	Read-only
Default	Value to be assigned to the element if it does not appear in input.	String	Required.

Table 38: Description of actions in the Input Format Editor/Set Default Value dialog

Action	Description	Next Form
OK	Accept values and close dialog	Input Format Editor
Cancel	Close without accepting values	Input Format Editor

Input Format Editor - Configure Input Element - Field Descriptions and User Actions

This is a modal dialog with the title "COL - Configure Input Element". It is used to modify properties of the selected input element.

Table 39: Description of fields in the Input Format Editor/Configure Input Element dialog

Field	Description	Values	Notes
No.	Row position	Integer	Read-only
Element Description	Element name	String	Read-only
Type	Combo-box with the type of the element.	String, Numeric	Required
Length	Length in bytes of the element.	Integer	Required only if Type is String.
Alignment	Combo-box to define alignment	Left, Right	
Filler	Character used for padding.	Char	Default: space

Table 40: Description of actions in the Input Format Editor/Configure Input Element dialog

Action	Description	Next Form
OK	Accept values and close dialog	Input Format Editor
Cancel	Close without accepting values	Input Format Editor

Output Line Definition - Object View - Field Descriptions and User Actions

Table 41: Description of fields in the Output Line Definition dialog - Object view

Field	Description	Values	Notes
Output Line Name	Output line name	String, max. length 32	Mandatory. Unique.
Description	Short description of the output line	String, max. length 256	Optional
Active	Check-box shows whether the line has been activated	Checked/unchecked	
File Name	File destination	String	Mandatory. If the file name does not start with "/" the file name is relative to <i>\$COL_DELIVER</i> . If the file name is complete, <i>\$COL_DELIVER</i> is ignored. Directory should already exist. Name must be unique.
Output Format	Assigned output format	List of defined output formats	Mandatory
Filter	Assigned filter or empty	List of defined filters	Optional
Start Date/Time		hh:mm dd.mm.yyyy	Mandatory. Default: current time and date.
Cycle	Choice of cycle format	Hours or Minutes	Mandatory
Hours	Combo-box with cycle-time in hours	1,2,3,4,6,8,12,24	Enabled only if Cycle=Hours, not mandatory. Default: 1
Minutes	Combo-box with cycle-time in minutes	1,2,3,4,5,6,10,12,15,30	Enabled only if Cycle=Minutes, not mandatory. Default 15.

Table 42: Description of actions in the Output Line Definition dialog

Action	Description	Next Form
New	Create a new object and switch to new object.	None.
Delete	Delete selected output line (enabled only in Object List view)	Warning Box.

Action	Description	Next Form
Save	Save values (enabled only in Object view)	None.
Active	Activate/deactivate selected input line	Warning Box
First record	Show first filter from the database	None
Previous record	Show previous filter from the database	None
Next record	Show next filter from the database	None
Last record	Show last filter from the database	None
Click on Print , "?" (Help) , Home Page , Start , Logoff or Pin (Sticky Page) icon in Toolbar	See Toolbar - Icon Descriptions and User Actions .	
Object	Change to Object view.	Same form in Object view.
New Object	Open new format in Object view.	Same form in Object view.
Object List	Change to Object List view.	Same form in Object List view.

Output Line Definition - Object List - Field Descriptions

The object can not be edited. Each row contains information about one output line.

Table 43: Description of fields in the Output Line Definition dialog - Object List view

Field	Description	Values	Notes
Name	Output line name	String, max. length 32	Read-only
Description	Short description of the output line	String, max. length 256	Read-only
Output Format	Assigned output format	List of defined output formats	Read-only
Filter	Assigned filter or empty	List of defined filters	Read-only
Active	Is line activated?	Yes/No	Read-only
Filename	File destination	String	Read-only
Start Date/Time		hh:mm dd.mm.yyyy	Read-only
Cycle	Cycle time in hours or minutes. Possible values for minutes are: 1,2,3,4,5,6,10,12,15,30. Possible values for hours are: 1,2,3,4,6,8,12,24.	Hours or Minutes	Read-only

Output Format Editor - Object View - Field Descriptions and User Actions

Table 44: Description of fields in the Output Format Editor dialog - Object view

Field	Description	Values	Notes
Format Name	Name of the selected format.	String (max. length 30)	Required, unique
Description	Short format description	String (max. length 255)	
End of Line	Combo-box to choose End of Line sequence	List of values: LF, CR, CR/LF, none)	
Element group list	Selection of the element group. Combo-box with the list of element groups.	Standard Elements, CM Elements, Text Elements	Read-only
Element table (on left-hand side of dialog)	List of elements available in the database. Allows selection of the element to be added to the Output table.	String	Read-only
Name - Element table	Element name, e.g. "BCHLCNT" for "Number of used B channels"	String	Read-only
Description - Element table	Element description, e.g. "Number of used B channels" for "BCHLCNT"	String	Read-only
Output elements table (on right-hand side of dialog)	List of output elements added by the user to the Output elements table.		
# - Output elements table	Position number	Integer	Read-only. Position number is automatically generated by program.
Name - Output elements table	Element name, e.g. "BCHLCNT" for "Number of used B channels"	String	Read-only
Description - Output elements table	Element description, e.g. "Number of used B channels" for "BCHLCNT"	String	Read-only
Length - Output elements table	Length in bytes of the element.	Integer	Read-only
Alignment - Output elements table	Alignment	Left, Right	Read-only
Filler - Output elements table	Character for padding.	Char	Read-only.
Text - Output elements table	Text is defined only for fixed text elements	String.	Read-only.
Number Of Elements	Number of elements in the output table	Integer	Read-only.

Field	Description	Values	Notes
Format Length	Total length in bytes of an output row.	Integer	Read-only.

Table 45: Description of actions in the Output Format Editor dialog

Action	Description	Next Form
>	Copy selected element from the standard element list to the output table. Selected element is not deleted from the original table. Position numbers are automatically adjusted.	None
<	Delete selected element from the output element table. Position numbers are automatically adjusted.	None
Double click in the Output table	Edit properties for the selected element	Configure Output Element dialog.
Up	Move up selected element in the output element table. Position numbers are automatically adjusted.	None
Down	Move down selected element in the output element table. Position numbers are automatically adjusted.	None
Save	Save changes to the database. Enabled only in Object view.	None
New	Create a new object and switch to new object.	None.
Delete	Delete selected object. Enabled only in Object List view.	Warning Box
First record	Show first format from the database	None
Previous record	Show previous format from the database	None
Next record	Show next format from the database	None
Last record	Show last format from the database	None
Click on Print , "?" (Help) , Home Page , Start , Logoff or Pin (Sticky Page) icon in Toolbar	See Toolbar - Icon Descriptions and User Actions .	
Object	Change to Object view.	Same form in Object view.
New Object	Open new format in Object view.	Same form in Object view.
Object List	Change to Object List view.	Same form in Object List view.

Output Format Editor - Object List - Field Descriptions

The object list can not be edited. Each row contains information about one output format. The table only allows the selection of a single row.

Table 46: Description of fields in the Output Format Editor dialog - Object List view

Field	Description	Values	Notes
Format Name	Name of the selected format	String (max. length 30)	Read-only, unique.
Description	Short format description	String (max. length 255)	Read-only.
Element Count	Number of elements in the output element table.	Integer	Read-only
Output format length	Total length in bytes of an output row.	Integer	Read-only

Output Format Editor - Configure Output Element - Field Descriptions and User Actions

Table 47: Description of fields in the Configure Output Element dialog

Field	Description	Values	Notes
No	Position number	Integer	Read-only
Name	Element name	String	Read-only
Type	Combo-box with the type of the element.	String, Numeric	Required
Length	Length in bytes of the element.	Integer	Required only if Type is String.
Alignment	Combo-box to define alignment	Left, Right	
Filler	Character used for padding	Char	
Text	Text property for fixed text elements	String	Enabled and required only for fixed text elements.

Table 48: Description of actions in the Output Format Editor/Configure Output Element dialog

Action	Description	Next Form
OK	Accept values and close dialog	Output Format Editor
Cancel	Close without accepting values	Output Format Editor

Filter Editor - Object View - Field Descriptions and User Actions

Table 49: Description of fields in the Filter Editor dialog - Object view

Field	Description	Values	Notes
Filter name		String, max. length 32	Mandatory
Description		String, max. length 256	Optional

Field	Description	Values	Notes
Element group list	Selection of the element group. Combo-box with the list of element groups	Standard Elements, CM Elements, Complex Elements	Read-only
Element table	List of elements available in selected element group. Allows selection of an element.		
Name - Element table	Table column with element names	String, e.g. "ACCOUNT" for "Account Number"	Read-only
Name - Element table	Table column with element descriptions	String, e.g. "Account Number" for "ACCOUNT"	Read-only
Filter Clause table	List of elements added by the user to the Filter Clause table. Filter Clause elements can be edited by double-clicking on a record (row) in the Filter Clause elements table.		
# - Filter Clause table	Position number	Integer	Read-only. Position number is generated automatically by program.
Name - Filter Clause table	Table column with element names	String	Read-only.
Operator - Filter Clause table	Table column with operators	=, <>, <, > <=, >=, IN, NOT IN	Required
Value - Filter Clause table	Table column with values. In case of multiple values, comma is used as the delimiter.	String eg [1-1-20-4711]	Required
Element count	Number of rows in the selection clause	Integer	Read-only

Table 50: Description of actions in the Filter Editor dialog

Action	Description	Next Form
Double-click in the filter table	Modify selected row from the filter table.	Configure Filter Element dialog.
>	Copy selected element from the element table to the filter table. Position numbers are adjusted automatically.	None
<	Delete selected element from the filter table. Position numbers are adjusted automatically.	None
Save	Save changes to the database. Enabled only in Object view.	None
New	Create a new object and switch to new object.	None.
Delete	Delete selected object. Enabled only in list view.	Warning box

Reference Material

Action	Description	Next Form
First record	Show first filter from the database	None
Previous record	Show previous filter from the database	None
Next record	Show next filter from the database	None
Last record	Show last filter from the database	None
Click on Print, "?" (Help), Home Page, Start, Logoff or Pin (Sticky Page) icon in Toolbar	See Toolbar - Icon Descriptions and User Actions .	
Object	Change to Object view.	Same form in Object view.
New Object	Open new format in Object view.	Same form in Object view.
Object List	Change to Object List view.	Same form in Object List view.

Filter Editor - Object List - Field Descriptions

The object can not be edited. Each line contains information about one filter.

Table 51: Description of fields in the Filter Editor dialog - Object List view

Field	Description	Values	Notes
Filter Name	Name of the filter	String (max. length 30)	Read-only, unique.
Description	Short format description	String (max. length 255)	Read-only.
Element Count	Number of elements in the filter table.	Integer	Read-only

Filter Editor - Set Default Value - Field Descriptions and User Actions

Table 52: Description of fields in the Configure Filter Element dialog

Field	Description	Values	Notes
Element Name	Name of element selected in the Filter Clause table.	String	Read-only
Element Description	Description of the element selected in the Filter Clause table.	String	Read-only
Operator	Combo-box with operators	=, <>, <, > <=, >=, IN, NOT IN	Required

Field	Description	Values	Notes
Value	Value	String, range for numeric values and values in brackets []	Required

Table 53: Description of actions in the Configure Filter Element dialog

Action	Description	Next Form
OK	Accept values and close dialog	Filter Editor
Cancel	Close without accepting values	Filter Editor

Translation Table Editor -- Field Descriptions and User Actions**Table 54: Translation Table Editor, Object view, field descriptions**

Field	Description	Value(s)	Comment
Translation Table Name	Name of selected translation table.	String (max. 30 characters).	Unique. Mandatory.
Element	This combo box contains the list of Standard Elements and CM Elements. The CM Elements are only displayed if the COL software is installed with the necessary user license rights.	The list of Standard Elements also contains generated elements which do not appear in the input (e.g. SYSTYPE).	Mandatory.
Description	Short description of translation table.	String (max. 255 characters).	Optional.
Predefined	This box is checked (activated) with predefined, non-editable tables.	Activated, Not activated.	Read-only.
Translation Table Values -- Position	Displays the sequential number of each table row. The sequential numbers of all table rows are automatically assigned or updated, respectively, upon creation or deletion of a row. If a row is added or deleted between already existing rows at a later time, the sequential numbers of all following rows will be updated automatically.	1,2,3,...	Read-only.
Translation Table Values -- In Value	Enter the input value for the translation (transformation) here.	String, max. 100 characters.	Value must be unique within one table.
Translation Table Values -- Out Value	Enter the output value for the translation (transformation) here.	String, max. 100 characters.	Value must be unique within one tabl. Optional.

Reference Material

Field	Description	Value(s)	Comment
Translation Table Values -- Comment	Comment.	String, max. 255 characters.	Optional.
Number of Values	The total number of rows in the table is displayed here.	Integer.	Read-only.

Table 55: Translation Table Editor, description of user actions

Action	Description	Next Form
Add new row (icon)	Add new row to the translation table. New empty row is inserted below the currently selected row. Cursor is positioned to the In Value table column field in the new row. The sequential number of the new row is automatically generated. Sequential numbers are updated for all rows below the new row. Changes are not saved to the database. Available only in Object and New Object view.	None.
Delete row (icon)	Delete selected row from the translation table. The sequential number of the new row is automatically generated. Sequential numbers are updated for all rows below the new row. Changes are not saved to the database. Available only in Object and New Object view.	None.
New	Create new object and switch to this object.	None.
Copy	Copy the current object to the clipboard. This button is only enabled in the Object view.	None.
Insert	Insert the previously copied object from the clipboard into the current view. This button is only enabled in the Object view.	None.
Save	Save changes to the database. This button is only enabled in the Object view.	An error message is issued if wrong or illegal values are entered.
Delete	Delete the selected object. This button is only enabled in the Object List view.	A warning message is issued before irreversible deletion.
Homepage	Goes back to the Homepage of Collecting Agent . Same function as the Homepage icon in the Toolbar .	Homepage of Collecting Agent.
Start	Jumps back to the OpenScape 4000 Assistant/Manager Start Page . Opens a new browser window and displays the OpenScape 4000 Assistant/Manager Start Page. Same function as the Start(*) option in the Toolbar . * This feature is only supported in OpenScape 4000 Assistant/Manager.	Start Page of OpenScape 4000 Assistant/Manager.

Action	Description	Next Form
Object	Change to Object view.	Same form in Object view.
New Object	Open new form in Object view.	Same form in Object view.
Object List	Change to Object List view.	Same form in Object List view.
First Record	Show first record from database. Not displayed in New Object view.	None.
Previous Record	Show previous record from database. Not displayed in New Object view.	None.
Next Record	Show next record from database. Not displayed in New Object view.	None.
Last Record	Show last record from database. Not displayed in New Object view.	None.
Refresh	Reload data from database and refresh the display.	None.
Pin	Check box for turning on and off the Sticky Page mode. Defines whether a new browser page is opened in the same window or in a new window. • OFF (default): a new applet will be launched in the currently opened browser window. • ON: a new applet will be launched in a new browser window. Same function as the Sticky Page option in the View menu.	None.
Logoff	When you click the Logoff icon in the toolbar, a message dialog is displayed, warning you that all unsaved data will be lost, prompting you to save all unsaved data from the current session and to confirm with OK that you want to log off. After logging off the program returns to the Logon screen. Same function as the Logoff option in the Action menu.	Warning message, then logon screen.
Context Help	Activates the Context Help. The mouse pointer is displayed as an arrow with an adjacent question mark. When you click on an element in your browser window with this pointer, the corresponding context-specific Help topic will be displayed in a separate Help browser window. You can also activate the Context Help by pointing and clicking on a specific location in the user interface and pressing CTRL+F1. Same functionality as the Context Help option in Help menu.	None.
Help Topics	Show the Help topics.	Help topics are displayed in new window.
Info	Shows the software version and the copyright data of the application.	Info box is displayed in new dialog.

Translation Group Editor -- Field Descriptions and User Actions

Table 56: Translation Group Editor, Object view, field descriptions

Field	Description	Value(s)	Comment
Group Name	Unique name of translation group.	String (max. 30 characters).	Unique, Mandatory.
Description	Short description of translation group.	String (max. 255 characters).	Optional.
Predefined	This box is checked (activated) with predefined, non-editable tables.	Activated, Not activated.	Read-only.
Available Tables -- Table Name	Table column in Available tables list located in left hand side area of Translation Group Editor dialog, Object . view. Displays the name of the translation table.	String, max. 30 characters.	Read-only.
Available Tables -- Element	Table column in Available tables list located in left hand side area of Translation Group Editor dialog, Object . view. Displays the element for which a value transformation (translation) is defined in the table.	String, max. 30 characters.	Read-only.
Available Tables -- Description	Short description of translation table.	String (max. 255 characters).	Read-only. Optional.
Translation Tables in the Group -- Table Name	Name of selected translation table.	String (max. 30 characters).	Read-only.
Translation Tables in the Group -- Element	Table column in the Translation Tables in the Group table located in right hand side area of Translation Group Editor dialog, Object . view. Displays the element for which a value transformation (translation) is defined in the table.	String (max. 30 characters).	Read-only.
Translation Tables in the Group -- Description	Short description of translation table.	String (max. 255 characters).	Read-only. Optional.
Translation Tables in the Group -- Number of Values	Number of values in the translation table.	Integer.	Read-only.
Number of Tables	Number of tables in the group.	Integer	Read-only.

Table 57: Translation Group Editor, description of user actions

Action	Description	Next Form
>	Add selected table from list of available tables to translation group. The selected table is removed from the list of available tables. The changes are not saved to the database.	None.
<	Delete selected row (translation table) from translation group and move translation table to list of available tables. The changes are not saved to the database.	None.
New	Create new object and switch to this object.	None.
Copy	Copy the current object to the clipboard. This button is only enabled in the Object view.	None.
Insert	Insert the previously copied object from the clipboard into the current view. This button is only enabled in the Object view.	None.
Save	Save changes to the database. This button is only enabled in the Object view.	An error message is issued if wrong or illegal values are entered.
Delete	Delete the selected object. This button is only enabled in the Object List view.	A warning message is issued before irreversible deletion.
Homepage	Goes back to the Homepage of Collecting Agent . Same function as the Homepage icon in the Toolbar .	Homepage of Collecting Agent.
Start	Jumps back to the OpenScape 4000 Assistant/Manager Start Page . Opens a new browser window and displays the OpenScape 4000 Assistant/Manager Start Page. Same function as the Start(*) option in the Toolbar .* This feature is only supported in OpenScape 4000 Assistant/Manager.	Start Page of OpenScape 4000 Assistant/Manager.
Object	Change to Object view.	Same form in Object view.
New Object	Open new form in Object view.	Same form in Object view.
Object List	Change to Object List view.	Same form in Object List view.
First Record	Show first record from database. Not displayed in New Object view.	None.
Previous Record	Show previous record from database. Not displayed in New Object view.	None.
Next Record	Show next record from database. Not displayed in New Object view.	None.

Reference Material

Action	Description	Next Form
Last Record	Show last record from database. Not displayed in New Object view.	None.
Refresh	Reload data from database and refresh the display.	None.
Pin	Check box for turning on and off the Sticky Page mode. Defines whether a new browser page is opened in the same window or in a new window. • OFF (default): a new applet will be launched in the currently opened browser window. • ON: a new applet will be launched in a new browser window. Same function as the Sticky Page option in the View menu.	None.
Logoff	When you click the Logoff icon in the toolbar, a message dialog is displayed, warning you that all unsaved data will be lost, prompting you to save all unsaved data from the current session and to confirm with OK that you want to log off. After logging off the program returns to the Logon screen. Same function as the Logoff option in the Action menu.	Warning message, then logon screen.
Context Help	Activates the Context Help. The mouse pointer is displayed as an arrow with an adjacent question mark. When you click on an element in your browser window with this pointer, the corresponding context-specific Help topic will be displayed in a separate Help browser window. You can also activate the Context Help by pointing and clicking on a specific location in the user interface and pressing CTRL+F1. Same functionality as the Context Help option in Help menu.	None.
Help Topics	Show the Help topics.	Help topics are displayed in new window.
Info	Shows the software version and the copyright data of the application.	Info box is displayed in new dialog.

Incorrect Records - Send Back To Input - Field Descriptions and User Actions

Table 58: Description of fields in the Incorrect Records dialog

Field	Description	Values	Notes
System ID	System ID	String	Read-only. System ID is extracted from the directory name. If the file is stored in the wrong directory, the System ID is wrong as well.

Field	Description	Values	Notes
File Name	File name (without directory name)	String	Read-only
File Size	File size in kilobytes	Integer	Read-only
Input Format	Input format for the switch	String	Read-only. Current format for the switch is fetched from the database. It is not necessarily the original format of the file.

Table 59: Description of actions in the Incorrect Records dialog

Action	Description	Next Form
Incorrect Records / Send Back to Input	Send selected file back to input. If the input format is correct and the file can be processed, it will automatically be deleted afterwards. In order to view the latest data, press the Refresh button or restart the window.	Warning box
Delete	Delete selected file	Warning box
Refresh	Refresh displayed data.	None.
First record	Select first row	None
Previous record	Select previous row	None
Next record	Select next row	None
Last record	Select last row	None
Click on Print , "?" (Help) , Home Page , Start , Logoff or Pin (Sticky Page) icon in Toolbar	See Toolbar - Icon Descriptions and User Actions .	

Options - Field Descriptions and User Actions**Table 60: Description of fields in the Options dialog**

Field	Description	Values	Notes
Input Path	Directory where to store input files	String	Also referred as <i>\$COL_INPUT</i>
Transform Path	Directory where to store transformed files	String	Also referred as <i>\$COL_TRANSFORM</i>

Reference Material

Field	Description	Values	Notes
Output Path	Directory where to store output files	String	Also referred as <i>\$COL_OUTPUT</i>
AM Deliver path	Directory where to deliver files for AM	String	Also referred as <i>\$COL_DELIVER</i>
PM Deliver path	Directory where to deliver files for PM	String	
Path of Incorrect Records	Directory where to store rejected CDRs	String	Also referred as <i>\$COL_ERROR</i>
FTBL path	Directory where FTBL files are stored.	String	Also referred as <i>\$COL_FTBL</i>
TFTP path	Directory where TFTP files are stored.	String	Also referred as <i>\$COL_TFTP</i>
Trunk Group Metering Path	Path where the traffic metering files will be saved.	String	
Number of Receive Threads	Number of receive processes	Integer	
Number of Transform Threads	Number of transform processes	Integer	
Number of Line Threads	Number of line processes	Integer	
Required Free Space	Required free space on disk in % for input files	Integer (0-100)	
Retention Period for CM History Data ... Day(s)	Use this field to enter the duration (in number of days) for the retention period of CM history data.	Integer. Default value: 20 days.	
Activate fast mode for transformation of virtual to physical node number only for the PM output line	When this check box is marked, the fast mode for transformation of virtual to physical node numbers is activated for the PM output line only.		
Activate/ Deactivate automatic delete of Logging Entries in COL	Using this check box you can specify whether the logging entries in COL should be automatically deleted or saved and retained for a certain period.		When this check box is marked, the logging entries will automatically be deleted.
Retention Period for Logging Entries ... Day(s)	Use this field to enter the duration (in number of days) for the retention period of the logging entries.	Integer, 1-3 digits Possible values: 1 - 366 day(s)	

Field	Description	Values	Notes
Save Input Files (CDRs)	Use this check box to enable/disable the backing up of input files (CDRs). If this check box is enabled, the input files containing the call data record sets (CDRs) will be saved to a backup directory under the path <code>..\var\COL\data</code> . For more information and important notes please refer to Save Input Files (CDRs) .		If this check box is enabled, the input files containing the call data record sets (CDRs) will be saved to a backup directory under the path <code>..\var\COL\data</code> .
Retention Period for Trunk Group Data from the Cyclic Check of the B Channels ... Day(s)	Use this field to enter the period - defined in days - over which the cyclic check data will be kept in the database.	Integer Default value: 100 days. Max. value: 366 days.	

Table 61: Description of actions in the Options dialog

Action	Description	Next Form
Save	Save values. Enabled only for "rsca" user.	Warning box.
Click on Print , "?" (Help) , Home Page , Start , Logoff or Pin (Sticky Page) icon in Toolbar	See Toolbar - Icon Descriptions and User Actions .	

Logging Report - Field Descriptions

Table 62: Description of fields in the Logging report

Field	Description	Values	Notes
Date	Displays the date and time when the log message was issued.		Column; Read-only
Category	Indicates the category of the logged activity, e.g. "start application" or "exit application".		Column; Read-only
System ID	The ID of the network node (switch) that is being logged and issued the log message.	String	Also referred as <code>\$COL_TRANSFORM</code>
Error	Error code		Also referred as <code>\$COL_INPUT</code>

Reference Material

Elements for Defining Input and Output Formats for COL CDRs

Field	Description	Values	Notes
Short message	Displays a short description of the logged activity or error, e.g. "COL process dbproxy started."		Column; Read-only
Long message	Displays a more detailed description of the logged activity or error, e.g. "COL process dbproxy started."		Column; Read-only
Severity	Indicates the severity of the log message.	0 indicates lowest severity.	Column; Read-only
Print/Export	Opens Run Report dialog to define various log output formats for Exporting Log Reports and send log files as e-mail attachment.		Button

6.2 Elements for Defining Input and Output Formats for COL CDRs

Elements for Defining Input and Output Formats

The following table describes the elements which can be assigned to the input and output format of COL:

Table 63: Elements for Defining Input and Output Formats

Short name	Long name (eng)	Type (Len) / Default Length	Range of values	Mandatory field	Element description	Default value
ACCTCODE (new US) (+H8000)	account code Account code used before / during a call	int(12) H8:int(15)	num. H8:text	no	>= H300 UNITY ger/eng: ACCT CODE R6.5/6.6: ACCTCODE Account code associated with a call. The account code is entered by the user either before or during the call. In AMO FEASU, the system feature "CDRACC" must be activated for this to work. >= H300 UNITY ger/eng: ACCTCODE R6.5/6.6: ACCTCODE H8000 Element No 8	blank
ACCTCODEBG (+H8000)	BG account code	H8:int(15)	H8:text	no	only for (no H300 field): H8000 Element No 90	blank

Short name	Long name (eng)	Type (Len) / Default Length	Range of values	Man-datory field	Element description	De-fault value
ACDAGTID (new H4000)	ACD agent ID, the ID of the ACD agent involved in an incoming or outgoing, answered call.	int(6)	num	no	>= HiPath 4000 V1.0 ger/eng: ACDAGTID The ID of the ACD agent involved in an incoming or outgoing, answered call.	0
ACDGID (new H4000)	ACD Group Number (ID)	Int(3)	Num.	no	Standard Element >= HiPath 4000 V3.0 ger/eng: ACDGID	0
ACDINFO (new H5000)	ACD / Non-ACD	char(1)	text	no	only for (no H300 field): H5000	-
ADPLOAD (new H5000)	ACD / Non-ACD 0-1000 promille (every 10 seconds)	char(1)	text	no	only for (no H300 field): H5000 >= H300 UNITY ger/eng: ADP LOAD Processor load of the ADP in parts per thousand. It is an average load over 10 seconds. The time stamp, when the load was taken, is available in the end_of_connection field: ENDDAY (2 digits), ENDMONTH (2 digits), ENDHOUR (2 digits), ENDMIN (2 digits), ENDSEC (2 digits), END10 (1 digits). END10 is tenth of a second.	-
AOCTYPE (AMO-TEXT)	advice of charge	char(10) / def: 1	text (0-3)	no	>= H300 E3.0 ger/eng: AOC TYPE Not used in the US.	0
ARSPATTGRP (new H8000)	BG ARS Pattern Group	int(1)	num.	no	only for (no H300 field): H8000 Element No 97	0
ATTCALLP (new H4000)	attendant call priority, priority of the call to the attendant	int(2)	num. (1-48)	no	>= H4000 V2.0 ger/eng: ATTCALLP This field contains a number representing the priority of a call to the attendant.	0

Reference Material

Short name	Long name (eng)	Type (Len) / Default Length	Range of values	Man-datory field	Element description	De-fault value
ATTCALLR (new H4000)	attendant intercept reason, reason for the intercept	int(2)	num. (0-26)	no	>= H4000 V2.0 ger/eng: ATTCALLR When a call is intercepted to the attendant console, the field will contain a number representing the intercept reason.	0
ATTCALLT (new H4000)	attendant call type	int(2)	num. (0-23)	no	>= H4000 V2.0 ger/eng: ATTCALLT Contains a number representing the type of a call to the attendant. 0: EMERGENCY_CALL 1: HOTLINE_CALL 2: LOCAL_FIRST_CALL 3: LOCAL_RECALL 4: LOCAL_PRIO_CALL 5: CO_RECALL 6: CO_SERIAL_CALL 7: CO_IN_CONSULTATION 8: CO_ON_HOOK_IN_CONS 9: TIE_RECALL 10: TIE_SERIAL_CALL 11: TIE_IN_CONSULTATION 12: TIE_ON_HOOK_IN_CONS 13: OVFL_LOC_FIRST_CALL 14: OVFL_LOC_PRIO_CALL 15: OVFL_CO_FIRST_CALL 16: OVFL_TIE_FIRST_CALL 17: PERSONAL_CALL 18: ATND_LOOP_TRANSFER 19: CO_FIRST_CALL 20: MLPP_FLASH_OV 21: MLPP_FLASH 22: MLPP_IMMED 23: MLPP_PRTY	0

Short name	Long name (eng)	Type (Len) / Default Length	Range of values	Man-datory field	Element description	De-fault value
ATTGRNO	attendant console group	int(2)	num. (0-16)	no	H300 ger: ATTGRNR H300 eng:ATNDGRNO R6.5/6.6: ATNDGRNO	0
ATTQUEID (new H4000)	attendant queue id for AC-Win Multiple Queue (MQ)	int(2)	num. (0-14)	no	>= H4000 V2.0 ger/eng: ATTQUEID For calls to an AC Win MQ this field will hold the Queue ID as signed to the call.	0
AUTH (+new H8000)	autorisation code	char(22) H8:char(15)	text	no	No H300 element H8000 Element No 89	blank
BAUD (AMO-TEXT)	transmission speed	char(10) / def: 3	num. 0-255 or value	no	H300 ger: SPEED H300 eng: BAUD R6.5/6.6: BAUD Output of the transmission speed as a text string (10 digits, administr. by AMO-Text, if the speed is not defined by AMO-text-table, the speed will be a number with 3 digits)	0
BCHLCNT	number of used B-channels	int(2)	num. (0-30)	no	>= H300 E1.0 ger/eng: BCHLCNT R6.5/6.6: BANDWDTH	0
BEARCAP (new H8000)	Bearer Capability Request	int(1)	num.	no	only for (no H300 field): H8000 Element No 20	0
BLNBYT (old)	block length in bytes	int(5)	num.	no	H300 ger/eng: BLNBYT R6.5/6.6: BLNBYT	0
BLNREC (old)	No. of Records per Block	int(5)	num.	no	H300 ger/eng: BLNREC R6.5/6.6: BLNREC	0
CAELNPNO (new H8000)	Local Number Porta biltily (LNP) Address Parameter	char(10)	text	no	only for (no H300 field): H8000 Element No 15	blank
CALCTYPE (AMO-TEXT)	applied type of billing	char(10) / def: 1	text 0-3	no	>= H300 E3.0 ger/eng: CALCTYPE	0

Reference Material

Short name	Long name (eng)	Type (Len) / Default Length	Range of values	Mandatory field	Element description	Default value
CALLEPTY	called party, number which was dialed by the calling party - e.g. hunting group	char(22)	text 0-9,*,#	no	>= H300 E3.0 ger/eng: CALLEPTY Common for all parties: If the party is an attendant console, AMO-TLZO can be used to create a virtual subscriber number; an entry in AMO-TLZO must be created for a main PBX tie trunk set (HAS). If the length of the output field is shorter than the length of the party number to output, the party number is cut off. For this reason the parameter FLDALIGN (more details see AMO-FTBL) will be used. Example right justified: Party: 96252125 Data record: 2125 Example left justified: Party: 96252125 Data record: 9625 If the length of the party to output is shorter than the field size in the data record, the field will be filled with the specified filler (left or right). Example right justified with longer field: A-Paypart: 2125 Data record: _____2125 Example left justified with longer field: A-Paypart: 2125 Data record: 2125_____	blank
CALLFUSE (new H8000)	Per Call Feature usage	int(1)	num	no	only for (no H300 field): H8000 Element No 106	0
CALLIID (AMO-TEXT STNID) (new) (+H8000)	identification of calling party number (uses value from element STNID)	char(10) / def: 1 H8:int(3)	text (0-8) H8:num	no	>= H300 UNITY ger/eng: CALLIID H8000 Element No 40 The ID output is the same as the AMO TEXT field STNID.	4 H8:0

Short name	Long name (eng)	Type (Len) / Default Length	Range of values	Mandatory field	Element description	Default value
CALLILV0	node number of calling party	int(3)	num. (0-999)	no	>= H300 E3.0 ger/eng: CALLILV0 >= H300 E1.0 ger/eng: LEVEL0 >= H300 V3.4 ger/eng: NODENR	0
CALLILV1	subdomain number of calling party	int(3)	num. (0-255)	no	>= H300 E3.0 ger/eng: CALLIV1	0
CALLILV2	domain number of calling party	int(2)	num. (0-31)	no	>= H300 E3.0 ger/eng: CALLILV2 >= H300 E1.0 ger/eng: LEVEL2	0
CALLIONI (new H4000)	originating network ID of the calling party (private / public)	int(2)	num. (0-27)	no	>= H300 UNITY ger/eng: CALLIONI H4000 V1.0: 0 = private network 1 = public network H4000 V2.0: 0 + (>4) 5-27 = private network 1,2,3,4 = public network	0
CALLIPTY (+H8000)	calling party, party that initiated the current connection/section	char(22) H8:char(20)	text 0-9,*,#	no	>= H300 E3.0 ger/eng CALLIPTY >=H300 V3.4 ger: PAYPART >=H300 V3.4 eng: CHRGEE R6.5/6.6: SRCNO H8000 Element No 12	blank
CALLISTAT (new H8000)	Calling Party Query Status	int(2)	num.	no	only for (no H300 field): H8000 Element No 46	9
CALLTPYE (new H8000)	Call Type / Attempt	int(3)	num.	no	only for (no H300 field): H8000 Element No 16	Blank
CARRIER (AM0-TEXT) (+H8000)	carrier, output of the communication network as a text string	char(10) / def: 1 H8:char(6)	text (0-9)	no	>= H300 V3.4 ger/eng: CARRIER Output of the Identifier of the communication network, such as AT & T, or MCI. H8000 Element No 10	1

Reference Material

Short name	Long name (eng)	Type (Len) / Default Length	Range of values	Mandatory field	Element description	Default value
CAUSE (enhanced) (+H8000)	cause of connection in interrupt / clearing the call	int(3)	num	no	>= H300 V3.4 ger/eng: CAUSE A code used to indicate the reason for clearing a call (connection interrupt), consult AMO-FTBL for a complete listing. Not used when CONNTYPE = INTERNAL H8000 Element No 19	0
CDRRECINFO (new H8000)	Additional CDR (AIN Call Involvement)	int(1)	num	no	only for (no H300 field): H8000 Element No 100	0
CFANUUMID (new H8000)	BG Originating Station Facility ID	char(7)	num	no	only for (no H300 field): H8000 Element No 93	blank
CFATYPE (new H8000)	BG Originating Facility Type	int(1)	num	no	only for (no H300 field): H8000 Element No 91	0
CFW (new R6.5/6.6 (AMO-MFORM) (+H8000)	indicates forwarded calls	char(10) / def: 1 H8:int(1)	text (0-1) H8:num	no	only for (no H300 field) R6.5/6.6: CFW H8000 Element No 23	1
CHOFCON (old) (AMO-TEXT)	type of connection	char(10) / def: 1	text (0-6)	no	H300 ger/eng: CHOFCON 1 = Local 2 = Long distance 3 = Local with limit value exceeded 4 = Long distance with limit value exceeded 5 = No entry 6 = Route optimization	0
CHRGUNIT	call charge units	int(5)	num. (0-65535)	no	H300 ger/eng: CHRGUNIT Not used in the US.	0
CHRGVALU (new H150)	call charge units or amount	int(11)	num.	no	only for (no H300 field): H150-LAN and H150-ALL	0

Short name	Long name (eng)	Type (Len) / Default Length	Range of values	Man-datory field	Element description	De-fault value
CJITTER (new H8000)	Originating Side Inter arrival JITTER Lost	int(10)	num	no	only for (no H300 field): H8000 Element No 75	0
CLINEUSED (new H8000)	Originating Side Codec Used	int(7)	num	no	only for (no H300 field): H8000 Element No 67	0
CMDRID (new H8000)	BG Originating. MDR Customer ID	char(10)	text	no	only for (no H300 field): H8000 Element No 87	blank
CMSWVERS	Switch version	Char(5)	text	no	CM Element	blank
COCTRCVD (new H8000)	Originating Side Octets Received	int(10)	num	no	only for (no H300 field): H8000 Element No 73	0
COCTSEND (new H8000)	Originating Side Octets Send	int(10)	num	no	only for (no H300 field): H8000 Element No 71	0
COLTYPE	COL Record Type (sign AM and/or PM)	Char(1)	text	no	Standard Element	0
CON10	connection duration part of 1/10 second	int(1)	num.	no	H300 ger/eng: CON10 R6.5/6.6: CON10	0
CONCHRG	costs calculated on out put with include value-added tax	float char(13) / def: 9	num., with comma	no	H300 ger/eng: CONCHRG Not used in the US.	0
CONCHRN	nettocosts calculated on output (without value added tax)	float char(13) / def: 9	num., with comma	no	>= H300 E3.0 ger/eng: CONCHRN Not used in the US.	0
CONDAY (new H5000)	connection duration of part day	int(3)	num.	no	only for (no H300 field): H5000	0
CONF (new R6.5/6.6 (AMO-MFORM))	indicates conference call	char(10) / def: 1	text (0-1)	no	only for (no H300 field) R6.5/6.6: CONF	1
CONHOUR	connection duration of part hour	int(2)	num.	no	H300 ger/eng: CONHOUR R6.5/6.6: CONHOUR	0

Reference Material

Short name	Long name (eng)	Type (Len) / Default Length	Range of values	Man-datory field	Element description	De-fault value
CONMIN	connection duration of part minute	int(2)	num.	no	H300 ger/eng: CONMIN R6.5/6.6: CONMIN	0
CONNSTEP	connection sequence, all CDB records of a connection will be numbered sequentially	int(3)	num. (1-255)	no	>= H300 E3.0 ger/eng: CONNSTEP (start with content 1)	1
CONNTYPE (enhanced) (AMO-TEXT)	connection type	char(10) / def: 1	text (0-5)	no	>= H300 V3.4 ger/eng: CONNTYPE 2 additional values Connection type: INTERN = internal connection INCO = incoming connection OUTGO = outgoing connection ACACT = activity of attendant LOAD = load of processors	0
CONSEC	connection duration of part second	int(2)	num.	no	H300 ger/eng: CONSEC R6.5/6.6: CONSEC	0
CONTOT (+H8000)	connection duration to tal in 1/10 second	int(6) H8:int(10)	num.	no	H300 ger: CONTSEC H300 eng: CONSECT R6.5/6.6: CONSECT H8000 Element No 4	0

Short name	Long name (eng)	Type (Len) / Default Length	Range of values	Man-datory field	Element description	De-fault value
COPIN (enhanced) (AMO-TEXT)	class of pin	char(10) / def: 2	text (0-10)	no	>= H300 V3.4 ger/eng: COPIN R6.5/6.6: DISAIND 0 = No valid class of PIN 1 = Manual PIN for mobile user 2 = Business PIN for long service 3 = Business PIN used for the call 4 = Private PIN used for the call 5 = Project code used for the call 6 = ID card for mobile user 7 = Switchover code 8 = PIN for service ID 9 = CDR account code 10 = PIN for dialing pattern check	0
CPACKLOST (new H8000)	Originating Side Pack ets Lost	int(10)	num	no	only for (no H300 field): H8000 Element No 74	0
CPACKRCVD (new H8000)	Originating Side Pack ets Received	int(10)	num	no	only for (no H300 field): H8000 Element No 72	0
CPACKSENT (new H8000)	Originating Side Pack ets Send	int(10)	num	no	only for (no H300 field): H8000 Element No 70	0
CRESINFO (new H8000)	Originating Side Res ervation Used	int(1)	num	no	only for (no H300 field): H8000 Element No 69	0
CSIGCOMP (new H8000)	BG Origination Call Completion Code	int(1)	num	no	only for (no H300 field): H8000 Element No 95	0
CSUPLINFO (new H8000)	BG Origination - Busi ness Feature Code	int(1)	num	no	only for (no H300 field): H8000 Element No 96	0
CTOSUSED (new H8000)	Originating Side TOS Used	int(3)	num	no	only for (no H300 field): H8000 Element No 68	0
CTRDIFF (old)	call charge sum for sta tion difference	int(5)	num.	no	H300 ger/eng: CTRDIFF only GET functionality (charge data recording per station) with format No.>=97	0

Reference Material

Short name	Long name (eng)	Type (Len) / Default Length	Range of values	Mandatory field	Element description	Default value
CTRNSDELY (new H8000)	Originating Side Average Transmission Delay	int(10)	num	no	only for (no H300 field): H8000 Element No 76	0
CTRTOT (old)	call charge sum for station total	int(5)	num.	no	H300 ger/eng: CTRTOT only GET functionality (charge data recording per station) with format No.>=97	0
CUSTNAME (new H8000)	Customer Name / Number	char(16)	text	no	only for (no H300 field): H8000 Element No 7	blank
DAILID (new H8000)	Dailing and Presubscription Indicator	int(1)	text	no	only for (no H300 field): H8000 Element No 54	0
DAILINFOBG (new H8000)	BG Access Code / Dailing Information	char(5)	text	no	only for (no H300 field): H8000 Element No 99	blank
DEPARTNAME (new H8000)	BG Department Name	char(20)	text	no	only for (no H300 field): H8000 Element No 102	blank
DESTIP (new H5000)	destination gateway	char(15)	text	no	only for (no H300 field): H5000	blank
DESTLV0	node number of destination number (new/connect party)	int(3)	num. (0-999)	no	>= H300 E3.0 ger/eng: DESTLV0	0
DESTLV1	subdomain number of destination number (new/connect party)	int(3)	num. (0-255)	no	>= H300 E3.0 ger/eng: DESTLV1	0
DESTLV2	domain number of destination number (new/connect party)	int(2)	num. (0-31)	no	>= H300 E3.0 ger/eng: DESTLV2	0

Short name	Long name (eng)	Type (Len) / Default Length	Range of values	Man-datory field	Element description	De-fault value
DESTPID (AMO-TEXT STNID) (new)	identification number of destination number (new/ connect party) (uses value from element STNID)	char(10) / def: 1 H8:int(3)	text (0-8) H8:num	no	>= H300 UNITY ger/eng: DESTPID R6.5/6.6: DESTID (see AMO-TEXT) For dialed numbers it is not always possible to determine the ID of the destination party. In these cases "unknown" is output. For connected parties (and new destination parties that might occur) the ID is the same as that STNID in AMO TEXT listed here: 1 = VF =Operator console 2 = HAS= PBX set 3 = NST= Night server 4 = TLN = Subscriber 5 = SM= Service module (for field paying party ID only) 6 = SPC= Special charging (for field paying party ID only) 7 = MEQ= Maintenance equipment (for field paying party ID only) 8 = PUP= Public phone via SL MAR to OpenScape (for field paying party ID only) 9 = MOB = Mobile user 10 = KEY = Number of the other line (keyset)	0
DESTPSTAT (new H8000)	Destination Party Query Status	int(2)	num.	no	only for (no H300 field): H8000 Element No 47	9
DESTPTY (enhanced for H150) (+H8000)	destination number (new/ connected party) called party	char(22) max. range char(25) H8:char(30)	text 0-9,*,#	no	>= H300 E3.0 ger/eng: DESTPTY H300 ger: VDESTNR H300 eng: VDESTNO R6.5/6.6: DESTNO only filled if connected H8000 Element No 11	blank

Reference Material

Short name	Long name (eng)	Type (Len) / Default Length	Range of values	Mandatory field	Element description	Default value
DFANUUMID (new H8000)	BG Terminating Station Facility ID	char(7)	num	no	only for (no H300 field): H8000 Element No 94	blank
DFATYPE (new H8000)	BG Terminating Facility Type	int(1)	num	no	only for (no H300 field): H8000 Element No 92	0
DISPCHRG	display charge, charge of the connection shown on display with include value-added tax	float char(13) / def: 9	num., with comma	no	>= H300 V3.4 ger/eng: DIS PCHRG calculated during the connection Not used in the US.	0
DISPCHRN	netto display charge, charge of the connection shown on display without value-added tax	float char(13) / def: 9	num., with comma	no	>= H300 E3.0 ger/eng: DIS PCHRN calculated during the connection Not used in the US.	0
DISPCHRN	netto display charge, charge of the connection shown on display without value-added tax	float char(13) / def: 9	num., with comma	no	>= H300 E3.0 ger/eng: DISPCHRN calculated during the connection	0
DJITTER (new H8000)	Terminating Side Inter arrival JITTER Lost	int(10)	num	no	only for (no H300 field): H8000 Element No 85	0
DLINEUSED (new H8000)	Terminating Side Co dec Used	int(7)	num	no	only for (no H300 field): H8000 Element No 77	0
DMDRID (new H8000)	BG Terminating MDR Customer ID	char(10)	text	no	only for (no H300 field): H8000 Element No 88	blank
DNBASESTA (new H8000)	Forwarded Base Station	char(20)	text	no	only for (no H300 field): H8000 Element No 65	Blank
DNIS (new US)	contains text strings related to the called party (dialed number)	char(22)	text	no	>= H300 UNITY ger/eng: DNIS R6.5/6.6: DNIS The DNIS number is provided by the PSTN and is related to the called party.	blank
DOCTRCVD (new H8000)	Terminating Side Oc tets Received	int(10)	num	no	only for (no H300 field): H8000 Element No 83	0

Short name	Long name (eng)	Type (Len) / Default Length	Range of values	Man-datory field	Element description	De-fault value
DOCTSEND (new H8000)	Terminating Side Oc tets Send	int(10)	num	no	only for (no H300 field): H8000 Element No 81	0
DPACKLOST (new H8000)	Terminating Side Pack ets Lost	int(10)	num	no	only for (no H300 field): H8000 Element No 84	0
DPACKRCVD (new H8000)	Terminating Side Pack ets Received	int(10)	num	no	only for (no H300 field): H8000 Element No 82	0
DPACKSENT (new H8000)	Terminating Side Pack ets Send	int(10)	num	no	only for (no H300 field): H8000 Element No 80	0
DRESINFO (new H8000)	Terminating Side Res ervation Used	int(1)	num	no	only for (no H300 field): H8000 Element No 79	0
DTOSUSED (new H8000)	Terminating Side TOS Used	int(3)	num	no	only for (no H300 field): H8000 Element No 78	0
DTRNSDELY (new H8000)	Terminating Side Aver age Transmission De lay	int(10)	num	no	only for (no H300 field): H8000 Element No 86	0
EGCARRIER (new H8000)	Egress Carrier Identifi cation	char(6)	text	no	only for (no H300 field): H8000 Element No 22	Blank
END10	end-of-connection 1/10 of a second	int(1)	num.	yes	H300 ger/eng: END10 R6.5/6.6: END10	0
ENDDAY	end-of-connection day	int(2)	num.	yes	H300 ger/eng: ENDDAY R6.5/6.6: ENDDAY	0
ENDHOUR	end-of-connection hour	int(2)	num.	yes	H300 ger/eng: ENDHOUR R6.5/6.6: ENDHOUR	0
ENDMIN	end-of-connection minute	int(2)	num.	yes	H300 ger/eng: ENDMIN R6.5/6.6: ENDMIN	0
ENDMONTH	end-of-connection month	int(2)	num.	yes	H300 ger/eng: ENDMONTH R6.5/6.6: ENDMONTH	0
ENDSEC	end-of-connection sec ond	int(2)	num.	yes	H300 ger/eng: ENDSEC R6.5/6.6: ENDSEC	0
ENDYDAY	end-of-connection day of the year	int(3)	num.	no	H300 ger/eng: ENDYDAY R6.5/6.6: ENDYDAY	0

Reference Material

Short name	Long name (eng)	Type (Len) / Default Length	Range of values	Mandatory field	Element description	Default value
ENDYEAR	end-of-connection year	int(4)	num.	yes	H300 ger/eng: ENDEAR R6.5/6.6: ENDEAR	0
EVENTID (new H8000)	Identification of Event	int(1)	num.	no	only for (no H300 field): H8000 Element No 107	Blank
EXPENS (AMO-TEXT)	expensive connection	char(10) / def: 1	text (0-3)	no	>= H300 V3.4 ger/eng: EXPENS R6.5/6.6: LCRXPATH Values: 0 = BILLIG = Inexpensive connections 1 = TEUER= Expensive connections 2 = GRATIS_A = Free of charge A-party 3 = GRATIS_B = Free of charge B-party	0
FACA (new US)	facility number/parameter for FAX/TTA access - BREAKIN	char(5)	text	no	>= H300 UNITY ger/eng: FACA R6.5/6.6: FACA This parameter is provided as part of NI2 PRI support	blank
FACB (new US)	facility number/parameter for FAX/TTA access - BREAKOUT	char(5)	text	no	>= H300 UNITY ger/eng: FACB R6.5/6.6: FACB This parameter is provided as part of NI2 PRI support	blank
FAXPAGES (new H8000)	Number of Fax Pages Sent / Received	int(10)	num.	no	only for (no H300 field): H8000 Element No 102	0
FIXTEXT	Fixed Text				Standard Element	0
FLAG1 (old)	generation of flag byte 1	char(2)	text	no	H300 ger/eng: FLAG1 (only using data processing system / only using DVA) The generation of flag byte one, only if using a data processing system behind PBX.	blank

Short name	Long name (eng)	Type (Len) / Default Length	Range of values	Man-datory field	Element description	De-fault value
FLAG2 (old)	generation of flag byte 2	char(2)	text	no	H300 ger/eng: FLAG2 (only using data processing system / only using DVA) The generation of flag byte two, only if using a data processing system behind PBX.	blank
FRL (new H8000)	BG Facility Restriction Level	int(1)	num.	no	only for (no H300 field): H8000 Element No 98	0
GENID (new H5000)	ID of generating gate keeper	char(15)	text	no	only for (no H300 field): H5000	blank
GENLV0 (only COL)	node number of generating node	int(3)	num.	no	No H300 element	0
GENLV1 (only COL)	subdomain number of generating node	int(3)	num.	no	No H300 element	0
GENLV2 (only COL)	domain number of generating node	int(2)	num.	no	No H300 element	0
GLOBLV0	node number of leg id - global for node	int(3)	num. (0-999)	no	>= H300 UNITY ger/eng: GLOBLV0 on H300 E3.0 ger/eng: LEGLV0 on H300 E1.0/2.0 ger/eng: CALLEV0 on H300 V3.4 ger/eng: CALLNODE identical with LEGLV0	0
GLOBLV1	subdomain number of local global (leg) id - global for node	int(3)	num. (0-255)	no	>= H300 UNITY ger/eng: GLOBLV1 on H300 E3.0 ger/eng: LEGLV1 on H300 E1.0/2.0 ger/eng: CALLEV1 identical with LEGLV1	0

Reference Material

Short name	Long name (eng)	Type (Len) / Default Length	Range of values	Mandatory field	Element description	Default value
GLOBLLV2	domain number of local global (leg) id - global for node	int(2)	num. (0-31)	no	>= H300 UNITY ger/eng: GLOBLLV2 on H300 E3.0 ger/eng: LEGLV2 on H300 E1.0/2.0 ger/eng: CALLEV2 identical with LEGLV2	0
GLOBLNODE (new H8000)	Local Global Node ID / Leg ID	char(10)	text	no	only for (no H300 field): H8000 Element No 121	Blank
GLOBLSEQ	local global (leg) id, if a target user may be changed with an existing connection, a new local global (leg)_id will be generated, the tread (global) call_id it self wouldn't be changed - global for node	int(32)	num.	no	>= H300 UNITYger/eng: GLOBLLSEQ on H300 E3.0 ger/eng: LEGSEQ >= H300 V3.4 ger/eng: CALLSEQU identical with LEGSEQ H8000 Element No 122	0
GWCODE (new H5000)	gateway access code	char(5)	text	no	only for (no H300 field): H5000	blank
H150INFO (new H150)	Type of call (e.g. outg., inc. ...)	char(2)	text	no	only for (no H300 field): H150-LAN and H150-ALL	2
H5CALLINFO (new H5000)	Call Forwarding / Diverting	char(1)	text	no	only for (no H300 field): H5000	C
HOLDDUR (new)(US) (IM Package)	hold duration in 1/10 seconds	int(5)	num. (0-65535)	no	>= H300 UNITY ger/eng: HOLDDUR	0
ICNINRID (new H8000)	Incoming IC/ICN Routing Indicator	int(1)	num.	no	only for (no H300 field): H8000 Element No 60	0
ICNOUTRID (new H8000)	Outgoing IC/ICN Routing Indicator	int(1)	num.	no	only for (no H300 field): H8000 Element No 62	0
ICNRSTAT (new H8000)	IC/ICN Call Event Status	int(2)	num.	no	only for (no H300 field): H8000 Element No 61	0

Short name	Long name (eng)	Type (Len) / Default Length	Range of values	Man-datory field	Element description	De-fault value
IDPP (old) (AMO-TEXT)	station CDR chargees, GET functionality	char(10) / def: 1	text	no	H300 ger/eng: IDPP only GET functionality (charge data recording per station) with format No.>=97 The output of the station ID as a text string (administered through AMO-TEXT), only GET-functionality (charge data recording per station)	0
INCACONDUR (new H8000)	Incoming Carrier Con nect Time	int(26)	num.	no	only for (no H300 field): H8000 Element No 50	Blank
INCARELDUR (new H8000)	Outgoing Carrier Re lease Time	int(26)	num.	no	only for (no H300 field): H8000 Element No 53	Blank
INFOTYPE (AMO-TEXT)	type of information	char(10) / def: 1	text (0-2)	no	>= H300 E3.0 ger/eng: INFO TYPE If charging information from carrier, then units or amounts. Not used in the US.	0
INGCARRIER (new H8000)	Ingress Carrier Identifi cation	char(6)	text	no	only for (no H300 field): H8000 Element No 21	Blank
INPHCONT (new H8000)	Incoming phone-con text	int(10)	text	no	only for (no H300 field): H8000 Element No 105	Blank
INTNBCHA (+H8000)	B-channel of the real trunk number of the non-record point	int(2) H8:int(10)	num.	no	>= H300 E2.0 ger/eng: INTNBCHA H8000 Element No 33	0
INTNLIST	imaginary trunk num ber created of INT NREAL	int(30)	num.	no	>= H300 E1.0 ger/eng: INTNLIST H8000 Element No 126	0

Reference Material

Short name	Long name (eng)	Type (Len) / Default Length	Range of values	Man-datory field	Element description	De-fault value
INTNREAL	real trunk number of the non-recording point (see TKNOREAL)	int(5)	num.	no	>= H300 E1.0 ger/eng: INT NREAL R6.5/6.6: DTRUNKID H8000 Element No 126 The real trunk number of non-re cording point (see also TKNO REAL). This field represents the "real" trunk number of the non-record-ing point. But again, forget the word "trunk", as this field actually means "line" number. This field is taken from the internal "line" number of a channel. For analog trunks, each analog trunk channel has its own unique "line" number. For digital trunks, each of the channels on a digital trunk span share a common "line" number, so you cannot tell which "B-channel" is being used. If a station-to-station (internal) call produces a CDR record, INTNREAL will display the "line" number of the called station. Example #1: If station 2001 dials 9-972-355-4321, then the CDR record will show "2001" in Field 15 (CALLIP TY), "9" in field 18 (ROUTCN), "9723554321" in field 16 (DESTP TY), the trunk line number in field 19 (TKNOREAL), and the station (2001) line number in field 20 (INTNREAL). So for station calls, the data in this field is not needed, as we already know the station number. We really do not need the "line" number in this example. Example #2: If a trunk call enters the HP4K, then exits the HP4K on another trunk (tandem call), the CDR fields TKNOREAL and INT NREAL show the "line" numbers for both trunks that were used. This example is the only practical use for the field INTNREAL.	0

Short name	Long name (eng)	Type (Len) / Default Length	Range of values	Man-datory field	Element description	De-fault value
INTNTGRID (new H8000)	Incoming Trunk Group Signaling Type	int(1)	num.	no	only for (no H300 field): H8000 Element No 38	0
INTNTRGR (new) (+H8000)	real trunk group number of the non-recording point (see INTNREAL)	int(3) H8:int(16)	num. (0-512)	no	>= H300 UNITY ger/eng: INTNTRGR When the nonrecording point is a line (station) instead of a trunk, zero (000) is output here. H8000 Element No 32	0
JIPINFO (new H8000)	Jurisdiction Information Parameter (JIP)	int(10)	num.	no	only for (no H300 field): H8000 Element No 44	0
JIPSOURCE (new H8000)	JIP Source Indicator	int(1)	num.	no	only for (no H300 field): H8000 Element No 42	5
KEYLV0	node number of key line used party	int(3)	num.	no	>= H300 E3.0 ger/eng: KEYLV0	0
KEYLV1	subdomain number of key line used party	int(3)	num.	no	>= H300 E3.0 ger/eng: KEYLV1	0
KEYLV2	subdomain number of key line used party	int(2)	num.	no	>= H300 E3.0 ger/eng: KEYLV2	0
KEYPTY	key line used party, the selected line (number) on a key phone providing multiple lines	char(22)	text	no	>= H300 E3.0 ger/eng: KEYPTY For information about the right or left justified output field, see CALLEPTY description of item	blank
LAYHIGINFO (new H8000)	High-Layer Compatibility Information Delivery	int(1)	num.	no	only for (no H300 field): H8000 Element No 58	0
LAYLOWINFO (new H8000)	Low-Layer Compatibility Information Delivery	int(1)	num.	no	only for (no H300 field): H8000 Element No 57	0
LCALLENO	length of the called party	int(2)	num. (0-22)	no	>= H300 E3.0 ger: LCALLENR eng: LCALLENO	0

Reference Material

Short name	Long name (eng)	Type (Len) / Default Length	Range of values	Mandatory field	Element description	Default value
LCALLENO (LCALLENR)	length of the called party	int(2)	num. (0-22)	no	>= H300 E3.0 ger: LCALLENR eng: LCALLENO	0
LCRROUT (new H150)	LCR route	char(2)	text	no	only for (no H300 field): H150-LAN and H150-ALL	blank
LCRROUT (new H150)	LCR route	char(2)	text	no	only for (no H300 field): H150-LAN and H150-ALL	blank
LDESTNO (LDESTNR)	length of the destination number	int(2)	num. (0-22)	no	>= H300 E3.0 ger: LDESTNR eng: LDESTNO R6.5/6.6: LDESTNO	0
LISTTYPE (old) (AMO-TEXT)	Type of station, CDR list type as a text string, only GET functionality	char(16)	text	no	>= H300 ger/eng: LISTTYPE only GET functionality (charge data recording per station) with format No.>=97 Values: IND = Individual call charge calculation SUM = Sum call charge calculation (partial calculation.) TOTAL = Total call charge calculation	blank
LRNNO (new H8000)	Location Routing Number (LRN)	int(10)	num.	no	only for (no H300 field): H8000 Element No 45	0
LRNSOURCE (new H8000)	LRN Source Indicator	int(1)	num.	no	only for (no H300 field): H8000 Element No 43	5
MEDIATYPE (new H8000)	Media Type	int(1)	num.	no	only for (no H300 field): H8000 Element No 104	0
MOBUCLV0 (not netwide)	node number of mobile user calling party	int(3)	num.	no	>= H300 E3.0 ger/eng: MOBUCLV0	0
MOBUCLV1 (not netwide)	subdomain number of mobile user calling party	int(3)	num.	no	>= H300 E3.0 ger/eng: MOBUCLV1	0

Short name	Long name (eng)	Type (Len) / Default Length	Range of values	Man-datory field	Element description	De-fault value
MOBUCLV2 (not netwide)	domain number of mo bile user calling party	int(2)	num.	no	>= H300 E3.0 ger/eng: MOBUCLV2	0
MOBUCPTY (not netwide)	mobile user calling par ty, user identifies at calling station with PIN	char(22)	text	no	>= H300 E3.0 ger/eng: MOBUCPTY For information about the right or left justified output field, see CALLEPTY description.	blank
MODEM (new R6.5/ R6.6)	modem pool number	char(2)	text	no	only for (no H300 field) R6.5/6.6: MODEM	blank
MODEM (new R6.5/ R6.6)	modem pool number	char(2)	text	no	only for (no H300 field) R6.5/6.6: MODEM	blank
MSGNO (+H8000)	consecutive number of message by S&F (Store a. Forward) con nection	int(4) H8:int(6)	num.	no	H300 ger: MSGNR H300 eng: MSGNO H8000 Element No 1	0
MSN (new H150)	MSN used	char(11)	text	no	only for (no H300 field): H150-LAN and H150-ALL (no val ue)	blank
NCT (new US)	indicate calls in which network calltransfer (NCT) was successful	char(1)	"-" or "N"	no	>= H300 UNITY ger/eng: NCT R6.5/6.6: NCT "-" dash = empty N = true A flag, indicating that a network call transfer (NCT) was suc cessfully performed. In a network call transfer, the transfer is per formed in the public network and all connections via the OpenScape/ HiPath 4000 are released. CDR of OpenScape/HiPath 4000 is not able to monitor charg ing of the remaining call any more (1 char)	"-"
NETCARA (new US)	access code of the net work carrier of the BREAKIN trunk	int(4)	num.	no	>= H300 UNITY ger/eng: NET CARA R6.5/6.6: NETCARA	0

Reference Material

Short name	Long name (eng)	Type (Len) / Default Length	Range of values	Man- datory field	Element description	De- fault value
NETCARB (new US)	access code of the net work carrier of the BREAKOUT trunk	int(4)	num.	no	>= H300 UNITY ger/eng: NET CARB R6.5/6.6: NETCARB	0
NETPULS	pulses, charge info from net	int(5)	num. (0-65535)	no	>= H300 E3.0 ger/eng: NETPULS	0
NETSVCA (new US)	type of service for long distance carrier for BREAKIN	int(2)	num.	no	>= H300 UNITY ger/eng: NETSVCA R6.5/6.6: NETSVCA	0
NETSVCB (new US)	type of service for long distance carrier for BREAKOUT	int(2)	num.	no	>= H300 UNITY ger/eng: NETSVCB R6.5/6.6: NETSVCB	0
NETTYPE (AMO-TEXT)	network description	char(10) / def: 1	text (0-3)	no	>= H300 V3.4 ger/eng: NETTYPE Values are: ANA = Analog network IDN = Integrated Data Network ISDN = Integrated Services Digi tal Network	0
NODETXT (new R6.5/ R6.6)	node indentification (text)	char(17)	text	no	only for (no H300 field) R6.5/6.6: NODEID	blank
NODETXT (new R6.5/ R6.6)	node indentification (text)	char(17)	text	no	only for (no H300 field) R6.5/6.6: NODEID	blank
ORGNATADR (new H8000)	Orig. Nature of Ad dress	int(3)	num.	no	only for (no H300 field): H8000 Element No26	0
ORGNATADR (new H8000)	Orig. Nature of Ad dress	int(3)	num.	no	only for (no H300 field): H8000 Element No26	0
OSAA (new US)	operator service ac cess for BREAKIN	int(1)	num.	no	>= H300 UNITY ger/eng: OSAA R6.5/6.6: BEARERA	0

