Unify OpenScape 4000 Assistant/Manager V10

Loadware Update Manager

Administrator Documentation
08/2024

Mitel

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Contents

1 Overview

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

1) Transfer of a loadware image to STMI and NCUI IP telephony boards and to SoftGates.

2) Activation of this image on these boards.

3) Transfer and background installation of an OS image to Standalone SoftGates.

4) Activation of this image on Standalone SoftGates.

5) Reboot of all kind of boards including the boards without background loading capability.

6) Backup of configuration data from the boards to the Assistant or restore the configuration data from the Assistant to the Gateway Manager.

All six tasks can be initiated independently from each other. Additionally, it is possible to control them 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

POS	Q-NUMBER	TYPE	BD-NAME	FCTID	CIRCUITS	LINE-TYPE	LW-FILE
011	Q2150-X100	PER	SLMB4	0	4	SLMB_16	LG49/ PZDSMBC0
012	Q2153-X	PER	SLMQ	0	16	SLMQ_EXT	LG86/ PZDQSM10
013	Q2153-X100	PER	SLMQ	0	16	SLMQ_EXT	LG86/ PZDQSM10
014	Q2158-X	PER	SLMO24	1	24	SLMO	LG83/ PZDSMO10
015	Q2159-X100	PER	TM2LP	0	8	TM2LP0	LG99/ PZGTM2L0
016	Q2159-X110	PER	TM2LP	0	8	TM2LP1	LG99/ PZGTM2L0
017	Q2159-X120	PER	TM2LP	0	8	TM2LP2	LG99/ PZGTM2L0
018	Q2159-X130	PER	TM2LP	0	8	TM2LP3	LG99/ PZGTM2L0
019	Q2159-X140	PER	TM2LP	0	8	TM2LP4	LG99/ PZGTM2L0
020	Q2159-X150	PER	TM2LP	0	8	TM2LP5	LG99/ PZGTM2L0
021	Q2159-X160	PER	TM2LP	0	8	TM2LP6	LG99/ PZGTM2L0
022	Q2159-X170	PER	TM2LP	0	8	TM2LP7	LG99/ PZGTM2L0
023	Q2159-X180	PER	TM2LP	0	8	TM2LP8	LG99/ PZGTM2L0
024	Q2159-X190	PER	TM2LP	0	8	TM2LP9	LG99/ PZGTM2L0
025	Q2159-X200	PER	TM2LP	0	8	TM2LP10	LG99/ PZGTM2L0
026	Q2160-X	PER	STMA	4	32	STMA_PSW	LG98/ PZSTMA10
027	Q2160-X	PER	STMA	5	128	STMA_NW20	LG98/ PZSTMA10
028	Q2160-X100	PER	STMA	4	32	STMA_PSW	LG98/ PZSTMA10
029	Q2160-X100	PER	STMA	5	128	STMA_NW20	LG98/ PZSTMA10

Overview

POS	Q-NUMBER	TYPE	BD-NAME	FCTID	CIRCUITS	LINE-TYPE	LW-FILE
030	Q2163-X	PER	STMD2	1	8	STMD_S0	LG79/ PZDSTMD0
031	Q2163-X100	PER	STMD2	1	8	SLMS	LG79/ PZDSTMD0
032	Q2168-X	PER	SLMO24	1	24	SLMO	LG83/ PZDSMO10
033	Q2169-X	PER	STHC	1	16	SLMO	LG71/ PZDSTHC0
					4	STMD_S0	
034	Q2169-X100	PER	SLMOP	1	24	SLMO	LG73/ PZDSMP10
035	Q2174-X	PER	STMD	0	8	STMD_S0	LG44/ PZDFSTD0
036	Q2184-X	PER	SLMAB	0	24	SLMA_1	LG43/ PZESMAB0
037	Q2186-X100	PER	TMLRB	0	8	TMLRB	LG69/ PZGTLRBQ
038	Q2187-X	SIUP	SIUX2	2	8	SIU_TYP_2	LG02/ PZJ22MV0
039	Q2187-X	SIUP	SIUX2	3	8	SIU_TYP_3	LG25/ PZJ23MC0
040	Q2187-X	SIUP	SIUX2	4	8	SIU_TDS	LG02/ PZJ24TD0
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

POS	Q-NUMBER	TYPE	BD-NAME	FCTID	CIRCUITS	LINE-TYPE	LW-FILE
049	Q2193-X200	PER	SLC24	0	255	SLMC	LG93/ PZDSLC27
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_CVM	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_CVM	LGA1/ PZFDUT10

