



A MITEL
PRODUCT
GUIDE

Unify OpenScape 4000 Assistant/Manager

Appliance Management

Administrator Documentation

12/2025

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1 Overview

The Appliance Management in OpenScape 4000 Assistant currently provides an interface for the **RISO (Recovery ISO) image** creation. The RISO image is a system level backup and its purpose is to recover the system in case of following events:

- After a **software "disaster"**
- After a **hardware "disaster"** followed by the hardware replacement

RISO can back up every appliance of a given OpenScape 4000 system, including host nodes, Quorum, Standalone/Survivable/Integrated Softgate and AP-Emergency (APE).

The backup creation process can be initiated and controlled centrally from the Appliance Management GUI in OpenScape 4000 Assistant. The process takes place during the normal runtime of the system and does not affect its operation.

The RISO creation can be triggered manually or scheduled and the resultant images are stored on the local hard disk, USB stick or the SFTP server. The image contains a complete OpenScape 4000 software installation, including the patch level and all configuration data that were active at the time of generation of the RISO image.

The recovery process from the RISO image is identical to a fresh installation: it formats the hard disk, reinstalls and configures the whole system.

The RISO procedure can be summarized in following steps ([Figure 1](#)):

- 1) **Backup** of all data and creation of a RISO image locally on the **hard disk** (step 1, [Figure 1](#)).

NOTICE: In case RISO backup on USB is selected, only one USB device should be connected.

Optional step: Writing the RISO image onto the **USB stick** (step 2, [Figure 1](#)).

Optional step: Transferring the RISO image onto the **SFTP server** (step 3, [Figure 1](#)).

- 2) **Reinstallation** of data from the RISO image on the Hardware appliance with a failure (step 4. [Figure 1](#)).

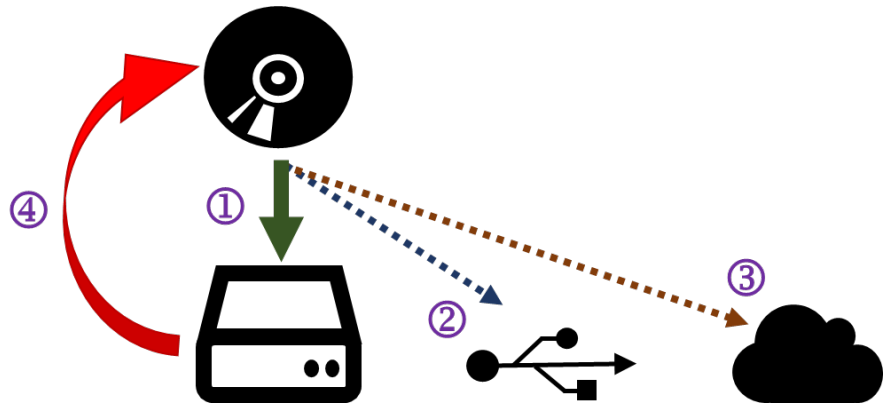


Figure 1: Recovery ISO image feature: Process summary

The Appliance Management GUI requests are handled by a controller located on the Linux Host Platform (PLT). This controller also arranges the RISO image creation scheduling. It is represented by the resource `rsc4k_risocontroller`

and it runs only on an primary Node.

Similarly, there is an Inventory service located on Linux Host Platform. This Inventory is used by the controller and provides the appliances overview (see [Appliances tab](#)). It is represented by the resource `rsc4k_inventory`

and it runs only on an primary Node.

1.1 General conditions

The following conditions must be met in order for the RISO image feature to work properly:

General conditions

- **Supported Hardware (including VMware):** All
- **Supported Software versions:** V7R2 and higher
- **Supported OpenScape 4000 deployments:** All

1.2 Functionality

See also:

[Create Recovery ISO image](#)

Recovery ISO image archiving:

- The **Hard Disk** archive: only the last successful RISO image is kept. A new image is created in addition to the old one and if the process is successful, the old RISO image is deleted.

- The **SFTP** archive: the number of stored RISO images per appliance can be configured. This can be done via *Maximal number of images per appliance* (see [SFTP Archive configuration](#) for more details).

For example, if there are five appliances on the system and the *Maximal number of images per appliance* is set up to two, there will be ten RISO images in total created on the SFTP archive, two images for every appliance.

If the deletion of an old ISO image is needed during the transfer, the appliance will only remove its own images. The images of other appliances will remain intact.

See also:

[Create a scheduled event for Recovery ISO image creation](#)

[Update scheduled event](#)

[SFTP Archive configuration](#)

Recovery ISO image reinstallation:

is supported on the same Hardware platform where the RISO image was created.

- **Manual:** The user confirms the reinstallation by unplugging or plugging the USB stick during the boot phase.
- **Unattended:** The user starts a RISO restore script which triggers the reinstallation from a USB stick plugged onto the system.

See also:

[Reinstallation of an appliance from Recovery ISO image](#)

Recovery ISO image Log files:

The log files connected to the Appliance Management and RISO image feature can be downloaded from:

- 1) Appliance Management Settings window
- 2) Portal
- 3) History tab in Appliance Management

See also:

[Log files](#)

2 Start up

To start up the Appliance Management GUI, go to

OpenScape 4000 Assistant --> Software Management --> Appliance Management .

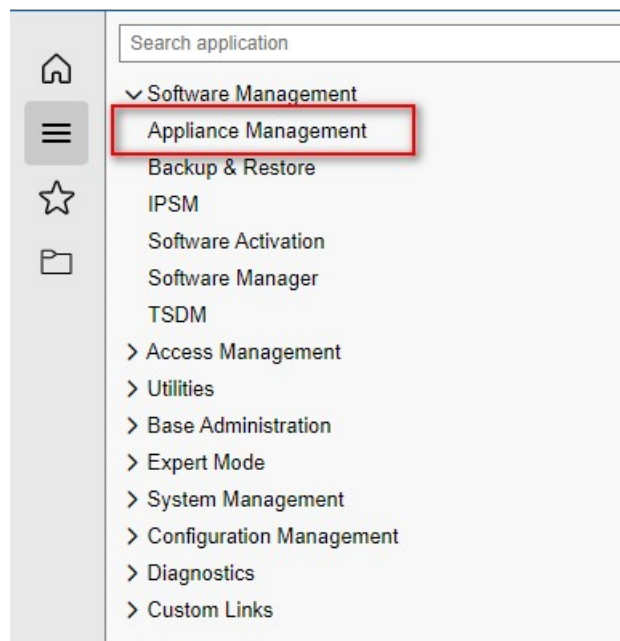


Figure 2: Appliance Management in OpenScape 4000 Assistant

2.1 Appliance Management layout

When the Appliance Management is fully loaded, the toast message **"Page content was successfully loaded"** will appear in the upper right corner (step 1, [Figure 3](#)).

Under the toast message, you can see the **connection status** between the web application GUI (browser) and the RISO controller on the PLT (step 2, [Figure 3](#)).

Possible status:

- **Online:** the connection is established 
- **Connecting...:** the connection is being established 
- **Offline:** the connection is not established 

The Appliance Management GUI consists of the following elements ([Figure 3](#)):

1) **Tabs** ([Figure 3](#), area marked with the orange rectangle):

- [Appliances tab](#)
- [Schedules tab](#)
- [History tab](#)

2) Tab layout (Figure 3, area marked with the green rectangle):

The content shown in the Tab layout depends on the preselected Tab. By default, the Appliances tab and its layout are displayed.

Appliances

Schedules

History

Logs

Online

(Logs can be downloaded from the Platform Portal under Logs -> Export -> Recovery ISO)

Label	Host Name	Customer IP	Software Version	Hardware Type	RAM	Deployment	LTU Number	Last Operation	Status
Select Label	Select Host Name	Select IP	Select Version	Select Hardware	Find	Select Deployment	Select LTU	Select Operation	Select Status
Node1 Active Node	SYSS-VNR	10.121.0.50	V10_R1.28.2	ECOSERVER2	16 GB	Simplex	0		Idle
SG50	OSA5-SG50-Voice1	10.121.121.50	V10_R1.28.0	OSA500	8 GB	StandaloneSoftgate	50		Idle
Tab layout									

Reset filters

Refresh all

Expand all

Collapse all

Rows per page 20

< 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100 101 102 103 104 105 106 107 108 109 110 111 112 113 114 115 116 117 118 119 120 121 122 123 124 125 126 127 128 129 130 131 132 133 134 135 136 137 138 139 140 141 142 143 144 145 146 147 148 149 150 151 152 153 154 155 156 157 158 159 160 161 162 163 164 165 166 167 168 169 170 171 172 173 174 175 176 177 178 179 180 181 182 183 184 185 186 187 188 189 190 191 192 193 194 195 196 197 198 199 200 201 202 203 204 205 206 207 208 209 210 211 212 213 214 215 216 217 218 219 220 221 222 223 224 225 226 227 228 229 230 231 232 233 234 235 236 237 238 239 240 241 242 243 244 245 246 247 248 249 250 251 252 253 254 255 256 257 258 259 260 261 262 263 264 265 266 267 268 269 270 271 272 273 274 275 276 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2021 2022 2023 2024 2025 2026 2027 2028 2029 2030 2031 2032 2033 2034 2035 2036 2037 2038 2039 2040 2041 2042 2043 2044 2045 2046 2047 2048 2049 2050 2051 2052 2053 2054 2055 2056 2057 2058 2059 2060 2061 2062 2063 2064 2065 2066 2067 2068 2069 2070 2071 2072 2073 2074 2075 2076 2077 2078 2079 2080 2081 2082 2083 2084 2085 2086 2087 2088 2089 2090 2091 2092 2093 2094 2095 2096 2097 2098 2099 2100 2101 2102 2103 2104 2105 2106 2107 2108 2109 2110 2111 2112 2113 2114 2115 2116 2117 2118 2119 2120 2121 2122 2123 2124 2125 2126 2127 2128 2129 2130 2131 2132 2133 2134 2135 2136 2137 2138 2139 2140 2141 2142 2143 2144 2145 2146 2147 2148 2149 2150 2151 2152 2153 2154 2155 2156 2157 2158 2159 2160 2161 2162 2163 2164 2165 2166 2167 2168 2169 2170 2171 2172 2173 2174 2175 2176 2177 2178 2179 2180 2181 2182 2183 2184 2185 2186 2187 2188 2189 2190 2191 2192 2193 2194 2195 2196 2197 2198 2199 2200 2201 2202 2203 2204 2205 2206 2207 2208 2209 2210 2211 2212 2213 2214 2215 2216 2217 2218 2219 2220 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2421 2422 2423 2424 2425 2426 2427 2428 2429 2430 2431 2432 2433 2434 2435 2436 2437 2438 2439 2440 2441 2442 2443 2444 2445 2446 2447 2448 2449 2450 2451 2452 2453 2454 2455 2456 2457 2458 2459 2460 2461 2462 2463 2464 2465 2466 2467 2468 2469 2470 2471 2472 2473 2474 2475 2476 2477 2478 2479 2480 2481 2482 2483 2484 2485 2486 2487 2488 2489 2490 2491 2492 2493 2494 2495 2496 2497 2498 2499 2500 2501 2502 2503 2504 2505 2506 2507 2508 2509 2510 2511 2512 2513 2514 2515 2516 2517 2518 2519 2520 2521 2522 2523 2524 2525 2526 2527 2528 2529 2530 2531 2532 2533 2534 2535 2536 2537 2538 2539 2540 2541 2542 2543 2544 2545 2546 2547 2548 2549 2550 2551 2552 2553 2554 2555 2556 2557 2558 2559 2560 2561 2562 2563 2564 2565 2566 2567 2568 2569 2570 2571 2572 2573 2574 2575 2576 2577 2578 2579 2580 2581 2582 2583 2584 2585 2586 2587 2588 2589 2590 2591 2592 2593 2594 2595 2596 2597 2598 2599 2600 2601 2602 2

3 Appliances tab

The Appliances tab displays an overview of all appliances that are present on the system.

