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GUIDE

# Mitel OpenScape 4000 Manager V11

## Gateway Manager

Administrator documentation
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Mitel

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# Contents

# 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**

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

| Q-NUMBER | TYPE | BD-NAME | FCTID | CIRCUITS | LINE-TYPE | LW-FILE |
|---|---|---|---|---|---|---|
| Q2153-X100 | PER | SLMQ | 0 | 16 | SLMQ_EXT | LG86/PZDQSM10 |
| Q2158-X | PER | SLMO24 | 1 | 24 | SLMO | LG83/PZDSMO10 |
| Q2159-X100 | PER | TM2LP | 0 | 8 | TM2LP0 | LG99/PZGTM2L0 |
| Q2159-X110 | PER | TM2LP | 0 | 8 | TM2LP1 | LG99/PZGTM2L0 |
| Q2159-X120 | PER | TM2LP | 0 | 8 | TM2LP2 | LG99/PZGTM2L0 |
| Q2159-X130 | PER | TM2LP | 0 | 8 | TM2LP3 | LG99/PZGTM2L0 |
| Q2159-X140 | PER | TM2LP | 0 | 8 | TM2LP4 | LG99/PZGTM2L0 |
| Q2159-X150 | PER | TM2LP | 0 | 8 | TM2LP5 | LG99/PZGTM2L0 |
| Q2159-X160 | PER | TM2LP | 0 | 8 | TM2LP6 | LG99/PZGTM2L0 |
| Q2159-X170 | PER | TM2LP | 0 | 8 | TM2LP7 | LG99/PZGTM2L0 |
| Q2159-X180 | PER | TM2LP | 0 | 8 | TM2LP8 | LG99/PZGTM2L0 |
| Q2159-X190 | PER | TM2LP | 0 | 8 | TM2LP9 | LG99/PZGTM2L0 |
| Q2159-X200 | PER | TM2LP | 0 | 8 | TM2LP10 | LG99/PZGTM2L0 |
| Q2160-X | PER | STMA | 4 | 32 | STMA_PSW | LG98/PZSTMA10 |
| Q2160-X | PER | STMA | 5 | 128 | STMA_NW20 | LG98/PZSTMA10 |
| Q2160-X100 | PER | STMA | 4 | 32 | STMA_PSW | LG98/PZSTMA10 |
| Q2160-X100 | PER | STMA | 5 | 128 | STMA_NW20 | LG98/PZSTMA10 |
| Q2163-X | PER | STMD2 | 1 | 8 | STMD_S0 | LG79/PZDSTMD0 |
| Q2163-X100 | PER | STMD2 | 1 | 8 | SLMS | LG79/PZDSTMD0 |
| Q2168-X | PER | SLMO24 | 1 | 24 | SLMO | LG83/PZDSMO10 |
| Q2169-X | PER | STHC | 1 | 16 | SLMO | LG71/PZDSTHC0 |
| | | | | 4 | STMD_S0 | |
| Q2169-X100 | PER | SLMOP | 1 | 24 | SLMO | LG73/PZDSMP10 |
| Q2174-X | PER | STMD | 0 | 8 | STMD_S0 | LG44/PZDFSTD0 |
| Q2184-X | PER | SLMAB | 0 | 24 | SLMA_1 | LG43/PZESMAB0 |
| Q2186-X100 | PER | TMLRB | 0 | 8 | TMLRB | LG69/PZGTLRBQ |
| Q2187-X | SIUP | SIUX2 | 2 | 8 | SIU_TYP_2 | LG02/PZJ22MV0 |
| Q2187-X | SIUP | SIUX2 | 3 | 8 | SIU_TYP_3 | LG25/PZJ23MC0 |
| Q2187-X | SIUP | SIUX2 | 4 | 8 | SIU_TDS | LG02/PZJ24TD0 |