Overview

POS	Q-NUMBER	TYPE	BD-NAME	FCTID	CIRCUITS	LINE-TYPE	LW-FILE
068	Q2227-X1	PER	SLMAV8	0	8	SLMA24	LG80/ PZESLAV0
069	Q2227-X	PER	SLMAV	0	24	SLMA24	LG80/ PZESLAV0
070	Q2233-X	SIUP	SIUX	1	8	STANDART_SIU	LG63/ PZJMSCO0
071	Q2233-X	SIUP	SIUX	2	8	SIU_TYP_2	LG02/ PZJX2MV0
072	Q2233-X	SIUP	SIUX	3	8	SIU_TYP_3	LG25/ PZJX3MC0
073	Q2233-X	SIUP	SIUX	4	8	SIU_TDS	LG02/ PZJX4TD0
074	Q2233-X	SIUP	SIUX	5	8	SIU_ANI	LG25/ PZJX5AN0
075	Q2233-X	SIUP	SIUX	6	8	SIU_TYP_3	LG25/ PZJX6SH0
076	Q2233-X	SIUP	SIUX	7	8	SIU_TYP_2	LG02/ PZJX7LT0
077	Q2235-X	PER	VCM-B15	0	1	VCM_B15	LG95/ PZJVCM00
078	Q2246-X	PER	SLMA24	0	24	SLMA_1	LG80/ PZESLA20
079	Q2266-X	LTU	LTUCA	0	0		LGA0/ PZKLTUX0
080	Q2286-X	PER	TMLRB	0	8	TMLRB	LG69/ PZGTLRBQ
081	Q2287-X	SIUP	SIUX3	2	8	SIU_TYP_2	LG02/ PZJ30AL0
082	Q2287-X	SIUP	SIUX3	3	8	SIU_TYP_3	LG02/ PZJ30AL0
083	Q2287-X	SIUP	SIUX3	4	8	SIU_TDS	LG02/ PZJ30AL0
084	Q2287-X	SIUP	SIUX3	5	8	SIU_ANI	LG02/ PZJ30AL0
085	Q2287-X	SIUP	SIUX3	6	8	SIU_TYP_3	LG02/ PZJ30AL0
086	Q2287-X	SIUP	SIUX3	7	8	SIU_TYP_2	LG02/ PZJ30AL0

POS	Q-NUMBER	TYPE	BD-NAME	FCTID	CIRCUITS	LINE-TYPE	LW-FILE
087	Q2288-X	PER	TMCOW	0	8	TMCOW	LG68/ PZGTCOWL
088	Q2288-X 10	PER	TMCOW	0	8	TMCOW	LG68/ PZGTCOW3
089	Q2288-X 20	PER	TMCOW	0	8	TMCOW	LG68/ PZGTCOW3
090	Q2288-X 30	PER	TMCOW	0	8	TMCOW	LG68/ PZGTCOW6
091	Q2288-X 40	PER	TMCOW	0	8	TMCOW	LG68/ PZGTCOWC
092	Q2288-X 50	PER	TMCOW	0	8	TMCOW	LG68/ PZGTCOWQ
093	Q2288-X 60	PER	TMCOW	0	8	TMCOW	LG68/ PZGTCOWQ
094	Q2288-X100	PER	TMCOW	0	8	TMCOW	LG68/ PZGTCOWQ
095	Q2288-X110	PER	TMCOW	0	8	TMCOW	LG68/ PZGTCOWD
095	Q2288-X120	PER	TMCOW	0	8	TMCOW	LG68/ PZGTCOWD
097	Q2288-X130	PER	TMCOW	0	8	TMCOW	LG68/ PZGTCOWQ
098	Q2288-X220	PER	TMCOW	0	8	TMCOW	LG68/ PZGTCOWL
099	Q2288-X300	PER	TMCOW	0	8	TMCOW	LG68/ PZGTCOWG
100	Q2288-X310	PER	TMCOW	0	8	TMCOW	LG68/ PZGTCOWQ
101	Q2292-X100	PER	TMEW2	0	4	TMEMW2	LG85/ PZGTMEU0
102	Q2305-X35	AP	NCUI2+	1	1	LTUCE	LGA0/ PZKNCI40
103	Q2305-X40	AP	NCUI2+	1	1	LTUCE	LGA0/ PZKNCI40
104	Q2312-X	LTG	RTM	0	1	SICOE	CDSCRTM0
					1	SICOE	CECORTM0
105	Q2316-X	IPGW	STMI2	1	0		LG98/ PZKSTI40

POS	Q-NUMBER	TYPE	BD-NAME	FCTID	CIRCUITS	LINE-TYPE	LW-FILE
106	Q2316-X10	IPGW	STMI2	1	0		LG98/ PZKSTI40
107	Q2324-X	AP	NCUI4	1	1	LTUCE	LGA0/ PZKNCI40
108	Q2324-X10	AP	NCUI4	1	1	LTUCE	LGA0/ PZKNCI40
109	Q2324-X11	AP	NCUI4	1	1	LTUCE	LGA0/ PZKNCI40
110	Q2324-X500	IPGW	STMI4	1	0		LG98/ PZKSTI40
111	Q2324-X510	IPGW	STMI4	1	0		LG98/ PZKSTI40
112	Q2324-X511	IPGW	STMI4	1	0		LG98/ PZKSTI40
113	Q2327-X100	PER	TMANI	0	8	TMANI	LG99/ PZGTMAN0
114	Q2327-X101	PER	TMANI-IM	0	8	TMANI	LG99/ PZGTMAN0
115	Q2327-X182	PER	TMANI-BR	0	8	TMANI	LG99/ PZGTMAN0
116	Q2329-X	AP	SoftGate	1	1	LTUCE	LGA0/ PZKSGW50
117	Q2330-X	IPGW	vHG3500	1	0		LGA0/ PZKSGVB0
118	Q2331-X	PER	SLMAE	0	24	SLMA24	LG80/ PZESLA40
119	Q2331-X100	PER	SLMAE8	0	8	SLMA24	LG80/ PZESLA40
120	Q2332-X	PER	STMD3	1	8	STMD_S0	LG79/ PZDSTM30
121	Q2333-X	PER	SLMO24	1	24	SLMO	LG83/ PZDSMO10
122	Q2334-X200	PER	SLC24	0	255	SLMC	LG93/ PZDSLC27
123	Q2335-X	DIU	DIUT2-E1	1	2	SLMN_E1	LGA1/ PZFDUE10
124	Q2335-X	DIU	DIUT2-E1	2	64	DIUC64	LGA1/ PZFDUE10