3.1 Appliances tab layout

The Appliances tab layout consists of four main elements (Figure 5):

- 1) Filters (Figure 5, area marked with an orange rectangle)
- 2) List of appliances (Figure 5, area marked with a green rectangle)
- 3) Functional buttons (Figure 5, area marked with a purple rectangle)
- 4) Page navigator (Figure 5, area marked with a brown rectangle)

Appliances									
SchedulesHistory(Logs can be downloaded from the Platform Portal under Logs -> Export -> Recovery ISO)Online									
Label	Host Name	Customer IP	Software Version	Hardware Type	RAM	Deployment	LTU Number	Last Operation	Status
Select Label	Select Host Name	Select IP	Select Version	Select Hardware	Find	Select Deployment	Select LTU	Select Operation	Select Status
Node1 + SG90 Active Node	Duck-CUST	10.100.82.90	V11_R1.13.0	VM	8 GB	Simplex Integrated Softgate	90		Idle
SurvSG20	Duck-Surv20NW	10.100.182.20	V11_R1.13.0	VM	4 GB	SurvivableSoftgate	20		Idle
SurvSG25	Duck-Surv25NW	10.100.182.25	V11_R1.13.0	VM	4 GB	SurvivableSoftgate	25		Idle

Reset filtersRefresh allExpand allCollapse allDownload All FI XMLs

Rows per page 201-3 of 3

Figure 5: Appliances tab layout

3.1.1 Filters

The list of appliances can be sorted by clicking on headers of the individual columns. The symbol of an arrow next to the selected heading indicates, according to which column are the rows sorted (Figure 6).

The default setting is to sort the appliances according to the Label.

Appliances									
SchedulesHistory(Logs can be downloaded from the Platform Portal under Logs -> Export -> Recovery ISO)Online									
Label	Host Name	Customer IP	Software Version	Hardware Type	RAM	Deployment	LTU Number	Last Operation	Status
Select Label	Select Host Name	Select IP	Select Version	Select Hardware	Find	Select Deployment	Select LTU	Select Operation	Select Status
Node1 Standalone	sys5	10.140.27.35	V11_R0.14.1	ECOSERVER2	16 GB	Simplex	0	BRD Creation Successful	Idle

Figure 6: Appliances tab: Filters

There is a second level of filters you can use to restrict your selection (Figure 7). This is useful in cases you are interested solely in certain data, for example you want to display information related to Standalone Softgate only.

Appliances									
SchedulesHistory(Logs can be downloaded from the Platform Portal under Logs -> Export -> Recovery ISO)Online									
Label	Host Name	Customer IP	Software Version	Hardware Type	RAM	Deployment	LTU Number	Last Operation	Status
Select Label	Select Host Name	Select IP	Select Version	Select Hardware	Find	Select Deployment	Select LTU	Select Operation	Select Status
Node1 Standalone	sys5	10.140.27.35	V11_R0.14.1	ECOSERVER2	16 GB	Simplex	0	BRD Creation Successful	Idle

Figure 7: Appliance tab: Restricting Filters

Multiple selection of items is also possible (Figure 8):

- 1) Hold the **Ctrl** key and select the items of the interest by **left mouse** click.
- 2) When you release the key, the required information will be filtered out.

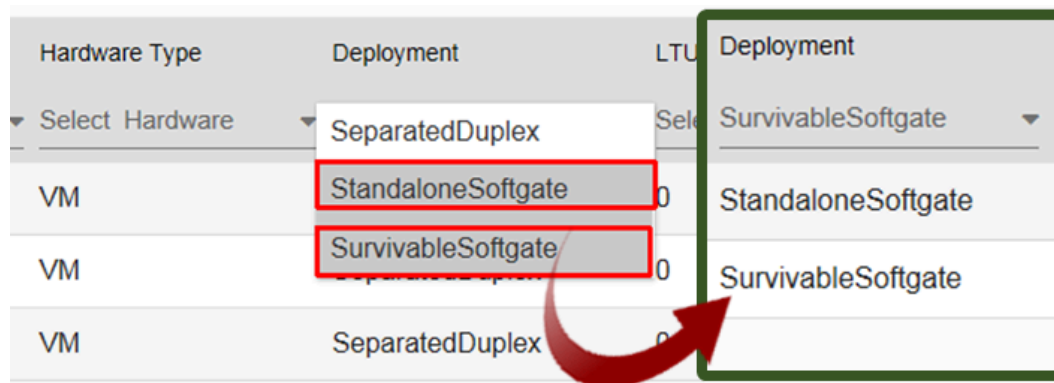


Figure 8: Appliance tab: Multiple filtering

Filtering parameters

For every appliance, the following filtering parameters are available:

- **Label** - a brief identifier of the appliance

Possible values:

- Node1
- Node2
- Quorum
- SG<LTU> (Standalone Softgate)
- SurvSG<LTU> (Survivable Softgate)
- APE<LTU> (AP-Emergency)

For Simplex and Quorum also:

- Integrated Softgate (for example: Node1 + SG<LTU>, Quorum<LTU>)

- **Hostname**
- **Customer IP**
- **Software Version**
- **Hardware Type**

Possible values:

- OSA500
- ECOSERVER
- VM (Virtual Machine)
- BRANCH

- **Deployment**

Possible values:

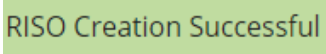
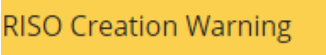
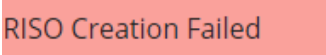
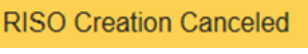
- Simplex
- Duplex
- Separated Duplex
- Standalone Softgate
- Survivable Softgate
- APE

- **LTU Number**

Appliances tab

- **Last Operation** - displays the result of the last operation, for example: RISO Creation Successful.

Possible values:

- RISO Creation Successful 
- RISO Creation Warning 
- RISO Creation Failed 
- RISO Creation Canceled 

- **Status** - combines two kinds of information: Appliance accessibility and Currently running operation. If there is an operation running, the progress bar is displayed in the Status box (see [Figure 18](#), in the middle).

Possible values:

–	Inaccessible (appliance not accessible)	Inaccessible
–	Idle (no operation runs)	Idle
–	Starting RISO creation	Starting RISO Creation
–	Creating RISO	Creating RISO
–	Canceling RISO creation	Canceling RISO Creation
–	Warning	Warning

The explanatory message for the Warning status can be found in the expanded view in the Basic Information box (example on [Figure 9](#)):

	APE21	dscxl2-ape-37-21	10.82.37.210	V8_R0.9.0	DSCXL												
	APE21	dscxl2-ape-37-21	10.82.37.210	V8_R0.9.0	DSCXL												
<table><tr><td colspan="3">Label APE21 Host Name dscxl2-ape-37-21 Customer IP 10.82.37.210 CC-AP IP 10.82.37.212 Software Version V8_R0.9.0 Hardware Type DSCXL Deployment APE</td><td colspan="3">Last Recovery ISO Creation Result SUCCESSFUL Time 2016-09-06 12:22:49 Software Version V8_R0.9.0 Log Files Download</td></tr><tr><td colspan="6">No AMO configuration exists (APESU)</td></tr></table>						Label APE21 Host Name dscxl2-ape-37-21 Customer IP 10.82.37.210 CC-AP IP 10.82.37.212 Software Version V8_R0.9.0 Hardware Type DSCXL Deployment APE			Last Recovery ISO Creation Result SUCCESSFUL Time 2016-09-06 12:22:49 Software Version V8_R0.9.0 Log Files Download			No AMO configuration exists (APESU)					
Label APE21 Host Name dscxl2-ape-37-21 Customer IP 10.82.37.210 CC-AP IP 10.82.37.212 Software Version V8_R0.9.0 Hardware Type DSCXL Deployment APE			Last Recovery ISO Creation Result SUCCESSFUL Time 2016-09-06 12:22:49 Software Version V8_R0.9.0 Log Files Download														
No AMO configuration exists (APESU)																	

Figure 9: Warning Status: Explanatory message

Possible values:

- No AMO configuration exists (UCSU/APRT)
No AMO configuration exists (UCSU/APRT)
- No AMO configuration exists (APESU)
No AMO configuration exists (APESU)
- No AMO configuration exists (APESU)
No AMO configuration exists (UCSU/APRT)
No AMO configuration exists (APESU)
No AMO configuration exists (UCSU/APRT)

Troubleshooting note:

When encountering the "Warning" status, the user has to complete the configuration on RMX side with required AMOs: UCSU, APRT or APESU.

NOTICE:

For **Standalone Softgate**, **APE** and **Survivable Softgate** deployments, the Warning status prevents starting the Recovery ISO Creation process by making the button "*Create Recovery ISO*" unavailable.

For **Simplex with Integrated Softgate** and **Quorum with Integrated Softgate** deployments, the Recovery ISO Creation is not prevented by Warning status.

3.1.2 List of appliances

The list of appliances is generated from the Inventory server, which is running on Linux Platform of the active Node. Inventory server reads basic overview from RMX DB (this includes only IPDA IPs). Other information (such as Customer IP, Deployment or Hardware Type) are uploaded by appliances themselves when they connect to the Inventory server.

The appliances are listed in rows with Node1, Node2 and Quorum on the top of the list ([Figure 10](#)).

