



A MITEL
PRODUCT
GUIDE

Unify OpenScape 4000 Manager

Gateway Manager V11R1

Administrator documentation

05/2025

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 2025, Mitel Networks Corporation

All rights reserved

Contents

1 Overview	4
1.1 Functionalities of the Gateway Manager.....	10
1.1.1 Time Frame and Scenarios of LW Update.....	11
1.1.2 Updating Loadware on Multiple Boards.....	12
1.1.3 Time Frame and Scenarios of OS image Update for Standalone SoftGates, STMIX, Enterprise Gateways.....	12
1.1.4 Light board list update.....	12
1.1.5 Restarting the boards.....	13
1.2 Starting the Gateway Manager.....	13
2 Loadware Tabsheet	15
2.1 LW Update with Manual Transfer and Manual Activation.....	17
2.2 LW Update with Manual Transfer and Immediate Activation.....	18
2.3 Remote access for IP boards.....	18
3 Transfer and/or Activation Scheduled at Different Times	24
4 "OS Update" Tabsheet	26
4.1 Possible Reasons for Failures of Gateway Manager.....	27
4.2 OS Update with Manual Transfer and Immediate Activation.....	28
4.3 Platform Hotfix Update.....	29
5 "Backup/Restore" Tabsheet	30
5.1 Backup/Restore Process.....	32
6 SPE Tabsheet	33
7 License TabSheet	36
8 "Failed Actions" Dialog	38
8.1 Inspecting Failed Actions.....	38
8.2 Possible Reasons for Failures of Gateway Manager.....	38
9 Handling of Boards Without Background Loading Capability	41
10 Appendix	43
10.1 Limitations and Restrictions.....	43
10.2 Transfer and Activation Controlled by Assistant.....	43
10.3 The LW Update Process.....	43
Index	45

1 Overview

The Gateway Manager is part of the HG3550m package and covers eight separate tasks:

- 1) Transfer of a loadware image to STMI, STMIX and NCUI IP telephony boards and to SoftGates and Enterprise GW.
- 2) Activation of this image on these boards.
- 3) Transfer and background installation of an OS image to Standalone SoftGates, STMIX and Enterprise GW.
- 4) Activation of this image on Standalone SoftGates, STMIX and Enterprise GW.
- 5) Backup of configuration data from the boards to the Assistant or restore the configuration data from the Assistant to the Gateway Manager.
- 6) MEK and Passphrase distribution.
- 7) Restart of all types of boards, including the boards without background loading capability.
- 8) Remote access for IP boards with valid IP via WBM, SSH, SFTP.
- 9) View License information and distribute license file to all Enterprise Gateways and SoftGates connected to the System.

All the tasks can be initiated independently from each other. Additionally, it is possible to control the software update related tasks manually or via a scheduler (cronjob).

Supported Board Versions

The following types of boards are supported by the Gateway Manager:

Table 1: Supported board types

POS	Q-NUMBER	TYPE	BD-NAME	FCTID	CIRCUITS	LINE-TYPE	LW-FILE
001	Q2012-X100	PER	TMEM	0	4	TMEM_NW	LG42/PZGTEMT0
002	Q2025-X300	PER	TMBD	0	4	TMBD	LG03/PZGTMBD0
003	Q2064-X100	PER	TMLR	0	2	TMLR	LG17/PZGTMLW0
004	Q2123-X	PER	TMLBL	0	8	TMLBL	LG77/PZGTBOB0
005	Q2123-X100	PER	TMLBL	0	8	TMLBL	LG77/PZGTBOB1
006	Q2146-X	PER	SLMA2	0	24	SLMA_1	LG80/PZESLA20
007	Q2147-X	PER	TMSFP	0	8	TMSFP	LG87/PZGTSFP0
008	Q2147-X300	PER	TMSFP	0	8	TMSFP	LG87/PZGTSFP1
009	Q2147-X400	PER	TMSFP	0	8	TMSFP	LG87/PZGTSFP1
010	Q2150-X	PER	SLMB	0	16	SLMB_16	LG49/PZDSMBC0
011	Q2150-X100	PER	SLMB4	0	4	SLMB_16	LG49/PZDSMBC0
012	Q2153-X	PER	SLMQ	0	16	SLMQ_EXT	LG86/PZDQSM10

POS	Q-NUMBER	TYPE	BD-NAME	FCTID	CIRCUITS	LINE-TYPE	LW-FILE
013	Q2153-X100	PER	SLMQ	0	16	SLMQ_EXT	LG86/PZDQSM
014	Q2158-X	PER	SLMO24	1	24	SLMO	LG83/PZDSMC
015	Q2159-X100	PER	TM2LP	0	8	TM2LP0	LG99/PZGTM2
016	Q2159-X110	PER	TM2LP	0	8	TM2LP1	LG99/PZGTM2
017	Q2159-X120	PER	TM2LP	0	8	TM2LP2	LG99/PZGTM2
018	Q2159-X130	PER	TM2LP	0	8	TM2LP3	LG99/PZGTM2
019	Q2159-X140	PER	TM2LP	0	8	TM2LP4	LG99/PZGTM2
020	Q2159-X150	PER	TM2LP	0	8	TM2LP5	LG99/PZGTM2
021	Q2159-X160	PER	TM2LP	0	8	TM2LP6	LG99/PZGTM2
022	Q2159-X170	PER	TM2LP	0	8	TM2LP7	LG99/PZGTM2
023	Q2159-X180	PER	TM2LP	0	8	TM2LP8	LG99/PZGTM2
024	Q2159-X190	PER	TM2LP	0	8	TM2LP9	LG99/PZGTM2
025	Q2159-X200	PER	TM2LP	0	8	TM2LP10	LG99/PZGTM2
026	Q2160-X	PER	STMA	4	32	STMA_PSW	LG98/PZSTMA
027	Q2160-X	PER	STMA	5	128	STMA_NW20	LG98/PZSTMA
028	Q2160-X100	PER	STMA	4	32	STMA_PSW	LG98/PZSTMA
029	Q2160-X100	PER	STMA	5	128	STMA_NW20	LG98/PZSTMA
030	Q2163-X	PER	STMD2	1	8	STMD_S0	LG79/PZDSTM
031	Q2163-X100	PER	STMD2	1	8	SLMS	LG79/PZDSTM
032	Q2168-X	PER	SLMO24	1	24	SLMO	LG83/PZDSMC
033	Q2169-X	PER	STHC	1	16	SLMO	LG71/PZDSTH
					4	STMD_S0	
034	Q2169-X100	PER	SLMOP	1	24	SLMO	LG73/PZDSMP
035	Q2174-X	PER	STMD	0	8	STMD_S0	LG44/PZDFST
036	Q2184-X	PER	SLMAB	0	24	SLMA_1	LG43/PZESMA
037	Q2186-X100	PER	TMLRB	0	8	TMLRB	LG69/PZGTLR
038	Q2187-X	SIUP	SIUX2	2	8	SIU_TYP_2	LG02/PZJ22MV
039	Q2187-X	SIUP	SIUX2	3	8	SIU_TYP_3	LG25/PZJ23MC
040	Q2187-X	SIUP	SIUX2	4	8	SIU_TDS	LG02/PZJ24TD

Overview

POS	Q-NUMBER	TYPE	BD-NAME	FCTID	CIRCUITS	LINE-TYPE	LW-FILE
041	Q2187-X	SIUP	SIUX2	5	8	SIU_ANI	LG25/PZJ25AN0
042	Q2187-X	SIUP	SIUX2	6	8	SIU_TYP_3	LG25/PZJ26SH0
043	Q2187-X	SIUP	SIUX2	7	8	SIU_TYP_2	LG02/PZJ27LT0
044	Q2191-X	PER	SLMA3	0	24	SLMA_1	LG80/PZESLAC0
045	Q2191-C	PER	SLMAC	0	24	SLMA24	LG80/PZESLAC0
046	Q2192-X	TMD	TMDNH	1	25	TMDN_BOS	LG82/PZFDMTBK
047	Q2192-X	TMD	TMDNH	2	1	TMDN_MOS	LG82/PZFDMTMK
048	Q2192-X	TMD	TMDNH	3	1	TMDN_CORNET_	LG82/PZFDMTVK
049	Q2193-X200	PER	SLC24	0	255	SLMC	LG93/PZDSL27
050	Q2195-X	DIU	DIU-N4	1	4	SLMN_E1	LGA2/PZFDUN40
051	Q2196-X	DIU	DIU-N2	1	2	SLMN_E1	LGA1/PZFDUN20
052	Q2196-X	DIU	DIU-N2	2	64	DIUC64	LGA2/PZFDCA20
053	Q2197-T	PER	TMDID	0	8	TMDID8	LG61/PZUDIDA0
054	Q2199-X	PER	SLMAR	0	8	SLMAR	LG80/PZESLA40
055	Q2205-X	PER	WAML	1	1	WAML	LG91/PZWWAML0
056	Q2205-X	PER	WAML	2	255	SLMPX	LG00/PZSLMPX0
057	Q2214-X	PER	TMOM2	0	4	TMOM2	LG88/PZGMOM40
058	Q2214-X100	PER	TMOM2	0	4	TMOM2	LG88/PZGMOM40
059	Q2216-X	TMD	DIU2U-B	5	25	TMDN_BOS	LG82/PZFDUNBK
060	Q2216-X	TMD	DIU2U-M	6	2	TMDN_MOS_CVN	LG82/PZFDUNMK
061	Q2217-X	PER	STMD3	1	8	STMD_S0	LG79/PZDSTM30
062	Q2217-X100	PER	STMD3	1	8	SLMS	LG79/PZDSTM30
063	Q2225-X	PER	SLMAE	0	24	SLMA24	LG80/PZESLA40
064	Q2226-X200	DIU	DIUT2-E1	1	2	SLMN_E1	LGA1/PZFDUE10
065	Q2226-X200	DIU	DIUT2-E1	2	64	DIUC64	LGA1/PZFDUE10
066	Q2226-X200	TMD	DIUT2-T1	3	25	TMDN_BOS	LGA1/PZFDUT10
067	Q2226-X200	TMD	DIUT2-T1	4	2	TMDN_MOS_CVN	LGA1/PZFDUT10
068	Q2227-X1	PER	SLMAV8	0	8	SLMA24	LG80/PZESLAV0
069	Q2227-X	PER	SLMAV	0	24	SLMA24	LG80/PZESLAV0