POS	Q-NUMBER	TYPE	BD-NAME	FCTID	CIRCUITS	LINE-TYPE	LW-FILE
125	Q2335-X	TMD	DIUT2-T1	3	25	TMDN_BOS	LGA1/ PZFDUT10
126	Q2335-X	TMD	DIUT2-T1	4	2	TMDN_MOS_CVN	LGA1/ PZFDUT10
127	Q2336-X100	PER	TMANI	0	8	TMANI	LG99/ PZGTMAN0
128	Q2336-X101	PER	TMANI-IM	0	8	TMANI	LG99/ PZGTMAN0
129	Q2336-X182	PER	TMANI-BR	0	8	TMANI	LG99/ PZGTMAN0
130	Q2337-X	PER	vSLC	0	255	SLMC	LGA0/ PZKSGVB0
131	Q2338-X1	PER	SLMAV8	0	8	SLMA24	LG80/ PZESLAV0
132	Q2338-X	PER	SLMAV	0	24	SLMA24	LG80/ PZESLAV0
133	Q2339-X	PER	vSLMA	0	24	SLMA_1	LGA0/ PZKSGVB0
134	Q2340-X	PER	vTMOM	0	4	TMOM2	LGA0/ PZKSGVB0
135	Q2341-X	SIUP	vSIUX	3	8	SIU_TYP_3	LGA0/ PZKSGVB0
136	Q2342-X	LTU	LTUCR	0	0		LGA0/ PZKLTUR0
137	Q2343-X	IPGW	STMIX	1	0		LGA0/ PZKSGW50
138	Q2344-X	PER	SLC24	0	255	SLMC	LG93/ PZDSLCU4
139	Q2344-X100	PER	SLMO24	1	24	SLMO	LG83/ PZDSMO40
140	Q2345-X	PER	SLC24	0	255	SLMC	LG93/ PZDSLCU4
141	Q2345-X100	PER	SLMO24	1	24	SLMO	LG83/ PZDSMO40
142	Q2346-X	PER	SLMAV4	0	4	SLMA24	LG80/ PZESLAV0
143	Q2347-X	AP	EntGW	1	1	LTUCE	LGA0/ PZKWGW50

POS	Q-NUMBER	TYPE	BD-NAME	FCTID	CIRCUITS	LINE-TYPE	LW-FILE
144	Q2452-X	PER	TMDID	0	8	TMDID8	LG61/ PZUDID80
145	Q2469-X	PER	TMEMUS	0	4	TMEMUS	LG33/ PZGEMUSK
146	Q2475-X	PER	TMC16	0	16	TMA	LG60/ PZUCOT60
147	Q2476-X	PER	TM3WO	0	4	TM3W	LG89/ PZGTM3W0
148	Q2477-X	PER	TM3WI	0	4	TM3W	LG89/ PZGTM3W0
149	Q2479-X	PER	SLMQ3	0	16	SLMQ3	LG67/ PZDQSM30
150	Q2480-X	PER	SLMAR	0	8	SLMAR	LG80/ PZESLAR0
151	Q2485-X	PER	TMC16P	0	16	TMA	LG60/ PZUCOT60
152	Q2816-X	PER	SLMY	1	255	SLMY	LG93/ PZDSLMY0
153	Q6400-X888	PER	CDG31-FU	3	2	CDG	LG74/ PZFCDG00
154	Q6401-X	PER	PBCDG-FU	3	2	CDG	LG74/ PZFCDG00
155	Q9556-X	PER	TMACH	0	8	TMACH	LG26/ PZGMACH0

Related Topics

Functionalities of the Gateway Manager

Starting the Gateway Manager Dialog

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 for each Standalone SoftGate.
- Version of available OS image is displayed (available after Minor/Fix Release transfer and preparation to the central Host) for each Standalone SoftGate.

- Version of imported OS image (available after OS image transfer and Preparation (Background installation)) for each Standalone SoftGate.
- Setting OS image transfer protocol for each Standalone SoftGate.
- 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 image transfer status is displayed.
- OS reboot (complete device reboot) of selected Standalone SoftGates.
- OS activation for Survivable SoftGate if "Automatic OS Update Activation" is NOT selected in Backup configuration on central Host.
- Single boards or all supported boards can be selected for the LW Update or GW Reboot for the STMI, NCUI and SoftGate boards.
- 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 can be done in sequence of AP by AP.
- LW Update status (e.g. transfer running) is displayed.
- 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.

NOTICE: An OS image transfer to Survivable SoftGate is done by HBR AP Backup & Restore. The Gateway Manager does not support an OS image transfer and background installation for Survivable SoftGates.

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 â"> manual activation
2) manual transfer â"> immediate subsequent activation
3) time controlled transfer â"> time controlled activation

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

This solution is only based on the OpenScape 4000 Assistant V7 for HG3500 and HG3575 v4 Gateway-parts. No AMO-equivalent is available.