Short name	Long name (eng)	Type (Len) / Default Length	Range of values	Man-datory field	Element description	De-fault value
OSAB (new US)	operator service access for BREAKOUT	int(1)	num.	no	>= H300 UNITY ger/eng: OSAB R6.5/6.6: BEARERB	0
OTCACON DUR (new H8000)	Outgoing Carrier Connect Time	int(26)	num.	no	only for (no H300 field): H8000 Element No 52	Blank
OUTDAY	current date of the out put day of the year	int(3)	num.	no	H300 ger/eng: OUTDAY only on H300 V3.4 ger: OUTDAYN R6.5/6.6: OUTYDAY	0
OUTDAYC (AMO-TEXT)	current date of the out put name of the day	char(10) / def: 1	text	no	H300 ger/eng: OUTDAYC R6.5/6.6: OUTDAYC	0
OUTDAYN	current date of the out put day	int(2)	num.	no	H300 ger/eng: OUTDAYN R6.5/6.6: OUTDAYN	0
OUTHOUR	current date of the out put hour	int(2)	num.	no	H300 ger/eng: OUTHOUR R6.5/6.6: OUTHOUR	0
OUTMIN	current date of the out put minute	int(2)	num.	no	H300 ger/eng: OUTMIN R6.5/6.6: OUTMIN	0
OUTMONC (AMO-TEXT)	current date of the out put name of the month	char(10) / def: 2	text	no	H300 ger/eng: OUTMONC R6.5/6.6: OUTMONC	0
OUTMONN	current date of the out put month	int(2)	num.	no	H300 ger/eng: OUTMONN R6.5/6.6: OUTMONN	
OUTSEC	current date of the out put second	int(2)	num.	no	H300 ger/eng: OUTSEC R6.5/6.6: OUTSEC	0
OUTYEAR	current date of the out put year	int(4)	num.	no	H300 ger/eng: OUTYEAR R6.5/6.6: OUTYEAR	0
PARTYINFO (new H8000)	User-to-User Informa tion / Fast Select	int(1)	num.	no	only for (no H300 field): H8000 Element No 59	0

Reference Material

Short name	Long name (eng)	Type (Len) / Default Length	Range of values	Man-datory field	Element description	De-fault value
PAYPART (+H8000)	paying party, chargee of a connection	char(22) H8:char(20)	text 0-9,*,#	no	H300 ger: PAYPART H300 eng: CHRGEE R6.5/6.6: SRCNO (DEFPP = define PAYPART) H8000 Element No 13	blank
PIN	personal ID	char(12)	text	no	H300 ger: VIDCARD H300 eng: PIN R6.5/6.6: DISAPIN	blank
PINLEN	length of the personal ID	int(2)	num. (0-12)	no	H300 ger: LIDCARD H300 eng: PINLEN	0
PPLV0	node number of paying party	int(3)	num. (0-999)	no	>= H300 E3.0 ger/eng: PPLV0 >= H300 E1.0 ger/eng: LEVEL0 >= H300 V3.4 ger/eng: NODENR	0
PPLV1	subdomain number of paying party	int(3)	num. (0-255)	no	>= H300 E3.0 ger/eng: PPLV1	0
PPLV2	domain number of paying party	int(2)	num. (0-31)	no	>= H300 E3.0 ger/eng: PPLV2 >= H300 E1.0 ger/eng: LEVEL2	0
PRICIC (new H150)	PRI CIC	char(4)	text	no	only for (no H300 field): H150-LAN	blank
PRINODAL (new H150)	PRI Nodal Service	char(2)	text	no	only for (no H300 field): H150-LAN	blank
PRIWATS (new H150)	PRI WATS-Band	char(1)	text	no	only for (no H300 field): H150-LAN	blank

Short name	Long name (eng)	Type (Len) / Default Length	Range of values	Man-datory field	Element description	De-fault value
QUEUEDUR	queuing duration, total queuing duration (call queue of attendant) in 1/10 seconds	int(5)	num.	no	>= H300 E3.0 ger/eng: QUEUEDUR	0
RECEIVID (new H5000)	ID of receiving gate keeper	char(15)	text	no	only for (no H300 field): H5000	blank
RECID (new H8000)	unique Record ID	char(59)	text	no	only for (no H300 field): H8000 Element No 6	blank
RECIDEN (new H8000)	Record Type / Identification for used format	int(8)	num	no	only for (no H300 field): H8000 Element No 2	00000 000
RECNO (old)	consecutive number of the record to be output for each selection group	int(32)	num. (1-9999)	no	H300 ger: RECNR H300 eng: RECNO R6.5/6.6: RECNO	0
RECPT	record point 0=transit between systems 1=breakout to central office 2=Recording direct at origin 3=Recording direct at origin and breakout to central office 4=Incoming	int(1)	num. (0-4)	no	>= H300 E1.0 ger/eng: RECPT	0
RECTYPE (new)	record type 0=Empty 1=only Accounting 2=only Traffic 3=Accounting and traffic	int(1)	num. (0-3)	no (yes if UNITY)	>= H300 UNITY ger/eng: RECTYPE	3
RELDUR (new H8000)	Call Release Time	int(26)	num.	no	only for (no H300 field): H8000 Element No 49	Blank

Reference Material

Short name	Long name (eng)	Type (Len) / Default Length	Range of values	Mandatory field	Element description	Default value
RING10	ring duration of part 1/ 10 seconds with format minute:second:1/ 10second	int(1)	num.	no	>= H300 E3.0 ger/eng: RING10	0
RINGDUR (+H8000)	ring duration, total ring duration in format 1/10 seconds	int(3) H8:int(26)	num.	no	>= H300 V3.4 ger/eng: RINGDUR H8000 Element No 48	0 H8:Blank
RINGMIN	ring duration of part minutes with format minute:second:1/ 10second	int(2)	num.	no	>= H300 E3.0 ger/eng: RINGMIN	0
RINGSEC	ring duration of part seconds with format minute:second:1/ 10second	int(2)	num.	no	>= H300 E3.0 ger/eng: RINGSEC	0
ROUTCC (AKZ2) (AMO-TEXT)	route code as a text string	char(10) / def: 6	text (0-999'999)	no	H300 ger/eng: ROUTCC	0
ROUTCN (AKZ1)	route code	int(6)	num.	no	>= H300 V3.4 ger/eng: ROUTCN R6.5/6.6: ACCESSC	0
ROUTESEL (new H8000)	Route Selection	int(1)	num.	no	only for (no H300 field): H8000 Element No29	0
RTINGLV0	node number of redirecting party	int(3)	num.	no	>= H300 E3.0 ger/eng: RTINGLV0	0
RTINGLV1	subdomain number of redirecting party	int(3)	num.	no	>= H300 E3.0 ger/eng: RTINGLV1	0
RTINGLV2	domain number of redirecting party	int(2)	num.	no	>= H300 E3.0 ger/eng: RTINGLV2	0
RTINGPTY	redirecting party, party that redirects a call	char(22)	text	no	>= H300 E3.0 ger/eng: RTINGPTY party who forwarded this call (A-party - in record of B-party)	blank

Short name	Long name (eng)	Type (Len) / Default Length	Range of values	Man-datory field	Element description	De-fault value
RTIONLV0	node number of redirection party	int(3)	num.	no	>= H300 E3.0 ger/eng: RTIONLV0	0
RTIONLV1	subdomain number of redirection party	int(3)	num.	no	>= H300 E3.0 ger/eng: RTIONLV1	0
RTIONLV2	domain number of redirection party	int(2)	num.	no	>= H300 E3.0 ger/eng: RTIONLV2	0
RTIONPTY	redirection party, party where a call is redirected to	char(22)	text	no	>= H300 E3.0 ger/eng: RTIONPTY R6.5/6.6: DIVERTNO	0
RTPID (new H8000)	indication secure RTP used	int(1)	num.	no	only for (no H300 field): H8000 Element No 108	Blank
RURAL (AM-TEXT)	flag if rural call	char(10) / def: 1	num. (0-1)	no	>= H300 E3.0 ger/eng: RURAL	0
SCPINFO (new H8000)	SCP / Service Feature Codes	int(3)	num.	no	only for (no H300 field): H8000 Element No 63	27
SECDUR (new H8000)	Call Segment Duration	int(10)	num.	no	only for (no H300 field): H8000 Element No 9	0
SELGRNO	selection group number	int(1)	num. (1-4)	no	H300 ger: SELGRUNU H300 eng: SELGRNO >= H300 E3.0 eng: SELGRUNO R6.5/6.6: SELGRNO	0
SERVICE (AMO-TEXT) (+H8000)	service code	char(10) / def: 1 H8:char(17)	text (0-6)	no	H300 ger/eng: SERVICE R6.5/6.6: SERVICE H8000 Element No 64	0
SHFININDS (new H8000)	Ingress DS0 ID (Ingress Shelf)	int(10)	num.	no	only for (no H300 field): H8000 Element No24	0
SHFINOUTDS (new H8000)	Egress DS0 ID (Ingress Shelf)	int(10)	num.	no	only for (no H300 field): H8000 Element No25	0
SHFOUINDS (new H8000)	Ingress DS0 ID (Egress Shelf)	int(10)	num.	no	only for (no H300 field): H8000 Element No36	0

Reference Material

Short name	Long name (eng)	Type (Len) / Default Length	Range of values	Mandatory field	Element description	Default value
SHFOUOUTDS (new H8000)	Egress DS0 ID (Egress Shelf)	int(10)	num.	no	only for (no H300 field): H8000 Element No37	0
SIDANI (new US)	contain text strings re leated to the calling party	char(25)	text	no	>= H300 UNITY ger/eng: SIDANI (Displayname des Anrufers)	blank
SIGDATA (AMO-TEXT) (+H8000)	indicates whether the output data record is correct / incorrect or double	char(10) / def: 1	text (0-1)	no	H300 ger/eng: SIGDATA R6.5/6.6: ERRDATA H8000 Element No 66	0
SIGTYPINCO (new H8000)	Ingress Signaling Type - IN	int(2)	num.	no	only for (no H300 field): H8000 Element No30	0
SIGTYPOUTC (new H8000)	Egress Signaling Type - OUT	int(2)	num.	no	only for (no H300 field): H8000 Element No31	0
SOURCEIP (new H5000)	source gateway	char(15)	text	no	only for (no H300 field): H5000	blank
ST10	start-of-connection 1/ 10 of a second	int(1)	num.	no	H300 ger/eng: ST10 R6.5/6.6: ST10	0
STDATETIME (new H8000)	Start Time (date / time stamp to 1/10)	char(26)	date time fraction(1)	no	only for (no H300 field): H8000 Element No 3	1970-01-01 01:01:000
STDAY	start-of-connection day	int(2)	num.	no	H300 ger/eng: STDAY R6.5/6.6: STDAY	0
STHOUR	start-of-connection hour	int(2)	num.	no	H300 ger/eng: STHOUR R6.5/6.6: STHOUR	0
STMIN	start-of-connection minute	int(2)	num.	no	H300 ger/eng: STMIN R6.5/6.6: STMIN	0
STMONTH	start-of-connection month	int(2)	num.	no	H300 ger/eng: STMONTH R6.5/6.6: STMONTH	0
STNID (AMO-TEXT) (+H8000)	station ID	char(10) / def: 1 H8:int(3)	text (0-8) H8:num	no	H300 ger: SUBSID H300 eng: STNID (PAYPART) R6.5/6.6: SOURCEID H8000 Element No 40	0

Short name	Long name (eng)	Type (Len) / Default Length	Range of values	Man-datory field	Element description	De-fault value
STNSTAT (new H8000)	Paying Party Query Status	int(2)	num.	no	only for (no H300 field): H8000 Element No 46	9
STSEC	start-of-connection second	int(2)	num.	no	H300 ger/eng: STSEC R6.5/6.6: STSEC	0
STYDAY	start-of-connection day of the year	int(3)	num.	no	H300 ger/eng: STYDAY R6.5/6.6: STYDAY	0
STYEAR	start-of-connection year	int(4)	num.	no	H300 ger/eng: STYEAR R6.5/6.6: STYEAR	0
SUBADCALLE (new H8000)	Called Party Subad dress Delivery	int(1)	num.	no	only for (no H300 field): H8000 Element No 56	0
SUBADCALLI (new H8000)	Calling Party Subad dress Delivery	int(1)	num.	no	only for (no H300 field): H8000 Element No 55	0
SUPLSERV (change) (+ chg. US) (AMO-TEXT) (+H8000)	supplement service	char(10) / def: 2 H8:int(1)	text (0-58) H8:num	no	>= H300 V3.4 ger/eng: SUPLSERV H8000 Element No 18	0
SWITCHID (new H8000)	Switch ID	char(16)	text	no	only for (no H300 field): H8000 Element No 5	blank
SWP (change US) (AMO-TEXT)	call phases	char(10) / def: 2	text (0-10)	no	>= H300 V3.4 ger/eng: SWP	0
SWULOAD (new)	switching unit load, 1- 1000 promille	int(4)	num.	no	>= H300 UNITY ger/eng: SWULOAD	0
SYNCH (new R6.5/6.6) (AMO-MFORM)	indicates synchronous call	char(10) / def: 1	text (0-1)	no	only for (no H300 field) R6.5/6.6: SYNCH	0
SYSID (new COL)	system ID (system name)	char(12)	text	no	No H300 element	blank

Reference Material

Short name	Long name (eng)	Type (Len) / Default Length	Range of values	Mandatory field	Element description	Default value
SYSTYPE (new COL)	system typ	char(12)	text	no	No H300 element H300	H300
SYSVERS (new COL)	system verison	char(12)	text	no	No H300 element values: UV1.0?	value
TEXT01 (new H8000)	Text Field 01	char(50)	text	no	only for (no H300 field): H8000 Element No 27	Blank
TEXT02 (new H8000)	Text Field 02	char(50)	text	no	only for (no H300 field): H8000 Element No 28	Blank
TEXT07 (new H8000)	Text Field 07	char(30)	text	no	only for (no H300 field): H8000 Element No 109	Blank
TEXT08 (new H8000)	Text Field 08	char(30)	text	no	only for (no H300 field): H8000 Element No 110	Blank
TEXT09 (new H8000)	Text Field 09	char(30)	text	no	only for (no H300 field): H8000 Element No 111	Blank
TEXT10 (new H8000)	Text Field 10	char(30)	text	no	only for (no H300 field): H8000 Element No 112	Blank
TEXT11 (new H8000)	Text Field 11	char(30)	text	no	only for (no H300 field): H8000 Element No 113	Blank
TEXT12 (new H8000)	Text Field 12	char(30)	text	no	only for (no H300 field): H8000 Element No 114	Blank
TEXT13 (new H8000)	Text Field 13	char(30)	text	no	only for (no H300 field): H8000 Element No 115	Blank
TEXT14 (new H8000)	Text Field 14	char(30)	text	no	only for (no H300 field): H8000 Element No 116	Blank
TEXT15 (new H8000)	Text Field 15	char(30)	text	no	only for (no H300 field): H8000 Element No 117	Blank
TEXT16 (new H8000)	Text Field 16	char(30)	text	no	only for (no H300 field): H8000 Element No 118	Blank
TEXT17 (new H8000)	Text Field 17	char(30)	text	no	only for (no H300 field): H8000 Element No 119	Blank

Short name	Long name (eng)	Type (Len) / Default Length	Range of values	Man-datory field	Element description	De-fault value
TEXT18 (new H8000)	Text Field 18	char(30)	text	no	only for (no H300 field): H8000 Element No 120	Blank
TEXT19 (new H8000)	Text Field 19	char(30)	text	no	only for (no H300 field): H8000 Element No 128	Blank
TEXT20 (new H8000)	Text Field 20	char(30)	text	no	only for (no H300 field): H8000 Element No 129	Blank
TEXT21 (new H8000)	Text Field 21	char(30)	text	no	only for (no H300 field): H8000 Element No 130	Blank
THRELV0 (change)	node number of tread (global) call id, a new call id may be generat ed only in case af a new connection. - glo blal for network	int(3)	num. (0-999)	no	>= H300 UNITY ger/eng: THRELV0 on H300 E3.0 ger/eng: GLOBLV0	0
THRELV1 (change)	subdomain number of tread (global) call id - globlal for network	int(3)	num. (0-255)	no	>= H300 UNITY ger/eng: THRELV1 on H300 E3.0 ger/eng: GLOBLV1	0
THRELV2 (change)	domain number of tread (global) call id - globlal for network	int(2)	num. (0-31)	no	>= H300 UNITY ger/eng: THRELV2 on H300 E3.0 ger/eng: GLOBLV2	0
THRENODE (new H8000)	Thread Call Node ID - Orig. Node (global for the network)	char(10)	text	no	only for (no H300 field): H8000 Element No 124	Blank
THRESEQ (change)	tread (global) call id - globlal for network	int(10)	num.	no	>= H300 UNITY ger/eng: THRESEQ on H300 E3.0 ger/eng: GLOBSEQ H8000 Element No 125	0
TKNOBCHA (+H8000)	B-channel of the real trunk number of the non record point	int(2) H8:int(10)	num.	no	>= H300 E2.0 ger/eng TKNOBCHA H8000 Element No 35	0

Reference Material

Short name	Long name (eng)	Type (Len) / Default Length	Range of values	Mandatory field	Element description	Default value
TKNOLIST	imaginary trunk number created of TKNO REAL (see AMO- FBTN)	int(30)	num.	no	H300 ger: TNLIST H300 eng: TKNOLIST H8000 Element No 127	0
TKNOREAL	real trunk number of recording point	int(30)	num. (0-65535)	yes	H300 ger: TNREAL H300 eng: TKNOREAL R6.5/6.6: STRUNKID H8000 Element No 127	0
TKNOTRGR (new) (+H8000)	real trunk group number of recording point	int(3) H8:int(16)	num. (0-512)	yes	>= H300 UNITY ger/eng: TKNOTRGR H8000 Element No 34	0
TKNOTRGRID (new H8000)	Outgoing Trunk Group Signaling Type	int(1)	num.	no	only for (no H300 field): H8000 Element No 39	0
TOLLNO (new H8000)	Toll-Free Dialed Number	char(10)	text	no	only for (no H300 field): H8000 Element No 14	Blank
TRANSCNT	number of passed through transit nodes	int(2)	num. (0-99)	no	>= H300 E1.0 ger/eng: TRANSCNT	0
TRANSDN (new H8000)	Transferred from Directory Number	int(20)	num	no	only for (no H300 field): H8000 Element No 123	Blank
TRANSFER (new R6.5/6.6 (AMO-MFORM))	indicates station transfers	char(10) / def: 1	text (0-1)	no	only for (no H300 field) R6.5/6.6: TRANSFER	0
TRANSRATE (new H8000)	Transfer Rate	int(10)	num.	no	only for (no H300 field): H8000 Element No 17	blank
TRNSFLV0	node number of transferring party - (attendant console)	int(3)	num.	no	>= H300 E3.0 ger/eng: TRNSFLV0 >= H300 E2.0 ger/eng: ATTLEV0	0
TRNSFLV1	subdomain number of transferring party - (attendant console)	int(3)	num.	no	>= H300 E3.0 ger/eng: TRNSFLV1 >= H300 E2.0 ger/eng: ATTLEV1	0

Short name	Long name (eng)	Type (Len) / Default Length	Range of values	Man-datory field	Element description	De-fault value
TRNSFLV2	domain number of transferring party - (at tendent console)	int(2)	num.	no	>= H300 E3.0 ger/eng: TRNSFLV2 >= H300 E2.0 ger/eng: ATTLEV2	0
TRNSFPTY	transferring party - (at tendent console), party that transferred a call	char(22)	text., 0-9,*,#	no	>= H300 E3.0 ger/eng: TRNSFPTY H300 ger: ATNR H300 eng: ATNDNO	blank
UNANS (AMO-TEXT)	through connect / no through connect	char(10) / def: 1	text (0-1)	no	>= H300 E2.0 ger/eng: UNANS on H300 V3.4/E1.0 ger/eng: UNITERAS (see b.)	Y (lang indep)
UNITERAS (AMO-TEXT)	deletion of the station CDR resettable counter after output, only GET functionality	char(22) / def: 1	text (0-1)	no	H300 ger/eng: UNITERAS (charge data recording per station)	Y (lang. indep)
ZONE (AMO-TEXT)	distance zone	char(10) / def: 3	text 0-209	no	>= H300 V3.4 ger/eng: ZONE	0
ZONEBIT (new H5000)	bit information distance zone	char(12)	num	no	only for (no H300 field): H5000	00000 00000 00

6.2.1 Fixed Values in FTBL Elements

The following table contains a list and a short description of the pre-defined (fixed) values that can be assigned to the individual elements.

Table 64: Fixed Values in FTBL Elements

Short name	Long name	Value description (engl.)	Element description (ger.)
ATTCALLR (new H4000)	attendant intercept reason, reason for the intercept	0, internal busy 1, external busy 2, undetermined call busy 3, no answer 4, not authorized 5, DID restriction 6, do not disturb, 7, not possible 8, not available 9, no pathway 10, insufficient data 11, after check 13, busy verification 14, busy verification with busy partner 15, busy verification with locked partner 16, held call no answer 17, recall hold 18, recall 19, msg wait cb 20, recall trunk 21, bes_o_btln 22, frei_o_btln 23, recall after SR 24, call after SR 25, direct call after SR 26, diverted call after SR	

Short name	Long name	Value description (engl.)	Element description (ger.)
ATTCALLT (new H4000)	attendant call type	0, EMERGENCY_CALL 1, HOTLINE_CALL 2, LOCAL_FIRST_CALL, 3, LOCAL_RECALL 4, LOCAL_PRIO_CALL 5, CO_RECALL 6, CO_SERIAL_CALL 7, CO_IN_CONSULTATION 8, CO_ON_HOOK_IN_CONS 9, TIE_RECALL 10, TIE_SERIAL_CALL 11, TIE_IN_CONSULTATION 12, TIE_ON_HOOK_IN_CONS 13, OVFL_LOC_FIRST_CALL 14, OVFL_LOC_PRIO_CALL 15, OVFL_CO_FIRST_CALL 16, OVFL_TIE_FIRST_CALL 17, PERSONAL_CALL 18, ATND_LOOP_TRANSFER 19, CO_FIRST_CALL 20, MLPP_FLASH_OV 21, MLPP_FLASH 22, MLPP_IMMED 23, MLPP_PRTY	

Reference Material

Short name	Long name	Value description (engl.)	Element description (ger.)
BAUD	transmission speed	000 = 0 Baud 005 = 600 Baud 006 = 2400 Baud 007 = 4800 Baud 008 = 9600 Baud 009 = 48000 Baud 010 = 64000 Baud 011 = variable 012 = X25 2400 Baud 013 = X25 4800 Baud 014 = X25 9600 Baud 015 = X25 48000 Baud 016 = X25 64000 Baud 017 = X25 variable 024 = 300 Baud 025 = 3600 Baud 026 = 12000 Baud 032 = 3510 Service 033 = Displaycopy 034 = BTX 1200 75 Modem 035 = BTX 1200 1200 Modem 036 = BTX 64k 037 = 3510 kind 1 038 = 3510 kind 2 039 = 3510 kind 3 040 = 3510 kind 4 041 = 3510 kind 5 042 = 3510 kind 6 043 = 3510 kind 7 044 = 3510 kind 8 045 = 3510 kind 9 046 = 3510 kind 10 047 = 3510 kind 11 049 = 900 Baud 050 = 1200 Baud 051 = 1800 Baud	10 digits, administr. by AMO-Text, if the speed is not defined by AMO-text-table, the speed will be a number with 3 digits.

Short name	Long name	Value description (engl.)	Element description (ger.)
		052 = 7200 Baud 053 = 14400 Baud 054 = 16800 Baud 055 = 19200 Baud 056 = 56000 Baud 069 = 600 Baud asynchronous 070 = 2400 Baud asynchronous 071 = 4800 Baud asynchronous 072 = 9600 Baud asynchronous 075 = variable Baud asynchronous 081 = 50 Baud asynchronous 082 = 75 Baud asynchronous 083 = 100 Baud asynchronous	
BAUD (continued)		084 = 110 Baud asynchronous 085 = 134,5 Baud asynchronous 086 = 150 Baud asynchronous 087 = 200 Baud asynchronous 088 = 300 Baud asynchronous 089 = 3600 Baud asynchronous 090 = 12000 Baud asynchronous 113 = 900 Baud asynchronous 114 = 1200 Baud asynchronous 115 = 1800 Baud asynchronous 116 = 7200 Baud asynchronous 117 = 14400 Baud asynchronous 118 = 16800 Baud asynchronous 119 = 19200 Baud asynchronous	

Reference Material

Short name	Long name	Value description (engl.)	Element description (ger.)
CAUSE	cause of connection interrupt / clearing the call	000 = no cause 001 = unallocated (unassigned) number 002 = no route to specified transit network 003 = no route to destination 006 = channel unacceptable 016 = normal call clearing 017 = user busy 018 = no user responding 019 = no answer from user (user alerted) 021 = call rejected 022 = number changed 026 = non-selected user clearing 027 = destination out of order 028 = invalid number format (address incomplete) 029 = facility rejected 030 = response to STATUS ENQUIRY 031 = normal, unspecified 033 = circuit out of order 034 = no circuit/channel available 038 = network out of order 041 = temporary failure	

Short name	Long name	Value description (engl.)	Element description (ger.)
CAUSE (continued)		042 = switching equipment congestion 043 = access information discarded 044 = requested circuit/channel not available 047 = resource unavailable, unspecified 049 = Quality of Service not available 050 = requested facility not subscribed 052 = outgoing call barred 053 = outgoing call barred with CUG 054 = incoming call barred 055 = incoming call barred with CUG 057 = bearer capability not authorized 058 = bearer capability not presently available 063 = service or option not available, unspecified 065 = bearer capability not implemented 066 = channel type not implemented 069 = requested facility not implemented	

Reference Material

Short name	Long name	Value description (engl.)	Element description (ger.)
CAUSE (continued)		070 = only restricted digital information bearer capability is available 079 = service or option not implemented, unspecified 081 = invalid call reference value 082 = identified channel does not exist 083 = a suspended call exists, but this call identity does not 084 = call identity in use 085 = no call suspended 086 = call having the requested call identity has been cleared 088 = incompatible destination 091 = invalid transit network destination 095 = invalid message, unspecified 096 = mandatory information element is missing 097 = message type non-existent or not implemented 098 = message not compatible with call state or message type non-existent or not implemented	

Short name	Long name	Value description (engl.)	Element description (ger.)
CAUSE (continued)		099 = information element non-existent or not implemented 100 = invalid information element contents 101 = message not compatible with call state 102 = recovery on timer expiry 111 = protocol error, unspecified 127 = interworking, unspecified 128 = HOP counter exceeded 129 = ACD PBK agent available 130 = ACD PBK divert 131 = ACD PBK end of shift 132 = circuit operational 133 = changeover 134 = user access busy 135 = not allowed SPV 136 = REV change n ALD at OAD 137 = REV change n ALD at DAD 138 = destination not obtainable 139 = out of order	

Reference Material

Short name	Long name	Value description (engl.)	Element description (ger.)
CAUSE (continued)		140 = netw congestion 141 = remote user initiated 142 = local proc error 143 = remote proc error 144 = remote user susp 145 = remote user resumed 146 = vacant code 147 = pre 0 dial err 148 = pre 1 dial err 149 = pre 1 not dial 150 = exc DGT rec 151 = miss routed call 152 = bc incomp src req 153 = src op violated 154 = NI2 protocol err 155 = not defined	
CAUSE (H5000)	carrier, output of the communication network as a text string	0 = Unknown Reason 1 = Normal call hang-up 2 = destination reject 3 = lines busy 4 = out of service 5 = destination busy 6 = no answer/abandoned Default : 1	0 = unbekannter Grund 1 = normales Gespräch achsende 2 = destination reject 3 = Leistung besetzt 4 = außer Betrieb 5 = Ziel besetzt 6 = keine Antwort/ abandoned Default : 1

Short name	Long name	Value description (engl.)	Element description (ger.)
CALLIONI (new H4000)	originating Network ID of the calling party (privat / public)	H4000 V1.0 0 = private network 1 = public network H4000 V2.0 0 = private (no indication) 1 = public tel 2 = public data 3 = public isdn 4 = public foreign network 5 = own network 1 6 = own network 2 7 = own network 3 8 = own network 4 ... 29 = own network 25 30 = own network 26 31 = own network 27	H4000 V1.0 0 = internes Netzwerk 1 = Öffentliches Netzwerk H4000 V2.0 0 = intern /eigenes Netzwerk (keine Identifikation) 1 = Öffentlich tel 2 = Öffentlich data 3 = Öffentlich isdn 4 = Öffentlich foreign network 5 = eigenes Netzwerk 1 6 = eigenes Netzwerk 2 7 = eigenes Netzwerk 3 8 = eigenes Netzwerk 4 ... 29 = eigenes Netzwerk 25 30 = eigenes Netzwerk 26 31 = eigenes Netzwerk 27

6.2.2 AMO Text Elements

The following table contains the list of AMO text elements. The individual values that can be assigned to the elements are listed and explained.

Table 65: AMO Text Elements

Short name	Long name	Value description	Element description
AOCTYPE	advice of charge	0 = Advice of charges - during the call (D_AOC) 1 = Advice of charges - at end of call (E_AOC) 2 = Advice of charges - during call setup (S_AOC)	("1 ..") 0 = GebÄ¼hreninformation wÄ¼rend des GesprÄ¼chs (D_AOC) ("2 ..") 1 = GebÄ¼hreninformation bei GesprÄ¼ chsende (E_AOC) ("3 ..") 2 = GebÄ¼hreninformation bei Verbindungsaufbau (S_AOC)

Reference Material

Short name	Long name	Value description	Element description
BAUD (AM)	transmission speed (10 digits, administr. by AMO-Text, if the speed is not defined by AMO-text-table, the speed will be a number with 3 digits)	0 = no speed specified 2400 = 2400 Baud 4800 = 4800 Baud 9600 = 9600 Baud 48000 = 48000 Baud 64000 = 64000 Baud	("000") 0 = Keine Geschwindigkeitsangabe ("000") ("001") 2400 = 2400 Baud ("002") 4800 = 4800 Baud ("003") 9600 = 9600 Baud ("004") 48000 = 48000 Baud ("005") 64000 = 64000 Baud
CALCTYPE	applied type of billing	CLOCK = charge pulse metering and sending, coinbox (RURAL) PULSES = Units / amounts from carrier (CENTRAL OFFICE) WOUT = Costs per time unit	("1 ..") CLOCK = MÃ¼nztelefon (RURAL) ("2 ..") PULSES = Impulse / BetrÃ¤ge vom AMT ("3 ..") WOUT = VergebÃ¼hrung nach Zeit
CARRIER (AM)	carrier, output of the communication network as a text string	0 = CARRIER_0 (intern) 1 = CARRIER_1 2 = CARRIER_2 3 = CARRIER_3 4 = CARRIER_4 5 = CARRIER_5 6 = CARRIER_6 7 = CARRIER_7 8 = CARRIER_8 9 = CARRIER_9	("0 ..") 0 = CARRIER_0 (intern) ("1 ..") 1 = CARRIER_1 ("2 ..") 2 = CARRIER_2 ("3 ..") 3 = CARRIER_3 ("4 ..") 4 = CARRIER_4 ("5 ..") 5 = CARRIER_5 ("6 ..") 6 = CARRIER_6 ("7 ..") 7 = CARRIER_7 ("8 ..") 8 = CARRIER_8 ("9 ..") 9 = CARRIER_9
CFW (new R6.5/6.6 (AMO-MFORM))	indicates forwarded calls	0 = Call forwarded 1 = Call not forwarded	0 = GesprÃ¤ch weitergeleitet 1 = GesprÃ¤ch nicht weitergeleitet
CHOFCON (old)	type of connection	1 = Local 2 = Long distance 3 = Local with limit value exceeded 4 = Long distance with limit value exceeded 5 = No entry 6 = Rerouting	("1 ..") 1 = Ortsverbindung ("2 ..") 2 = Fernverbindung ("3 ..") 3 = Ortsverbindung mit GrenzwertÃ¼berschreitung ("4 ..") 4 = Fernverbindung mit GrenzwertÃ¼berschreitung ("5 ..") 5 = Kein Eintrag ("6 ..") 6 = Rerouting

Short name	Long name	Value description	Element description
CONF (new R6.5/6.6 (AMO-MFORM))	indicates conference call	0 = Conference 1 = Normal	0 = Konferenz 1 = Normal
CONNTYPE (AM) (enhanced 2 values)	connection type	OUTGO = Outgoing connections INCO = Incoming connections INTERN = Internal connections ACACT = activity of attendant LOAD = load of processor (ADP / SWU)	("0 ..") GEHEND = Abgehende Verbindungen ("1 ..") KOMMEND = Ankommende Verbindungen ("3 ..") INTERN = Interne Verbindungen ("4 ..") ACACT = Vermittlungsplatzaktivität ("5 ..") LOAD = Systemlast (ADP / SWU)
CONNTYPE (H5000)	connection type	1 = Incoming connections (ext./ int.) 2 = Outgoing connections (int./ ext.) 3 = Internal connections (int./ int.) 4 = Transit (ext./ext.)	1 = Ankommende Verbindungen (ext./int.) 2 = Abgehende Verbindungen (int./ext.) 3 = Interne Verbindungen (int./int.) 4 = Transit (ext./ext.)
COPIN (AM)	class of pin	0 = No valid class of pin 1 = Pin manual 2 = Pin long service 3 = Pin 1 call service 4 = Pin 1 private service 5 = Project code for 1 call 6 = ID card user 7 = Class of service switchover 8 = PIN -Class_8	("0 ..") 0 = Keine PIN vorhanden ("P ..") 1 = PIN-Klasse_1 ("P ..") 2 = PIN-Klasse_2 ("P ..") 3 = PIN-Klasse_3 ("P ..") 4 = PIN-Klasse_4 ("P ..") 5 = PIN-Klasse_5 ("P ..") 6 = PIN-Klasse_6 ("P ..") 7 = PIN-Klasse_7 ("P ..") 8 = PIN-Klasse_8
COPIN (only R6.5/6.6 - MFORM element - DISAIND)	class of pin	("0 ..") 0 = Disa number ("P ..") 1 = PIN ("P ..") 2 = Normal - Neither DISA or PIN	("0 ..") 0 = Disa Nummer ("P ..") 1 = PIN ("P ..") 2 = Normal - keine DISA or PIN

Reference Material

Short name	Long name	Value description	Element description
DESTPID / STNID (AMO-TEXT STNID) (new)	identification number of destination number (new/ connect party) (uses value from element STNID)	1 = Operator console 2 = Main PABX set 3 = Night server 4 = Subscriber 5 = Service module 6 = Special charging 7 = Maintenance equipment 8 = Public phone 9 = Mobile user 10 = Number of the other line (keyset)	("1 ..") 1 = Vermittlungsfernsprecher ("2 ..") 2 = Hauptanlagensatz ("3 ..") 3 = Nachtnebenstelle ("4 ..") 4 = Teilnehmer ("5 ..") 5 = Service-Modul ("6 ..") 6 = Spezielle VergebÃ¼hrung ("7 ..") 7 = Wartungseinrichtung ("8 ..") 8 = Ãffentlicher Fernsprechapparat ("9 ..") 9 = Mobiler Teilnehmer ("10 ..") 10 = Fremde Leitungsnummer (Keyset)
DESTPID (new H5000)	identification number of destination number	1 = Gateway 2 = Subscriber	1 = Gateway 2 = Teilnehmer
EXPENS (AM)	expensive connection	0 = Inexpensive connections 1 = Expensive connections 2 = Free of charge A-party 3 = Free of charge B-party	("0 ..") 0 = Billig ("1 ..") 1 = Teuer ("2 ..") 2 = Gratis A-Tlnr ("3 ..") 3 = Gratis B-Tlnr
EXPENS (only R6.5/6.6 - MFORM element - LCREXP)	expensive connection	("0 ..") 0 = Inexpensive connections ("1 ..") 1 = Expensive connections	("0 ..") 0 = Billig ("1 ..") 1 = Teuer
IDPP	station CDR chargees, GET functionality	ATND = Attendant console MTLC = Main PABX tie-line circuit STN = Station TC = CDR per trunk	("1 ..") VF = Vermittlungsfernsprecher ("2 ..") HAS = Main PABX tie-line circuit ("3 ..") TLN = Teilnehmer ("4 ..") AS = Amtssatz (Trunk)
INFOTYPE	type of information	AMOUNT = Amounts from carrier (CENTRAL OFFICE) UNITS = Units from carrier (CENTRAL OFFICE)	("1 ..") AMOUNT = BetrÃ¤ge vom AMT ("2 ..") UNITS = Einheiten vom AMT
LISTTYPE	Type of station, CDR list type as a text string, only GET functionality	IND = Individual call charge calculation SUM = Sum call charge calculation (part calc.) TOTAL = Total call charge calculation	("1 ..") EINZEL = Einzelabrechnung ("3 ..") TEIL = Teilabrechnung ("2 ..") TOTAL = Totalabrechnung

Short name	Long name	Value description	Element description
NETTYPE (used but not def. in AM)	network description	ANA = Analog network IDN = Integrated Data Network ISDN = Integrated Services Digital Network	("0 ..") ANA = Analog-Netz ("1 ..") IDN = Integriertes-Daten-Netz ("2 ..") ISDN = Integriertes-Service- Daten-Netz
OUTDAYC (R6.5/R6.6 - MFORM element - DAY)	current date of the output name of the day	1 = "Monday .." 2 = "Tuesday .." 3 = "Wednesday .." 4 = "Thursday .." 5 = "Friday .." 6 = "Saturday .." 7 = "Sunday .."	1 = "Montag .." 2 = "Dienstag .." 3 = "Mittwoch .." 4 = "Donnerstag .." 5 = "Freitag .." 6 = "Samstag .." 7 = "Sonntag .."
OUTMONC (R6.5/R6.6 - MFORM element - MONTH)	current date of the output name of the month	1 = "January .." 2 = "February .." 3 = "March .." 4 = "April .." 5 = "May .." 6 = "June .." 7 = "July .." 8 = "August .." 9 = "September .." 10 = "October .." 11 = "November .." 12 = "December .."	1 = "Januar .." 2 = "Februar .." 3 = "März .." 4 = "April .." 5 = "Mai .." 6 = "Juni .." 7 = "Juli .." 8 = "August .." 9 = "September .." 10 = "Oktober .." 11 = "November .." 12 = "Dezember .."

Reference Material

Short name	Long name	Value description	Element description
ROUTCC (AKZ2) (AM)	route code as a text string from 0 to 999999	0 = "00 .." 1 = "01 .." 2 = "02 .." 3 = "03 .." 4 = "04 .." 5 = "05 .." 6 = "06 .." 7 = "07 .." 8 = "08 .." 9 = "09 .." 10 = "10 .." 11 = "11 .." 12 = "12 .." 13 = "13 .." 14 = "14 .." 15 = "15 .." 16 = "16 .."	0 = "00 .." 1 = "01 .." 2 = "02 .." 3 = "03 .." 4 = "04 .." 5 = "05 .." 6 = "06 .." 7 = "07 .." 8 = "08 .." 9 = "09 .." 10 = "10 .." 11 = "11 .." 12 = "12 .." 13 = "13 .." 14 = "14 .." 15 = "15 .." 16 = "16 .."
RURAL	flag if rural call	0=rural 1=other terminal device	("0 ..") 0=MÃ¼nzfernsprecher ("1 ..") 1=andere EndgerÃ¤te
SERVICE	service	VOICE = Voice connection TTX = Teletex VTX = Interactive videotex FAX = Facsimile DTE = data terminal TTC = Teletex-telex converter	("0 ..") VOICE = Sprachverbindung ("1 ..") TTX = Teletex ("2 ..") BTX = Bildschirmtext ("3 ..") FAX = Faksimile ("4 ..") DEE = Datenendeinrichtung ("5 ..") TTC = Teletex-Telex-Umsetzer
SERVICE (only R6.5/R6.6 - MFORM)	service	("0 ..") VCE = Voice connection ("1 ..") DATA = data terminal ("2 ..") FAX = Facsimile	("0 ..") VCE = Sprachverbindung ("1 ..") DATA = Datenendeinrichtung ("2 ..") FAX = Faksimile
SERVICE (new H5000)	service	0 = Voice 1 = Data	0 = Sprache 1 = Daten
SIGDATA (R6.5/R6.6 - MFORM element - ERRDATA)	indicates whether the output data record is correct / incorrect or double	0 = incorrect or double data set 1 = correct data set	("1 ..") 0 = ungenauer oder doppelter Datensatz ("0 ..") 1 = korrekter Datensatz

Short name	Long name	Value description	Element description
STNID (AM)	station ID	1 = Operator console 2 = Main PABX set 3 = Night server 4 = Subscriber 5 = Service module 6 = Special charging 7 = Maintenance equipment 8 = Public phone 9 = Mobile user 10 = Number of the other line (keyset)	("1 ..") 1 = Vermittlungsfernsprecher ("2 ..") 2 = Hauptanlagensatz ("3 ..") 3 = Nachtnebenstelle ("4 ..") 4 = Teilnehmer ("5 ..") 5 = Service-Modul ("6 ..") 6 = Spezielle VergebÃ¼hrung ("7 ..") 7 = Wartungseinrichtung ("8 ..") 8 = Ãffentlicher Fernsprechapparat ("9 ..") 9 = Mobiler Teilnehmer ("10 ..") 10 = Fremde Leitungsnummer (Keyset)
STNID (only R6.5/6.6 - MFORM element - PARTYID)	station ID	("1 ..") 1 = Attendant ("2 ..") 2 = Subscriber ("3 ..") 3 = Main PABX set ("4 ..") 4 = Night server ("5 ..") 5 = CO amd PRI rate trunk ("6 ..") 6 = Recorded and Music Announcement ("7 ..") 7 = NI voice device for initiating a call to a telecomputer ("8 ..") 8 = Relocated telecomputer office station	("1 ..") 1 = Vermittlungsfernsprecher ("2 ..") 2 = Teilnehmer ("3 ..") 3 = Hauptanlagensatz ("4 ..") 4 = Nachtnebenstelle ("5 ..") 5 = CO amd PRI rate trunk ("6 ..") 6 = Recorded and Music Announcement ("7 ..") 7 = NI voice device for initiating a call to a telecomputer ("8 ..") 8 = Relocated telecomputer office station
STNID (new H5000)	station ID	1 = Gateway 2 = Subscriber	1 = Gateway 2 = Teilnehmer

Reference Material

Short name	Long name	Value description	Element description
SUPLSERV (AM) (change +9) (+ chg. US + 14)	supplement service	0 = Not defined 1 = Normal call 2 = Consultation call 3 = Call transfer 4 = Call back 5 = Call fwd busy 6 = Call fwd unconditional 7 = Call fwd noreply 8 = Call pickup 9 = Conference 10 = Override 11 = Hunting group 12 = Mail box 13 = Paging 14 = Dictation 15 = Credit card charge 16 = Reverse charging 17 = Call defection 18 = Door opening 19 = Ring back 20 = Hang up on hold 21 = Hang up on queueing	("0 ..") 0 = Nicht definiert ("1 ..") 1 = Normalgespräch ("2 ..") 2 = Rückfrageverbindung ("3 ..") 3 = Anrufübergabe ("4 ..") 4 = Rückruf ("5 ..") 5 = Anrufumleitung auf besetzten Teilnehmer ("6 ..") 6 = Unbedingte Anrufumleitung ("7 ..") 7 = Rufweiserschaltung / Umleitung bei keiner Annahme ("8 ..") 8 = Anrufübernahme ("9 ..") 9 = Konferenz ("10 ..") 10 = Aufschalten ("11 ..") 11 = Sammelanschluß ("12 ..") 12 = Briefkasten / Sprachspeicher ("13 ..") 13 = Personensuche (Blättern) ("14 ..") 14 = Diktat ("15 ..") 15 = Kreditkartenvergebührung ("16 ..") 16 = Gebührenübernahme ("17 ..") 17 = Rufablenkung ("18 ..") 18 = Tariföffnung ("19 ..") 19 = Rufzustand / Freiton ("20 ..") 20 = Auflegen im Haltezustand ("21 ..") 21 = Auflegen in einer Warteschlange

Short name	Long name	Value description	Element description
SUPLSERV (continued)		22 = End of queueing	("22 ..") 22= Ausgliedern aus der Warteschlange
		23 = Begin of queueing	("23 ..") 23= Einhängen in die Warteschlange
		24 = Master transfer	("24 ..") 24= Konferenz wird übergeben
		25 = Recall	("25 ..") 25= Wiederanruf
		26 = Intercept	("26 ..") 26 = Abwurf
		27 = Central attendant	("27 ..") 27= Umleitung zum zentralen Vermittlungsplatz
		28 = No CDR with end of select	("28 ..") 28= Keine Vergebührung ab Wahlende
		29 = Busy	("29 ..") 29= Besetzt
		30 = CDR lost buffer	("30 ..") 30= Hängengebliebenes Gebührenticket
		31 = AC activates night service	("31 ..") 31= Aktivierung Nachschaltung
		32 = AC deactivates night service	("32 ..") 32= Deaktivierung Nachtschaltung
		33 = AC pulls the jack	("33 ..") 33= Klinke ziehen
		34 = AC reconnects the jack	("34 ..") 34= Klinke einstecken
		35 = AC out of service	("35 ..") 35= VF außer Betrieb
		36 = AC restart	("36 ..") 36= VF restart
		37 = Hang up in a hunting group queue	("37 ..") 37= Auslegen in einer Sammelanschluß - Warteschlange
		38 = hunting group busy	("38 ..") 38= Sammelanschluß ist besetzt
		39 = SWU and ADP load	("39 ..") 39= Prozessorauslastung
		40 = Transit	("40 ..") 40= Transit
		41 = Rerouting	("41 ..") 41= Wegoptimierung
		42 = incoming call barred	("42 ..") 42= Kommender Ruf blockiert

Reference Material

Short name	Long name	Value description	Element description
SUPLSERV (continued)		43 = Destination out of service	("43 ..") 43= Zielteilnehmer nicht im Betrieb
		44 = Resource unavailable	("44 ..") 44= Resource nicht verfügbar
		45 = Call rejected	("45 ..") 45= Verbindung abgelehnt
		46 = Unassigned number	("46 ..") 46= Nummer nicht vorhanden
		47 = Account code	("47 ..") 47= Zuordnungsnummer
		48 = Conference activ	("48 ..") 48= Einberufer der Konferenzverbindung ist noch aktiv
		49 = Conference passiv	
		50 = Begin of HOLD "A"	("49 ..") 49= Einberufer der Konferenzverbindung ist ausgeschieden
		51 = Begin of HOLD "B"	("50 ..") 50= A Teilnehmer wird gehalten
		52 = End of HOLD "A"	("51 ..") 51= B Teilnehmer wird gehalten
		53 = End of HOLD "B"	("52 ..") 52= A Teilnehmer verlässt den Haltezustand
		54 = Hang up on HOLD "A"	
		55 = Hang up on HOLD "B"	("53 ..") 53= B Teilnehmer verlässt den Haltezustand
		56 = Ringing after connect	("54 ..") 54= A Teilnehmer legt im Haltezustand auf
			("55 ..") 55= B Teilnehmer legt im Haltezustand auf
			("56 ..") 56= Klingeln nach Verbunden

Short name	Long name	Value description	Element description
SWP (AM) (change US+ 1 value)	call phases	("0 ..") SPACE = No call processing process ("1 ..") ENDS = End of call after seizure ("2 ..") ENDSEC = End of call after transfer point ("3 ..") ENDL = End of call after limit value ("4 ..") SECS = Transfer point after seizure ("5 ..") NEXTSEC = Transfer point after transfer point ("6 ..") SECL = Transfer point after limit value ("7 ..") LAS = Limit value after seizure ("8 ..") LASEC = Limit value after transfer point ("9 ..") LAL = Limit value after limit value ("10 ..") SECACC = Transfer after account code	("0 ..") LEER = Kein Vermittlungsvorgang ("1 ..") ENDNB = Gesprächsende nach Belegung ("2 ..") ENDNA = Gesprächsende nach Abschnitt ("3 ..") ENDNG = Gesprächsende nach Grenzwert ("4 ..") ABSNB = Abschnitt nach Belegung ("5 ..") ABSNA = Abschnitt nach Abschnitt ("6 ..") ABSNG = Abschnitt nach Grenzwert ("7 ..") GRWNB = Grenzwert nach Belegung ("8 ..") GRWNA = Grenzwert nach Abschnitt ("9 ..") GRWNG = Grenzwert nach Grenzwert ("10 ..") ABSNACC = Abschnitt nach Account Code
SYNCH (new R6.5/6.6 (AMO-MFORM))	indicates synchronour call	0 = Synchronous 1 = Asynchronous	0 = Synchron 1 = Asynchron
TRANSFER (new R6.5/6.6 (AMO-MFORM))	indicates station transfers	("0 ..") SPACE = Call not involved in a transfer ("1 ..") ATTND = Call involved in a attendant transfer ("2 ..") XFER = Call involved in a transfer ("3 ..") TIME = Call was > 18 hr time limit and record was split (this portion closed out and new record started)	
UNANS (AM)	through connect / no through connect	NTHRCONN = No through connect THRCONN = Through connect	("Y ..") (language independent) DURCHV = Durchgeschaltene Verbindung ("N ..") NDURCHV = Nicht durchgeschaltene Verbindung

Reference Material

Short name	Long name	Value description	Element description
UNITERAS (AM)	deletion of the station CDR resettable counter after output, only GET functionality Attention: AMO-TEXT for EV1.0 and V3.4	Y = Resettable counter deleted or through connected N = Resettable counter not deleted or not through connected	("Y ..") Y (language independent) = Differenzzähler gelÃ¶scht oder durchverbunden ("N ..") N = DifferenzzÃ¶hler nicht gelÃ¶scht oder nicht durchverbunden
ZONE	distance zone	SPACE = Space INT01 = Internal01 - INTnn = Internalnn INT09 = Internal09 INC0 = Incoming01 INCnn = Incomingnn INC09 = Incoming09 LOC = Local NEAR = Nearby CHRGFREE = Charge free CHRGINFO = Charge info from carrier DIST01 = Distance01 DISTnn = Distancenn DIST50 = Distance50 ABR01 = Abroad01 ABRnn = Abroadnn ABR99 = Abroad99 TIE01 = Tie01 TIEnn = Tienn TIE09 = Tie09	LEER (0) = Leereintrag INT01 (1) = 1. Internzone - INTnn = nn. Internzone INT09 (9) = 9. Internzone ANK01 (11)= 1. ankommende Zone ANKnn = nn. ankommende Zone ANK09 (19) = 9. ankommende Zone ORT (21) = Lokal Zone NAH 31)= Nahezone GEBFREE = GebÃ¼hrenfrei GEBINFO = GebÃ¼hreninformation vom Carrier FERN0 (51) = 1. Fernzone FERNnn = nn. Fernzone FERN50 (100) = 50. Fernzone AUSL01 (101) = 1. Auslandszone AUSLnn = nn. Auslandszone AUSL99 (199) = 99. Aus QUER01 (201) = 1. Zone fÃ¼r Querverbindungen QUERnn = nn. Zone fÃ¼r Querverbindungen QUER09 (209) = 9. Zone fÃ¼r Querverbindungen
ZONE (only H5000)	distance zone	see element ZONEBIT Default = 0	see Element ZONEBIT Default = 0

Short name	Long name	Value description	Element description			
ZONEBIT (new H5000)	bit information distance zone	The column 'Value' is displayed in ZONE for H5000				
		Definition	First four bits	Second Four bits	Third four bits	Value
		Invalid	0000	0000	0000	0
		Internal	0000	0000	0001	1
		Incoming	0000	0000	0010	2
		Emergency	0000	0000	0100	4
		Local	0000	0001	0000	16
		National	0000	0010	0000	32
		International	0000	0100	0000	64
		External	0000	0111	0000	112
		Service	0000	1000	0000	128
		Toll Free	0001	0000	0000	256
		Premium	0010	0000	0000	512
		Dummy	0100	0000	0000	1024

6.3 Pre-defined Formats for Output Format Definition

The following pre-defined formats for defining the output format are available, and they apply likewise to the output formats of H3000 and H2000 systems:

- [Elements for Defining Input and Output Formats](#)
- [AM-WIN 1.0 - Format for AM-WIN 1.0](#)
- [AM-WIN 2.0 - Format for AM-WIN 2.0](#)
- [H4000_HP_AM - Output format from OpenScape 4000 for HiPath AM](#)
- [OpenScape 4000 Manager/Assistant PM - Output format for OpenScape 4000 Assistant PM V1.0](#)
- [H4000_HPAM_E164 - Output format from OpenScape 4000 for HiPath AM](#)
- [HP4M_AMPM_UV3.0 - Output format from HiPath 4000 V3](#)
- [HP4M_AMPM_UV4 - Output format from HiPath 4000 V4](#)
- [HP4M_AMPM_UV5 - Output format from HiPath 4000 V5](#)
- [HP4M_AMPM_UV6 - Output format from HiPath 4000 V6](#)
- [HP4M_AMPM_UV7 - Output format from OpenScape 4000 V7](#)
- [HP4M_PM_UV7 - Output format from OpenScape 4000 V7](#)
- [HP4M_AMPM_UV8 - Output format from OpenScape 4000 V8](#)
- [HP4M_PM_UV8 - Output format from OpenScape 4000 V8](#)
- [HP4M_AMPM_UV10 - Output format from OpenScape 4000 V10](#)
- [HP4M_PM_UV10 - Output format from OpenScape 4000 V10](#)

AM-WIN 1.0 - Format for AM-WIN 1.0

Legend: No. = sequential element number; ET = element type: F = fixed text, V = variable element; E = ending element; FTBL Name = FTBL element name; EIndex = element index; L = element length; A = alignment; FI = pad character: Empty = space

Reference Material

Table 66: AM-WIN 1.0 - Output format for AM-WIN 1.0

NO	ET	Element	Long name (eng)	Position	Lenght	Alignmen	filler
1	F	\$	sign for record begin	1	1		
2	V	TKNOLIST	trunk number	2-6	5	r	
3	V	PPLV2	domain of paying party	7-8	2	r	0
4	V	PPLV1	subdomain of paying party	9-11	3	r	0
5	V	PPLV0	node number of paying party	12-14	3	r	0
6	V	PAYPARTY	paying party	15-24	10	r	
7	V	STNID	source id	25	1		
8	V	PIN	PIN	26-37	12	l	
9	V	DESTPTY	destination number	38-59	22	l	
10	V	CONTOT	call duration in 1/10 seconds	60-65	6	r	0
11	V	ENDYEAR	end of call - year	66-67	2	r	0
12	V	ENDMONTH	end of call - month	68-69	2	r	0
13	V	ENDDAY	end of call - day	70-71	2	r	0
14	V	ENDHOUR	end of call - hour	72-73	2	r	0
15	V	ENDMIN	end of call - minute	74-75	2	r	0
16	V	ENDSEC	end of call - second	76-77	2	r	0
17	V	CHRGUNIT	call charge units	78-81	4	r	0
18	V	SERVICE	service code	82	1		
19	V	ZONE	call zone	83-85	3	r	0
20	V	CARRIER	carrier	86	1		
21	V	ROUTCC	route code	87-92	6	l	
22	V	CONNTYPE	call type	93	1		
23	V	EXPENS	flag for "expensive facility"	94	1		
24	V	GENLV2	domain of node generating the call record	95-96	2	r	0
25	V	GENLV1	subdomain of node generating the call record	97-99	3	r	0
26	V	GENLV0	node number of node generating the call record	100-102	3	r	0
27	V	COPIN	PIN category	103	1		
28	V	DISPCHRG	display costs	104-112	9	r	0

NO	ET	Element	Long name (eng)	Position	Lenght	Alignmen	filler
29	V	RINGDUR	ring duration in 1/10 seconds	113-115	3	r	0
30	V	SUPLSERV	supplementary services	116-117	2	r	0
31	V	GLOBLV2	domain of node generation the call id (old leg) - global for node	118-119	2	r	0
32	V	GLOBLV1	subdomain of node generation the call id (old leg) - global for node	120-122	3	r	0
33	V	GLOBLV0	node number of node generation the call id (old leg) - global for node	123-125	3	r	0
34	V	GLOBSEQ	sequence number of generating node (old leg) - global for node	126-133	8	r	0
35	V	CONCHRG	evaluated cost	134-142	9	r	0
36	V	CAUSE	reason for release of a call	143-145	3	r	0
37	V	UNANS	answered / not answered flag	146	1		
38	V	RECPT	record point of CDR	147	1		
39	V	TRANSCNT	number of transit nodes	148-149	2	r	0
40	V	TRNSFPTY	Transferring party - party that transferred a call	150-159	10	r	
41	V	BAUD	transmission speed	160-162	3	r	0
42	V	SIGDATA	data record "correct/incorrect"	163	1		
43	F	CRLF	CR / LF flag for end of data record	164-165	2		

AM-WIN 2.0 - Format for AM-WIN 2.0

Legend: No. = sequential element number; ET = element type: F = fixed text, V = variable element; E = ending element; FTBL Name = FTBL element name; EIndex = element index; L = element length; A = alignment; FI = pad character: Empty = space

Table 67: AM-WIN 2.0 - Output format for AM-WIN 2.0

NO	ET	Element	Long name (eng)	Position	Lenght	Alignmen	filler
1	F	\$	sign for record begin	1	1		
2	V	TKNOLIST	trunk number	2-6	5	r	
3	V	PPLV2	domain of paying party	7-8	2	r	0
4	V	PPLV1	subdomain of paying party	9-11	3	r	0
5	V	PPLV0	node number of paying party	12-14	3	r	0
6	V	PAYPARTY	paying party	15-24	10	r	

Reference Material

NO	ET	Element	Long name (eng)	Position	Lenght	Alignmen	filler
7	V	STNID	source id	25	1		
8	V	PIN	PIN	26-37	12	l	
9	V	DESTPTY	destination number	38-59	22	l	
10	V	CONTOT	call duration in 1/10 seconds	60-65	6	r	0
11	V	ENDYEAR	end of call - year	66-67	2	r	0
12	V	ENDMONTH	end of call - month	68-69	2	r	0
13	V	ENDDAY	end of call - day	70-71	2	r	0
14	V	ENDHOUR	end of call - hour	72-73	2	r	0
15	V	ENDMIN	end of call - minute	74-75	2	r	0
16	V	ENDSEC	end of call - second	76-77	2	r	0
17	V	CHRGUNIT	call charge units	78-81	4	r	0
18	V	SERVICE	service code	82	1		
19	V	ZONE	call zone	83-85	3	r	0
20	V	CARRIER	carrier	86	1		
21	V	ROUTCC	route code	87-92	6	l	
22	V	CONNTYPE	call type	93	1		
23	V	EXPENS	flag for "expensive facility"	94	1		
24	V	GENLV2	domain of node generating the call record	95-96	2	r	0
25	V	GENLV1	subdomain of node generating the call record	97-99	3	r	0
26	V	GENLV0	node number of node generating the call record	100-102	3	r	0
27	V	COPIN	PIN category	103	1		
28	V	DISPCHRG	display costs	104-112	9	r	0
29	F	FixText	FFF	113-115	3		FFF
30	V	SUPLSERV	supplementary services	116-117	2	r	0
31	V	GLOBLV2	domain of node generation the call id (old leg) - global for node	118-119	2	r	0
32	V	GLOBLV1	subdomain of node generation the call id (old leg) - global for node	120-122	3	r	0
33	V	GLOBLV0	node number of node generation the call id (old leg) - global for node	123-125	3	r	0

NO	ET	Element	Long name (eng)	Position	Lenght	Alignmen	filler
34	V	GLOBSEQ	sequence number of generating node (old leg) - global for node	126-133	8	r	0
35	V	CONCHRG	evaluated cost	134-142	9	r	0
36	V	CAUSE	reason for release of a call	143-145	3	r	0
37	V	UNANS	answered / not answered flag	146	1		
38	V	RECPT	record point of CDR	147	1		
39	V	TRANSCNT	number of transit nodes	148-149	2	r	0
40	V	TRNSFPTY	Transferring party - party that transferred a call	150-159	10	r	
41	V	BAUD	transmission speed	160-162	3	r	0
42	V	SIGDATA	data record "correct/incorrect"	163	1		
43	V	TRNSFLV2	domain number of transferring party	164-165	2	r	0
44	V	TRNSFLV1	subdomain number of transferring party	166-168	3	r	0
45	V	TRNSFLV0	node number number of transferring party	169-171	3	r	0
46	V	DESTLV2	domain number of connected party	172-173	2	r	0
47	V	DESTLV1	subdomain number of connected party	174-176	3	r	0
48	V	DESTLV0	node number of connected party	177-179	3	r	0
49	V	THRELV2	domain number of global call id - global for network	180-181	2	r	0
50	V	THRELV1	subdomain number of global call id - global for network	182-184	3	r	0
51	V	THRELV0	node number of global call id, a new call id may be generated only in case af a new connection. - global for network	185-187	3	r	0
52	V	THRESEQ	global call id - global for network	188-195	8	r	0
53	V	NETTYPE	network description	196	1		
54	V	INTNLIST	trunk number of the non-recording point	197-201	5	l	
55	V	RINGDUR	ring duration in 1/10 seconds	202-207	6	r	0
56	V	QUEUEDUR	queuing duration in 1/10 seconds	208-213	6	l	
57	F	CRLF	CR / LF flag for end of data record	214-215	2		

H4000_HP_AM - Output format from OpenScape 4000 for HiPath AM

Legend: No. = sequential element number; ET = element type: F = fixed text, V = variable element; E = ending element; FTBL Name = FTBL element name; EIndex = element index; L = element length; A = alignment; FI = pad character: Empty = space

Table 68: H4000_HP_AM - Output format from OpenScape 4000 for HiPath AM

No.	ET	Element	Long name (eng)	Position	Length	Alignme	filler
1	F	FIXTEXT	sign for record begin - fixed text	1-1	1		\$
2	V	TKNOLIST	trunk number	2-6	5	r	
3	V	PPLV2	domain of paying party	7-8	2	r	0
4	V	PPLV1	subdomain of paying party	9-11	3	r	0
5	V	PPLV0	node number of paying party	12-14	3	r	0
6	V	PAYPART	paying party	15-26	12	r	
7	V	STNID	source id	27-27	1		
8	V	PIN	PIN	28-39	12	l	
9	V	DESTPTY	destination number	40-61	22	l	
10	V	CONTOT	call duration in 1/10 seconds	62-67	6	r	0
11	V	ENDYEAR	end of call - year	68-69	2	r	0
12	V	ENDMONTH	end of call - month	70-71	2	r	0
13	V	ENDDAY	end of call - day	72-73	2	r	0
14	V	ENDHOUR	end of call - hour	74-75	2	r	0
15	V	ENDMIN	end of call - minute	76-77	2	r	0
16	V	ENDSEC	end of call - second	78-79	2	r	0
17	V	CHRGUNIT	call charge units	80-83	4	r	0
18	V	SERVICE	service code	84-84	1		
19	V	ZONE	call zone	85-87	3	r	0
20	V	CARRIER	carrier	88-88	1		
21	V	ROUTCC	route code	89-94	6	l	
22	V	CONNTYPE	call type	95-95	1		
23	V	EXPENS	flag for "expensive facility"	96-96	1		
24	V	GENLV2	domain of node generating the call record	97-98	2	r	0

No.	ET	Element	Long name (eng)	Position	Length	Alignme	filler
25	V	GENLV1	subdomain of node generating the call record	99-101	3	r	0
26	V	GENLV0	node number of node generating the call record	102-104	3	r	0
27	V	COPIN	PIN category	105-105	1		
28	V	DISPCHRG	display costs	106-114	9	r	0
29	F	FIXTEXT	FFF - fixed text	115-117	3		FFF
30	V	SUPLSERV	supplementary services	118-119	2	r	0
31	V	GLOBLV2	domain of node generation the call id (old leg) - global for node	120-121	2	r	0
32	V	GLOBLV1	subdomain of node generation the call id (old leg) - global for node	122-124	3	r	0
33	V	GLOBLV0	node number of node generation the call id (old leg) - global for node	125-127	3	r	0
34	V	GLOBSEQ	sequence number of generating node (old leg) - global for node	128-135	8	r	0
35	V	CONCHRG	evaluated cost	136-144	9	r	0
36	V	CAUSE	reason for release of a call	145-147	3	r	0
37	V	UNANS	answered / not answered flag	148-148	1		
38	V	RECPT	record point of CDR	149-149	1		
39	V	TRANSCNT	number of transit nodes	150-151	2	r	0
40	V	TRNSFPTY	Transferring party - party that transferred a call	152-163	12	r	
41	V	BAUD	transmission speed	164-166	3	r	0
42	V	SIGDATA	data record "correct/incorrect"	167-167	1		
43	V	TRNSFLV2	domain number of transferring party	168-169	2	r	0
44	V	TRNSFLV1	subdomain number of transferring party	170-172	3	r	0
45	V	TRNSFLV0	node number number of transferring party	173-175	3	r	0
46	V	DESTLV2	domain number of connected party	176-177	2	r	0
47	V	DESTLV1	subdomain number of connected party	178-180	3	r	0
48	V	DESTLV0	node number of connected party	181-183	3	r	0
49	V	THRELV2	domain number of global call id - global for network	184-185	2	r	0