Appliances		Schedules		History				Online 13:43:54	
Label	Hostname	Customer IP	Software Version	Hardware Type	Deployment	LTU Number	Last Operation	Status	
Expand view		Select Hostname	Select IP	Select Version	Select Hardware	Select Deployment	Select LTU	Select Operation	Select Status
Node1	soco2-38-A	10.82.38.10	V7_R2.14.0	VM	SeparatedDuplex	0		Idle	
Node2	soco2-38-B	10.82.38.11	V7_R2.14.0	VM	SeparatedDuplex	0		Idle	
Quorum	soco2-38-quorum	0.0.0.0	V7_R2.14.0	VM	SeparatedDuplex	0		Idle	
SG19	soco2-38-sg19	10.82.38.19	V7_R2.14.0	VM	StandaloneSoftgate	19		Idle	
SurvSG18	survsg18-inventory	10.82.38.18	V7_R2.14.0	VM	SurvivableSoftgate	18		Idle	

Figure 10: Appliances tab: List of appliances

Expand or collapse the view

Every row can be expanded by clicking on the plus sign at left in order to show the **appliance details**. To hide the details again, click the minus sign (Figure 11).

Node1
Active node

SYS5-VNR
10.121.0.50
V10_R1.28.2
ECOSERVER2
16 GB
Simplex
0

Idle

Label

Node1

Host Name

SYS5-VNR

Customer IP

10.121.0.50

CCA IP

10.121.121.52

Software Version

V10_R1.28.2

Hardware Type

ECOSERVER2

RAM

16 GB

Deployment

Simplex

Installed Software

Calico

Create Recovery ISO

Recovery ISO download

No file

Figure 11: Appliances tab: Expand/collapse an appliance row

Display the appliance details

The detailed information about an appliance can be seen in extended view after expanding the row.

The extended view is divided into four boxes (Figure 12):

1) Basic Information (first box from the left):

Includes details about the selected appliance.

2) **Status information** (second box from the left):

Provides details about the last operation and a next scheduled event.

3) **Operation buttons** (third box from the left):

Contains buttons for starting an operation. Currently, there is the Create RISO button only.

4) **Last event information** (fourth box from the left):

Provides details about an event currently running or just completed. If the Create RISO button is selected then this box offers additional settings for the given operation (see the chapter: [Create Recovery ISO image](#)).

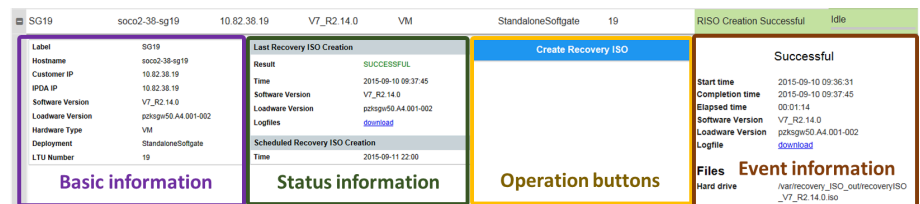


Figure 12: Appliances tab: Appliance displayed details

3.1.3 Functional buttons

There are five functional buttons on the Appliances tab ([Figure 13](#)):

- **Reset filters**
- **Refresh all**
- **Expand all**
- **Collapse all**
- **Download All FI XMLs**

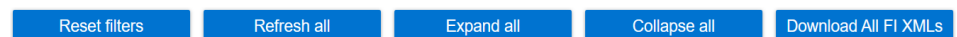


Figure 13: Appliances tab: Functional buttons

Sorting and filtering can be reset by clicking **Reset filters**.

The appliance list is automatically refreshed every 60 seconds. However, the immediate refresh can be enforced by clicking **Refresh all**.

All rows can be expanded by clicking **Expand all** and collapsed by clicking **Collapse all**.

The First Install XML files for all appliances can be downloaded as a tarball file (to Admin PC), instead of complete generated RISO image.

3.1.4 Page navigator

The Page navigator allows you to display the desired **number of items per page**. The default value is to show **twenty rows** per page.

If you want to **change** the number of items displayed ([Figure 14](#)):

- Left mouse click on the **arrow** next to the *Rows per page* number to open a menu.

- Left mouse click to **select the value**. The number of items will be updated according to your selection automatically.

Possible options:

- 5
- 10
- 20
- 50
- 75
- 100

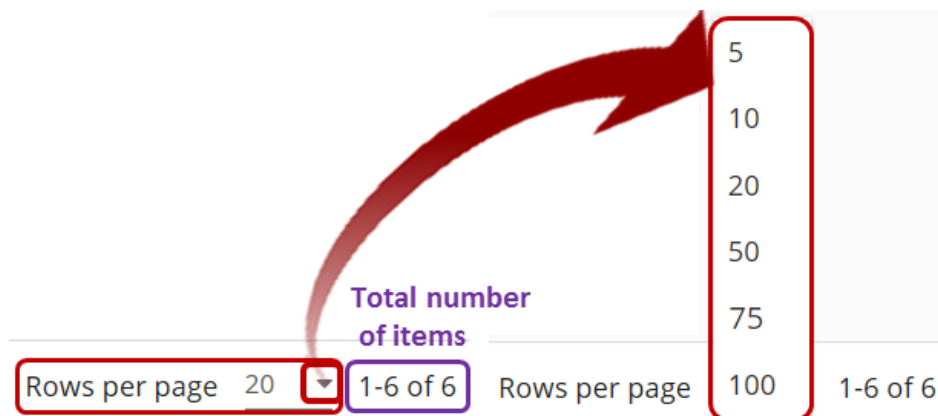


Figure 14: Appliances tab: Page navigator

Alternatively, you can toggle between the pages by typing directly the number of the page you want to display ([Figure 15](#)).

NOTICE: This option is available only if the number of items displayed on the page exceeds the *Rows per page* value.



Figure 15: Appliances tab: Page navigator - page number

3.2 Create Recovery ISO image

In order to create a RISO image ([Figure 16](#)):

- 1) **Expand the row** of an appliance where the RISO image will be created ([Figure 16](#); step 1).
- 2) In the Operation buttons box, click **Create Recovery ISO** ([Figure 16](#); step 2). The Additional archives options will be displayed in the Last event information box.

NOTICE: For Standalone Softgate, APE and Survivable Softgate deployments: If the button "Create Recovery ISO" is **NOT available**, this is caused by Warning status which

prevents starting the Recovery ISO Creation process. For more information about Warning Status, see [page 16](#).

- 3) Select the relevant archive checkbox(es) to write the RISO image also on ([Figure 16](#); step 3):

- USB stick
- SFTP server

NOTICE: The RISO image is **always** created and stored locally on the Hard disk. For multi-node configurations, (duplex/GSD) RISO backup must be generated for each node.

- 4) When done, click **Create** ([Figure 16](#); step 4).

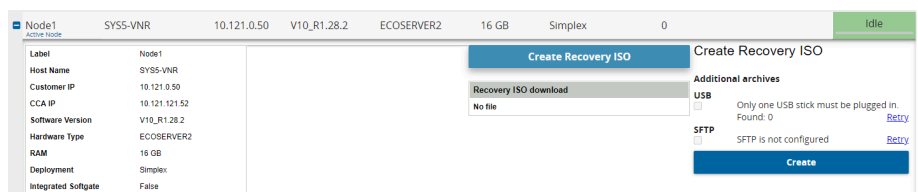


Figure 16: Appliances tab: Create Recovery ISO image

- 5) The system will ask you to confirm the action. Click **Yes** on the Create RISO popup message ([Figure 17](#)).

Create Recovery ISO

This operation cannot be cancelled and can take substantial time depending on deployment.

Do you really want to create the Recovery ISO for Node1?

✓ YES NO

Figure 17: Appliances tab: Create Recovery ISO image: confirm

- 6) The creation of the RISO image will start. You can watch the progress either in the Last event information box, or in the Status box of the appliance if the Last event information box is collapsed.

In this step, the First Install XML file is generated and copied to the path **/.AS/firstinstall/**



Figure 18: Appliances tab: Create Recovery ISO image: progress

- 7) The process is finished when the Last event information box displays the message "Successful" and the Status box displays "Idle" ([Figure 18](#)).

3.2.1 Additional archives check

Before the RISO image is created, there is a brief check of additional archives availability. This check consists of two steps:

- Detection
- Testing

Procedure:

- 1) When the *Create Recovery ISO* button is selected, a brief **detection** of both, the USB Stick and SFTP server status is started.
 - For the **USB Stick** the test detects whether there is only one USB stick plugged in the system.
 - For the **SFTP server** the test detects whether a SFTP configuration is available.

NOTICE: Both checkboxes are disabled by default (greyed out, [Figure 19](#)).

Create Recovery ISO

Additional archives

USB
☐ Only one USB stick must be plugged in.
 Found: 0 [Retry](#)

SFTP
☐ SFTP is not configured [Retry](#)

Create

Figure 19: Appliances tab: Additional archives - Default state

If the **result** of the detection is **False**, the relevant checkbox remains disabled and cannot be selected until the cause of the failure is removed ([Figure 20](#)). Next to the checkbox of the respective archive, the error message is displayed together with the **Retry** link.

If the result is **True**, the checkbox will be enabled.

Create Recovery ISO

Additional archives

USB
☐ Only one USB stick must be plugged in.
 Found: 0 [Retry](#)

SFTP
☐ SFTP is not configured [Retry](#)

Create

Figure 20: Appliances tab: Additional archives - Detection failed example

2) When the user selects one or both checkboxes, the **test** will start. While the test is running, the spinner is displayed next to each archive.

- For the **USB Stick** the test checks whether it is possible to write to the USB stick and whether its capacity is sufficient.
- For the **SFTP server** the test checks the IP address, User name and Password and the given Path where the RISO image should be stored. These settings can be entered in [Settings window](#). Finally, the test also checks the ability to write the ISO image on the SFTP server by creating and deleting a test file.

If the test **fails**, the error message describing the cause of failure is displayed next to the respective checkbox together with the **Retry** link ([Figure 21](#)).

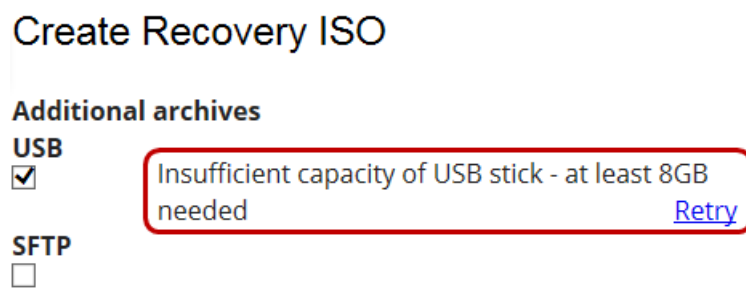


Figure 21: Appliances tab: Additional archives - Test failed example

For **USB Stick**:

Possible failure messages:

- USB stick is not writable
- Insufficient capacity of USB stick - at least 8GB needed
- Appliance inaccessible
- No valid test result from appliance
- Aborted due to timeout

For the **SFTP server**:

Possible failure messages:

- No connectivity to SFTP server
- SFTP service unreachable
- Cannot login to SFTP server: wrong user or password
- Directory does not exist on SFTP server
- Cannot write to directory on SFTP server
- Not enough space on SFTP server
- Appliance inaccessible
- No valid test result from appliance
- Aborted due to timeout

3.2.2 RISO Download via Web

The RISO images stored on every appliance can be downloaded via Web UI of the Appliance management.