1.1.2 Updating Loadware on Multiple Boards

Updating loadware via LW Update 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 left upper

corner of the table in the "LW Update" Dialog (also in the "Backup/Restore" Dialog).

> **NOTICE:** Up to 30 boards can perform update at the same time. If more than 30 boards are selected for update at the same time, only three of them will start with LW Update and other boards will wait. GW Reboot is only possible for one board in the queue.

Related Topics

Starting the Gateway Manager Dialog

"LW Update" Dialog

Transfer and/or Activation Scheduled at Different Times

Transfer of Loadware from a Client PC

"OS Update" Dialog

"Backup/Restore" Dialog

"Failed Actions" Dialog

Handling of Boards Without Background Loading Capability

Logical AP Group Activation

1.1.3 Time Frame and Scenarios of OS image Update for Standalone SoftGates

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

1.2 Starting the Gateway Manager Dialog

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

• Select **Expert Mode â"> Gateway Manager**.

The Gateway Manager dialog is displayed.

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

- LW Update
- OS Update
- Backup/Restore
- Failed Actions (Overview)

Unify OpenScape 4000		LW	OS	Backup/Restore	SPE	License
Assistant Gateway Manager						

Figure 1: Gateway Manager -Select Function

Related Topics

Functionalities of the Gateway Manager

"LW Update" Dialog

Transfer of Loadware from a Client PC

"OS Update" Dialog

"Backup/Restore" Dialog

"Failed Actions" Dialog

Handling of Boards Without Background Loading Capability

Logical AP Group Activation

2 "LW Update" Dialog

The first screen of the **Gateway Manager** dialog is the **LW Update** dialog.

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 LW transfer of activation can start as a scheduled task. User also can to reboot the selected boards using the button **Boards reboot**.

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

- PEN (Port Equipment Number) of the board,
- Board Type (possible values: IP boards, nonIP boards),
- IP Address of the board,
- Security (displays the SECURITY MODE of the GW. If a padlock icon is displayed, this means that the GW is in secure mode, i.e. no administration is possible, and the WBM is not accessible),
- 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.)
- Scheduled time for transfer (if set),
- Scheduled time for activation (if set),
- Loadware version currently activated in the board (**Running LW** column),
- Available, but currently not activated loadware version in the board (**Current Flash LW** column),
- Available loadware version on RMX,
- LW Update progress (displays the progress of any running LW transfer or activation).

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

Gateway Manager -"LW Update" screen

Sorting the List

You can sort the list by clicking any of the column headers.

Filtering the List

You can filter the list by selecting the filters in the Based on status (All boards, DEF, NL, NPR/UNACH, LOCK, READY, SOFTLOCK) or Based on activity

(All boards, Active boards, Standby boards) or Based on type (All boards, IP boards, nonIP boards, STMI, NCUI, vHG3500, SoftGate) fields.

Logical AP Group activation

The description of the functionality of this checkbox can be found in Section 2.3, "Logical AP Group Activation".

Row Colors

- Red: unreachable boards marked as NPR are highlighted in red.
- Green: running loadware version on the board is the same as on the RMX.
- Grey: changes for this board are locked because some action is in progress (activation or transfer is running for this boards) .
- Blue: board is selected by the user.
- White: running loadware version on the board is different than loadware on the RMX.

Related Topics

LW Update with Manual Transfer and Manual Activation

LW Update with Manual Transfer and Immediate Activation

Transfer of Loadware from a Client PC

"OS Update" Dialog

Updating Loadware on Multiple Boards

Logical AP Group Activation

Handling of Boards Without Background Loading Capability

2.1 LW Update with Manual Transfer and Manual Activation

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

- Use the filters in the Based on status (All boards, DEF, NL, NPR/UNACH, LOCK, READY, SOFTLOCK) or Based on activity (All boards, Active boards, Standby boards) or Based on type (All boards, IP boards, nonIP boards, STMI, NCUI, vHG3500, SoftGate) fields to display the boards you want to update.
- The board list and the available loadware version can be refreshed and redisplayed by pressing the **Update Board List** button.
- Check the **Select** checkbox for the desired board (you may select more boards by Ctrl+left mouse button, or select all boards displayed in the list by by checking the checkbox in the left upper corner of the table).
- Press the **Transfer LW** 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 **LW Update progress** column.
- After the loadware transfer has finished, press the **Activate LW** button to start the loadware activation.

- The checkbox for the selected board(s) becomes disabled (grayed out). The progress of activation is displayed in the **LW Update progress** column.

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

Transfer of Loadware from a Client PC

Updating Loadware on Multiple Boards

Logical AP Group Activation

Handling of Boards Without Background Loading Capability

2.2 LW Update with Manual Transfer and Immediate Activation

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

- Use the filters in the the Based on status (All boards, DEF, NL, NPR/UNACH, LOCK, READY, SOFTLOCK) or Based on activity (All boards, Active boards, Standby boards) or Based on type (All boards, IP boards, nonIP boards, STMI, NCUI, vHG3500, SoftGate) fields to display the boards you want to update.
- The board list and the available loadware version can be refreshed and redisplayed by pressing the **Update Board List** button.
- Check the **Select** checkbox for the desired board (you may select more boards by Ctrl+left mouse button, or select all boards displayed in the list by by checking the checkbox in the left upper corner of the table).
- Press the **Transfer and Activate LW** button to start the loadware update.
- The checkbox for the selected board becomes disabled (grayed out). The progress of a loadware file transfer is displayed in the **LW Update progress** column. The progress of activation is displayed in the **LW Update progress** column.