Reference Material

No.	ET	Element	Long name (eng)	Position	Length	Alignme	filler
50	V	THRELV1	subdomain number of global call id - global for network	186-188	3	r	0
51	V	THRELV0	node number of global call id, a new call id may be generated only in case of a new connection. - global for network	189-191	3	r	0
52	V	THRESEQ	global call id - global for network	192-199	8	r	0
53	V	NETTYPE	network description	200-200	1		
54	V	INTNLIST	trunk number of the non-recording point	201-205	5	l	
55	V	RINGDUR	ring duration in 1/10 seconds	206-211	6	r	0
56	V	QUEUEDUR	queuing duration in 1/10 seconds	212-217	6	l	
	F	CRLF	CR / LF flag for end of data record	218-219	2		

OpenScape 4000 Manager/Assistant PM - Output format for OpenScape 4000 Assistant PM V1.0

Table 69: OpenScape 4000 Manager / Assistant PM - Output format for OpenScape 4000 Manager / Assistant PM V1.0

Short name	Long name (eng)	Type (Len) / Default Length	Range of values	Mandatory field	Element description	Default value
ATTCALLP (new H4000)	attendant call priority, priority of the call to the attendant	int(2)	num. (1-48)	no	>= H4000 V2.0 ger/eng: ATTCALLP	0
ATTCALLR (new H4000)	attendant intercept reason, reason for the intercept	int(2)	num. (0-26)	no	>= H4000 V2.0 ger/eng: ATTCALLR	0
ATTCALLT (new H4000)	attendant call type	int(2)	num. (0-23)	no	>= H4000 V2.0 ger/eng: ATTCALLT	0
ATTQUEID (new H4000)	attendant queue id for AC-Win Multiple Queue (MQ)	int(2)	num. (0-14)	no	>= H4000 V2.0 ger/eng: ATTQUEID	0

Table 70: OpenScape 4000 Manager/Assistant PM - Output format for OpenScape 4000 Manager/ Assistant PM V1.0

Element	Description	Position	Length	Alignment	filler
ADPLOAD	ADP load	1-4	4	l	
ATTGRNO	attendant console group	5-6	2	l	
ATTCALLP	attendant call priority	7-8	2	l	

Element	Description	Position	Lenght	Alignment	filler
ATTCALLR	attendant intercept reason	9-10	2		
ATTCALLT	attendant call type	11-12	2		
ATTQUEID	attendant queue id for AC-Win MQ	13-14	2		
BCHLCNT	number of used B-channels	7-8	2		
CALLEPTY	called party, number which was dialed by the calling party - e.g. hunting group	9-30	22		
CALLILV2	domain number of calling party	31-32	2		
CALLILV1	subdomain number of calling party	33-35	3		
CALLILV0	node number of calling party	36-38	3		
CALLIONI	originating network id of the calling party	39-40	2		
CALLIPTY	calling party, party that initiated the current connection/section	41-62	22		
CARRIER	output of the communication network as a text string	63	1		
CAUSE	cause of connection interrupt / clearing the call	64-66	3		
CONNSTEP	connection sequenz, all CDB records of a connection will be numbered sequentially	67-69	3		
CONNTYPE	connection typ	70	1		
CONTOT	connection duration total in 1/10 seconds	71-76	6		
DESTLV2	domain number of destination number (new/ connect party)	77-78	2		
DESTLV1	subdomain number of destination number (new/ connect party)	79-81	3		
DESTLV0	node number of destination number (new/ connect party)	82-84	3		
DESTPTY	destination number (new/conneted party)	85-106	22		
ENDYEAR	end-of-connection year	107-110	4		
ENDMONTH	end-of-connection month	111-112	2		
ENDDAY	end-of-connection day	113-114	2		
ENDHOUR	end-of-connection hour	115-116	2		
ENDMIN	end-of-connection minute	117-118	2		
ENDSEC	end-of-connection second	119-120	2		
END10	end-of-connection 1/10 of a second	121	1		

Reference Material

Element	Description	Position	Lenght	Alignment	filler
GENLV2	domain number of generating node	122-123	2	I	
GENLV1	subdomain number of generating node	124-126	3	I	
GENLV0	node number of generating node	127-129	3	I	
GLOBLV2	domain number of leg id - global for node	130-131	2	I	
GLOBLV1	subdomain number of leg id - global for node	132-134	3	I	
GLOBLV0	node number of leg id - global for node	135-137	3	I	
GLOBSEQ	leg id, if a targetuser may be changed with an existing connection, a new leg_id will be generated, the global call_id itself wouldn't be changed - global for node	138-145	8	I	
HOLDDUR	hold duration in 1/10 seconds	146-150	5	I	
INTNBCHA	B-channel of the real trunk number of the non-record point	151-152	2	I	
INTNTRGR	real trunk group number of the non-recording point	153-154	2	I	
INTNREAL	real trunk number of the non-recording point (see TKNOREAL)	155-159	5	I	
PPLV2	domain number of paying party	160-161	2	I	
PPLV1	subdomain number of paying party	162-164	3	I	
PPLV0	Knotennummer der paying party	165-167	3	I	
PAYPART	paying party, chargee of a connection	168-189	22	I	
QUEUEDUR	queuing duration, total queuing duration (call queue of attendant) in 1/10 seconds	190-194	5	I	
RINGDUR	ring duration, total ring duration in format 1/10 seconds	195-197	3	I	
SUPLSERV	supplement service	198-199	2	I	
SWP	call phases	200-201	2	I	
SWULOAD	switching unit load	202-205	4	I	
THRELV2	domain number of global call id - global for network	206-207	2	I	
THRELV1	subdomain number of global call id - global for network	208-210	3	I	
THRELV0	node number of global call id, a new call id may be generated only in case af a new connection. - global for network	211-213	3	I	
THRESEQ	global call id - global for network	214-221	8	I	

Element	Description	Position	Lenght	Alignment	filler
TKNOBCHA	B-channel of the real trunk number of the non record point	222-223	2	I	
TKNOTRGR	real trunk group number of recording point	224-225	2	I	
TKNOREAL	real trunk number of recoring point	226-230	5	I	
TRNSFLV2	domain number of transering party - (attendent console)	231-232	2	I	
TRNSFLV1	subdomain number of transering party - (attendent console)	233-235	3	I	
TRNSFLV0	node number of transering party - (attendent console)	236-238	3	I	
TRNSFPTY	transering party - (attendent console), party that transferred a call	239-260	22	I	
TRANSCNT	number of passed through transit nodes	261-262	2	I	
UNANS	through connect / no through connect	263	1	I	
CRLF	CR / LF flag for end of data record	264-265	2	I	

H4000_HPAM_E164 - Output format from OpenScape 4000 for HiPath AM

Legend: No. = sequential element number; ET = element type: F = fixed text, V = variable element; E = ending element; FTBL Name = FTBL element name; EIndex = element index; L = element length; A = alignment; FI = pad character: Empty = space

Table 71: H4000_HPAM_E164 - Output format from OpenScape 4000 for HiPath AM

NO	ET	Element	Long name (eng)	Position	Lenght	Alignmen	filler
1	F	\$	sign for record begin	1	1		
2	V	TKNOLIST	trunk number	2-6	5	r	
3	V	PPLV2	domain of paying party	7-8	2	r	0
4	V	PPLV1	subdomain of paying party	9-11	3	r	0
5	V	PPLV0	node number of paying party	12-14	3	r	0
6x	V	EPAYPARTY	Paying party; chargee of a connection - in E.164 Numbering Format	15-36	22	r	
7	V	STNID	source id	37	1		
8	V	PIN	PIN	38-49	12	I	
9x	V	EDESTPTY	Destination number (new/ connected party) - in E.164 Numbering Format	50-74	25	I	

Reference Material

NO	ET	Element	Long name (eng)	Position	Lenght	Alignmen	filler
10	V	CONTOT	call duration in 1/10 seconds	75-80	6	r	0
11	V	ENDYEAR	end of call - year	81-82	2	r	0
12	V	ENDMONTH	end of call - month	83-84	2	r	0
13	V	ENDDAY	end of call - day	85-86	2	r	0
14	V	ENDHOUR	end of call - hour	87-88	2	r	0
15	V	ENDMIN	end of call - minute	89-90	2	r	0
16	V	ENDSEC	end of call - second	91-92	2	r	0
17	V	CHRGUNIT	call charge units	93-96	4	r	0
18	V	SERVICE	service code	97	1		
19	V	ZONE	call zone	98-100	3	r	0
20	V	CARRIER	carrier	101	1		
21	V	ROUTCC	route code	102-107	6	l	
22	V	CONNTYPE	call type	108	1		
23	V	EXPENS	flag for "expensive facility"	109	1		
24	V	GENLV2	domain of node generating the call record	110-111	2	r	0
25	V	GENLV1	subdomain of node generating the call record	112-114	3	r	0
26	V	GENLV0	node number of node generating the call record	115-117	3	r	0
27	V	COPIN	PIN category	118	1		
28	V	DISPCHRG	display costs	119-127	9	r	0
29	F	FixText	FFF	128-130	3		FFF
30	V	SUPLSERV	supplementary services	131-132	2	r	0
31	V	GLOBLV2	domain of node generation the call id (old leg) - global for node	133-134	2	r	0
32	V	GLOBLV1	subdomain of node generation the call id (old leg) - global for node	135-137	3	r	0
33	V	GLOBLV0	node number of node generation the call id (old leg) - global for node	138-140	3	r	0
34	V	GLOBSEQ	sequence number of generating node (old leg) - global for node	141-148	8	r	0
35	V	CONCHRG	evaluated cost	149-157	9	r	0

NO	ET	Element	Long name (eng)	Position	Lenght	Alignmen	filler
36	V	CAUSE	reason for release of a call	158-160	3	r	0
37	V	UNANS	answered / not answered flag	161	1		
38	V	RECPT	record point of CDR	162	1		
39	V	TRANSCNT	number of transit nodes	163-164	2	r	0
40	V	ETRNSFPTY	Transferring party (attendant console) - in E.164 Numbering Format	165-186	22	r	
41	V	BAUD	transmission speed	187-189	3	r	0
42	V	SIGDATA	data record "correct/incorrect"	190	1		
43	V	TRNSFLV2	domain number of transferring party	191-192	2	r	0
44	V	TRNSFLV1	subdomain number of transferring party	193-195	3	r	0
45	V	TRNSFLV0	node number of transferring party	196-198	3	r	0
46	V	DESTLV2	domain number of connected party	199-200	2	r	0
47	V	DESTLV1	subdomain number of connected party	201-203	3	r	0
48	V	DESTLV0	node number of connected party	204-206	3	r	0
49	V	THRELV2	domain number of global call id - global for network	207-208	2	r	0
50	V	THRELV1	subdomain number of global call id - global for network	209-211	3	r	0
51	V	THRELV0	node number of global call id - global for network	212-214	3	r	0
52	V	THRESEQ	global call id - global for network	215-222	8	r	0
53	V	NETTYPE	network description	223	1		
54	V	INTNLIST	trunk number of the non-recording point	224-228	5	l	
55	V	RINGDUR	ring duration in 1/10 seconds	229-234	6	r	0
56	V	QUEUEDUR	queuing duration in 1/10 seconds	235-240	6	l	
	F	CRLF	CR / LF flag for end of data record	241-242	2		

HP4M_AMPM_UV3.0 - Output format from HiPath 4000 V3

Legend: No. = sequential element number; ET = element type: F = fixed text, V = variable element; E = ending element; FTBL Name = FTBL element name; EIndex = element index; L = element length; A = alignment; FI = pad character: Empty = space

Table 72: HP4M_AMPM_UV3.0 - Output format

No	ET	Element	Long name (eng)	Position	Length	Alignmer	filler
1	F	FIXTEXT	Fixed text	1	1	L	\$
2	V	ACDGID	ACD Group Number	2-4	3	L	
3	V	ADPLOAD	ADP load	5-8	4	R	0
4	V	ATTGRNO	Attendant console group	9-10	2	R	0
5	V	BAUD	Transmission speed	11-13	3	L	
6	V	BCHLCNT	Number of used B-channels	14-15	2	R	0
7	V	CALLEPTY	Called party; dialed number	16-37	22	L	
8	V	CALLIID	Identification of calling party number	38-38	1	L	
9	V	CALLILV0	Node number of calling party	39-41	3	R	0
10	V	CALLILV1	Subdomain number of calling party	42-44	3	R	0
11	V	CALLILV2	Domain number of calling party	45-46	2	R	0
12	V	CALLIPTY	Calling party; party that initiated connection	47-68	22	L	
13	V	CARRIER	Carrier; communication network	69-69	1	L	
14	V	CAUSE	Cause - of connection interrupt / clear down	70-72	3	R	0
15	V	CHRGUNIT	Call charge units	73-77	5	R	0
16	V	CONCHRG	Costs calculated on output within VAT	78-86	9	R	0
17	V	CONNSTEP	Connection sequence; number	87-89	3	R	0
18	V	CONNTYPE	Connection type	90-90	1	L	
19	V	CONTOT	Connection duration total in 1/10 seconds	91-96	6	R	0
20	V	COPIN	Class of PIN	97-98	2	L	
21	V	DESTLV0	Node number of destination number	99-101	3	R	0
22	V	DESTLV1	Subdomain number of destination number	102-104	3	R	0
23	V	DESTLV2	Domain number of destination number	105-106	2	R	0
24	V	DESTPID	Identification number of destination number	107-107	1	L	
25	V	DESTPTY	Destination number (new/connected party)	108-129	22	L	
26	V	DISPCHRG	Display of connection charge with VAT	130-138	9	R	0

No	ET	Element	Long name (eng)	Position	Length	Alignmer	filler
27	V	END10	End-of-connection 1/10 of a second	139-139	1	R	0
28	V	ENDDAY	End-of-connection day	140-141	2	R	0
29	V	ENDHOUR	End-of-connection hour	142-143	2	R	0
30	V	ENDMIN	End-of-connection minute	144-145	2	R	0
31	V	ENDMONTH	End-of-connection month	146-147	2	R	0
32	V	ENDSEC	End-of-connection second	148-149	2	R	0
33	V	ENDYEAR	End-of-connection year	150-153	4	R	0
34	V	EXPENS	Expensive connection	154-154	1	L	
35	V	GLOBLV0	Node number of global call ID only local	155-157	3	R	0
36	V	GLOBLV1	Subdomain number of global call ID (local)	158-160	3	R	0
37	V	GLOBLV2	Domain number of global call ID (local)	161-162	2	R	0
38	V	GLOBLSEQ	Global call ID (local/leg)	163-179	8	R	0
39	V	HOLDDUR	Hold duration in 1/10 seconds	171-175	5	R	0
40	V	INTNBCHA	B-channel for real trunk no. of the recording point	176-177	2	R	0
41	V	INTNLIST	Imaginary trunk number created from INTNREAL	178-183	6	R	0
42	V	INTNREAL	Real trunk no. of the non-recording point (see TKNOREAL)	184-188	5	L	
43	V	INTNTRGR	Real trunk group number of the non-recording point	189-191	3	R	0
44	V	NETTYPE	Network description	192-192	1	L	
45	V	PAYPART	Paying party; chargee of a connection	193-214	22	L	
46	V	PIN	Personal identification number	215-226	12	L	
47	V	PPLV0	Node number of paying party	227-229	3	R	0
48	V	PPLV1	Subdomain number of paying party	230-232	3	R	0
49	V	PPLV2	Domain number of paying party	233-234	2	R	0
50	V	QUEUEDUR	Queueing duration in 1/10 seconds	235-239	5	R	0
51	V	RECPT	Record point	240-240	1	R	0
52	V	RECTYPE	Record type	241-241	1	R	0
53	V	RINGDUR	Ring duration; total in 1/10 seconds	242-244	3	R	0

Reference Material

No	ET	Element	Long name (eng)	Position	Length	Alignmer	filler
54	V	ROUTCC	Route code as a text string	245-250	6	R	
55	V	SERVICE	Service	251-251	1	L	
56	V	SIGDATA	Indicates whether the output data record is correct / incorrect or double	252-252	1	L	
57	V	STNID	Station identification number	253-253	1	L	
58	V	SUPLSERV	Supplementary service	254-255	2	L	
59	V	SWP	Call processing phases	256-257	2	L	
60	V	SWULOAD	Switching unit load	258-261	4	R	0
61	V	THRELV0	Node number of thread (global) call ID	262-264	3	R	0
62	V	THRELV1	Subdomain number of thread (global) call ID	265-267	3	R	0
63	V	THRELV2	Domain number of thread (global) call ID	268-269	2	R	0
64	V	THRESEQ	Thread (global) call ID in network	270-277	8	R	0
65	V	TKNOBCHA	B-channel for real trunk no. of the non-recording point	278-279	2	R	0
66	V	TKNOLIST	Imaginary trunk number created of TKNOREAL (see AMO-FBTN)	280-285	6	L	
67	V	TKNOREAL	Real trunk number of recording point	286-290	5	R	0
68	V	TKNOTRGR	Real trunk group number of recording point	291-293	3	R	0
69	V	TRANSCNT	Number of passed through transit nodes	294-295	2	R	0
70	V	TRNSFLV0	Node number of transferring party (AC)	296-298	3	R	0
71	V	TRNSFLV1	Subdomain number of transferring party (AC)	299-301	3	R	0
72	V	TRNSFLV2	Domain number of transferring party (AC)	302-303	2	R	0
73	V	TRNSFPTY	Transferring party (attendant console)	304-325	22	L	
74	V	UNANS	Through connect / no through connect	326-326	1	L	
75	V	ZONE	Distance zone	327-329	3	L	

HP4M_AMPM_UV4 - Output format from HiPath 4000 V4

Legend: No. = sequential element number; ET = element type: F = fixed text, V = variable element; E = ending element; FTBL Name = FTBL element name; EIndex = element index; L = element length; A = alignment; FI = pad character: Empty = space

Table 73: HP4M_AMPM_UV4 - Output format

No	ET	Element	Long name (eng)	Position	Length	Alignmen	filler
1	F	FIXTEXT	Fixed text	1	1	L	\$
2	V	ACDGID	ACD Group Number	2-4	3	L	
3	V	ADPLOAD	ADP load	5-8	4	R	0
4	V	ATTGRNO	Attendant console group	9-10	2	R	0
5	V	BAUD	Transmission speed	11-13	3	L	
6	V	BCHLCNT	Number of used B-channels	14-15	2	R	0
7	V	CALLEPTY	Called party; dialed number	16-37	22	L	
8	V	CALLIID	Identification of calling party number	38-38	1	L	
9	V	CALLILV0	Node number of calling party	39-41	3	R	0
10	V	CALLILV1	Subdomain number of calling party	42-44	3	R	0
11	V	CALLILV2	Domain number of calling party	45-46	2	R	0
12	V	CALLIPTY	Calling party; party that initiated connection	47-68	22	L	
13	V	CARRIER	Carrier; communication network	69-69	1	L	
14	V	CAUSE	Cause - of connection interrupt / clear down	70-72	3	R	0
15	V	CHRGUNIT	Call charge units	73-77	5	R	0
16	V	CONCHRG	Costs calculated on output within VAT	78-86	9	R	0
17	V	CONNSTEP	Connection sequence; number	87-89	3	R	0
18	V	CONNTYPE	Connection type	90-90	1	L	
19	V	CONTOT	Connection duration total in 1/10 seconds	91-96	6	R	0
20	V	COPIN	Class of PIN	97-98	2	L	
21	V	DESTLV0	Node number of destination number	99-101	3	R	0
22	V	DESTLV1	Subdomain number of destination number	102-104	3	R	0
23	V	DESTLV2	Domain number of destination number	105-106	2	R	0
24	V	DESTPID	Identification number of destination number	107-107	1	L	
25	V	DESTPTY	Destination number (new/connected party)	108-129	22	L	
26	V	DISPCHRG	Display of connection charge with VAT	130-138	9	R	0

Reference Material

No	ET	Element	Long name (eng)	Position	Length	Alignmen	filler
27	V	END10	End-of-connection 1/10 of a second	139-139	1	R	0
28	V	ENDDAY	End-of-connection day	140-141	2	R	0
29	V	ENDHOUR	End-of-connection hour	142-143	2	R	0
30	V	ENDMIN	End-of-connection minute	144-145	2	R	0
31	V	ENDMONTH	End-of-connection month	146-147	2	R	0
32	V	ENDSEC	End-of-connection second	148-149	2	R	0
33	V	ENDYEAR	End-of-connection year	150-153	4	R	0
34	V	EXPENS	Expensive connection	154-154	1	L	
35	V	GLOBLV0	Node number of global call ID only local	155-157	3	R	0
36	V	GLOBLV1	Subdomain number of global call ID (local)	158-160	3	R	0
37	V	GLOBLV2	Domain number of global call ID (local)	161-162	2	R	0
38	V	GLOBLSEQ	Global call ID (local/leg)	163-179	8	R	0
39	V	HOLDDUR	Hold duration in 1/10 seconds	171-175	5	R	0
40	V	INTNBCHA	B-channel for real trunk no. of the recording point	176-177	2	R	0
41	V	INTNLIST	Imaginary trunk number created from INTNREAL	178-183	6	R	0
42	V	INTNREAL	Real trunk no. of the non-recording point (see TKNOREAL)	184-188	5	L	
43	V	INTNTRGR	Real trunk group number of the non-recording point	189-191	3	R	0
44	V	NETTYPE	Network description	192-192	1	L	
45	V	PAYPART	Paying party; chargee of a connection	193-214	22	L	
46	V	PIN	Personal identification number	215-226	12	L	
47	V	PPLV0	Node number of paying party	227-229	3	R	0
48	V	PPLV1	Subdomain number of paying party	230-232	3	R	0
49	V	PPLV2	Domain number of paying party	233-234	2	R	0
50	V	QUEUEDUR	Queueing duration in 1/10 seconds	235-239	5	R	0
51	V	RECPT	Record point	240-240	1	R	0
52	V	RECTYPE	Record type	241-241	1	R	0
53	V	RINGDUR	Ring duration; total in 1/10 seconds	242-244	3	R	0
54	V	ROUTCC	Route code as a text string	245-250	6	R	

No	ET	Element	Long name (eng)	Position	Length	Alignmen	filler
55	V	SERVICE	Service	251-251	1	L	
56	V	SIGDATA	Indicates whether the output data record is correct / incorrect or double	252-252	1	L	
57	V	STNID	Station identification number	253-253	1	L	
58	V	SUPLSERV	Supplementary service	254-255	2	L	
59	V	SWP	Call processing phases	256-257	2	L	
60	V	SWULOAD	Switching unit load	258-261	4	R	0
61	V	THRELV0	Node number of thread (global) call ID	262-264	3	R	0
62	V	THRELV1	Subdomain number of thread (global) call ID	265-267	3	R	0
63	V	THRELV2	Domain number of thread (global) call ID	268-269	2	R	0
64	V	THRESEQ	Thread (global) call ID in network	270-277	8	R	0
65	V	TKNOBCHA	B-channel for real trunk no. of the non-recording point	278-279	2	R	0
66	V	TKNOLIST	Imaginary trunk number created of TKNOREAL (see AMO-FBTN)	280-285	6	L	
67	V	TKNOREAL	Real trunk number of recording point	286-290	5	R	0
68	V	TKNOTRGR	Real trunk group number of recording point	291-293	3	R	0
69	V	TRANSCNT	Number of passed through transit nodes	294-295	2	R	0
70	V	TRNSFLV0	Node number of transferring party (AC)	296-298	3	R	0
71	V	TRNSFLV1	Subdomain number of transferring party (AC)	299-301	3	R	0
72	V	TRNSFLV2	Domain number of transferring party (AC)	302-303	2	R	0
73	V	TRNSFPTY	Transferring party (attendant console)	304-325	22	L	
74	V	UNANS	Through connect / no through connect	326-326	1	L	
75	V	ZONE	Distance zone	327-329	3	L	

HP4M_AMPV_UV5 - Output format from HiPath 4000 V5

Legend: No. = sequential element number; ET = element type: F = fixed text, V = variable element; E = ending element; FTBL Name = FTBL element name; EIndex = element index; L = element length; A = alignment; FI = pad character: Empty = space

Table 74: HP4M_AMPM_UV5 - Output format

No	ET	Element	Long name (eng)	Position	Length	Alignme	filler
1	F	FIXTEXT	Fixed text	1	1	L	\$
2	V	ACDGID	ACD Group Number	2-4	3	L	
3	V	ADPLOAD	ADP load	5-8	4	R	0
4	V	ATTGRNO	Attendant console group	9-10	2	R	0
5	V	BAUD	Transmission speed	11-13	3	L	
6	V	BCHLCNT	Number of used B-channels	14-15	2	R	0
7	V	CALLEPTY	Called party; dialed number	16-37	22	L	
8	V	CALLIID	Identification of calling party number	38-38	1	L	
9	V	CALLILV0	Node number of calling party	39-41	3	R	0
10	V	CALLILV1	Subdomain number of calling party	42-44	3	R	0
11	V	CALLILV2	Domain number of calling party	45-46	2	R	0
12	V	CALLIPTY	Calling party; party that initiated connection	47-68	22	L	
13	V	CARRIER	Carrier; communication network	69-69	1	L	
14	V	CAUSE	Cause - of connection interrupt / clear down	70-72	3	R	0
15	V	CHRGUNIT	Call charge units	73-77	5	R	0
16	V	CONCHRG	Costs calculated on output within VAT	78-86	9	R	0
17	V	CONNSTEP	Connection sequence; number	87-89	3	R	0
18	V	CONNTYPE	Connection type	90-90	1	L	
19	V	CONTOT	Connection duration total in 1/10 seconds	91-96	6	R	0
20	V	COPIN	Class of PIN	97-98	2	L	
21	V	DESTLV0	Node number of destination number	99-101	3	R	0
22	V	DESTLV1	Subdomain number of destination number	102-104	3	R	0
23	V	DESTLV2	Domain number of destination number	105-106	2	R	0
24	V	DESTPID	Identification number of destination number	107-107	1	L	
25	V	DESTPTY	Destination number (new/connected party)	108-129	22	L	
26	V	DISPCHRG	Display of connection charge with VAT	130-138	9	R	0
27	V	END10	End-of-connection 1/10 of a second	139-139	1	R	0

No	ET	Element	Long name (eng)	Position	Length	Alignme	filler
28	V	ENDDAY	End-of-connection day	140-141	2	R	0
29	V	ENDHOUR	End-of-connection hour	142-143	2	R	0
30	V	ENDMIN	End-of-connection minute	144-145	2	R	0
31	V	ENDMONTH	End-of-connection month	146-147	2	R	0
32	V	ENDSEC	End-of-connection second	148-149	2	R	0
33	V	ENDYEAR	End-of-connection year	150-153	4	R	0
34	V	EXPENS	Expensive connection	154-154	1	L	
35	V	GLOBLV0	Node number of global call ID only local	155-157	3	R	0
36	V	GLOBLV1	Subdomain number of global call ID (local)	158-160	3	R	0
37	V	GLOBLV2	Domain number of global call ID (local)	161-162	2	R	0
38	V	GLOBLSEQ	Global call ID (local/leg)	163-179	8	R	0
39	V	HOLDDUR	Hold duration in 1/10 seconds	171-175	5	R	0
40	V	INTNBCHA	B-channel for real trunk no. of the recording point	176-177	2	R	0
41	V	INTNLIST	Imaginary trunk number created from INTNREAL	178-183	6	R	0
42	V	INTNREAL	Real trunk no. of the non-recording point (see TKNOREAL)	184-188	5	L	
43	V	INTNTRGR	Real trunk group number of the non-recording point	189-191	3	R	0
44	V	NETTYPE	Network description	192-192	1	L	
45	V	PAYPART	Paying party; chargee of a connection	193-214	22	L	
46	V	PIN	Personal identification number	215-226	12	L	
47	V	PPLV0	Node number of paying party	227-229	3	R	0
48	V	PPLV1	Subdomain number of paying party	230-232	3	R	0
49	V	PPLV2	Domain number of paying party	233-234	2	R	0
50	V	QUEUEDUR	Queueing duration in 1/10 seconds	235-239	5	R	0
51	V	RECPT	Record point	240-240	1	R	0
52	V	RECTYPE	Record type	241-241	1	R	0
53	V	RINGDUR	Ring duration; total in 1/10 seconds	242-244	3	R	0
54	V	ROUTCC	Route code as a text string	245-250	6	R	
55	V	SERVICE	Service	251-251	1	L	

Reference Material

No	ET	Element	Long name (eng)	Position	Length	Alignme	filler
56	V	SIGDATA	Indicates whether the output data record is correct / incorrect or double	252-252	1	L	
57	V	STNID	Station identification number	253-253	1	L	
58	V	SUPLSERV	Supplementary service	254-255	2	L	
59	V	SWP	Call processing phases	256-257	2	L	
60	V	SWULOAD	Switching unit load	258-261	4	R	0
61	V	THRELV0	Node number of thread (global) call ID	262-264	3	R	0
62	V	THRELV1	Subdomain number of thread (global) call ID	265-267	3	R	0
63	V	THRELV2	Domain number of thread (global) call ID	268-269	2	R	0
64	V	THRESEQ	Thread (global) call ID in network	270-277	8	R	0
65	V	TKNOBCHA	B-channel for real trunk no. of the non-recording point	278-279	2	R	0
66	V	TKNOLIST	Imaginary trunk number created of TKNOREAL (see AMO-FBTN)	280-285	6	L	
67	V	TKNOREAL	Real trunk number of recording point	286-290	5	R	0
68	V	TKNOTRGR	Real trunk group number of recording point	291-293	3	R	0
69	V	TRANSCNT	Number of passed through transit nodes	294-295	2	R	0
70	V	TRNSFLV0	Node number of transferring party (AC)	296-298	3	R	0
71	V	TRNSFLV1	Subdomain number of transferring party (AC)	299-301	3	R	0
72	V	TRNSFLV2	Domain number of transferring party (AC)	302-303	2	R	0
73	V	TRNSFPTY	Transferring party (attendant console)	304-325	22	L	
74	V	UNANS	Through connect / no through connect	326-326	1	L	
75	V	ZONE	Distance zone	327-329	3	L	

HP4M_AMPM_UV6 - Output format from HiPath 4000 V6

Legend: No. = sequential element number; ET = element type: F = fixed text, V = variable element; E = ending element; FTBL Name = FTBL element name; EIndex = element index; L = element length; A = alignment; FI = pad character: Empty = space

Table 75: HP4M_AMPM_UV6 - Output format

No	ET	Element	Long name (eng)	Position	Length	Alignme	filler
1	F	FIXTEXT	Fixed text	1	1	L	\$

No	ET	Element	Long name (eng)	Position	Length	Alignme	filler
2	V	ACDGID	ACD Group Number	2-4	3	L	
3	V	ADPLOAD	ADP load	5-8	4	R	0
4	V	ATTGRNO	Attendant console group	9-10	2	R	0
5	V	BAUD	Transmission speed	11-13	3	L	
6	V	BCHLCNT	Number of used B-channels	14-15	2	R	0
7	V	CALLEPTY	Called party; dialed number	16-37	22	L	
8	V	CALLIID	Identification of calling party number	38-38	1	L	
9	V	CALLILV0	Node number of calling party	39-41	3	R	0
10	V	CALLILV1	Subdomain number of calling party	42-44	3	R	0
11	V	CALLILV2	Domain number of calling party	45-46	2	R	0
12	V	CALLIPTY	Calling party; party that initiated connection	47-68	22	L	
13	V	CARRIER	Carrier; communication network	69-69	1	L	
14	V	CAUSE	Cause - of connection interrupt / clear down	70-72	3	R	0
15	V	CHRGUNIT	Call charge units	73-77	5	R	0
16	V	CONCHRG	Costs calculated on output within VAT	78-86	9	R	0
17	V	CONNSTEP	Connection sequence; number	87-89	3	R	0
18	V	CONNTYPE	Connection type	90-90	1	L	
19	V	CONTOT	Connection duration total in 1/10 seconds	91-96	6	R	0
20	V	COPIN	Class of PIN	97-98	2	L	
21	V	DESTLV0	Node number of destination number	99-101	3	R	0
22	V	DESTLV1	Subdomain number of destination number	102-104	3	R	0
23	V	DESTLV2	Domain number of destination number	105-106	2	R	0
24	V	DESTPID	Identification number of destination number	107-107	1	L	
25	V	DESTPTY	Destination number (new/connected party)	108-129	22	L	
26	V	DISPCHRG	Display of connection charge with VAT	130-138	9	R	0
27	V	END10	End-of-connection 1/10 of a second	139-139	1	R	0
28	V	ENDDAY	End-of-connection day	140-141	2	R	0

Reference Material

No	ET	Element	Long name (eng)	Position	Length	Alignme	filler
29	V	ENDHOUR	End-of-connection hour	142-143	2	R	0
30	V	ENDMIN	End-of-connection minute	144-145	2	R	0
31	V	ENDMONTH	End-of-connection month	146-147	2	R	0
32	V	ENDSEC	End-of-connection second	148-149	2	R	0
33	V	ENDYEAR	End-of-connection year	150-153	4	R	0
34	V	EXPENS	Expensive connection	154-154	1	L	
35	V	GLOBLV0	Node number of global call ID only local	155-157	3	R	0
36	V	GLOBLV1	Subdomain number of global call ID (local)	158-160	3	R	0
37	V	GLOBLV2	Domain number of global call ID (local)	161-162	2	R	0
38	V	GLOBLSEQ	Global call ID (local/leg)	163-179	8	R	0
39	V	HOLDDUR	Hold duration in 1/10 seconds	171-175	5	R	0
40	V	INTNBCHA	B-channel for real trunk no. of the recording point	176-177	2	R	0
41	V	INTNLIST	Imaginary trunk number created from INTNREAL	178-183	6	R	0
42	V	INTNREAL	Real trunk no. of the non-recording point (see TKNOREAL)	184-188	5	L	
43	V	INTNTRGR	Real trunk group number of the non-recording point	189-191	3	R	0
44	V	NETTYPE	Network description	192-192	1	L	
45	V	PAYPART	Paying party; chargee of a connection	193-214	22	L	
46	V	PIN	Personal identification number	215-226	12	L	
47	V	PPLV0	Node number of paying party	227-229	3	R	0
48	V	PPLV1	Subdomain number of paying party	230-232	3	R	0
49	V	PPLV2	Domain number of paying party	233-234	2	R	0
50	V	QUEUEDUR	Queueing duration in 1/10 seconds	235-239	5	R	0
51	V	RECPT	Record point	240-240	1	R	0
52	V	RECTYPE	Record type	241-241	1	R	0
53	V	RINGDUR	Ring duration; total in 1/10 seconds	242-244	3	R	0
54	V	ROUTCC	Route code as a text string	245-250	6	R	
55	V	SERVICE	Service	251-251	1	L	

No	ET	Element	Long name (eng)	Position	Length	Alignme	filler
56	V	SIGDATA	Indicates whether the output data record is correct / incorrect or double	252-252	1	L	
57	V	STNID	Station identification number	253-253	1	L	
58	V	SUPLSERV	Supplementary service	254-255	2	L	
59	V	SWP	Call processing phases	256-257	2	L	
60	V	SWULOAD	Switching unit load	258-261	4	R	0
61	V	THRELV0	Node number of thread (global) call ID	262-264	3	R	0
62	V	THRELV1	Subdomain number of thread (global) call ID	265-267	3	R	0
63	V	THRELV2	Domain number of thread (global) call ID	268-269	2	R	0
64	V	THRESEQ	Thread (global) call ID in network	270-277	8	R	0
65	V	TKNOBCHA	B-channel for real trunk no. of the non-recording point	278-279	2	R	0
66	V	TKNOLIST	Imaginary trunk number created of TKNOREAL (see AMO-FBTN)	280-285	6	L	
67	V	TKNOREAL	Real trunk number of recording point	286-290	5	R	0
68	V	TKNOTRGR	Real trunk group number of recording point	291-293	3	R	0
69	V	TRANSCNT	Number of passed through transit nodes	294-295	2	R	0
70	V	TRNSFLV0	Node number of transferring party (AC)	296-298	3	R	0
71	V	TRNSFLV1	Subdomain number of transferring party (AC)	299-301	3	R	0
72	V	TRNSFLV2	Domain number of transferring party (AC)	302-303	2	R	0
73	V	TRNSFPTY	Transferring party (attendant console)	304-325	22	L	
74	V	UNANS	Through connect / no through connect	326-326	1	L	
75	V	ZONE	Distance zone	327-329	3	L	

HP4M_AMPM_UV7 - Output format from OpenScope 4000 V7

Legend: No. = sequential element number; ET = element type: F = fixed text, V = variable element; E = ending element; FTBL Name = FTBL element name; EIndex = element index; L = element length; A = alignment; FI = pad character: Empty = space

Table 76: HP4M_AMP_M_UV7 - Output format

No	ET	Element	Long name (eng)	Position	Length	Alignme	filler
1	F	FIXTEXT	Fixed text	1	1	L	\$
2	V	ACDGRID	ACD Group Number	2-4	3	L	
3	V	ADPLOAD	ADP load	5-8	4	R	0
4	V	ATTGRNO	Attendant console group	9-10	2	R	0
5	V	BAUD	Transmission speed	11-13	3	L	
6	V	BCHLCNT	Number of used B-channels	14-15	2	R	0
7	V	CALLEPTY	Called party; dialed number	16-37	22	L	
8	V	CALLIID	Identification of calling party number	38-38	1	L	
9	V	CALLILV0	Node number of calling party	39-41	3	R	0
10	V	CALLILV1	Subdomain number of calling party	42-44	3	R	0
11	V	CALLILV2	Domain number of calling party	45-46	2	R	0
12	V	CALLIPT	Calling party; party that initiated connection	47-68	22	L	
13	V	CARRIER	Carrier; communication network	69-69	1	L	
14	V	CAUSE	Cause - of connection interrupt / clear down	70-72	3	R	0
15	V	CHRGUNIT	Call charge units	73-77	5	R	0
16	V	CONCHRG	Costs calculated on output within VAT	78-86	9	R	0
17	V	CONNSTEP	Connection sequence; number	87-89	3	R	0
18	V	CONNTYPE	Connection type	90-90	1	L	
19	V	CONTOT	Connection duration total in 1/10 seconds	91-96	6	R	0
20	V	COPIN	Class of PIN	97-98	2	L	
21	V	DESTLV0	Node number of destination number	99-101	3	R	0
22	V	DESTLV1	Subdomain number of destination number	102-104	3	R	0
23	V	DESTLV2	Domain number of destination number	105-106	2	R	0
24	V	DESTPID	Identification number of destination number	107-107	1	L	
25	V	DESTPTY	Destination number (new/connected party)	108-129	22	L	
26	V	DISPCHRG	Display of connection charge with VAT	130-138	9	R	0

No	ET	Element	Long name (eng)	Position	Length	Alignme	filler
27	V	END10	End-of-connection 1/10 of a second	139-139	1	R	0
28	V	ENDDAY	End-of-connection day	140-141	2	R	0
29	V	ENDHOUR	End-of-connection hour	142-143	2	R	0
30	V	ENDMIN	End-of-connection minute	144-145	2	R	0
31	V	ENDMONTH	End-of-connection month	146-147	2	R	0
32	V	ENDSEC	End-of-connection second	148-149	2	R	0
33	V	ENDYEAR	End-of-connection year	150-153	4	R	0
34	V	EXPENS	Expensive connection	154-154	1	L	
35	V	GLOBLV0	Node number of global call ID only local	155-157	3	R	0
36	V	GLOBLV1	Subdomain number of global call ID (local)	158-160	3	R	0
37	V	GLOBLV2	Domain number of global call ID (local)	161-162	2	R	0
38	V	GLOBLSEQ	Global call ID (local/leg)	163-179	8	R	0
39	V	HOLDDUR	Hold duration in 1/10 seconds	171-175	5	R	0
40	V	INTNBCHA	B-channel for real trunk no. of the recording point	176-177	2	R	0
41	V	INTNLIST	Imaginary trunk number created from INTNREAL	178-183	6	R	0
42	V	INTNREAL	Real trunk no. of the non-recording point (see TKNOREAL)	184-188	5	L	
43	V	INTNTRGR	Real trunk group number of the non-recording point	189-191	3	R	0
44	V	NETTYPE	Network description	192-192	1	L	
45	V	PAYPART	Paying party; chargee of a connection	193-214	22	L	
46	V	PIN	Personal identification number	215-226	12	L	
47	V	PPLV0	Node number of paying party	227-229	3	R	0
48	V	PPLV1	Subdomain number of paying party	230-232	3	R	0
49	V	PPLV2	Domain number of paying party	233-234	2	R	0
50	V	QUEUEDUR	Queueing duration in 1/10 seconds	235-239	5	R	0
51	V	RECPT	Record point	240-240	1	R	0
52	V	RECTYPE	Record type	241-241	1	R	0
53	V	RINGDUR	Ring duration; total in 1/10 seconds	242-244	3	R	0

Reference Material

No	ET	Element	Long name (eng)	Position	Length	Alignme	filler
54	V	ROUTCC	Route code as a text string	245-250	6	R	
55	V	SERVICE	Service	251-251	1	L	
56	V	SIGDATA	Indicates whether the output data record is correct / incorrect or double	252-252	1	L	
57	V	STNID	Station identification number	253-253	1	L	
58	V	SUPLSERV	Supplementary service	254-255	2	L	
59	V	SWP	Call processing phases	256-257	2	L	
60	V	SWULOAD	Switching unit load	258-261	4	R	0
61	V	THRELV0	Node number of thread (global) call ID	262-264	3	R	0
62	V	THRELV1	Subdomain number of thread (global) call ID	265-267	3	R	0
63	V	THRELV2	Domain number of thread (global) call ID	268-269	2	R	0
64	V	THRESEQ	Thread (global) call ID in network	270-277	8	R	0
65	V	TKNOBCHA	B-channel for real trunk no. of the non-recording point	278-279	2	R	0
66	V	TKNOLIST	Imaginary trunk number created of TKNOREAL (see AMO-FBTN)	280-285	6	L	
67	V	TKNOREAL	Real trunk number of recording point	286-290	5	R	0
68	V	TKNOTRGR	Real trunk group number of recording point	291-293	3	R	0
69	V	TRANSCNT	Number of passed through transit nodes	294-295	2	R	0
70	V	TRNSFLV0	Node number of transferring party (AC)	296-298	3	R	0
71	V	TRNSFLV1	Subdomain number of transferring party (AC)	299-301	3	R	0
72	V	TRNSFLV2	Domain number of transferring party (AC)	302-303	2	R	0
73	V	TRNSFPTY	Transferring party (attendant console)	304-325	22	L	
74	V	UNANS	Through connect / no through connect	326-326	1	L	
75	V	ZONE	Distance zone	327-329	3	L	

HP4M_PM_UV7 - Output format from OpenScope 4000 V7

Legend: No. = sequential element number; ET = element type: F = fixed text, V = variable element; E = ending element; FTBL Name = FTBL element name; EIndex = element index; L = element length; A = alignment; FI = pad character: Empty = space

Table 77: HP4M_PM_UV7 - Output format

No	ET	Element	Long name (eng)	Position	Length	Alignme	filler
1	F	FIXTEXT	Fixed text	1	1	L	\$
2	V	ACDGID	ACD Group Number	2-4	3	L	
3	V	ADPLOAD	ADP load	5-8	4	R	0
4	V	ATTGRNO	Attendant console group	9-10	2	R	0
5	V	BCHLCNT	Number of used B-channels	11-12	2	R	0
6	V	CALLEPTY	Called party; dialed number	13-34	22	L	
7	V	CALLIID	Identification of calling party number	35-35	1	L	
8	V	CALLILV0	Node number of calling party	36-38	3	R	0
9	V	CALLILV1	Subdomain number of calling party	39-41	3	R	0
10	V	CALLILV2	Domain number of calling party	42-43	2	R	0
11	V	CALLIPTY	Calling party; party that initiated connection	45-65	22	L	
12	V	CARRIER	Carrier; communication network	66-66	1	L	
13	V	CAUSE	Cause - of connection interrupt / clear down	67-69	3	R	0
14	V	CONNSTEP	Connection sequence; number	70-72	3	R	0
15	V	CONNTYPE	Connection type	73-73	1	L	
16	V	CONTOT	Connection duration total in 1/10 seconds	74-79	6	R	0
17	V	DESTLV0	Node number of destination number	80-82	3	R	0
18	V	DESTLV1	Subdomain number of destination number	83-85	3	R	0
19	V	DESTLV2	Domain number of destination number	86-87	2	R	0
20	V	DESTPID	Identification number of destination number	88-88	1	L	
21	V	DESTPTY	Destination number (new/connected party)	89-110	22	L	
22	V	END10	End-of-connection 1/10 of a second	111-111	1	R	0
23	V	ENDDAY	End-of-connection day	112-113	2	R	0
24	V	ENDHOUR	End-of-connection hour	114-115	2	R	0
25	V	ENDMIN	End-of-connection minute	116-117	2	R	0
26	V	ENDMONTH	End-of-connection month	118-119	2	R	0
27	V	ENDSEC	End-of-connection second	120-121	2	R	0

Reference Material

No	ET	Element	Long name (eng)	Position	Length	Alignme	filler
28	V	ENDYEAR	End-of-connection year	122-125	4	R	0
29	V	GLOBLV0	Node number of global call ID only local	126-128	3	R	0
30	V	GLOBLV1	Subdomain number of global call ID (local)	129-131	3	R	0
31	V	GLOBLV2	Domain number of global call ID (local)	132-133	2	R	0
32	V	GLOBLSEQ	Global call ID (local/leg)	134-141	8	R	0
33	V	HOLDDUR	Hold duration in 1/10 seconds	142-146	5	R	0
34	V	INTNBCHA	B-channel for real trunk no. of the recording point	147-148	2	R	0
35	V	INTNREAL	Real trunk no. of the non-recording point (see TKNOREAL)	149-153	5	L	
36	V	INTNTRGR	Real trunk group number of the non-recording point	154-156	3	R	0
37	V	PAYPART	Paying party; chargee of a connection	157-178	22	L	
38	V	PPLV0	Node number of paying party	179-181	3	R	0
39	V	PPLV1	Subdomain number of paying party	182-184	3	R	0
40	V	PPLV2	Domain number of paying party	185-186	2	R	0
41	V	QUEUEDUR	Queueing duration in 1/10 seconds	187-191	5	R	0
42	V	RINGDUR	Ring duration; total in 1/10 seconds	192-194	3	R	0
43	V	STNID	Station identification number	195-195	1	L	
44	V	SUPLSERV	Supplementary service	196-197	2	L	
45	V	SWP	Call processing phases	198-199	2	L	
46	V	SWULOAD	Switching unit load	200-203	4	R	0
47	V	THRELV0	Node number of thread (global) call ID	204-206	3	R	0
48	V	THRELV1	Subdomain number of thread (global) call ID	207-209	3	R	0
49	V	THRELV2	Domain number of thread (global) call ID	210-211	2	R	0
50	V	THRESEQ	Thread (global) call ID in network	212-219	8	R	0
51	V	TKNOBCHA	B-channel for real trunk no. of the non-recording point	220-221	2	R	0
52	V	TKNOREAL	Real trunk number of recording point	222-226	5	R	0
53	V	TKNOTRGR	Real trunk group number of recording point	227-229	3	R	0

No	ET	Element	Long name (eng)	Position	Length	Alignme	filler
54	V	TRANSCNT	Number of passed through transit nodes	230-231	2	R	0
55	V	TRNSFLV0	Node number of transferring party (AC)	232-234	3	R	0
56	V	TRNSFLV1	Subdomain number of transferring party (AC)	235-237	3	R	0
57	V	TRNSFLV2	Domain number of transferring party (AC)	238-239	2	R	0
58	V	TRNSFPTY	Transferring party (attendant console)	240-261	22	L	
59	V	UNANS	Through connect / no through connect	262-262	1	L	

HP4M_AMPM_UV8 - Output format from OpenScape 4000 V8

Legend: No. = sequential element number; ET = element type: F = fixed text, V = variable element; E = ending element; FTBL Name = FTBL element name; EIndex = element index; L = element length; A = alignment; FI = pad character: Empty = space

Table 78: HP4M_AMPM_UV8 - Output format

No	ET	Element	Long name (eng)	Position	Length	Alignme	filler
1	F	FIXTEXT	Fixed text	1	1	L	\$
2	V	ACDGID	ACD Group Number	2-4	3	L	
3	V	ADPLOAD	ADP load	5-8	4	R	0
4	V	ATTGRNO	Attendant console group	9-10	2	R	0
5	V	BAUD	Transmission speed	11-13	3	L	
6	V	BCHLCNT	Number of used B-channels	14-15	2	R	0
7	V	CALLEPTY	Called party; dialed number	16-37	22	L	
8	V	CALLIID	Identification of calling party number	38-38	1	L	
9	V	CALLILV0	Node number of calling party	39-41	3	R	0
10	V	CALLILV1	Subdomain number of calling party	42-44	3	R	0
11	V	CALLILV2	Domain number of calling party	45-46	2	R	0
12	V	CALLIPTY	Calling party; party that initiated connection	47-68	22	L	
13	V	CARRIER	Carrier; communication network	69-69	1	L	
14	V	CAUSE	Cause - of connection interrupt / clear down	70-72	3	R	0
15	V	CHRGUNIT	Call charge units	73-77	5	R	0
16	V	CONCHRG	Costs calculated on output within VAT	78-86	9	R	0
17	V	CONNSTEP	Connection sequence; number	87-89	3	R	0

Reference Material

No	ET	Element	Long name (eng)	Position	Length	Alignme	filler
18	V	CONNTYPE	Connection type	90-90	1	L	
19	V	CONTOT	Connection duration total in 1/10 seconds	91-96	6	R	0
20	V	COPIN	Class of PIN	97-98	2	L	
21	V	DESTLV0	Node number of destination number	99-101	3	R	0
22	V	DESTLV1	Subdomain number of destination number	102-104	3	R	0
23	V	DESTLV2	Domain number of destination number	105-106	2	R	0
24	V	DESTPID	Identification number of destination number	107-107	1	L	
25	V	DESTPTY	Destination number (new/connected party)	108-129	22	L	
26	V	DISPCHRG	Display of connection charge with VAT	130-138	9	R	0
27	V	END10	End-of-connection 1/10 of a second	139-139	1	R	0
28	V	ENDDAY	End-of-connection day	140-141	2	R	0
29	V	ENDHOUR	End-of-connection hour	142-143	2	R	0
30	V	ENDMIN	End-of-connection minute	144-145	2	R	0
31	V	ENDMONTH	End-of-connection month	146-147	2	R	0
32	V	ENDSEC	End-of-connection second	148-149	2	R	0
33	V	ENDYEAR	End-of-connection year	150-153	4	R	0
34	V	EXPENS	Expensive connection	154-154	1	L	
35	V	GLOBLV0	Node number of global call ID only local	155-157	3	R	0
36	V	GLOBLV1	Subdomain number of global call ID (local)	158-160	3	R	0
37	V	GLOBLV2	Domain number of global call ID (local)	161-162	2	R	0
38	V	GLOBLSEQ	Global call ID (local/leg)	163-179	8	R	0
39	V	HOLDDUR	Hold duration in 1/10 seconds	171-175	5	R	0
40	V	INTNBCHA	B-channel for real trunk no. of the recording point	176-177	2	R	0
41	V	INTNLIST	Imaginary trunk number created from INTNREAL	178-183	6	R	0
42	V	INTNREAL	Real trunk no. of the non-recording point (see TKNOREAL)	184-188	5	L	

No	ET	Element	Long name (eng)	Position	Length	Alignme	filler
43	V	INTNTRGR	Real trunk group number of the non-recording point	189-191	3	R	0
44	V	NETTYPE	Network description	192-192	1	L	
45	V	PAYPART	Paying party; chargee of a connection	193-214	22	L	
46	V	PIN	Personal identification number	215-226	12	L	
47	V	PPLV0	Node number of paying party	227-229	3	R	0
48	V	PPLV1	Subdomain number of paying party	230-232	3	R	0
49	V	PPLV2	Domain number of paying party	233-234	2	R	0
50	V	QUEUEDUR	Queueing duration in 1/10 seconds	235-239	5	R	0
51	V	RECPT	Record point	240-240	1	R	0
52	V	RECTYPE	Record type	241-241	1	R	0
53	V	RINGDUR	Ring duration; total in 1/10 seconds	242-244	3	R	0
54	V	ROUTCC	Route code as a text string	245-250	6	R	
55	V	SERVICE	Service	251-251	1	L	
56	V	SIGDATA	Indicates whether the output data record is correct / incorrect or double	252-252	1	L	
57	V	STNID	Station identification number	253-253	1	L	
58	V	SUPLSERV	Supplementary service	254-255	2	L	
59	V	SWP	Call processing phases	256-257	2	L	
60	V	SWULOAD	Switching unit load	258-261	4	R	0
61	V	THRELV0	Node number of thread (global) call ID	262-264	3	R	0
62	V	THRELV1	Subdomain number of thread (global) call ID	265-267	3	R	0
63	V	THRELV2	Domain number of thread (global) call ID	268-269	2	R	0
64	V	THRESEQ	Thread (global) call ID in network	270-277	8	R	0
65	V	TKNOBCHA	B-channel for real trunk no. of the non-recording point	278-279	2	R	0
66	V	TKNOLIST	Imaginary trunk number created of TKNOREAL (see AMO-FBTN)	280-285	6	L	
67	V	TKNOREAL	Real trunk number of recording point	286-290	5	R	0
68	V	TKNOTRGR	Real trunk group number of recording point	291-293	3	R	0

Reference Material

No	ET	Element	Long name (eng)	Position	Length	Alignme	filler
69	V	TRANSCNT	Number of passed through transit nodes	294-295	2	R	0
70	V	TRNSFLV0	Node number of transferring party (AC)	296-298	3	R	0
71	V	TRNSFLV1	Subdomain number of transferring party (AC)	299-301	3	R	0
72	V	TRNSFLV2	Domain number of transferring party (AC)	302-303	2	R	0
73	V	TRNSFPTY	Transferring party (attendant console)	304-325	22	L	
74	V	UNANS	Through connect / no through connect	326-326	1	L	
75	V	ZONE	Distance zone	327-329	3	L	

HP4M_PM_UV8 - Output format from OpenScape 4000 V8

Legend: No. = sequential element number; ET = element type: F = fixed text, V = variable element; E = ending element; FTBL Name = FTBL element name; EIndex = element index; L = element length; A = alignment; FI = pad character: Empty = space

Table 79: HP4M_PM_UV8 - Output format

No	ET	Element	Long name (eng)	Position	Length	Alignme	filler
1	F	FIXTEXT	Fixed text	1	1	L	\$
2	V	ACDGID	ACD Group Number	2-4	3	L	
3	V	ADPLOAD	ADP load	5-8	4	R	0
4	V	ATTGRNO	Attendant console group	9-10	2	R	0
5	V	BCHLCNT	Number of used B-channels	11-12	2	R	0
6	V	CALLEPTY	Called party; dialed number	13-34	22	L	
7	V	CALLIID	Identification of calling party number	35-35	1	L	
8	V	CALLILV0	Node number of calling party	36-38	3	R	0
9	V	CALLILV1	Subdomain number of calling party	39-41	3	R	0
10	V	CALLILV2	Domain number of calling party	42-43	2	R	0
11	V	CALLIPTY	Calling party; party that initiated connection	45-65	22	L	
12	V	CARRIER	Carrier; communication network	66-66	1	L	
13	V	CAUSE	Cause - of connection interrupt / clear down	67-69	3	R	0
14	V	CONNSTEP	Connection sequence; number	70-72	3	R	0

No	ET	Element	Long name (eng)	Position	Length	Alignme	filler
15	V	CONNTYPE	Connection type	73-73	1	L	
16	V	CONTOT	Connection duration total in 1/10 seconds	74-79	6	R	0
17	V	DESTLV0	Node number of destination number	80-82	3	R	0
18	V	DESTLV1	Subdomain number of destination number	83-85	3	R	0
19	V	DESTLV2	Domain number of destination number	86-87	2	R	0
20	V	DESTPID	Identification number of destination number	88-88	1	L	
21	V	DESTPTY	Destination number (new/connected party)	89-110	22	L	
22	V	END10	End-of-connection 1/10 of a second	111-111	1	R	0
23	V	ENDDAY	End-of-connection day	112-113	2	R	0
24	V	ENDHOUR	End-of-connection hour	114-115	2	R	0
25	V	ENDMIN	End-of-connection minute	116-117	2	R	0
26	V	ENDMONTH	End-of-connection month	118-119	2	R	0
27	V	ENDSEC	End-of-connection second	120-121	2	R	0
28	V	ENDYEAR	End-of-connection year	122-125	4	R	0
29	V	GLOBLV0	Node number of global call ID only local	126-128	3	R	0
30	V	GLOBLV1	Subdomain number of global call ID (local)	129-131	3	R	0
31	V	GLOBLV2	Domain number of global call ID (local)	132-133	2	R	0
32	V	GLOBLSEQ	Global call ID (local/leg)	134-141	8	R	0
33	V	HOLDDUR	Hold duration in 1/10 seconds	142-146	5	R	0
34	V	INTNBCHA	B-channel for real trunk no. of the recording point	147-148	2	R	0
35	V	INTNREAL	Real trunk no. of the non-recording point (see TKNOREAL)	149-153	5	L	
36	V	INTNTRGR	Real trunk group number of the non-recording point	154-156	3	R	0
37	V	PAYPART	Paying party; chargee of a connection	157-178	22	L	
38	V	PPLV0	Node number of paying party	179-181	3	R	0
39	V	PPLV1	Subdomain number of paying party	182-184	3	R	0
40	V	PPLV2	Domain number of paying party	185-186	2	R	0

Reference Material

No	ET	Element	Long name (eng)	Position	Length	Alignme	filler
41	V	QUEUEDUR	Queueing duration in 1/10 seconds	187-191	5	R	0
42	V	RINGDUR	Ring duration; total in 1/10 seconds	192-194	3	R	0
43	V	STNID	Station identification number	195-195	1	L	
44	V	SUPLSERV	Supplementary service	196-197	2	L	
45	V	SWP	Call processing phases	198-199	2	L	
46	V	SWULOAD	Switching unit load	200-203	4	R	0
47	V	THRELV0	Node number of thread (global) call ID	204-206	3	R	0
48	V	THRELV1	Subdomain number of thread (global) call ID	207-209	3	R	0
49	V	THRELV2	Domain number of thread (global) call ID	210-211	2	R	0
50	V	THRESEQ	Thread (global) call ID in network	212-219	8	R	0
51	V	TKNOBCHA	B-channel for real trunk no. of the non-recording point	220-221	2	R	0
52	V	TKNOREAL	Real trunk number of recording point	222-226	5	R	0
53	V	TKNOTRGR	Real trunk group number of recording point	227-229	3	R	0
54	V	TRANSCNT	Number of passed through transit nodes	230-231	2	R	0
55	V	TRNSFLV0	Node number of transferring party (AC)	232-234	3	R	0
56	V	TRNSFLV1	Subdomain number of transferring party (AC)	235-237	3	R	0
57	V	TRNSFLV2	Domain number of transferring party (AC)	238-239	2	R	0
58	V	TRNSFPTY	Transferring party (attendant console)	240-261	22	L	
59	V	UNANS	Through connect / no through connect	262-262	1	L	

HP4M_AMPM_UV10 - Output format from OpenScape 4000 V10

Legend: No. = sequential element number; ET = element type: F = fixed text, V = variable element; E = ending element; FTBL Name = FTBL element name; EIndex = element index; L = element length; A = alignment; FI = pad character: Empty = space

Table 80: HP4M_AMPM_UV10- Output format

No	ET	Element	Long name (eng)	Position	Length	Alignme	filler
1	F	FIXTEXT	Fixed text	1	1	L	\$
2	V	ACDGID	ACD Group Number	2-4	3	L	
3	V	ADPLOAD	ADP load	5-8	4	R	0

No	ET	Element	Long name (eng)	Position	Length	Alignme	filler
4	V	ATTGRNO	Attendant console group	9-10	2	R	0
5	V	BAUD	Transmission speed	11-13	3	L	
6	V	BCHLCNT	Number of used B-channels	14-15	2	R	0
7	V	CALLEPTY	Called party; dialed number	16-37	22	L	
8	V	CALLIID	Identification of calling party number	38-38	1	L	
9	V	CALLILV0	Node number of calling party	39-41	3	R	0
10	V	CALLILV1	Subdomain number of calling party	42-44	3	R	0
11	V	CALLILV2	Domain number of calling party	45-46	2	R	0
12	V	CALLIPTY	Calling party; party that initiated connection	47-68	22	L	
13	V	CARRIER	Carrier; communication network	69-69	1	L	
14	V	CAUSE	Cause - of connection interrupt / clear down	70-72	3	R	0
15	V	CHRGUNIT	Call charge units	73-77	5	R	0
16	V	CONCHRG	Costs calculated on output within VAT	78-86	9	R	0
17	V	CONNSTEP	Connection sequence; number	87-89	3	R	0
18	V	CONNTYPE	Connection type	90-90	1	L	
19	V	CONTOT	Connection duration total in 1/10 seconds	91-96	6	R	0
20	V	COPIN	Class of PIN	97-98	2	L	
21	V	DESTLV0	Node number of destination number	99-101	3	R	0
22	V	DESTLV1	Subdomain number of destination number	102-104	3	R	0
23	V	DESTLV2	Domain number of destination number	105-106	2	R	0
24	V	DESTPID	Identification number of destination number	107-107	1	L	
25	V	DESTPTY	Destination number (new/connected party)	108-129	22	L	
26	V	DISPCHRG	Display of connection charge with VAT	130-138	9	R	0
27	V	END10	End-of-connection 1/10 of a second	139-139	1	R	0
28	V	ENDDAY	End-of-connection day	140-141	2	R	0
29	V	ENDHOUR	End-of-connection hour	142-143	2	R	0
30	V	ENDMIN	End-of-connection minute	144-145	2	R	0

Reference Material

No	ET	Element	Long name (eng)	Position	Length	Alignme	filler
31	V	ENDMONTH	End-of-connection month	146-147	2	R	0
32	V	ENDSEC	End-of-connection second	148-149	2	R	0
33	V	ENDYEAR	End-of-connection year	150-153	4	R	0
34	V	EXPENS	Expensive connection	154-154	1	L	
35	V	GLOBLV0	Node number of global call ID only local	155-157	3	R	0
36	V	GLOBLV1	Subdomain number of global call ID (local)	158-160	3	R	0
37	V	GLOBLV2	Domain number of global call ID (local)	161-162	2	R	0
38	V	GLOBLSEQ	Global call ID (local/leg)	163-179	8	R	0
39	V	HOLDDUR	Hold duration in 1/10 seconds	171-175	5	R	0
40	V	INTNBCHA	B-channel for real trunk no. of the recording point	176-177	2	R	0
41	V	INTNLIST	Imaginary trunk number created from INTNREAL	178-183	6	R	0
42	V	INTNREAL	Real trunk no. of the non-recording point (see TKNOREAL)	184-188	5	L	
43	V	INTNTRGR	Real trunk group number of the non-recording point	189-191	3	R	0
44	V	NETTYPE	Network description	192-192	1	L	
45	V	PAYPART	Paying party; chargee of a connection	193-214	22	L	
46	V	PIN	Personal identification number	215-226	12	L	
47	V	PPLV0	Node number of paying party	227-229	3	R	0
48	V	PPLV1	Subdomain number of paying party	230-232	3	R	0
49	V	PPLV2	Domain number of paying party	233-234	2	R	0
50	V	QUEUEDUR	Queueing duration in 1/10 seconds	235-239	5	R	0
51	V	RECPT	Record point	240-240	1	R	0
52	V	RECTYPE	Record type	241-241	1	R	0
53	V	RINGDUR	Ring duration; total in 1/10 seconds	242-244	3	R	0
54	V	ROUTCC	Route code as a text string	245-250	6	R	
55	V	SERVICE	Service	251-251	1	L	
56	V	SIGDATA	Indicates whether the output data record is correct / incorrect or double	252-252	1	L	