| Q-NUMBER | TYPE | BD-NAME | FCTID | CIRCUITS | LINE-TYPE | LW-FILE |
|---|---|---|---|---|---|---|
| Q2187-X | SIUP | SIUX2 | 5 | 8 | SIU_ANI | LG25/PZJ25AN0 |
| Q2187-X | SIUP | SIUX2 | 6 | 8 | SIU_TYP_3 | LG25/PZJ26SH0 |
| Q2187-X | SIUP | SIUX2 | 7 | 8 | SIU_TYP_2 | LG02/PZJ27LT0 |
| Q2191-X | PER | SLMA3 | 0 | 24 | SLMA_1 | LG80/PZESLAC0 |
| Q2191-C | PER | SLMAC | 0 | 24 | SLMA24 | LG80/PZESLAC0 |
| Q2192-X | TMD | TMDNH | 1 | 25 | TMDN_BOS | LG82/PZFDMTBK |
| Q2192-X | TMD | TMDNH | 2 | 1 | TMDN_MOS | LG82/PZFDMTMK |
| Q2192-X | TMD | TMDNH | 3 | 1 | TMDN_CORNET_ | LG82/PZFDMTVK |
| Q2193-X200 | PER | SLC24 | 0 | 255 | SLMC | LG93/PZDSLC27 |
| Q2195-X | DIU | DIU-N4 | 1 | 4 | SLMN_E1 | LGA2/PZFDUN40 |
| Q2196-X | DIU | DIU-N2 | 1 | 2 | SLMN_E1 | LGA1/PZFDUN20 |
| Q2196-X | DIU | DIU-N2 | 2 | 64 | DIUC64 | LGA2/PZFDCA20 |
| Q2197-T | PER | TMDID | 0 | 8 | TMDID8 | LG61/PZUDIDA0 |
| Q2199-X | PER | SLMAR | 0 | 8 | SLMAR | LG80/PZESLA40 |
| Q2205-X | PER | WAML | 1 | 1 | WAML | LG91/PZWWAML0 |
| Q2205-X | PER | WAML | 2 | 255 | SLMPX | LG00/PZSLMPX0 |
| Q2214-X | PER | TMOM2 | 0 | 4 | TMOM2 | LG88/PZGMOM40 |
| Q2214-X100 | PER | TMOM2 | 0 | 4 | TMOM2 | LG88/PZGMOM40 |
| Q2216-X | TMD | DIU2U-B | 5 | 25 | TMDN_BOS | LG82/PZFDUNBK |
| Q2216-X | TMD | DIU2U-M | 6 | 2 | TMDN_MOS_CVN | LG82/PZFDUNMK |
| Q2217-X | PER | STMD3 | 1 | 8 | STMD_S0 | LG79/PZDSTM30 |
| Q2217-X100 | PER | STMD3 | 1 | 8 | SLMS | LG79/PZDSTM30 |
| Q2225-X | PER | SLMAE | 0 | 24 | SLMA24 | LG80/PZESLA40 |
| Q2226-X200 | DIU | DIUT2-E1 | 1 | 2 | SLMN_E1 | LGA1/PZFDUE10 |
| Q2226-X200 | DIU | DIUT2-E1 | 2 | 64 | DIUC64 | LGA1/PZFDUE10 |
| Q2226-X200 | TMD | DIUT2-T1 | 3 | 25 | TMDN_BOS | LGA1/PZFDUT10 |
| Q2226-X200 | TMD | DIUT2-T1 | 4 | 2 | TMDN_MOS_CVN | LGA1/PZFDUT10 |
| Q2227-X1 | PER | SLMAV8 | 0 | 8 | SLMA24 | LG80/PZESLAV0 |
| Q2227-X | PER | SLMAV | 0 | 24 | SLMA24 | LG80/PZESLAV0 |

| Q-NUMBER | TYPE | BD-NAME | FCTID | CIRCUITS | LINE-TYPE | LW-FILE |
|---|---|---|---|---|---|---|
| Q2233-X | SIUP | SIUX | 1 | 8 | STANDART_SIU | LG63/PZJMSCO0 |
| Q2233-X | SIUP | SIUX | 2 | 8 | SIU_TYP_2 | LG02/PZJX2MV0 |
| Q2233-X | SIUP | SIUX | 3 | 8 | SIU_TYP_3 | LG25/PZJX3MC0 |
| Q2233-X | SIUP | SIUX | 4 | 8 | SIU_TDS | LG02/PZJX4TD0 |
| Q2233-X | SIUP | SIUX | 5 | 8 | SIU_ANI | LG25/PZJX5AN0 |
| Q2233-X | SIUP | SIUX | 6 | 8 | SIU_TYP_3 | LG25/PZJX6SH0 |
| Q2233-X | SIUP | SIUX | 7 | 8 | SIU_TYP_2 | LG02/PZJX7LT0 |
| Q2235-X | PER | VCM-B15 | 0 | 1 | VCM_B15 | LG95/PZJVCM00 |
| Q2236-X | PER | STMD4 | 1 | 8 | STMD_S0 | LG79/PZDSTM40 |
| Q2238-X200 | DIU | DIUT3-E1 | 1 | 2 | SLMN_E1 | LGA1/PZFDUE30 |
| Q2238-X200 | DIU | DIUT3-E1 | 2 | 64 | DIUC64 | LGA1/PZFDUE30 |
| Q2238-X200 | TMD | DIUT3-T1 | 3 | 25 | TMDN_BOS | LGA1/PZFDUT30 |
| Q2238-X200 | TMD | DIUT3-T1 | | | | |
| Q2246-X | PER | SLMA24 | 0 | 24 | SLMA_1 | LG80/PZESLA20 |
| Q2266-X | LTU | LTUCA | 0 | 0 | | LGA0/PZKLTUX0 |
| Q2286-X | PER | TMLRB | 0 | 8 | TMLRB | LG69/PZGTLRBQ |
| Q2287-X | SIUP | SIUX3 | 2 | 8 | SIU_TYP_2 | LG02/PZJ30AL0 |
| Q2287-X | SIUP | SIUX3 | 3 | 8 | SIU_TYP_3 | LG02/PZJ30AL0 |
| Q2287-X | SIUP | SIUX3 | 4 | 8 | SIU_TDS | LG02/PZJ30AL0 |
| Q2287-X | SIUP | SIUX3 | 5 | 8 | SIU_ANI | LG02/PZJ30AL0 |
| Q2287-X | SIUP | SIUX3 | 6 | 8 | SIU_TYP_3 | LG02/PZJ30AL0 |
| Q2287-X | SIUP | SIUX3 | 7 | 8 | SIU_TYP_2 | LG02/PZJ30AL0 |
| Q2288-X | PER | TMCOW | 0 | 8 | TMCOW | LG68/PZGTCOWL |
| Q2288-X 10 | PER | TMCOW | 0 | 8 | TMCOW | LG68/PZGTCOW3 |
| Q2288-X 20 | PER | TMCOW | 0 | 8 | TMCOW | LG68/PZGTCOW3 |
| Q2288-X 30 | PER | TMCOW | 0 | 8 | TMCOW | LG68/PZGTCOW6 |
| Q2288-X 40 | PER | TMCOW | 0 | 8 | TMCOW | LG68/PZGTCOWC |
| Q2288-X 50 | PER | TMCOW | 0 | 8 | TMCOW | LG68/PZGTCOWQ |
| Q2288-X 60 | PER | TMCOW | 0 | 8 | TMCOW | LG68/PZGTCOWQ |
| Q2288-X100 | PER | TMCOW | 0 | 8 | TMCOW | LG68/PZGTCOWQ |