Related Topics

LW Update with Manual Transfer and Manual Activation

Transfer and/or Activation Scheduled at Different Times

Transfer of Loadware from a Client PC

Updating Loadware on Multiple Boards

Logical AP Group Activation

Handling of Boards Without Background Loading Capability

2.3 Logical AP Group Activation

Logical AP Group Activation is a feature that changes the order of the LW updates. The goal is to reduce downtime while all boards are unavailable (down) during LW activation. LW transfer is not affected though the checkbox Logical AP group activation is checked. If this checkbox is checked during an LW activation, there are two options:
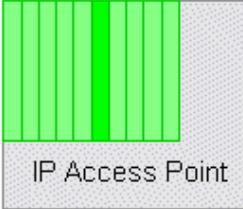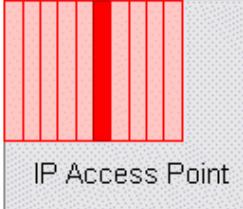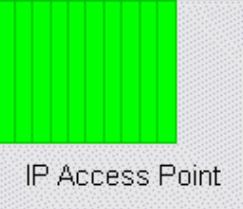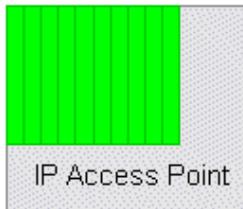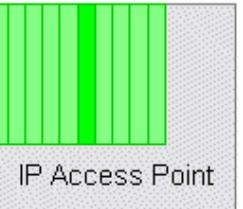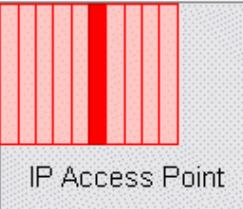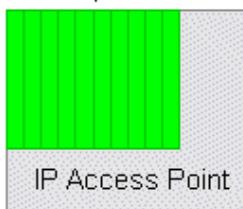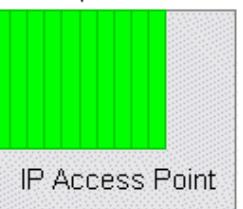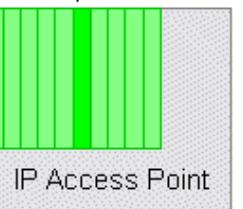
- Only one board in the host shelf (LTU 1 - LTU 15) is rebooted at a time, and all other boards are waiting until the LW update has finished. Then the next board is rebooted, one by one.

Reboot Scheme "One board per shelf at a time"

Only one entire AP shelf (NCUI or SoftGate) with all configured boards for this LTU is rebooted (down) at a time. All other AP shelfs are waiting for the LW activation until the previous NCUI (or virtual NCUI) has finished the LW update.

	LTU17	LTU18	LTU19	
1.	LW update done IP Access Point	LW activation running IP Access Point	LW activation waiting IP Access Point	
2.	LW update done IP Access Point	LW update done IP Access Point	LW activation running IP Access Point	
3.	LW update done IP Access Point	LW update done IP Access Point	LW update done IP Access Point	

Reboot Scheme "One AP shelf at a time"

3 Transfer and/or Activation Scheduled at Different Times

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

- Use the filters in the the Based on status (All boards, DEF, NL, NPR/ UNACH, LOCK, READY, SOFTLOCK) or Based on activity (All boards, Active boards, Standby boards) or Based on type (All boards, IP boards, nonIP boards, STMI, NCUI, vHG3500, SoftGate) fields to display the boards you want to update.
- The board list and the available loadware version can be refreshed and redisplayed by pressing the **Update Board List** button.
- Check the **Select** checkbox for the desired board (you may select more boards by Ctrl+left mouse button, or select all boards displayed in the list by checking the checkbox in the left upper corner of the table).
- Press the Set Transfer Time 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.
- Press the Set Activation Time 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 before the transfer time!
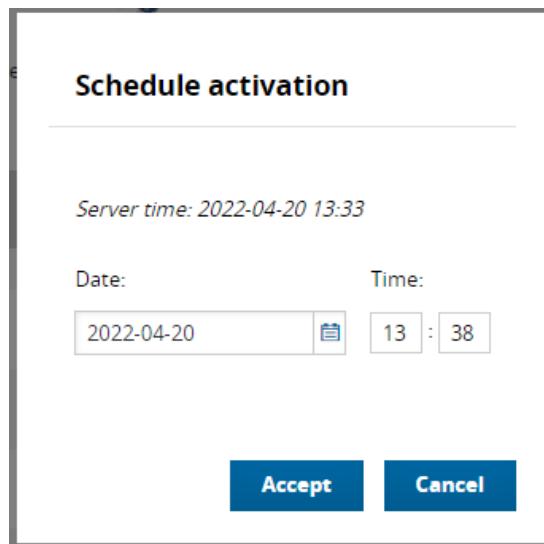
"LW Update" / Schedule Activation

- 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

Transfer and/or Activation Scheduled at Different Times

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

Transfer of Loadware from a Client PC

"OS Update" Dialog

Updating Loadware on Multiple Boards

Logical AP Group Activation

Handling of Boards Without Background Loading Capability

4 Transfer of Loadware from a Client PC

You can use GateWay Manager for transferring the LoadWare file from your Client PC to the RMX/Boards.