NOTICE:

The download is initiated directly from the individual appliance which requires that Secure mode needs to set to classic during the maintenance actions.

An activated **Restricted access to Platform Portal and SSH of Platform and CSTA in Security Mode Configuration** will prevent the web download.

The feature is supported by the Assistant Appliance Management and consists of three parts:

- The possibility to download the RISO image (if it exists).
- The display of checksum (using a Sha256 string).
- Mutual exclusion of the interface between Create Recovery ISO and Download Recovery ISO.

Recovery ISO download

The **Recovery ISO download** area is located under the **Create Recovery ISO** button and it displays information regarding the RISO file (if it exists).

The information displayed within this section can be:

- **No file:** no RISO image exists on the current appliance.



Figure 22: No RISO file

- **RISO file and a Download button:** a RISO image exists on the current appliance and can be downloaded.



Figure 23: RISO file

By pressing the Download button, the RISO image download begins through a redirection to a new web page, using the native download mechanism of the used browser. The new generated link is temporary and it is available

and can be used to initiate and perform the download for approximately two minutes.

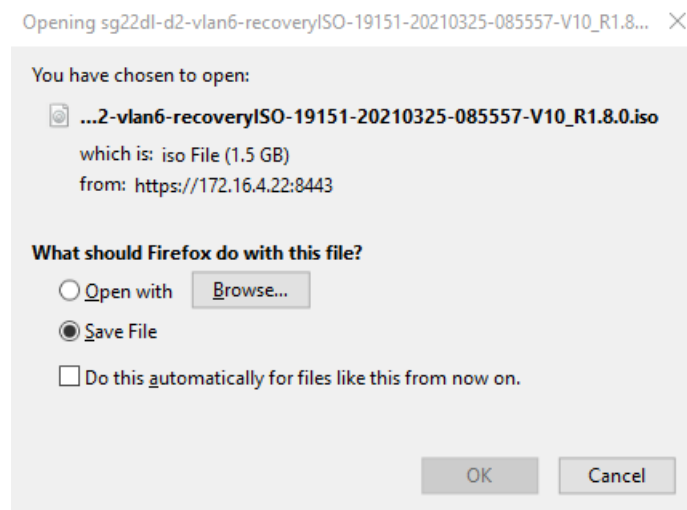


Figure 24: Redirection to a new Web page for RISO image download

- **RISO file and a Download spinner**

The Download spinner is displayed

- During the download process.
- For approximately two minutes once the download is completed, paused, broken, or canceled by user.

After about two minutes of inactivity, the download link becomes inactive and the Download button is displayed again to start a new download.



Figure 25: Download spinner

Checksum / Sha256

The checksum information is displayed when hovering the mouse cursor over the Download button.

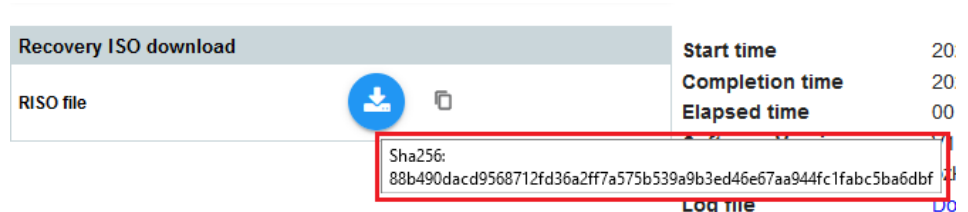


Figure 26: Checksum information

The checksum information can be saved using the **Copy checksum to clipboard** button.

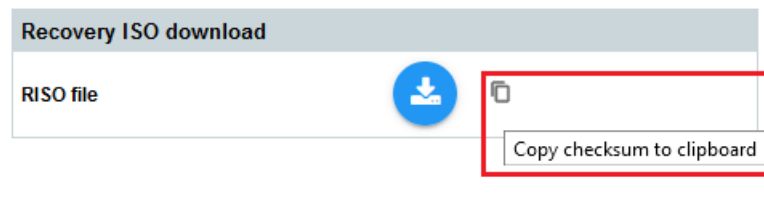


Figure 27: Copy checksum to clipboard

Mutual exclusion mechanism

A mutual exclusion mechanism is applied to the interface to avoid backend collisions.

If the creation of a Recovery ISO file is in progress, there is no possibility to download the Recovery ISO file, even if the RISO file exists on the server for some time.

Also, if a Recovery ISO download is in progress, the user is alerted and it is possible to Create another Recovery ISO file only after the download has finished.

Create Recovery ISO

Recovery ISO download in progress

✖ OK

Figure 28: Recovery ISO download is in progress

3.3 Create First Install XML file

3.3.1 Destination Path

The First Install XML file is copied to the path `/.AS/firstinstall`.

3.3.2 Methods for Generating the First Install XML File

There are several methods for generating the First Install XML File:

- 1) BEER Logical Backup on host (Assistant) generates the First Install XML files for all SW appliances and copies them to the destination path.
- 2) The existing **Recovery ISO Creation** operation generates First Install XML file and copies it to the destination path.

- 3) A new schedule **Operation Type** is added in Schedule tab: **First Install XML Creation**. At the scheduled time, the file is generated on hard disk and it is copied to the destination path.

As for **Recovery ISO Creation**, the information regarding **First Install XML Creation** is displayed in [Appliances](#) and [History](#) tab.

Also, there is the possibility to transfer it to SFTP and to USB (to /config directory).

3.3.3 Download

A new functional button is added at the bottom of the page on Appliances tab: **Download All FI XMLs**. The downloaded tarball file contain the First Install XML files for all appliances and the name of downloaded file has the format **FIXML_AssistantIP_currentdate_currenttime.gz**.

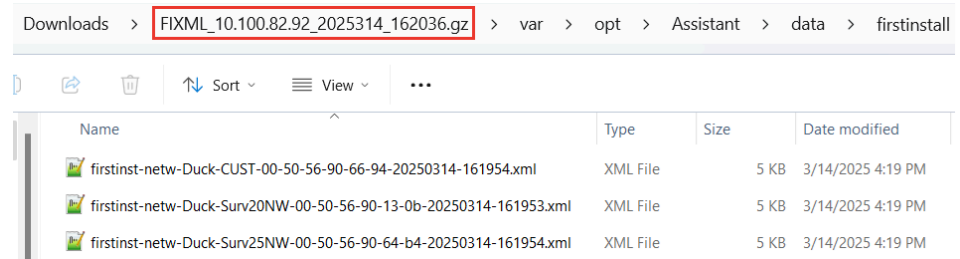


Figure 29: Downloaded tarball file on Admin PC

4 Schedules tab

The Schedules tab allows user to schedule automatic events for the present appliances.

4.1 Schedules tab layout

The Schedules tab layout consists of three main elements (Figure 24):

- 1) Filters(Figure 24, area marked with an orange rectangle)
- 2) List of events (Figure 24, area marked with a green rectangle)
- 3) Functional buttons(Figure 24, area marked with a purple rectangle)
- 4) Page navigator (Figure 24, area marked with a purple rectangle)

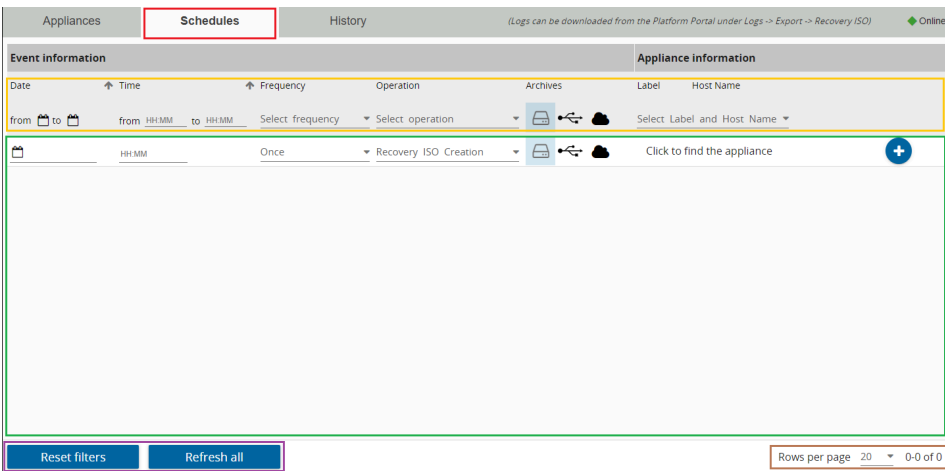


Figure 30: Schedules tab layout

4.1.1 Filters

The list of scheduled events can be sorted by clicking on headers of the individual columns. The symbol of an arrow next to the selected heading indicates, according to which column are the rows sorted (Figure 25).

The default setting is to sort the operations according to the **nearest event occurrence**.

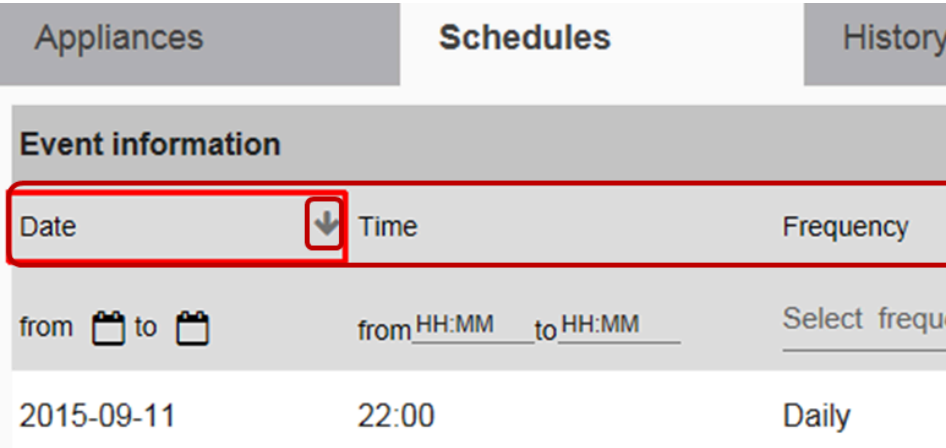


Figure 31: Schedules tab: Filters

There is a second level of the filters you can use to restrict your selection (Figure 26). This is useful in cases you are interested solely in certain data, for example you want to display information related to frequency only.