POS	Q-NUMBER	TYPE	BD-NAME	FCTID	CIRCUITS	LINE-TYPE	LW-FILE
070	Q2233-X	SIUP	SIUX	1	8	STANDART_SIU	LG63/PZJMSC
071	Q2233-X	SIUP	SIUX	2	8	SIU_TYP_2	LG02/PZJX2M
072	Q2233-X	SIUP	SIUX	3	8	SIU_TYP_3	LG25/PZJX3M
073	Q2233-X	SIUP	SIUX	4	8	SIU_TDS	LG02/PZJX4TD
074	Q2233-X	SIUP	SIUX	5	8	SIU_ANI	LG25/PZJX5AN
075	Q2233-X	SIUP	SIUX	6	8	SIU_TYP_3	LG25/PZJX6SH
076	Q2233-X	SIUP	SIUX	7	8	SIU_TYP_2	LG02/PZJX7LT
077	Q2235-X	PER	VCM-B15	0	1	VCM_B15	LG95/PZJVCM
078	Q2236-X	PER	STMD4	1	8	STMD_S0	LG79/PZDSTM
079	Q2238-X200	DIU	DIUT3-E1	1	2	SLMN_E1	LGA1/PZFDUE
080	Q2238-X200	DIU	DIUT3-E1	2	64	DIUC64	LGA1/PZFDUE
081	Q2238-X200	TMD	DIUT3-T1	3	25	TMDN_BOS	LGA1/PZFDUT
082	Q2238-X200	TMD	DIUT3-T1				
083	Q2246-X	PER	SLMA24	0	24	SLMA_1	LG80/PZESLA2
084	Q2266-X	LTU	LTUCA	0	0		LGA0/PZKLTU
085	Q2286-X	PER	TMLRB	0	8	TMLRB	LG69/PZGTLR
086	Q2287-X	SIUP	SIUX3	2	8	SIU_TYP_2	LG02/PZJ30AL
087	Q2287-X	SIUP	SIUX3	3	8	SIU_TYP_3	LG02/PZJ30AL
088	Q2287-X	SIUP	SIUX3	4	8	SIU_TDS	LG02/PZJ30AL
089	Q2287-X	SIUP	SIUX3	5	8	SIU_ANI	LG02/PZJ30AL
090	Q2287-X	SIUP	SIUX3	6	8	SIU_TYP_3	LG02/PZJ30AL
091	Q2287-X	SIUP	SIUX3	7	8	SIU_TYP_2	LG02/PZJ30AL
092	Q2288-X	PER	TMCOW	0	8	TMCOW	LG68/PZGTCO
093	Q2288-X 10	PER	TMCOW	0	8	TMCOW	LG68/PZGTCO
094	Q2288-X 20	PER	TMCOW	0	8	TMCOW	LG68/PZGTCO
095	Q2288-X 30	PER	TMCOW	0	8	TMCOW	LG68/PZGTCO
096	Q2288-X 40	PER	TMCOW	0	8	TMCOW	LG68/PZGTCO
097	Q2288-X 50	PER	TMCOW	0	8	TMCOW	LG68/PZGTCO
098	Q2288-X 60	PER	TMCOW	0	8	TMCOW	LG68/PZGTCO
099	Q2288-X100	PER	TMCOW	0	8	TMCOW	LG68/PZGTCO

Overview

POS	Q-NUMBER	TYPE	BD-NAME	FCTID	CIRCUITS	LINE-TYPE	LW-FILE
100	Q2288-X110	PER	TMCOW	0	8	TMCOW	LG68/PZGTCOWD
101	Q2288-X120	PER	TMCOW	0	8	TMCOW	LG68/PZGTCOWD
102	Q2288-X130	PER	TMCOW	0	8	TMCOW	LG68/PZGTCOWQ
103	Q2288-X220	PER	TMCOW	0	8	TMCOW	LG68/PZGTCOWL
104	Q2288-X300	PER	TMCOW	0	8	TMCOW	LG68/PZGTCOWG
105	Q2288-X310	PER	TMCOW	0	8	TMCOW	LG68/PZGTCOWQ
106	Q2292-X100	PER	TMEW2	0	4	TMEMW2	LG85/PZGTMEU0
107	Q2305-X35	AP	NCUI2+	1	1	LTUCE	LGA0/PZKNCI40
108	Q2305-X40	AP	NCUI2+	1	1	LTUCE	LGA0/PZKNCI40
109	Q2312-X	LTG	RTM	0	1	SICOE	CDSCRTM0
					1	SICOE	CECORTM0
110	Q2316-X	IPGW	STMI2	1	0		LG98/PZKSTI40
111	Q2316-X10	IPGW	STMI2	1	0		LG98/PZKSTI40
112	Q2324-X	AP	NCUI4	1	1	LTUCE	LGA0/PZKNCI40
113	Q2324-X10	AP	NCUI4	1	1	LTUCE	LGA0/PZKNCI40
114	Q2324-X11	AP	NCUI4	1	1	LTUCE	LGA0/PZKNCI40
115	Q2324-X500	IPGW	STMI4	1	0		LG98/PZKSTI40
116	Q2324-X510	IPGW	STMI4	1	0		LG98/PZKSTI40
117	Q2324-X511	IPGW	STMI4	1	0		LG98/PZKSTI40
118	Q2327-X100	PER	TMANI	0	8	TMANI	LG99/PZGTMAN0
119	Q2327-X101	PER	TMANI-IM	0	8	TMANI	LG99/PZGTMAN0
120	Q2327-X182	PER	TMANI-BR	0	8	TMANI	LG99/PZGTMAN0
121	Q2329-X	AP	SoftGate	1	1	LTUCE	LGA0/PZKSGW50
122	Q2330-X	IPGW	vHG3500	1	0		LGA0/PZKSGVB0
123	Q2331-X	PER	SLMAE	0	24	SLMA24	LG80/PZESLA40
124	Q2331-X100	PER	SLMAE8	0	8	SLMA24	LG80/PZESLA40
125	Q2332-X	PER	STMD3	1	8	STMD_S0	LG79/PZDSTM30
126	Q2333-X	PER	SLMO24	1	24	SLMO	LG83/PZDSMO10
127	Q2334-X200	PER	SLC24	0	255	SLMC	LG93/PZDSL27

POS	Q-NUMBER	TYPE	BD-NAME	FCTID	CIRCUITS	LINE-TYPE	LW-FILE
128	Q2335-X	DIU	DIUT2-E1	1	2	SLMN_E1	LGA1/PZFDUE
129	Q2335-X	DIU	DIUT2-E1	2	64	DIUC64	LGA1/PZFDUE
130	Q2335-X	TMD	DIUT2-T1	3	25	TMDN_BOS	LGA1/PZFDUT
131	Q2335-X	TMD	DIUT2-T1	4	2	TMDN_MOS_CVN	LGA1/PZFDUT
132	Q2336-X100	PER	TMANI	0	8	TMANI	LG99/PZGTMA
133	Q2336-X101	PER	TMANI-IM	0	8	TMANI	LG99/PZGTMA
134	Q2336-X182	PER	TMANI-BR	0	8	TMANI	LG99/PZGTMA
135	Q2337-X	PER	vSLC	0	255	SLMC	LGA0/PZKSGV
136	Q2338-X1	PER	SLMAV8	0	8	SLMA24	LG80/PZESLA
137	Q2338-X	PER	SLMAV	0	24	SLMA24	LG80/PZESLA
138	Q2339-X	PER	vSLMA	0	24	SLMA_1	LGA0/PZKSGV
139	Q2340-X	PER	vTMOM	0	4	TMOM2	LGA0/PZKSGV
140	Q2341-X	SIUP	vSIUX	3	8	SIU_TYP_3	LGA0/PZKSGV
141	Q2342-X	LTU	LTUCR	0	0		LGA0/PZKLTU
142	Q2343-X	IPGW	STMIX	1	0		LGA0/PZKSGV
143	Q2344-X	PER	SLC24	0	255	SLMC	LG93/PZDSL
144	Q2344-X100	PER	SLMO24	1	24	SLMO	LG83/PZDSMC
145	Q2345-X	PER	SLC24	0	255	SLMC	LG93/PZDSL
146	Q2345-X100	PER	SLMO24	1	24	SLMO	LG83/PZDSMC
147	Q2346-X	PER	SLMAV4	0	4	SLMA24	LG80/PZESLA
148	Q2347-X	AP	EntGW	1	1	LTUCE	LGA0/PZKKGW
149	Q2348-X200	PER	TMANIN	0	8	TMANI	LG99/PZGTMIN
150	Q2349-X	PER	STMD4	1	8	STMD_S0	LG79/PZDSTM
151	Q2351-X	DIU	DIUT3-E1	1	2	SLMN_E1	LGA1/PZFDUE
152	Q2351-X	DIU	DIUT3-E1	2	64	DIUC64	LGA1/PZFDUE
153	Q2351-X	TMD	DIUT3-T1	3	25	TMDN_BOS	LGA1/PZFDUT
154	Q2351-X	TMD	DIUT3-T1	4	2	TMDN_MOS_CVN	LGA1/PZFDUT
155	Q2358-X200	PER	TMANIN	0	8	TMANI	LG99/PZGTMIN
156	Q2452-X	PER	TMDID	0	8	TMDID8	LG61/PZUDID8
157	Q2469-X	PER	TMEMUS	0	4	TMEMUS	LG33/PZGEMU