No	ET	Element	Long name (eng)	Position	Length	Alignme	filler
57	V	STNID	Station identification number	253-253	1	L	
58	V	SUPLSERV	Supplementary service	254-255	2	L	
59	V	SWP	Call processing phases	256-257	2	L	
60	V	SWULOAD	Switching unit load	258-261	4	R	0
61	V	THRELV0	Node number of thread (global) call ID	262-264	3	R	0
62	V	THRELV1	Subdomain number of thread (global) call ID	265-267	3	R	0
63	V	THRELV2	Domain number of thread (global) call ID	268-269	2	R	0
64	V	THRESEQ	Thread (global) call ID in network	270-277	8	R	0
65	V	TKNOBCHA	B-channel for real trunk no. of the non-recording point	278-279	2	R	0
66	V	TKNOLIST	Imaginary trunk number created of TKNOREAL (see AMO-FBTN)	280-285	6	L	
67	V	TKNOREAL	Real trunk number of recording point	286-290	5	R	0
68	V	TKNOTRGR	Real trunk group number of recording point	291-293	3	R	0
69	V	TRANSCNT	Number of passed through transit nodes	294-295	2	R	0
70	V	TRNSFLV0	Node number of transferring party (AC)	296-298	3	R	0
71	V	TRNSFLV1	Subdomain number of transferring party (AC)	299-301	3	R	0
72	V	TRNSFLV2	Domain number of transferring party (AC)	302-303	2	R	0
73	V	TRNSFPTY	Transferring party (attendant console)	304-325	22	L	
74	V	UNANS	Through connect / no through connect	326-326	1	L	
75	V	ZONE	Distance zone	327-329	3	L	

HP4M_PM_UV10 - Output format from OpenScape 4000 V10

Legend: No. = sequential element number; ET = element type: F = fixed text, V = variable element; E = ending element; FTBL Name = FTBL element name; EIndex = element index; L = element length; A = alignment; FI = pad character: Empty = space

Table 81: HP4M_PM_UV10 - Output format

No	ET	Element	Long name (eng)	Position	Length	Alignme	filler
1	F	FIXTEXT	Fixed text	1	1	L	\$

Reference Material

No	ET	Element	Long name (eng)	Position	Length	Alignme	filler
2	V	ACDGID	ACD Group Number	2-4	3	L	
3	V	ADPLOAD	ADP load	5-8	4	R	0
4	V	ATTGRNO	Attendant console group	9-10	2	R	0
5	V	BCHLCNT	Number of used B-channels	11-12	2	R	0
6	V	CALLEPTY	Called party; dialed number	13-34	22	L	
7	V	CALLIID	Identification of calling party number	35-35	1	L	
8	V	CALLILV0	Node number of calling party	36-38	3	R	0
9	V	CALLILV1	Subdomain number of calling party	39-41	3	R	0
10	V	CALLILV2	Domain number of calling party	42-43	2	R	0
11	V	CALLIPTY	Calling party; party that initiated connection	45-65	22	L	
12	V	CARRIER	Carrier; communication network	66-66	1	L	
13	V	CAUSE	Cause - of connection interrupt / clear down	67-69	3	R	0
14	V	CONNSTEP	Connection sequence; number	70-72	3	R	0
15	V	CONNTYPE	Connection type	73-73	1	L	
16	V	CONTOT	Connection duration total in 1/10 seconds	74-79	6	R	0
17	V	DESTLV0	Node number of destination number	80-82	3	R	0
18	V	DESTLV1	Subdomain number of destination number	83-85	3	R	0
19	V	DESTLV2	Domain number of destination number	86-87	2	R	0
20	V	DESTPID	Identification number of destination number	88-88	1	L	
21	V	DESTPTY	Destination number (new/connected party)	89-110	22	L	
22	V	END10	End-of-connection 1/10 of a second	111-111	1	R	0
23	V	ENDDAY	End-of-connection day	112-113	2	R	0
24	V	ENDHOUR	End-of-connection hour	114-115	2	R	0
25	V	ENDMIN	End-of-connection minute	116-117	2	R	0
26	V	ENDMONTH	End-of-connection month	118-119	2	R	0
27	V	ENDSEC	End-of-connection second	120-121	2	R	0
28	V	ENDYEAR	End-of-connection year	122-125	4	R	0
29	V	GLOBLV0	Node number of global call ID only local	126-128	3	R	0

No	ET	Element	Long name (eng)	Position	Length	Alignme	filler
30	V	GLOBLV1	Subdomain number of global call ID (local)	129-131	3	R	0
31	V	GLOBLV2	Domain number of global call ID (local)	132-133	2	R	0
32	V	GLOBLSEQ	Global call ID (local/leg)	134-141	8	R	0
33	V	HOLDDUR	Hold duration in 1/10 seconds	142-146	5	R	0
34	V	INTNBCHA	B-channel for real trunk no. of the recording point	147-148	2	R	0
35	V	INTNREAL	Real trunk no. of the non-recording point (see TKNOREAL)	149-153	5	L	
36	V	INTNTRGR	Real trunk group number of the non-recording point	154-156	3	R	0
37	V	PAYPART	Paying party; chargee of a connection	157-178	22	L	
38	V	PPLV0	Node number of paying party	179-181	3	R	0
39	V	PPLV1	Subdomain number of paying party	182-184	3	R	0
40	V	PPLV2	Domain number of paying party	185-186	2	R	0
41	V	QUEUEDUR	Queueing duration in 1/10 seconds	187-191	5	R	0
42	V	RINGDUR	Ring duration; total in 1/10 seconds	192-194	3	R	0
43	V	STNID	Station identification number	195-195	1	L	
44	V	SUPLSERV	Supplementary service	196-197	2	L	
45	V	SWP	Call processing phases	198-199	2	L	
46	V	SWULOAD	Switching unit load	200-203	4	R	0
47	V	THRELV0	Node number of thread (global) call ID	204-206	3	R	0
48	V	THRELV1	Subdomain number of thread (global) call ID	207-209	3	R	0
49	V	THRELV2	Domain number of thread (global) call ID	210-211	2	R	0
50	V	THRESEQ	Thread (global) call ID in network	212-219	8	R	0
51	V	TKNOBCHA	B-channel for real trunk no. of the non-recording point	220-221	2	R	0
52	V	TKNOREAL	Real trunk number of recording point	222-226	5	R	0
53	V	TKNOTRGR	Real trunk group number of recording point	227-229	3	R	0
54	V	TRANSCNT	Number of passed through transit nodes	230-231	2	R	0
55	V	TRNSFLV0	Node number of transferring party (AC)	232-234	3	R	0

Reference Material

Pre-defined Formats for Input Format Definition

No	ET	Element	Long name (eng)	Position	Length	Alignme	filler
56	V	TRNSFLV1	Subdomain number of transferring party (AC)	235-237	3	R	0
57	V	TRNSFLV2	Domain number of transferring party (AC)	238-239	2	R	0
58	V	TRNSFPTY	Transferring party (attendant console)	240-261	22	L	
59	V	UNANS	Through connect / no through connect	262-262	1	L	

6.4 Pre-defined Formats for Input Format Definition

The following pre-defined formats for defining the input format are available, and they apply likewise to the input formats of H3000 and H2000 systems:

- [Elements for Defining Input and Output Formats](#)
- [AMPM_UV1.0 - Input format for AM / PM OpenScape 4000](#)
- [AMPM_UV8 - Input format for AM/PM OpenScape 4000](#)
- [PM_UV8 - Input format for OpenScape 4000](#)
- [CM Elements Used for Generating History Output](#)

AMPM_UV1.0 - Input format for AM / PM OpenScape 4000

Table 82: AMPM_UV1.0 - Input format for AM/PM OpenScape 4000

No	Element	Description	Position	Lenght	Alignment	filler
1	\$	sign for record begin	1	1		
2	ADPLOAD	APD load	2-5	4	r	0
3	ATTGRNO	attendant console group	6-7	2	r	0
4	BAUD	transmission speed	8-10	3	l	
5	BCHLCNT	number of used B-channels	11-12	2	r	0
6	CALLEPTY	called party, number which was dialed by the calling party - e.g. hunting group	13-34	22	l	
7	CALLIID	identification of calling party	35	1	l	
8	CALLILV0	node number of calling party	36-38	3	r	0
9	CALLILV1	subdomain number of calling party	38-41	3	r	0
10	CALLILV2	domain number of calling party	42-43	2	r	0
11	CALLIPTY	calling party, party that initiated the current connection/section	44-65	22	l	
12	CARRIER	output of the communication network as a text string	66	1	l	

No	Element	Description	Position	Lenght	Alignment	filler
13	CAUSE	cause of connection interrupt / clearing the call	68-69	3	r	0
14	CHRGUNIT	call charge units	70-74	5	r	0
15	CONCHRG	evaluated cost	75-83	9	r	0
16	CONNSTEP	connection sequenz, all CDB records of a connection will be numbered sequentially	84-86	3	r	0
17	CONNTYPE	connection type	87	1	l	
18	CONTOT	connection duration total in 1/10 seconds	88-93	6	r	0
19	COPIN	PIN category	94-95	2	l	
20	DESTLV0	node number of destination number (new/connect party)	96-97	3	r	0
21	DESTLV1	subdomain number of destination number (new/ connect party)	98-100	3	r	0
22	DESTLV2	domain number of destination number (new/connect party)	101-102	2	r	0
23	DESTPID	Identification number of destination	103	1	l	
24	DESTPTY	destination number (new/ conneted party)	105-126	22	l	
25	DISPCHRG	display costs	127-135	9	r	0
26	END10	end-of-connection 1/10 of a second	136	1	r	0
27	ENDDAY	end-of-connection day	137-138	2	r	0
28	ENDHOUR	end-of-connection hour	139-140	2	r	0
29	ENDMIN	end-of-connection minute	141-142	2	r	0
30	ENDMONTH	end-of-connection month	143-144	2	r	0
31	ENDSEC	end-of-connection second	145-146	2	r	0
32	ENDYEAR	end-of-connection year	147-150	4	r	0
33	EXPENS	flag for "expensive facility"	151	1	l	
34	GLOBLLV0	node number of leg id	152-154	3	r	0
35	GLOBLLV1	subdomain number of leg id	155-157	3	r	0
36	GLOBLLV2	domain number of leg id	158-159	2	r	0

Reference Material

No	Element	Description	Position	Lenght	Alignment	filler
37	GLOBLSEQ	leg id, if a targetuser may be changed with an existing connection, a new leg_id will be generated, the global call_id itself wouldn't be changed	156-167	8	r	0
38	HOLDDUR	hold duration in 1/10 seconds	168-172	5	r	0
39	INTNBCHA	B-channel of the real trunk number of the non-record point	173-174	2	r	0
40	INTNLIST	trunk number of the non-recording point	175-180	6	r	0
41	INTNREAL	real trunk number of the non-recording point (see TKNOREAL)	181-185	5	l	
42	INTNTRGR	real trunk group number of the non-recording point	186-188	3	r	0
43	NETTYPE	network description	189	1	l	
44	PAYPART	paying party, chargee of a connection	190-211	22	l	
45	PIN	PIN	212-223	12	l	
46	PPLV0	Knotennummer der paying party	224-226	3	r	0
47	PPLV1	subdomain number of paying party	227-229	3	r	0
48	PPLV2	domain number of paying party	230-231	2	r	0
49	QUEUEDUR	queuing duration, total queuing duration (call queue of attendant) in 1/10 seconds	232-236	5	r	0
50	RECPT	record point of CDR	237	1	r	0
51	RECTYPE	record type	238	1	r	0
52	RINGDUR	ring duration, total ring duration in format 1/10 seconds	239-241	3	r	0
53	ROUTCC	route code	242-247	6	l	
54	SERVICE	service code	248	1	l	
55	SIGDATA	data record "correct/incorrect"	249	1	l	
56	STNID	source id	250	1	l	
57	SUPLSERV	supplement service	251-252	2	l	
58	SWP	call phases	253-254	2	l	
59	SWULOAD	switching unit load	255-258	4	r	0

No	Element	Description	Position	Lenght	Alignment	filler
60	THRELV0	node number of global call id, a new call id may be generated only in case af a new connection.	259-261	3	r	0
61	THRELV1	subdomain number of global call id	262-264	3	r	0
62	THRELV2	domain number of global call id	265-266	2	r	0
63	THRESEQ	global call id	267-274	8	r	0
64	TKNOBCHA	B-channel of the real trunk number of the non record point	275-276	2	r	0
65	TKNOLIST	trunk number	277-282	6	l	
66	TKNOREAL	real trunk number of recoring point	283-287	5	r	0
67	TKNOTRGR	real trunk group number of recording point	288-290	3	r	0
68	TRANSCNT	number of passed through transit nodes	291-292	2	r	0
69	TRNSFLV0	node number of transering party - (attendent console)	293-295	3	r	0
70	TRNSFLV1	subdomain number of transering party - (attendent console)	296-298	3	r	0
71	TRNSFLV2	domain number of transering party - (attendent console)	299-300	2	r	0
72	TRNSFPTY	transering party - (attendent console), party that transferred a call	301-322	22	l	
73	UNANS	through connect / no through connect	323	1	l	
74	ZONE	call zone	324-326	3	l	
75	CRLF	CR / LF flag for end of data record	327-328	2		

AMPM_UV8 - Input format for AM/PM OpenScape 4000

Legend: No. = sequential element number; ET = element type: F = fixed text, V = variable element; E = ending element; FTBL Name = FTBL element name; EIndex = element index; L = element length; A = alignment; FI = pad character: Empty = space

Table 83: AMPM_UV6 - Input format for AM/PM OpenScape 4000

No	ET	Element	Long name (eng)	Position	Length	Alignment	filler
1	F	FIXTEXT	Fixed text	1	1	L	\$
2	V	ACDGID	ACD Group Number	2-4	3	L	
3	V	ADPLOAD	ADP load	5-8	4	R	0
4	V	ATTCALLP	Attendant call priority	9-10	2	R	
5	V	ATTCALLR	Attendant intercept reason	11-12	2	R	
6	V	ATTCALLT	Attendant call type	13-14	2	R	
7	V	ATTGRNO	Attendant console group	15-16	2	R	0
8	V	ATTQUEID	Attendant queue id for AC-Win Multiple Queue (MQ)	17-18	2	R	
9	V	BAUD	Transmission speed	19-21	3	L	
10	V	BCHLCNT	Number of used B-channels	22-23	2	R	0
11	V	CALLEPTY	Called party; dialed number	24-45	22	L	
12	V	CALLIID	Identification of calling party number	46-46	1	L	
13	V	CALLILV0	Node number of calling party	47-49	3	R	0
14	V	CALLILV1	Subdomain number of calling party	50-52	3	R	0
15	V	CALLILV2	Domain number of calling party	53-54	2	R	0
16	V	CALLIONI	Originating Network ID of the calling party (privat/public)	55-56	2	R	
17	V	CALLIPTY	Calling party; party that initiated connection	57-78	22	L	
18	V	CARRIER	Carrier; communication network	79-79	1	L	
19	V	CAUSE	Cause - of connection interrupt / clear down	80-82	3	R	0
20	V	CHOFCON	Type of connection	83-83	1	L	
21	V	CHRGUNIT	Call charge units	84-88	5	R	0
22	V	CONCHRG	Costs calculated on output within VAT	89-97	9	R	0
23	V	CONNSTEP	Connection sequence; number	98-100	3	R	0
24	V	CONNTYPE	Connection type	101-101	1	L	
25	V	CONTOT	Connection duration total in 1/10 seconds	102-107	6	R	0
26	V	COPIN	Class of PIN	108-109	2	L	
27	V	DESTLV0	Node number of destination number	110-112	3	R	0

No	ET	Element	Long name (eng)	Position	Length	Alignme	filler
28	V	DESTLV1	Subdomain number of destination number	113-115	3	R	0
29	V	DESTLV2	Domain number of destination number	116-117	2	R	0
30	V	DESTPID	Identification number of destination number	118-118	1	L	
31	V	DESTPTY	Destination number (new/connected party)	119-140	22	L	
32	V	DISPCHRG	Display of connection charge with VAT	141-149	9	R	0
33	V	END10	End-of-connection 1/10 of a second	150-150	1	R	0
34	V	ENDDAY	End-of-connection day	151-152	2	R	0
35	V	ENDHOUR	End-of-connection hour	153-154	2	R	0
36	V	ENDMIN	End-of-connection minute	155-156	2	R	0
37	V	ENDMONTH	End-of-connection month	157-158	2	R	0
38	V	ENDSEC	End-of-connection second	159-160	2	R	0
39	V	ENDYEAR	End-of-connection year	161-164	4	R	0
40	V	EXPENS	Expensive connection	165-165	1	L	
41	V	GLOBLV0	Node number of global call ID only local	166-168	3	R	0
42	V	GLOBLV1	Subdomain number of global call ID (local)	169-171	3	R	0
43	V	GLOBLV2	Domain number of global call ID (local)	172-173	2	R	0
44	V	GLOBLSEQ	Global call ID (local/leg)	174-181	8	R	0
45	V	HOLDDUR	Hold duration in 1/10 seconds	182-186	5	R	0
46	V	INTNBCHA	B-channel for real trunk no. of the recording point	187-188	2	R	0
47	V	INTNLIST	Imaginary trunk number created from INTNREAL	189-194	6	R	0
48	V	INTNREAL	Real trunk no. of the non-recording point (see TKNOREAL)	195-199	5	L	
49	V	INTNTRGR	Real trunk group number of the non-recording point	200-202	3	R	0
50	V	NETTYPE	Network description	203-203	1	L	
51	V	PAYPART	Paying party; chargee of a connection	204-225	22	L	
52	V	PIN	Personal identification number	226-237	12	L	

Reference Material

No	ET	Element	Long name (eng)	Position	Length	Alignme	filler
53	V	PPLV0	Node number of paying party	238-240	3	R	0
54	V	PPLV1	Subdomain number of paying party	241-243	3	R	0
55	V	PPLV2	Domain number of paying party	244-245	2	R	0
56	V	QUEUEDUR	Queueing duration in 1/10 seconds	246-250	5	R	0
57	V	RECPT	Record point	251-251	1	R	0
58	V	RECTYPE	Record type	252-252	1	R	0
59	V	RINGDUR	Ring duration; total in 1/10 seconds	253-255	3	R	0
60	V	ROUTCC	Route code as a text string	256-261	6	R	
61	V	SERVICE	Service	262-262	1	L	
62	V	SIGDATA	Indicates whether the output data record is correct / incorrect or double	263-263	1	L	
63	V	STNID	Station identification number	264-264	1	L	
64	V	SUPLSERV	Supplementary service	265-266	2	L	
65	V	SWP	Call processing phases	267-268	2	L	
66	V	SWULOAD	Switching unit load	269-272	4	R	0
67	V	THRELV0	Node number of thread (global) call ID	273-275	3	R	0
68	V	THRELV1	Subdomain number of thread (global) call ID	276-278	3	R	0
69	V	THRELV2	Domain number of thread (global) call ID	279-280	2	R	0
70	V	THRESEQ	Thread (global) call ID in network	281-288	8	R	0
71	V	TKNOBCHA	B-channel for real trunk no. of the non-recording point	289-290	2	R	0
72	V	TKNOLIST	Imaginary trunk number created of TKNOREAL (see AMO-FBTN)	291-296	6	L	
73	V	TKNOREAL	Real trunk number of recording point	297-301	5	R	0
74	V	TKNOTRGR	Real trunk group number of recording point	302-304	3	R	0
75	V	TRANSCNT	Number of passed through transit nodes	305-306	2	R	0
76	V	TRNSFLV0	Node number of transferring party (AC)	307-309	3	R	0
77	V	TRNSFLV1	Subdomain number of transferring party (AC)	310-312	3	R	0

No	ET	Element	Long name (eng)	Position	Length	Alignme	filler
78	V	TRNSFLV2	Domain number of transferring party (AC)	313-314	2	R	0
79	V	TRNSFPTY	Transferring party (attendant console)	315-336	22	L	
80	V	UNANS	Through connect / no through connect	337-337	1	L	
81	V	ZONE	Distance zone	338-340	3	L	

PM_UV8 - Input format for OpenScape 4000

Legend: No. = sequential element number; ET = element type: F = fixed text, V = variable element; E = ending element; FTBL Name = FTBL element name; EIndex = element index; L = element length; A = alignment; FI = pad character: Empty = space

Table 84: PM_UV6 - Input format for OpenScape 4000

No	ET	Element	Long name (eng)	Position	Length	Alignmer	filler
1	F	FIXTEXT	Fixed text	1	1	L	\$
2	V	ACDGID	ACD Group Number	2-4	3	L	
3	V	ADPLOAD	ADP load	5-8	4	R	0
4	V	ATTCALLP	Attendant call priority	9-10	2	R	
5	V	ATTCALLR	Attendant intercept reason	11-12	2	R	
6	V	ATTCALLT	Attendant call type	13-14	2	R	
7	V	ATTGRNO	Attendant console group	15-16	2	R	0
8	V	ATTQUEID	Attendant queue id for AC-Win Multiple Queue (MQ)	17-18	2	R	
9	V	BCHLCNT	Number of used B-channels	19-20	2	R	0
10	V	CALLEPTY	Called party; dialed number	21-42	22	L	
11	V	CALLIID	Identification of calling party number	43-43	1	L	
12	V	CALLILV0	Node number of calling party	44-46	3	R	0
13	V	CALLILV1	Subdomain number of calling party	47-49	3	R	0
14	V	CALLILV2	Domain number of calling party	50-51	2	R	0
15	V	CALLIONI	Originating Network ID of the calling party (privat/public)	52-53	2	R	
16	V	CALLIPTY	Calling party; party that initiated connection	54-75	22	L	
17	V	CARRIER	Carrier; communication network	76-76	1	L	

Reference Material

No	ET	Element	Long name (eng)	Position	Length	Alignmer	filler
18	V	CAUSE	Cause - of connection interrupt / clear down	77-79	3	R	0
19	V	CHOFCON	Type of connection	80-80	1	L	
20	V	CONNSTEP	Connection sequence; number	81-83	3	R	0
21	V	CONNTYPE	Connection type	84-84	1	L	
22	V	CONTOT	Connection duration total in 1/10 seconds	85-90	6	R	0
23	V	DESTLV0	Node number of destination number	91-93	3	R	0
24	V	DESTLV1	Subdomain number of destination number	94-96	3	R	0
25	V	DESTLV2	Domain number of destination number	97-98	2	R	0
26	V	DESTPID	Identification number of destination number	99-99	1	L	
27	V	DESTPTY	Destination number (new/ connected party)	100-121	22	L	
28	V	END10	End-of-connection 1/10 of a second	122-122	1	R	0
29	V	ENDDAY	End-of-connection day	123-124	2	R	0
30	V	ENDHOUR	End-of-connection hour	125-126	2	R	0
31	V	ENDMIN	End-of-connection minute	127-128	2	R	0
32	V	ENDMONTH	End-of-connection month	129-130	2	R	0
33	V	ENDSEC	End-of-connection second	131-132	2	R	0
34	V	ENDYEAR	End-of-connection year	133-136	4	R	0
35	V	GLOBLV0	Node number of global call ID only local	137-139	3	R	0
36	V	GLOBLV1	Subdomain number of global call ID (local)	140-142	3	R	0
37	V	GLOBLV2	Domain number of global call ID (local)	143-144	2	R	0
38	V	GLOBLSEQ	Global call ID (local/leg)	145-152	8	R	0
39	V	HOLDDUR	Hold duration in 1/10 seconds	153-157	5	R	0
40	V	INTNBCHA	B-channel for real trunk no. of the recording point	158-159	2	R	0

No	ET	Element	Long name (eng)	Position	Length	Alignmer	filler
41	V	INTNREAL	Real trunk no. of the non-recording point (see TKNOREAL)	160-164	5	L	
42	V	INTNTRGR	Real trunk group number of the non-recording point	165-167	3	R	0
43	V	PAYPART	Paying party; chargee of a connection	168-189	22	L	
44	V	PPLV0	Node number of paying party	190-192	3	R	0
45	V	PPLV1	Subdomain number of paying party	193-195	3	R	0
46	V	PPLV2	Domain number of paying party	196-197	2	R	0
47	V	QUEUEDUR	Queueing duration in 1/10 seconds	198-202	5	R	0
48	V	RECTYPE	Record type	203-203	1	Right	
49	V	RINGDUR	Ring duration; total in 1/10 seconds	204-206	3	R	0
50	V	STNID	Station identification number	207-207	1	L	
51	V	SUPLSERV	Supplementary service	208-209	2	L	
52	V	SWP	Call processing phases	210-211	2	L	
53	V	SWULOAD	Switching unit load	212-215	4	R	0
54	V	THRELV0	Node number of thread (global) call ID	216-218	3	R	0
55	V	THRELV1	Subdomain number of thread (global) call ID	219-221	3	R	0
56	V	THRELV2	Domain number of thread (global) call ID	222-223	2	R	0
57	V	THRESEQ	Thread (global) call ID in network	224-231	8	R	0
58	V	TKNOBCHA	B-channel for real trunk no. of the non-recording point	232-233	2	R	0
59	V	TKNOREAL	Real trunk number of recording point	234-238	5	R	0
60	V	TKNOTRGR	Real trunk group number of recording point	239-241	3	R	0
61	V	TRANSCNT	Number of passed through transit nodes	242-243	2	R	0
62	V	TRNSFLV0	Node number of transferring party (AC)	244-246	3	R	0

Reference Material

Additional CM Elements for Defining CDR Output Formats

No	ET	Element	Long name (eng)	Position	Length	Alignmer	filler
63	V	TRANSFLV1	Subdomain number of transferring party (AC)	247-249	3	R	0
64	V	TRANSFLV2	Domain number of transferring party (AC)	250-251	2	R	0
65	V	TRANSFPTY	Transferring party (attendant console)	252-273	22	L	
66	V	UNANS	Through connect / no through connect	274-274	1	L	

6.5 Additional CM Elements for Defining CDR Output Formats

[CM Elements Used for Generating History Output, page 349](#)

[CM Elements Used for Transforming Virtual to Physical Node Numbers, page 352](#)

[Loading the col_port and col_switch Tables, page 354](#)

6.5.1 CM Elements Used for Generating History Output

COL uses CM data from the database in order to show it as part of the CDR output data or as additional criteria in the filter.

Since personal data may change, COL must always get CM data that has been valid at the moment when COL data (CDRs) has been generated on the switch, and not the current CM data.

Therefore CM provides data which shows the history of adding/modifying/deleting for specific objects.

CM provides additional data records in separate tables, showing the history of the changed object.

The history records are stored by CM into the following tables:

- col_switch: history records for the switch object
- col_domain: history records for the domain object
- col_persdat: history records for the persdat object
- col_pin: history records for the pin object

These tables have the same structure as the original CM tables. The history records are generated when something has been changed in the original CM tables. They are created in online mode, not in batch mode.

In general, history data will only be created if the flags *admin.col_install* and *admin.col_sync* are set to "001". This is done at installation time depending on the current licence information.

COL components always have to use date and time when CDR data has been generated to select appropriate historical CM data.

COL is also maintaining the deletion of history records.

The following table specifies the CM elements used as part of the CDR output file or as additional criteria in the filter.

Table 85: CM Tables used for generating CDR output files

Short name	Long name (eng)	Usage (M = Manager A = Assistant)	Type (Length)	Reference to CM tables
persdat				
ACCOUNT	account number	M	char(15)	persdat.accountnum (own tabsheet AM)
BANKCODE	bankcode	M	char(15)	persdat.bankcode (own tabsheet AM)
BUILDING	building	M	char(30)	persdat.building
CHARGEID	chargeid	M	char(12)	persdat.chargeid (own tabsheet AM)
COMPANY	company	M	char(30)	persdat.company
COSTBEAR	cost bearer	M	char(32)	persdat.costbear (own tabsheet AM)
COUNTRY	country	M	char (2)	persdat.country
EXTAREACOD	ext. area code	M	char(6)	persdat.ext_areacode
EXTCOUCODE	ext. country code	M	char(2)	persdat.ext_countrycode
EXTNETCODE	ext. netcode	M	char(16)	persdat.ext_netcode
EXTTIENUM	tienum	M	char(6)	persdat.tienum
FAXNUMBER	fax number	M	char(22)	persdat.faxnumber
FIRSTNAME	christian name	M	char(30)	persdat.christiannname
LOCATION	location	M	char(15)	persdat.location
NAME	name	M	char (50)	persdat.name
ORG1	organisation 1	M	char(40)	persdat.org1
ORG2	organisation 2	M	char(40)	persdat.org2
ORG3	organisation 3	M	char(40)	persdat.org3
PAYPART	extension	M	char (6)	persdat.extension
PERSNUM	personal number	M	char(32)	persdat.persnum (own tabsheet AM)
POSITION	position	M	integer	persdat.sequ_num

Reference Material

Short name	Long name (eng)	Usage (M = Manager A = Assistant)	Type (Length)	Reference to CM tables
ROOM	room	M	char(10)	persdat.longname
SALUTATION	salutation	M	char(15)	persdat.salutation
SORTNAME	sort name	M	char (60)	persdat.sortname
SWITCHNAME	switch name	M	char (4)	persdat.switch_name
TITLE	title	M	char(15)	persdat.title
TRUNKACC	trunk	M	char(1)	persdat.direct_trunk_acc
USEGROUP	user group	M	char(30)	persdat.owner_group
switch		M		
AREACODE	switch areacode	M	char(16)	switch.areacode
CMVERSION	switch version	M	char(5)	switch.version
DOMAIN	switch domain	M	char(8)	switch.domain
NETCODE	switch netcode	M	char(16)	switch.netcode
NODENUM	node number	M	char(10)	switch.nodenum
SWCOUNTRY	switch country	M	char(2)	switch.country
SWITCHNAME SYSNAME	switch name system name	M	char(4)	switch.switch_name or from chdmain chdmain.mnemonic
SWITCHTYP	switch typ	M	char(10)	switch.switch_typ
domain		M		
(POSITION)	position	M	integer	pin.position
DOMAIN	domain	M	char(8)	switch.domain
PAYPART	extension	M	char(6)	pin.extension
pin		M		
PIN	pin number	M	char(12)	pin.pin_num
SWITCHNAME	switch name	M	char(4)	pin.switch_name
TIENUM	tienum	M	char(6)	domain.tienum
port		M		
CALLIPTY	calling party (initiated connection)	M	char(6)	port.extension (If no match with this key VIRT LV0-VIRT LV2 = 0 (default = 0))

Short name	Long name (eng)	Usage (M = Manager A = Assistant)	Type (Length)	Reference to CM tables
SWITCHNAME	switch name	M	char(4)	port.switch_name
VIRTLV0	virtual node number of calling party	M, A	int(3) (char(10))	port.node_id (there are two formats possible three-stage or single stage or empty/blank) three <x>-<x>-<VIRTLV0> single-stage <VIRTLV0> (If field is blank/empty VIRTLV0- VIRTLV2 = 0 (default =0)) (If format is single-stage VIRTLV1 + VIRTLV2 = 0)
VIRTLV1	virtual subdomain number of calling party	M, A	int(3) (char(10))	port.node_id (three <x>-<VIRTLV1>-<x>)
VIRTLV2	virtual domain number of calling party	M, A	int(2) (char(10))	port.node_id (part <VIRTLV2>-<x>-<x>)
admin		M		
	Col-install flag	M	char(3)	admin.col_install 000 = COL no 001 = COL yes written during COL-inst
	Col-sync flag for creation of history records in CM	M	char(3)	admin.col_sync 000 = COL sync no 001 = COL sync yes Package dependent only with Package COL-C
Delete	Delete	M	char(3) char(3)	admin.gcu_install admin.gcu_sync

6.5.2 CM Elements Used for Transforming Virtual to Physical Node Numbers

Basically, only the virtual node numbers are sent in the call charge data records (CDRs), as only these are known network-wide. On the other hand, users can allocate a station/subscriber only via the physical node number of the system. But since physical and the virtual node number must be different, an allocation

of virtual node numbers from CDR data to a physical station/subscriber is needed.

So, when a system is upgraded to OpenScape 4000, this implies switching between virtual and physical node numbers. In order to provide OpenScape Assistant/Manager or other evaluation applications with the possibility to continue using the physical node number, COL-CM output elements have been introduced in OpenScape 4000 Manager. The purpose of these output elements is to output the physical node number in the output data records.

These COL-CM elements are automatically collected during run time from data of OpenScape 4000 Manager Configuration Management (CM) (tables col_port and col_switch). The elements can be found in the Output Format Editor under "CM Elements".

The CM elements for the virtual node number output are:

Table 86: CM Output Elements for physical node number transformation

YCALLILV0-YCALLILV2	Physical node number of calling party
YPDESTLV0-YDESTLV2	Physical node number of destination number
YPPLV0-YPPLV2	Physical node number of cost bearer
YRTINGLV0-YRTINGLV2	Physical node number of transferring subscriber/station
YRTIONLV0-YRTIONLV2	Physical node number of forward destination
YTRNSFLV0-YTRNSFLV2	Physical node number of transferring subscriber/station (AC)

Please use format PHYS_HP-COL_V1.0 if you want to transform the virtual node number to the physical node number for the Hi-Path Assistant/Manager output line.

Attention: The usage of the CM elements slows down the data throughput in the col_line process considerably due to the fact that for each element a SELECT query has to be executed in the col_port and col_switch tables in order to determine the physical node number. This transformation also needs to be performed with the CDRs since the call initiation may have occurred in an OpenScape/HiPath 4000 system with a virtual node number.

Please take this into consideration when using these elements in the output record.

A performance improvement is already being worked at for one of the next loads to come.

See also

[Loading the col_port and col_switch Tables](#)

6.5.2.1 Loading the col_port and col_switch Tables

You can initialize/load the col_port table for every system individually by using the UPLOAD-ALL command. For many systems this mechanism is not the optimum solution. A simpler solution would be to load the col_port and col_switch tables from the port and switch tables. You need to execute the following SQL sequence to perform this operation.

- Establish the connection with the OpenScape 4000 Assistant/Manager.
- Enter .<blank>/opt/informix/ids_env_var (loading the Informix environment variables). <blank> is a placeholder representing a blank character.
- Start the SQL Command Interface with **dbaccess cdb**
- Select **Query Language** and confirm by pressing the **Enter** key.
- Select **New** and confirm.
 - Updating the col_port table

Enter the following command:

```
insert into col_port
select * from port
where active="A"
and extension not in
(select extension from col_port where
switch_name=port.switch_name );
update col_port set issue="H",active="H",b_active="H"
where active="A";
```
 - Updating the col_switch table

Enter the following command:

```
insert into col_switch
select * from switch where active="A"
and switch_name not in
(select switch_name from col_switch where
nodenum=switch.nodenum );
update col_switch set
issue="H",active="H",b_active="H" where active="A";
```
- The col_port and the col_switch tables are now populated with data. Quit **dbaccess** by pressing the **ESC** key twice.

7 Configuration Examples - Data Collection

7.1 HiPath AM FTP Collecting

[Call Collecting from OpenScape 4000 Manager/Assistant](#)

- [OpenScape 4000 Manager Collecting Agent](#)
- [Configuring OpenScape 4000 Manager Collecting Agent](#)
- [OpenScape 4000 Manager Collecting Agent - HiPath AM](#)
- [OpenScape 4000 Manager Collecting Agent - OpenScape 4000 Manager Exchange](#)
- [OpenScape 4000 Assistant Collecting Agent](#)
- [Configuration of OpenScape 4000 Assistant Collecting Agent](#)
- [OpenScape 4000 Assistant Collecting Agent - HiPath AM](#)
- [OpenScape 4000 Assistant Collecting Agent - OpenScape 4000 Assistant Exchange](#)
- [OpenScape 4000 Assistant Collecting Agent - Activate Access Rights for the XIE Interface](#)

7.2 Call Collecting from OpenScape 4000 Manager/Assistant

This description completes the HiPath AM configuration for call collecting and personal data exchange with OpenScape 4000 Manager/Assistant by FTP direct access.

Two separate scenarios are shown:

- Connecting HiPath AM to OpenScape 4000 Manager (network)
and, respectively,
- OpenScape 4000 Assistant (single site).

[OpenScape 4000 Manager Collecting Agent](#)

[Configuring OpenScape 4000 Manager Collecting Agent](#)

[OpenScape 4000 Manager Collecting Agent - HiPath AM](#)

[OpenScape 4000 Manager Collecting Agent - OpenScape 4000 Manager Exchange](#)

[OpenScape 4000 Assistant Collecting Agent](#)

[Configuration of OpenScape 4000 Assistant Collecting Agent](#)

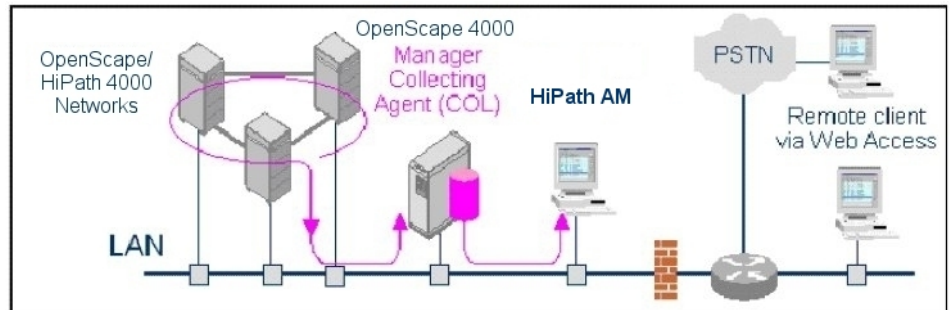
[OpenScape 4000 Assistant Collecting Agent - HiPath AM](#)

[OpenScape 4000 Assistant Collecting Agent - OpenScape 4000 Assistant Exchange](#)

[OpenScape 4000 Assistant Collecting Agent - Activate Access Rights for the XIE Interface](#)

7.2.1 OpenScape 4000 Manager Collecting Agent

Scenario



- Each OpenScape/HiPath 4000 switch stores calls detail records to its FT file.
- OpenScape 4000 Manager Collecting Agent polls the call tickets from OpenScape/HiPath 4000 switches via File Transfer and separates the call tickets to one file for AM (Accounting Management) and another file for PM (Performance Management). A prerequisite for this data separation is that OpenScape PM-N or OpenScape PM-E has to be installed on the network.
- HiPath AM transfers all call tickets as one compiled file collected by OpenScape 4000 Manager Collecting Agent from all single OpenScape/HiPath 4000 switches.
- HiPath AM takes over the subscriber (customer) data (exchange = external transfer) from OpenScape 4000 Manager.

In order to perform the polling of the calls tickets and to configure the exchange interface for the subscriber (customer) data, the following steps are required:

Procedure

- 1) Configuration of OpenScape 4000 Manager Collecting Agent - Output (see Section [Configuring OpenScape 4000 Manager Collecting Agent](#)).
- 2) Setting up the systems (switches) to be polled in HiPath AM (see Section [OpenScape 4000 Manager Collecting Agent - HiPath AM](#)).
- 3) Setting up OpenScape 4000 Manager Exchange for the subscriber data. (see Section [OpenScape 4000 Manager Collecting Agent - OpenScape 4000 Manager Exchange](#)).

7.2.2 Configuring OpenScape 4000 Manager Collecting Agent

OpenScape 4000 Manager Collecting Agent stores the CDRs gathered from the switches in the network into one single file.

The procedure of setting up the input line side of OpenScape 4000 Manager Collecting Agent is described in the [Definition of Input Lines](#) section and is therefore not explained here.

Setting Up the Output Line

To set up the output of records, you need to set up one output line (output file) per record format.

- To set up output lines, use the **Definition of Output Lines** feature from the **Start Page** of **OpenScape 4000 Manager Collecting Agent**.

- To set up a new output line, select the **New Object** radio button or the **Object > New** menu item.

In the dialog displayed you have to enter the following data:

Output Line Name	Name of output line, e.g. HPAM4000 , max. 32 characters.
Description	Arbitrary text. Max. 256 characters.
Active	This toggle switch is specifically used to start/stop the output for this output line. Please take into consideration that if the output is turned off no records will be buffered (temporarily saved). Therefore, if you intend to temporarily turn off the output without losing records, use the Stop Output button of the Controlling feature on the COL Homepage .
Output Format	Choose one of the pre-defined or user defined record formats. The chosen output format should match the input record format.
Filter	Select the DefaultFilter setting here.
File Name	Enter the filename GCDATA for the output file. The output file will by default be created in the /var/col/data/deliver/ directory.
Start Date / Start Time	The current date and time is automatically entered here. Adjust the output time values to your needs. The output date/time should be set to a value of at least 10 minutes before the collecting time of the HiPath AM.
Cycle	Use this field to enter the value for the output cycle. Possible values: Min. 1 minute, max. 24 hours. Adjust the output cycle to match the collecting cycle of the HiPath AM.

And... Don't forget to save your data!

Pre-defined Format (Output Format)

Input Format	Output Format
AM_V3.0_L	HP-COL_V1.0
AM_V3.1_L	HP-COL_V1.0

7.2.3 OpenScape 4000 Manager Collecting Agent - HiPath AM

This configuration is always based on the assumption that OpenScape 4000 Manager Collecting Agent collects the call tickets of all OpenScape/HiPath 4000 switches in the network and makes them available to AM.

The external exchange of HiPath AM to the subscriber data in OpenScape 4000 Manager is always enabled.

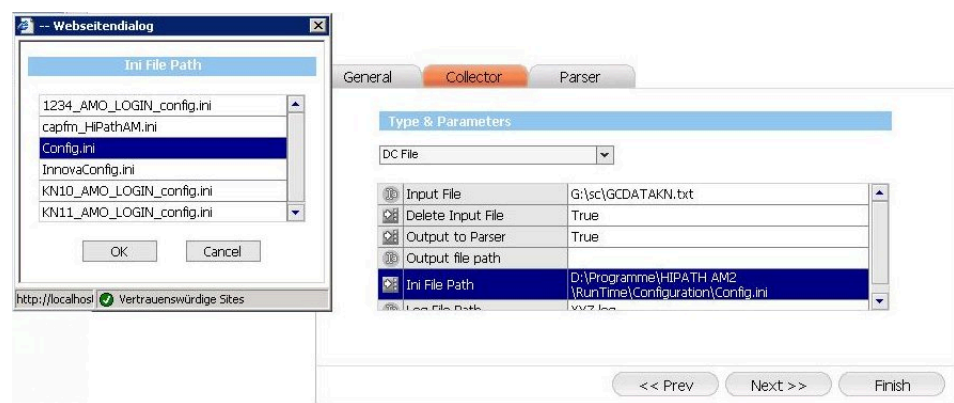
Procedure

In order to transfer the collected calls data from COL to HiPath AM, you have to convert - per output line - one (and only one - not several, not all) switch imported from OpenScape 4000 Manager to a HiPath task.

To configure a CDR data collection from file, please choose the **Maintenance** module. Go to **Task Manager** and **Data Collector**. Under **Data Source** please choose a switch, a system which is responsible for the file.

Click the **Next** button.

Configuration Examples - Data Collection

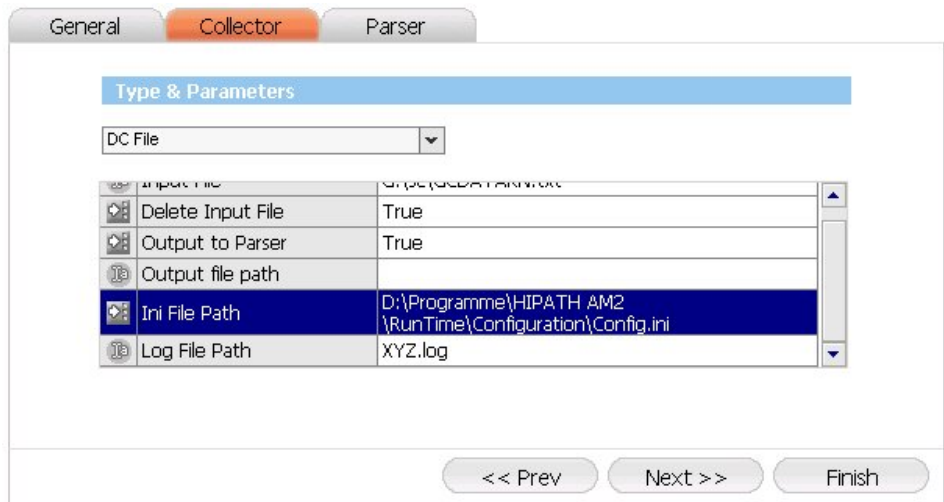


Under **Type & Parameters** please choose **DC File** for CDR data collection from file.

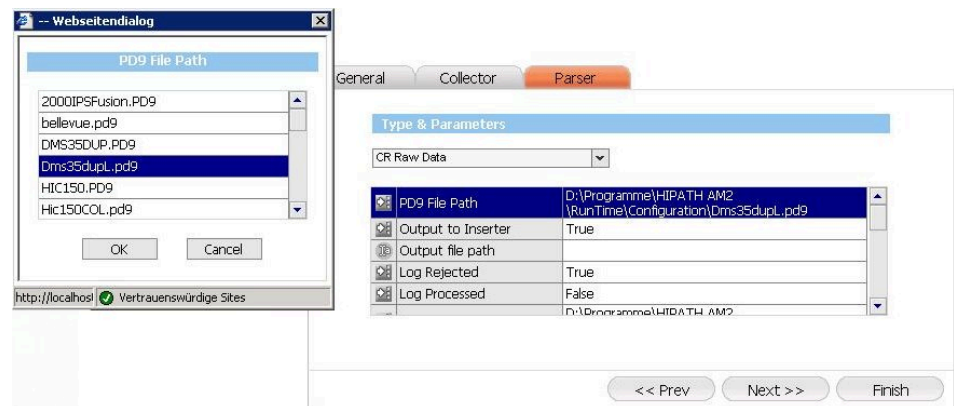
In the **Input File** field please enter the path including the CDR file name.

For the **INI File Path** field please select the **Config.ini** entry.

In the **Log File Path** field you can create a folder for the log file by entering the path including the folder name and the file name.



Click the **Next** button.



PD9 File Path: Select the file path for the defined "Output format" from the OpenScope system (FTBL).

Parser

Type & Parameters

CR Raw Data

Output to Inserter	True
Output file path	
Log Rejected	True
Log Processed	False
Ini File Path	D:\Programme\HIPATH AM2\RunTime\Configuration\Config.ini

<< Prev Next >> Finish

Click the **Next** button.

Summary

Name: Collect from File

Description: Collect from Data Source

Schedule Run Job Now Save

<< Prev Next >> Finish

Click the **Save** button.

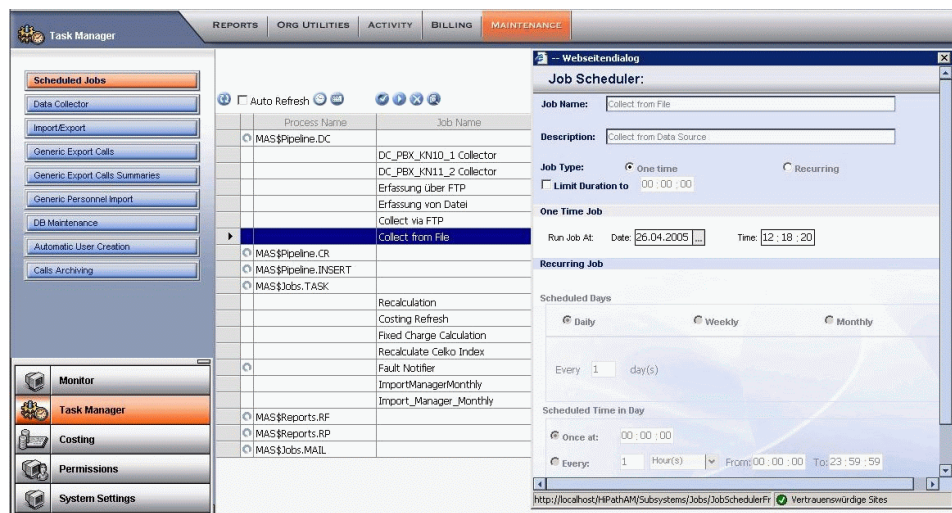
Task Manager

Scheduled Jobs
Monitor and configure system jobs

Process Name	Job Name	Enabled	Status	Status Time	Status Text
MAS\$Pipeline.DC	DC_PBX_KN10_1 Collector	1	Last Run Time 26.04.2005 12:10:19	26.04.2005	AmoLoginEnglishNew
	DC_PBX_KN11_2 Collector	1	Last Run Time 26.04.2005 12:10:01	26.04.2005	AmoLoginEnglishNew
	Erfassung über FTP	0			
	Erfassung von Datei	0	Last Run Time 25.04.2005 16:30:58	25.04.2005	File collection failed
	Collect via FTP	0			
	Collect from File	0	Last Run Time 26.04.2005 12:18:42		
MAS\$Pipeline.CR					
MAS\$Pipeline.INSERT					
MAS\$Jobs.TASK					
	Recalculation	0			
	Costing Refresh	1	Last Run Time 26.04.2005 11:35:56		
	Fixed Charge Calculation	1	Last Run Time 25.04.2005 16:10:50		
	Recalculate Celko Index	1	Last Run Time 25.04.2005 19:00:00		
	Fault Notifier	0	Last Run Time 25.04.2005 15:12:31		
	ImportManagerMonthly	0	Last Run Time 25.04.2005 15:21:17	25.04.2005	Import failed - Login
	Import_Manager_Monthly	0	Last Run Time 26.04.2005 11:35:49	26.04.2005	Import failed - Login
MAS\$Reports.RF					
MAS\$Reports.RP					
MAS\$Jobs.MAIL					

Now you can start the new job manually by clicking on the **Start Job Now** icon or via the **Job Scheduler** as scheduled job.

Click on the **Job Scheduler** icon.



7.2.4 OpenScape 4000 Manager Collecting Agent - OpenScape 4000 Manager Exchange

The Import/Export Interface - Import/Export API (XIE) - is used to take over the customer data (organizational structure, personal data, PIN and switch-specific data) from OpenScape 4000 Manager - Configuration Management.

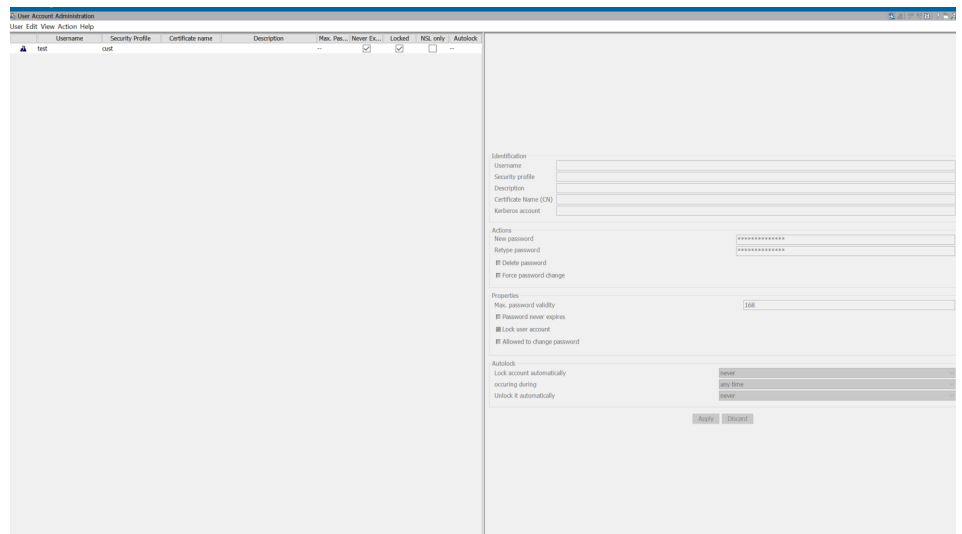
To be able to operate this interface appropriately, an account having the necessary privileges for the required data needs to be set up.

- [Creating a Login in OpenScape 4000 Manager for HiPath AM \(Customer Data\)](#) (see [page 364](#)),
- [OpenScape 4000 Manager Collecting Agent - Activate Access Rights for the XIE Interface](#) (see [page 365](#)),
- [Special Items with OpenScape 4000 Manager - XIE Interface](#) (see [page 365](#)).

7.2.4.1 Creating a Login in OpenScape 4000 Manager for HiPath AM (Customer Data)

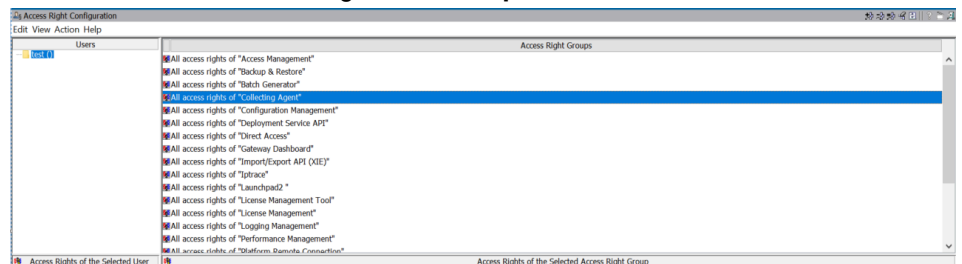
Create a new user account using the **Access Management** application:

- Menu item: Account Management - User Account Administration
- Select the **User - Add** menu to create the **hpam** user account. In the **Actions** area, enter **hpam** as the new password into the **New Password** field.



7.2.4.2 OpenScape 4000 Manager Collecting Agent - Activate Access Rights for the XIE Interface

In order to add the XIE rights for the user account created, you need to select All access rights of "Import/Export API (XIE)" in the Access Right Configuration and allocate these access rights to user **hpam**.



This allocation creates a new directory **/home/hpam/iefiles**. The external exchange with HiPath AM for customer data (XIE data) is managed via this directory.

7.2.4.3 Special Items with OpenScape 4000 Manager - XIE Interface

- File Transfer (FTP) Access

The XIE user account is required for HiPath AM to receive the call data file from OpenScape 4000 Manager Collecting Agent. You can use the same login as for the external exchange for customer data.

- Automatic Creation of Response Files

Like in the previous version of XIE, the request files (xxx.req), that are located in the exchange directory <iefiles>, are read by the system after a configurable amount of time. The corresponding response files (xxx.rsp)

are generated by the system and copied to the same directory, e.g. here for HiPath AM retrieval.

This period is set by default to 15 minutes in OpenScape 4000 Manager due to performance reasons. You can change this value, but this would lead to a significant performance loss within the OpenScape 4000 Manager system.

- Supported Hierarchy Levels

OpenScape 4000 Assistant/Manager supports 6 hierarchy levels: org1 through org6.

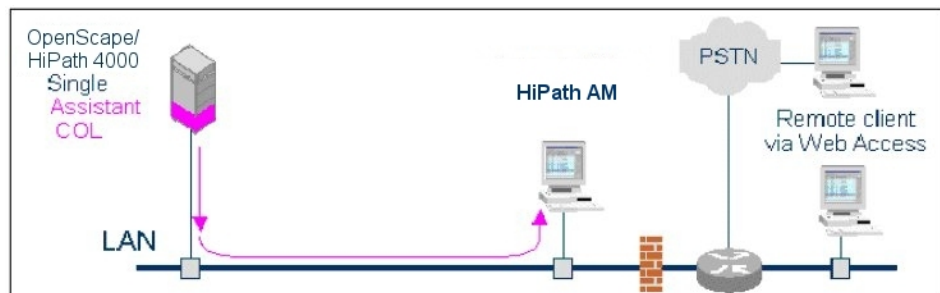
HiPath AM is configured for the hierarchy levels "Country", "Company", "org1-org3". This implies that only the hierarchy levels org1-org3 are exchanged via the XIE interface.

Consequence:

NOTICE: In OpenScape 4000 Manager - Configuration Management - please fill in only the levels org1-org3 for HiPath AM

7.2.5 OpenScape 4000 Assistant Collecting Agent

Basic Scenario



- OpenScape 4000 stores the call detail records to its FT file.
- OpenScape 4000 Assistant COL polls the call tickets from the OpenScape/HiPath 4000 system and separates the call tickets to one file for AM (Accounting Management) and another file for PM (Performance Management).
- HiPath AM then retrieves only the AM file from Assistant COL.

In order to perform the polling of the call tickets (call charge data), the following steps are required:

Procedure

- 1) Configuration of OpenScape 4000 Assistant Collecting Agent - Output Line (see [Configuration of OpenScape 4000 Assistant Collecting Agent](#) on [page 367](#)),
- 2) Configuration of the switches to be retrieved in HiPath AM.
- 3) Configuration of OpenScape 4000 Assistant Exchange for Customer Data.

7.2.6 Configuration of OpenScope 4000 Assistant Collecting Agent

OpenScope 4000 Assistant Collecting Agent stores the CDRs gathered from the OpenScope/HiPath 4000 system into one single file.

NOTICE: The procedure of setting up the input line side of OpenScope 4000 Assistant Collecting Agent is described in the Collecting Agent documentation, and is therefore not explained here

[OpenScope 4000 Assistant Collecting Agent - Setting Up Output Lines](#) on page 367

7.2.6.1 OpenScope 4000 Assistant Collecting Agent - Setting Up Output Lines

To set up the output of records, you need to set up one output line (output file) per record format.

- To set up output lines, use the **Definition of Output Lines** feature from the **OpenScope 4000 Assistant Collecting Agent -> Homepage**.
- To set up a new output line, select the **New Object** radio button or the **Object > New** menu item.

In the dialog displayed you have to enter the following data:

Output Line Name	Name of output line, e.g. "HPCOL", max. 32 characters.
Description	Arbitrary text. Max. 256 characters.

Active	This toggle switch is specifically used to start/stop the output for this output line. Please take into consideration that if the output is turned off no records will be buffered (temporarily saved). Therefore, if you intend to temporarily turn off the output without losing records, use the Stop Output button of the Controlling feature on the COL Homepage .
Output Format	Choose one of the pre-defined or user defined record formats. The chosen output format should match the input record format: Pre-defined Format (Output Format) page 368
Filter	Select DefaultFilter here.
File Name	Enter the filename GCDATA for the output file. The output file will by default be created in the /var/col/data/deliver/ directory.
Start Date / Start Time	The current date and time is automatically entered here. Adjust the output time values to your needs. The output date/ time should be set to a value of at least 10 minutes before the collecting time of the HiPath AM.
Cycle	Use this field to enter the value for the output cycle. Possible values: Min. 1 minute, max. 24 hours. Adjust the output cycle to match the collecting cycle of the HiPath AM.

And... Don't forget to save your data!

Pre-defined Format (Output Format)

Input Format	Output Format
AM_V3.0_L	HP-COL_V1.0
AM_V3.1_L	HP-COL_V1.0

7.2.7 OpenScape 4000 Assistant Collecting Agent - HiPath AM

See description in section [OpenScape 4000 Manager Collecting Agent - HiPath AM](#).

7.2.8 OpenScape 4000 Assistant Collecting Agent - OpenScape 4000 Assistant Exchange

See description in section [OpenScape 4000 Manager Collecting Agent - OpenScape 4000 Manager Exchange](#).

7.2.9 OpenScape 4000 Assistant Collecting Agent - Activate Access Rights for the XIE Interface

See description in section [OpenScape 4000 Manager Collecting Agent - Activate Access Rights for the XIE Interface](#).

[Special Items with OpenScape 4000 Assistant - XIE Interface](#)

7.2.9.1 Special Items with OpenScape 4000 Assistant - XIE Interface

- File Transfer (FTP) Access for HiPath AM Call Data Exchange

The XIE user account is required for HiPath AM to receive the call data file from OpenScape 4000 Assistant Collecting Agent. You can use the same login as for the external exchange for customer data.

- Automatic Creation of Response Files

Like in the previous version of XIE, the request files (xxx.req) which are located in the exchange directory <iefiles> are read by the system after a configurable amount of time. The corresponding response files (xxx.rsp) are generated by the system and copied to the same directory, e.g. here for HiPath AM retrieval.

This period is set by default to 15 minutes in OpenScape 4000 Assistant due to performance reasons. You can change this value, but this would lead to a significant performance loss within the OpenScape 4000 Assistant system.

- Supported Hierarchy Levels

OpenScape 4000 Assistant/Manager supports 6 hierarchy levels: org1 through org6.

HiPath AM is configured for the hierarchy levels "Country", "Company", "org1-org3". This implies that only the hierarchy levels org1-org3 are exchanged via the XIE interface.

Consequence:

In OpenScape 4000 Assistant - Configuration Management - please fill in only the levels org1-org3 for HiPath AM.

7.3 OpenScape 4000 Manager Collecting Agent - Configuration for AM/PM

[How Do I Add an Additional Output Line for PM in COL, Having One Existing AM Output Line?](#)

[OpenScape/HiPath 4000 Node](#)

7.3.1 How Do I Add an Additional Output Line for PM in COL, Having One Existing AM Output Line?

Procedure

In order to avoid losing call charge data, the following procedure is recommended:

- Retrieve AM Data
- Deactivate AM Input Line
- Perform Enhancement (Add PM Output Line)
- Activate AM and PM Input Line

7.3.2 OpenScape/HiPath 4000 Node

Retrieving AM Data

Please refer to [Retrieving AM Data Manually](#) on [page 372](#).

Deactivating the AM Input Line

Please refer to [Deactivating the AM Input Line](#) on [page 373](#).

Enhancing the Input Format With the Fields Required for PM

1) Analyze the already configured CDR data elements for AM.

If the CDR data elements required for AM are included in the AMPM_UV1.0 default input format, then you should use this format as the new input format.

Based on the new input format, COL will generate an FTBL batch for the configuration of the CDR output format. Path and name of the FTBL batch: /var/col/data/ftbl/AMPM_UV1.0.GE (German) /var/col/data/ftbl/AMPM_UV1.0.EN (English)

AM Output Format

The output format for AM must not be changed.

In this way you make sure that the AM data remain unchanged.

AM Output Line

The AM Filter needs to be activated for the AM Output Line.

For details, please refer to [Setting the AM Filter for the AM Output Line](#) on [page 377](#).

The AM Filter contains the following elements: COLTYPE=0;1;3

For details, please refer to [Verifying the AM Filter](#) on [page 378](#).

PM Output Line

The PM Output Line is preset to a default value. The PM filter is used as a filter here.

The PM Filter contains the following elements: COLTYPE=0;2;3

For details, please refer to [Verifying the PM Filter](#) on [page 379](#).

Configuring the Node

- 1) Transfer the FTBL batch generated by COL to the client using FTP.

The TEXT configuration required for PM needs to be compared to the current TEXT configuration. If elements already configured are modified by the new TEXT configuration, you need to clarify which applications are using these elements.

1) Hint:

At present there is no solution available for the case when different text configurations are required for one element. Since at present there is no TEXT configuration batch available on the Manager, the AMO TEXT commands listed in the [Pre-defined Formats for Output Format Definition](#) and [Pre-defined Formats for Input Format Definition](#) sections have to be used.

See also [AMO Text - Configuration for OpenScape 4000](#), on [page 382](#):

Execute the FTBL batch on the node.

Execute the TEXT batch on the node.

Configure the virtual tie trunk and CO trunk number (Quer- und Amtssatznummer) using the AMO FBTN. Example:
ADD-FBTN:TBL=TN,LTG=99,LTU=1,SLOT=1,CCT=1,
BCHAN=1,VTRKNO=111111; This dummy entry is only necessary if subscribers have to be measured.

Activating the AM and PM Input Line

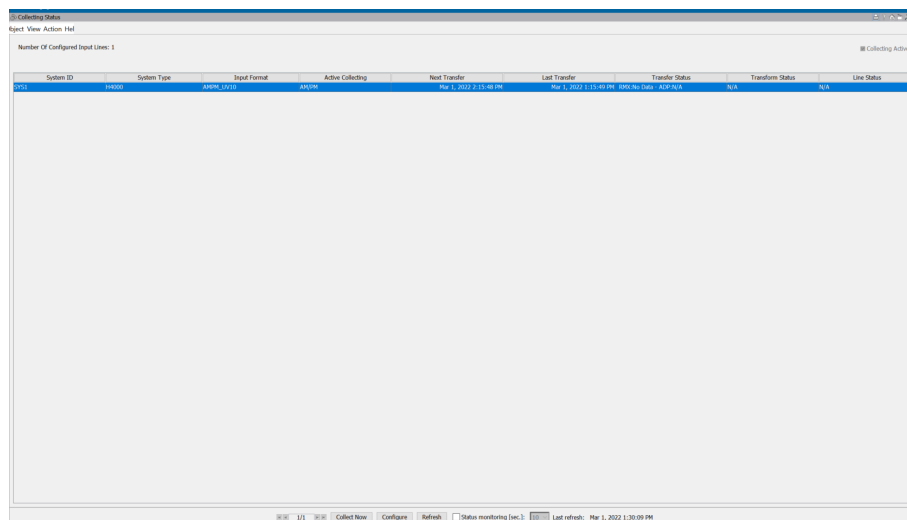
Please refer to [Activating the AM and PM Input Lines](#) on [page 376](#).