- Check the **Select** checkbox for the desired board (you can select multiple boards by pressing Ctrl and the left mouse button, or select all boards displayed in the list by checking the checkbox in the left upper corner of the table).
- Press the **Transfer LW** button.
- Select **Special LoadWare** in the **Transfer** dialog.
- Check **Transfer loadware to RMX automatically** if you want the Gateway Manager to automatically transfer the selected LoadWare file to RMX.
- Select the LoadWare file from your client PC using the **Upload** button. The LoadWare file is automatically uploaded to RMX if **Transfer Loadware to RMX automatically** was selected.
- Press the **Start Transfer** button.

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

The progress of a loadware file transfer is displayed in the LW Update Progress column.
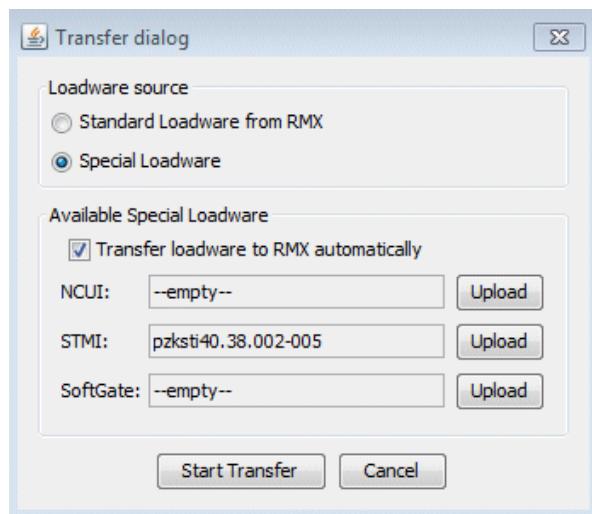
Transfer of Loadware from a Client

Related Topics

"LW Update" Dialog

Transfer and/or Activation Scheduled at Different Times

Transfer of Loadware from a Client PC

"OS Update" Dialog

"Backup/Restore" Dialog

"Failed Actions" Dialog

Handling of Boards Without Background Loading Capability

Logical AP Group Activation

5 "OS Update" Dialog

The second screen of the **Gateway Manager** dialog is the **OS Update** dialog.

Here 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) of the board,
- Board Type (only Standalone and Survivable SoftGates are displayed),
- IP Address of the board,
- Security (displays the SECURITY MODE of the GW. If a padlock icon is displayed, this means that the GW is in secure mode, i.e. no administration is possible, and the WBM is not accessible),
- 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),
- OS image version currently activated in the board (**Current OS** column),
- Available, but currently not activated OS image version in the board (**Imported OS** column),
- Available OS image version on the central Host system,

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

Gateway Manager -"OS Update" screen

Sorting the List

You can sort the list by clicking any of the column headers.

Filtering the List

You can filter the list by selecting the filters in the Based on status (All, READY, LOCK, SOFTLOCK, NPR/UNACH, NL, DEF).

Row Colors

- White: running OS image version on the board is different from the OS image version on the central host.
- Green: running OS image version on the board is the same as on the central host.
- Grey: changes for this board are locked because some action is in progress (activation or transfer is running for this boards) .
- Blue: board is selected by the user.
- Red: unreachable boards marked as NPR are highlighted in red.

Related Topics

OS Update with Manual Transfer and Manual Activation

OS Update with Manual Transfer and Immediate Activation

5.1 OS Update with Manual Transfer and Manual Activation

In the **OS Update** screen 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.

- Use the filters in the the Based on status (All, READY, LOCK, SOFT-LOCK, NPR/UNACH, NL, DEF) fields to display the boards you want to update.
- 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** button to start the OS image transfer.
- The checkbox for the selected board(s) becomes disabled (grayed out). The progress of an OS image file transfer is displayed in the **Progress** column.
- After the OS image transfer has finished, press the **Activate** button to start the OS image activation.
- The checkbox for the selected board(s) becomes disabled (grayed out). The progress of activation is displayed in the **Progress** column.

Related Topics

OS Update with Manual Transfer and Immediate Activation

5.2 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

"OS Update" Dialog

Progress column. The progress of activation is displayed in the **Progress** column.

Related Topics

OS Update with Manual Transfer and Manual Activation

6 "Backup/Restore" Dialog

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.

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** dialog.

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

- PEN (Port Equipment Number) of the board,
- Board Type,
- IP Address of the board,
- Board Status (possible values: READY, LOCK, SOFTLOCK, NPR/UNACH, NL, DEF. 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.)
- Progress (possible values: Data restore, Data backup, Data restore waiting, Data backup waiting),
- Last backup time,
- Last restore time.

Gateway Manager -"Backup/Restore" screen

Sorting the List

You can sort the list by clicking any of the column headers.

Filtering the List

You can filter the list by selecting the filters in the Based on status (All, READY, LOCK, SOFTLOCK, NPR/UNACH, NL, DEF) or Based on activity (All, Active, Standby) fields.

Row Colors

- White: no backup/restore process is currently running on this board.
- Green: running loadware version on the board is the same as on the RMX.
- Grey: a backup/restore process is currently running on this board.
- Blue: board is selected by the user.
- Red: unreachable boards are highlighted in red.