Overview

Functionalities of the Gateway Manager

POS	Q-NUMBER	TYPE	BD-NAME	FCTID	CIRCUITS	LINE-TYPE	LW-FILE
158	Q2475-X	PER	TMC16	0	16	TMA	LG60/PZUCOT60
159	Q2476-X	PER	TM3WO	0	4	TM3W	LG89/PZGTM3W0
160	Q2477-X	PER	TM3WI	0	4	TM3W	LG89/PZGTM3W0
161	Q2479-X	PER	SLMQ3	0	16	SLMQ3	LG67/PZDQSM30
162	Q2480-X	PER	SLMAR	0	8	SLMAR	LG80/PZESLAR0
163	Q2485-X	PER	TMC16P	0	16	TMA	LG60/PZUCOT60
164	Q2816-X	PER	SLMY	1	255	SLMY	LG93/PZDSLMY0
165	Q6400-X888	PER	CDG31-FU	3	2	CDG	LG74/PZFCDG00
166	Q6401-X	PER	PBCDG-FU	3	2	CDG	LG74/PZFCDG00
167	Q9556-X	PER	TMACH	0	8	TMACH	LG26/PZGMACH0

Related Topics

[Functionalities of the Gateway Manager](#)

[Starting the Gateway Manager](#)

1.1 Functionalities of the Gateway Manager

The Gateway Manager dialog covers the following functionality:

- Supported types of boards are filtered and displayed.
- Version of currently running loadware is displayed for each board.
- Version of available loadware (on RMX-Partition) is displayed.
- Version of currently running OS image is displayed, including the platform HF level for each SoftGate, Enterprise Gateway, STMIX.
- Version of available OS image is displayed including the platform HF level (available after Minor/Fix Release transfer and preparation to the central Host) for each SoftGate, Enterprise Gateway, STMIX.
- Version of imported OS image (available after OS image transfer and Preparation (Background installation)) for each Standalone SoftGate, Standalone Enterprise Gateway, STMIX.
- Setting OS image transfer protocol for each Standalone SoftGate, Standalone Enterprise Gateway, STMIX.
- OS image update can be split into two parts: OS image transfer and/or OS image activation.
- OS image update can be done immediately or time controlled (e.i scheduled). OS update included both RLC and Platform HF (if activated on the host).
- OS image transfer status is displayed.
- Single boards or all supported IP boards can be selected for the LW Update.
- Restart board can be done for all types of boards (IP or non IP).
- LW Update can be split into two parts: Loadware transfer and/or loadware activation.

- LW Update can be done immediately or time controlled (i.e. scheduled).
- LW Update status (e.g. transfer running) is displayed.
- LW/OS update is done in parallel for all selected boards. As soon as one board has finished the transfer, its activation will start. The NCUI and Enterprise Gateway boards will not start their activation until the STMI/STMIX boards from their shelves finish transferring their LWs, and in case of STMIX boards, they will also wait until the LW activation command is sent.
- Backup of configuration data from the boards to the Assistant or restore configuration data from the Assistant to the Gateway Manager.
- Communication between Assistant and the boards is performed via https.
- Description of type (STMI, NCUI, STMIX, Enterprise Gateway, Softgate, etc) and functionalities (SIP, WAML, STANDBY, etc) of the boards, detailed information about them, location of access points of the boards.
- Security mode of the board's connection – it allows also to change for a board the security status from SECURE to MAINTAINANCE and back to execute some operation on it.
- Display of Softgate License Information (ALI, license type and validity), serial number and SIEL-ID.
- Connection type for AP boards (DL or NW in case of Softgates and Enterprise Gateways).
- Extended Enterprise Gateway ID and Shelf (XEntGWID and XEntGWSshelf) in case of Extended Enterprise Gateway.
- Update and distribution of SecureTrace passphrase.
- Configure manual/automatic MEK distribution.
- Remote access to web based administration GUI for administration of a HG board via direct link.
- Remote SSH access to HG boards via direct link.
- Remote SFTP access to SoftGate, Enterprise Gateway and STMIX, STMIY.
- Upload and distribute licenses for SoftGates and Enterprise Gateways.

NOTICE: An OS image transfer to Survivable SoftGate/Enterprise Gateway is done by HBR APE Restore. The Gateway Manager does not support an OS image transfer and background installation for Survivable SoftGate/Enterprise Gateway.

1.1.1 Time Frame and Scenarios of LW Update

LW Update is split into two parts: loadware transfer and loadware activation.

For both tasks, manual and time controlled initiation is supported.

So the following scenarios are in scope:

- 1) manual transfer → manual activation
- 2) manual transfer → immediate subsequent activation
- 3) time controlled transfer → time controlled activation

This approach is an add-on to the existing NCUI (FTP), back-plane loading concept. Existing loading concepts are not affected by the implementation of LW Update.

1.1.2 Updating Loadware on Multiple Boards

Updating loadware via Loadware tabsheet on a multiple boards (bulk loadware update) is done the same way as updating loadware on a single board, except that multiple boards can be selected by activating the **Select** checkbox; if all boards are to be selected, this can be done by checking the checkbox in the upper left corner of the table in the tabsheet.

Related Topics

[Starting the Gateway Manager](#)

[Loadware Tabsheet](#)

[Transfer and/or Activation Scheduled at Different Times](#)

["OS Update" Tabsheet](#)

["Backup/Restore" Tabsheet](#)

["Failed Actions" Dialog](#)

[Handling of Boards Without Background Loading Capability](#)

[Remote access for IP boards](#)

[SPE Tabsheet](#)

1.1.3 Time Frame and Scenarios of OS image Update for Standalone SoftGates, STMIX, Enterprise Gateways

The OS image Transfer and Activation can be initiated:

- 1) Manually using the Gateway Manager after the NUC RLC Preparation on the central Host is finished, but the Minor/Fix release (RLC) was not yet activated.
- 2) Automatically during the Minor/Fix release (RLC) activation. You can monitor the progress in the Gateway Manager.

The manual OS image update is split into two parts: OS image Transfer/Preparation (background installation) and OS image activation. For both tasks manual and time controlled scenarios are available:

- 1) manual transfer --> manual activation
- 2) manual transfer --> immediate subsequent activation
- 3) time controlled transfer --> time controlled activation

If by the time the OS update process is initiated, there is also a Platform HF activated on the central host, then, once the RLC activation is finished, the Platform HF update is automatically triggered.

1.1.4 Light board list update

In the right upper corner of the Gateway Manager dialog, next to the "Update Board List" button, there is a time stamp - this shows when the board list was updated for the last time.

When the Gateway Manager dialog is opened for the first time within a day, this time stamp is verified. If the last update was done in the previous day, then a light update is started.

A light update means that a set of commands are executed in the background to check the status of the boards (READY, NPR, etc), the LW version and the OS version (in case of STMIX and SG).

Then, all the gathered data is compared with the data collected during the last update process.

If there are any differences, then a dialog is displayed informing about the modifications discovered and that a full board list update process is triggered automatically.

Confirm board list update

Status of boards has changed in AMO BCSU. Proceed with board list update

Figure 1: Confirm board list update dialog box

If no differences are found, then only the time stamp of the last update process is updated.

1.1.5 Restarting the boards

The **Restart board** allows a board (IP or non IP) to be restarted via RMX commands (RES-BSSU or RES-USSU). The button is located in the LW update tabsheet.

1.2 Starting the Gateway Manager

To start the Gateway Manager application from the LAP2 application tree of the OpenScape 4000 Assistant:

- Select **Expert Mode → Gateway Manager**.

The Gateway Manager dialog is displayed.

In the upper pane you can select the functions of the Gateway Manager:

- Loadware (LW)
- OS Update (OS)
- Backup/Restore
- MEK Distribution (SPE)
- License
- Failed Actions (Overview)
- Update Board List
- Reinitialize GWM



Figure 2: Gateway Manager – Select Function

Related Topics

[Functionalities of the Gateway Manager](#)

["OS Update" Tabsheet](#)

["Backup/Restore" Tabsheet](#)

["Failed Actions" Dialog](#)

[Handling of Boards Without Background Loading Capability](#)

[SPE Tabsheet](#)

[Remote access for IP boards](#)

2 Loadware Tabsheet

The first screen of the **Gateway Manager** is tabsheet for updating loadware.

Here it is possible to start the manual transfer of a loadware file and a manual or immediate subsequent activation of the new loadware. Both possibilities for the activation of LW transfer can start as a scheduled task. The user also can reboot the selected boards using the **Restart board** button.

In the columns of the table in this dialog, the following information is displayed:

- PEN (Port Equipment Number) and IP Address of the board,
- Board Type (possible values: IP boards, nonIP boards), Functionality and Gateway Description,
- Board Status (possible values: READY, LOCK, SOFTLOCK, NPR/UNACH, NL, DEF, WBT. CGW boards can be configured in standby mode, whereas virtual boards vHG3550 in standby also have an IP address. The status of such boards can be READY/Standby and NPR/Standby.)
- LW Update progress (displays the progress of any running LW transfer or activation),
- **Running LW** (Loadware version currently activated in the board) and **Available LW on flash** (Available, but currently not activated loadware version in the board)
- Available loadware version on RMX.
- Scheduled time for transfer and activation (if set).
- Remote access links allow connection to the IP boards on WBM, SSH, SFTP.