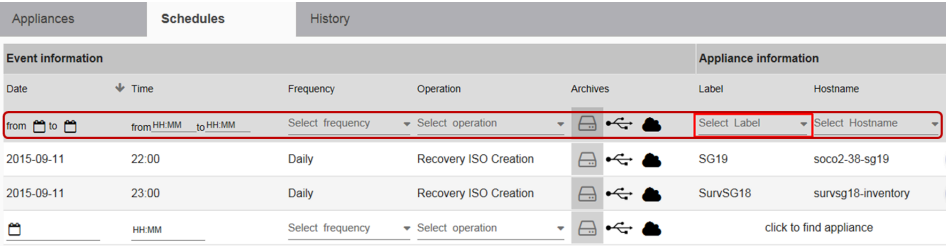


Figure 32: Schedules tab: Restricting Filters

Multiple selection of items is also possible:

- 1) Hold the **Ctrl** key and select the items of the interest by **left mouse** click.
- 2) When you release the key, the required information will be filtered out.

Filtering parameters

For every scheduled event, following filtering parameters are available (Figure 27):

- **Date** - shows the date of the nearest event occurrence. You can enter an interval *From - To*.
For example. on *2015-09-10 (Thursday)*.
- **Time** - displays the time of the nearest event occurrence. You can enter an interval *From - To*.
For example: at *22:00*.

- **Frequency** - informs how often the event will be executed:
 - Once: the event will be executed only once and then it will disappear from the list.
For example, only on *2015-09-10* and no more.
 - Daily: the event will be executed every day.
For example, on *2015-09-10, 2015-09-11, 2015-09-12...*
 - Every weekday: the event will be executed on every Monday, Tuesday, Wednesday, Thursday and Friday.
 - Weekly: the event will be executed only on a certain day of every week.
For example, on every Thursday: *2015-09-10 (Th), 2015-09-17 (Th), 2015-09-24 (Th)...*
 - Monthly date: the event will be executed only on a specific date of every month.
For example, on the tenth day of the month: *2015-09-10, 2015-10-10, 2015-11-10...*
 - Monthly day: the event will be executed only on a certain date of the month.
For example, on the second Thursday of the month: *2015-09-10, 2015-10-08, 2015-11-12...*
 - Yearly: the event will be executed only on a designated date every year.
For example, only on *2015-03-10, 2016-09-10, 2017-09-10...*
- **Operation** - type of operation. Currently, only RISO Creation is possible
- **Archives** - type of archive where the RISO image will be stored

Possible options:

- Hard disk (always selected)



- USB stick



- SFTP server



- **Label** - a brief identifier of the appliance (see the Label column in the [Filtering parameters](#) on the Appliances tab)
- **Hostname**

Event information					Appliance information	
Date	Time	Frequency	Operation	Archives	Label	Hostname
from to	from HH:MM to HH:MM	Select frequency	Select operation		Select Label	Select Hostname

Figure 33: Schedules tab: Filtering parameters

4.1.2 List of events

The scheduled events are listed in rows with the nearest event occurrence on the top of the list ([Figure 28](#)). The bottommost row always serves for adding a

new scheduled event (see [Creating a new scheduled event](#)) and therefore, has no parameters filled in.

Appliances		Schedules		History		(Logs can be downloaded from the Platform Portal under Logs -> Export -> Recovery ISO)		Online
Event information						Appliance information		
Date	Time	Frequency	Operation	Archives	Label	Host Name		
from to	from HH:MM to HH:MM	Select frequency	Select operation		Select Label and Host Name			
2022-03-26	22:55	Daily	Recovery ISO Creation		Node1	SYS5-VNR		
	HH:MM	Once	Recovery ISO Creation		Click to find the appliance			

Figure 34: Schedules tab: List of events

Functional icons

For every scheduled event row, the following functional icons are available ([Figure 29](#)):

- 1) **Upload:** store the edited changes
- 2) **Cancel changes:** discard the changes
- 3) **Copy:** clone the event
- 4) **Remove:** delete the event completely

The bottommost event row has only one functional icon:

- 5) **Add:** add new event



Figure 35: Schedules tab: Functional icons

4.1.3 Functional buttons

There are two functional buttons on the Schedules tab ([Figure 30](#)):

- **Reset filters**
- **Refresh all**



Figure 36: Schedules tab: Functional buttons

Sorting and filtering can be reset by clicking **Reset filters**.

The event list is automatically refreshed only when the view is switched to the Schedules tab. However, the immediate refresh can be enforced by clicking **Refresh all**.

4.1.4 Page navigator

The Page navigator allows you to display the desired **number of items per page**. The default value is to show **twenty rows** per page.

If you want to **change** the number of items displayed ([Figure 31](#)):

- 1) **Left mouse click** on the arrow next to the *Rows per page* number to open a menu.

Schedules tab

Create a scheduled event for Recovery ISO image creation

- 2) Left mouse click to **select the value**. The number of items will be updated according to your selection automatically.

Possible options:

- 5
- 10
- 20
- 50
- 75
- 100

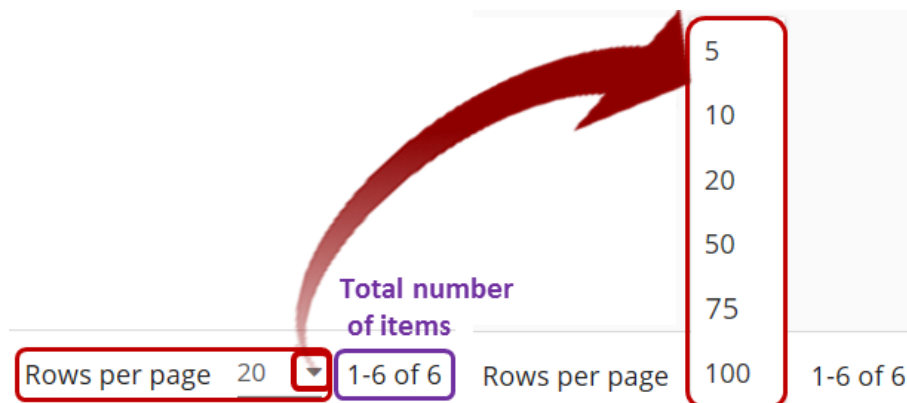


Figure 37: Schedules tab: Page navigator

Alternatively, you can toggle between the pages by typing directly the number of the page you want to display ([Figure 32](#)).

NOTICE: This option is available only if the number of items displayed on the page exceeds the *Rows per page* value.



Figure 38: Appliances tab: Page navigator - page number

4.2 Create a scheduled event for Recovery ISO image creation

There are two ways to create a scheduled event:

- 1) Newly from the beginning
- 2) By duplicating an existing event

4.2.1 Creating a new scheduled event

- 1) Select the empty row you want to create an event in by clicking on it.

2) Fill in the **event parameters** (Figure 33, step 1):

- **Date:** Click on the Date field to pick a date from the calendar.
- **Time:** Use only digits without colon.
- **Frequency:** Select an option from the dropdown menu.
- **Operation:** Select an option from the dropdown menu
- **Archive:** Select one of several options of archiving by clicking on following icons

– USB stick



– SFTP server



NOTICE: Hard disk option  is always preselected (the icon is greyed out) and cannot be unselected.

- Select **Label** and **Hostname:** Select the Label and Host name of the appliance.

3) Click the **Add** icon to create the event (Figure 33, step 2).

Appliances		Schedules	History	(Logs can be downloaded from the Platform Portal under Logs -> Export -> Recovery ISO)		Online
Event information				Appliance information		
Date	Time	Frequency	Operation	Archives	Label	Host Name
from  to 	from HH:MM to HH:MM	Select frequency	Select operation	  	Select Label and Host Name	
	HH:MM	Once	Recovery ISO Creation	  	Click to find the appliance	
						

Figure 39: Scheduled tab: Create a new scheduled event

4.2.2 Creating a new scheduled event by duplication

1) Select the event you want to duplicate by clicking on it.

2)

Click the **Copy** icon  to create a copy of this event (Figure 34, step 1).

3) Edit the event parameters (Figure 34, step 2):

- Date
- Time
- Frequency
- Operation
- Archives
- Label
- Hostname

4)

Click the **Upload** icon  to store the event (Figure 34, step 3).

NOTICE: The duplication can be canceled by clicking the

Cancel changes icon .

Schedules tab

Update scheduled event

Appliances		Schedules		History		(Logs can be downloaded from the Platform Portal under Logs -> Export -> Recovery ISO)		Online
Event information						Appliance information		
Date	Time	Frequency	Operation	Archives	Label	Host Name		
from to	from HH:MM to HH:MM	Select frequency	Select operation		Select Label and Host Name			
2022-03-26	22:55	Daily	Recovery ISO Creation		Node1	SYSS-VNR		
	HH:MM	Once	Recovery ISO Creation		Click to find the appliance			

Figure 40: Schedules tab: Duplicate a scheduled event

4.3 Update scheduled event

To update a scheduled event (Figure 35):

- 1) **Select the event** you want to duplicate by clicking on it.
- 2) **Edit** the event parameters you want to change (Figure 35, step 1).
- 3) Click the **Upload** icon to store the changes (Figure 35, step 2).

NOTICE: The edition can be canceled by clicking the **Cancel changes** icon .

Appliances		Schedules		History		(Logs can be downloaded from the Platform Portal under Logs->Export->Recovery ISO)		Online
Event information						Appliance information		
Date	⬆ Time	Frequency	Operation	Archives	Label	Host Name		
from to	from HH:MM to HH:MM	Select frequency ▾	Select operation ▾		Select Label and Host Name ▾			
2022-03-26	22:55	Daily	Recovery ISO Creation		Node1	SYSS-VNR		
	HH:MM	Once ▾	Recovery ISO Creation ▾		Click to find the appliance			

Figure 41: Schedules tab: Update scheduled event

4.4 Delete scheduled event

To delete a scheduled event (Figure 36):

- 1) Click the **Delete** icon located next to the event you want to remove. The record will be deleted.

Appliances		Schedules		History		(Logs can be downloaded from the Platform Portal under Logs-> Export -> Recovery ISO)		Online
Event information						Appliance information		
Date	⬆️ Time	Frequency	Operation	Archives	Label	Host Name		
from 📅 to 📅	from HH:MM to HH:MM	Select frequency ⌵	Select operation ⌵	📁🔗☁️	Select Label and Host Name ⌵			
2022-03-26	22:55	Daily	Recovery ISO Creation	📁🔗☁️	Node1	SYSS-VNR	   	
📅	HH:MM	Once	⌵ Recovery ISO Creation ⌵	📁🔗☁️	Click to find the appliance			

Figure 42: Schedules tab: Delete a scheduled event

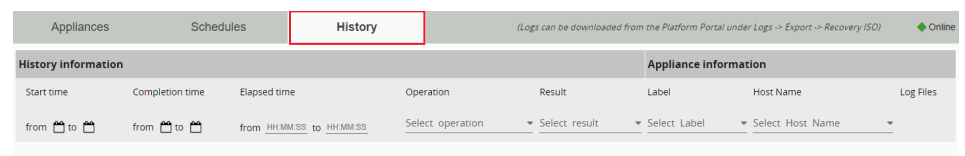
5 History tab

The History tab allows you to display an overview of all past and completed operations (for example a RISO Creation).