| Q-NUMBER | TYPE | BD-NAME | FCTID | CIRCUITS | LINE-TYPE | LW-FILE |
|---|---|---|---|---|---|---|
| Q2288-X110 | PER | TMCOW | 0 | 8 | TMCOW | LG68/PZGTCOWD |
| Q2288-X120 | PER | TMCOW | 0 | 8 | TMCOW | LG68/PZGTCOWD |
| Q2288-X130 | PER | TMCOW | 0 | 8 | TMCOW | LG68/PZGTCOWQ |
| Q2288-X220 | PER | TMCOW | 0 | 8 | TMCOW | LG68/PZGTCOWL |
| Q2288-X300 | PER | TMCOW | 0 | 8 | TMCOW | LG68/PZGTCOWG |
| Q2288-X310 | PER | TMCOW | 0 | 8 | TMCOW | LG68/PZGTCOWQ |
| Q2292-X100 | PER | TMEW2 | 0 | 4 | TMEMW2 | LG85/PZGTMEU0 |
| Q2305-X35 | AP | NCUI2+ | 1 | 1 | LTUCE | LGA0/PZKNCI40 |
| Q2305-X40 | AP | NCUI2+ | 1 | 1 | LTUCE | LGA0/PZKNCI40 |
| Q2312-X | LTG | RTM | 0 | 1 | SICOE | CDSCRTM0 |
| | | | | 1 | SICOE | CECORTM0 |
| Q2316-X | IPGW | STMI2 | 1 | 0 | | LG98/PZKSTI40 |
| Q2316-X10 | IPGW | STMI2 | 1 | 0 | | LG98/PZKSTI40 |
| Q2324-X | AP | NCUI4 | 1 | 1 | LTUCE | LGA0/PZKNCI40 |
| Q2324-X10 | AP | NCUI4 | 1 | 1 | LTUCE | LGA0/PZKNCI40 |
| Q2324-X11 | AP | NCUI4 | 1 | 1 | LTUCE | LGA0/PZKNCI40 |
| Q2324-X500 | IPGW | STMI4 | 1 | 0 | | LG98/PZKSTI40 |
| Q2324-X510 | IPGW | STMI4 | 1 | 0 | | LG98/PZKSTI40 |
| Q2324-X511 | IPGW | STMI4 | 1 | 0 | | LG98/PZKSTI40 |
| Q2327-X100 | PER | TMANI | 0 | 8 | TMANI | LG99/PZGTMAN0 |
| Q2327-X101 | PER | TMANI-IM | 0 | 8 | TMANI | LG99/PZGTMAN0 |
| Q2327-X182 | PER | TMANI-BR | 0 | 8 | TMANI | LG99/PZGTMAN0 |
| Q2329-X | AP | SoftGate | 1 | 1 | LTUCE | LGA0/PZKSGW50 |
| Q2330-X | IPGW | vHG3500 | 1 | 0 | | LGA0/PZKSGVB0 |
| Q2331-X | PER | SLMAE | 0 | 24 | SLMA24 | LG80/PZESLA40 |
| Q2331-X100 | PER | SLMAE8 | 0 | 8 | SLMA24 | LG80/PZESLA40 |
| Q2332-X | PER | STMD3 | 1 | 8 | STMD_S0 | LG79/PZDSTM30 |
| Q2333-X | PER | SLMO24 | 1 | 24 | SLMO | LG83/PZDSMO10 |
| Q2334-X200 | PER | SLC24 | 0 | 255 | SLMC | LG93/PZDSLC27 |