Furthermore the progress of transfer and activation will be monitored in the right hand columns after starting the transfer and/or activation.

PEN	IP address	Type	Functionality	GW Description	RMX Status	Progress	Running LW	Available LW on Flash	Available LW on RMX	Transfer Time	Activation Time	Remote access
1-5-1	10.140.27.159	STM32	MG3550	SP-HG3550	READY		pksgw50 A9.304	pksgw50 A9.304				
1-5-2		DIU/TS-T1			READY		pkfou30 01/25/24 18:20:51	pkfou30 01/25/24 18:20:51				
1-5-3	0.0.0.0	STM32	STANDBY		READY		pkscd40 04/11/23 16:37:49	pkshd40 A9.048				
1-5-4	10.140.28.13	STM32	MG3550	SP-HG3550	READY		pkscd40 A9.048	pkscd40 A9.048				
1-5-5		SLM024			READY		pkdsm10 12/19/12 17:10:47	pkdsm10 12/19/12 17:10:47				
1-5-7		LTUCA			READY		pkhtu0 09/14/05 12:07:20	pkhtu0 09/14/05 12:07:20				
1-5-8		SLMAE			READY		pkent40 02/24/15 15:55:44	pkent40 02/24/15 15:55:44				
1-5-14	10.140.28.158	STM32	MG3550	SP-HG3550	READY		pksgw50 A9.304	pksgw50 A9.304				
1-50	10.140.21.81	Stand-alone	SoftGate		READY		pksgw50 A9.304	pksgw50 A9.304				
1-60	10.140.21.81	Stand-alone	SoftGate		READY		pksgw50 A9.304	pksgw50 A9.304				

Figure 3: Gateway Manager – "LW Update" screen

Filters

The LW tab has its own dedicated set of filters that are applied during a user's session.

IMPORTANT: Upon the start of the Gateway Manager application, the default filters are set, so each tab shows only the boards relevant to it.

NOTICE: Please note that some filters are specific to certain tabs only and are not available on the others.

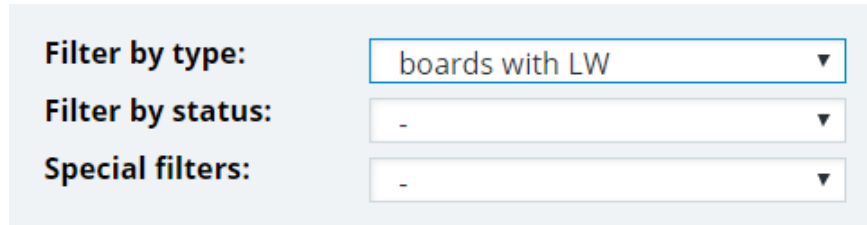


Figure 4: LW tab filters

Following options are available:

Table 2: Filter by type:

–	not filtered (shows all boards if this option is selected in all filter combo boxes)
boards with LW	shows only boards relevant to LW tab (default filter in LW tab)
IP boards	shows only IP boards
nonIP boards	shows only non-IP boards
Access Points	shows only SoftGates, NCUI and Enterprise Gateways
STMI	shows only STMI boards
STMIX	shows only STMIX boards
NCUI	shows only NCUI boards
vHG3500	shows only vHG3500 boards
SoftGate	shows only SoftGates
Enterprise Gateway	shows only Enterprise Gateways
HFA subscriber (HG3530)	shows only boards with HFA functionality
SIP subscriber (HG3540)	shows only boards with SIP functionality
IP trunking (HG3550)	shows only boards with trunking functionality
IPDA (HG3570)	shows only boards with IPDA functionality

Table 3: Filter by Status

–	not filtered
READY	shows only boards with status READY
not READY	shows only boards in status other than READY

Table 4: Special Filter

–	not filtered
In Progress	shows only boards with ongoing operation
Version difference	shows only boards which have different running and available loadware

Related Topics

- [LW Update with Manual Transfer and Manual Activation](#)
- [LW Update with Manual Transfer and Immediate Activation](#)
- ["OS Update" Tabsheet](#)
- [Updating Loadware on Multiple Boards](#)
- [Remote access for IP boards](#)
- [Handling of Boards Without Background Loading Capability](#)

2.1 LW Update with Manual Transfer and Manual Activation

In the **Loadware tabsheet** all available boards for LW Update are displayed, showing the currently activated loadware versions and the loadware versions available for transfer and activation.

- The board list and the available loadware version can be refreshed and redisplayed by pressing the circle in the top right menu bar.
- Check the **Select** checkbox for the desired board (you may select more boards, or select all boards displayed in the list by checking the checkbox in the left upper corner of the table).
- Press the **Transfer** button to start the loadware transfer.
- The checkbox for the selected board(s) becomes disabled (grayed out). The progress of a loadware file transfer is displayed in the **Progress** column.
- After the loadware transfer has finished, press the **Activate** button to start the loadware activation.

NOTICE: Note that activation is possible only for boards, which have the same loadware version available in the board cache as is available on RMX. It is not possible to send an activation command to a board with a different loadware version in the board cache, because the board would automatically start the transfer of the loadware image from RMX, and this is not the desired behavior for activation.

Related Topics

- [LW Update with Manual Transfer and Immediate Activation](#)
- [Transfer and/or Activation Scheduled at Different Times](#)
- [Updating Loadware on Multiple Boards](#)
- [Remote access for IP boards](#)

[Handling of Boards Without Background Loading Capability](#)

2.2 LW Update with Manual Transfer and Immediate Activation

In the **Loadware tabsheet** all available boards for LW Update are displayed, showing the currently activated loadware versions and loadware versions available for transfer and activation.

- The board list and the available loadware version can be refreshed and redisplayed by pressing the circle in the top right menu bar.
- Check the **Select** checkbox for the desired board (you may select more boards, or select all boards displayed in the list by checking the checkbox in the left upper corner of the table).
- Press the **Transfer and Activate** button to start the loadware update.
- The checkbox for the selected board becomes disabled (grayed out). The progress of a loadware file transfer and activation is displayed in the **Progress** column.

Related Topics

[LW Update with Manual Transfer and Manual Activation](#)

[Transfer and/or Activation Scheduled at Different Times](#)

[Updating Loadware on Multiple Boards](#)

[Remote access for IP boards](#)

[Handling of Boards Without Background Loading Capability](#)

2.3 Remote access for IP boards

The IP boards can be accessed from the Assistant Gateway Manager page on WBM, SSH or SFTP.

	PEN IP address	Type Functionality	Status	Progress	Running LW Available LW on Flash	Available LW on RMX	Transfer Time Activation Time	Remote access
<input type="checkbox"/>	1-30-6 10.9.0.136	Survivable EntGW	READY		pksgw50.B0.002-009	pksgw50.B0.002-009		

Figure 5: Remote Access Links

The Gateway Terminal application provides web-based terminal access to the selected gateway. The Gateway Terminal window is displayed to administrate the system via CLI commands (see "List of CLI Commands").

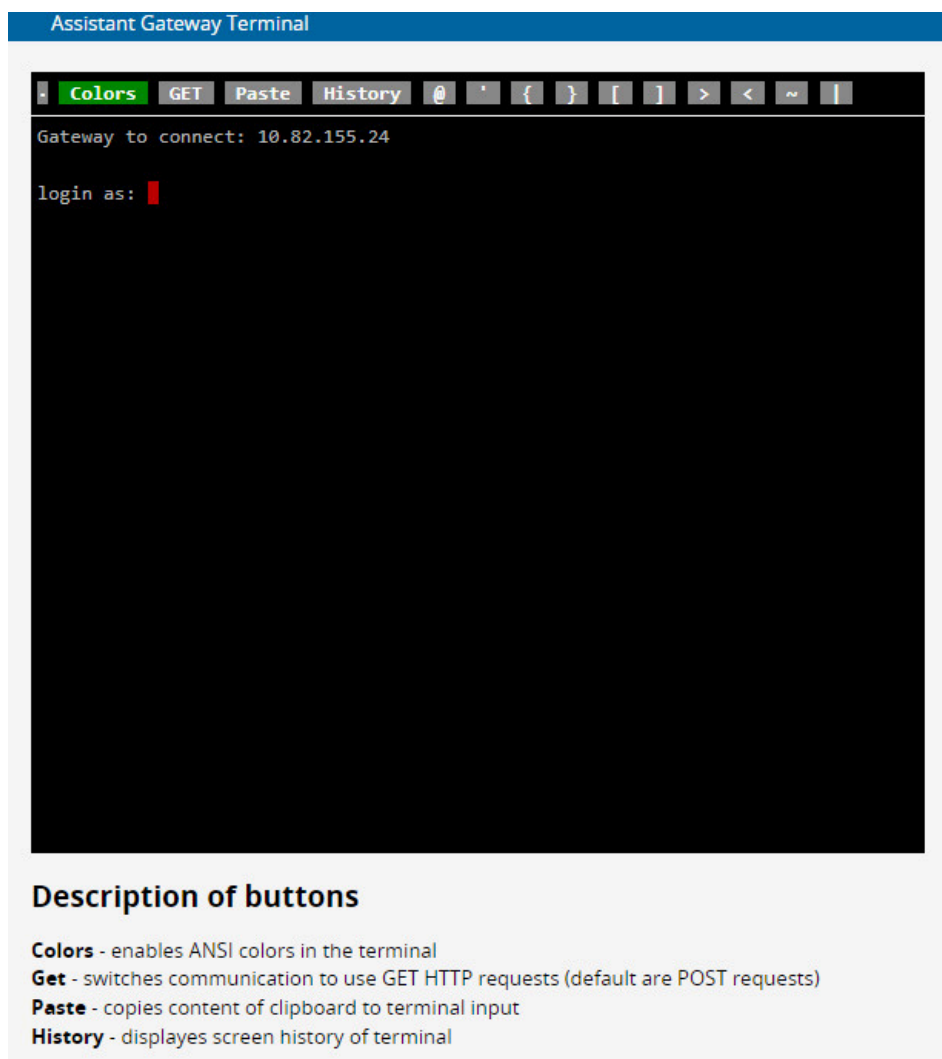


Figure 6: The Gateway Terminal window

Buttons

Functionality of buttons in the header of the Gateway Terminal window:

- **Colors:** Enable/Disable colors in the terminal (default: On). The colors are fixed, according to default configuration of user's colors.
- **GET:** Enable/Disable communication with HTTP GET requests (default: Off).
- **Paste:** Paste content of clipboard into terminal.
- **History:** displays screen history, allows the user to copy the contents to clipboard.