5.1 History tab layout

The History tab layout consists of three main elements (Figure 37):

- 1) **Filters**(Figure 37, area marked with an orange rectangle)
- 2) **List of operations**(Figure 37, area marked with a green rectangle)
- 3) **Functional buttons**(Figure 37, area marked with a purple rectangle)
- 4) **Page navigator** (Figure 37, area marked with a brown rectangle)



The screenshot shows the 'History' tab selected in a navigation bar with 'Appliances' and 'Schedules'. Below the tabs is a 'History information' section with a table. The table has columns for 'Start time', 'Completion time', 'Elapsed time', 'Operation', 'Result', 'Label', 'Host Name', and 'Log Files'. Each column has a filter icon (calendar for dates, clock for times) and a dropdown menu for selection. A note at the top right says '(Logs can be downloaded from the Platform Portal under Logs -> Export -> Recovery (SO))' and an 'Online' status indicator is present.

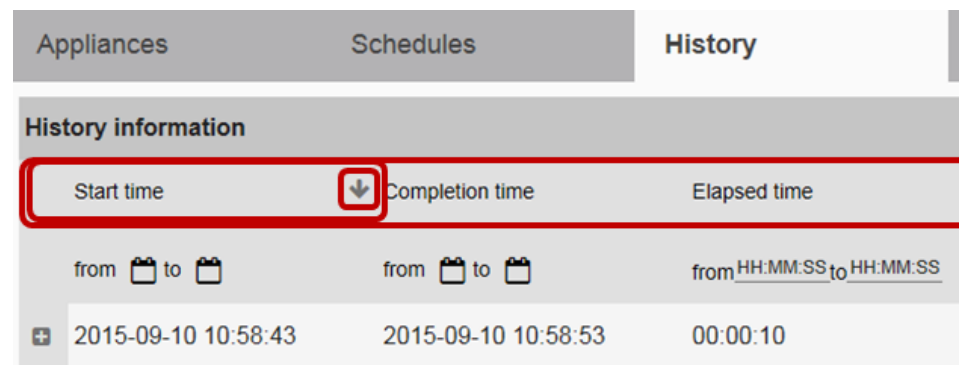
Start time	Completion time	Elapsed time	Operation	Result	Label	Host Name	Log Files
from to	from to	from HH:MM:SS to HH:MM:SS	Select operation	Select result	Select Label	Select Host Name	

Figure 43: History tab layout

5.1.1 Filters

The list of operations can be sorted by clicking on headers of the individual columns. The symbol of an arrow next to the selected heading indicates, according to which column are the rows sorted (Figure 38).

The default setting is to sort the operations according to the **Start time**.



The screenshot shows the 'History' tab selected. Below the tabs is a 'History information' section. A red box highlights the 'Start time' header and its sort arrow (a downward arrow). The table below has columns for 'Start time', 'Completion time', and 'Elapsed time'. Each column has a filter icon (calendar for dates, clock for times) and a dropdown menu for selection. A data row is shown with the following values: 2015-09-10 10:58:43, 2015-09-10 10:58:53, and 00:00:10.

Start time	Completion time	Elapsed time
from to	from to	from HH:MM:SS to HH:MM:SS
2015-09-10 10:58:43	2015-09-10 10:58:53	00:00:10

Figure 44: History tab: Filters

There is a second level of the filters you can use to restrict your selection (Figure 39). This is useful in cases you are interested solely in certain data, for example you want to display information related to RISO image creation result only.

AppliancesSchedulesHistory								
History information						Appliance information		
Start time	Completion time	Elapsed time	Operation	Result		Label	Hostname	Logfiles
from to	from to	from HH:MM:SS to HH:MM:SS	Select operation	Select result		Select Label	Select Hostname	
2015-09-10 10:58:43	2015-09-10 10:58:53	00:00:10	Recovery ISO Creation	Canceled		SG19	soco2-38-sg19	 

Figure 45: History tab: Restricting Filters

Multiple selection of items is also possible:

- 1) Hold the **Ctrl** key and select the items of the interest by **left mouse** click.
- 2) When you release the key, the required information will be filtered out.

Filtering parameters

For every record, following filtering parameters are available:

- **Start time**
- **Completion time**
- **Elapsed time**
- **Operation**
Possible values:
 - 1) Recovery ISO Creation
 - 2) First Install XML Creation

- **Result**
Possible values:
 - Successful
 - Warning
 - Failed
 - Canceled

- **Label**
- **Hostname**
- **Logfiles**

Show log file 

Download log file 

5.1.2 List of operations

The operations are listed in rows with the latest record on the top of the list (Figure 40).

AppliancesSchedulesHistory								
History information						Appliance information		
Start time	Completion time	Elapsed time	Operation	Result		Label	Hostname	Logfiles
Expand view								
from to	from to	from HH:MM:SS to HH:MM:SS	Select operation	Select result		Select Label	Select Hostname	Functional icons
2015-09-10 10:58:43	2015-09-10 10:58:53	00:00:10	Recovery ISO Creation	Canceled		SG19	soco2-38-sg19	 
2015-09-10 10:39:59	2015-09-10 10:42:50	00:02:51	Recovery ISO Creation	Successful		SG19	soco2-38-sg19	

Figure 46: History tab: List of operations

Functional icons

For every operations row, following functional icons are available (Figure 41):

- 1) Show log file
- 2) Download log file

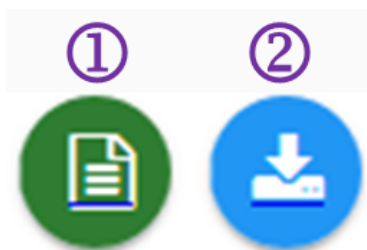


Figure 47: History tab: Functional icons

See also:

[Recovery ISO image creation log files](#)

Expand or collapse the view

Every row can be expanded by clicking on the plus sign on the left in order to show the **operation details**. To hide the details again, click the minus sign (Figure 42).

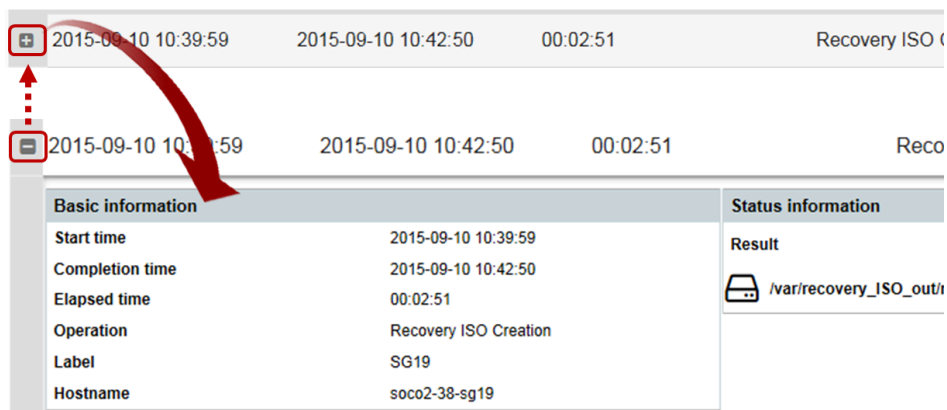


Figure 48: History tab: Expand/collapse an operation row

Display operation details

The detailed information about an operation can be seen in extended view after expanding the row.

The extended view is divided into three boxes (Figure 43):

- 1) **Basic information** (first box from the left):

Contains details about the selected operation.

2) **Status information** (second box from the left):

- Result - overall result of the operation
Possible values:
 - Warning
 - Failed
 - Canceled
- Path to the created ISO image and result status for each archive - it shows whether writing to USB stick or the transfer to SFTP server was successful.

Possible options:

- Hard disk



- USB stick



- SFTP server



3) **Additional information** (third box from the left):

Provides information included in the ISO image:

- Software Version
- Loadware Version
- Size of the ISO image [Bytes]
- Return code and additional information about eventual failure
- Scheduled/Manual - indicates if the operation was started manually or by the scheduler

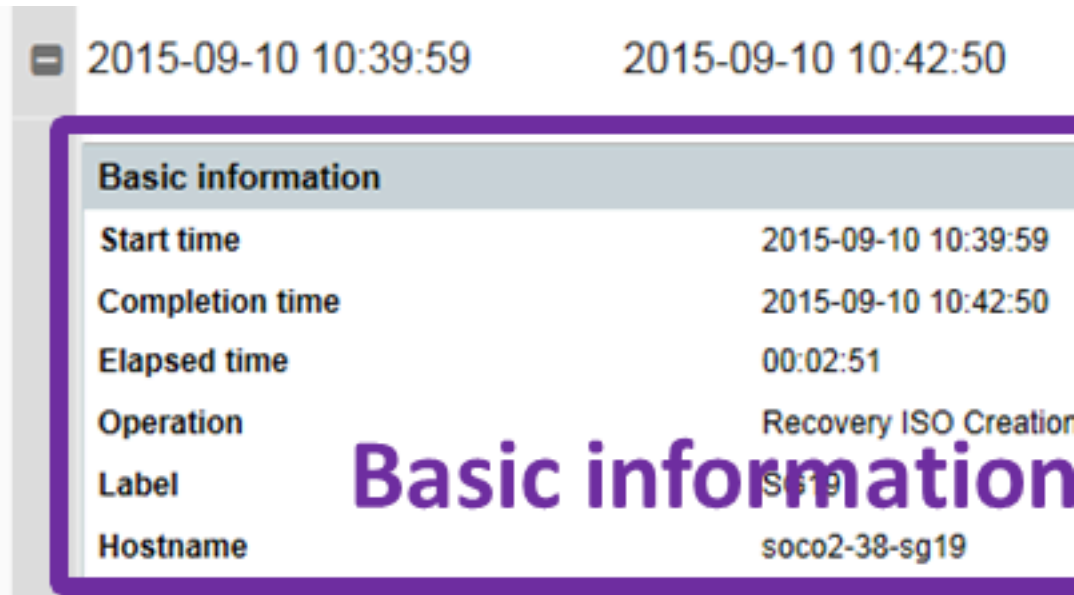


Figure 49: History tab: Operation displayed details

5.1.3 Functional buttons

There are four functional buttons on the History tab:

- **Reset filters**
- **Refresh all**
- **Expand all**
- **Collapse all**



Figure 50: History tab: Functional buttons

Sorting and filtering can be reset by clicking **Reset filters**.

The history list is automatically refreshed only when the view is switched to the History tab. However, the immediate refresh can be enforced by clicking **Refresh all**.

All rows can be expanded by clicking **Expand all** and collapsed by clicking **Collapse all**.