Related Topics

Backup/Restore Process

6.1 Backup/Restore Process

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

- Use the filters in the the Based on status (All, READY, LOCK, SOFTLOCK, NPR/UNACH, NL, DEF) or Based on activity (All, Active, Standby) fields to display the boards you want to backup/restore.
- The board list and the processes running are refreshed and redisplayed by pressing the **Update Board List** button.

- Check the **Select** checkbox for the desired board (you may select more boards by ctrl+left mouse button, or select all boards displayed boards in the list by pressing the **Select All** button).
- 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.
- You can stop the Backup/Restore process at any time by pressing the **Stop backup and restore** button.
- Once the Backup/Restore processes are done, press the **Update Board List** button to refresh and redisplay the board list.

7 "Failed Actions" Dialog

In case errors occurred during transfers and/or activations for some reason, you can get an overview of this in the **Failed Actions** dialog.

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

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,
- Action that was ongoing when the error occurred,
- The time when the error appeared,
- Error message.
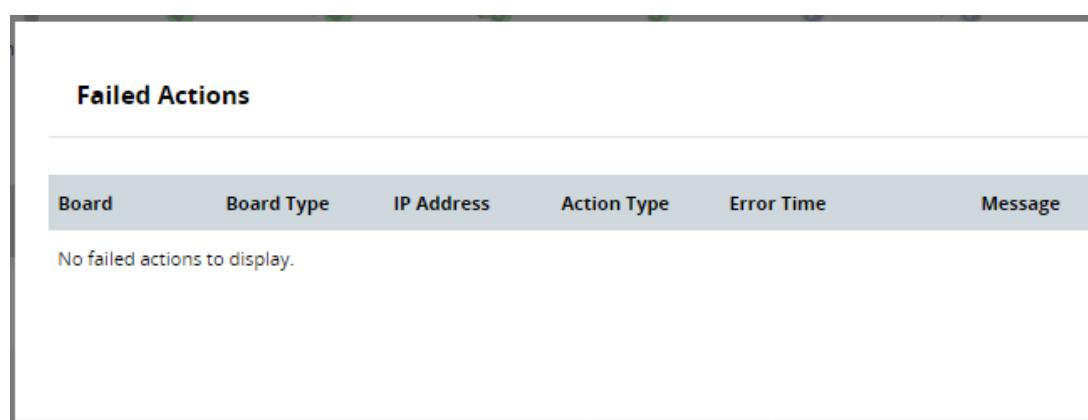
Failed Actions

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

Figure 2: Gateway Manager - "Failed Action" screen

Related Topics

Inspecting Failed Actions

Possible Reasons for Failures of Gateway Manager

7.1 Inspecting Failed Actions

For each error the time when it appeared is displayed in the corresponding field.

- With the **Clear** button you can clear the list.
- An automatic refresh of the list is performed every 5 seconds.
- The reason for failure is listed in the **Error** column.

Related Topics

"Failed Actions" Dialog

Possible Reasons for Failures of Gateway Manager

7.2 Possible Reasons for Failures of Gateway Manager

- Error getting loadware files from RMX to the Assistant.

- Error reading loadware version from header of loadware file.
- (In the **Available LW Version** column **not available** is displayed and the **Select** checkbox is disabled.)
- Error during reading loadware version running on the board.
- Update of board list failed.
- Error transferring loadware file on board.
- Error on activation of the new loadware on board after a board restart.
- At scheduled time of loadware update the board is not in state READY, LOCK or SOFT_LOCK.
- No update is performed and this board appears in **Failed Actions**.
- If transfer or activation is in progress, no other action can be started (scheduled or manually) at that time.

Related Topics

"Failed Actions" Dialog

Inspecting Failed Actions

8 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 are marked NONE in the IP Address column. The user interface of the Gateway Manager has an enhanced filter for visualizing boards based on the type, especially for IP and nonIP boards.

If this filter is set to nonIP boards, only the nonIP boards are listed.

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 of the "Running LW version" column.

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 2: Board types, Running LW, and Available LW

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

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; a different number of restarts can be set using the enviroment variable MAX_RESTARTS in the file `/opt/hg3550m/bin/lw_daemon_start.sh` on the Assistant.

Related Topics

Starting the Gateway Manager Dialog

"LW Update" Dialog

"Backup/Restore" Dialog

"Failed Actions" Dialog

LW Update with Manual Transfer and Manual Activation

LW Update with Manual Transfer and Immediate Activation

Updating Loadware on Multiple Boards

Logical AP Group Activation

Inspecting Failed Actions

Possible Reasons for Failures of Gateway Manager

9 Appendix

9.1 Architecture and Interface Concept of LW Update

Loadware activation can be performed immediately or controlled by a daemon based on date and time stored in the database.

By default, the LW Update Manager does not allow the user to transfer and activate the same loadware that is active on the board. However, this behavior can be changed by modifying an environment variable. The variable to control this behavior is the parameter TRANSFER_SAME_LOADWARE in the file lw_daemon_start.sh.

If on the board any transfer or activation is running, the status of this action will be saved in `cdb` database.