List of CLI Commands

Following is a list of the commands that can be executed via CLI (command line input).

Not all commands are available on every board. The help instruction can be used to find out which commands are implemented on a particular board.

Please note that there are commands that are hidden by the system, and cannot be started remotely.

Table 5: Command listing

Command	Description
delete config	Deletes configuration files
dump board parameters	Shows the content of the configuration data file in HEX format
help	Provides Help information
get ip address <parameter name>	Displays the chosen IP-address
set ip address <parameter name> <ip address>	Changes the chosen IP-address
get id <parameter name>	Displays the chosen identifier
set id <parameter name> <value>	Changes the chosen identifier
set id trace_level (level, susy-id) <value> <value>	Sets the trace level for specified component trace
get id trace_level (susy-id) <value>	Gets the trace level for specified component trace
set trace on (susy-id) <value>	Enables specified component trace
set trace off (susy-id) <value>	Disables specified component trace
get trace state (susy-id) <value>	
set hhstrace on	
set hhstrace off	
get hhstrace state	
set hhserror on	
set hhserror off	
get hhserror state	
set hhsswitch on	
set hhsswitch off	
get hhsswitch state	
set slmotracepoints <slmopid> <trpt16-23> <trpt8-15> <trpt0-7>	

Command	Description
reset all slmotracepoints	Reset all tracepoints in the SLMOHP-part
dump at addr <seg_addr> <offset> <dump_length>	Dumps the indicated region
get time	Displays the current date and time
logout	Disconnect from the preferred server
ping <ip address>	This routine tests that a remote host is reachable by sending ICMP echo request packets, and waiting for replies
shell	
reboot	This routine tests that a remote host is reachable by sending ICMP echo request packets, and waiting for replies
reset active traces	Reset all active traces
show active traces	Displays all active traces at the time
show all parameters	Displays all parameter values that may be changed by users
show arp cache	Displays the current Internet-to-Ethernet address mappings in the ARP-table
show board config	Displays the content of the board data file
show file ascii <path and file name>	Displays the file content in ASCII format
show file hex <path and file name>	Displays the file content in hexadecimal format
show flash	Displays a list of all used files and directories
show hardware	Displays a list of all hardware components on the board
show host	Displays a list of remote hosts, along with their Internet addresses and aliases
show hostname	Displays the target machine's symbolic name, which can be used for identification
show memory	Displays statistics about the available and allocated memory in the system memory partition
show must be traced (level, susy-id) <value> <value>	
show ramdrv	Displays a list of all used files and directories

Command	Description
show route	Displays the current routing information contained in the routing table
show susy map	Displays all defined subsystems in the target
show versions	Determines which version of loadware you are using
switch console trace on	Displays trace outputs
switch console trace off	Prevents console trace prints during a CLI session
switch file trace on	Switches on file logging
switch file trace off	Switches off file logging
syntax <command line>	Displays the syntax of the given command line without the parameter

The STMI and NCUI boards allow only WBM and SSH access. The SSH access to Terminal Server is provided with the TRM account. User is automatically logged into the gateway. The number of terminal connections is limited to only one connection per gateway.

The STMIX, Softgate and Enterprise Gateway boards support WBM, SSH, SFTP access. For STMIX, there can be 2 WBM connections: for HFA and for SIP functionalities.

PEN	IP address	Type	Functionality	Status	Progress	Running LW	Available LW on Flash	Available LW on RMX	Transfer Time	Activation Time	Remote access
1-30	1-30 SURV5G30 0171	STMIX	HG5330	READY		pktpgw50.B0.002-009		pktpgw50.B0.002-009			

Figure 7: Remote Access Links STMIX

For SFTP to work properly, either a WinSCP client (<http://winscp.net>) or a SFTP client that registers the sftp:// URI has to be installed on the Client PC.

NOTICE: Please note that the SoftGate/ EntGW/ STMIX SSH access is provided via a Linux console to the respective boards. There is NO Gateway CLI functionality.

The IP boards that do not have an IP address (present as 0.0.0.0) are not reachable via remote access links.

Gateway Manager offers a link to the WBM of the SG /EntGW and Platform Portal link for the SG/EntGW when system connected via RSP.

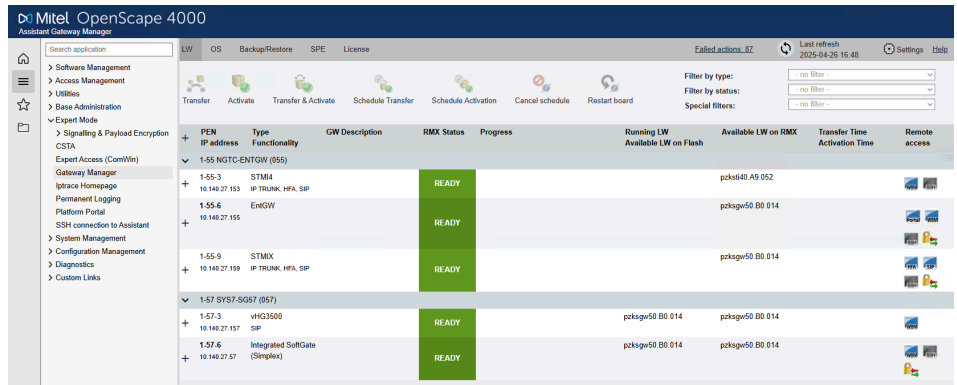


Figure 8: Remote Access Links to WBM of the SG /EntGW and Platform Portal link for the SG/EntGW

3 Transfer and/or Activation Scheduled at Different Times

In the Loadware or OS Update tabsheet you can set scheduled tasks such as LW/OS image transfer and LW/OS image activation.

- The board list and the available loadware version can be refreshed and redisplayed by pressing the circle in the right top menu bar.
- Check the **Select** checkbox for the desired board (you may select more boards, or select all boards displayed in the list by checking the checkbox in the left upper corner of the table).
- Press the Schedule Transfer button (or left click in the corresponding Transfer Time field in the list).
- A calendar window opens; select the desired transfer date and enter the time of day in the input field.

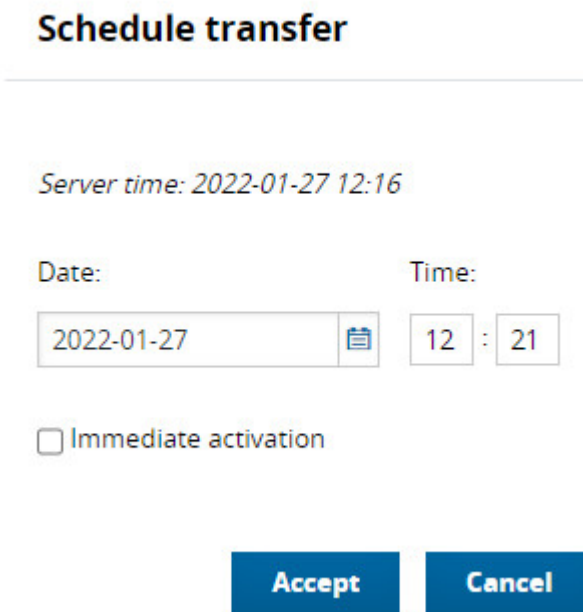


Figure 9: Schedule Transfer

- Press the Schedule Activation button (or left click in the corresponding Activation Time field in the list).
- A calendar window opens; select the desired activation date and enter the time of day in the input field.

NOTICE: Note that the activation time cannot be set before the transfer time!

The difference between the “Server time” and the scheduled time must be more than 5 minutes.

Schedule activation

Server time: 2022-01-27 12:33

Date: Time: :

Accept

Cancel

Figure 10: Schedule Activation

- If a task needs to be re-scheduled, press the Cancel Scheduling button.
- The loadware/OS image will be updated at the scheduled times.

NOTICE: For an OS Image Activation: Select "Keep the current running SoftGate LoadWare" to skip the LoadWare update during OS image activation. This can be useful if you use the Loadware Hotfix and Minor/Fix release common activation via the Software Activation; in this case the SoftGate might contain a newer LoadWare than one provided by the OS image.