5.1.4 Page navigator

The Page navigator allows you to display the desired **number of items per page**. The default value is to show **twenty rows** per page.

If you want to **change** the number of items displayed ([Figure 45](#)):

- **Left mouse click** on the arrow next to the *Rows per page* number to open a menu.
- Left mouse click to **select the value**. The number of items will be updated according to your selection automatically.

Possible options:

- 5
- 10
- 20
- 50
- 75
- 100

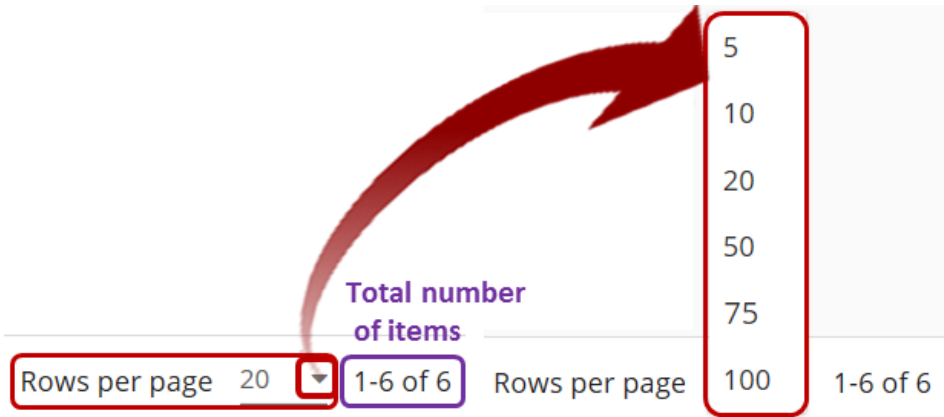


Figure 51: History tab: Page navigator

Alternatively, you can toggle between the pages by typing directly the number of the page you want to display ([Figure 46](#)).

NOTICE: This option is available only if the number of items displayed on the page exceeds the *Rows per page* value.

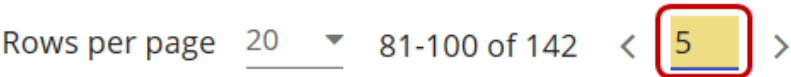


Figure 52: Appliances tab: Page navigator: Page number

6 Settings window

The Settings window layout consists of four main elements:

1) **Options**, area marked with an orange rectangle):

The Appliance management Settings window enables to:

- Set up the [SFTP Archive configuration](#)
- Download the [Appliance Management GUI log files](#)

2) **SFTP configuration setup**, area marked with a green rectangle)

3) **Connection Test results**, area marked with a brown rectangle)

4) **Functional buttons**, area marked with a purple rectangle):

- **Save & Test:** Saves the SFTP configuration and runs the Connection test
- **Delete:** Resets the SFTP configuration setup form
- **Close:** Closes the Settings window

Settings

SFTP configuration

Host Name (or IP Address)

Path

User

Password

Maximal number of images per appliance 2

Connection Test

Test Progress

Save & Test Delete Close

Figure 53: Settings window layout

6.1 SFTP Archive configuration

Important note: Due to the size of the RISO images, it is recommended to use an **external SFTP** server for their storage. Neither the Platform, nor the Assistant SFTP servers should be used for this purpose as their size is limited!

NOTICE: There is one common SFTP server for all appliances.

6.1.1 Set up the SFTP archive configuration and run the Connection test

- 1) In the Appliance Management GUI, click on the **Settings** icon ( , [Figure 48](#)).

Appliances									
Schedules									
History									
(Logs can be downloaded from the Platform Portal under Logs -> Export -> Recovery ISO) Online									
Label	Host Name	Customer IP	Software Version	Hardware Type	RAM	Deployment	LTU Number	Last Operation	Status
Select Label	Select Host Name	Select IP	Select Version	Select Hardware	Find	Select Deployment	Select LTU	Select Operation	Select Status
 Node1	SY55-VNR	10.121.0.50	V10_R1.28.2	ECOSERVER2	16 GB	Simplex	0		Idle
 SG50	OSA5-SG50-Voice1	10.121.121.50	V10_R1.28.0	OSA500	8 GB	StandaloneSoftgate	50		Idle

Figure 54: Appliance management: Settings

- 2) The *Settings* window with the **SFTP configuration** will appear ([Figure 49](#)).
- 3) Enter following parameters (step 1, [Figure 49](#)):

- **Host Name** or **IP address** of the SFTP server.
 - The IP address must be reachable from all appliances since the RISO image transfer is done directly from each appliance to the SFTP server.
 - If the Host Name is used, it must be resolvable to the correct IP address on each appliance. Therefore, the FQDN should be used.
- **Port** used to establish the connection to the SFTP server.

The default port is **22**.
- **Directory Path** on SFTP server where the ISO images will be stored.

The directory must already exist on the SFTP server and the User (see below) must have a permission to read/write in this directory.
- **User** name used for login to the SFTP server.

This user must have a permission to read/write in the directory specified by Path (see above).
- **Password** used for login to the SFTP server.
- **Maximal number of images per appliance** that can be stored on the SFTP server. The range of numbers that can be entered is from 1 to 10.

The default value is two images per appliance.

Settings

SFTP

Download log

SFTP configuration

Host Name (or IP Address)

10.82.38.10

Port

22

Path

/var/sftp

User

root

Password

Maximal number of images per appliance

2

Connection Test

Test Progress

Save & Test

Delete

Close

Figure 55: Settings window: SFTP configuration

- 4) When done, click **Save & Test** (step 2, [Figure 49](#)). When the configuration is saved, a toast window displaying the Save message will appear in the upper right corner of the *Settings* window.
- 5) At the same time, the **Connection test** for each appliance will start. This test includes following checks:
 - IP address/Host Name reachability
 - Availability of the SFTP service
 - User and password correctness
 - Existence of the chosen directory and permissions check
 - Space capacity

You can monitor the progress of the Connection test in the **Test Progress** field (step 3, [Figure 49](#)).

For every appliance there is a spinner displayed while the test is still running. The test result can be:

- **Successful** (step 4, [Figure 49](#))
- **No connectivity to SFTP server**
- **SFTP service unreachable**
- **Cannot login to SFTP server:** wrong user or password
- **Directory does not exist on SFTP server** ([Figure 50](#))
- **Cannot write to directory on SFTP server**
- **Not enough space on SFTP server**
- **Appliance inaccessible**
- **No valid test result from appliance**
- **Aborted due to timeout**

Connection Test	
Test Progress	
Node1 + SG17	Directory does not exist on SFTP server
SG19	Directory does not exist on SFTP server
SG18	Directory does not exist on SFTP server
SurvSG20	Directory does not exist on SFTP server

Figure 56: Settings window: Connection test progress result example

6.1.2 Update the SFTP archive configuration

If you want to update the SFTP archive configuration ([Figure 51](#)):

- 1) Go to the *Settings* window.

- 2) Left mouse click on the **parameter** you want to edit.
- 3) Delete the old value and type a new one.
- 4) Store the changes by clicking **Save & Test**.

Settings

SFTPDownload log

SFTP configuration

Host Name (or IP Address)

10.82.38.5

Path

/var/SFTP

User

engr

Password

Maximal number of images per appliance

1

Connection Test

Test Progress

Save & Test

Delete

Close

Figure 57: Settings window: Update the SFTP configuration

6.1.3 Delete the SFTP archive configuration

If you want to delete the SFTP archive configuration:

- 1) Go to the *Settings* window.
- 2) Click **Delete** (Figure 52).

Settings

SFTPDownload log

SFTP configuration

Host Name (or IP Address)

10.82.38.5

Path

/var/SFTP

User

engr

Password

Maximal number of images per appliance

1

Connection Test

Test Progress

Save & Test

Delete

Close

Figure 58: Settings window: Delete the SFTP configuration

- 3) The system will ask you to confirm the action. Click **Yes** on the Delete SFTP settings message (Figure 53).



Figure 59: Settings window: Delete the SFTP configuration: confirm

- 4) The SFTP configuration will be deleted and the form will be emptied.

6.2 Log files

The log files connected to the Appliance Management and RISO image feature can be downloaded from three different locations:

- 1) Appliance Management Settings window ([Appliance Management GUI log files](#))
- 2) Portal ([Platform Controller log files](#))
- 3) History tab in Appliance Management ([Recovery ISO image creation log files](#))

6.2.1 Appliance Management GUI log files

The log file containing the Appliance Management **GUI information** can be downloaded from the *Appliance Management Settings* window:

- 1) In the Appliance Management GUI, click on the **Settings** icon (, Figure 54).



Figure 60: Appliance management: Settings

- 2) The *Settings* window will appear. Click **Download log**. The log file will be downloaded automatically (Figure 55).



Figure 61: Appliance management: Settings window

6.2.2 Platform Controller log files

The **Platform (PLT) controller** log files can be downloaded via the **Portal** (Figure 56):

- 1) Log in to the Portal. Click **Maintenance**.
- 2) In the *Maintenance* menu, open **Logs** and click **Export**.

3) Select the **Recovery ISO** checkbox and click the **Export** button.

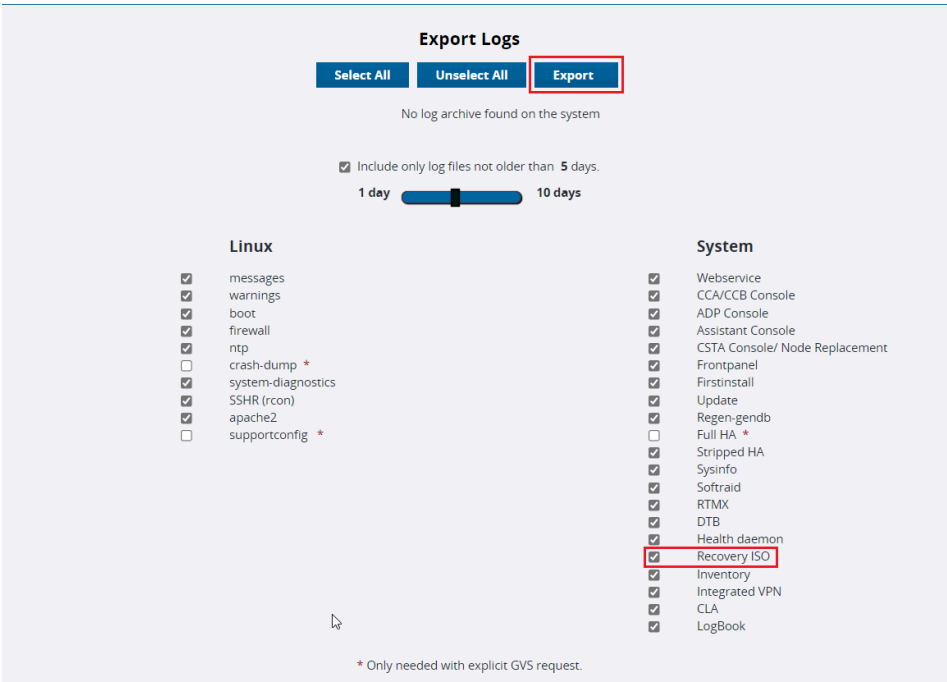


Figure 62: Maintenance window: Export Logs

Log files on Linux Host Platform:

/var/log/recoveryISO
/opt/dscx1/share/recoveryISO

6.2.3 Recovery ISO image creation log files

The log files of **RISO creation** of individual appliances can be found in the *History tab* (Figure 57).