| Q-NUMBER | TYPE | BD-NAME | FCTID | CIRCUITS | LINE-TYPE | LW-FILE |
|---|---|---|---|---|---|---|
| Q2335-X | DIU | DIUT2-E1 | 1 | 2 | SLMN_E1 | LGA1/PZFDUE10 |
| Q2335-X | DIU | DIUT2-E1 | 2 | 64 | DIUC64 | LGA1/PZFDUE10 |
| Q2335-X | TMD | DIUT2-T1 | 3 | 25 | TMDN_BOS | LGA1/PZFDUT10 |
| Q2335-X | TMD | DIUT2-T1 | 4 | 2 | TMDN_MOS_CVN | LGA1/PZFDUT10 |
| Q2336-X100 | PER | TMANI | 0 | 8 | TMANI | LG99/PZGTMAN0 |
| Q2336-X101 | PER | TMANI-IM | 0 | 8 | TMANI | LG99/PZGTMAN0 |
| Q2336-X182 | PER | TMANI-BR | 0 | 8 | TMANI | LG99/PZGTMAN0 |
| Q2337-X | PER | vSLC | 0 | 255 | SLMC | LGA0/PZKSGVB0 |
| Q2338-X1 | PER | SLMAV8 | 0 | 8 | SLMA24 | LG80/PZESLAV0 |
| Q2338-X | PER | SLMAV | 0 | 24 | SLMA24 | LG80/PZESLAV0 |
| Q2339-X | PER | vSLMA | 0 | 24 | SLMA_1 | LGA0/PZKSGVB0 |
| Q2340-X | PER | vTMOM | 0 | 4 | TMOM2 | LGA0/PZKSGVB0 |
| Q2341-X | SIUP | vSIUX | 3 | 8 | SIU_TYP_3 | LGA0/PZKSGVB0 |
| Q2342-X | LTU | LTUCR | 0 | 0 | | LGA0/PZKLTUR0 |
| Q2343-X | IPGW | STMIX | 1 | 0 | | LGA0/PZKSGW50 |
| Q2344-X | PER | SLC24 | 0 | 255 | SLMC | LG93/PZDSLCU4 |
| Q2344-X100 | PER | SLMO24 | 1 | 24 | SLMO | LG83/PZDSMO40 |
| Q2345-X | PER | SLC24 | 0 | 255 | SLMC | LG93/PZDSLCU4 |
| Q2345-X100 | PER | SLMO24 | 1 | 24 | SLMO | LG83/PZDSMO40 |
| Q2346-X | PER | SLMAV4 | 0 | 4 | SLMA24 | LG80/PZESLAV0 |
| Q2347-X | AP | EntGW | 1 | 1 | LTUCE | LGA0/PZKWGW50 |
| Q2348-X200 | PER | TMANIN | 0 | 8 | TMANI | LG99/PZGTMIN0 |
| Q2349-X | PER | STMD4 | 1 | 8 | STMD_S0 | LG79/PZDSTM40 |
| Q2351-X | DIU | DIUT3-E1 | 1 | 2 | SLMN_E1 | LGA1/PZFDUE30 |
| Q2351-X | DIU | DIUT3-E1 | 2 | 64 | DIUC64 | LGA1/PZFDUE30 |
| Q2351-X | TMD | DIUT3-T1 | 3 | 25 | TMDN_BOS | LGA1/PZFDUT30 |
| Q2351-X | TMD | DIUT3-T1 | 4 | 2 | TMDN_MOS_CVN | LGA1/PZFDUT30 |
| Q2358-X200 | PER | TMANIN | 0 | 8 | TMANI | LG99/PZGTMIN0 |
| Q2452-X | PER | TMDID | 0 | 8 | TMDID8 | LG61/PZUDID80 |
| Q2469-X | PER | TMEMUS | 0 | 4 | TMEMUS | LG33/PZGEMUSK |