Related Topics

[OS Update with Manual Transfer and Manual Activation](#)

[OS Update with Manual Transfer and Immediate Activation](#)

["OS Update" Tabsheet](#)

[Updating Loadware on Multiple Boards](#)

[Remote access for IP boards](#)

[Handling of Boards Without Background Loading Capability](#)

4 "OS Update" Tabsheet

In the OS Update tabsheet it is possible to start the manual transfer of an OS image and a manual or immediate subsequent activation of the OS

In the columns of the table in this dialog, the following information is displayed:

- PEN (Port Equipment Number) and IP Address of the board,
- Board Type (only Standalone and Survivable SoftGates are displayed) and Functionality,
- Board Status (possible values: READY, LOCK, SOFTLOCK, NPR/UNACH, NL, DEF)
- OS image update progress (displays the progress of any running OS image transfer or activation)
- Current OS (OS image version currently activated in the board) and Protocol used for OS transfer
- Available OS (OS Image version on the central Host system) and Imported OS (Available, but currently not activated OS image version in the board),
- Scheduled time for transfer and activation (if set).

Furthermore the progress of transfer and activation will be monitored in the right hand columns after starting the transfer and/or activation.

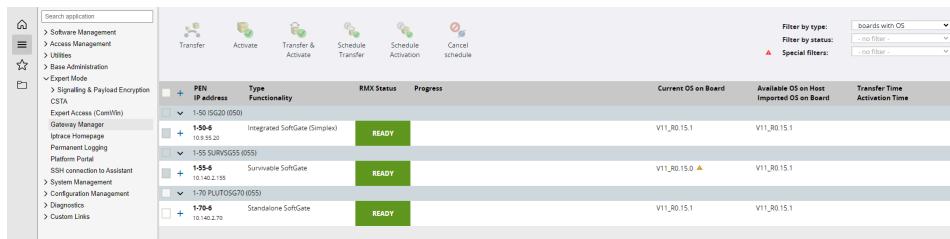


Figure 11: Gateway Manager – "OS Update" screen

Filters

The OS tab has its own dedicated set of filters that are applied during a user's session.

IMPORTANT: Upon the start of the Gateway Manager application, the default filters are set, so each tab shows only the boards relevant to it.

NOTICE: Please note that some filters are specific to certain tabs only and are not available on the others.

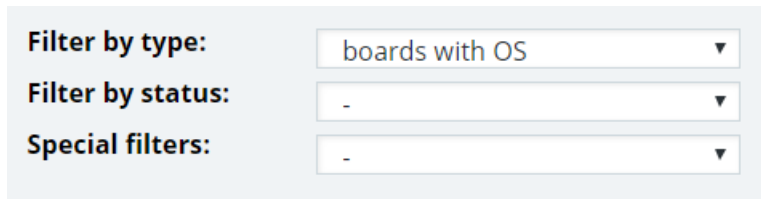


Figure 12: OS tab filters

Following options are available:

Table 6: Filter by type:

boards with OS	shows only boards relevant to OS tab (default filter in OS tab)
----------------	---

Table 7: Filter by Status

–	not filtered
READY	shows only boards with status READY
not READY	shows only boards in status other than READY

Table 8: Special Filter

–	not filtered
In Progress	shows only boards with ongoing operation
Version difference	shows only boards which have current and available OS

Related Topics

[OS Update with Manual Transfer and Manual Activation](#)

[OS Update with Manual Transfer and Immediate Activation](#)

4.1 Possible Reasons for Failures of Gateway Manager

The errors can be divided into two groups:

- 1) General errors that cause failures regardless of the operation.
- 2) Errors related to specific operations running in individual tabsheets.

General reasons

- Failed update of the list of boards caused by inconsistency in your contracted software
- Incomplete or empty list of boards caused by unavailable RMX
- Failed user action caused by gateways unavailable via HTTPS or due to the network connectivity issues.
- Failed user action caused by gateways that are not in READY or NL status at scheduled time.
- If any user operation is in progress, no other action can be started (scheduled or manually) at that time.

LW Update failures

- General reasons
- Corrupted LW file on the RMX
- Invalid image in the FLASH after finished LW transfer

"OS Update" Tabsheet

OS Update with Manual Transfer and Immediate Activation

OS Update failures

- General reasons
- Transfer protocol (PP or SFTP) is not set
- OS (Operating System) package is not available on the Central Host
- No imported OS after finished OS transfer

Backup/Restore failures

- General reasons

SPE failures

- General reasons
- Invalid SPE certificates on the gateways
- Old passphrase does not match while updating the secure trace passphrase

Reinitialize GWM

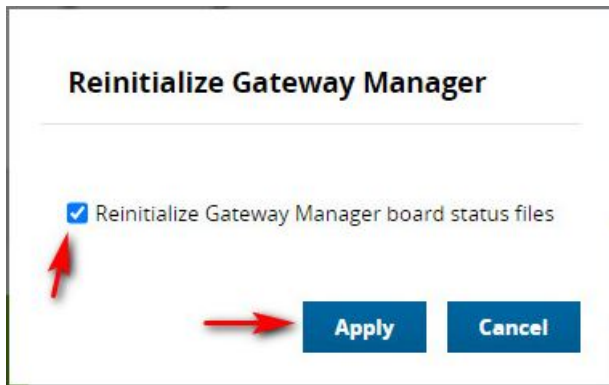
In case Gateway Manager runs into inconsistency (e.g. during the OS Update of one or more boards), it can be reset without the need of completely reinstalling the Assistant, via the **Reinitialize GWM** button.

Follow the steps below to reinitialize the Gateway Manager:

- 1) In the top-right corner of the Assistant Gateway Manager tab, click the **Reinitialize GWM** button.



- 2) In the pop-up window displayed, enable the **Reinitialize Gateway Manager board status files** option and click **Apply**.



This operation will reset the internal states of the Gateway Manager, including the persistent ones. It will not affect any board.

Related Topics

["Failed Actions" Dialog](#)

[Inspecting Failed Actions](#)

4.2 OS Update with Manual Transfer and Immediate Activation

In the **OS Update** tabsheet all available boards for an OS Update are displayed, showing the currently activated OS image versions and the OS image versions available for transfer and activation.

- The board list and the available OS image version can be refreshed and redisplayed by pressing the circle in the top right menu bar.
- Check the **Select** checkbox for the desired board (you may select more boards, or select all boards displayed in the list by checking the checkbox in the left upper corner of the table).
- Press the **Transfer and Activate** button to start the OS image update.
- The checkbox for the selected board becomes disabled (grayed out). The progress of a OS image file transfer and activation is displayed in the **Progress** column.

Related Topics

[OS Update with Manual Transfer and Manual Activation](#)

4.3 Platform Hotfix Update

In the **OS Update** tabsheet all available boards for an OS Update are displayed, showing the currently activated OS image versions and the OS image versions available for transfer and activation.

In the OS Update tabsheet, all the available boards for an OS Update are displayed, showing the currently activated OS image versions and the OS image versions available for transfer and activation. The OS versions displayed contain also the Platform Hotfix level. In case the Platform Hotfix number is different on a board than on the central host, the delta Platform Hotfixes can be also activated on the STMIX boards, SoftGates, and Enterprise Gateways (for example: available OS version on the host is: V10_R1.25.6 and the OS version on the board is V10_R1.25.3).

- The board list and the available OS image version can be refreshed and redisplayed by pressing the circle in the top right menu bar.
- Check the Select checkbox for the desired board. It is possible to select more boards, or to select all the boards displayed in the list by checking the box in the left upper corner of the table.
- Press the **Transfer&Activate** button to start the platform Hotfix update.

The checkbox for the selected board becomes disabled (grayed out).

The message: "Platform HF update is running..." is displayed in the **Progress** column.

In case the version on the board is different also in the RLC level and on the host, there is also at least one Platform Hotfix activated. If the Transfer&Activate button is pressed, the OS update process will update both the RLC and the Platform Hotfix for the selected board (for ex: available OS version on the host is: V10_R1.25.6 and the OS version on the board is V10_R0.28.3).

Related Topics

[OS Update with Manual Transfer and Manual Activation](#)

5 "Backup/Restore" Tabsheet

The Backup/Restore (BR) of the configuration data is a separate part of the HBR Backup/Restore for HG3550M. You can configure - enable/disable to do the HG3550M - CGWB-NCUI Configuration backup by Software Management (HBR). If the downloading of the GW data from the boards is enabled, HBR backup generates the data backup from all boards to the Assistant, packs the data and stores the data on the medium selected for backup. If the downloading of the GW data from the boards is disabled, HBR generates the backup from the data stored on the Assistant. Thus, the user can download the GW configuration data from selected boards to the Assistant using the Gateway Manager and then generate the backup using HBR. The restore of the GW data for the boards selected works in a similar way. HBR generates the restore from the selected medium to assistant Assistant; once this has happened, it is possible to restore the GW data for the boards selected using the Gateway Manager.

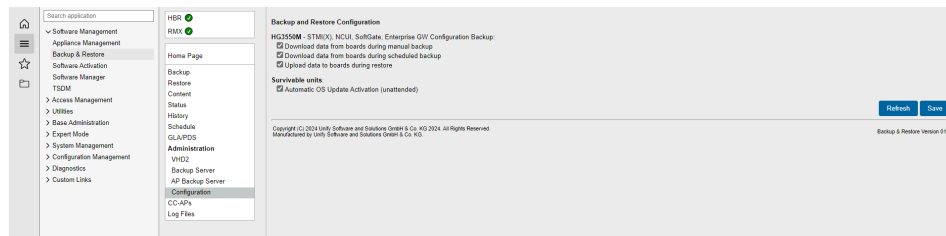


Figure 13: Software Management – "Backup and Restore Configuration" screen

To perform a Backup of the configuration data from the boards to the Assistant or a Restore of the configuration data from the Assistant to the Gateway Manager, select **Backup/Restore** in the upper pane of the **Gateway Manager**.