Appliances Schedules History Online 9:43:42									
History information						Appliance information			
Start time	Completion time	Elapsed time	Operation	Result		Label	Hostname	Logfiles	
from to	from to	from HHMMSS to HHMMSS	Select operation	Select result		Select Label	Select Hostname		
2015-09-10 10:58:43	2015-09-10 10:58:53	00:00:10	Recovery ISO Creation	Canceled		SG19	soco2-38-sg19		
2015-09-10 10:39:59	2015-09-10 10:42:50	00:02:51	Recovery ISO Creation	Successful		SG19	soco2-38-sg19		
2015-09-10 09:36:31	2015-09-10 09:37:45	00:01:14	Recovery ISO Creation	Successful		SG19	soco2-38-sg19		

Figure 63: Appliances log files in History tab

The log files can be:

- 1) **Viewed directly:** Click **Show log file** icon(, Figure 58). A popup window with the content of the log file will appear.
- 2) **Downloaded:** Click **Download log file** icon(, Figure 58). The log file in .gz zip format will be downloaded automatically.

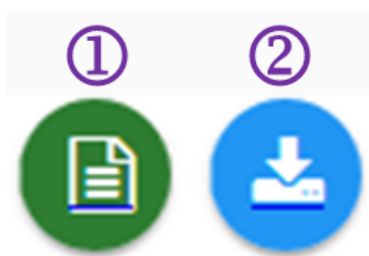


Figure 64: Log files functional icons in History tab

7 Reinstallation of an appliance from Recovery ISO image

Reinstallation from the RISO image is supported on the same Hardware platform where the RISO image was created.

If the RISO restore is started for one appliance, the RISO backup creation should not be attempted for the same appliance.

The reinstallation from the RISO image can be either manual or unattended:

- **Manual:** The user confirms the reinstallation by unplugging or plugging the USB stick during the boot phase.
- **Unattended:** The user starts a RISO restore script which triggers the reinstallation from local hard disk or from USB stick plugged onto the system.

Reinstallation formats the hard disk and reinstalls and configure the whole system. All the former data will be lost. This process is identical to a fresh installation.

7.1 Manual reinstallation

Manual reinstallation of the RISO image requires an assistance of the user.

7.1.1 Reinstallation from the USB Stick

Prerequisites:

A valid recovery ISO image should be available on the USB stick.

If the USB Stick does not contain a RISO image yet, follow the steps in chapter 2.2.2: *Preparing an USB Stick for Installation* in the **Installation, Configuration and Migration** manual to transfer the RISO image from the SFTP server on the USB Stick.

Alternatively, the RISO image can be **written on the USB** Stick using the **OpenScape 4000 appliance** (see [Writing a Recovery ISO image on USB Stick via the OpenScape 4000 appliance](#) for more details)

Procedure:

- 1) EcoServer and Branch remove the HD/SSD before the reset in order to force booting from the USB Stick. Plug in the USB Stick containing a RISO image and power on, reboot or reset the system

After the system boot from the USB Stick, plug again the HD/SSD.
- 2) Wait until the ETHs flash. This will take approximately one minute.
 - **ETH6 and ETH7** for **EcoServer**
 - **ETH0 and ETH1** (LAN & WAN) for **OSA500 and BRANCH**
- 3) During this phase, **plug out the USB stick** and then **plug it back in**. This will start up the reinstallation from the RISO image.

NOTICE: Connected USB Stick does NOT mean that in case the system reboots, the creation of RISO images will run in loops automatically.

Remarks:

For the reinstallation of RISO image on OSA500, EcoServer and Branch, every USB port can be used.

For the migration from an old hardware (for example: OSA, etc.) we create an Recovery ISO image.

In the case of Duplex and Geo Separated Duplex it is possible to restore with the same image for node A and B respectively A, B and Q in the case of Geo Separated Duplex. In order to achieve that, we put the RISO image on a stick (bootable stick).

In this case, we make a backup RISO image on any node A or B and the restore can be done on any node (A, B or Q) with the same image made on the stick.

For **Virtual Machines** on ESX:

Option 1: **Reinstallation from local disk**

If the appliances are running as VM on ESX, the reinstallation process will start automatically. Therefore, you have to take care that the RISO image is booted only once and it is NOT configured as a default boot entry in the BIOS.

For the reinstallation procedure, please see [Chapter 7.2.1, "Reinstallation from the local Hard disk"](#).

Option 2: **Reinstallation using the RISO image connected to VM**

Appliances running as VM on ESX can also be reinstalled directly with the RISO image connected to the VM (no USB stick is required).

NOTICE: The RISO image can be used to reinstall an existing VM or on a newly created VM (in case a new VM is used, please deploy corresponding OVF template).

NOTICE: It is recommended that the RISO image is copied locally to ESX Datastore before mounting it to the VM.

For **Quorum Node**:

The Quorum Node can be restored with a RISO image created from any node.

For **Node1** and **Node2**:

It is possible to restore all Node1, Node2 and Quorum Nodes of a Duplex/GSD with a RISO image previously created on Node1 or Node2.

NOTICE: It is not possible to restore Node1 and Node2 using a RISO image previously created on Quorum Node.

For **Duplex/GSD deployments**:

The reinstallation follows the default scheme where Node1 will be primary and Node2 will be secondary. If you need a different order, you need to change manually the XML file stored on the USB Stick in the Config directory. Use the

Reinstallation of an appliance from Recovery ISO image

"node-replacement" = 1 tag option. For more details, please see the chapter 10.3.2.1: *Common Section* in the **Installation, Configuration and Migration**.

If the physical hardware or virtual machine is replaced, to use RISO restore you must update the XML file with the new MAC address.

7.1.1.1 Reinstallation of a Geo Separated Duplex (GSD) system

Prerequisites

Trigger shutdown of all nodes via **Portal --> Maintenance -->Shutdown/Reboot menu**.

NOTICE: In case Portal is not working, please initiate the nodes shutdown via ssh connection for each node: `#shutdown`

In case of the full system restore, the reinstallation sequence should be:

- **Node1**

In order to have telephony up, the standalone operation should be enabled

`#standalone_operation enable`

- **Node2**

- **Quorum**

Wait until the Node1 is fully up and the Assistant installation/Assistant Logical restore have finished

- **Node1**

Disable the standalone operation mode

`#standalone_operation disable`

In this case, we make a backup RISO image on any node A or B and the restore can be done on any node (A, B or Q) with the same image made on the stick.

NOTICE: All cables should be connected while the reinstallation is done

7.1.1.2 Reinstallation of a Duplex system

Prerequisites

Trigger shutdown of all nodes via **Portal -> Maintenance ->Shutdown/Reboot menu**.

NOTICE: In case Portal is not working, please initiate the nodes shutdown via ssh connection for each node: `#shutdown`

In case of the full system restore, the reinstallation sequence should be:

- **Node1**

Wait until the Node1 is fully up and the Assistant installation/Assistant Logical restore have finished

- **Node2**

In this case, we make a backup RISO image on any node A or B and the restore can be done on any node (A, B) with the same image made on the stick.

NOTICE: You can use the Feature Node Replacement to recover the second Node of the Duplex Setup.

7.1.1.3 Reinstallation of single Node systems

In case of the full system restore, the reinstallation sequence should be:

- **Node1**

NOTICE: Covered systems: Simplex, Survivable SoftGate, APE and Standalone SoftGate.

7.2 Unattended reinstallation

7.2.1 Reinstallation from the local Hard disk

Prerequisites:

- OpenScape 4000 appliance system is accessible.
- RISO image was created and it is stored on:

/tmp/recovery_ISO_out

Procedure:

- 1) Start the RISO image reinstallation process by calling the command:

```
/opt/recoveryISO/recoveryISO.sh restore_local
```

Note: If the RISO image is located in a different folder, it can be passed to the script with following command:

```
/opt/recoveryISO/recoveryISO.sh  
restore_local<path_to_riso_backup_image>
```

NOTICE: In case of Duplex/GSD, please trigger the RISO reinstallation.

Restrictions:

The reinstallation of RISO image will not work:

- If the system was updated with RAR feature from installations having a very old partitioning layout (V6 R1.10 or V6R1.12) where there is no separate `var` partition and logical volume group.
- If a second Hard disk with failure is inserted but it is not active in the RAID.
- Local RISO restores are supported inside Major SW Versions, means the base SW version needs to be on the same Major SW versions. e.g. V11 RISO images requires V11 boot SW level.
- Restore of Duplex (EcoServer) System has to use Node replacement for StandBy Node
- Local restore of GSD deployments on Hypervisor environment isn't supported as the StandBy Node can't be restored via Node replacement, use instead Hypervisor backup to restore.

7.2.2 Remote restore from the locally connected USB Stick

It is possible to connect a USB Stick with the RISO image locally first, and then trigger the reinstallation process remotely without the BIOS boot order changes.

You can initiate the reinstallation via following command:

```
/opt/recoveryISO/recoveryISO.sh restore_usb
```

NOTICE: The USB Stick can remain connected to the system permanently. You can use it as a medium for regular (scheduled) RISO image creation or when a fast reinstallation is needed without any extra preparation step for the recovery.

7.2.3 Writing a Recovery ISO image on USB stick

If the USB Stick does not contain a RISO image yet, follow the steps in chapter 2.2.2: *Preparing an USB Stick for Installation* in the **Installation, Configuration and Migration manual** to transfer the RISO image from the SFTP server on the USB Stick.

The RISO image can be written on the USB Stick using the OpenScape 4000 appliance (see [Writing a Recovery ISO image on USB Stick via the OpenScape 4000 appliance](#) for more details).

7.2.3.1 Writing a Recovery ISO image on USB Stick via the OpenScape 4000 appliance

You can write the ISO image manually on the USB stick with command:

```
/opt/recoveryISO/recoveryISO writeusb
```

NOTICE: If the USB Stick is plugged in during the run of the RISO image creation process, after the successful creation of the ISO image in the local system folder, the system will attempt to write the ISO image to the USB Stick.

NOTICE: In case that the writing process is **interrupted** or **unsuccessful**, the RISO image creation process will end

with warning: *"USB stick not written, unusable for recovery purposes"*.

NOTICE: It is allowed to have **only one USB Stick** connected to the system while performing this operation.

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