| Q-NUMBER | TYPE | BD-NAME | FCTID | CIRCUITS | LINE-TYPE | LW-FILE |
|---|---|---|---|---|---|---|
| Q2475-X | PER | TMC16 | 0 | 16 | TMA | LG60/PZUCOT60 |
| Q2476-X | PER | TM3WO | 0 | 4 | TM3W | LG89/PZGTM3W0 |
| Q2477-X | PER | TM3WI | 0 | 4 | TM3W | LG89/PZGTM3W0 |
| Q2479-X | PER | SLMQ3 | 0 | 16 | SLMQ3 | LG67/PZDQSM30 |
| Q2480-X | PER | SLMAR | 0 | 8 | SLMAR | LG80/PZESLAR0 |
| Q2485-X | PER | TMC16P | 0 | 16 | TMA | LG60/PZUCOT60 |
| Q2816-X | PER | SLMY | 1 | 255 | SLMY | LG93/PZDSLMY0 |
| Q6400-X888 | PER | CDG31-FU | 3 | 2 | CDG | LG74/PZFCDG00 |
| Q6401-X | PER | PBCDG-FU | 3 | 2 | CDG | LG74/PZFCDG00 |
| Q9556-X | PER | TMACH | 0 | 8 | TMACH | LG26/PZGMACH0 |
| Q2229-X100 | PER | SLMAV2 | 0 | 24 | SLMA24 | LG80 /PZESLV20 |

**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 XEntGWShelf) 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.

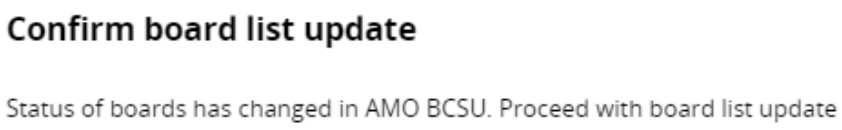



**Figure 1: Confirm board list update dialog box**

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.

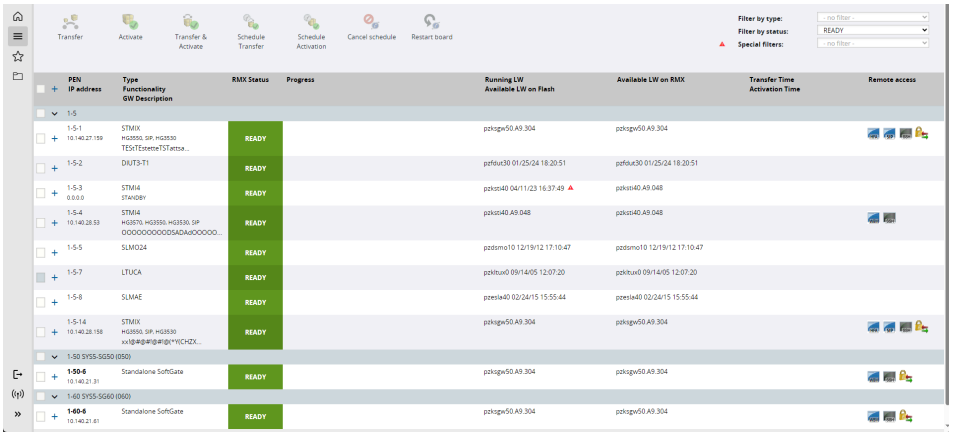



**Figure 3: Gateway Manager – "LW Update" screen**

### 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.

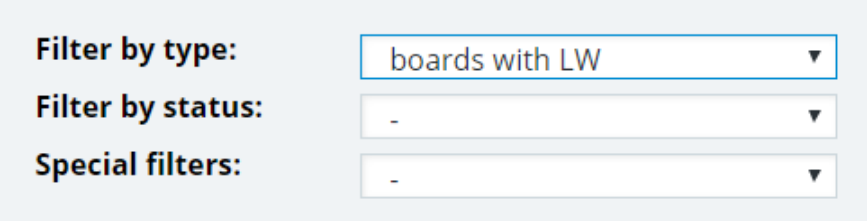



**Figure 4: LW tab filters**

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 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.