In the columns of the table displayed in this screen, the following information is recorded:

- PEN (Port Equipment Number) and IP Address of the board,
- Board Type and Functionality,
- Board Status: Possible values:
 - READY
 - LOCK
 - SOFTLOCK
 - NPR/UNACH
 - NL
 - DEF

NOTICE: CGW boards can be configured in standby mode. Virtual boards vHG3550 in standby mode also have an IP address. The status of such boards can be: READY/Standby and NPR/Standby.

- Progress: Possible values:
 - Data store
 - Data backup
 - Data restore waiting
 - Data backup waiting
- Last backup time
- Last restore time

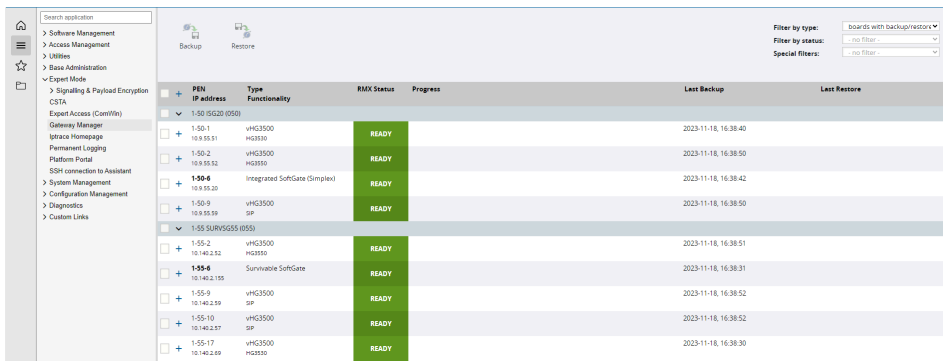


Figure 14: Gateway Manager – "Backup/Restore" screen

Filters

The Backup/Restore tab has its own dedicated set of filters that are applied during a user's session.

IMPORTANT: Upon the start of the Gateway Manager application, the default filters are set, so each tab shows only the boards relevant to it.

NOTICE: Please note that some filters are specific to certain tabs only and are not available on the others.

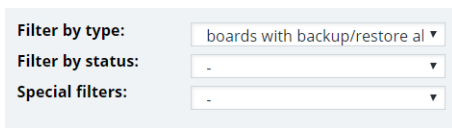


Figure 15: Backup/Restore tab filters

Following options are available:

Table 9: Filter by type:

boards with Backup/Restore ability	shows only boards relevant to Backup/Restore tab (default filter in Backup/Restore tab)
------------------------------------	---

Table 10: Filter by Status

–	not filtered
READY	shows only boards with status READY

not READY	shows only boards in status other than READY
-----------	--

Table 11: Special Filter

–	not filtered
In Progress	shows only boards with ongoing operation

Related Topics

[Backup/Restore Process](#)

5.1 Backup/Restore Process

In the **Backup/Restore** tabsheet all available boards for Backup/Restore are displayed, showing the currently running processes and the last backup/restore times.

- The board list and the processes running are refreshed and redisplayed by pressing the circle in the top right menu bar.
- Check the **Select** checkbox for the desired board (you may select more boards, or select all boards displayed boards in the list by checking the checkbox in the upper left corner of the table).
- Press the **Backup** button to start the Backup process or the **Restore** button to start the Restore process.
 - The checkbox for the selected board(s) becomes disabled (grayed out).
 - The progress of the Backup/Restore process is displayed in the **Progress** column.
- Once the Backup/Restore processes are done, press the circle in the top right menu bar. to refresh and redisplay the board list.

6 SPE Tabsheet

The **Signalling and Payload Encryption (SPE)** tab sheet allows you to administrate passphrase distribution (MEK and Secure Trace) both for AP shelves and HHS.

NOTICE: 'MEK' (or short 'Key') is abbreviation of "Master Encryption Key" used to encrypt the HSR connection between RMX CC and IPDA unit (SoftGate, NCUI, EntGW).

In the columns of the table displayed in this screen, the following information is recorded:

- PEN (Port Equipment Number) and IP Address of the board,
- Board Type and Functionality,
- Board Status: Possible values:
 - READY
 - LOCK
 - SOFTLOCK
 - NPR/UNACH
 - NL
 - DEF

NOTICE: CGW boards can be configured in standby mode. Virtual boards vHG3550 in standby mode also have an IP address. The status of such boards can be: READY/Standby and NPR/Standby.

- Progress: Possible values:
 - Data store
 - Data backup
 - Data restore waiting
 - Data backup waiting
- Last successful MEK update date and Result of last MEK distribution
- Last Update Passphrase date and Result of last Passphrase distribution

PEN	IP address	Type	Functionality	RMX Status	Progress	Last Update MEK Result	Last Update Passphrase Result	Periodical Update MEK Next Update
1-50	15620	050						
1-50-6	10.9.9.10		Integrated SoftGate (Simplex)	READY				
1-55	55	55	SURROGESS 050					
1-55-6	10.142.115		Sunivoda SoftGate	READY				
1-70	PLUTOS670	050						
1-70-6	10.142.170		Standardone SoftGate	READY				

Figure 16: Gateway Manager – "SPE" screen

The following features are available on this page:

- **Update and distribute a SecureTrace passphrase**
- You can distribute a passphrase for all IP boards using button 'Secure Trace Passphrase'.
- **Configure manual MEK distribution**

- Manual distribution is performed per selected boards and is handled asynchronously. You can configure the manual distribution of the APN MEK per board using 'Distribute Keys Manually' button.

Manual distribution will start updating AP shelf with the MEK. If updating an AP shelf fails, then it will continue with updating the HHS with the MEK.

In this case you will be informed that manual distribution is completed with errors and you will be advised to update the AP shelf with the MEK manually from the native web based interface of the Gateway.

- **Immediate MEK distribution**
- You can start random generated MEK distribution to all boards using button 'Distribute Keys Immediately'.
- **Configure automatic MEK distribution**
- You can configure the schedule of the automatic distribution of the APN MEK using 'Distribute Keys Automatically'.

The newly entered MEK will be stored on the board, on the RMX and also on the platform. In case of automatic or immediate MEK distribution a unique random MEK will be generated and sent to all the boards, to the RMX and to the platform. The MEK stored on the platform will be sent automatically via inventory service to all newly configured or replaced SGs/EntGWs.

Filters

The SPE tab has its own dedicated set of filters that are applied during a user's session.

IMPORTANT: Upon the start of the Gateway Manager application, the default filters are set, so each tab shows only the boards relevant to it.

NOTICE: Please note that some filters are specific to certain tabs only and are not available on the others.

Figure 17: SPE tab filters

Following options are available:

Table 12: Filter by type:

boards with SPE ability	shows only boards relevant to SPE tab (default filter in SPE tab)
Access Points	shows only SoftGates, NCUI and Enterprise Gateways (default filter in SPE tab)

Table 13: Filter by Status

–	not filtered
READY	shows only boards with status READY
not READY	shows only boards in status other than READY

Table 14: Special Filter

–	not filtered
In Progress	shows only boards with ongoing operation
Distribution failed	shows only boards for which MEK and/or Passphrase distribution failed

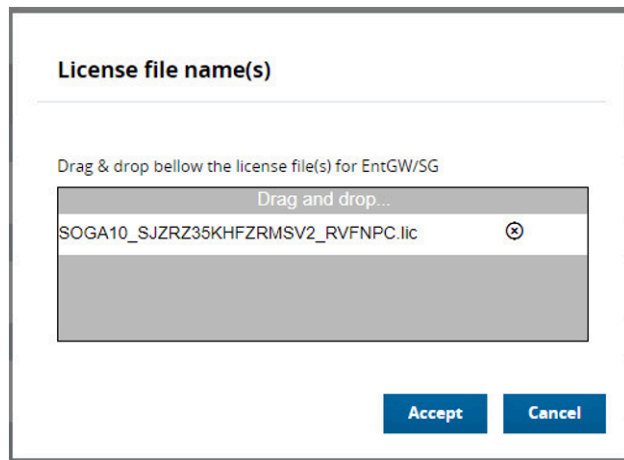
7 License TabSheet

The **License** TabSheet offers the possibility to upload the licenses for SoftGates and Enterprise Gateways. The page shows information about the RMX board status, the time and result of the last upload license operation, the progress of an ongoing upload, and the ALI and the validity of the license existing on each board.

NOTICE: The validity period info is updated after each update boardlist operation, when the corresponding information is retrieved from each board.

PEN IP address	Type Functionality	RMX Status	Last Upload Result	ALI License Info	Progress
1-55 5155-SG00 (050)	Scalabone SoftGate	READY		SGZK256H22M45124RVFNPC Base_55 valid for 28 days	
1-55 5155-AP55-ENTGW (053)	EntGW	READY		W5AVEE00QDF307C4RVFNNU Base_55 valid for 28 days	
1-55 5155-AP55-ENTGW (053)	EntGW	READY		W5AVEE00QDF307C4RVFNNU Base_55 valid for 28 days	
1-40 5155-SG00 (060)	Scalabone SoftGate	READY		SGZK27AFK3WPEY4RVFNPH Base_55 valid for 28 days	

By clicking the **Upload License** button, a small dialog box is opened where the license files can be dragged and dropped. When the **Accept** button is clicked, the license files are sent to the corresponding appliance.



Filters

The License tab has its own dedicated set of filters that are applied during a user's session.

IMPORTANT:

Upon the start of the Gateway Manager application, the default filters are set, so each tab shows only the relevant boards.