Activating the Measurement for Trunks and Subscribers

Please refer to [Activating a Measurement](#) on [page 381](#).

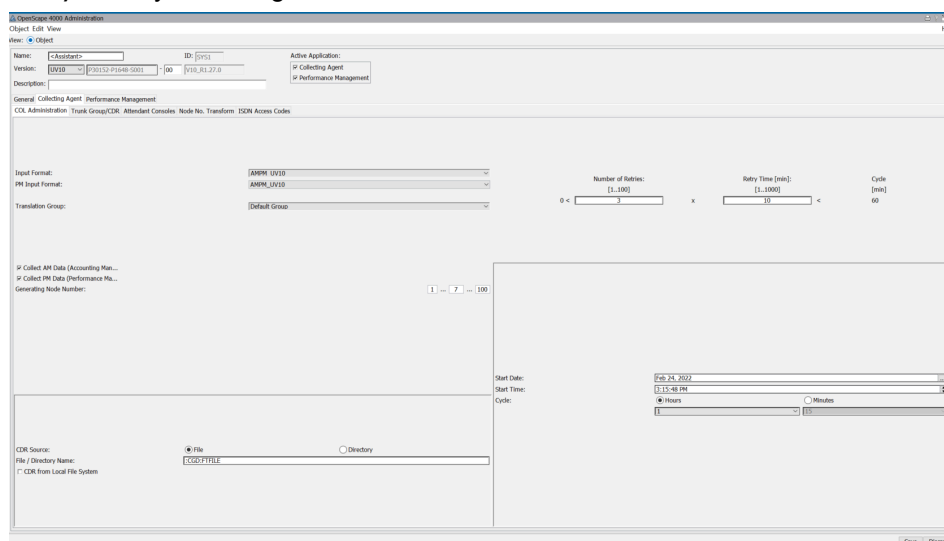
7.4 Retrieving AM Data Manually

- 1) Start: **Start Page -> Collecting Agent-> Collecting Status**
 - a) Select the node (system) for which you want to perform the data collection,
 - b) Click the **Collect Now** button to start retrieving the AM data.



7.5 Deactivating the AM Input Line

- 1) Start: **Start Page -> System Management -> OpenScape 4000 Administration**
 - a) Select the node for which you want to activate the AM input line,
 - b) Make sure the **Collecting Agent** in the **Active Applications** area is checked. Click the **Collecting Agent** tab sheet to bring it to the front on your display,
 - c) Deactivate the **Collect AM Data** feature by unchecking the check box,
 - d) **Save** your changes.



7.6 Creating an Input Format for a specific Variant

1) Start: **Start Page** -> **Collecting Agent** -> **Collecting Agent Homepage** -> **Input Format Editor**

a) Highlight the **AMPM_UV1.0** format,

b) Switch from the **Object List** view to the **Object** view.

Format Name	System Version	Description	Element Count	Format Length
AM1.0_UV1.0	UV1.0	AM V1.0 input format for HiPath 4000 V1.0	26	114
AM1.0_UV2.0	UV2.0	AM V1.0 input format for HiPath 4000 V2.0	26	114
AMPM_UV1.0	UV1.0	AM/PM input format for HiPath 4000 V1.0	75	327
AMPM_UV1.0_S	UV1.0	Short AM/PM input format for HiPath 4000 V1.0	70	318
AMPM_UV1.0	UV1.0	AM/PM input format for HiPath 4000 V1.0	81	340
AMPM_UV2.0	UV2.0	Enhanced AM/PM input format for HiPath 4000 V2.0	80	337
AMPM_UV2.0_S	UV2.0	Short AM/PM input format for HiPath 4000 V2.0	75	327
AMPM_UV3.0	UV3.0	AM/PM input format for HiPath 4000 V3.0	81	340
AMPM_UV4	UV4	AM/PM input format for HiPath 4000 V4	81	340
AMPM_UV5	UV5	AM/PM input format for HiPath 4000 V5	81	340
AMPM_UV6	UV6	AM/PM input format for HiPath 4000 V6	81	340
AMPM_UV7	UV7	AM/PM input format for HiPath 4000 V7	81	340
AMPM_UV8	UV8	AM/PM input format for HiPath 4000 V8	81	340
CDR_UV1.0	UV1.0	All CDR elements for HiPath 4000 V1.0	151	662
CDR_UV2.0	UV2.0	All CDR elements for HiPath 4000 V2.0	151	662
PM_N_UV1.0	UV1.0	Short PM Network for HiPath V1.0	25	110
PM_N_UV2.0	UV2.0	Short PM Network for HiPath V2.0	25	110
PM_N_UV3.0	UV3.0	Short PM Network for HiPath 4000 V3.0	25	110
PM_N_UV4	UV4	Short PM Network for HiPath 4000 V4	25	110
PM_UV1.0	UV1.0	Default PM input format for HiPath 4000 V1.0	60	261
PM_UV1.0_S	UV1.0	Short PM input format for HiPath 4000 V1.0	51	223
PM_UV2.0	UV2.0	Enhanced PM input format for HiPath 4000 V2.0	66	274
PM_UV2.0_S	UV2.0	Short PM input format for HiPath 4000 V2.0	60	261
PM_UV3.0	UV3.0	PM input format for HiPath 4000 V3.0	66	274
PM_UV4	UV4	PM input format for HiPath 4000 V4	66	274
PM_UV5	UV5	PM input format for HiPath 4000 V5	66	274
PM_UV6	UV6	PM input format for HiPath 4000 V6	66	274
PM_UV7	UV7	PM input format for HiPath 4000 V7	66	274
PM_UV8	UV8	PM input format for HiPath 4000 V8	66	274
test	UV10		22	85

c) **Object** -> **Copy**.

Format Name	System Version	Description	Element Count	Format Length
AM1.0_UV1.0	UV1.0	AM V1.0 input format for HiPath 4000 V1.0	26	114
AM1.0_UV2.0	UV2.0	AM V1.0 input format for HiPath 4000 V2.0	26	114
AMPM_UV1.0	UV1.0	AM/PM input format for HiPath 4000 V1.0	75	327
AMPM_UV1.0_S	UV1.0	Short AM/PM input format for HiPath 4000 V1.0	70	318
AMPM_UV1.0	UV1.0	AM/PM input format for HiPath 4000 V1.0	81	340
AMPM_UV2.0	UV2.0	Enhanced AM/PM input format for HiPath 4000 V2.0	80	337
AMPM_UV2.0_S	UV2.0	Short AM/PM input format for HiPath 4000 V2.0	75	327
AMPM_UV3.0	UV3.0	AM/PM input format for HiPath 4000 V3.0	81	340
AMPM_UV4	UV4	AM/PM input format for HiPath 4000 V4	81	340
AMPM_UV5	UV5	AM/PM input format for HiPath 4000 V5	81	340
AMPM_UV6	UV6	AM/PM input format for HiPath 4000 V6	81	340
AMPM_UV7	UV7	AM/PM input format for HiPath 4000 V7	81	340
AMPM_UV8	UV8	AM/PM input format for HiPath 4000 V8	81	340
CDR_UV1.0	UV1.0	All CDR elements for HiPath 4000 V1.0	151	662
CDR_UV2.0	UV2.0	All CDR elements for HiPath 4000 V2.0	151	662
PM_N_UV1.0	UV1.0	Short PM Network for HiPath V1.0	25	110
PM_N_UV2.0	UV2.0	Short PM Network for HiPath V2.0	25	110
PM_N_UV3.0	UV3.0	Short PM Network for HiPath 4000 V3.0	25	110
PM_N_UV4	UV4	Short PM Network for HiPath 4000 V4	25	110
PM_UV1.0	UV1.0	Default PM input format for HiPath 4000 V1.0	60	261
PM_UV1.0_S	UV1.0	Short PM input format for HiPath 4000 V1.0	51	223
PM_UV2.0	UV2.0	Enhanced PM input format for HiPath 4000 V2.0	66	274
PM_UV2.0_S	UV2.0	Short PM input format for HiPath 4000 V2.0	60	261
PM_UV3.0	UV3.0	PM input format for HiPath 4000 V3.0	66	274
PM_UV4	UV4	PM input format for HiPath 4000 V4	66	274

d) **Object** -> **New**; The empty table of the Input Format Editor is displayed,

e) **Object** -> **Insert**; You created a copy of the **AMPM_UV1.0** input format,

f) **Format Name** field: Enter the name of the new format,

g) **Description** field: Enter a description of the new format,

h) **System Version** field: Select the system version; A message dialog is displayed, notifying you that the format will be edited automatically. As soon as you confirm this message, all fields that do not exist in this system variant will be deleted.

i) **Save** your new input format.

7.7 Activating the AM and PM Input Lines

- 1) Start: **Start Page -> System Management -> OpenScape 4000 Administration**
 - a) Select the node for which you want to activate the AM and PM input lines,
 - b) Make sure the **Collecting Agent** in the **Active Applications** area is checked.
 - c) Click the **Collecting Agent** tab sheet to bring it to the front on your display,
 - d) Activate the **Collect AM Data** feature by checking the corresponding check box,
 - e) Activate the **Collect PM Data** feature by checking the corresponding check box,
 - f) **Input Format** field: Enter the AM/PM input format, depending on the system version (e.g. AM/PM_UV1.0, ...),
 - g) **PM Input Format** field: Enter the AM/PM input format, depending on the system version (e.g. AM/PM_UV1.0, ...),
 - h) **Save** your configuration.

The screenshot displays the 'OpenScape 4000 Administration' window, specifically the 'Collecting Agent' configuration page. The interface includes a top navigation bar with 'Object Edit View' and 'Help' buttons. Below this, there are fields for 'Name', 'Version', and 'Description'. The 'Active Application' section shows 'Collecting Agent' and 'Performance Management' with checkboxes. The main configuration area contains several fields: 'Input Format' (set to 'AMPM_UV1.0'), 'PM Input Format' (set to 'AMPM_UV1.0'), and 'Translation Group' (set to 'Default Group'). There are also fields for 'Number of Entries' (set to '1'), 'Entry Time (min)' (set to '1'), and 'Cycle' (set to '15'). A 'Start Date' field is set to 'Fri 24, 2022'. The 'Start Time' field is set to '13:48:00'. The 'Cycle' field is set to '15'. The 'CDR Source' section shows 'File' selected and 'Directory' unselected. The 'File / Directory Name' field is set to 'CDR1000'. The 'CDR from Local File System' checkbox is checked.

7.8 Setting the AM Filter for the AM Output Line

- 1) Start: **Start Page -> Collecting Agent -> Homepage Collecting Agent -> Definition of Output Lines**
 - a) **Output Line Name** field: Select the AM output line,
 - b) **Translation Group** field: Select the translation group,
 - c) **Filter** field: Select **AM Filter**,
 - d) **Save** your configuration.

7.9 Verifying the AM Filter

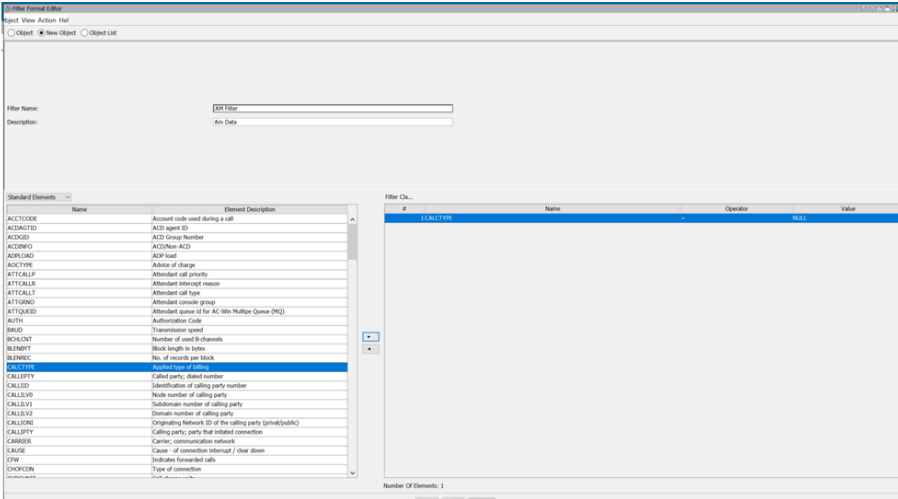
- 1) Start: **Start Page -> Collecting Agent -> Homepage Collecting Agent -> Filter Editor**
 - a) **Filter Name** field: Select **AM Filter**, then switch to **Object** view.

Name	Element Description
ACCTCODE	Account code used during a call
ACDAGENT	ACD agent ID
ACDGRP	ACD Group Number
ACDINFO	ACDNon-ACD
ACDLOAD	ACD load
ACDTYPE	Advice of charge
ATTICALLP	Attendant call priority
ATTICALLR	Attendant interval reason
ATTICALLT	Attendant call type
ATTICALLG	Attendant console group
ATTICALLQ	Attendant queue ID for AC-win Multiple Queue (MQ)
ATTICALLS	Authorization Code
BAUD	Transmission speed
BCHLNT	Number of used D-channels
BCHLNT	Block length in bytes
BLNSEC	No. of reports per block
CALLTYPE	Called party, called number
CALLID	Identification of calling party number
CALLIDP	Block number of calling party
CALLIDV	Subdomain number of calling party
CALLIDZ	Domain number of calling party
CALLIDN	Originating Network ID of the calling party (private/public)
CALLIDT	Calling party, party that initiated connection
CAUSE	Carrier communication network
CAUSE	Cause of connection interrupt / clear down
CTW	Indicates forwarded calls
CHKCON	Type of connection

Filter Chk.	Name	Operator	Value
1	CALLTYPE	<	NULL

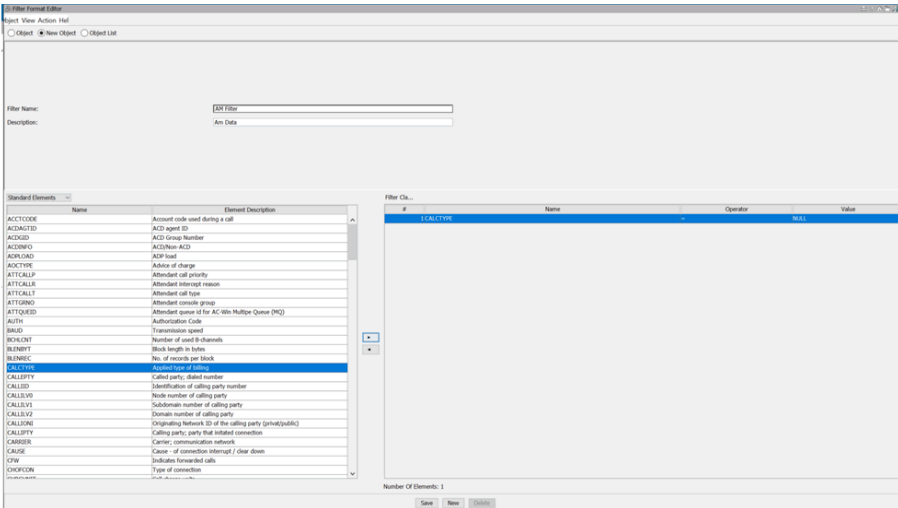
7.10 Verifying the PM Filter

- 1) Start: **Start Page -> Collecting Agent -> Homepage Collecting Agent -> Filter Editor**
 - a) **Filter Name** field: Select **PM Filter**, then switch to **Object** view.



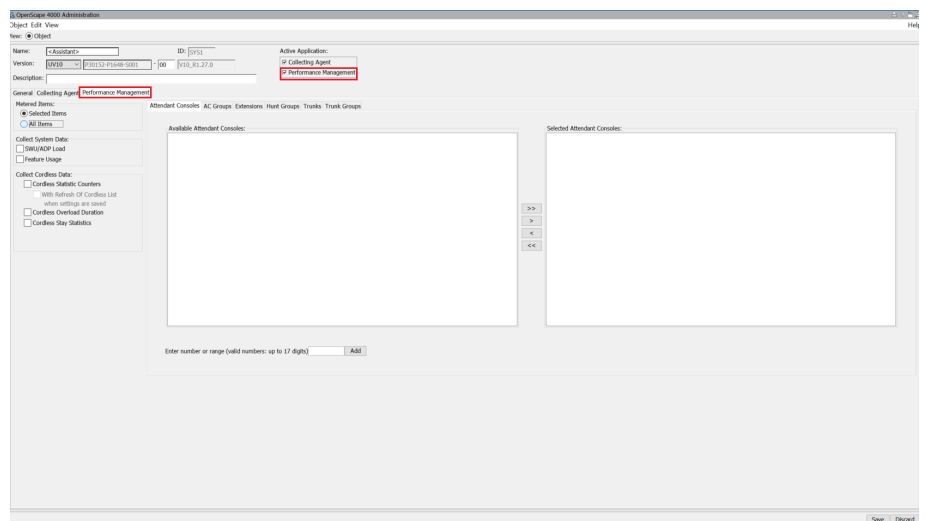
7.11 Enhancing the AM Filter

- 1) Start: **Start Page -> Collecting Agent -> Homepage Collecting Agent -> Filter Editor**
 - a) **Filter Name** field: Select **AM Filter**,
 - b) Add **CONNTYPE = 0** as Filter Clause,
 - c) **Save**.



7.12 Activating a Measurement

- 1) Start: **Start Page** -> **System Management** -> **OpenScape 4000 Administration**
 - a) Select the node, then switch to the **Object** view,
 - b) Make sure **Performance Management** in the **Active Applications** area is checked,
 - c) Click the **Performance Management** tab sheet to bring it to the front on your display,
 - d) Select the objects to be measured (specific trunks, subscribers) or click the **All Items** radio button in the **Metered Items** area if you want all items to be measured,
 - e) Click the **Save** button to activate the measurement.



7.13 AMO Text - Configuration for OpenScape 4000

AMO-TEXT - Configuration for OpenScape 4000

```
ADD-TEXT:SERVICE,VOICE,"0 ";
ADD-TEXT:SERVICE,FAX,"3 ";
ADD-TEXT:SERVICE,DTE,"4 ";
ADD-TEXT:SPEED,0,"000 ";
ADD-TEXT:SPEED,2400,"001 ";
ADD-TEXT:SPEED,4800,"002 ";
ADD-TEXT:SPEED,9600,"003 ";
ADD-TEXT:SPEED,48000,"004 ";
ADD-TEXT:SPEED,64000,"005 ";
ADD-TEXT:NETTYPE,ANA,"0 ";
ADD-TEXT:NETTYPE,IDN,"1 ";
ADD-TEXT:NETTYPE,ISDN,"2 ";
ADD-TEXT:SWP,SPACE,"0 ";
ADD-TEXT:SWP,ENDS,"1 ";
ADD-TEXT:SWP,ENDSEC,"2 ";
ADD-TEXT:SWP,ENDL,"3 ";
ADD-TEXT:SWP,SECS,"4 ";
ADD-TEXT:SWP,NEXTSEC,"5 ";
```

Configuration Examples - Data Collection

```
ADD-TEXT:SWP,SECL,"6 ";
ADD-TEXT:SWP,LAS,"7 ";
ADD-TEXT:SWP,LASEC,"8 ";
ADD-TEXT:SWP,LAL,"9 ";
ADD-TEXT:SWP,SECACC,"10 ";
ADD-TEXT:SUBSID,1,"1 ";
ADD-TEXT:SUBSID,2,"3 ";
ADD-TEXT:SUBSID,3,"4 ";
ADD-TEXT:SUBSID,4,"2 ";
ADD-TEXT:SUBSID,5,"5 ";
ADD-TEXT:SUBSID,6,"6 ";
ADD-TEXT:SUBSID,7,"7 ";
ADD-TEXT:SUBSID,8,"8 ";
ADD-TEXT:SUBSID,9,"9 ";
ADD-TEXT:SUBSID,10,"10 ";
ADD-TEXT:SIGDATA,0,"1 ";
ADD-TEXT:SIGDATA,1,"0 ";
ADD-TEXT:ROUTCC,0,"00 ";
ADD-TEXT:ROUTCC,1,"01 ";
ADD-TEXT:ROUTCC,2,"02 ";
ADD-TEXT:ROUTCC,3,"03 ";
ADD-TEXT:ROUTCC,4,"04 ";
ADD-TEXT:ROUTCC,5,"05 ";
ADD-TEXT:ROUTCC,6,"06 ";
ADD-TEXT:ROUTCC,7,"07 ";
ADD-TEXT:ROUTCC,8,"08 ";
ADD-TEXT:ROUTCC,9,"09 ";
ADD-TEXT:ROUTCC,10,"10 ";
ADD-TEXT:ROUTCC,11,"11 ";
ADD-TEXT:ROUTCC,12,"12 ";
ADD-TEXT:ROUTCC,13,"13 ";
ADD-TEXT:ROUTCC,14,"14 ";
ADD-TEXT:ROUTCC,15,"15 ";
ADD-TEXT:ROUTCC,16,"16 ";
ADD-TEXT:EXPENS,0,"0 ";
ADD-TEXT:EXPENS,1,"1 ";
ADD-TEXT:EXPENS,2,"2 ";
ADD-TEXT:EXPENS,3,"3 ";
ADD-TEXT:CONNTYPE,INTERN,"3 ";
ADD-TEXT:CONNTYPE,INCO,"1 ";
ADD-TEXT:CONNTYPE,OUTGO,"0 ";
ADD-TEXT:CONNTYPE,ACACT,"4 ";
ADD-TEXT:CONNTYPE,LOAD,"5 ";
ADD-TEXT:SUPLSERV,0,"00 ";
ADD-TEXT:SUPLSERV,1,"01 ";
ADD-TEXT:SUPLSERV,2,"02 ";
ADD-TEXT:SUPLSERV,3,"03 ";
ADD-TEXT:SUPLSERV,4,"04 ";
ADD-TEXT:SUPLSERV,5,"05 ";
ADD-TEXT:SUPLSERV,6,"06 ";
ADD-TEXT:SUPLSERV,7,"07 ";
ADD-TEXT:SUPLSERV,8,"08 ";
ADD-TEXT:SUPLSERV,9,"09 ";
ADD-TEXT:SUPLSERV,10,"10 ";
ADD-TEXT:SUPLSERV,11,"11 ";
ADD-TEXT:SUPLSERV,12,"12 ";
```

```
ADD-TEXT:SUPLSERV,13,"13 ";
ADD-TEXT:SUPLSERV,14,"14 ";
ADD-TEXT:SUPLSERV,15,"15 ";
ADD-TEXT:SUPLSERV,16,"16 ";
ADD-TEXT:SUPLSERV,17,"17 ";
ADD-TEXT:SUPLSERV,18,"18 ";
ADD-TEXT:SUPLSERV,19,"19 ";
ADD-TEXT:SUPLSERV,20,"20 ";
ADD-TEXT:SUPLSERV,21,"21 ";
ADD-TEXT:SUPLSERV,22,"22 ";
ADD-TEXT:SUPLSERV,23,"23 ";
ADD-TEXT:SUPLSERV,24,"24 ";
ADD-TEXT:SUPLSERV,25,"25 ";
ADD-TEXT:SUPLSERV,26,"26 ";
ADD-TEXT:SUPLSERV,27,"27 ";
ADD-TEXT:SUPLSERV,28,"28 ";
ADD-TEXT:SUPLSERV,29,"29 ";
ADD-TEXT:SUPLSERV,30,"30 ";
ADD-TEXT:SUPLSERV,31,"31 ";
ADD-TEXT:SUPLSERV,32,"32 ";
ADD-TEXT:SUPLSERV,33,"33 ";
ADD-TEXT:SUPLSERV,34,"34 ";
ADD-TEXT:SUPLSERV,35,"35 ";
ADD-TEXT:SUPLSERV,36,"36 ";
ADD-TEXT:SUPLSERV,37,"37 ";
ADD-TEXT:SUPLSERV,38,"38 ";
ADD-TEXT:SUPLSERV,39,"39 ";
ADD-TEXT:SUPLSERV,40,"40 ";
ADD-TEXT:SUPLSERV,41,"41 ";
ADD-TEXT:SUPLSERV,42,"42 ";
ADD-TEXT:SUPLSERV,43,"43 ";
ADD-TEXT:SUPLSERV,44,"44 ";
ADD-TEXT:SUPLSERV,45,"45 ";
ADD-TEXT:SUPLSERV,46,"46 ";
ADD-TEXT:SUPLSERV,47,"47 ";
ADD-TEXT:SUPLSERV,48,"48 ";
ADD-TEXT:SUPLSERV,49,"49 ";
ADD-TEXT:SUPLSERV,50,"50 ";
ADD-TEXT:SUPLSERV,51,"51 ";
ADD-TEXT:SUPLSERV,52,"52 ";
ADD-TEXT:SUPLSERV,53,"53 ";
ADD-TEXT:SUPLSERV,54,"54 ";
ADD-TEXT:SUPLSERV,55,"55 ";
ADD-TEXT:SUPLSERV,56,"56 ";
ADD-TEXT:ZONE,SPACE,"000 ";
ADD-TEXT:ZONE,INT01,"001 ";
ADD-TEXT:ZONE,INT02,"002 ";
ADD-TEXT:ZONE,INT03,"003 ";
ADD-TEXT:ZONE,INT04,"004 ";
ADD-TEXT:ZONE,INT05,"005 ";
ADD-TEXT:ZONE,INT06,"006 ";
ADD-TEXT:ZONE,INT07,"007 ";
ADD-TEXT:ZONE,INT08,"008 ";
ADD-TEXT:ZONE,INT09,"009 ";
ADD-TEXT:ZONE,INC01,"011 ";
ADD-TEXT:ZONE,INC02,"012 ";
```

Configuration Examples - Data Collection

```
ADD-TEXT:ZONE, INC03, "013 ";
ADD-TEXT:ZONE, INC04, "014 ";
ADD-TEXT:ZONE, INC05, "015 ";
ADD-TEXT:ZONE, INC06, "016 ";
ADD-TEXT:ZONE, INC07, "017 ";
ADD-TEXT:ZONE, INC08, "018 ";
ADD-TEXT:ZONE, INC09, "019 ";
ADD-TEXT:ZONE, LOC, "021 ";
ADD-TEXT:ZONE, CHRGFREE, "IN FREE CH";
ADD-TEXT:ZONE, CHRGINFO, "IN INFO CH";
ADD-TEXT:ZONE, NEAR, "031 ";
ADD-TEXT:ZONE, DIST01, "051 ";
ADD-TEXT:ZONE, DIST02, "052 ";
ADD-TEXT:ZONE, DIST03, "053 ";
ADD-TEXT:ZONE, DIST04, "054 ";
ADD-TEXT:ZONE, DIST05, "055 ";
ADD-TEXT:ZONE, DIST06, "056 ";
ADD-TEXT:ZONE, DIST07, "057 ";
ADD-TEXT:ZONE, DIST08, "058 ";
ADD-TEXT:ZONE, DIST09, "059 ";
ADD-TEXT:ZONE, DIST10, "060 ";
ADD-TEXT:ZONE, DIST11, "061 ";
ADD-TEXT:ZONE, DIST12, "062 ";
ADD-TEXT:ZONE, DIST13, "063 ";
ADD-TEXT:ZONE, DIST14, "064 ";
ADD-TEXT:ZONE, DIST15, "065 ";
ADD-TEXT:ZONE, DIST16, "066 ";
ADD-TEXT:ZONE, DIST17, "067 ";
ADD-TEXT:ZONE, DIST18, "068 ";
ADD-TEXT:ZONE, DIST19, "069 ";
ADD-TEXT:ZONE, DIST20, "070 ";
ADD-TEXT:ZONE, DIST21, "071 ";
ADD-TEXT:ZONE, DIST22, "072 ";
ADD-TEXT:ZONE, DIST23, "073 ";
ADD-TEXT:ZONE, DIST24, "074 ";
ADD-TEXT:ZONE, DIST25, "075 ";
ADD-TEXT:ZONE, DIST26, "076 ";
ADD-TEXT:ZONE, DIST27, "077 ";
ADD-TEXT:ZONE, DIST28, "078 ";
ADD-TEXT:ZONE, DIST29, "079 ";
ADD-TEXT:ZONE, DIST30, "080 ";
ADD-TEXT:ZONE, DIST31, "081 ";
ADD-TEXT:ZONE, DIST32, "082 ";
ADD-TEXT:ZONE, DIST33, "083 ";
ADD-TEXT:ZONE, DIST34, "084 ";
ADD-TEXT:ZONE, DIST35, "085 ";
ADD-TEXT:ZONE, DIST36, "086 ";
ADD-TEXT:ZONE, DIST37, "087 ";
ADD-TEXT:ZONE, DIST38, "088 ";
ADD-TEXT:ZONE, DIST39, "089 ";
ADD-TEXT:ZONE, DIST40, "090 ";
ADD-TEXT:ZONE, DIST41, "091 ";
ADD-TEXT:ZONE, DIST42, "092 ";
ADD-TEXT:ZONE, DIST43, "093 ";
ADD-TEXT:ZONE, DIST44, "094 ";
ADD-TEXT:ZONE, DIST45, "095 ";
```



```
ADD-TEXT:ZONE,DIST46,"096 ";
ADD-TEXT:ZONE,DIST47,"097 ";
ADD-TEXT:ZONE,DIST48,"098 ";
ADD-TEXT:ZONE,DIST49,"099 ";
ADD-TEXT:ZONE,DIST50,"100 ";
ADD-TEXT:ZONE,ABR01,"101 ";
ADD-TEXT:ZONE,ABR02,"102 ";
ADD-TEXT:ZONE,ABR03,"103 ";
ADD-TEXT:ZONE,ABR04,"104 ";
ADD-TEXT:ZONE,ABR05,"105 ";
ADD-TEXT:ZONE,ABR06,"106 ";
ADD-TEXT:ZONE,ABR07,"107 ";
ADD-TEXT:ZONE,ABR08,"108 ";
ADD-TEXT:ZONE,ABR09,"109 ";
ADD-TEXT:ZONE,ABR10,"110 ";
ADD-TEXT:ZONE,ABR11,"111 ";
ADD-TEXT:ZONE,ABR12,"112 ";
ADD-TEXT:ZONE,ABR13,"113 ";
ADD-TEXT:ZONE,ABR14,"114 ";
ADD-TEXT:ZONE,ABR15,"115 ";
ADD-TEXT:ZONE,ABR16,"116 ";
ADD-TEXT:ZONE,ABR17,"117 ";
ADD-TEXT:ZONE,ABR18,"118 ";
ADD-TEXT:ZONE,ABR19,"119 ";
ADD-TEXT:ZONE,ABR20,"120 ";
ADD-TEXT:ZONE,ABR21,"121 ";
ADD-TEXT:ZONE,ABR22,"122 ";
ADD-TEXT:ZONE,ABR23,"123 ";
ADD-TEXT:ZONE,ABR24,"124 ";
ADD-TEXT:ZONE,ABR25,"125 ";
ADD-TEXT:ZONE,ABR26,"126 ";
ADD-TEXT:ZONE,ABR27,"127 ";
ADD-TEXT:ZONE,ABR28,"128 ";
ADD-TEXT:ZONE,ABR29,"129 ";
ADD-TEXT:ZONE,ABR30,"130 ";
ADD-TEXT:ZONE,ABR31,"131 ";
ADD-TEXT:ZONE,ABR32,"132 ";
ADD-TEXT:ZONE,ABR33,"133 ";
ADD-TEXT:ZONE,ABR34,"134 ";
ADD-TEXT:ZONE,ABR35,"135 ";
ADD-TEXT:ZONE,ABR36,"136 ";
ADD-TEXT:ZONE,ABR37,"137 ";
ADD-TEXT:ZONE,ABR38,"138 ";
ADD-TEXT:ZONE,ABR39,"139 ";
ADD-TEXT:ZONE,ABR40,"140 ";
ADD-TEXT:ZONE,ABR41,"141 ";
ADD-TEXT:ZONE,ABR42,"142 ";
ADD-TEXT:ZONE,ABR43,"143 ";
ADD-TEXT:ZONE,ABR44,"144 ";
ADD-TEXT:ZONE,ABR45,"145 ";
ADD-TEXT:ZONE,ABR46,"146 ";
ADD-TEXT:ZONE,ABR47,"147 ";
ADD-TEXT:ZONE,ABR48,"148 ";
ADD-TEXT:ZONE,ABR49,"149 ";
ADD-TEXT:ZONE,ABR50,"150 ";
ADD-TEXT:ZONE,ABR51,"151 ";
```

Configuration Examples - Data Collection

```
ADD-TEXT:ZONE,ABR52,"152 ";
ADD-TEXT:ZONE,ABR53,"153 ";
ADD-TEXT:ZONE,ABR54,"154 ";
ADD-TEXT:ZONE,ABR55,"155 ";
ADD-TEXT:ZONE,ABR56,"156 ";
ADD-TEXT:ZONE,ABR57,"157 ";
ADD-TEXT:ZONE,ABR58,"158 ";
ADD-TEXT:ZONE,ABR59,"159 ";
ADD-TEXT:ZONE,ABR60,"160 ";
ADD-TEXT:ZONE,ABR61,"161 ";
ADD-TEXT:ZONE,ABR62,"162 ";
ADD-TEXT:ZONE,ABR63,"163 ";
ADD-TEXT:ZONE,ABR64,"164 ";
ADD-TEXT:ZONE,ABR65,"165 ";
ADD-TEXT:ZONE,ABR66,"166 ";
ADD-TEXT:ZONE,ABR67,"167 ";
ADD-TEXT:ZONE,ABR68,"168 ";
ADD-TEXT:ZONE,ABR69,"169 ";
ADD-TEXT:ZONE,ABR70,"170 ";
ADD-TEXT:ZONE,ABR71,"171 ";
ADD-TEXT:ZONE,ABR72,"172 ";
ADD-TEXT:ZONE,ABR73,"173 ";
ADD-TEXT:ZONE,ABR74,"174 ";
ADD-TEXT:ZONE,ABR75,"175 ";
ADD-TEXT:ZONE,ABR76,"176 ";
ADD-TEXT:ZONE,ABR77,"177 ";
ADD-TEXT:ZONE,ABR78,"178 ";
ADD-TEXT:ZONE,ABR79,"179 ";
ADD-TEXT:ZONE,ABR80,"180 ";
ADD-TEXT:ZONE,ABR81,"181 ";
ADD-TEXT:ZONE,ABR82,"182 ";
ADD-TEXT:ZONE,ABR83,"183 ";
ADD-TEXT:ZONE,ABR84,"184 ";
ADD-TEXT:ZONE,ABR85,"185 ";
ADD-TEXT:ZONE,ABR86,"186 ";
ADD-TEXT:ZONE,ABR87,"187 ";
ADD-TEXT:ZONE,ABR88,"188 ";
ADD-TEXT:ZONE,ABR89,"189 ";
ADD-TEXT:ZONE,ABR90,"190 ";
ADD-TEXT:ZONE,ABR91,"191 ";
ADD-TEXT:ZONE,ABR92,"192 ";
ADD-TEXT:ZONE,ABR93,"193 ";
ADD-TEXT:ZONE,ABR94,"194 ";
ADD-TEXT:ZONE,ABR95,"195 ";
ADD-TEXT:ZONE,ABR96,"196 ";
ADD-TEXT:ZONE,ABR97,"197 ";
ADD-TEXT:ZONE,ABR98,"198 ";
ADD-TEXT:ZONE,ABR99,"199 ";
ADD-TEXT:ZONE,TIE01,"201 ";
ADD-TEXT:ZONE,TIE02,"202 ";
ADD-TEXT:ZONE,TIE03,"203 ";
ADD-TEXT:ZONE,TIE04,"204 ";
ADD-TEXT:ZONE,TIE05,"205 ";
ADD-TEXT:ZONE,TIE06,"206 ";
ADD-TEXT:ZONE,TIE07,"207 ";
ADD-TEXT:ZONE,TIE08,"208 ";
```

```
ADD-TEXT:ZONE,TIE09,"209 ";
ADD-TEXT:CARRIER,0,"0 ";
ADD-TEXT:CARRIER,1,"1 ";
ADD-TEXT:CARRIER,2,"2 ";
ADD-TEXT:CARRIER,3,"3 ";
ADD-TEXT:CARRIER,4,"4 ";
ADD-TEXT:CARRIER,5,"5 ";
ADD-TEXT:CARRIER,6,"6 ";
ADD-TEXT:CARRIER,7,"7 ";
ADD-TEXT:CARRIER,8,"8 ";
ADD-TEXT:CARRIER,9,"9 ";
ADD-TEXT:COPIN,0,"0 ";
ADD-TEXT:COPIN,1,"P ";
ADD-TEXT:COPIN,2,"P ";
ADD-TEXT:COPIN,3,"P ";
ADD-TEXT:COPIN,4,"P ";
ADD-TEXT:COPIN,5,"P ";
ADD-TEXT:COPIN,6,"P ";
ADD-TEXT:COPIN,7,"P ";
ADD-TEXT:COPIN,8,"P ";
ADD-TEXT:COPIN,9,"P ";
ADD-TEXT:UNANS,THRCONN,"Y ";
ADD-TEXT:UNANS,NTHRCONN,"N ";
```

8 Automatic Forwarding of Alarms to Fault Management

If one of the following error situations occurs error messages are forwarded to the Fault Management (FM)/RSP (Remote Service Platform) application. If FM is not installed the error messages are also displayed in the Logging Management of OpenScape 4000 Assistant/Manager:

- 1) A system cannot be reached during a collecting cycle -> in FM the respective system is displayed in "RED" color - RETRY EXCEEDED. Solution: Restart the Switch/Manager communication.
- 2) If the threshold value set for the free disk space left on the /var or /var/col partition has been reached, COL will stop collecting further call charge data since there is not enough free space available on the /var or /var/col partition any more. The value **Required Free Space** is set in the **Options** dialog (default setting = 10% of free space must be left on the device). In FM the Manager is displayed in "RED" color - NOT ENOUGH SPACE. Solution: Delete data on the /var or /var/col partition.

Example of a filter configuration used in Logging Management to output the COL alarms/error messages.

For protocol type(s): Error events (select)

Further search criteria:

- Application = COL
- Priority/Severity = CAUTION
- Category = RECEIVE_LOG

Administration in Logging Management:

To activate the forwarding of error messages to the Fault Management you need to activate the **Remote Alarms to Local FM** check box in the **Admin** dialog in **Logging Management**.

Administration in Fault Management:

In Fault Management, in the /opt/bin/ncc/options ini file, you need to activate the reading in of alarms from the Manager. For more information please refer to the Fault Management documentation.

9 Attachments to the Installation Steps

[DISPLAY-DAGR; ... DISPLAY-FBTN:TAB=TN; -- page 395](#)

[Examples: B01 - B71 -- page 436](#)

9.1 DISPLAY-DAGR; ... DISPLAY-FBTN:TAB=TN;

DISPLAY-DAGR;

CHANGE-DAGR:FT,40000,ASC,12-10,001,FTFILE;

DISPLAY-FEACG;

DELETE-FEACG:CDRFAST;

ADD-FEACG:CDRCDUMP;

DISPLAY-SELG;

ACTIVATE-SELS:1;

STA-INFO:":CGD:FT_FILE_INTERN",L;

COPY-DAGR;

DISPLAY-SELG;;

Setting Up Selection Group 1 in Two Steps

DISPLAY-SELG;

CHANGE-SELG:SELT,1,1,,,,,0&&999999;

CHANGE-SELG:SELT,1,1,,,,,VOICE;

CHANGE-SELG:SELT,1,1,,,,,,ALL,ALL,N,N,J,N,N,N,N,N,N,N,N,N,N,N,N;

CHANGE-SELG:SELT,1,1,,,,,,,,,,,,,,,,,,,,,0,000000;

CHANGE-SELG:SELT,1,1,,,,,,,,,,,,,,,,,,,,,0&&999,0&&254,0&&30;

AE-

SELG:SELT,1,1,,,,,,,,,,,,,,,,,,,,,N,N,INTERN&KOMMEND&GEHEND&ACACT&LOA

DISPLAY-COSSU;

DISPLAY-COT;

DISPLAY-FEASU;

ACTIVATE-SELS:1;

DISPLAY-SELS;

DISPLAY-ZAND:ALLDATA;

DISPLAY-SELS;;

DEACTIVATE-SELS:1;

DISPLAY-SELS;;

ADD-FEACG:BITL=CDRFAST&CDRCDUMP;

DISPLAY-SELG

CHANGE-

DAGR:FILE=FT,NO=40000,CODE=ASC,TIME=20-11,PERIOD=001,NAME=FTFILE;

Attachments to the Installation Steps

```
DISPLAY-DAGR;
DISPLAY-FEACG;
DISPLAY-SELG;
ADD-FEACG:CM=CDRFAST;
DELETE-FEACG:CM=CDRCDIS&CDRATND&CDRSPR;
DISPLAY-FEACG;
ADD-FEACG:CDRFAST;
DISPLAY-FEACG;
ADD-FEACG:CM=CDRCDUMP;
DISPLAY-SELG;
ADD-
SELG:TBL=SELG,SELGNO=1,RESOP=Y,BASDEV=FT,RESDEV=FT,BLBAS=1,BLRES=1;
DISPLAY-SELG;
DISPLAY-COT;;
DISPLAY-TDCSU:1-1-103-0;
CHANGE-COT:COTNO=22,COTTYPE=COTADD,PAR=ICZL;
CHANGE-LDAT:LROUTE=231,LSVC=VCE,LRTTEL=1,LATTR=WCHREG;
DISPLAY-FEASU;
DISPLAY-FEASU;
Setting Up Selection Group 1 in Two Steps
DISPLAY-SELS;
Connecting via FTP (1)
Connecting via FTP (2)
Connecting via FTP (3)
Connecting via Telnet (1)
ADD-
FBTN:TBL=TRKNO,LTG=99,LTU=1,SLOT=1,CCT=1,BCHAN=1,VTRKNO=111111;
DISPLAY-FBTN:TAB=TN;
```

DISPLAY-DAGR;

```
DISPLAY-DAGR;
DISPLAY-DAGR;
H500:  AMO DAGR  STARTED
      FILE-PARAMETERS OF DMS-FILES OF CALL CHARGE REGISTRATION

      FILE NAME                NUMBER OF RECORDS IN THE FILE

      CDRC1                    65000
      CDRC2                     0
      FT                       65000

      PARAMETERS FOR THE FILE FOR FILE-TRANSFER:
```

```

OUTPUT-CODE                : ASC
COPY TIME (DD-HH)          : 05-10
COPY PERIOD (HOURS)        : 001
NAME OF THE TRANSFER FILE  : FTFILE
  
```

```

AMO-DAGR -111              SMDR/DMDR FILE SIZES
DISPLAY COMPLETED;
  
```

CHANGE-DAGR:FT,40000,ASC,12-10,001,FTFILE;

```

CHANGE-DAGR:FILE=FT,NO=40000,CODE=ASC,TIME=05-10,PERIOD=001,NAME="FTFILE";
CHANGE-DAGR:FILE=FT,NO=40000,CODE=ASC,TIME=05-10,PERIOD=001,NAME="FTFILE";
H500:  AMO DAGR  STARTED
AMO-DAGR -111              SMDR/DMDR FILE SIZES
CHANGE COMPLETED;
  
```

DISPLAY-FEACG;

```

DISPLAY-FEACG;
DISPLAY-FEACG;
H500:  AMO FEACG STARTED
CALL DATA REGISTRATION AT ATTENDANT CONSOLE      : DEACTIVATED;
CALL DATA REGISTRATION ON ADD. DEVICE, IMMEDIATE OUTPUT : ACTIVATED;
CALL DATA REGISTRATION ON ADDITIONAL DEVICE, CALL UP  : ACTIVATED;
CALL DATA REGISTRATION PER STATION, PRINTER OUTPUT   : DEACTIVATED;
CALL DATA REGISTRATION ON FAST OUTPUT DEVICE        : DEACTIVATED;
AMO-FEACG-111          SMDR/DMDR FEATURE LIST
DISPLAY COMPLETED;
  
```

DISPLAY-FEACG;

```

AB-FEACG;
H500:  AMO FEACG GESTARTET

GEBUEHRENERFASSUNG AM VERMITTLUNGSPLATZ          : AUSGESCHALTET;
GEBUEHRENERFASSUNG AUF ZUSATZGERAET, SOFORTAUSGABE : EINGESCHALTET;
GEBUEHRENERFASSUNG AUF ZUSATZGERAET, ABRUF        : AUSGESCHALTET;
GEBUEHRENERFASSUNG PRO TEILNEHMER, DRUCKERAUSGABE  : AUSGESCHALTET;
GEBUEHRENERFASSUNG AUF SCHNELLES AUSGABEGERAET    : EINGESCHALTET;

AMO-FEACG-111          BITLEISTE DER GEBUEHRENERFASSUNG
ABFRAGEN DURCHGEFUEHRT;
  
```

```
DELETE-FEACG:CDRFAST;

DELETE-FEACG:CM=CDRFAST;
DELETE-FEACG:CM=CDRFAST;
H500:  AMO FEACG STARTED
AMO-FEACG-111      SMDR/DMDR FEATURE LIST
DELETE COMPLETED;
```

```
ADD-FEACG:CDRCDUMP;

ADD-FEACG:CM=CDRDUMP;
ADD-FEACG:CM=CDRDUMP;
H500:  AMO FEACG STARTED
AMO-FEACG-111      SMDR/DMDR FEATURE LIST
ADD COMPLETED;
```

```
DISPLAY-SELG;

DISPLAY-SELG:;
H500:  AMO SELG  STARTED
```

SELECTION GROUP : 1			
OPERATING STATE : ON			
BASDEV	: FT	RESOP	: N
RESDEV	: NODEV	BLBAS	: 1
		BLRES	: 0
SELECTION GROUP : 1		SELECTION TABLE : 1	
FORMBAS	: FORM01	TARIFF	: NOCALC
FORMRES	: NOFORM	DESTCNT	: A22
SELECTION GROUP : 2			
OPERATING STATE : OFF			
SELECTION GROUP : 3			
OPERATING STATE : OFF			
SELECTION GROUP : 4			
OPERATING STATE : OFF			
AMO-SELG -111 ADMINISTRATION OF SELECTION GROUPS AND TABLES			
DISPLAY COMPLETED;			

Selection gr
used for FT
already con
activated (F
used).

```
ACTIVATE-SELS:1;

ACTIVATE-SELS:SELGRNO=1;
```



```
ACTIVATE-SELS:SELGRNO=1;
H500: AMO SELS STARTED
AMO-SELS -111          SMDR/DMDR SELECTION GROUP SWITCHES
ACTIVATE COMPLETED;
```

STA-INFO:":CGD:FT_FILE_INTERN",L;

```
sta-info:":CGD:FT_FILE_INTERN",L;
```

```
STA-INFO:":CGD:FT_FILE_INTERN",L;
```

```
H500: AMO INFO GESTARTET
```

```
< :CGD:FT_FILE_INTERN >
```

```
FILETYPE          : DATA
```

```
FILESIZE          : H'00000132
```

```
FILEGRANULARITY  : H'0001
```

```
FILECONNECTIONS  : H'0002
```

```
READCONNECTIONS  : H'0001
```

```
WRITECONNECTIONS : H'0001
```

```
OPEN SHARE       : H'0000
```

```
OWNER            : H'FFFF
```

```
FILE BLOCKS      : H'00000001
```

```
VOLUMENAME       : A1H1G
```

```
VOLUME SIZE      : H'02300000
```

```
ACCESS           : H'000F
```

```
FSTAT BEENDET
```

```
STATUS = H'0000
```

```
AMO-INFO -111          FILESTATUS AUSGEBEN
```

```
START DURCHGEFUEHRT;
```

COPY-DAGR;

```
COPY-DAGR;
```

```
COPY-DAGR;
```

```
H500: AMO DAGR STARTED
```

```
AMO-DAGR -111          SMDR/DMDR FILE SIZES
```

Attachments to the Installation Steps

COPY COMPLETED;

DISPLAY-SELG;;

DISPLAY-SELG;;

DISPLAY-SELG;;

H500: AMO SELG STARTED

=====+					
	SELECTION GROUP		: 1		
+-----+					
	OPERATING STATE		:	OFF	
			RESOP	:	
	BASDEV	:	BLBAS	:	
	RESDEV	:	BLRES	:	
=====+					

=====+							
	SELECTION GROUP		: 2				
+-----+							
	OPERATING STATE		:	OFF			
			RESOP	:	N		
	BASDEV	:	FT	BLBAS	:	1	
	RESDEV	:	NODEV	BLRES	:	0	

```

=====
|
|
|      SELECTION GROUP      :      2              SELECTION TABLE      :      1      |
|
|
|  FORMBAS      :      FORM04              TARIFF      :      NOCALC      |
|  FORMRES      :      NOFORM              DESTCNT      :      A22      |
|
|
|  LEVEL0       :      0&&999      |
|  LEVEL1       :      0&&254      |
|  LEVEL2       :      0&&30      |
|  CDRCD        :      0&&9999999      |
|
|
|  ATNDGR       :      0&&15      |
|  SERVICE      :      VOICE      &FAX      &DTE      |
|
|
|  CDRULT       :      0              CONNTL      :      00 : 00 : 00      |
|  COPIN        :      0&&8              CARRIER      :      0&&9      |
|
|
|  SELECTION FEATURES 1 :      |
|
|
|  CTYPE        :      ALL              PAYPARTY      :      ALL              NSTAT      :      N      |
|  CDRAC        :      N              SFSETUP      :      N              CDBAD      :      N      |
|  CDRC         :      N              CDRSTA      :      N              THRGCON      :      N      |
|  SECTION      :      N              TIE-LINE      :      N              EXPENS      :      N      |
|  CONNTYP      :      INTERN      &INCO      &OUTG      |
|  RECTYP       :      ALL      |
|
|
|  SELECTION FEATURES 2 :      |

```

Attachments to the Installation Steps

```

|
|
|  CDCHU      :   N          CDRULTE      :   N          CONNT      :   N  |
|  PCODE      :   N          PPCF         :   N          STATAB1     :   N  |
|  STATAB2     :   N          DNOTBL1     :   N          DNOTBL2     :   N  |
|
|
+=====+

+=====+

|                                SELECTION GROUP   :   3                                |
+-----+

|
|
|                                OPERATING STATE   :   OFF                                |
|
|
|                                RESOP              :   N                                |
|
|                                BASDEV      :   CDRC1          BLBAS      :   1          |
|                                RESDEV      :   NODEV          BLRES       :   0          |
|
|
+=====+

|
|
|                                SELECTION GROUP   :   3          SELECTION TABLE   :   1          |
|
|
|  FORMBAS     :   HDFORM          TARIFF        :   NOCALC          |
|  FORMRES     :   NOFORM          DESTCNT       :   A22          |
|
|
|  LEVEL0      :   0&&999          |
|  LEVEL1      :   0&&254          |
|  LEVEL2      :   0&&30           |
|  CDRCD       :   0&&9999999     |

```

```

|
|
|  ATNDGR      :    0&&15
|
|  SERVICE     :    VOICE    &FAX      &DTE
|
|
|  CDRULT      :    0          CONNTL      :    00 : 00 : 00
|
|  COPIN       :    0&&8      CARRIER    :    0&&9
|
|
|  SELECTION FEATURES 1 :
|
|
|  CTYPE       :    ALL          PAYPARTY   :    ALL          NSTAT      :    N
|
|  CDRAC       :    N          SFSETUP     :    N          CDBAD      :    N
|
|  CDRC        :    N          CDRSTA      :    N          THRGCON    :    N
|
|  SECTION     :    N          TIE-LINE    :    N          EXPENS     :    N
|
|  CONNTYP     :    INTERN  &INCO    &OUTG
|
|  RECTYP      :    ALL
|
|
|  SELECTION FEATURES 2 :
|
|
|  CDCHU       :    N          CDRULTE     :    N          CONNT      :    N
|
|  PCODE       :    N          PPCF        :    N          STATAB1    :    N
|
|  STATAB2     :    N          DNOTBL1     :    N          DNOTBL2    :    N
|
|
+=====+
|
+=====+
|
|              SELECTION GROUP   :  4
|
+-----+
|

```

Attachments to the Installation Steps

```
|          OPERATING STATE      :      OFF          |
|
|
|          RESOP      :      N          |
|          BASDEV      :          BLBAS      :          |
|          RESDEV      :          BLRES      :          |
|
```

+=====+

AMO-SELG -111 ADMINISTRATION OF SELECTION GROUPS AND TABLES

DISPLAY COMPLETED;

Setting Up Selection Group 1 in Two Steps

How to set up selection group 1 in two steps:

ADD-SELG:TBL=SELG, SELGNO=1, RESOP=Y, BASDEV=FT, RESDEV=FT, BLBAS=1, BLRES=1;

ADD-SELG:TBL=SELG, SELGNO=1, RESOP=Y, BASDEV=FT, RESDEV=FT, BLBAS=1, BLRES=1;

H500: AMO SELG STARTED

AMO-SELG -111 ADMINISTRATION OF SELECTION GROUPS AND TABLES

ADD COMPLETED;

CHANGE-SELG:TBL=SELT, SELGNO=1, SELTABNO=1, FORMBAS=FORM01, FORMRES=NOFORM,
TARIF=NOCALC, DESTCNT="A22", CDRCD=0&&999999, SERVICE=DTE&FAX&VOICE, ATNDGR=0&&15,
CTYPE=ALL, PAYPARTY=ALL, CDRC=N, CDRSTA=N, THRGCON=N, NSTAT=N, SECTION=N, CDCHU=N,
CDRAC=N, SFSETUP=N, CDBAD=N, CDRULTE=N, CONNT=N, PCODE=N, PPCF=N, STATAB1=N,
STATAB2=N, DNOTBL1=N, DNOTBL2=N, CDRULT=0, CONNTL=000000, LEVEL0=0&&99,
LEVEL1=0&&254, LEVEL2=0&&30, TIELINE=N, EXPENS=N,

CONNTYP=INTERN&INCO&OUTG&ACACT&LOAD, COPIN=0&&8, CARRIER=0&&9, RECTYP=ALL;

H500: AMO SELG STARTED

AMO-SELG -111 ADMINISTRATION OF SELECTION GROUPS AND TABLES

CHANGE COMPLETED;

DISPLAY-SELG;

ab-selg;

AB-SELG;

H500: AMO SELG GESTARTET

```

=====+
|                                     |
|          SELEKTIONSGRUPPE : 1     |
|                                     |
+-----+
|                                     |
|                                     |
|          BETRIEBSZUSTAND   :   OFF |
|                                     |
|                                     |
|                                     |
|          RESBET           :    J   |
|                                     |
|          BASGER           :   FT    |
|          BLBAS            :    1    |
|          RESGER           :   FT    |
|          BLRES            :    1    |
|                                     |
|                                     |
+=====+

```

```

=====+
|                                     |
|          SELEKTIONSGRUPPE : 2     |
|                                     |
+-----+
|                                     |
|                                     |
|          BETRIEBSZUSTAND   :   OFF |
|                                     |
|                                     |
|                                     |
|          RESBET           :    N   |
|                                     |
|          BASGER           :   FT    |
|          BLBAS            :    1    |
|          RESGER           :  NODEV  |
|          BLRES            :    0    |
|                                     |
|                                     |
+=====+

```

```

|                                     |
|          SELEKTIONSGRUPPE   :    2          SELEKTIONSTABELLE   :    1          |
|                                     |
|                                     |

```

Attachments to the Installation Steps

```
|  FORMBAS      :   FORM04                TARIF      :   NOCALC                |
|  FORMRES      :   NOFORM                ZLNUZ       :   A22                  |
|
...
+=====+
|                                     SELEKTIONSGRUPPE : 3                        |
+-----+
|
|                                     BETRIEBSZUSTAND   :   OFF                    |
|
...
+=====+
|                                     SELEKTIONSGRUPPE : 4                        |
+-----+
|
|                                     BETRIEBSZUSTAND   :   OFF_WITHOUT_QUEUEING    |
|
...
ABFRAGEN DURCHGEFUEHRT;

<

      CHANGE-SELG:SELT,1,1,,,,,0&&999999;

<ae-selg:sel,t,1,1,,,,,0&&999999;

AE-SELG:SELT,1,1,,,,,0&&999999;

H500:  AMO SELG  GESTARTET

H19:  DIE TABELLENEINRICHTUNG ERFOLGT NUR DANN,

      WENN DER PARAMETER KOMDIE EINGEGEBEN WIRD.

AMO-SELG -111          SELEKTIONSGRUPPEN

AENDERN DURCHGEFUEHRT;
```


CHANGE-SELG:SELT,1,1,,,,,,VOICE;

ae-selg:selt,1,1,,,,,,voice;

AE-SELG:SELT,1,1,,,,,,VOICE;

H500: AMO SELG GESTARTET

AMO-SELG -111 SELEKTIONSGRUPPEN

AENDERN DURCHGEFUEHRT;

CHANGE-SELG:SELT,1,1,,,,,,ALL,ALL,N,N,J,N,N,N,N,N,N,N,N,N,N,N,N;

ae-selg:selt,1,1,,,,,,all,all,n,n,j,n,n,n,n,n,n,n,n,n,n,n,n;

AE-SELG:SELT,1,1,,,,,,ALL,ALL,N,N,J,N,N,N,N,N,N,N,N,N,N,N,N;

H500: AMO SELG GESTARTET

AMO-SELG -111 SELEKTIONSGRUPPEN

AENDERN DURCHGEFUEHRT;

CHANGE-SELG:SELT,1,1,,,,,,,,,,,,,,,,,,,,,0,000000;

ae-selg:selt,1,1,,,,,,,,,,,,,,,,,,,,,0,000000;

AE-SELG:SELT,1,1,,,,,,,,,,,,,,,,,,,,,0,000000;

H500: AMO SELG GESTARTET

AMO-SELG -111 SELEKTIONSGRUPPEN

AENDERN DURCHGEFUEHRT;

CHANGE-SELG:SELT,1,1,,,,,,,,,,,,,,,,,,,,,0&&999,0&&254,0&&30;

ae-selg:selt,1,1,,,,,,,,,,,,,,,,,,,,,0&&999,0&&254,0&&30;

AE-SELG:SELT,1,1,,,,,,,,,,,,,,,,,,,,,0&&999,0&&254,0&&30;

H500: AMO SELG GESTARTET <ae-

selg:selt,1,1,,,,,,,,,,,,,,,,,,,,,n,n,intern&kommend&gehend&acact&

load,0&&15,0&&9,all;

AE-SELG:SELT,1,1,,,,,,,,,,,,,,,,,,,,,N,N,

INTERN&KOMMEND&GEHEND&ACACT&LOAD,0&&15,0&&9,ALL;

H500: AMO SELG GESTARTET

Attachments to the Installation Steps

AMO-SELG -111 SELEKTIONSGRUPPEN

AENDERN DURCHGEFUEHRT;

<

AMO-SELG -111 SELEKTIONSGRUPPEN

AENDERN DURCHGEFUEHRT;

AE-
SELG:SELT,1,1,,,,,,,,,,,,,,,,,,,,,,,,,,,,N,N,INTERN&KOMMEND&GEHEND&ACACT&LOAD,08

ae-selg:selt,1,1,,,,,,,,,,,,,,,,,,,,,,,,,,,,n,n,intern&kommend&gehend&acact&
load,0&&15,0&&9,all;

AE-SELG:SELT,1,1,,,,,,,,,,,,,,,,,,,,,,,,,,,,N,N,

INTERN&KOMMEND&GEHEND&ACACT&LOAD,0&&15,0&&9,ALL;

H500: AMO SELG GESTARTET

AMO-SELG -111 SELEKTIONSGRUPPEN

AENDERN DURCHGEFUEHRT;

DISPLAY-COSSU;

ab-cossu;

AB-COSSU;

H500: AMO COSSU GESTARTET

+-----+-----+-----+-----+					
COS	SPRACHE		FAX		DEE
+-----+-----+-----+-----+					
1	>ANALOGES EG HALBAMT				
	HAB		HAB		HAB
	QVKW		QVKW		QVKW
	DUAS		FSM		GRUBE
	PRTLN		GRUBE		DSM
	GESP				MULTRA

		GEZ			
		BUC			
		SSM			
		ZURL			
		UENW			
	2	>ANALOGES EG AMT OHNE AULEXT			
		FBKW		FBKW	
		QVKW		QVKW	
		GESP		FSM	
		GEBINT		GRUBE	
		GEZ		UENW	
		BUC		UENW	
		SSM			
		UENW			
	3	>ANALOGES EG AMT MIT AULEXT			
		FBKW		FBKW	
		QVKW		QVKW	
		GESP		FSM	
		GEBINT		GRUBE	
		GEZ		UENW	
		BUC		UENW	
		SSM			
		AULEXT			
		AULERU			
		UENW			
	11	>DIGITALES EG HALBAMT OHNE AULEXT MIT BRIEFKASTEN			
		HAB		HAB	
		QVKW		QVKW	

Attachments to the Installation Steps

		GESP		FSM		GRUBE	
		GEBINT		GRUBE		DSM	
		BRK		UENW		MULTRA	
		BUC				UENW	
		DATLN					
		AULRTG					
		UENW					
	12	>DIGITALES EG AMT OHNE AULEXT MIT BRIFKASTEN					
		FBKW		FBKW		FBKW	
		QVKW		QVKW		QVKW	
		GESP		FSM		GRUBE	
		GEBINT		GRUBE		DSM	
		BRK		UENW		MULTRA	
		BUC				UENW	
		DATLN					
		AULRTG					
		UENW					
	13	>DIGITALES EG AMT MIT AULEXT MIT BRIFKASTEN					
		FBKW		FBKW		FBKW	
		QVKW		QVKW		QVKW	
		GESP		FSM		GRUBE	
		GEBINT		GRUBE		DSM	
		BRK		UENW		MULTRA	
		BUC				UENW	
		DATLN					
		AULEXT					
		AULERU					
		AULFAT					

		AULRTG			
		AULUMF			
		UENW			
	20	>SPEZIAL FUER TELEWORKER VERLAENGERUNG GERKON TCVLV			
		FBKW		NIB	
		QVKW		NQVB	
		GEBINT		UENW	
		BRK		DSM	
		BUC		MULTRA	
		DATLN		UENW	
		SPECAR			
		UENW			
	22	>			
		FBKW		NIB	
		QVKW		NQVB	
		DATLN		UENW	
		MSN		DSM	
		MULTRA		MSN	
		CCBS		MULTRA	
		COLR		UENW	
		UENW			
	23	>SPEZIAL FUER EDSS1 TLN UND TELEWORKING CLIENT S0PP			
		FBKW		FBKW	
		QVKW		QVKW	
		GESP		FSM	
		GEBINT		GRUBE	
		BRK		UENW	
		BUC		UENW	

Attachments to the Installation Steps

		DATLN			
		MULTRA			
		UENW			
	90	>BERECHTIGUNGSKLASSE FUER SAETZE			
		FBKW		NIB	
		QVKW		NQVB	
		GESP			
		UENW			
	99	>BERECHTIGUNGSKLASSE FUER ATTENDANT			
		FBKW		NIB	
		QVKW		NQVB	
		UENW			
	122	>EDSS1 EG			
		FBKW		FBKW	
		QVKW		QVKW	
		DATLN		GRUBE	
		MSN		MSN	
		MULTRA		MULTRA	
		CCBS			
		CW			
+-----+-----+-----+-----+					
+-----+-----+					
	COEX		COS		

...