**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").

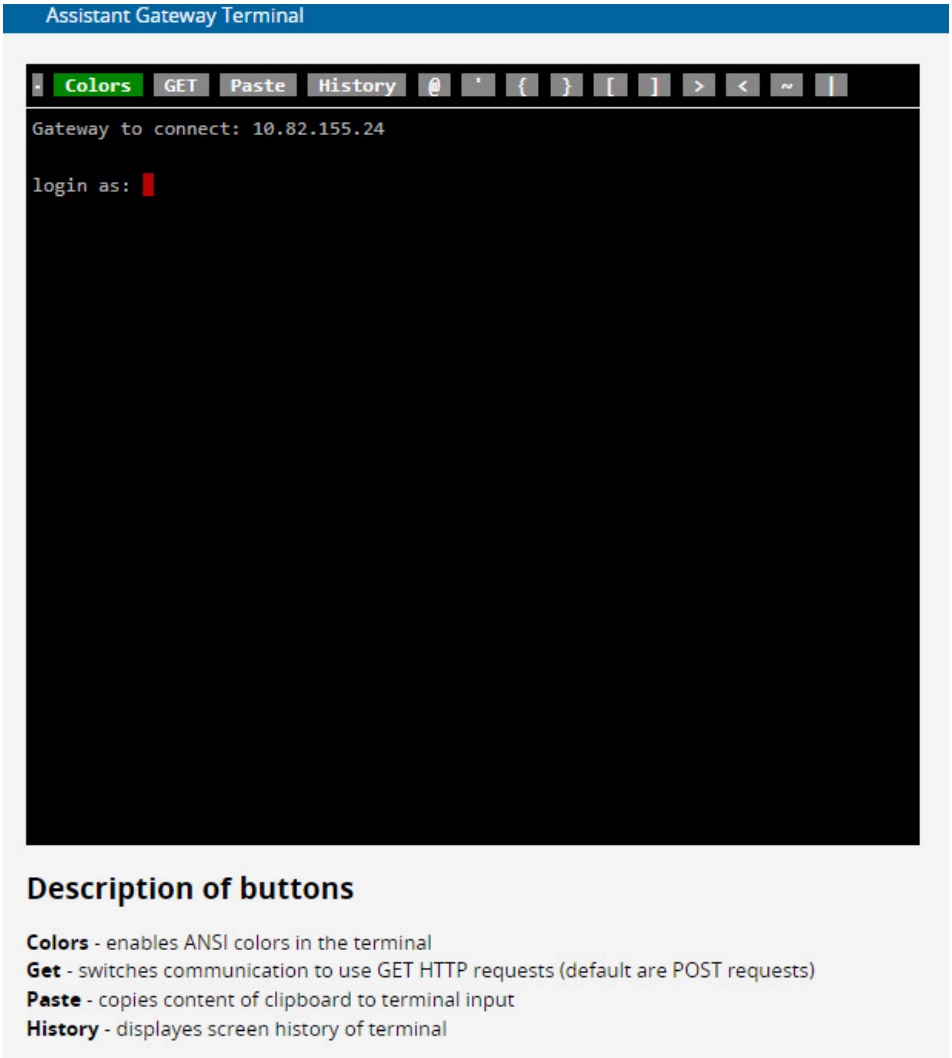



**Figure 6: The Gateway Terminal window**

### 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.


**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.

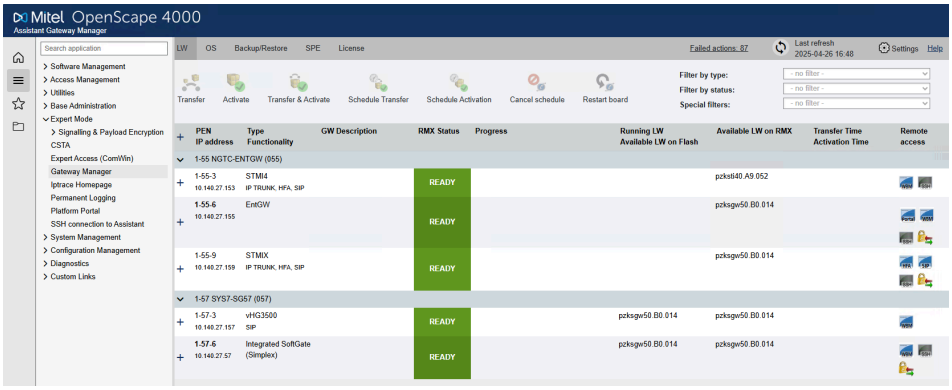



**Figure 8: Remote Access Links to WBM of the SG /EntGW and Platform Portal link for the SG/EntGW**

# 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.

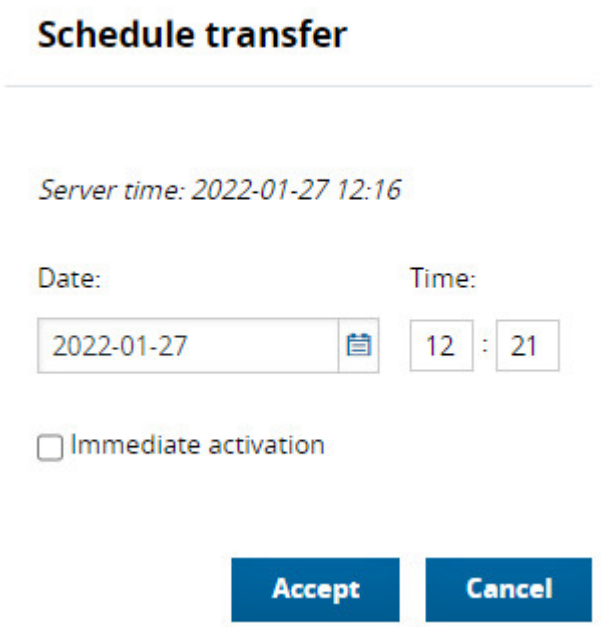



**Figure 9: Schedule Transfer**

- 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.