INFO:

Please note that some filters are specific to certain tabs only and are not available on the others.

Filter by type: boards with license

Filter by status: - no filter -

Special filters: - no filter -

Figure 18: License tab filters

The following filtering options are available:

Table 15: Filter by type

boards with license	shows only boards relevant to license tab (default filter in License tab)
SofGate	shows only SoftGates
Enterprise Gateway	shows only Enterprise Gateways

Table 16: Filter by status

–	not filtered
READY	shows only boards with status READY
not READY	shows only boards in status other than READY

Table 17: Special filter

–	not filtered
Progress ongoing	shows only boards with ongoing operation

8 "Failed Actions" Dialog

You can find an overview of any occurred errors in the **Failed Actions** dialog.

Select **Failed Actions** in the upper pane of the **Gateway Manager**.

The **Failed Actions** dialog is displayed with an overview of failed actions of the Gateway Manager, showing

- PEN (Port Equipment Number) of the concerned board,
- board type of the concerned board,
- IP address of the concerned board,
- time when the error occurred,
- error message.

Board	Board Type	IP Address	Action Type	Error Time	Message
No failed actions to display.					

Figure 19: Gateway Manager – "Failed Action" screen

Related Topics

[Inspecting Failed Actions](#)

[Possible Reasons for Failures of Gateway Manager](#)

8.1 Inspecting Failed Actions

For each board the planned time of transfer and activation is displayed in the corresponding field.

- With the **Clear** button you can clear the list.
- An automatic refresh of the list is performed upon a new error occurrence.
- The reason for failure is listed in the **Message** column.

Related Topics

["Failed Actions" Dialog](#)

[Possible Reasons for Failures of Gateway Manager](#)

8.2 Possible Reasons for Failures of Gateway Manager

The errors can be divided into two groups:

- 1) General errors that cause failures regardless of the operation.
- 2) Errors related to specific operations running in individual tabsheets.

General reasons

- Failed update of the list of boards caused by inconsistency in your contracted software

- Incomplete or empty list of boards caused by unavailable RMX
- Failed user action caused by gateways unavailable via HTTPS or due to the network connectivity issues.
- Failed user action caused by gateways that are not in READY or NL status at scheduled time.
- If any user operation is in progress, no other action can be started (scheduled or manually) at that time.

LW Update failures

- General reasons
- Corrupted LW file on the RMX
- Invalid image in the FLASH after finished LW transfer

OS Update failures

- General reasons
- Transfer protocol (PP or SFTP) is not set
- OS (Operating System) package is not available on the Central Host
- No imported OS after finished OS transfer

Backup/Restore failures

- General reasons

SPE failures

- General reasons
- Invalid SPE certificates on the gateways
- Old passphrase does not match while updating the secure trace passphrase

Reinitialize GWM

In case Gateway Manager runs into inconsistency (e.g. during the OS Update of one or more boards), it can be reset without the need of completely reinstalling the Assistant, via the **Reinitialize GWM** button.

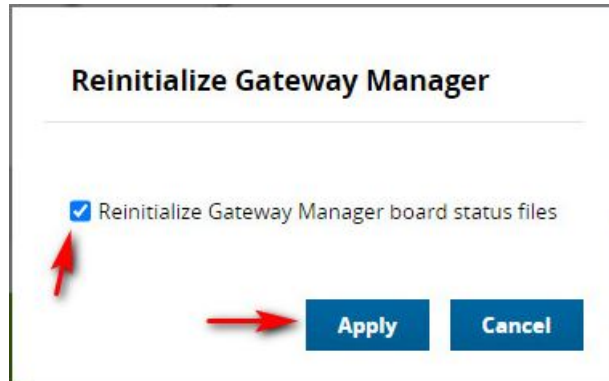
Follow the steps below to reinitialize the Gateway Manager:

- 1) In the top-right corner of the Assistant Gateway Manager tab, click the **Reinitialize GWM** button.



"Failed Actions" Dialog

- 2) In the pop-up window displayed, enable the **Reinitialize Gateway Manager board status files** option and click **Apply**.



This operation will reset the internal states of the Gateway Manager, including the persistent ones. It will not affect any board.

Related Topics

["Failed Actions" Dialog](#)

[Inspecting Failed Actions](#)

9 Handling of Boards Without Background Loading Capability

This feature supports the loadware transfer/activation to boards that have no IP address (non-VoIP boards).

The list of the boards in the user interface of the Gateway Manager can show all kind of the boards which are configured on the RMX. Boards without background loading (BGL) capability don't have IP in the IP Address column.

The loadware versions for boards without BGL can have a different form. The rule is: If a board does not have a numbered LW version such as e.g. "pzgtman0.os.o1.046" in the header of the LW file, its name and the date and time of the LW creation are used as a unique LW version identifier, e.g. "pzgtman0 01/11/12 11:55:00". The date is shown in the format "MM/DD/YY".

In case of bad connectivity of an IP board or if a board is in STANDBY mode, or in another words, if the RMX does not detect the board as being READY or NL, there will be nothing displayed in the column of the running LW version.

The LW transfer for boards without background loading (BGL) is ignored and always finishes successfully. No message written into failed actions. The following table shows the expected LW versions available on the board and on the RMX.

Table 18: Board types, Running LW, and Available LW

Board Type	Running LW	Available
IP GW good connection	Numbered LW version	Numbered
IP GW bad https access or STANDBY mode		Numbered
nonIP GW	lwname MM/DD/YY HH:MM:SS	lwname M
nonIP GW	lwname MM/DD/YY HH:MM:SS	Numbered
nonIP GW	Numbered LW version	Numbered

The LW activation for boards without BGL is performed using AMO:RES-BSSU. If a reboot of a nonIP board (using AMO-RESTART) is running, all other nonIP boards have to wait until the update is finished; only then the next AMO-RESTART can start. By default, only one AMO-RESTART can be running at at time.

Related Topics

[Loadware Tabsheet](#)

["Backup/Restore" Tabsheet](#)

["Failed Actions" Dialog](#)

[LW Update with Manual Transfer and Manual Activation](#)

[LW Update with Manual Transfer and Immediate Activation](#)

[Remote access for IP boards](#)

[Inspecting Failed Actions](#)

Handling of Boards Without Background Loading Capability

Possible Reasons for Failures of Gateway Manager

10 Appendix

10.1 Limitations and Restrictions

- Loadware update can be performed for boards which are in DC status READY or NL (seen in DISP-BCSU output). Initial upload of loadware is done via the HDLC interface.
- Loadware upload to DEFECT boards is performed via HDLC interface.
- HG35XXM has a limit of 100 CGW boards and 82 NCUI boards.
- All NCUI and STMI boards are visible by SL200 interface, meaning there is a route from Assistant SL200 network interface to the boards.
- During update board list the scheduled jobs which are not in progress (no activation or transfer is running) will be removed for boards which are not in state ready, lock or soft lock. This can be tracked in the ["Failed Actions" Dialog](#).
- Scheduled transfers and activations for boards in different time zones will be processed according to switch time, not at locale scheduled time.

Related Topics

[Transfer and Activation Controlled by Assistant](#)

[The LW Update Process](#)

10.2 Transfer and Activation Controlled by Assistant

Assistant copies the new loadware file from the RXM partition of the OpenScape hard disk into the local file system of the Assistant.

The Assistant will push the image (loadware file) to the board using HTTPS request (described HTTP IF).

This transfer is possible when a GW card is in one of following states:

- READY
- NL (Not Loaded)

The Assistant will send the activation command - the board will then request the reset from the System, which reboots the board. This is important due to preconditions of the activation, which are not executed when simply a reboot is executed.

Related Topics

[Limitations and Restrictions](#)

[The LW Update Process](#)

10.3 The LW Update Process

LW Update is performed in a sequence of steps:

- 1) HG35XXM will copy the loadware files (predefined names for HG3500 and HG3575 respectively) from a specific path on RMX HD and save them to a specific path on an Assistant HD.

This copying process is done by the `/opt/bin/uricmd hg3550m rmxcopy` command.

- 2) The version of the loadware is saved in the header of the loadware file. Before copying the loadware file, the version is read by AMO command from the file header. Information about the version will be saved in the same directory.
- 3) The Update board list procedure (`/opt/hg3550m/bin/updateBoardList`) will be called.

This procedure is part of HG35XXM and will be enhanced to cover board in different state (READY, NL).

- 4) Password synchronization routine (`/opt/secm/bin/hahg`) will be called.
- 5) For all boards:

- Loadware versions are read from the boards, saved in file and compared to the version of the loadware on the Assistant.
- Transfer of the the loadware to the boards if the loadware version on Assistant is different: At most 30 parallel transfers are possible at one time.

Related Topics

[Limitations and Restrictions](#)

[Transfer and Activation Controlled by Assistant](#)

Index

A

Assistant SL200 network interface [43](#)

B

background loading capability (BGL) [41](#)
board versions [4](#)
boards without background loading capability [41](#)

H

HDLC interface [43](#)

I

immediate subsequent activation [11](#)

L

Loadware versions [44](#)

M

manual activation [11](#)
manual transfer [11](#)

N

NCUI [11](#)
NCUI boards [43](#)

O

opt/secm/bin/hahg [44](#)

P

Password synchronization [44](#)

R

reset [43](#)

S

Scheduled transfer [43](#)
state
 READY
 LOCK
 SOFT LOCK [43](#), [44](#)
 NL [43](#)
steps
 LW Update [43](#)

supported board versions [4](#)

T

time controlled activation [11](#)
time controlled transfer [11](#)
time zones [43](#)
Transfer of the the loadware [44](#)

U

Update Board List [44](#)