AMO-COSSU-111 BERECHTIGUNGSKLASSEN

ABFRAGEN DURCHGEFUEHRT;

DISPLAY-COT;

ab-cot;

AB-COT;

H500: AMO COT GESTARTET

COT: 0 INFO: QUER SO CORNET NQ E/V3 BEIDE

GERAET: S0VERB QUELLE: DB

PARAMETER:

LEITUNG MIT MELDEKRITERIUM	MVLT
AUFSCHALTEN BZW. ANKLOPFEN MOEGlich	AMGL
UEBERGABE IM BESETZT-, RUF- ODER GESPRACHSZUSTAND	UELM
NETZWEITER RUECKRUF IM BESETZTFALL	RRBN
NETZWEITER RUECKRUF IM FREIFALL	RRFN
ANRUFUMLEITUNG NETZWEIT ERLAUBT	AULN
RUFWEITERSCHALTUNG NETZWEIT ERLAUBT	RWSN
UEBERTRAGUNG DER VBZ-GRUPPE DES TLN UEBER S0/S2-LEITUNG	VBZN
ANRUF E ZU EINEM BESETZTEN SA WERDEN NICHT AUSGELOEST	SAAO
"SENDING_COMPLETE" WIRD GESETZT	BLOC
LEITUNG FUEHRT ZU KNOTEN MIT ROUTE OPTIMIERUNG	ROPT
TSC-SIGNAL. F. UEBERGR. LM BEI DIGITALEN NETZ (ERFORDERLICH)	TSCS
LEITUNG SENDET BETRAEGE AN URSPRUNGSKNOTEN	LTMB
ERREICHBARKEITSPRUEFUNG DES UMLEITUNGSZIELES MOEGlich	PRZL
UUS SERVICE CLASS 1 (VERBINDUNGSaufBAU BASIC CALL)	UUS1
UUS SERVICE CLASS 3 (VERBINDUNGSabbAU BASIC CALL)	UUS3
PIN REMOTE MOEGlich (GEHENDER UND KOMMENDER VERKEHR)	PINR
B-KANAL-VERHANDLUNG (PREFERRED-PREFERRED COLLISION VERH.)	BKVE
KEIN TON	KTON

Attachments to the Installation Steps

COT: 2 INFO: QUER S2 CORNET NQ E/V3 BEIDE

GERAET: S2VERB QUELLE: DB

PARAMETER:

LEITUNG MIT MELDEKRITERIUM	MVLT
AUFSCHALTEN BZW. ANKLOPFEN MOEGlich	AMGL
UEBERGABE IM BESETZT-, RUF- ODER GESPRACHSZUSTAND	UELM
NETZWEITER RUECKRUF IM BESETZTFALL	RRBN
NETZWEITER RUECKRUF IM FREIFALL	RRFN
ANRUFUMLEITUNG NETZWEIT ERLAUBT	AULN
RUFWEITERSCHALTUNG NETZWEIT ERLAUBT	RWSN
UEBERTRAGUNG DER VBZ-GRUPPE DES TLN UEBER S0/S2-LEITUNG	VBZN
ANRUFU ZU EINEM BESETZTEN SA WERDEN NICHT AUSGELOEST	SAAO
"SENDING_COMPLETE" WIRD GESETZT	BLOC
LEITUNG FUEHRT ZU KNOTEN MIT ROUTE OPTIMIERUNG	ROPT
TSC-SIGNAL. F. UEBERGR. LM BEI DIGITALEN NETZ (ERFORDERLICH)	TSCS
LEITUNG SENDET BETRAEGE AN URSPRUNGSKNOTEN	LTMB
PROGRAMMIERUNG ANRUFUMLEITUNG FUER ANDERE TLN MGL.	AUAT
ERREICHBARKEITSPRUEFUNG DES UMLEITUNGSZIELES MOEGlich	PRZL
UUS SERVICE CLASS 1 (VERBINDUNGSaufBAU BASIC CALL)	UUS1
UUS SERVICE CLASS 3 (VERBINDUNGSabbAU BASIC CALL)	UUS3
PIN REMOTE MOEGlich (GEHENDER UND KOMMENDER VERKEHR)	PINR
B-KANAL-VERHANDLUNG (PREFERRED-PREFERRED COLLISION VERH.)	BKVE
KEIN TON	KTON

COT: 3 INFO: WAML OHNE LCR DATEN / V3.0 CORNV33

GERAET: LAN QUELLE: DB

PARAMETER:

LEITUNG MIT MELDEKRITERIUM	MVLT

WIEDERANRUF E ZU VF WERDEN UNTERDRUECKT	KWDA
KOMMENDE LEITUNG VON ANLAGE OHNE LCR	OLCR
VOREINGESTELLE KNOTENNUMMER DER LEITUNG VERWENDEN	VKNN
KOMMENDE LEITUNG VON ANLAGE OHNE LCR (DATEN)	OLRD
KEIN ABWURF BEI TRANSIT GEHEND	KATG
SPRACHKOMPRIMIERUNG NICHT ERLAUBT	SPKN
KEIN TON	KTON

COT: 5 INFO: QUER VCM CORNET NQ E/V3 BEIDE

GERAET: SKVERB QUELLE: DB

PARAMETER:

LEITUNG MIT MELDEKRITERIUM	MVLT
AUFSCHALTEN BZW. ANKLOPFEN MOEGlich	AMGL
UEBERGABE IM BESETZT-, RUF- ODER GESPRACHSZUSTAND	UELM
NETZWEITER RUECKRUF IM BESETZTFALL	RRBN
NETZWEITER RUECKRUF IM FREIFALL	RRFN
ANRUFUMLEITUNG NETZWEIT ERLAUBT	AULN
RUFWEITERSCHALTUNG NETZWEIT ERLAUBT	RWSN
UEBERTRAGUNG DER VBZ-GRUPPE DES TLN UEBER S0/S2-LEITUNG	VBZN
ANRUF E ZU EINEM BESETZTEN SA WERDEN NICHT AUSGELOEST	SAAO
"SENDING_COMPLETE" WIRD GESETZT	BLOC
LEITUNG FUEHRT ZU KNOTEN MIT ROUTE OPTIMIERUNG	ROPT
TSC-SIGNAL. F. UEBERGR. LM BEI DIGITALEN NETZ (ERFORDERLICH)	TSCS
LEITUNG SENDET BETRAEGE AN URSPRUNGSKNOTEN	LTMB
PROGRAMMIERUNG ANRUFUMLEITUNG FUER ANDERE TLN MGL.	AUAT
ERREICHBARKEITSPRUEFUNG DES UMLEITUNGSZIELES MOEGlich	PRZL
UUS SERVICE CLASS 1 (VERBINDUNGSaufBAU BASIC CALL)	UUS1
UUS SERVICE CLASS 3 (VERBINDUNGSabbAU BASIC CALL)	UUS3

Attachments to the Installation Steps

SPRACHKANAL KOMPRIMIERT	SPRK
PIN REMOTE MOEGlich (GEHENDER UND KOMMENDER VERKEHR)	PINR
B-KANAL-VERHANDLUNG (PREFERRED-PREFERRED COLLISION VERH.)	BKVE
KEIN TON	KTON

COT: 10 INFO: 10: AMT IKZ O. ABWURF

GERAET: IKZ QUELLE: DB

PARAMETER:

LEITUNG MIT VORAB-WAHLENDEAUSSENDUNG	LTVW
ANRUF E ZU EINEM BESETZTEN SA WERDEN NICHT AUSGELOEST	SAAO
KEINE KNOTENNUMMER ZUM PARTNER SENDEN	LOKN
KOMMENDE LEITUNG VON ANLAGE OHNE LCR	OLCR
VOREINGESTELTE KNOTENNUMMER DER LEITUNG VERWENDEN	VKNN
KOMMENDE LEITUNG VON ANLAGE OHNE LCR (DATEN)	OLRD
KEIN TON	KTON

COT: 11 INFO: 11: AMT IKZ M. ABWURF

GERAET: IKZ QUELLE: DB

PARAMETER:

ABWURF ZUM VF WENN WAHL UNVOLLSTAENDIG	AWWU
ABWURF ZUM VF WENN NICHT VORHANDEN	AWNV
ABWURF ZUM VF IM BESETZTFALL	AWBF
ABWURF ZUM VF WENN NICHT BERECHTIGT	AWNB
ABWURF ZUM VF BEI GASSENBESETZT	AWGB
ABWURF ZUM VF BEI ANRUF SCHUTZ	AWAS
ABWURF ZUM VF BEI FREI (NACH ZEIT)	AWFR
LEITUNG MIT VORAB-WAHLENDEAUSSENDUNG	LTVW
ANRUF E ZU EINEM BESETZTEN SA WERDEN NICHT AUSGELOEST	SAAO

KEINE KNOTENNUMMER ZUM PARTNER SENDEN	LOKN
KOMMENDE LEITUNG VON ANLAGE OHNE LCR	OLCR
VOREINGESTELLE KNOTENNUMMER DER LEITUNG VERWENDEN	VKNN
KOMMENDE LEITUNG VON ANLAGE OHNE LCR (DATEN)	OLRD
KEIN TON	KTON

COT: 12 INFO: 12: AMT HKZ

GERAET: HKZ QUELLE: DB

PARAMETER:

ANRUF ZU EINEM BESETZTEN SA WERDEN NICHT AUSGELOEST	SAAO
KEINE KNOTENNUMMER ZUM PARTNER SENDEN	LOKN
KOMMENDE LEITUNG VON ANLAGE OHNE LCR	OLCR
VOREINGESTELLE KNOTENNUMMER DER LEITUNG VERWENDEN	VKNN
KOMMENDE LEITUNG VON ANLAGE OHNE LCR (DATEN)	OLRD
KEIN TON	KTON

COT: 20 INFO: 20: S0/2 AMT EDSBRD O. ABWURF

GERAET: S2AMT QUELLE: DB

PARAMETER:

ANRUF BEI EINHAENGEN IN RUECKFRAGE	AERF
LEITUNG MIT MELDEKRITERIUM	MVLT
UEBERGABE IM BESETZT-, RUF- ODER GESPRACHEZUSTAND	UELM
NETZWEITER RUECKRUF IM BESETZTFALL	RRBN
ANRUF ZU EINEM BESETZTEN SA WERDEN NICHT AUSGELOEST	SAAO
KEINE KNOTENNUMMER ZUM PARTNER SENDEN	LOKN
KOMMENDE LEITUNG VON ANLAGE OHNE LCR	OLCR
TSC-SIGNAL. F. UEBERGR. LM BEI DIGITALEN NETZ (ERFORDERLICH)	TSCS
VOREINGESTELLE KNOTENNUMMER DER LEITUNG VERWENDEN	VKNN

Attachments to the Installation Steps

KOMMENDE LEITUNG VON ANLAGE OHNE LCR (DATEN)	OLRD
SATZ GESPERRT FUER FLAG-TRACE	NOFT
KEIN TON	KTON

COT: 21 INFO: 21: S0/2 AMT EDSBRD M. ABWURF

GERAET: S2AMT QUELLE: DB

PARAMETER:

ANRUF BEI EINHAENGEN IN RUECKFRAGE	AERF
ABWURF ZUM VF WENN WAHL UNVOLLSTAENDIG	AWWU
ABWURF ZUM VF WENN NICHT VORHANDEN	AWNV
ABWURF ZUM VF IM BESETZTFALL	AWBF
ABWURF ZUM VF WENN NICHT BERECHTIGT	AWNB
ABWURF ZUM VF BEI GASSENBESETZT	AWGB
ABWURF ZUM VF BEI ANRUFSCHUTZ	AWAS
ABWURF ZUM VF BEI FREI (NACH ZEIT)	AWFR
LEITUNG MIT MELDEKRITERIUM	MVLT
UEBERGABE IM BESETZT-, RUF- ODER GESPRAECHSZUSTAND	UELM
NETZWEITER RUECKRUF IM BESETZTFALL	RRBN
ABWURF BEI NICHT ERLAUBTER WAHL	AWNE
ANRUF ZU EINEM BESETZTEN SA WERDEN NICHT AUSGELOEST	SAAO
KEINE KNOTENNUMMER ZUM PARTNER SENDEN	LOKN
ABWURF WENN KEINE WAHL ERFOLGT	AWKW
KOMMENDE LEITUNG VON ANLAGE OHNE LCR	OLCR
TSC-SIGNAL. F. UEBERGR. LM BEI DIGITALEN NETZ (ERFORDERLICH)	TSCS
VOREINGESTELTE KNOTENNUMMER DER LEITUNG VERWENDEN	VKNN
KOMMENDE LEITUNG VON ANLAGE OHNE LCR (DATEN)	OLRD
SATZ GESPERRT FUER FLAG-TRACE	NOFT
KEIN TON	KTON

COT: 22 INFO: 22: S0/2 AMT 1TR6 O. ABWURF

GERAET: S2AMT QUELLE: DB

PARAMETER:

ANRUF BEI EINHAENGEN IN RUECKFRAGE	AERF
LEITUNG MIT MELDEKRITERIUM	MVLT
UEBERGABE IM BESETZT-, RUF- ODER GESPRACHSZUSTAND	UELM
ANRUF ZU EINEM BESETZTEN SA WERDEN NICHT AUSGELOEST	SAAO
KEINE KNOTENNUMMER ZUM PARTNER SENDEN	LOKN
KOMMENDE LEITUNG VON ANLAGE OHNE LCR	OLCR
VOREINGESTELLE KNOTENNUMMER DER LEITUNG VERWENDEN	VKNN
KOMMENDE LEITUNG VON ANLAGE OHNE LCR (DATEN)	OLRD
SATZ GESPERRT FUER FLAG-TRACE	NOFT
KEIN TON	KTON

COT: 23 INFO: 23: S0/2 AMT 1TR6 M. ABWURF

GERAET: S2AMT QUELLE: DB

PARAMETER:

ANRUF BEI EINHAENGEN IN RUECKFRAGE	AERF
ABWURF ZUM VF WENN WAHL UNVOLLSTAENDIG	AWWU
ABWURF ZUM VF WENN NICHT VORHANDEN	AWNv
ABWURF ZUM VF IM BESETZTFALL	AWBF
ABWURF ZUM VF WENN NICHT BERECHTIGT	AWNB
ABWURF ZUM VF BEI GASSENBESETZT	AWGB
ABWURF ZUM VF BEI ANRUF SCHUTZ	AWAS
ABWURF ZUM VF BEI FREI (NACH ZEIT)	AWFR
LEITUNG MIT MELDEKRITERIUM	MVLT
UEBERGABE IM BESETZT-, RUF- ODER GESPRACHSZUSTAND	UELM

Attachments to the Installation Steps

ABWURF BEI NICHT ERLAUBTER WAHL	AWNE
ANRUF E ZU EINEM BESETZTEN SA WERDEN NICHT AUSGELOEST	SAAO
KEINE KNOTENNUMMER ZUM PARTNER SENDEN	LOKN
ABWURF WENN KEINE WAHL ERFOLGT	AWKW
KOMMENDE LEITUNG VON ANLAGE OHNE LCR	OLCR
VOREINGESTELLE KNOTENNUMMER DER LEITUNG VERWENDEN	VKNN
KOMMENDE LEITUNG VON ANLAGE OHNE LCR (DATEN)	OLRD
SATZ GESPERRT FUER FLAG-TRACE	NOFT
KEIN TON	KTON

COT: 30 INFO: 30: S0/2 QUER CORNV33

GERAET: S2VERB QUELLE: DB

PARAMETER:

PRIORITAET FUER VF WIRD AUS MELDUNG ERMITTELT	PRIO
ANRUF BEI EINHAENGEN IN RUECKFRAGE	AERF
LEITUNG MIT MELDEKRITERIUM	MVLT
AUFSCHALTEN BZW. ANKLOPFEN MOEGlich	AMGL
UEBERGABE IM BESETZT-, RUF- ODER GESPRAECHSZUSTAND	UELM
NETZWEITER RUECKRUF IM BESETZTFALL	RRBN
NETZWEITER RUECKRUF IM FREIFALL	RRFN
ANRUFUMLEITUNG NETZWEIT ERLAUBT	AULN
RUFWEITERSCHALTUNG NETZWEIT ERLAUBT	RWSN
ANRUF E ZU EINEM BESETZTEN SA WERDEN NICHT AUSGELOEST	SAAO
TRANSIT-COUNTER-VERWALTUNG FUER S0/S2-LEITUNG AKTIVIEREN	TRCA
TSC-SIGNAL. F. UEBERGR. LM BEI DIGITALEN NETZ (ERFORDERLICH)	TSCS
ERREICHBARKEITSPRUEFUNG DES UMLEITUNGSZIELES MOEGlich	PRZL
GEBUEHRENELEMENTE NICHT SENDEN	GBNS
GEBUEHREN KOMMEND IGNORIEREN	GBKI

CORNET-NQ PICKUP-INFO NICHT UNTERSTUETZT	NQPI
UNTERDRUECKEN SIGNALISIERUNG VON CDR-E SPEZ. MELDUNGEN	NCDR
SATZ GESPERRT FUER FLAG-TRACE	NOFT
CORNET-NQ NETZWEITE UEBERNAHME NICHT UNTERSTUETZT	NQNP
KEIN TON	KTON

COT: 31 INFO: 31: S0/2 QUER LOKN

GERAET: S2VERB QUELLE: DB

PARAMETER:

PRIORITAET FUER VF WIRD AUS MELDUNG ERMITTELT	PRIO
ANRUF BEI EINHAENGEN IN RUECKFRAGE	AERF
LEITUNG MIT MELDEKRITERIUM	MVLT
AUFSCHALTEN BZW. ANKLOPFEN MOEGlich	AMGL
UEBERGABE IM BESETZT-, RUF- ODER GESPRACHSZUSTAND	UELM
NETZWEITER RUECKRUF IM BESETZTFALL	RRBN
NETZWEITER RUECKRUF IM FREIFALL	RRFN
ANRUFUMLEITUNG NETZWEIT ERLAUBT	AULN
RUFWEITERSCHALTUNG NETZWEIT ERLAUBT	RWSN
KEINE KNOTENNUMMER ZUM PARTNER SENDEN	LOKN
KOMMENDE LEITUNG VON ANLAGE OHNE LCR	OLCR
VOREINGESTELLE KNOTENNUMMER DER LEITUNG VERWENDEN	VKNN
KOMMENDE LEITUNG VON ANLAGE OHNE LCR (DATEN)	OLRD
GEBUEHRENELEMENTE NICHT SENDEN	GBNS
GEBUEHREN KOMMEND IGNORIEREN	GBKI
CORNET-NQ PICKUP-INFO NICHT UNTERSTUETZT	NQPI
UNTERDRUECKEN SIGNALISIERUNG VON CDR-E SPEZ. MELDUNGEN	NCDR
SATZ GESPERRT FUER FLAG-TRACE	NOFT
CORNET-NQ NETZWEITE UEBERNAHME NICHT UNTERSTUETZT	NQNP

Attachments to the Installation Steps

KEIN TON

KTON

COT: 32 INFO: 32: S0/2 QUER ECMA1 AB V2.0

GERAET: S2VERB QUELLE: DB

PARAMETER:

PRIORITAET FUER VF WIRD AUS MELDUNG ERMITTELT	PRIO
ANRUF BEI EINHAENGEN IN RUECKFRAGE	AERF
LEITUNG MIT MELDEKRITERIUM	MVLT
AUFSCHALTEN BZW. ANKLOPFEN MOEGlich	AMGL
UEBERGABE IM BESETZT-, RUF- ODER GESPRACHSZUSTAND	UELM
NETZWEITER RUECKRUF IM BESETZTFALL	RRBN
NETZWEITER RUECKRUF IM FREIFALL	RRFN
ANRUFUMLEITUNG NETZWEIT ERLAUBT	AULN
RUFWEITERSCHALTUNG NETZWEIT ERLAUBT	RWSN
ANRUFU ZU EINEM BESETZTEN SA WERDEN NICHT AUSGELOEST	SAAO
"SENDING_COMPLETE" WIRD GESETZT	BLOC
TRANSIT-COUNTER-VERWALTUNG FUER S0/S2-LEITUNG AKTIVIEREN	TRCA
TSC-SIGNAL. F. UEBERGR. LM BEI DIGITALEN NETZ (ERFORDERLICH)	TSCS
LEITUNG SENDET BETRAEGE AN URSPRUNGSKNOTEN	LTMB
ERREICHBARKEITSPRUEFUNG DES UMLEITUNGSZIELES MOEGlich	PRZL
GEBUEHRENUEBERTRAGUNG PRO VERBINDUNG (ERFORDERL. CORNET-NQ)	GBUE
KEIN TON	KTON

COT: 33 INFO: 33: S0/2 QUER ECMA2 < V3.0

GERAET: S2VERB QUELLE: DB

PARAMETER:

PRIORITAET FUER VF WIRD AUS MELDUNG ERMITTELT	PRIO
ANRUF BEI EINHAENGEN IN RUECKFRAGE	AERF

LEITUNG MIT MELDEKRITERIUM	MVLT
AUFSCHALTEN BZW. ANKLOPFEN MOEGlich	AMGL
UEBERGABE IM BESETZT-, RUF- ODER GESPRACHSZUSTAND	UELM
NETZWEITER RUECKRUF IM BESETZTFALL	RRBN
NETZWEITER RUECKRUF IM FREIFALL	RRFN
ANRUFUMLEITUNG NETZWEIT ERLAUBT	AULN
RUFWEITERSCHALTUNG NETZWEIT ERLAUBT	RWSN
ANRUF ZU EINEM BESETZTEN SA WERDEN NICHT AUSGEOEST	SAAO
"SENDING_COMPLETE" WIRD GESETZT	BLOC
TRANSIT-COUNTER-VERWALTUNG FUER S0/S2-LEITUNG AKTIVIEREN	TRCA
TSC-SIGNAL. F. UEBERGR. LM BEI DIGITALEN NETZ (ERFORDERLICH)	TSCS
LEITUNG SENDET BETRAEGE AN URSPRUNGSKNOTEN	LTMB
ERREICHBARKEITSPRUEFUNG DES UMLEITUNGSZIELES MOEGlich	PRZL
GEBUEHRENUEBERTRAGUNG PRO VERBINDUNG (ERFORDERL. CORNET-NQ)	GBUE
KEIN TON	KTON

COT: 34 INFO: 34: S0/2 QUER CORNV33 < V3.5

GERAET: S2VERB QUELLE: DB

PARAMETER:

PRIORITAET FUER VF WIRD AUS MELDUNG ERMITTELT	PRIO
ANRUF BEI EINHAENGEN IN RUECKFRAGE	AERF
LEITUNG MIT MELDEKRITERIUM	MVLT
AUFSCHALTEN BZW. ANKLOPFEN MOEGlich	AMGL
UEBERGABE IM BESETZT-, RUF- ODER GESPRACHSZUSTAND	UELM
NETZWEITER RUECKRUF IM BESETZTFALL	RRBN
NETZWEITER RUECKRUF IM FREIFALL	RRFN
ANRUFUMLEITUNG NETZWEIT ERLAUBT	AULN
RUFWEITERSCHALTUNG NETZWEIT ERLAUBT	RWSN

Attachments to the Installation Steps

ANRUF ZU EINEM BESETZTEN SA WERDEN NICHT AUSGELOEST	SAAO
TRANSIT-COUNTER-VERWALTUNG FUER S0/S2-LEITUNG AKTIVIEREN	TRCA
TSC-SIGNAL. F. UEBERGR. LM BEI DIGITALEN NETZ (ERFORDERLICH)	TSCS
LEITUNG SENDET BETRAEGE AN URSPRUNGSKNOTEN	LTMB
ERREICHBARKEITSPRUEFUNG DES UMLEITUNGSZIELES MOEGlich	PRZL
LEITUNG MIT IMPLIZITEN RUFNUMMERN	LIRU
GBUEHRENELEMENTE NICHT SENDEN	GBNS
GBUEHREN KOMMEND IGNORIEREN	GBKI
CORNET-NQ PICKUP-INFO NICHT UNTERSTUETZT	NQPI
UNTERDRUECKEN SIGNALISIERUNG VON CDR-E SPEZ. MELDUNGEN	NCDR
SATZ GESPERRT FUER FLAG-TRACE	NOFT
CORNET-NQ NETZWEITE UEBERNAHME NICHT UNTERSTUETZT	NQNP
KEIN TON	KTON

COT: 35 INFO: 35: S0/2 QUER ECMA1 < V2.0

GERAET: S2VERB QUELLE: DB

PARAMETER:

PRIORITAET FUER VF WIRD AUS MELDUNG ERMITTELT	PRIO
ANRUF BEI EINHAENGEN IN RUECKFRAGE	AERF
LEITUNG MIT MELDEKRITERIUM	MVLT
AUF SCHALTEN BZW. ANKLOPFEN MOEGlich	AMGL
UEBERGABE IM BESETZT-, RUF- ODER GESPRAECHSZUSTAND	UELM
NETZWEITER RUECKRUF IM BESETZTFALL	RRBN
NETZWEITER RUECKRUF IM FREIFALL	RRFN
ANRUFUMLEITUNG NETZWEIT ERLAUBT	AULN
RUFWEITERSCHALTUNG NETZWEIT ERLAUBT	RWSN
ANRUF ZU EINEM BESETZTEN SA WERDEN NICHT AUSGELOEST	SAAO
"SENDING_COMPLETE" WIRD GESETZT	BLOC

TRANSIT-COUNTER-VERWALTUNG FUER S0/S2-LEITUNG AKTIVIEREN	TRCA
TSC-SIGNAL. F. UEBERGR. LM BEI DIGITALEN NETZ (ERFORDERLICH)	TSCS
LEITUNG SENDET BETRAEGE AN URSPRUNGSKNOTEN	LTMB
ERREICHBARKEITSPRUEFUNG DES UMLEITUNGSZIELES MOEGlich	PRZL
KEIN TON	KTON

COT: 36 INFO: 36: S0/2 QUER ECMA2 AB V3.0

GERAET: S2VERB QUELLE: DB

PARAMETER:

PRIORITAET FUER VF WIRD AUS MELDUNG ERMITTELT	PRIO
ANRUF BEI EINHAENGEN IN RUECKFRAGE	AERF
LEITUNG MIT MELDEKRITERIUM	MVLT
AUFSCHALTEN BZW. ANKLOPFEN MOEGlich	AMGL
UEBERGABE IM BESETZT-, RUF- ODER GESPRAECHSZUSTAND	UELM
NETZWEITER RUECKRUF IM BESETZTFALL	RRBN
NETZWEITER RUECKRUF IM FREIFALL	RRFN
ANRUFUMLEITUNG NETZWEIT ERLAUBT	AULN
RUFWEITERSCHALTUNG NETZWEIT ERLAUBT	RWSN
ANRUFE ZU EINEM BESETZTEN SA WERDEN NICHT AUSGEOEST	SAAO
"SENDING_COMPLETE" WIRD GESETZT	BLOC
TRANSIT-COUNTER-VERWALTUNG FUER S0/S2-LEITUNG AKTIVIEREN	TRCA
TSC-SIGNAL. F. UEBERGR. LM BEI DIGITALEN NETZ (ERFORDERLICH)	TSCS
LEITUNG SENDET BETRAEGE AN URSPRUNGSKNOTEN	LTMB
ERREICHBARKEITSPRUEFUNG DES UMLEITUNGSZIELES MOEGlich	PRZL
GEBUEHRENUEBERTRAGUNG PRO VERBINDUNG (ERFORDERL. CORNET-NQ)	GBUE
KEIN TON	KTON

COT: 40 INFO: 40: KOMPRIMIERT ZU VCM

Attachments to the Installation Steps

GERAET: SKVERB QUELLE: DB

PARAMETER:

ANRUF BEI EINHAENGEN IN RUECKFRAGE	AERF
LEITUNG MIT MELDEKRITERIUM	MVLT
AUFSCHALTEN BZW. ANKLOPFEN MOEGlich	AMGL
UEBERGABE IM BESETZT-, RUF- ODER GESPRACHSZUSTAND	UELM
NETZWEITER RUECKRUF IM BESETZTFALL	RRBN
NETZWEITER RUECKRUF IM FREIFALL	RRFN
ANRUFUMLEITUNG NETZWEIT ERLAUBT	AULN
RUFWEITERSCHALTUNG NETZWEIT ERLAUBT	RWSN
ANRUF E ZU EINEM BESETZTEN SA WERDEN NICHT AUSGELOEST	SAAO
"SENDING_COMPLETE" WIRD GESETZT	BLOC
TRANSIT-COUNTER-VERWALTUNG FUER S0/S2-LEITUNG AKTIVIEREN	TRCA
TSC-SIGNAL. F. UEBERGR. LM BEI DIGITALEN NETZ (ERFORDERLICH)	TSCS
ERREICHBARKEITSPRUEFUNG DES UMLEITUNGSZIELES MOEGlich	PRZL
KEIN LOKALER HALTETON, HALTETON VON GEGENANLAGE	KLHT
SPRACHKANAL KOMPRIMIERT	SPRK
GEBUEHRENUEBERTRAGUNG PRO VERBINDUNG (ERFORDERL. CORNET-NQ)	GBUE
KEIN TON	KTON

COT: 50 INFO: 50: PSE - MFV

GERAET: PSE QUELLE: DB

PARAMETER:

ANRUF BEI EINHAENGEN IN RUECKFRAGE	AERF
KEINE KNOTENNUMMER ZUM PARTNER SENDEN	LOKN
KOMMENDE LEITUNG VON ANLAGE OHNE LCR	OLCR
KOMMENDE LEITUNG VON ANLAGE OHNE LCR (DATEN)	OLRD
KEIN TON	KTON

COT: 51 INFO: 51: PSE - IWV

GERAET: PSE QUELLE: DB

PARAMETER:

ANRUF BEI EINHAENGEN IN RUECKFRAGE	AERF
KEINE KNOTENNUMMER ZUM PARTNER SENDEN	LOKN
KOMMENDE LEITUNG VON ANLAGE OHNE LCR	OLCR
KOMMENDE LEITUNG VON ANLAGE OHNE LCR (DATEN)	OLRD
KEIN TON	KTON

COT: 70 INFO: 70: VMS

GERAET: UNAB QUELLE: DB

PARAMETER:

SPRACHINFO-SERVER	VM

COT: 71 INFO: 71: PHONEMAIL

GERAET: UNAB QUELLE: DB

PARAMETER:

ANRUF BEI EINHAENGEN IN RUECKFRAGE	AERF
LEITUNG MIT MELDEKRITERIUM	MVLT
AUFSCHALTEN BZW. ANKLOPFEN MOEGlich	AMGL
UEBERGABE IM BESETZT-, RUF- ODER GESPRAECHSZUSTAND	UELM
AMTSWAEHLTONEINSPEISUNG BEI GEHENDEN AMTSBELEGUNGEN	AWTE
"SENDING_COMPLETE" WIRD GESETZT	BLOC
KEINE KNOTENNUMMER ZUM PARTNER SENDEN	LOKN
KOMMENDE LEITUNG VON ANLAGE OHNE LCR	OLCR
TSC-SIGNAL. F. UEBERGR. LM BEI DIGITALEN NETZ (ERFORDERLICH)	TSCS
VOREINGESTELLE KNOTENNUMMER DER LEITUNG VERWENDEN	VKNN

Attachments to the Installation Steps

KOMMENDE LEITUNG VON ANLAGE OHNE LCR (DATEN)	OLRD
LEITUNG MIT IMPLIZITEN RUFNUMMERN	LIRU
DURCHSCHALTEN BEI UEBERGABE IM RUFZUSTAND BEI TRANSIT	DUET
KEIN TON	KTON

COT: 80 INFO: 80: WAML

GERAET: LAN QUELLE: DB

PARAMETER:

LEITUNG MIT MELDEKRITERIUM	MVLT
KEINE KNOTENNUMMER ZUM PARTNER SENDEN	LOKN
KOMMENDE LEITUNG VON ANLAGE OHNE LCR	OLCR
VOREINGESTELLE KNOTENNUMMER DER LEITUNG VERWENDEN	VKNN
KOMMENDE LEITUNG VON ANLAGE OHNE LCR (DATEN)	OLRD
KEIN TON	KTON

COT: 90 INFO: 90: EDSS1-NET

GERAET: S2VERB QUELLE: DB

PARAMETER:

NACHWAHL UNBEGRENZT MOEGlich	PDUR
UEBERGABE IM BESETZT-, RUF- ODER GESPRACHSZUSTAND	UELM
QUERLEITUNG	QUER
"SENDING_COMPLETE" WIRD GESETZT	BLOC
KEINE KNOTENNUMMER ZUM PARTNER SENDEN	LOKN
KOMMENDE LEITUNG VON ANLAGE OHNE LCR	OLCR
VOREINGESTELLE KNOTENNUMMER DER LEITUNG VERWENDEN	VKNN
KOMMENDE LEITUNG VON ANLAGE OHNE LCR (DATEN)	OLRD
KEIN TON	KTON

COT: 100 INFO: QUER SO CORNET NQ E/V3 BEIDE

GERAET: SOVERB QUELLE: DB

PARAMETER:

LEITUNG MIT MELDEKRITERIUM	MVLT
AUFSCHALTEN BZW. ANKLOPFEN MOEGlich	AMGL
UEBERGABE IM BESETZT-, RUF- ODER GESPRACHSZUSTAND	UELM
NETZWEITER RUECKRUF IM BESETZTFALL	RRBN
NETZWEITER RUECKRUF IM FREIFALL	RRFN
ANRUFUMLEITUNG NETZWEIT ERLAUBT	AULN
RUFWEITERSCHALTUNG NETZWEIT ERLAUBT	RWSN
UEBERTRAGUNG DER VBZ-GRUPPE DES TLN UEBER S0/S2-LEITUNG	VBZN
ANRUF E ZU EINEM BESETZTEN SA WERDEN NICHT AUSGELOEST	SAAO
"SENDING_COMPLETE" WIRD GESETZT	BLOC
LEITUNG FUEHRT ZU KNOTEN MIT ROUTE OPTIMIERUNG	ROPT
TSC-SIGNAL. F. UEBERGR. LM BEI DIGITALEN NETZ (ERFORDERLICH)	TSCS
LEITUNG SENDET BETRAEGE AN URSPRUNGSKNOTEN	LTMB
PROGRAMMIERUNG ANRUFUMLEITUNG FUER ANDERE TLN MGL.	AUAT
ERREICHBARKEITSPRUEFUNG DES UMLEITUNGSZIELES MOEGlich	PRZL
UUS SERVICE CLASS 1 (VERBINDUNGSaufBAU BASIC CALL)	UUS1
UUS SERVICE CLASS 3 (VERBINDUNGSabbAU BASIC CALL)	UUS3
PIN REMOTE MOEGlich (GEHENDER UND KOMMENDER VERKEHR)	PINR
B-KANAL-VERHANDLUNG (PREFERRED-PREFERRED COLLISION VERH.)	BKVE
NPI ISDN, ABGEHENDER VERKEHR	NPIS
KEIN TON	KTON

COT: 101 INFO:

GERAET: UNAB QUELLE: DB

PARAMETER:

Attachments to the Installation Steps

ANRUFEN ZU EINEM BESETZTEN SA WERDEN NICHT AUSGELOEST	SAAO
KEIN TON	KTON

COT: 102 INFO: QUER S2 CORNET NQ E/V3 BEIDE

GERAET: S2VERB QUELLE: DB

PARAMETER:

LEITUNG MIT MELDEKRITERIUM	MVLT
AUF SCHALTEN BZW. ANKLOPFEN MOEGlich	AMGL
UEBERGABE IM BESETZT-, RUF- ODER GESPRACHSZUSTAND	UELM
NETZWEITER RUECKRUF IM BESETZTFALL	RRBN
NETZWEITER RUECKRUF IM FREIFALL	RRFN
ANRUFUMLEITUNG NETZWEIT ERLAUBT	AULN
RUFWEITERSCHALTUNG NETZWEIT ERLAUBT	RWSN
UEBERTRAGUNG DER VBZ-GRUPPE DES TLN UEBER S0/S2-LEITUNG	VBZN
ANRUFEN ZU EINEM BESETZTEN SA WERDEN NICHT AUSGELOEST	SAAO
"SENDING_COMPLETE" WIRD GESETZT	BLOC
LEITUNG FUEHRT ZU KNOTEN MIT ROUTE OPTIMIERUNG	ROPT
TSC-SIGNAL. F. UEBERGR. LM BEI DIGITALEN NETZ (ERFORDERLICH)	TSCS
LEITUNG SENDET BETRAEGE AN URSPRUNGSKNOTEN	LTMB
PROGRAMMIERUNG ANRUFUMLEITUNG FUER ANDERE TLN MGL.	AUAT
ERREICHBARKEITSPRUEFUNG DES UMLEITUNGSZIELES MOEGlich	PRZL
UUS SERVICE CLASS 1 (VERBINDUNGS-AUFBAU BASIC CALL)	UUS1
UUS SERVICE CLASS 3 (VERBINDUNGS-ABBAU BASIC CALL)	UUS3
PIN REMOTE MOEGlich (GEHENDER UND KOMMENDER VERKEHR)	PINR
B-KANAL-VERHANDLUNG (PREFERRED-PREFERRED COLLISION VERH.)	BKVE
NPI ISDN, ABGEHENDER VERKEHR	NPIS
KEIN TON	KTON

COT: 103 INFO: WAML OHNE LCR DATEN / V3.0 CORNV33

GERAET: LAN QUELLE: DB

PARAMETER:

LEITUNG MIT MELDEKRITERIUM	MVLT
KOMMENDE LEITUNG VON ANLAGE OHNE LCR	OLCR
VOREINGESTELLE KNOTENNUMMER DER LEITUNG VERWENDEN	VKNN
KOMMENDE LEITUNG VON ANLAGE OHNE LCR (DATEN)	OLRD
UNTERDRUECKEN SIGNALISIERUNG VON CDR-E SPEZ. MELDUNGEN	NCDR
KEIN TON	KTON

COT: 105 INFO: QUER VCM CORNET NQ E/V3 BEIDE

GERAET: SKVERB QUELLE: DB

PARAMETER:

LEITUNG MIT MELDEKRITERIUM	MVLT
AUFSCHALTEN BZW. ANKLOPFEN MOEGlich	AMGL
UEBERGABE IM BESETZT-, RUF- ODER GESPRAECHSZUSTAND	UELM
NETZWEITER RUECKRUF IM BESETZTFALL	RRBN
NETZWEITER RUECKRUF IM FREIFALL	RRFN
ANRUFUMLEITUNG NETZWEIT ERLAUBT	AULN
RUFWEITERSCHALTUNG NETZWEIT ERLAUBT	RWSN
UEBERTRAGUNG DER VBZ-GROEPPE DES TLN UEBER S0/S2-LEITUNG	VBZN
ANRUFE ZU EINEM BESETZTEN SA WERDEN NICHT AUSGEOEST	SAAO
"SENDING_COMPLETE" WIRD GESETZT	BLOC
LEITUNG FUEHRT ZU KNOTEN MIT ROUTE OPTIMIERUNG	ROPT
TSC-SIGNAL. F. UEBERGR. LM BEI DIGITALEN NETZ (ERFORDERLICH)	TSCS
LEITUNG SENDET BETRAEGE AN URSPRUNGSKNOTEN	LTMB
PROGRAMMIERUNG ANRUFUMLEITUNG FUER ANDERE TLN MGL.	AUAT
ERREICHBARKEITSPRUEFUNG DES UMLEITUNGSZIELES MOEGlich	PRZL

Attachments to the Installation Steps

UUS SERVICE CLASS 1 (VERBINDUNGSAUFBAU BASIC CALL)	UUS1
UUS SERVICE CLASS 3 (VERBINDUNGSABBAU BASIC CALL)	UUS3
SPRACHKANAL KOMPRIMIERT	SPRK
PIN REMOTE MOEGlich (GEHENDER UND KOMMENDER VERKEHR)	PINR
B-KANAL-VERHANDLUNG (PREFERRED-PREFERRED COLLISION VERH.)	BKVE
NPI ISDN, ABGEHENDER VERKEHR	NPIS
KEIN TON	KTON

COT: 110 INFO:

GERAET: UNAB QUELLE: DB

PARAMETER:

LEITUNG MIT MELDEKRITERIUM	MVLT
AUFSCHALTEN BZW. ANKLOPFEN MOEGlich	AMGL
UEBERGABE NUR IM GESPRACHSZUSTAND	UEGM
UEBERGABE IM BESETZT-, RUF- ODER GESPRACHSZUSTAND	UELM
NETZWEITER RUECKRUF IM BESETZTFALL	RRBN
NETZWEITER RUECKRUF IM FREIFALL	RRFN
ANRUFUMLEITUNG NETZWEIT ERLAUBT	AULN
RUFWEITERSCHALTUNG NETZWEIT ERLAUBT	RWSN
KOMMENDE LEITUNG VON ANLAGE OHNE LCR	OLCR
VOREINGESTELLE KNOTENNUMMER DER LEITUNG VERWENDEN	VKNN
KEIN TON	KTON

COT: 112 INFO:

GERAET: UNAB QUELLE: DB

PARAMETER:

LEITUNG MIT MELDEKRITERIUM	MVLT
AUFSCHALTEN BZW. ANKLOPFEN MOEGlich	AMGL

UEBERGABE NUR IM GESPRACHESZUSTAND	UEGM
UEBERGABE IM BESETZT-, RUF- ODER GESPRACHESZUSTAND	UELM
NETZWEITER RUECKRUF IM BESETZTFALL	RRBN
NETZWEITER RUECKRUF IM FREIFALL	RRFN
ANRUFUMLEITUNG NETZWEIT ERLAUBT	AULN
RUFWEITERSCHALTUNG NETZWEIT ERLAUBT	RWSN
KOMMENDE LEITUNG VON ANLAGE OHNE LCR	OLCR
VOREINGESTELLE KNOTENNUMMER DER LEITUNG VERWENDEN	VKNN
KEIN TON	KTON

COT: 120 INFO:

GERAET: UNAB QUELLE: DB

PARAMETER:

LEITUNG MIT VORAB-WAHLENDEAUSSENDUNG	LTVW
KEINE KNOTENNUMMER ZUM PARTNER SENDEN	LOKN
KOMMENDE LEITUNG VON ANLAGE OHNE LCR	OLCR
KOMMENDE GEBUEHRENERFASSUNG UEBER ZONE ODER LEITUNG	KGZL
SPRACHKOMPRIMIERUNG NICHT ERLAUBT	SPKN
KEIN TON	KTON

COT: 121 INFO:

GERAET: UNAB QUELLE: DB

PARAMETER:

ABWURF ZUM VF WENN WAHL UNVOLLSTAENDIG	AWWU
ABWURF ZUM VF WENN NICHT VORHANDEN	AWNV
ABWURF ZUM VF IM BESETZTFALL	AWBF
ABWURF ZUM VF WENN NICHT BERECHTIGT	AWNB
ABWURF ZUM VF BEI GASSENBESETZT	AWGB

Attachments to the Installation Steps

ABWURF ZUM VF BEI ANRUFSCHUTZ	AWAS
ABWURF ZUM VF BEI FREI (NACH ZEIT)	AWFR
LEITUNG MIT MELDEKRITERIUM	MVLT
LEITUNG MIT VORAB-WAHLENDEAUSSENDUNG	LTVW
KEINE KNOTENNUMMER ZUM PARTNER SENDEN	LOKN
KOMMENDE LEITUNG VON ANLAGE OHNE LCR	OLCR
SPRACHKOMPRIMIERUNG NICHT ERLAUBT	SPKN
KEIN TON	KTON

COT: 124 INFO:

GERAET: UNAB QUELLE: DB

PARAMETER:

LEITUNG MIT MELDEKRITERIUM	MVLT
AUFSCHALTEN BZW. ANKLOPFEN MOEGlich	AMGL
UEBERGABE NUR IM GESPRACHSZUSTAND	UEGM
UEBERGABE IM BESETZT-, RUF- ODER GESPRACHSZUSTAND	UELM
NETZWEITER RUECKRUF IM BESETZTFALL	RRBN
NETZWEITER RUECKRUF IM FREIFALL	RRFN
ANRUFUMLEITUNG NETZWEIT ERLAUBT	AULN
RUFWEITERSCHALTUNG NETZWEIT ERLAUBT	RWSN
"SENDING_COMPLETE" WIRD GESETZT	BLOC
TSC-SIGNAL. F. UEBERGR. LM BEI DIGITALEN NETZ (ERFORDERLICH)	TSCS
PROGRAMMIERUNG ANRUFUMLEITUNG FUER ANDERE TLN MGL.	AUAT
ERREICHBARKEITSPRUEFUNG DES UMLEITUNGSZIELES MOEGlich	PRZL
PIN REMOTE MOEGlich (GEHENDER UND KOMMENDER VERKEHR)	PINR
KEIN TON	KTON

COT: 150 INFO:

GERAET: UNAB QUELLE: DB

PARAMETER:

LEITUNG MIT MELDEKRITERIUM	MVLT
AUFSCHALTEN BZW. ANKLOPFEN MOEGlich	AMGL
UEBERGABE NUR IM GESPRACHSZUSTAND	UEGM
UEBERGABE IM BESETZT-, RUF- ODER GESPRACHSZUSTAND	UELM
NETZWEITER RUECKRUF IM BESETZTFALL	RRBN
NETZWEITER RUECKRUF IM FREIFALL	RRFN
ANRUFUMLEITUNG NETZWEIT ERLAUBT	AULN
RUFWEITERSCHALTUNG NETZWEIT ERLAUBT	RWSN
TSC-SIGNAL. F. UEBERGR. LM BEI DIGITALEN NETZ (ERFORDERLICH)	TSCS
PROGRAMMIERUNG ANRUFUMLEITUNG FUER ANDERE TLN MGL.	AUAT
KEIN LOKALER HALTETON, HALTETON VON GEGENANLAGE	KLHT
SPRACHKANAL KOMPRIMIERT	SPRK
KEIN TON	KTON

VARNU: 1 GERMANY

...

AMO-LDAT -111 LCR-RICHTUNGEN

ABFRAGEN DURCHGEFUEHRT;

<

DISPLAY-FEASU;

ab-feasu;

AB-FEASU;

H500: AMO FEASU GESTARTET

FREIGELEGEBENE LEISTUNGSMERKMALE

RNGZ RNGI SAS SAF SAD AUFS FRAD NACHTZU

Attachments to the Installation Steps

BERUMC	BERUMS	BERUMA	BERUMV	BERUMZ	BERUMD	HOTROE	ANRS
VARKONF	FANGEN	WW	ANKS	RR	DRS	MAK	UML
AUN	KET	DRD	ESI	RUF	NOTAUF	NOTTR	SYNCANN
GEBGNW	GEBGAMT	GESPINT	GESPNW	GESPAMT	LCRET	POSTBUSY	POSTFREE
RELOCATE	VOICO	SANW	PINNW	TERMIN	VFVE	EAUL	GIS
ERHPRIO	TRVAWAHL	ANRLSOPT	CDRE	DIRAUN			

GESPERRTE LEISTUNGSMERKMALE

GEFM	BELM	ABDUWA	RES	GEBFREI	WARTVF	AMTFANG	LED SIGN
VMSIWV	RELCON	RERING	AUTOV	RRB	RRF	GEBINT	GEBK
PININT	TRVARUF	DCPA	NCT	RCCB	MLPP	CDRACC	CLIP

H02: DIE GESAMTE ERWEITERTE GEBUEHRENERFASSUNG (CDRE) IST AKTIV.

AMO-FEASU-111 LEISTUNGSMERKMALE, BITLEISTE SWU SETZEN

ABFRAGEN DURCHGEFUEHRT;

ACTIVATE-SELS:1;

eins-sels:1;

EINS-SELS:1;

H500: AMO SELS GESTARTET

AMO-SELS -111 SELEKTIONSGRUPPEN SCHALTEN

EINSCHALTEN DURCHGEFUEHRT;

DISPLAY-SELS;

ab-sels;

AB-SELS;

H500: AMO SELS GESTARTET

BETRIEBSZUSTAENDE DER SELEKTIONSGRUPPEN

SELGRUNU

BETRIEBSZUSTAND

1	EIN
2	AUS
3	AUS
4	STOP

AMO-SELS -111 SELEKTIONSGRUPPEN SCHALTEN

ABFRAGEN DURCHGEFUEHRT;

```
DISPLAY-ZAND:ALLDATA;
```

```
DISPLAY-ZAND:TYPE=ALLDATA;
H500:  AMO ZAND  STARTED
```

GENERAL SYSTEM DATA:

```
TRANSFER = PICKUP , ALERTN = NO ,
AUTHUP = TA ,
RNGBKTN = YES , TRANSINH = NO ,
NIGHT = TA ,
ITRFRD = NO , HOLDTN = MUSIC , ANATESIG = TONE ,
DSSLT = 5 , CODTN = YES , CONFSUB = YES ,
DATEDIS = DDMM , CNTRYCD = 0 , RCLLT = NO ,
MELODY = 1 , TRCD = , CPBLOWL = 10 ,
CPBUPPL = 20 , CUTHRU1A = NO , PREDIA = NO ,
SIUANN = 1 , CO = NO , COEXN = 0 ,
CBKNO = 5 , SEVDIG = NO , PNNO = 1 -85 -200 ,
DISPMODE = MODE1 , PNODECD = 808520 , ROUTOPTP = YES ,
ROUTOPTD = NO , CALLOFF = NO , PARARING = YES ,
DSSDEST = NO , ONEPARTY = YES , MSGDELAY = NO ,
EXCOCO = NO , TRDGTPR = NO , COANN = NO ,
HOTDIAL = NO , TRANSTOG = NO , NOCFW = NO ,
HOLDHUNT = NO , POSTDDLY = NO , EXBUSYOV = NO ,
OVRMST = NO , OVRHUNT = NO , CONITPRO = YES ,
RECHUNT = NO , CALLACMP = NO ;
```

AMO-ZAND -111 SYSTEM DATA
DISPLAY COMPLETED;

DISPLAY-SELS::

```
ab-sels;;
```

Attachments to the Installation Steps

AB-SELS;;

H500: AMO SELS GESTARTET

BETRIEBSZUSTAENDE DER SELEKTIONSGRUPPEN

SELGRUNU	BETRIEBSZUSTAND
1	EIN
2	AUS
3	AUS
4	STOP

AMO-SELS -111 SELEKTIONSGRUPPEN SCHALTEN

ABFRAGEN DURCHGEFUEHRT;

DEACTIVATE-SELS:1;

DEACTIVATE-SELS:SELGRNO=1;

DEACTIVATE-SELS:SELGRNO=1;

H500: AMO SELS STARTED

AMO-SELS -111 SMDR/DMDR SELECTION GROUP SWITCHES

DEACTIVATE COMPLETED;

DISPLAY-SELS;;

AB-SELS;;

H500: AMO SELS GESTARTET

BETRIEBSZUSTAENDE DER SELEKTIONSGRUPPEN

SELGRUNU	BETRIEBSZUSTAND
1	AUS
2	AUS

3 AUS

4 STOP

AMO-SELS -111 SELEKTIONSGRUPPEN SCHALTEN

ABFRAGEN DURCHGEFUEHRT;

ADD-FEACG:BITL=CDRFAST&CDRCDUMP;

EINRICHTEN-FEACG:BITL=FAST&GEZSO;

EINRICHTEN-FEACG:BITL=FAST&GEZSO;

H500: AMO FEACG GESTARTET

H05: ELEMENT FAST WURDE GESETZT. ALLE SELEKTIONSGRUPPEN, BIS AUF DIE ERSTE,
WURDEN AUSGESCHALTET

AMO-FEACG-111 BITLEISTE DER GEBUEHRENERFASSUNG

EINRICHTEN DURCHGEFUEHRT;

DISPLAY-SELG

DIS-SELG;
H500: AMO SELG STARTED

SELECTION GROUP : 1			
OPERATING STATE : OFF			
BASDEV	:	RESOP	:
RESDEV	:	BLBAS	:
		BLRES	:
SELECTION GROUP : 2			
OPERATING STATE : OFF			
BASDEV	:	RESOP	:
RESDEV	:	BLBAS	:
		BLRES	:
SELECTION GROUP : 3			
OPERATING STATE : OFF			
BASDEV	:	RESOP	:
RESDEV	:	BLBAS	:
		BLRES	:
SELECTION GROUP : 4			
OPERATING STATE : OFF_WITHOUT_QUEUEING			
BASDEV	:	RESOP	:
RESDEV	:	BLBAS	:
		BLRES	:
AMO-SELG -111 ADMINISTRATION OF SELECTION GROUPS AND TABLES			
DISPLAY COMPLETED;			

CHANGE-
DAGR:FILE=FT,NO=40000,CODE=ASC,TIME=20-11,PERIOD=001,NAME=FTFILE;

CHANGE-DAGR:FILE=FT,NO=40000,CODE=ASC,TIME=20-11,PERIOD=001,NAME="FTFILE";
CHANGE-DAGR:FILE=FT,NO=40000,CODE=ASC,TIME=20-11,PERIOD=001,NAME="FTFILE";
H500: AMO DAGR STARTED
AMO-DAGR -111 SMDR/DMDR FILE SIZES
CHANGE COMPLETED;

DISPLAY-DAGR;

DIS-DAGR;

H500: AMO DAGR STARTED

FILE-PARAMETERS OF DMS-FILES OF CALL CHARGE REGISTRATION

FILE NAME	NUMBER OF RECORDS IN THE FILE
CDRC1	65000
CDRC2	0
FT	40000

PARAMETERS FOR THE FILE FOR FILE-TRANSFER:

OUTPUT-CODE	: ASC
COPY TIME (DD-HH)	: 20-11
COPY PERIOD (HOURS)	: 001
NAME OF THE TRANSFER FILE	: FTFILE

AMO-DAGR -111 SMDR/DMDR FILE SIZES

DISPLAY COMPLETED;

DISPLAY-FEACG;

DIS-FEACG;
H500: AMO FEACG STARTED

CALL DATA REGISTRATION AT ATTENDANT CONSOLE	: ACTIVATED;
CALL DATA REGISTRATION ON ADD. DEVICE, IMMEDIATE OUTPUT	: ACTIVATED;
CALL DATA REGISTRATION ON ADDITIONAL DEVICE, CALL UP	: DEACTIVATED;
CALL DATA REGISTRATION PER STATION, PRINTER OUTPUT	: ACTIVATED;
CALL DATA REGISTRATION ON FAST OUTPUT DEVICE	: DEACTIVATED;

AMO-FEACG-111 SMDR/DMDR FEATURE LIST
DISPLAY COMPLETED;

CDR
CDR

DISPLAY-SELG;

DIS-SELG;
H500: AMO SELG STARTED

=====			
	SELECTION GROUP : 1		

	OPERATING STATE : OFF		
	BASDEV :	RESOP :	
	RESDEV :	BLBAS :	
		BLRES :	
	=====		
	SELECTION GROUP : 2		

	OPERATING STATE : OFF		
	BASDEV :	RESOP :	
	RESDEV :	BLBAS :	
		BLRES :	
	=====		
	SELECTION GROUP : 3		

	OPERATING STATE : OFF		
	BASDEV :	RESOP :	
	RESDEV :	BLBAS :	
		BLRES :	
	=====		
	SELECTION GROUP : 4		

	OPERATING STATE : OFF_WITHOUT_QUEUEING		
	BASDEV :	RESOP :	
	RESDEV :	BLBAS :	
		BLRES :	
	=====		
AMO-SELG -111 ADMINISTRATION OF SELECTION GROUPS AND TABLES			
DISPLAY COMPLETED;			

ADD-FEACG:CM=CDRFAST;

ADD-FEACG:CM=CDRFAST;
H500: AMO FEACG STARTED
H04: ELEMENT CDRFAST IS ONLY SET IF ELEMENTS CDRCDIS, CDRATND AND CDRSPR

Attachments to the Installation Steps

ARE NOT SET
AMO-FEACG-111 SMDR/DMDR FEATURE LIST
ADD NOT COMPLETED;

DELETE-FEACG:CM=CDRCDIS&CDRATND&CDRSPR;

DELETE-FEACG:CM=CDRCDIS&CDRATND&CDRSPR;
DELETE-FEACG:CM=CDRCDIS&CDRATND&CDRSPR;
H500: AMO FEACG STARTED
AMO-FEACG-111 SMDR/DMDR FEATURE LIST
DELETE COMPLETED;

DISPLAY-FEACG;

DIS-FEACG;
H500: AMO FEACG STARTED

CALL DATA REGISTRATION AT ATTENDANT CONSOLE	: DEACTIVATED;
CALL DATA REGISTRATION ON ADD. DEVICE, IMMEDIATE OUTPUT	: ACTIVATED;
CALL DATA REGISTRATION ON ADDITIONAL DEVICE, CALL UP	: DEACTIVATED;
CALL DATA REGISTRATION PER STATION, PRINTER OUTPUT	: DEACTIVATED;
CALL DATA REGISTRATION ON FAST OUTPUT DEVICE	: DEACTIVATED;

AMO-FEACG-111 SMDR/DMDR FEATURE LIST
DISPLAY COMPLETED;

CDR
CDR

ADD-FEACG:CDRFAST;

ADD-FEACG:CM=CDRFAST;
H500: AMO FEACG STARTED
H05: FAST MODE IN PROGRESS. ALL SELECTION GROUPS, EXCEPT THE FIRST ONE,
ARE SWITCHED OFF
AMO-FEACG-111 SMDR/DMDR FEATURE LIST
ADD COMPLETED;

DISPLAY-FEACG;

DIS-FEACG;
H500: AMO FEACG STARTED

CALL DATA REGISTRATION AT ATTENDANT CONSOLE	: DEACTIVATED;
CALL DATA REGISTRATION ON ADD. DEVICE, IMMEDIATE OUTPUT	: ACTIVATED;
CALL DATA REGISTRATION ON ADDITIONAL DEVICE, CALL UP	: DEACTIVATED;
CALL DATA REGISTRATION PER STATION, PRINTER OUTPUT	: DEACTIVATED;
CALL DATA REGISTRATION ON FAST OUTPUT DEVICE	: ACTIVATED;

AMO-FEACG-111 SMDR/DMDR FEATURE LIST
DISPLAY COMPLETED;

CDR
CDR

ADD-FEACG:CM=CDRCDUMP;

```
ADD-FEACG:CM=CDRCDUMP;
H500: AMO FEACG STARTED
H05: FAST MODE IN PROGRESS. ALL SELECTION GROUPS, EXCEPT THE FIRST ONE,
ARE SWITCHED OFF
AMO-FEACG-111          SMDR/DMDR FEATURE LIST
ADD COMPLETED;
```

DISPLAY-SELG;

DIS-SELG;
H500: AMO SELG STARTED

SELECTION GROUP : 1	
OPERATING STATE : OFF	
BASDEV :	RESOP :
RESDEV :	BLBAS :
	BLRES :

AMO-SELG -111 ADMINISTRATION OF SELECTION GROUPS AND TABLES
DISPLAY COMPLETED;

ADD-

SELG:TBL=SELG,SELGNO=1,RESOP=Y,BASDEV=FT,RESDEV=FT,BLBAS=1,BLRES

```
ADD-SELG:TBL=SELG,SELGNO=1,RESOP=Y,BASDEV=FT,RESDEV=FT,BLBAS=1,BLRES=1;
H500:  AMO SELG  STARTED
AMO-SELG -111          ADMINISTRATION OF SELECTION GROUPS AND TABLES
ADD COMPLETED;
```

DISPLAY-SELG;

```
DIS-SELG;  
H500:  AMO SELG  STARTED
```

```
-----+-----
```

SELECTION GROUP : 1					
-----+-----					
OPERATING STATE : OFF					
BASDEV	:	FT	RESOP	:	Y
RESDEV	:	FT	BLBAS	:	1
			BLRES	:	1

```
-----+-----
```

AMO-SELG -111 ADMINISTRATION OF SELECTION GROUPS AND TABLES
DISPLAY COMPLETED:

DISPLAY-COT:;

DISPLAY-COT:;

Attachments to the Installation Steps

H500: AMO COT STARTED

COT: 0 INFO:

...

COT: 22 INFO:

DEVICE: INDEP SOURCE: DB

PARAMETER:

TRUNK SIGNALING ANSWER	ANS
KNOCKING OVERRIDE POSSIBLE	KNOR
CALL EXTEND FOR BUSY, RING OR CALL STATE	CEBC
NETWORKWIDE AUTOMATIC CALLBACK ON FREE	CBFN
NETWORKWIDE CALL FORWARDING PERMITTED	FWDN
NETWORKWIDE FORWARDING NO-ANSWER	FNAN
REGENERATED CO DIALTONE ON OUTGOING SEIZURE	COTN
REGISTRATION OF IMPLAUSIBLE EVENTS	IEVT
DON'T RELEASE CALL TO BUSY HUNT GROUP	BSHT
SEND NO NODE NUMBER TO PARTNER	LWNC
NO TONE	NTON

COT: 23 INFO:

...

...