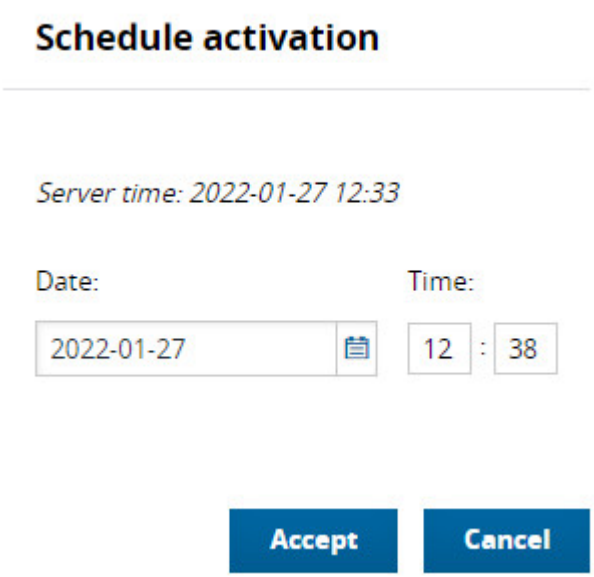



**Figure 10: Schedule Activation**

- 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.

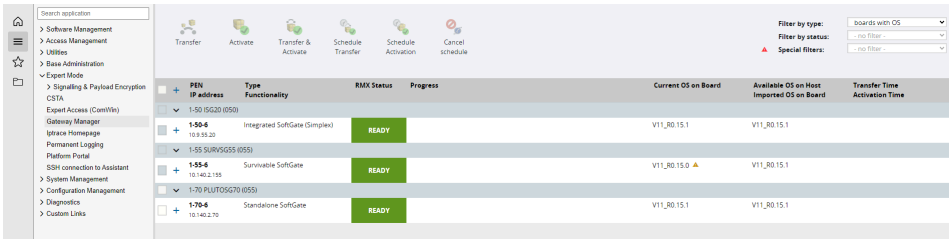



**Figure 11: Gateway Manager – "OS Update" screen**

### 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.

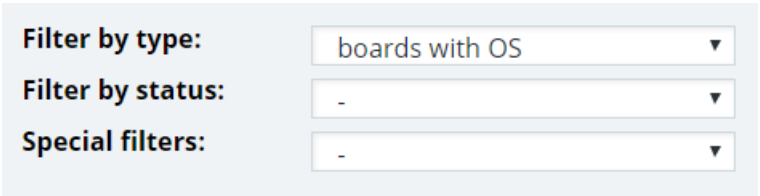



**Figure 12: OS tab filters**

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 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

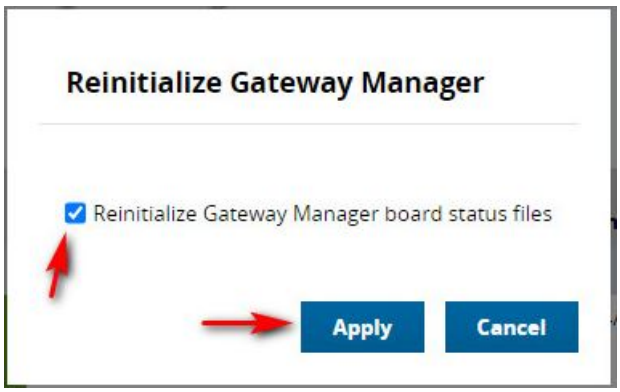
**Reinitialize GWM**

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** buton.