The daemon responsible for activation or transfer is also responsible for consistency in the database, which means that the entries in the database have to correspond with the reality on the boards. This inconsistency can be caused by not planned actions like reboot of Assistant etc. If the daemon detects any inconsistency, it removes wrong entries and updates the failed actions log if needed.
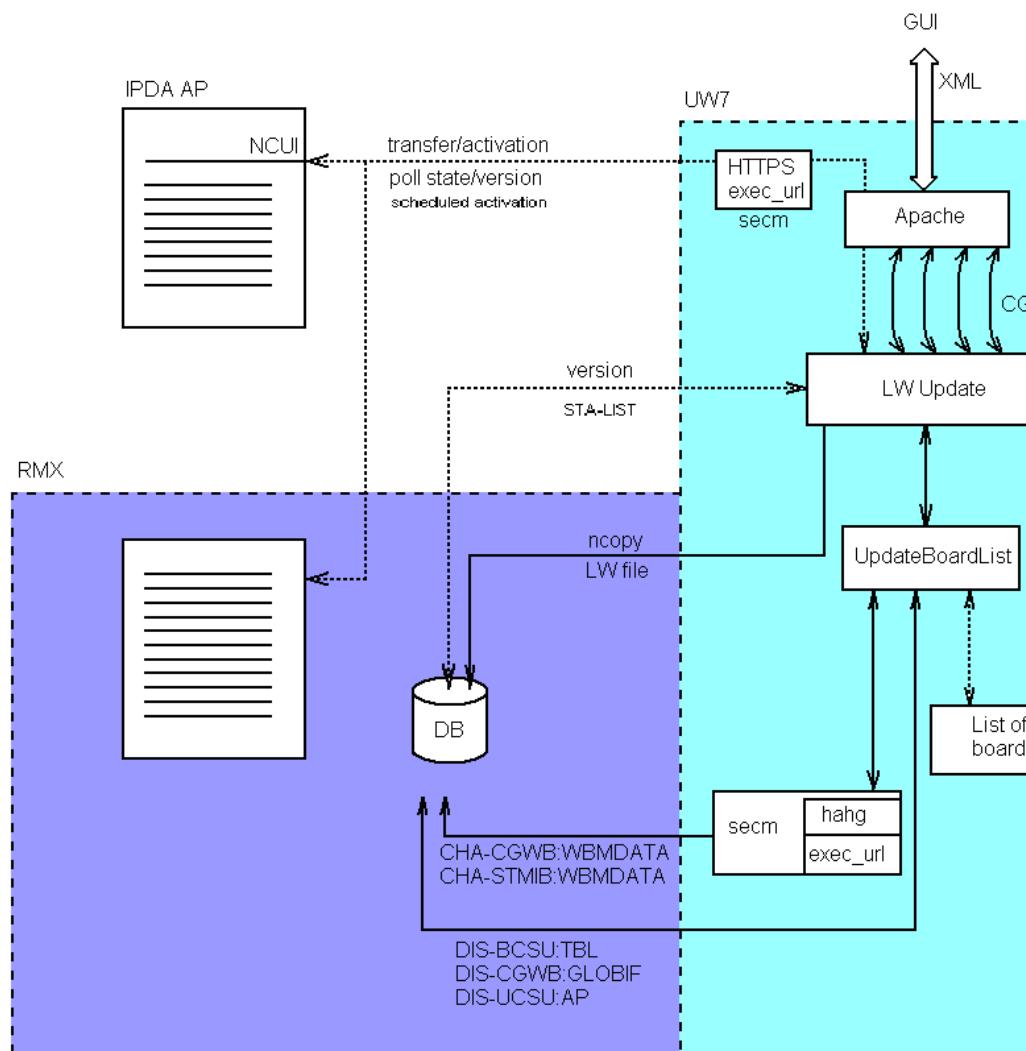
Figure 3: LW Update -Architecture and Interface Concept

The user interface sends requests to and receives responses from Apache server in an xml format. Each request will invoke a CGI call on LW Update. LW Update stores the status of any activation or transfer in cdb.

For time controlled activation and/or transfer the crontab is not used, but the daemon will start scheduled actions. LW Update is able to call UpdateBoardList procedure which will use hahg to create a list of boards.

The version of the loadware file on the rmx are read by dipas_batch with AMO LIST and the file transfer is performed with the /opt/bin/uricmd hg3550m rmxcopy command. The transfer of loadware files from the Assistant to the board itself and the activation will be made through Apache server via HTTPS. Also the status of a board and the version of the running loadware will be polled via HTTPS.

Scheduling activation on the board side is managed by Apache server via https.

Related Topics

Limitations and Restrictions

Transfer and Activation Controlled by Assistant

9.2 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.
- On the GUI dialog **LW Update** only progress (of loadware transfer and activation) for those actions is tracked, which are initiated from that GUI dialog (manually or scheduled).
- 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

Architecture and Interface Concept of LW Update

Transfer and Activation Controlled by Assistant

The LW Update Process

9.3 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
- LOCK
- SOFT_LOCK

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

Architecture and Interface Concept of LW Update

Limitations and Restrictions

The LW Update Process

9.4 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.

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

3) 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.

4) The Update board list procedure (`/opt/hg3550m/bin/ updateBoardList`) will be called.

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

6) Password synchronization routine (`/opt/secm/bin/hahg`) will be called.

7) For all boards:

8) • 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 3 parallel transfers are possible at one time.

   • File deletion is not needed due to small size of loadware files (2 files ~20MB).

Related Topics

Architecture and Interface Concept of LW Update

Limitations and Restrictions

Transfer and Activation Controlled by Assistant

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