AMO-COT -111 CLASS OF TRUNK FOR CALL PROCESSING

DISPLAY COMPLETED;

DISPLAY-TDCSU:1-1-103-0;

You need to activate the ICZL parameter for all trunk groups to be metered. (Interrogate via [DISPLAY-COT](#)). Provided that the PEN is known you can interrogate the COT number using DISPLAY-TDCSU:

DISPLAY-TDCSU: PEN1=1-1-103-0;

H500: AMO TDCSU STARTED

```

+----- DIGITAL TRUNK (FORMAT=L) -----+
|          DEV = S2CONN          PEN = 1-01-103-0          |
|-----|
| COTNO    = 22          COPNO    = 0          DPLN      = 0          |
| ITR      = 0          COS      = 23          LCOSV     = 1          |
| LCOSD    = 1          CCT      =             DESTNO    = 0          |
| PROTVAR  = ECMAV2     SEGMENT  = 8          TCHARG     = N          |
| SUPPRESS = 0          DGTPR    =             CHIMAP    = N          |
| ISDNCC   =             ISDNAC  =             ISDNLC    =          |
| ISDNIP   =             ISDNNP  =          |
| PNPL2C   =             PNPL1C  =             PNPLC     =          |
| PNPL2P   =             PNPL1P  =             PNPAC     =          |
| TRACOUNT = 31          SATCOUNT = MANY      NNO       = 1  -1  -201 |
| ALARMNO  = 0          FIDX     = 1          CARRIER   = 1          |
| ZONE     = EMPTY      COTX     = 22          FWDX      = 1          |
| DOMTYPE  =             DOMAINNO =          TPROFNO   =          |
| INIGHT   =          |
| CCHDL    =             UUSCCX  = 16          UUSCCY    = 8          |
|-----|
| TGRP     = 231          SRCHMODE = DSC          BCNEG    = N          |
| BCGR     = 1          INS      = Y          LWPAR     = 3          |
| LWPP     = 0          LWLT     = 0          LWPS      = 0          |
| LWR1     = 0          LWR2     = 0          |
| BCHAN    1 && 30          |
|          |
+-----+

```

AMOUNT OF B-CHANNELS IN THIS DISPLAY-OUTPUT: 30

Attachments to the Installation Steps

AMO-TDCSU-111 DIGITAL TRUNKS

DISPLAY COMPLETED;

Use DISPLAY-COT to check whether the relevant ICZL parameter is set:

DISPLAY-COT:COTNO=22;

H500: AMO COT STARTED

COT: 22 INFO:

DEVICE: INDEP SOURCE: DB

PARAMETER:

TRUNK SIGNALING ANSWER	ANS
KNOCKING OVERRIDE POSSIBLE	KNOR
CALL EXTEND FOR BUSY, RING OR CALL STATE	CEBC
NETWORKWIDE AUTOMATIC CALLBACK ON FREE	CBFN
NETWORKWIDE CALL FORWARDING PERMITTED	FWDN
NETWORKWIDE FORWARDING NO-ANSWER	FNAN
REGENERATED CO DIALTONE ON OUTGOING SEIZURE	COTN
REGISTRATION OF IMPLAUSIBLE EVENTS	IEVT
DON'T RELEASE CALL TO BUSY HUNT GROUP	BSHT
SEND NO NODE NUMBER TO PARTNER	LWNC
NO TONE	NTON

AMO-COT -111 CLASS OF TRUNK FOR CALL PROCESSING

DISPLAY COMPLETED;

[next](#)

CHANGE-COT:COTNO=22,COTTYPE=COTADD,PAR=ICZL;

Use CHANGE-COT to set the ICZL parameter:

CHANGE-COT:COTNO=22,COTTYPE=COTADD,PAR=ICZL;

H500: AMO COT STARTED

H07: CHANGED COT STILL LINKED WITH FOLLOWING TRUNKS:

COT	TRUNK	BCGR	DEVICE

22	1- 1-103-	0 1	S2CONN
	1- 1-103-	1 1	S2CONN
	1- 1-103-	2 1	S2CONN
	1- 1-103-	2 2	S2CONN

```

1- 1-103- 2 3      S2CONN
1- 4- 25- 0 1      S2CONN
1- 4- 55- 0 1      S2CONN
1- 4- 25- 0 2      S2CONN
1- 4- 55- 0 2      S2CONN

```

```

-----
H06: COT 22 CHANGED
AMO-COT -111      CLASS OF TRUNK FOR CALL PROCESSING
CHANGE COMPLETED;

```

CHANGE-LDAT:LROUTE=231,LSVC=VCE,LRTTEL=1,LATTR=WCHREG;

Use CHANGE-LDAT to set the WCHREG attribute for the "Voice" service:

(Use [DISPLAY-TDCSU](#) to interrogate the trunk group number.)

```
CHANGE-LDAT:LROUTE=231,LSVC=VCE,LRTTEL=1,LATTR=WCHREG;
```

```

H500: AMO LDAT STARTED
H03: LRTTEL 1 FOR LROUTE 231 WAS CHANGED
AMO-LDAT -111      LCR-DIRECTIONS
CHANGE COMPLETED;

```

DISPLAY-FEASU;

Use DISPLAY-FEASU to interrogate the CDRIC, CDROGNW, CDROGTR and CDRINH features:

```
DIS-FEASU;
```

```
H500: AMO FEASU STARTED
```

```
ACTIVATED FEATURES
```

LDME	SPDC	SPDI	HTVCE	HTTTX	HTFAX	HTVTX	HTDTE
FWDVCE	FWDTTX	FWDF	FWDVTX	FWDDTE	OVR	FRKN	NIGHT
COSXCD	COSXKEY	DCOSX	COSXATND	ICPTDID	HOTRCL	DND	TCR
CONF3	VARCONF	PRESCONF	BROAD	TRACE	SNR	RKNOVR	CBK
DSS	SPLIT	ONHKTRNS	PU	RSVCO	SER	CDRATND	CQPRI
ISTR	RNG	LED SIGN	RELOCATE	PININT	NX64	TIMEDREM	CLIP

```
DEACTIVATED FEATURES
```

CRITM	SUPV	ATNDCOSX	COSXT	COSXDP	RPTAL	CDRSAT	DDTES
DVTXS	NCDTE	NCVTX	NOCHRG	DOA	STAT	TELM	WTATND
TRACCO	VMSDP	RELCON	RERING	AUTOV	EMOVR	EMRLS	DCBB

Attachments to the Installation Steps

```
DCBNOA    SYNCANN  CDRINH    CDRIC      CDROGNW    CDROGTR    DISCHINH  DISCHNW
DISCHTR    LCRET      POSTBUSY  POSTFREE  VOICO      HTNW       PINNW     ATTR
ECFW       CPS        INCPRIO   XFBACALL  XFBADIAL  CALGOPT    CDRE      DIRCPCKP
AMO-FEASU-111      CUSTOMER FEATURE LIST
```

DISPLAY COMPLETED;

Use CHANGE-FEASU to activate the CDRIC, CDROGNW, CDROGTR and CDRINH features:

CHANGE-FEASU:TYPE=A,CM=CDRIC&CDRINH&CDROGNW&CDROGTR;

H500: AMO FEASU STARTED

```
AMO-FEASU-111      CUSTOMER FEATURE LIST
```

CHANGE COMPLETED;

[next](#)

DISPLAY-FEASU;

To double-check, you can interrogate the features once again:

DIS-FEASU;

H500: AMO FEASU STARTED

ACTIVATED FEATURES

```
LDME      SPDC      SPDI      HTVCE      HTTTX      HTFAX      HTVTX      HTDTE
FWDVCE    FWDTTX    FWDF      FWDVTX     FWDDTE     OVR        FRKN       NIGHT
COSXCD    COSXKEY    DCOSX     COSXATND   ICPTDID    HOTRCL     DND        TCR
CONF3     VARCONF    PRESCONF  BROAD      CDRSAT     TRACE      SNR        RKNOVR
CBK       DSS       SPLIT     ONHKTRNS   PU         RSVCO      SER        CDRATND
CQPRI     ISTR      RNG       LEDSIGN    CDRINH     CDRIC      CDROGNW    CDROGTR
RELOCATE  PININT    NX64      TIMEDREM   CLIP
```

DEACTIVATED FEATURES

```
CRITM     SUPV      ATNDCOSX  COSXT      COSXDP     RPTAL      DDTES      DVTXS
```

```
NCDTE      NCVTX      NOCHRG      DOA          STAT          TELM          WTATND      TRACCO
VMSDP      RELCON      RERING      AUTOV        EMOVR         EMRLS         DCBB        DCBNOA
SYNCANN     DISCHINH  DISCHNW     DISCHTR      LCRET         POSTBUSY     POSTFREE    VOICO
HTNW        PINNW        ATTR        ECFW         CPS           INCPRIO      XFBACALL    XFBADIAL
CALGOPT     CDRE        DIRCPCKP
AMO-FEASU-111      CUSTOMER FEATURE LIST
DISPLAY COMPLETED;
```

Setting Up Selection Group 1 in Two Steps

How to set up selection group 1 in two steps:

```
ADD-SELG:TBL=SELG,SELGNO=1,RESOP=Y,BASDEV=FT,RESDEV=FT,BLBAS=1,BLRES=1;
ADD-SELG:TBL=SELG,SELGNO=1,RESOP=Y,BASDEV=FT,RESDEV=FT,BLBAS=1,BLRES=1;
H500:  AMO SELG  STARTED
AMO-SELG -111      ADMINISTRATION OF SELECTION GROUPS AND TABLES
ADD COMPLETED;
CHANGE-SELG:TBL=SELT,SELGNO=1,SELTABNO=1,FORMBAS=FORM01,FORMRES=FORM01,
TARIF=TARGR00,DESTCNT="A22",CDRCD=0&&99999,SERVICE=VOICE&DTE&FAX,ATNDGR=0&&15,
CTYPE=ALL,PAYPARTY=ALL,CDRC=N,CDRSTA=N,THRGCON=N,NSTAT=N,SECTION=N,CDCHU=N,
CDRAC=N,SFSETUP=N,CDBAD=N,CDRULTE=N,CONNT=N,PCODE=N,PPCF=N,STATAB1=N,
STATAB2=N,DNOTBL1=N,DNOTBL2=N,CDRULT=0,CONNTL=000000,LEVEL0=0&&999,
LEVEL1=0&&254,LEVEL2=0&&30,TIELINE=N,EXPENS=N,CONNTYP=ALL,COPIN=0&&8,
CARRIER=0&&9;
H500:  AMO SELG  STARTED
AMO-SELG -111      ADMINISTRATION OF SELECTION GROUPS AND TABLES
CHANGE COMPLETED;
```

DISPLAY-SELS;

Use DISPLAY-SELS to interrogate the status of the selection group:

```
DIS-SELS;
H500:  AMO SELS  STARTED
```

OPERATING CONDITIONS OF THE SELECTION GROUPS

Attachments to the Installation Steps

SELGRNO	OPERATING CONDITION

1	OFF

2	OFF

3	OFF

4	OFF

AMO-SELS -111 SMDR/DMDR SELECTION GROUP SWITCHES

DISPLAY COMPLETED;

Use ACTIVATE-SELS to activate the selection group:

ACTIVATE-SELS:SELGRNO=1;

H500: AMO SELS STARTED

AMO-SELS -111 SMDR/DMDR SELECTION GROUP SWITCHES

ACTIVATE COMPLETED;

Connecting via FTP (1)

ftp> open 1.85.31.2

Verbindung mit 1.85.31.2 wurde hergestellt.

220- This system is monitored and evidence of criminal activity may be

220- reported to law enforcement officials.

220-

220-

220 HiPath FTP server ready

Benutzer (1.85.31.2:(none)): engr

331 Password required for engr.

Kennwort:

230 User engr logged in.

ftp> cd /var/col/data/ftbl

250 CWD command successful.

ftp> pwd

257 "/var/col/data/ftbl" is current directory.

ftp> lcd c:\ftbl

Lokales Verzeichnis jetzt C:\ftbl

ftp> bin

200 Type set to I.

ftp> mget *

200 Type set to I.

mget AM1.5_R6.5+6.6.EN? y

200 PORT command successful.

150 Opening BINARY mode data connection for AM1.5_R6.5+6.6.EN (923 bytes).

226 Transfer complete.

FTP: 923 Bytes empfangen in 0,01Sekunden 92,30KB/s

...

mget AMO_TEXT_AMPM_EV3.0.GER? y

200 PORT command successful.

150 Opening BINARY mode data connection for AMO_TEXT_AMPM_EV3.0.GER (12804 bytes).

226 Transfer complete.

FTP: 12804 Bytes empfangen in 0,20Sekunden 64,02KB/s

Attachments to the Installation Steps

mget AMO_TEXT_AMPM_UV1.0.ENG? y

200 PORT command successful.

150 Opening BINARY mode data connection for AMO_TEXT_AMPM_UV1.0.ENG (11791 bytes).

226 Transfer complete.

FTP: 11791 Bytes empfangen in 0,17Sekunden 69,36KB/s

mget AMO_TEXT_AMPM_UV1.0.GER? y

200 PORT command successful.

150 Opening BINARY mode data connection for AMO_TEXT_AMPM_UV1.0.GER (14191 bytes).

226 Transfer complete.

FTP: 14191 Bytes empfangen in 0,17Sekunden 83,48KB/s

...

mget AMPM_EV3.0.GE? y

200 PORT command successful.

150 Opening BINARY mode data connection for AMPM_EV3.0.GE (3881 bytes).

226 Transfer complete.

FTP: 3881 Bytes empfangen in 0,20Sekunden 19,41KB/s

...

mget AMPM_UV1.0.EN? y

200 PORT command successful.

150 Opening BINARY mode data connection for AMPM_UV1.0.EN (3589 bytes).

226 Transfer complete.

FTP: 3589 Bytes empfangen in 0,16Sekunden 22,29KB/s

mget AMPM_UV1.0.GE? y

200 PORT command successful.

150 Opening BINARY mode data connection for AMPM_UV1.0.GE (3599 bytes).

226 Transfer complete.

FTP: 3599 Bytes empfangen in 0,15Sekunden 23,99KB/s

...

mget PM_UV1.0.GE? y

200 PORT command successful.

150 Opening BINARY mode data connection for PM_UV1.0.GE (2836 bytes).

226 Transfer complete.

FTP: 2836 Bytes empfangen in 0,19Sekunden 14,93KB/s

ftp> bye

221-You have transferred 240352 bytes in 50 files.

221-Total traffic for this session was 250060 bytes in 51 transfers.

221-Thank you for using the FTP service on D7C001.

221 Goodbye.

Attachments to the Installation Steps

Connecting via FTP (2)

```
ftp> open 139.21.137.39
```

Verbindung mit 139.21.137.39 wurde hergestellt.

220- This system is monitored and evidence of criminal activity may be

220- reported to law enforcement officials.

220-

220-

220 HiPath FTP server ready

Benutzer (139.21.137.39:(none)): engr

331 Password required for engr.

Kennwort:

230 User engr logged in.

```
ftp> cd /opt/bin/tools
```

250 CWD command successful.

```
ftp> lcd c:\ftbl
```

Lokales Verzeichnis jetzt C:\ftbl

```
ftp> bin
```

200 Type set to I.

```
ftp> get TG_usage.zip
```

200 PORT command successful.

150 Opening BINARY mode data connection for TG_usage.zip (342407 bytes).

226 Transfer complete.

FTP: 342407 Bytes empfangen in 0,50Sekunden 684,81KB/s

```
ftp> bye  
221-You have transferred 342407 bytes in 1 files.  
221-Total traffic for this session was 342931 bytes in 1 transfers.  
221-Thank you for using the FTP service on server.  
221 Goodbye.
```

Connecting via FTP (3)

```
ftp> open 139.21.137.39  
Verbindung mit 139.21.137.39 wurde hergestellt.  
  
220- This system is monitored and evidence of criminal activity may be  
220- reported to law enforcement officials.  
220-  
220-  
220 HiPath FTP server ready  
Benutzer (139.21.137.39:(none)): engr  
331 Password required for engr.  
Kennwort:  
230 User engr logged in.  
ftp> cd /home/engr  
250 CWD command successful.  
ftp> lcd C:\ftbl\TG_usage  
Lokales Verzeichnis jetzt C:\ftbl\TG_usage  
  
ftp> put LOAD_FILE.XIE
```

Attachments to the Installation Steps

200 PORT command successful.

150 Opening ASCII mode data connection for LOAD_FILE.XIE.

226 Transfer complete.

FTP: 462 Bytes gesendet in 0,00Sekunden 462000,00KB/s

ftp> bye

221-You have transferred 462 bytes in 1 files.

221-Total traffic for this session was 963 bytes in 1 transfers.

221-Thank you for using the FTP service on server.

221 Goodbye.

Connecting via Telnet (1)

login: engr

Password:

Open UNIX 8.0.0

server

Copyright (c) 1976-2001 Caldera International, Inc. and its suppliers.

All Rights Reserved.

RESTRICTED RIGHTS LEGEND:

When licensed to a U.S., State, or Local Government, all Software produced by Caldera International is commercial computer software as defined in FAR 12.212, and has been developed exclusively at private expense. All technical data, or Caldera International commercial computer software/documentation is subject to the provisions of

FAR 12.211 - "Technical Data", and FAR 12.212 - "Computer Software" respectively, or clauses providing Caldera International equivalent protections in DFARS or other agency specific regulations.

Manufacturer: Caldera International, Inc.,
240 West Center Street, Orem, UT 84057.

Last login: Thu Feb 20 12:53:38 2003 on pts004

You have mail

```
# cd /opt/informix
# . ./ids_env_var
# dbaccess
```

DBACCESS: Query-language Connection Database Table Session Exit
Use SQL query language.

----- Press CTRL-W for Help -----

SELECT DATABASE >>

Select a database with the Arrow Keys, or enter a name, then press Return.

----- Press CTRL-W for Help -----

cdb@online

logmdb@online

Attachments to the Installation Steps

```
sysmaster@online
```

```
sysutils@online
```

```
SQL:  New  Run  Modify  Use-editor  Output  Choose  Save  Info  Drop  Exit
```

```
Enter new SQL statements using SQL editor.
```

```
----- cdb@online ----- Press CTRL-W for Help -----
```

```
NEW:   ESC      = Done editing      CTRL-A = Typeover/Insert      CTRL-R = Redraw
```

```
      CTRL-X = Delete character  CTRL-D = Delete rest of line
```

```
----- cdb@online ----- Press CTRL-W for Help -----
```

```
load from "/home/engr/LOAD_FILE.XIE" insert into col_trunk
```

```
28 row(s) loaded.
```

```
SQL:  New  Run  Modify  Use-editor  Output  Choose  Save  Info  Drop  Exit
```

```
Run the current SQL statements.
```

DBACCESS: Query-language Connection Database Table Session Exit

Use SQL query language.

----- cdb@online ----- Press CTRL-W for Help -----

Database closed

#

ADD-

FBTN:TBL=TRKNO,LTG=99,LTU=1,SLOT=1,CCT=1,BCHAN=1,VTRKNO=111111;

Example for setting up line trunk group 99 in the trunk group:

```
ADD-FBTN:TBL=TRKNO,LTG=99,LTU=1,SLOT=1,CCT=1,BCHAN=1,VTRKNO=111111;
ADD-FBTN:TBL=TRKNO,LTG=99,LTU=1,SLOT=1,CCT=1,BCHAN=1,VTRKNO=111111;
H500: AMO FBTN STARTED
      AMO-FBTN -111      ADMINISTRATION OF THE FLAG BYTE AND TRUNK NUMBER TABLES
ADD COMPLETED;
```

Click [here](#) to see an example of the corresponding query.

DISPLAY-FBTN:TAB=TN;

Example for interrogating the trunk number table:

DISPLAY-FBTN:TBL=TRKNO;

DISPLAY-FBTN:TBL=TRKNO;

H500: AMO FBTN STARTED

TRUNK-NUMBER-TABLE

ENTRY	LTG	LTU	SLOT	CCT	ISDN-B-CHANNEL	VIRT.TRUNK CIRC. NO
1	1	2	55	0	1 -2	01025500

Attachments to the Installation Steps
Examples: B01 - B71

2	1	2	55	1	1 -2	01025501
3	1	2	55	2	1 -2	01025502
4	1	2	55	3	1 -2	01025503
5	1	2	55	4	1 -2	01025504
6	1	2	55	5	1 -2	01025505
7	1	2	55	6	1 -2	01025506
8	1	2	55	7	1 -2	01025507
9	99	1	1	1	0	99999
10	99	1	1	1	1	111111

AMO-FBTN -111 ADMINISTRATION OF THE FLAG BYTE AND TRUNK NUMBER TABLES

DISPLAY COMPLETED;

9.2 Examples: B01 - B71

- [Example: B01](#)
- [Example: B02](#)
- [Example: B03](#)
- [Example: B04](#)
- [Example: B05](#)
- [Example: B06](#)
- [Example: B07](#)
- [Example: B08](#)
- [Example: B09](#)
- [Example: B10](#)
- [Example: B11](#)
- [Example: B12](#)
- [Example: B13](#)
- [Example: B14](#)
- [Example: B15](#)
- [Example: B16](#)
- [Example: B17](#)
- [Example: B18](#)

Example: B19

Example: B20

Example: B21

Example: B22

Example: B23

Example: B24

Example: B25

Example: B26

Example: B27

Example: B28

Example: B29

Example: B30

Example: B31

Example: B32

Example: B33

Example: B34

Example: B35

Example: B36

Example: B37

Example: B38

Example: B39

Example: B41

Example: B41

Example: B42

Example: B43

Example: B44

Example: B45

Example: B46

Example: B47

Example: B48

Example: B49

Example: B50

Example: B51

Example: B52

Example: B53

Example: B54

Example: B55

Attachments to the Installation Steps

[Example: B56](#)

[Example: B57](#)

[Example: B58](#)

[Example: B59](#)

[Example: B60](#)

[Example: B61](#)

[Example: B62](#)

[Example: B63](#)

[Example: B64](#)

[Example: B65](#)

[Example: B66](#)

[Example: B67](#)

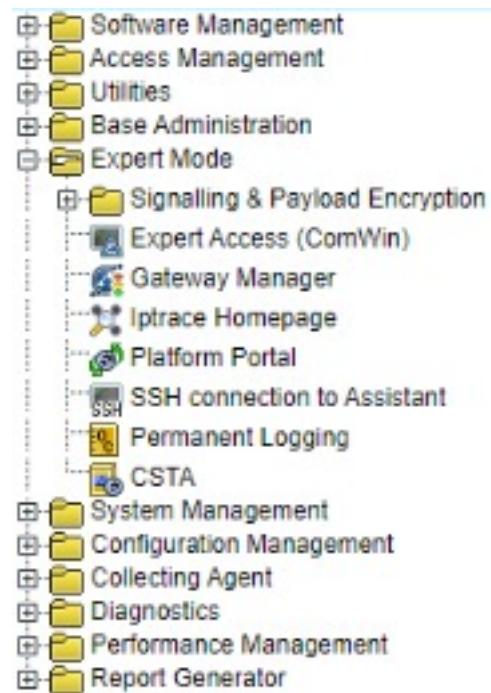
[Example: B68](#)

[Example: B69](#)

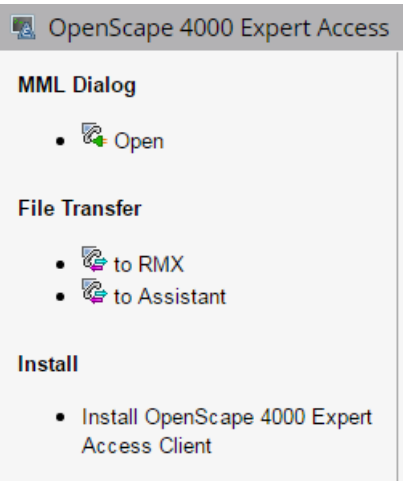
[Example: B70](#)

[Example: B71](#)

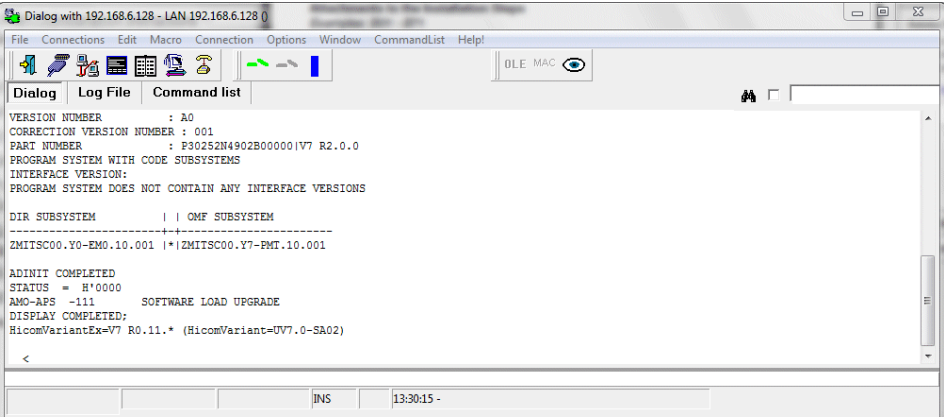
Example: B01



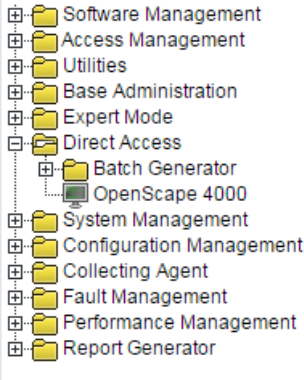
Example: B02



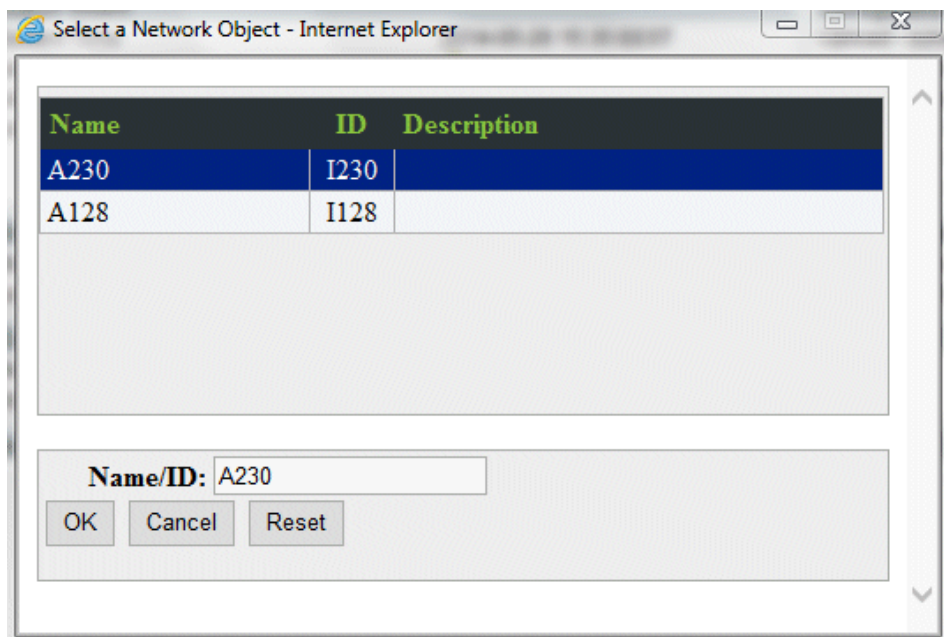
Example: B03



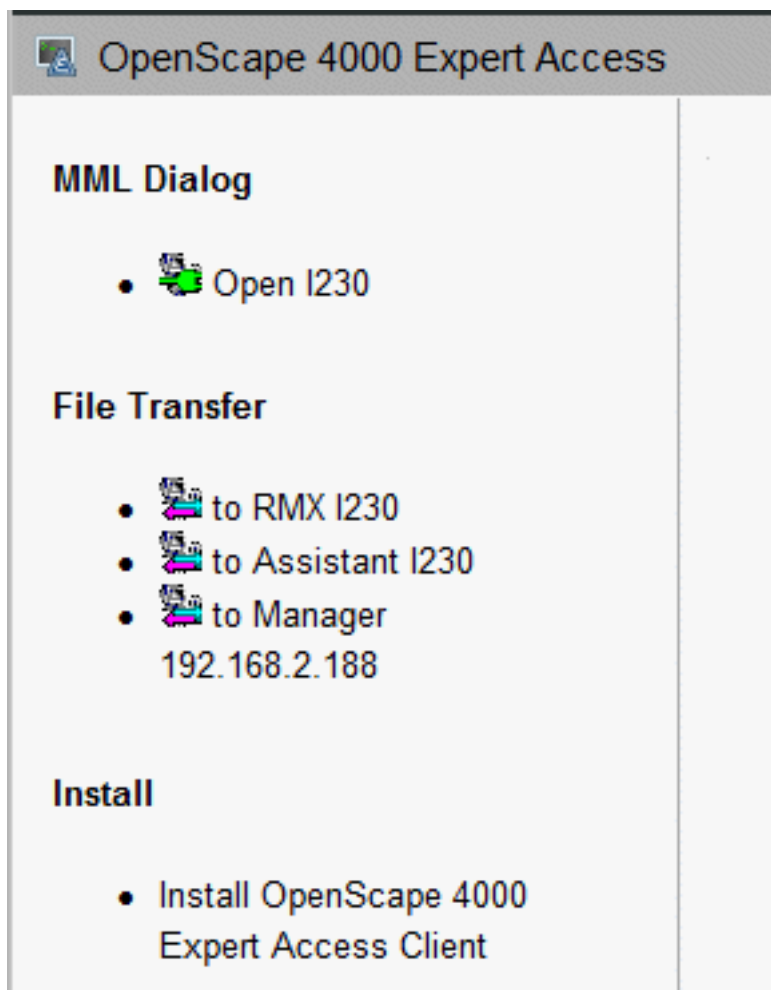
Example: B04



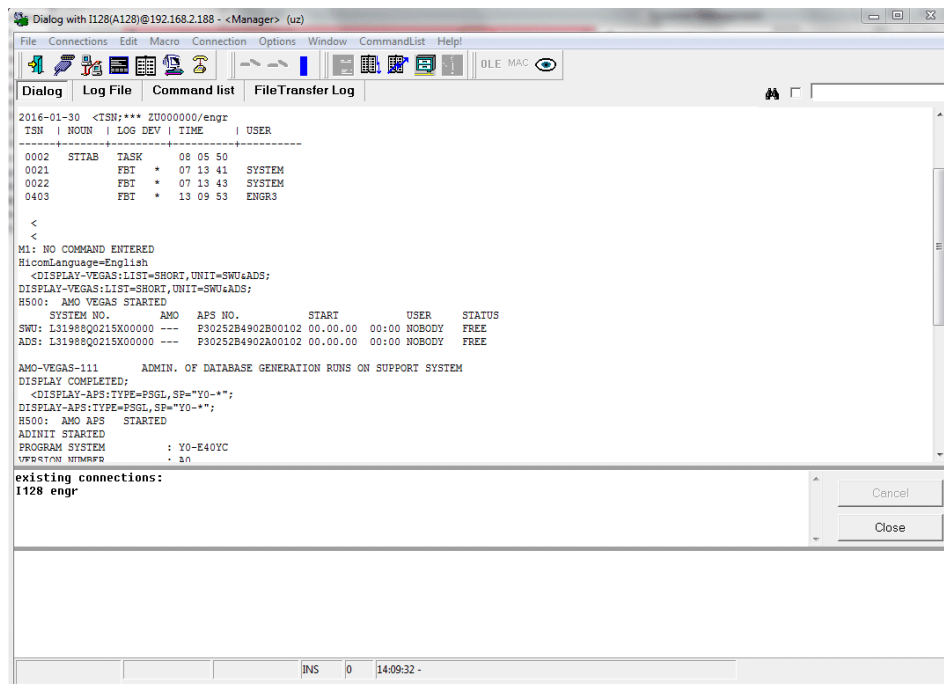
Example: B05



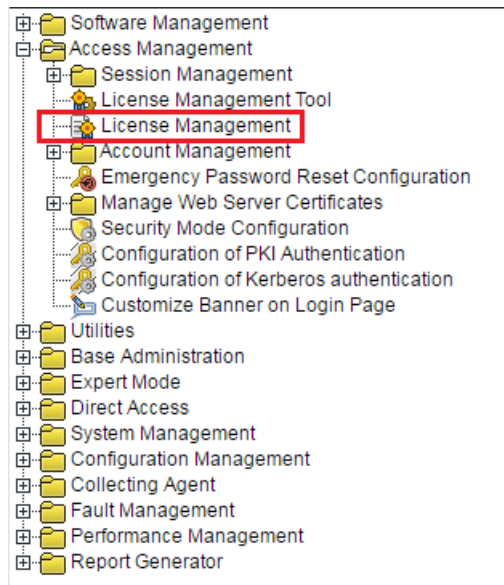
Example: B06



Example: B07



Example: B08



Example: B09

 License Management

Upload License File on local CLA server

Choose File

No file chosen

Send

Configure CLA IP-Address/DNS Name

Send

[Display CLA IP-Address/DNS Name](#)

[Display Installed License data](#)

[Display license details](#)

Configure License Warning Level

99 %

Send

Example: B10

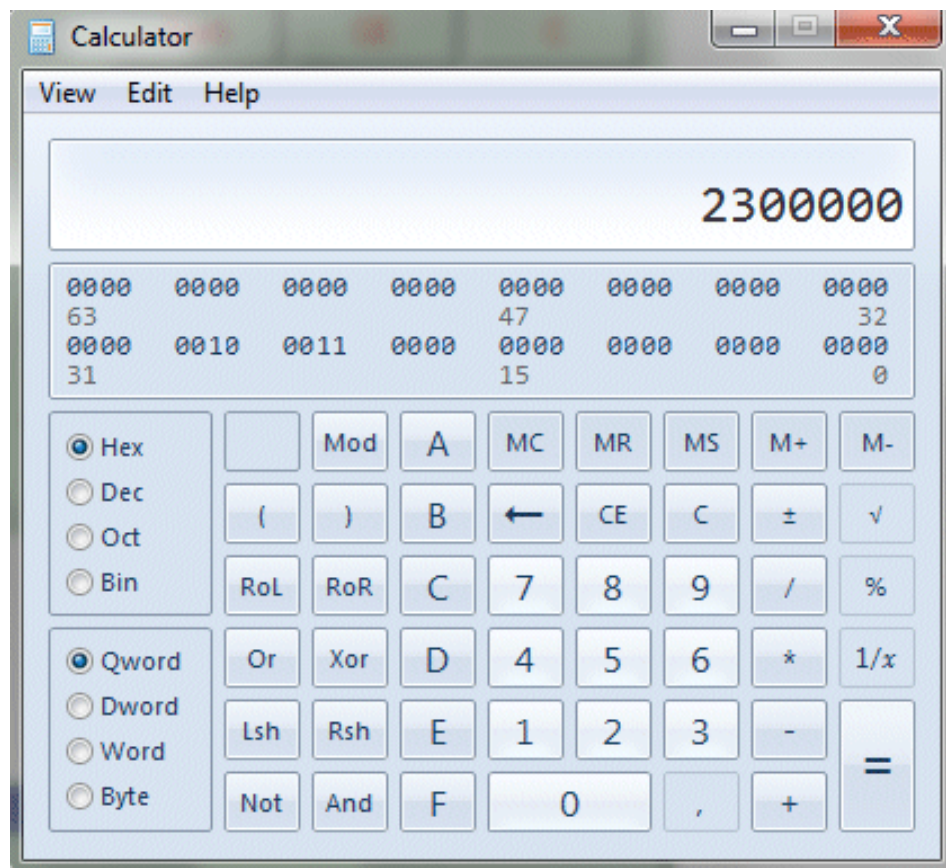
OpenScape 4000	Test stage details created on 2022-03-01 12:09:20			SLES Upgrade Protection	F2		
License Version	1.0	V10 (ID:13411305)		Licensed		Used value	Validity
Advanced Locking	CC-AP for AP Emergency (IPDA only)	-NWDNLP+PYEDVSHKRVFNND		10		2	until 31.12.2022
Used Network Mode	Trunk/Network	58		Details of SLES Upgrade Protection license count			
OpenScape 4000				OpenScape 4000 Host system			1
Assistant applications	Yes			CC-AP for AP Emergency (IPDA only)			0
PhoneMaster (J-HPT)	Yes			Softgate (including OpenScape Access)			2
				STMM board			2
				OpenScape Enterprise Gateway			2
OpenScape 4000 RMX	F2	Licensed		Used Value			Validity
System Number		L3195500510X00000		L3195500510X00000			
Support contract				33 (counted at: Tue Mar 1 12:09:20 2022)			305 days
File	6000			25 (counted at: Tue Mar 1 12:09:20 2022)			305 days
TDM (Analog, UpdE, ISDN, Cordless, PSM, PSE devices)	6000			0			305 days
OpenScape Mobile	9			0			305 days
Duplex	Yes			Yes			305 days
Upload License File on local CLA server:							
Choose File No file chosen Upload License							

426

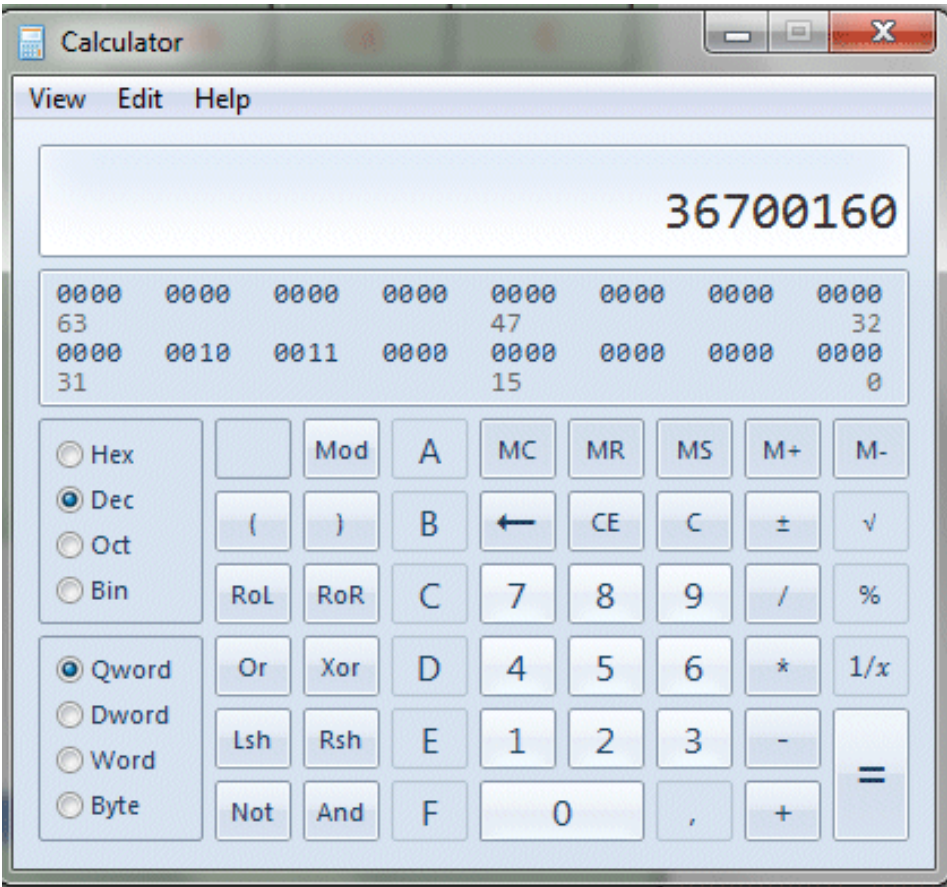
OpenScape 4000 Assistant/Manager, Collecting Agent / HiPath COL, Administrator Documentation

P31003-H34B0-M118-01-76A9, 08/2024

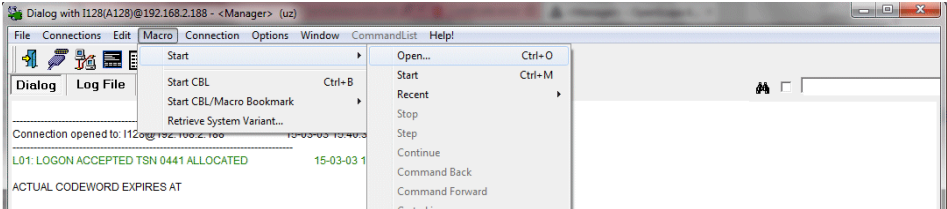
Example: B11



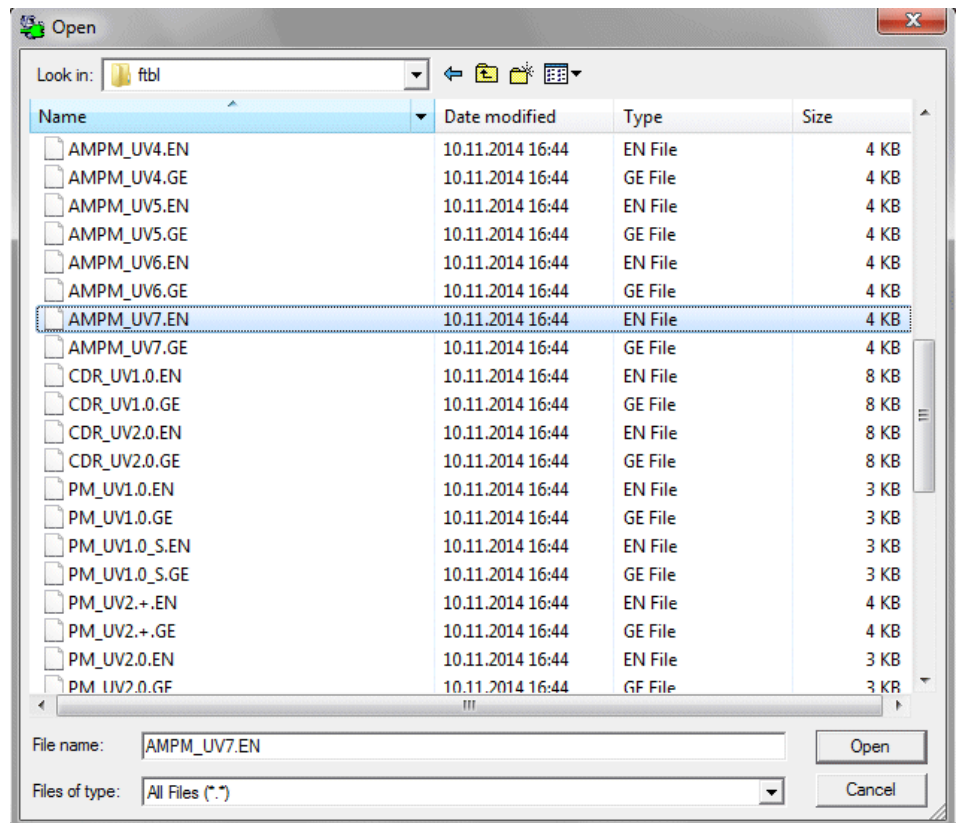
Example: B12



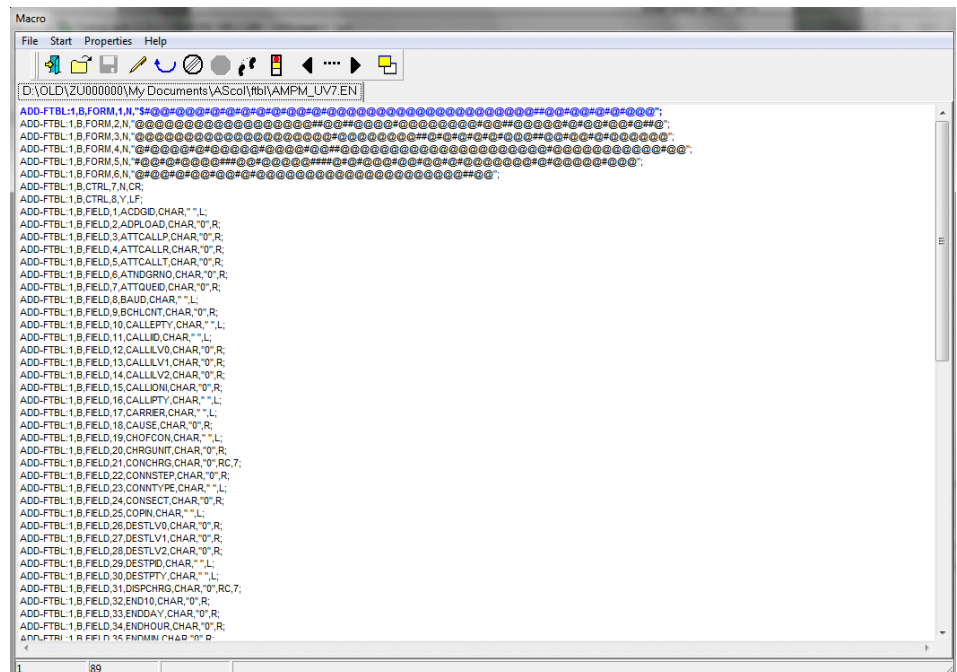
Example: B13



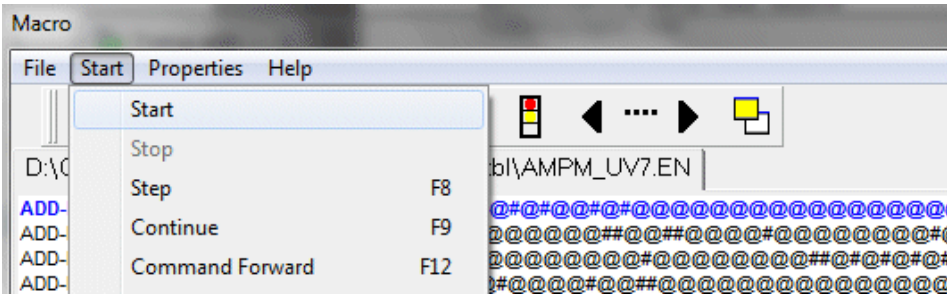
Example: B14



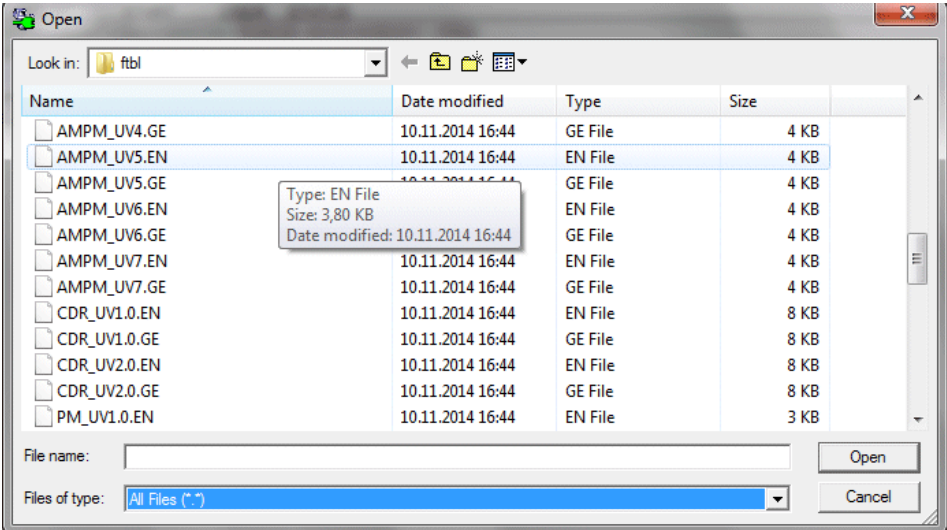
Example: B15



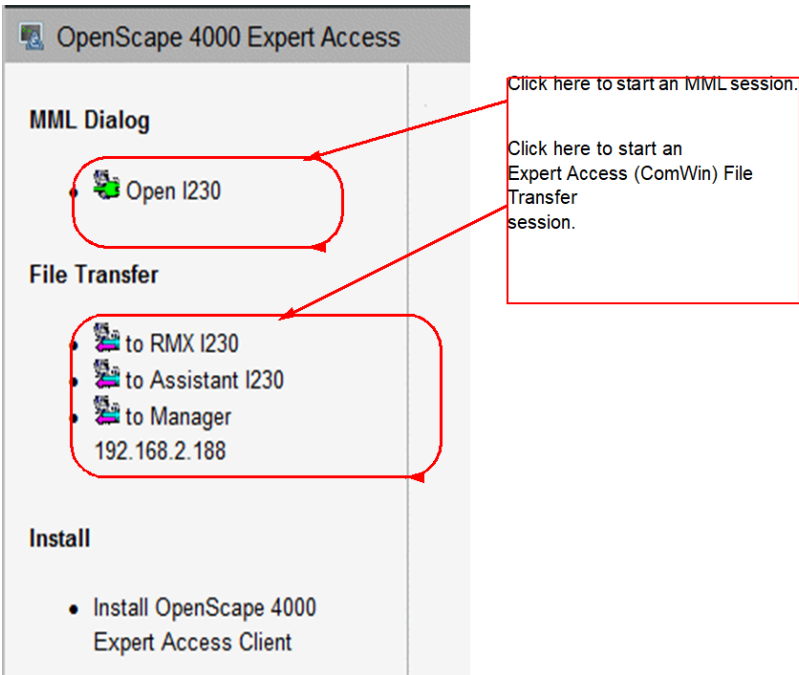
Example: B16



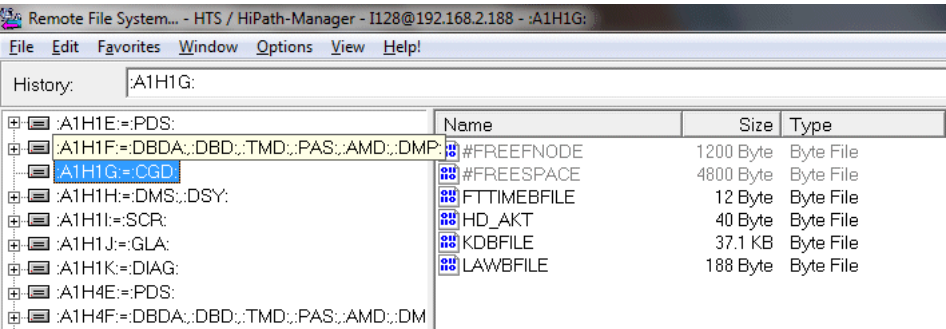
Example: B17



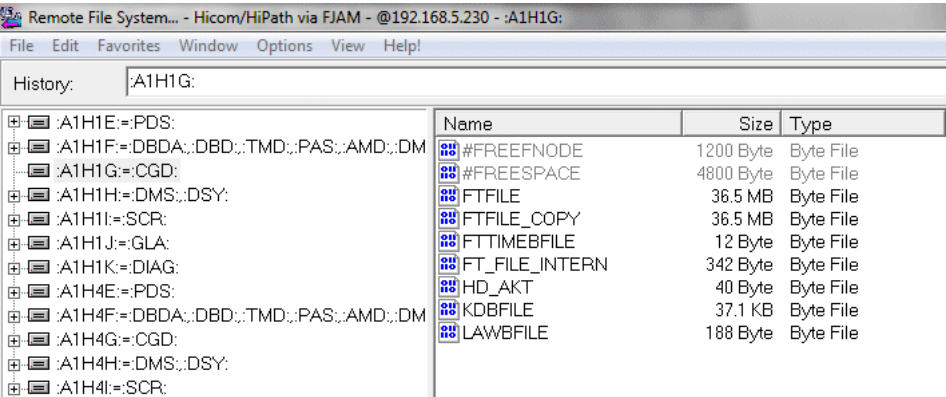
Example: B18



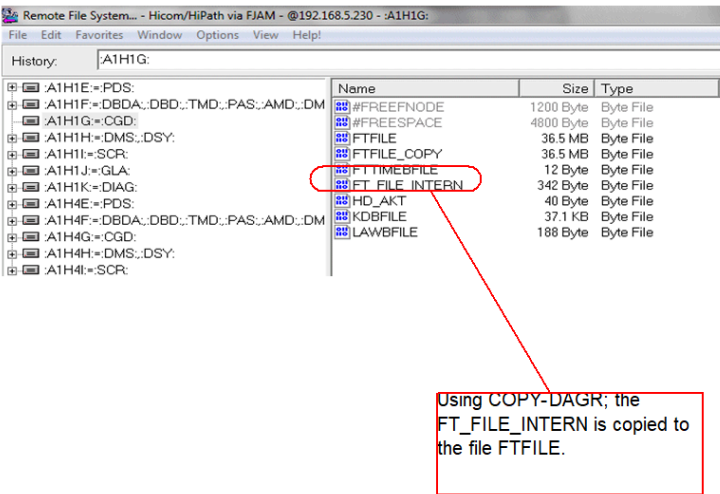
Example: B19



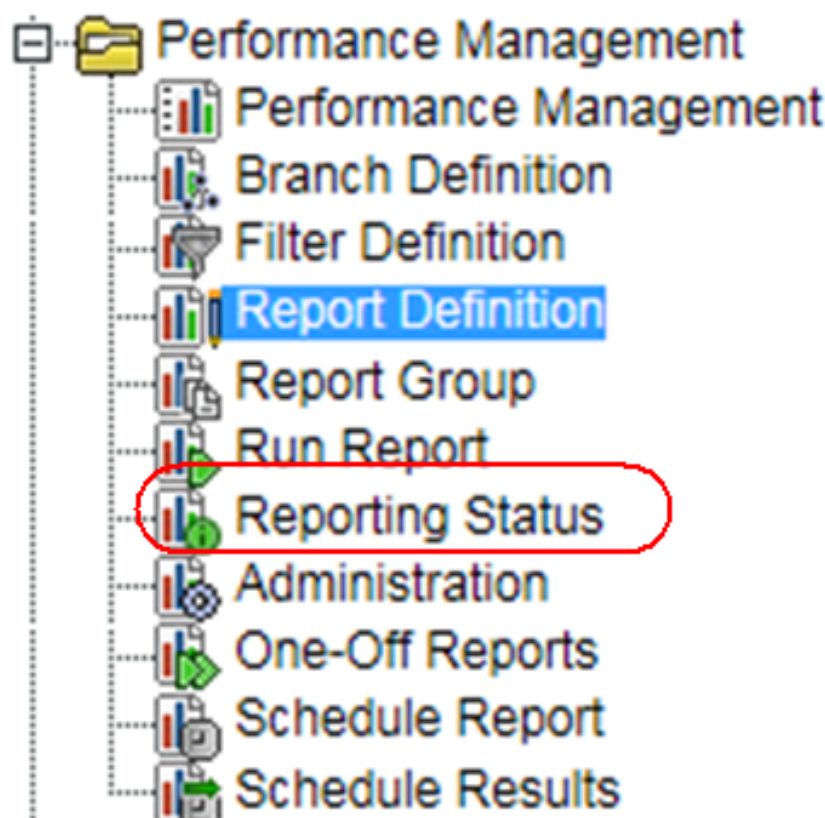
Example: B20



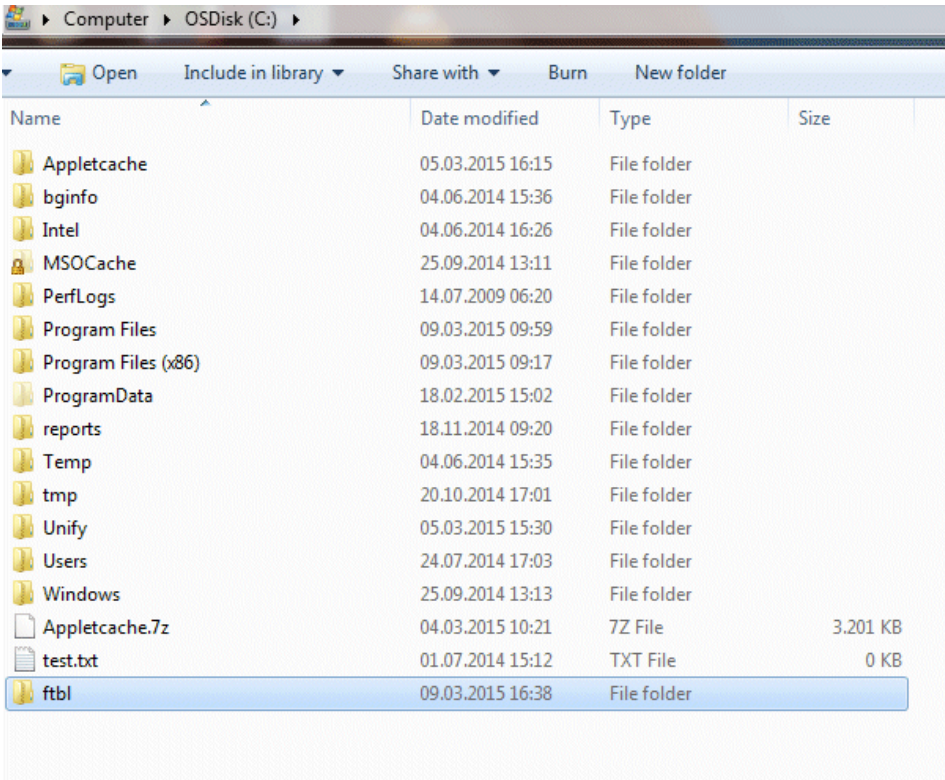
Example: B21



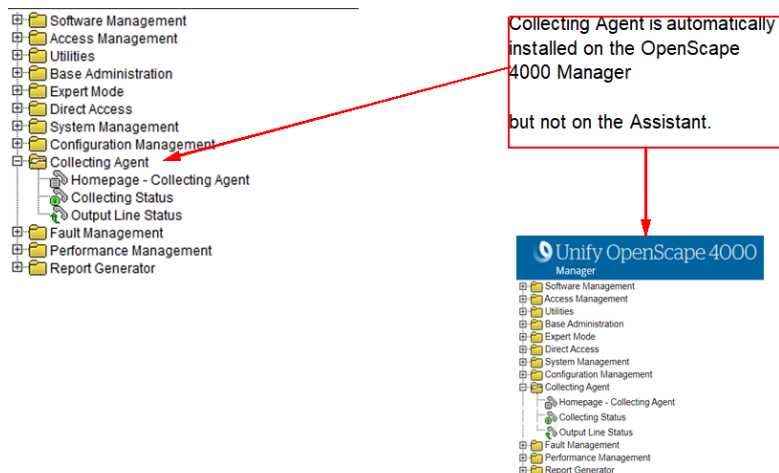
Example: B22



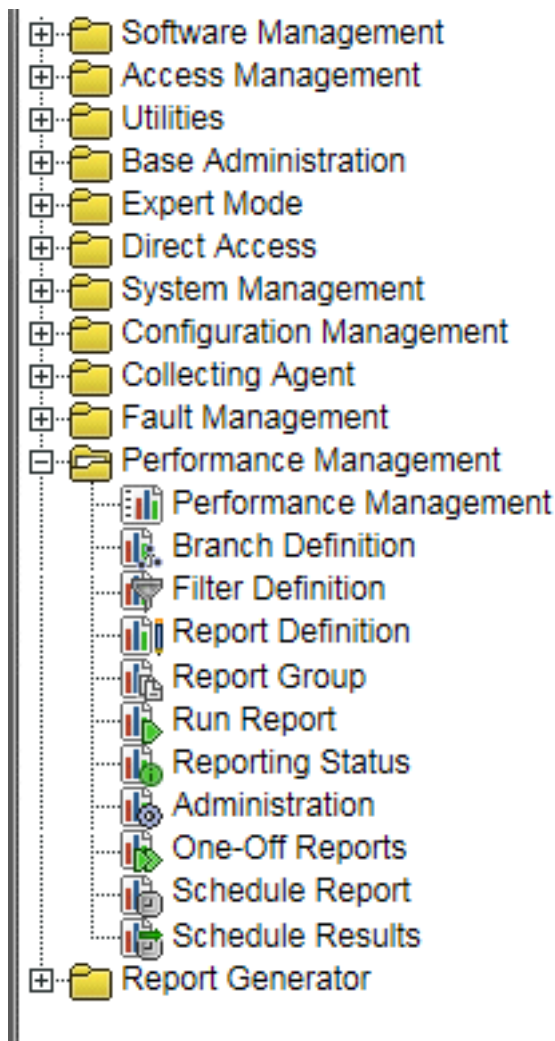
Example: B23



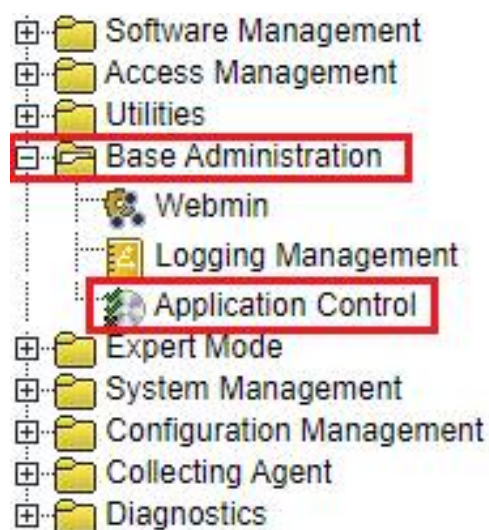
Example: B24



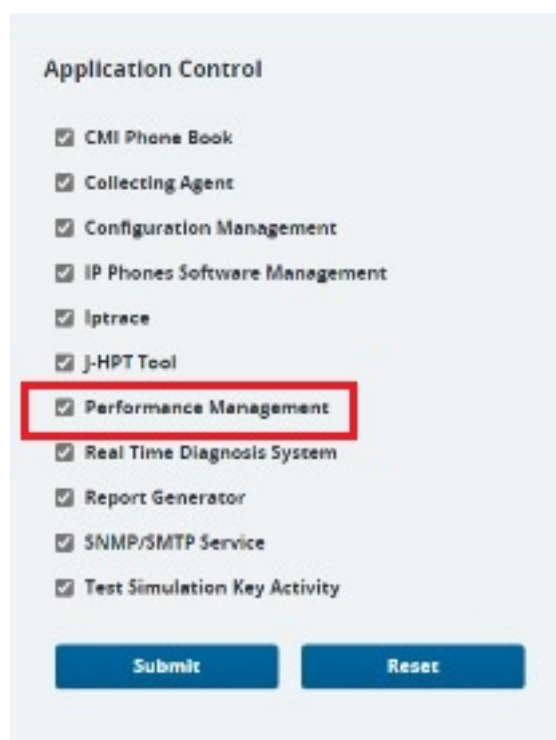
Example: B25



Example: B26



Example: B27



Example: B28

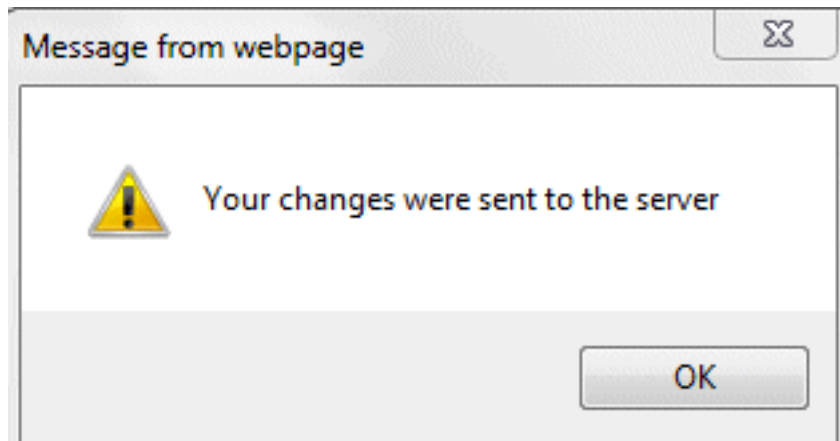


Application Control

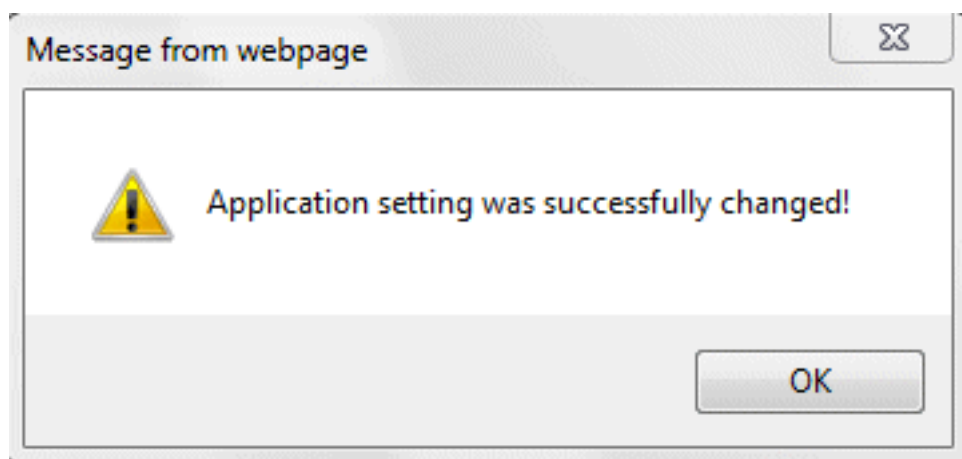
- ☒ CMI Phone Book
- ☒ **Collecting Agent**
- ☒ Configuration Management
- ☒ IP Phones Software Management
- ☒ Iptrace
- ☒ J-HPT Tool
- ☒ Performance Management
- ☒ Real Time Diagnosis System
- ☒ Report Generator
- ☒ SNMP/SMTP Service
- ☒ Test Simulation Key Activity

Submit Reset

Example: B29



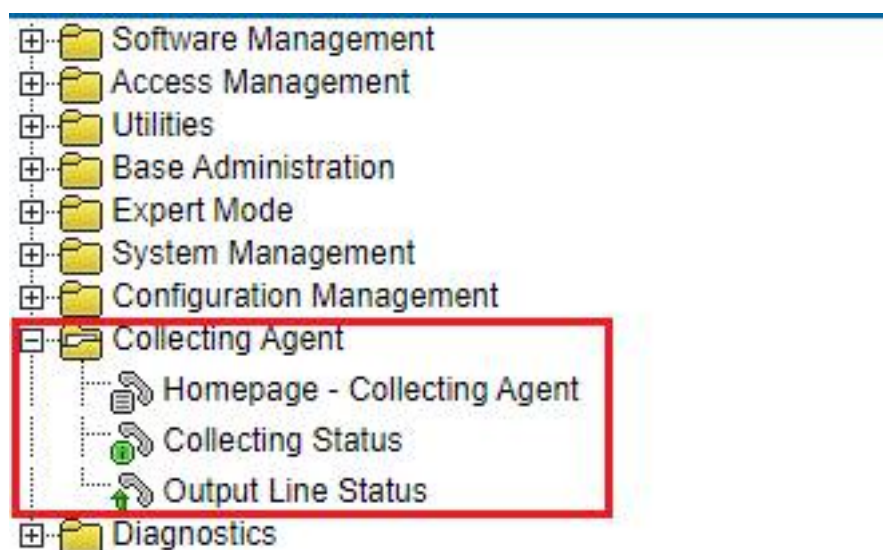
Example: B30



Example: B31



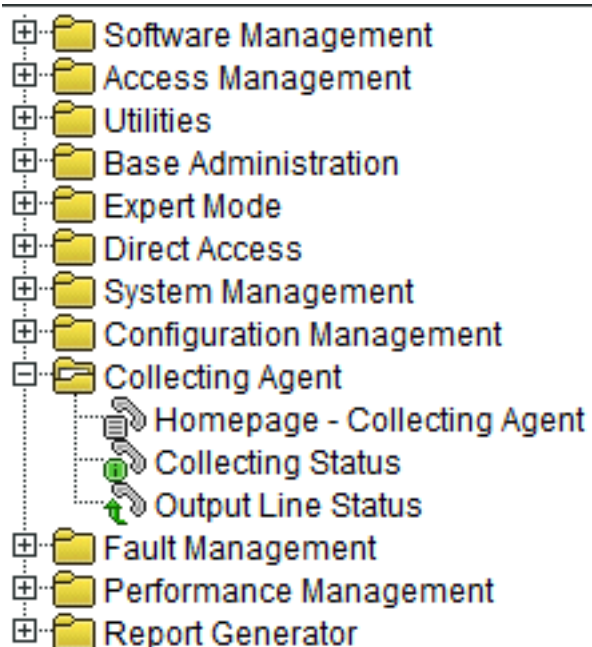
Example: B32



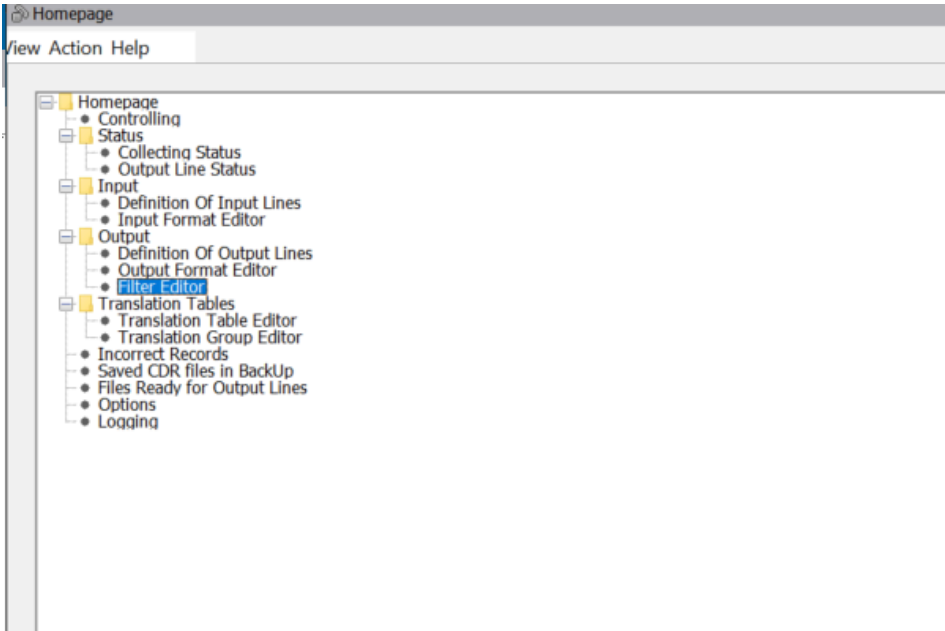
Example: B33



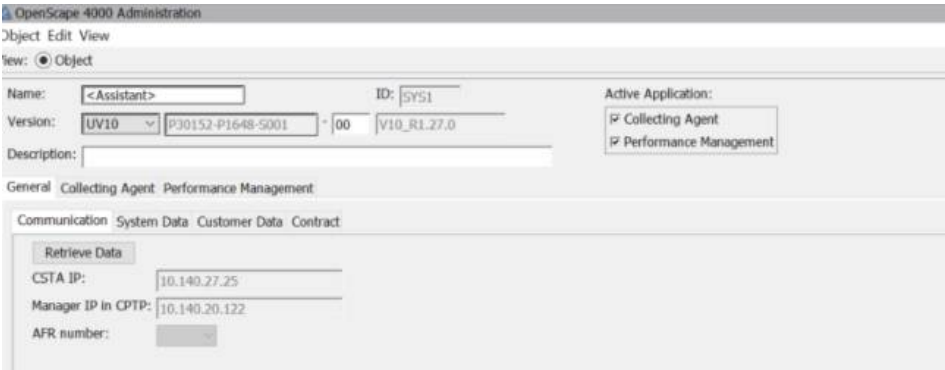
Example: B34



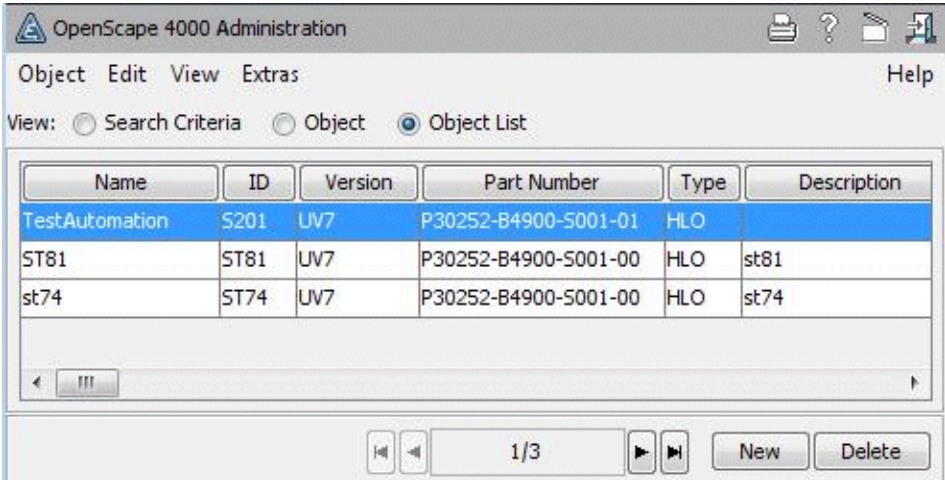
Example: B35



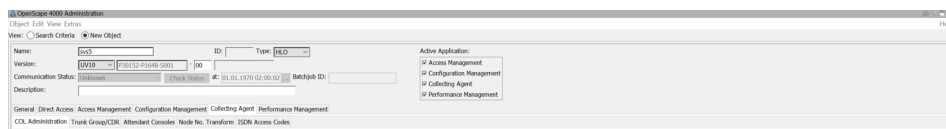
Example: B36



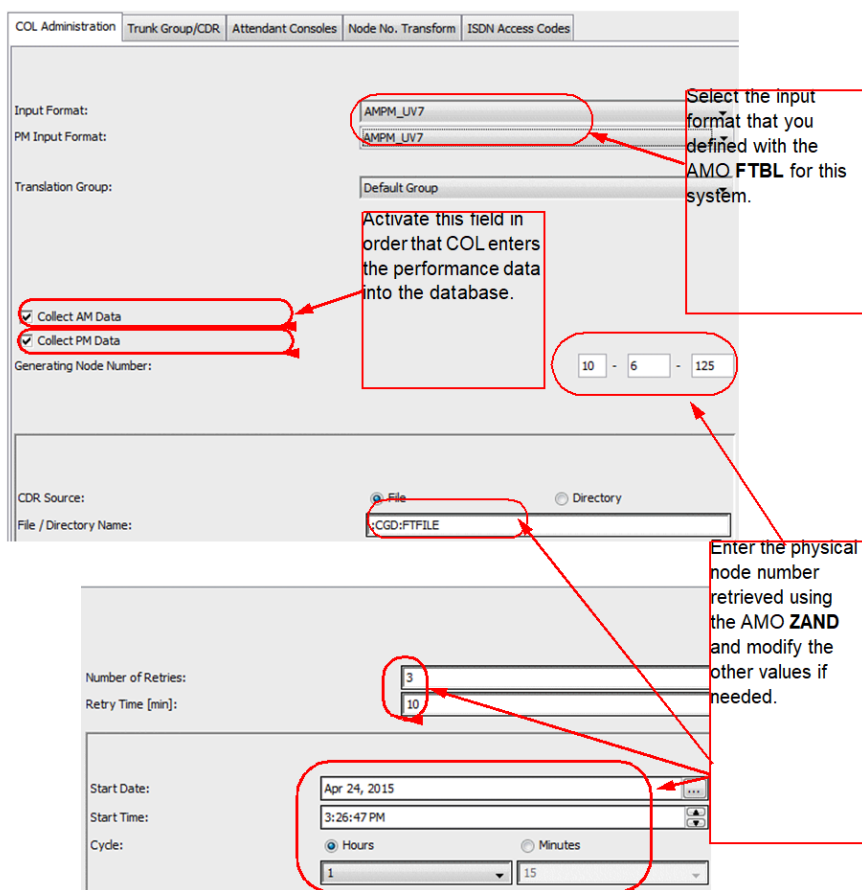
Example: B37



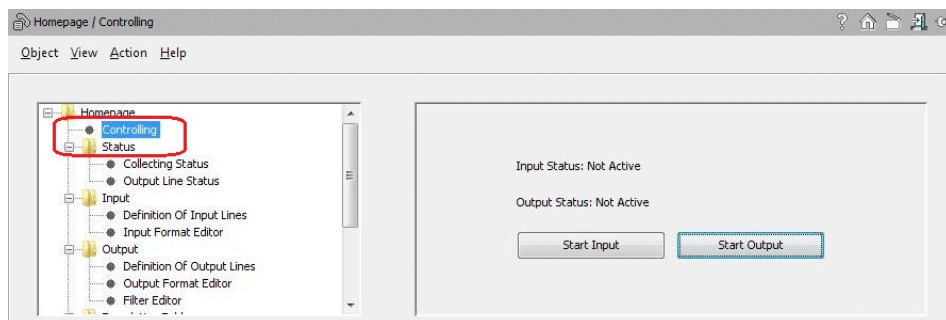
Example: B38



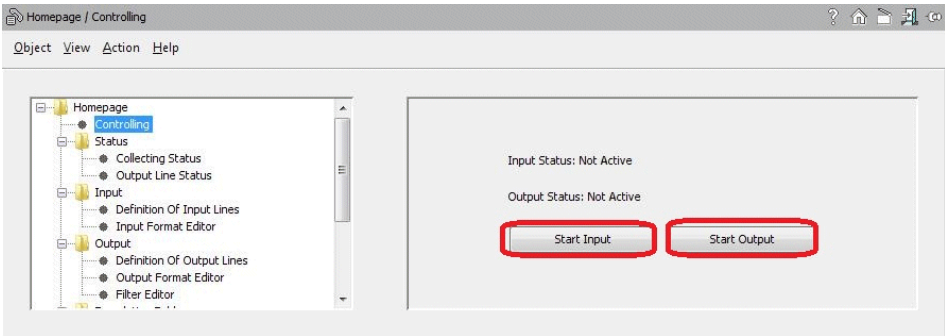
Example: B39



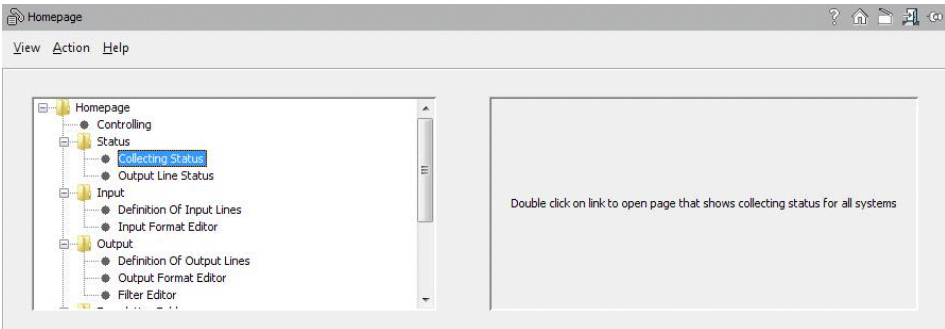
Example: B41



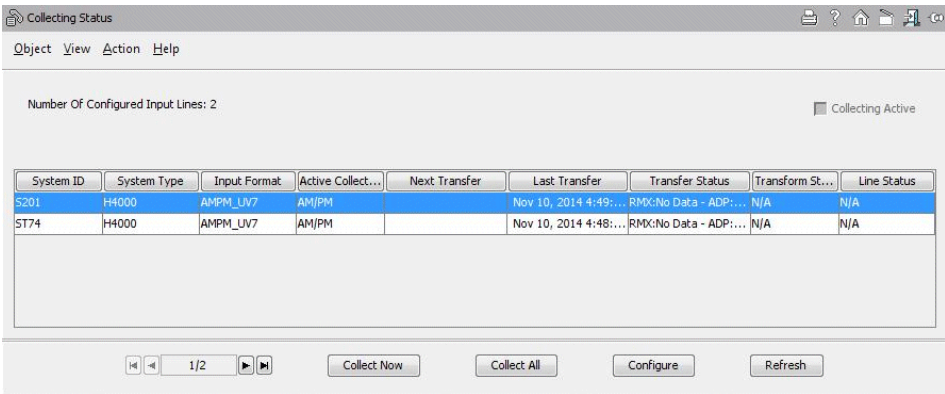
Example: B42



Example: B43



Example: B44



Example: B45

If the status in the **Transfer Status** column is set to "Error" this means that a transfer problem has occurred.
If the status in the **Transform Status** column is set to "Error" this means that the COL input format and the FORM table of the selection group (see FTBL file) are not identical. The data will then be stored as "incorrect records" and can be re-sent to the input or deleted after the COL input format has been corrected.

Collecting Status

Object View Action Help

Number Of Configured Input Lines: 2

Collecting Active

System ID	System Type	Input Format	Active Collect...	Next Transfer	Last Transfer	Transfer Status	Transform St...	Line Status
S201	H4000	AMPM_UV7	AM/PM		Nov 10, 2014 4:49:...	RMX:No Data - ADP:...	N/A	N/A
ST74	H4000	AMPM_UV7	AM/PM		Nov 10, 2014 4:48:...	RMX:No Data - ADP:...	N/A	N/A

1/2

Collect Now

Collect All

Configure

Refresh

Example: B46

+

 Software Management

+

 Access Management

+

 Utilities

+

 Base Administration

-

 Expert Mode

- SSH

 SSH connection to Manager

+

 Direct Access

+

 System Management

+

 Configuration Management

+

 Collecting Agent

+

 Fault Management

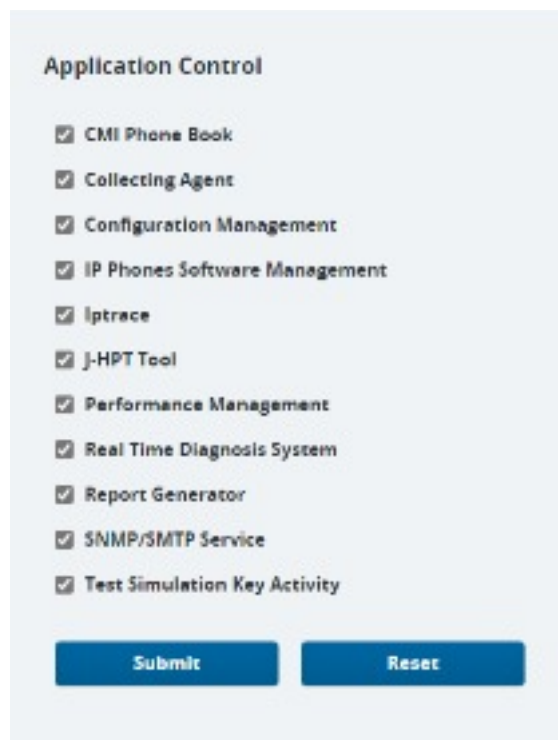
+

 Performance Management

+

 Report Generator

Example: B47

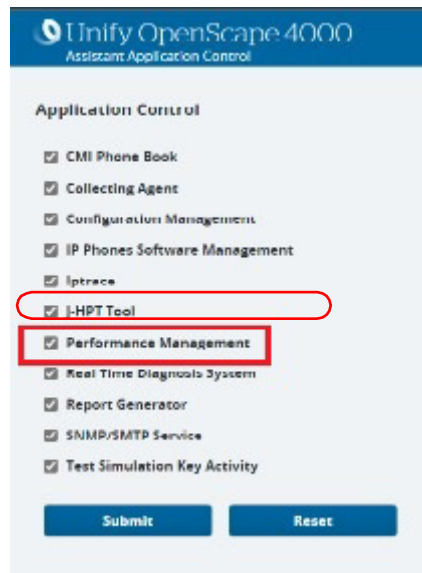


Application Control

- ☒ CMI Phone Book
- ☒ Collecting Agent
- ☒ Configuration Management
- ☒ IP Phones Software Management
- ☒ Iptrace
- ☒ J-HPT Tool
- ☒ Performance Management
- ☒ Real Time Diagnosis System
- ☒ Report Generator
- ☒ SNMP/SMTP Service
- ☒ Test Simulation Key Activity

Submit **Reset**

Example: B48



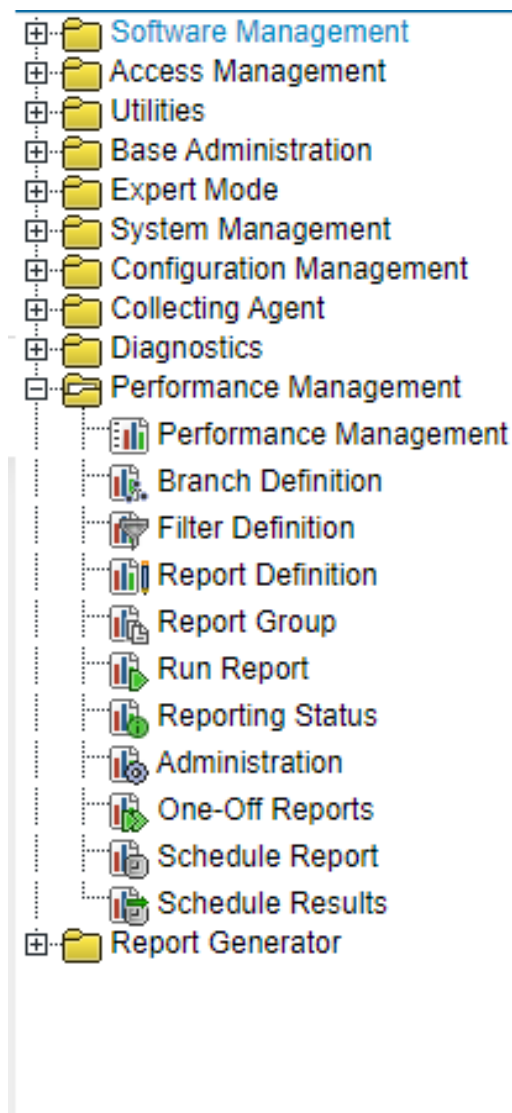
Unify OpenScope 4000
Assistant Application Control

Application Control

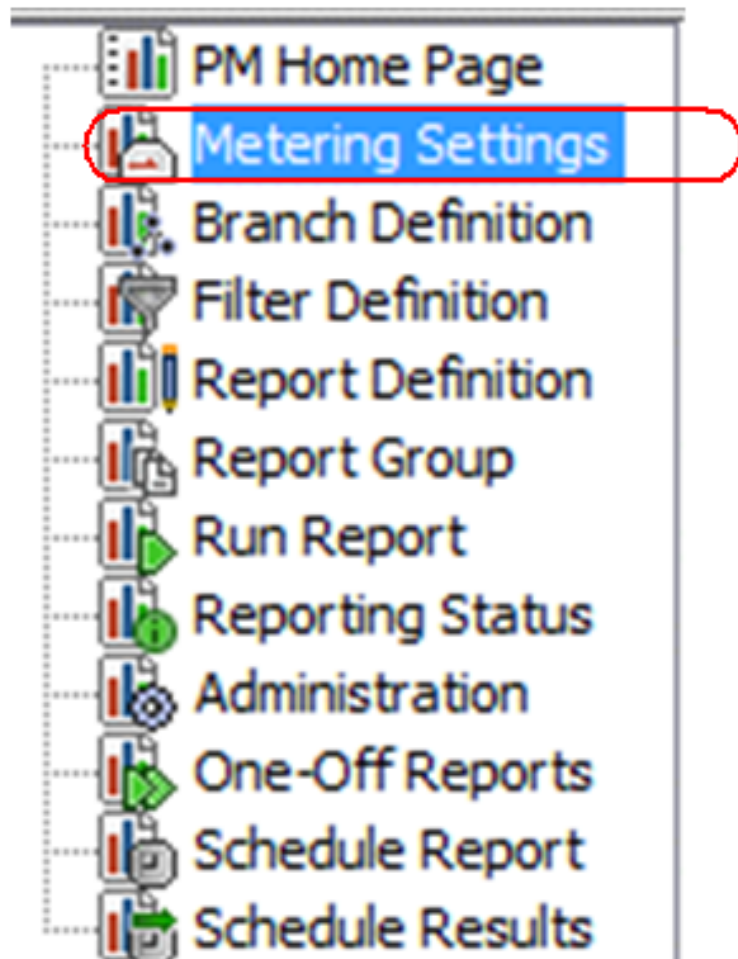
- ☒ CMI Phone Book
- ☒ Collecting Agent
- ☒ Configuration Management
- ☒ IP Phones Software Management
- ☒ Iptrace
- ☒ J-HPT Tool
- ☒ Performance Management
- ☒ Real Time Diagnosis System
- ☒ Report Generator
- ☒ SNMP/SMTP Service
- ☒ Test Simulation Key Activity

Submit **Reset**

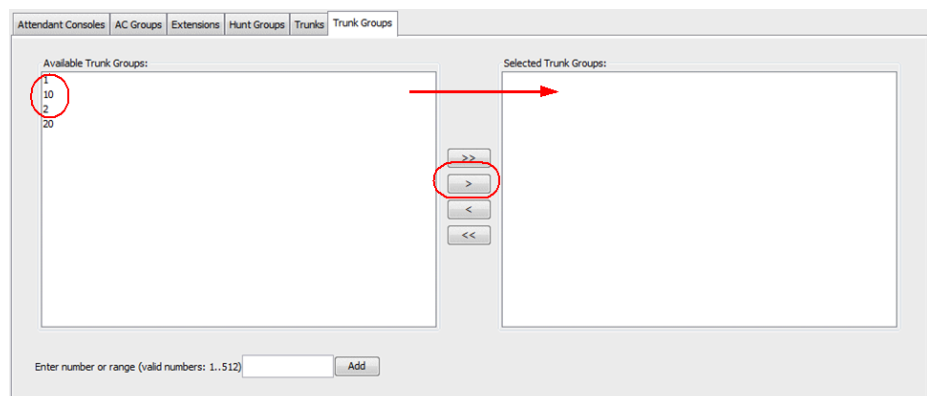
Example: B49



Example: B51



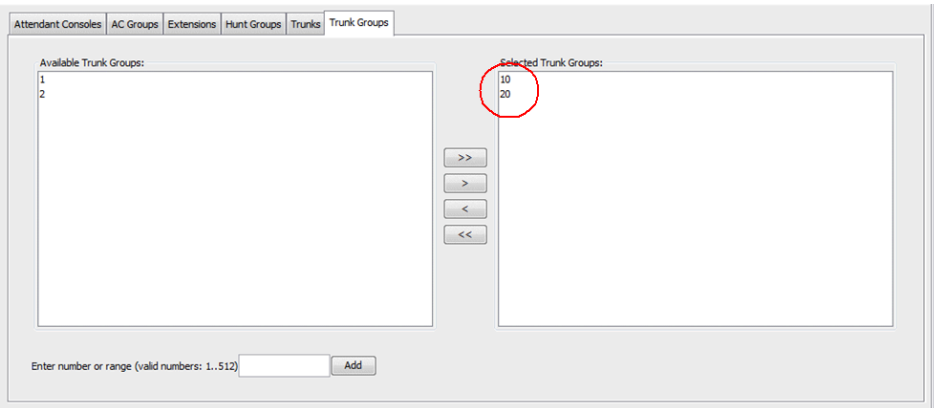
Example: B52



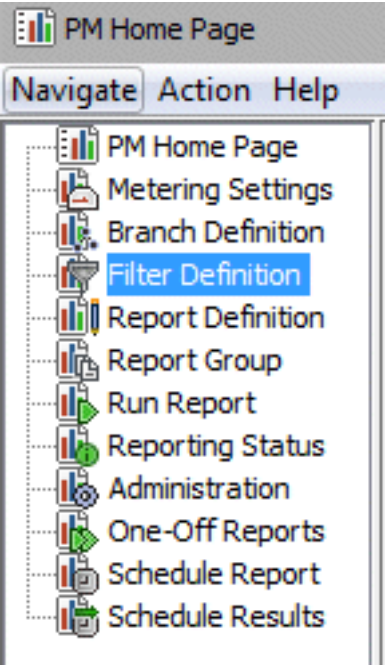
Select the objects to be metered (extensions, external lines, trunk groups etc.) in the left hand side pane and move the selected objects to the right hand side pane by clicking the ">" button.

[next](#)

Example: B53

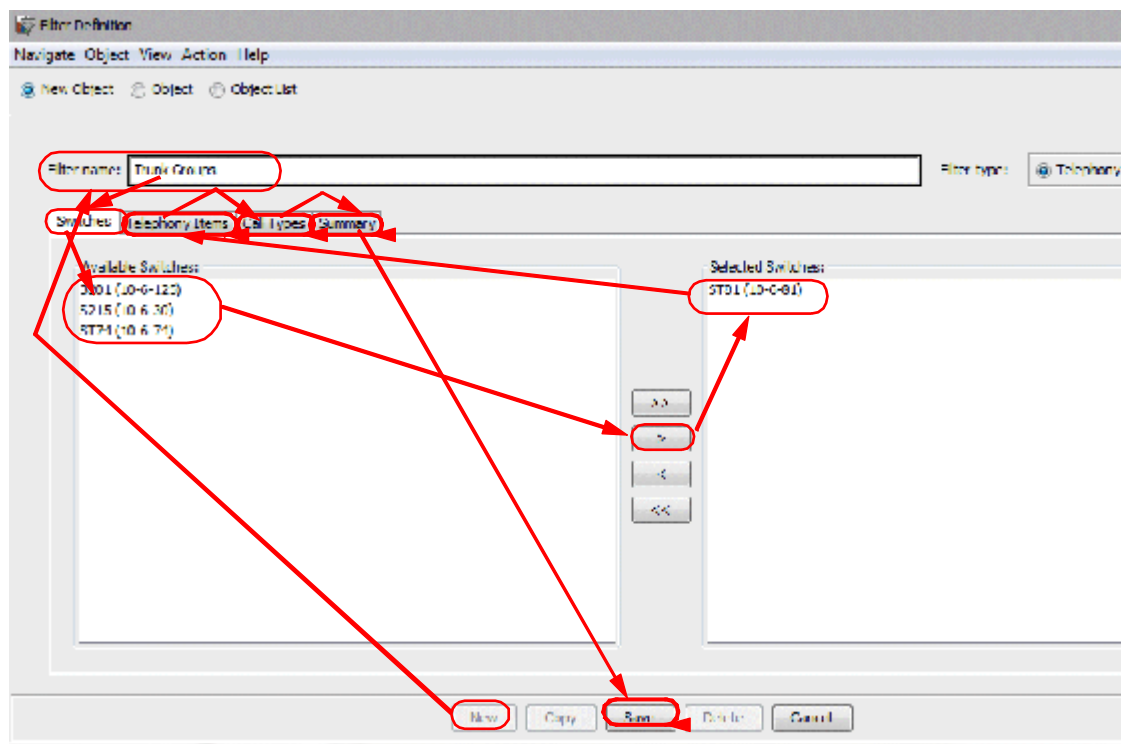


Example: B54



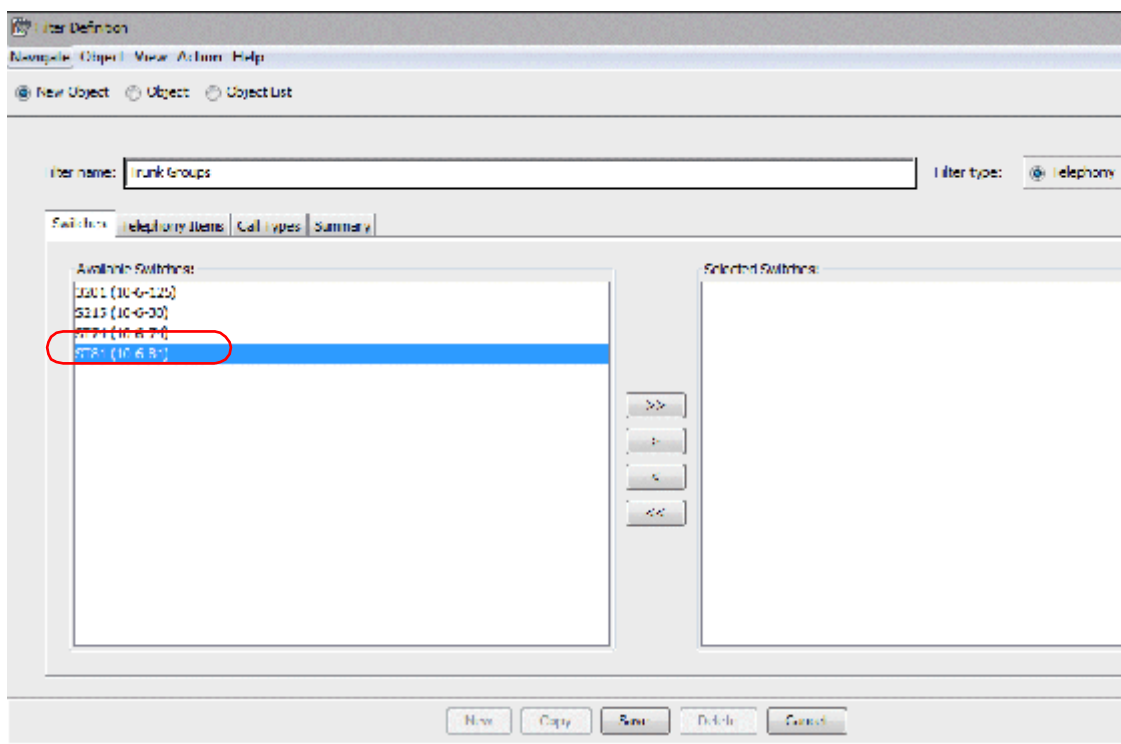
[next](#)

Example: B55



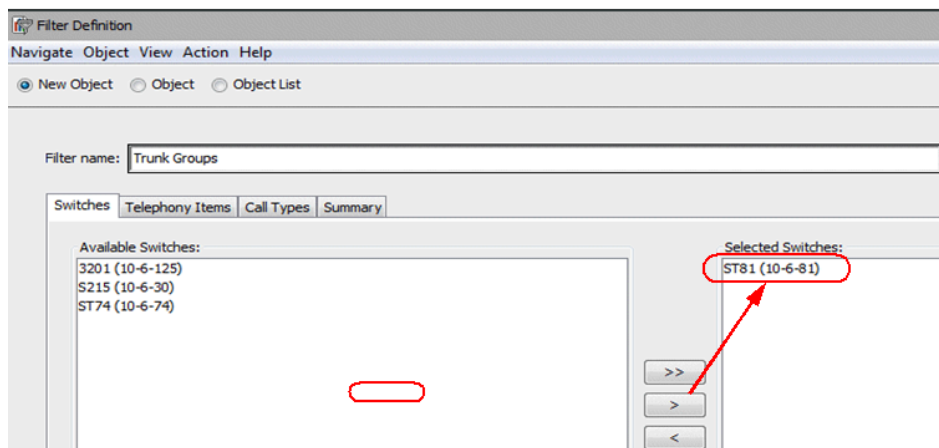
next

Example: B56



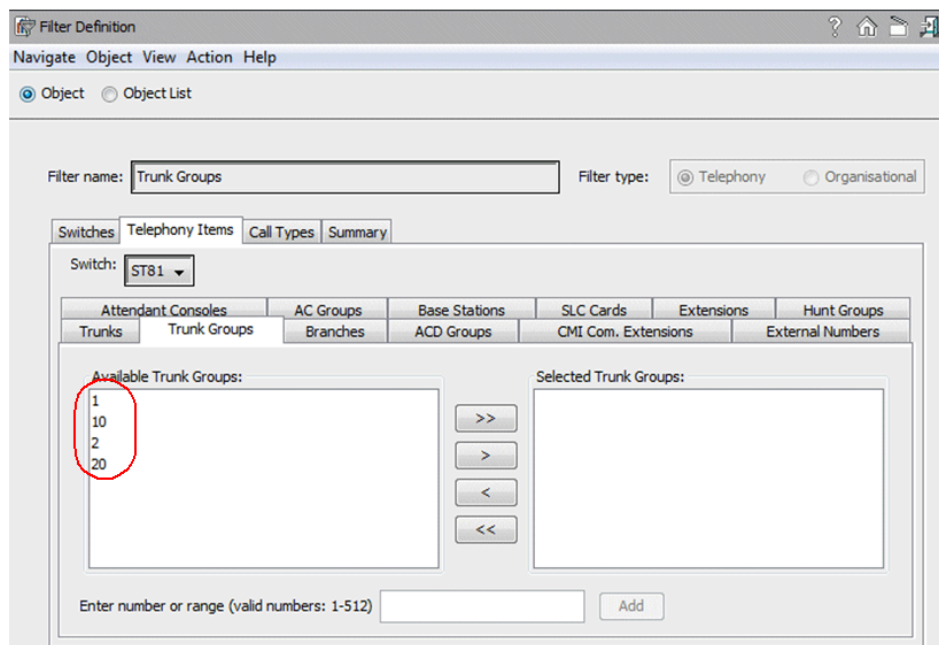
next

Example: B57



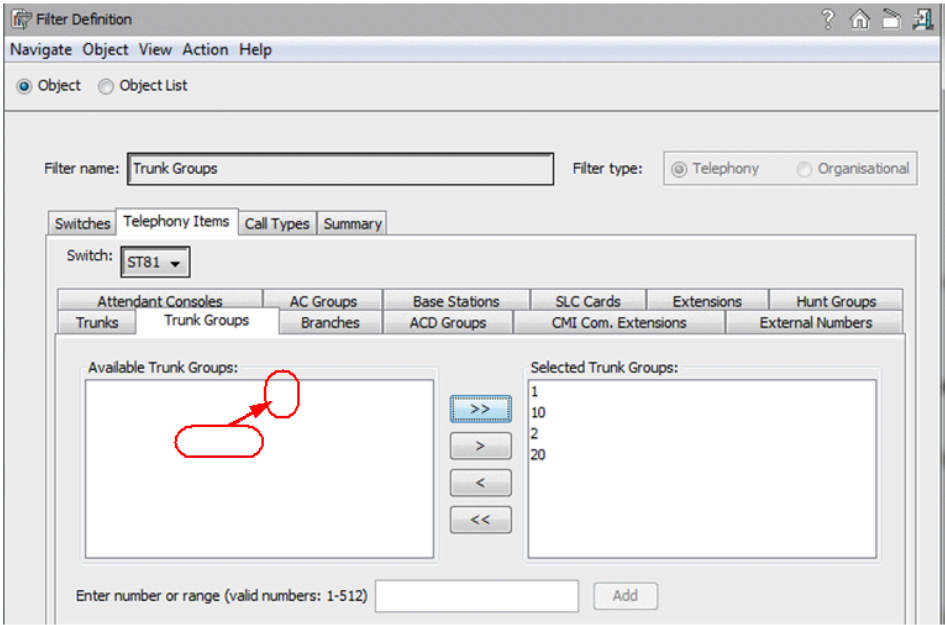
next

Example: B58



next

Example: B59



next

Example: B60

Filter Definition

Navigate Object View Action Help

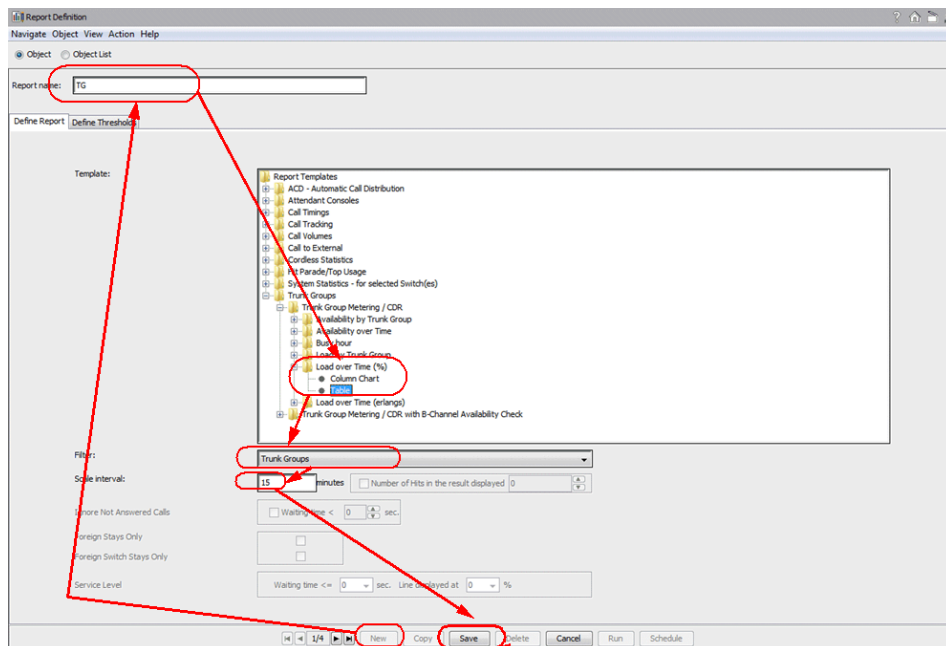
Object Object List

Filter name: Trunk Groups

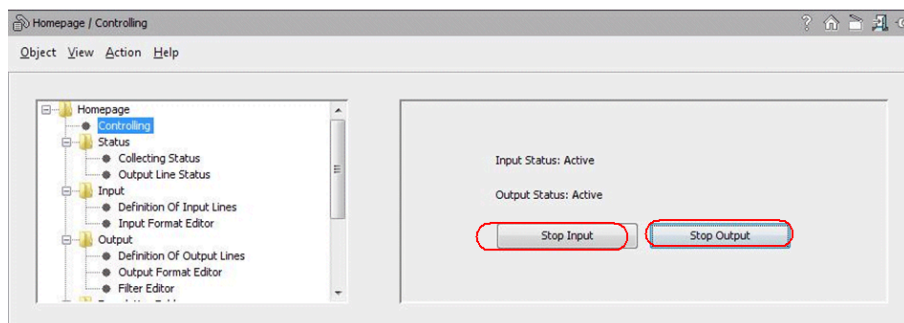
Switches Telephony Items Call Types Summary

Switch	Item Type	Item
ST81	Trunk Group	10
ST81	Trunk Group	2
ST81	Trunk Group	20
ST81	Trunk Group	1

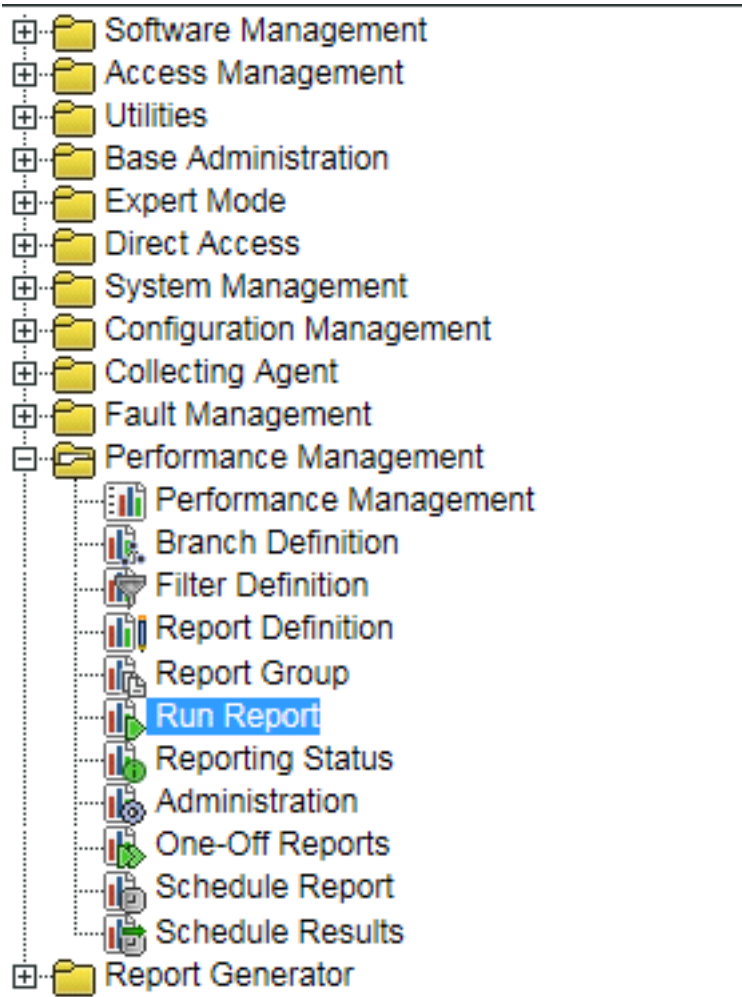
Example: B61



Example: B62



Example: B63



Example: B64

Report or Group:

Report mode: ☒ Full ☐ Summary

Reporting period:

From:	Date:	Friday, March 6, 2015	Time:	1:53 PM
To:	Date:	Friday, March 6, 2015	Time:	4:53 PM

Report output:

☒ Advanced ☐ Display on screen

☐ Save to file on PC

Directory:

Format:

☒ Flexible

Example: B65

Report or Group:

Report mode: ☒ Full ☐ Summary

Reporting period:

From:	Date:	Friday, March 6, 2015	Time:	1:53 PM
To:	Date:	Friday, March 6, 2015	Time:	4:53 PM

Report output:

☐ Advanced ☒ Display on screen

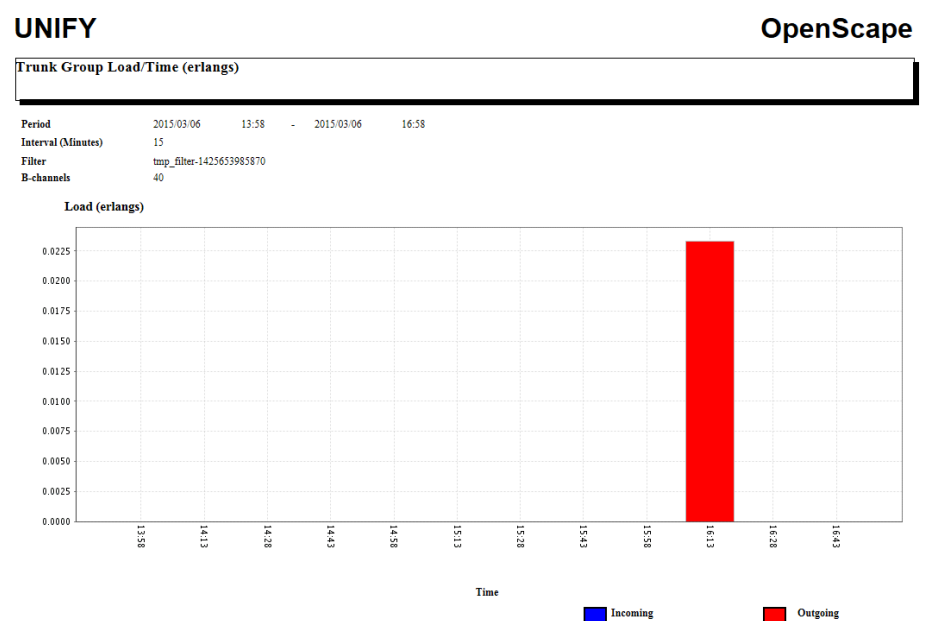
☐ Save to file on PC

Directory:

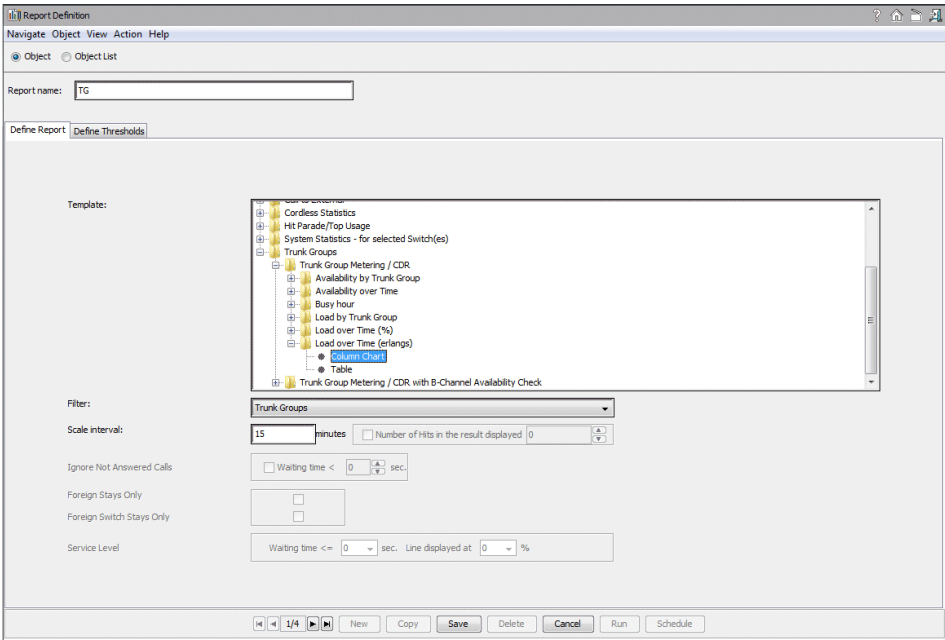
Format:

☒ Flexible

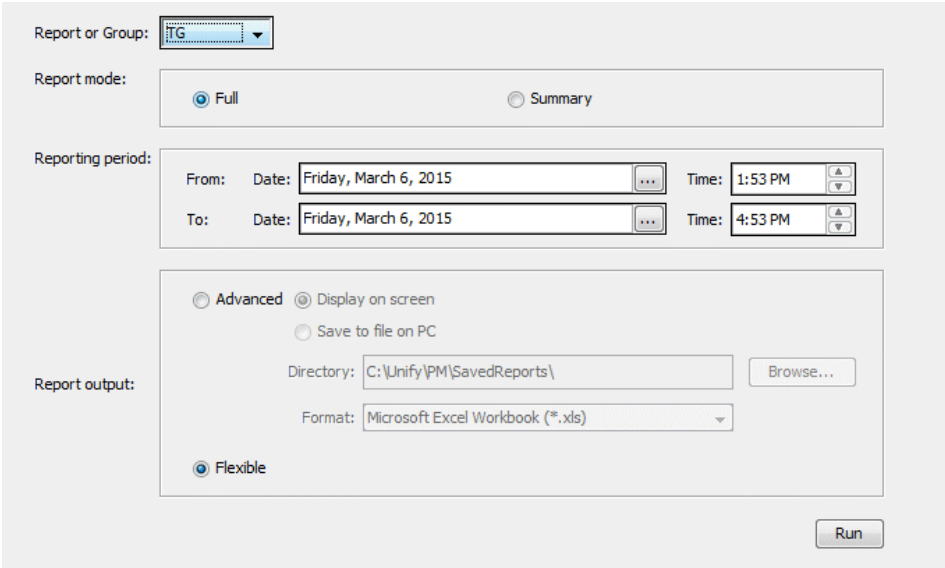
Example: B66



Example: B67



Example: B68



Example: B69

Report name:

Define Report **Define Thresholds**

Template:

Trunk Groups

Trunk Group Metering / CDR

Availability by Trunk Group

Availability over Time

Busy hour

Load by Trunk Group

Load over Time (%)

Load over Time (erlangs)

Column Chart

Trunk Group Metering / CDR with B-Channel Availability Check

Filter:

Scale interval: minutes ☐ Number of Hits in the result displayed

Ignore Not Answered Calls ☐ Waiting time < sec.

Foreign Stays Only ☐

Foreign Switch Stays Only ☐

Service Level

Example: B70

Report or Group:

Report mode: ☒ Full ☐ Summary

Reporting period:

From: Date: Time:

To: Date: Time:

Report output:

☐ Advanced ☒ Display on screen

☐ Save to file on PC

Directory:

Format:

☒ Flexible

Example: B71

UNIFY

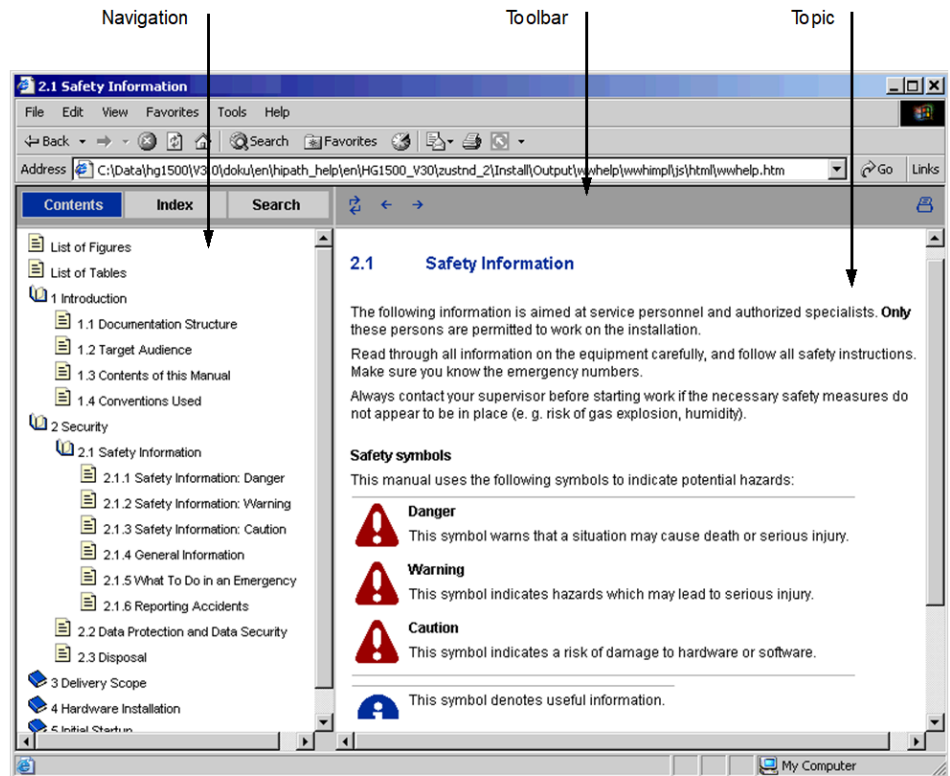
OpenScape

Trunk Group Load/Time (erlangs)			
Period	2015/03/06	13:58	- 2015/03/06 16:58
Interval (Minutes)	15		
Filter	tmp_filter-1425654063234		
B-Channels	40		
		Load (erlangs)	
Time	Date	Incoming	Outgoing
13:58	2015/03/06	0.00	0.00
14:13	2015/03/06	0.00	0.00
14:28	2015/03/06	0.00	0.00
14:43	2015/03/06	0.00	0.00
14:58	2015/03/06	0.00	0.00
15:13	2015/03/06	0.00	0.00
15:28	2015/03/06	0.00	0.00
15:43	2015/03/06	0.00	0.00
15:58	2015/03/06	0.00	0.00
16:13	2015/03/06	0.00	0.02
16:28	2015/03/06	0.00	0.00
16:43	2015/03/06	0.00	0.00

10 Using the Help

10.1 Layout

The Help is displayed in a Web browser and is split into the three areas shown below:



Navigation

The navigation area is displayed at the left of the browser window and contains the following tabs:

- **Contents tab** The Contents tab displays all topics relevant to the Help. Click the book icon to expand or collapse the subtopics. Click any entry to display the relevant topic in the Topic area.
- **Index tab** Click the Index tab to view all index entries. An alphabetical list of keywords for each topic is displayed. Click any index entry to display the relevant topic.
- **Search tab** Click the Search tab to search for a word or phrase. Enter the search term and click **Go**. If you do not know the exact word or phrase, you can enter a star "*" before or after the term. Click any search result entry to display the relevant topic. (For details see "[Search Within the Help](#)").

Toolbar

The toolbar is displayed at the top of the browser window and contains the following buttons:

- **Display in Contents** Click this button to synchronize the contents currently displayed in the Topic area with the list of contents. If you navigate through the Topic area with the "Previous Topic" or "Next Topic" buttons, you can use the "Display in Contents" button to display the relevant topic entry in the list of contents.
- **Previous Topic** Click this button to revert to the previous related topic. By contrast, click the "Back" button of the browser to revert to the last topic viewed.
- **Next Topic** Click this button to jump to the next related topic.
- **Print** Click this button to print the topic currently displayed in the Topic area. (For details see "[Printing Help Topics](#)").

Topic

The Topic area is at the right of the browser window and displays the information on the selected topics.

The browser's caption displays the title of the current Help page.

10.2 Overview of Key Functions

- **Key combination ALT+ TAB** You can use this key combination to switch between the Help and the application.
- **Text highlighted in blue (links)** Within a Help topic, you can click a link (text highlighted in blue) to obtain further information about the topic. This information is displayed in the Topic area as well.
- **Popup windows** Within a Help topic, you can click a link (text highlighted in blue - bold) to obtain further or more detailed information in an additional window (popup). These popup windows are displayed in the lower left corner by default.

If you click another popup link while a popup window is open, the contents of the popup window will be changed accordingly.

A popup remains displayed until it is closed or the entire Help is closed.

- **Drop down text** If you click on text identified with the  icon within a Help topic, a drop down text box containing additional information will open under the text. Click the icon again to collapse this text box. To collapse all drop down text boxes in a Help topic, click the browser's **Refresh** button.
- **Start page** Click the first entry in the table of contents to open the start page for the Help. The start page may contain the following information about the open Help:
 - Title of the Help
 - Help ID number
 - Link to **HTML download**
 - Link to **PDF download**
 - Link to **Feedback**
 - Version number and release date of the Help

10.3 How to Use the Help

You can use the following functions to navigate the Help system:

- [Open the Help Window](#)
- [Search Within the Help](#)
- [Printing Help Topics](#)
- [Key Combinations in the Help](#)

10.3.1 Open the Help Window

There are different ways of opening the Help depending on the application.

Display the Help topics

- Open the contents of the integrated Help by using the **Help** menu in the application.
- Or
- Left-click the Help icon in the application toolbar to open the content of the Help.
- Or (if implemented)
- Left-click the Help icon or the Help button in the application window.

Context-sensitive help for a window (if implemented)

- Press key F1 if you require information about a window.

Context-sensitive help for an element (if implemented)

- Select an element (field, button, tab, etc.) in the user interface and press the SHIFT + F1 keys to open the context-sensitive help.
- Or
- Open the context-sensitive help by using the **Help** menu in the application.
- Or
- Left-click the Help icon  in the application toolbar. The cursor will become a question mark . Now click an element (field, button, tab, etc.) in the user interface to view the relevant Help text.

10.3.2 Search Within the Help

The Help has an integrated full-text search function which makes it easy for you to find the information you need.

- 1) To search for a word or phrase, click the **Search** tab in the Navigation area on the left.
- 2) Enter the search term in the input field. To optimize the search, you can search for several words at the same time. If you do not know the exact word or phrase, you can insert an asterisk "*" before or after the term. Spaces

between words are interpreted as AND operators (see examples). The search is not case-sensitive.

Examples

Te* This will display all topics containing a phrase beginning with the letters *Te...* or *te...*, such as *text*, *teleworking*, *telephone*, *telephone connection*, *Telephone Connection*, etc.

Find text This will display all topics containing the word *find* or *text* or both.

- 3) If the Help consists of several books, you can optionally select a specific book. In this case a drop down list showing the names of all books will be displayed. The preselected option in this drop down list is **All available books**. If you select this entry, the search is run in all available books. The search result displayed indicates the source (book).
- 4) Click the **Start** button to initiate the search.
- 5) Click an entry in the list of search results (in the **Title** column) to display the required topic.

The more often the search term occurs on the page, the higher its **priority** will be. Results also have priority if the search term occurs in the heading.

The **title** shows the heading of the chapter in which the term occurs.

The **book** in which the term occurs is displayed last.

NOTICE: You can also use your browser's (CTRL + F) search function to run a search within a Help topic.

10.3.3 Printing Help Topics

- Right-click the topic you want to print and click Print.
Or
- Click the print icon in the toolbar.
Or
- Press the CTRL + P keys.

Popup windows:

To print the contents of a popup Help topic, right-click anywhere in the popup window and click Print topic.

Drop down list:

If you wish to print the information displayed in dropdown text, it must be visible. Be sure to open the desired drop down text boxes prior to printing the topic.

10.3.4 Key Combinations in the Help

Key combinations	Action
ALT+TAB	Switch between the Help and other open windows.

Key combinations	Action
TAB	Jump to the next link within a Help topic.
SHIFT+TAB	Revert to the previous link within a Help topic.
F5	Refresh the display.
CTRL+POS1	Go to the top of the page.
CTRL+END	Go to the end of the page.
CTRL+A	Select all the text in a window.
CTRL+F	Search within a Help topic.
CTRL+P	Print a topic.
ALT+left arrow	Revert to the previously displayed topic.
ALT+right arrow	Go to the next (previously displayed) topic.
ALT+F4	Close the Help.

Index

A

ACCOUNT [321](#)
ACCTCODE [102](#), [102](#)
Additional CM elements
 For defining CDR output formats [320](#)
Additional CM records
 For CDR output formats [320](#)
AM-WIN 1.0
 Output format [269](#)
AM-WIN 2.0
 Element table [271](#)
 Output format [271](#)
 Output format from system 300 for AM-WIN 2.0 [271](#)
AMO DAGR [22](#)
AMPM_UV1.0
 Input format [310](#)
Application Tree [33](#), [95](#), [160](#), [189](#)
AREACODE [322](#)
Assigning formats to an input line [166](#)
Attendant Consoles
 tab sheet in System Management [49](#)
Automatic copying
 FT_INTERN_FILE [23](#)

B

Backup PC [40](#)
BANKCODE [321](#)
Block size
 SELG [26](#)
BUILDING [321](#)

C

Call Data Collection (COL) Tab Sheet in System Management [44](#)
CALLIPTY [322](#)
CDR output fields [138](#)
CDR output files for AM [27](#)
CDR output filter [27](#)
CHARGEID [321](#)
CM elements
 Additional [320](#)
 Description [321](#)
 In CDR output files [321](#), [321](#)
 In output file [168](#)
 Reference to CM tables [321](#)
 Used as filter criteria [321](#)
CM records
 Used in output formats [320](#)
CMVERSION [322](#)
COL
 Main functional areas [28](#)

COL Administration
 tab sheet in System Management [44](#)
COL features
 Links on COL Home Page [30](#)
COL Features [37](#)
COL Home Page [157](#)
COL Home Page icon [32](#), [189](#)
COL Paths
 tab sheet
 Options [82](#)
COL System Management dialog
 Definitino of Input Lines [42](#)
COL-Funktionen [158](#)
Collect now [40](#)
Collecting CDRs [27](#)
Collecting status
 Description [39](#)
 Input lines [39](#)
 Refresh [39](#)
Collecting Status [39](#)
COMPANY [321](#)
Configure Input Element
 Input Format Editor [59](#)
Content pane [34](#), [38](#)
contents [456](#)
Controlling [38](#)
COSTBEAR [321](#)
COUNTRY [321](#)

D

DAGR
 Notes [22](#)
Data Collection
 Configuration Examples [326](#)
Default Filter
 Output format [167](#)
Definition of Input Lines
 COL System Management dialog [42](#)
DOMAIN [322](#), [322](#)
drop down text [456](#)

E

E.164 number format [51](#)
Elements
 Output format [168](#)
Error messages
 PM/COL [11](#)
Exporting log reports [89](#)
EXTAREACOD [321](#)
EXTCOUCODE [321](#)
EXTNETCODE [321](#)
EXTTIENUM [321](#)

F

FAXNUMBER [321](#)

Features

COL [37](#)

feedback [456](#)

Field Descriptions [94](#)

Filter Editor

Object view [68](#)

FIRSTNAME [321](#)

Flexible format support of CDRs [27](#)

Format assignment

Format change [166](#)

FT_INTERN_FILE

Automatic copying [23](#)

FTBL AMO batches

AMO batches

FTBL [163](#)

En_US and DE [163](#)

FTBL path

File storage location [163](#)

FTFILE [23](#)

FTP [24](#)

H

H2000

input formats [310](#)

output formats [269](#)

H3000

input formats [310](#)

output formats [269](#)

H4000_HP-AM

Output format [274](#)

H4000_HPAM_E164

Output format [279](#)

Help icon [32](#), [188](#)

Hints Before Starting [7](#)

History records

In CDR output files [321](#)

Home Page

Links [30](#)

OpenScape 4000 Manager/Assistant [32](#), [189](#)

how to use help [456](#)

HTML download [456](#)

I

Incorrect records

Refresh [126](#)

Send back to Input [126](#)

Incorrect Records

CDRs [178](#)

Format mismatch [178](#)

Send Back To Input [79](#)

Input format AMPM_UV1.0

Element table [310](#)

For AM/PM OpenScape 4000 [310](#)

Input format editor [52](#)

Setting up input formats [163](#)

Input Format Editor

Configure Input Element [59](#)

Description [55](#), [102](#), [102](#)

Object View [54](#)

Input formats

Element names [163](#)

FTBL [163](#)

H2000 [310](#)

H3000 [310](#)

Mapping [163](#)

Modifying [166](#)

Pre-defined [163](#)

Setting up [163](#)

Input lines

Collecting status [39](#)

Input Status [38](#)

Installation

PM [13](#)

ISDN Access Codes [51](#)

L

links [456](#)

Links on COL Home Page [30](#)

List of network objects

System Management OpenScape 4000 [43](#)

LOCATION [321](#)

Logging [27](#), [33](#), [85](#)

M

mixed networks [51](#)

N

NAME [321](#)

navigation [455](#)

Navigation Pane [33](#), [95](#), [160](#), [189](#)

NETCODE [322](#)

NODENUM [322](#)

O

Object List

System Management OpenScape 4000 [43](#)

OpenScape 4000 Manager / Assistant PM V1.0

Output format [276](#)

OpenScape 4000 Manager/Assistant Start Page

Icon [32](#), [189](#)

Options [81](#)

COL Paths [82](#)

Settings [83](#)

ORG1-3 [321](#)

Output fields

CDR [138](#)

- Output file
 - CM elements [168](#)
 - Text elements [168](#)
- Output format
 - AM-WIN 2.0 [271](#)
 - Default filter [167](#)
 - Elements [168](#)
 - Mapping [168](#)
 - Output line [167](#)
- Output format AM-WIN 1.0 from system for AM-WIN 1.0
 - Element table [269](#)
- Output format editor
 - Output table [168](#)
- Output Format Editor
 - Description [64](#)
 - Object view [64](#)
- Output format from OpenScape 4000 for HiPath AM [274](#)
- Output format H4000_HP-AM
 - Element table [274](#)
- Output format H4000_HPAM_E164 from system for HiPath AM
 - Element table [279](#)
- Output format OpenScape 4000 Manager / Assistant PM V1.0 [276](#)
 - Element table [276](#)
- Output formats
 - Additional CM elements used in output formats [320](#)
 - Additional CM records [320](#)
 - Assigning [167](#)
 - H2000 [269](#)
 - H3000 [269](#)
- Output Formats
 - Setting up [168](#)
- Output line
 - For each system type [167](#)
 - Format mapping [168](#)
 - Output format [167](#)
- Output line definition
 - Output filter [167](#)
 - Output formats [167](#)
- Output Line Definition
 - Description [60](#)
- Output line status [41](#)
 - Description [41](#)
 - Refresh [41](#)
- Output Status [38](#)

P

- PAYPART [321](#), [322](#)
- PDF download [456](#)
- PERSNUM [321](#)
- Pin [33](#), [189](#)
 - Sticky Page [187](#)
- PIN [322](#)
- Pin icon
 - Sticky page [33](#), [189](#)

- PM
 - Installation [13](#)
- PM restrictions [11](#)
- PM/COL
 - Error messages [11](#)
- PM/COL Installation
 - Security aspects [12](#)
- popup windows [456](#)
- POSITION [321](#), [322](#)

R

- Refresh
 - Incorrect records [126](#)
- Rejected CDRs
 - Incorrect Records [178](#)
 - List [178](#)
- ROOM [322](#)
- Run Report Dialog [89](#)

S

- SALUTATION [322](#)
- Security aspects
 - PM/COL Installation [12](#)
- SELG
 - Block size [26](#)
- Send Back to Input
 - Incorrect Records [79](#), [178](#)
- Settings
 - tab sheet
 - Options [83](#)
- SORTNAME [322](#)
- Start OpenScape 4000 Manager/Assistant [189](#)
- start page [456](#)
- Start Page
 - OpenScape 4000 Manager/Assistant [32](#)
- Start/Stop Input [38](#)
- Start/Stop Output [38](#)
- Start/stop PM collecting [166](#)
- Step-by-step instructions [157](#)
- sticky mode [33](#), [174](#), [177](#), [187](#), [189](#), [207](#), [210](#)
- Sticky page
 - Pin icon [33](#), [189](#)
- Sticky Page
 - Pin [187](#)
- SWCOUNTRY [322](#)
- SWITCHNAME [322](#), [322](#), [322](#), [323](#)
- SWCHTYP [322](#)
- SYSNAME [322](#)
- System Management [44](#)
 - Adding a system [162](#)
- System Management OpenScape 4000
 - object ist [43](#)

T

tab

contents [455](#)

index [455](#)

search [455](#)

Tab Sheets

Call Data Collection (COL) in System Management [44](#)

TIENUM [322](#)

TITLE [322](#)

toolbar [455](#)

topic [456](#)

Trunk Group/CDR

tab sheet in System Management [46](#)

TRUNKACC [322](#)

U

USEGROUP [322](#)

User Interface [28](#)

V

VIRTLV0 [322](#)

VIRTLV0-2 [323](#)

VIRTLV1 [322](#)

VIRTLV2 [322](#)

Y

YCALLLV0-2 [324](#)

YPDESTLV0-2 [324](#)

YPPLV0-2 [324](#)

YRTINGLV0-2 [324](#)

YRTIONLV0-2 [324](#)

YTRNSFLV0-2 [324](#)