**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.

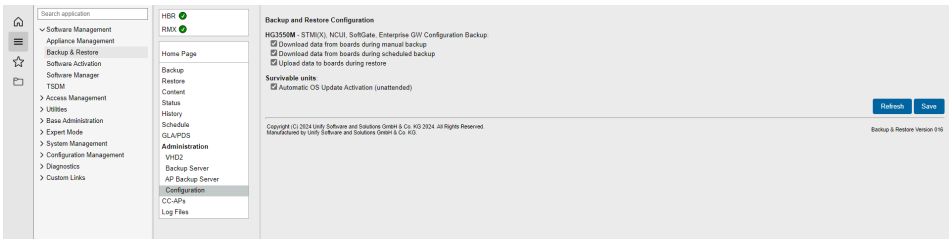



**Figure 13: Software Management – "Backup and Restore Configuration" screen**

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

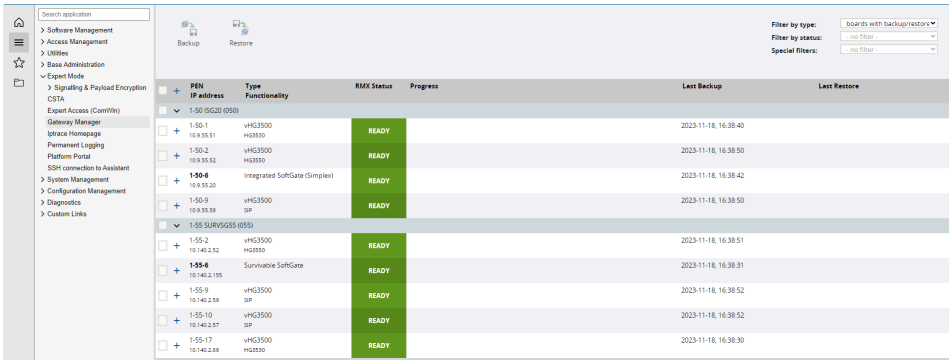



**Figure 14: Gateway Manager – "Backup/Restore" screen**

### 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.

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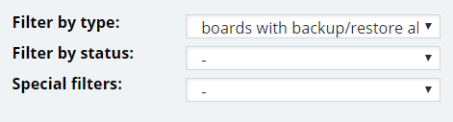



**Figure 15: Backup/Restore tab filters**

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 Backkup/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

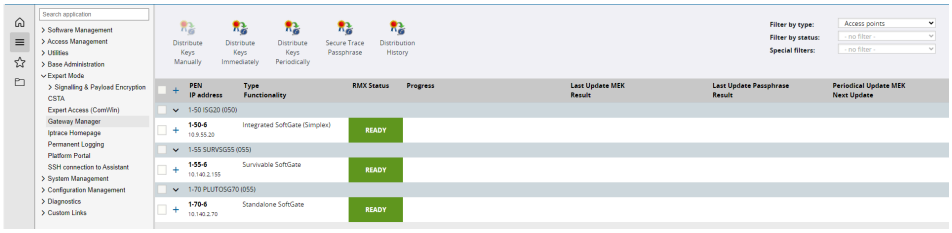



**Figure 16: Gateway Manager – "SPE" screen**

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.

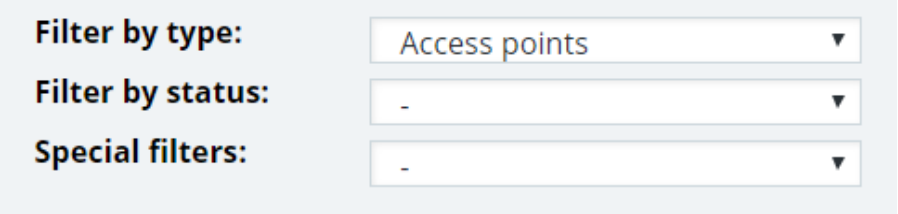



**Figure 17: SPE tab filters**

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 |

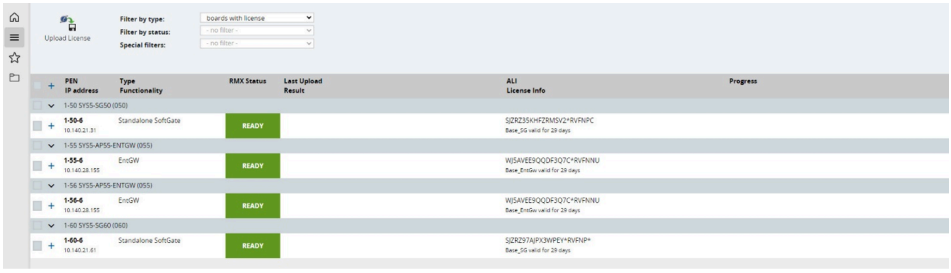
**Table 14: Special Filter**

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

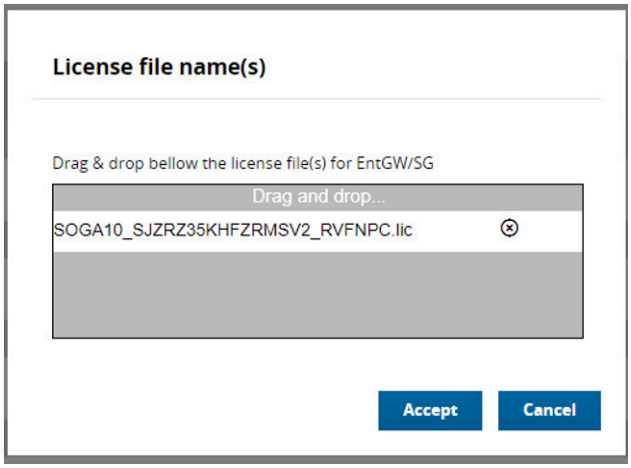
# 7 License TabSheet

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.




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.

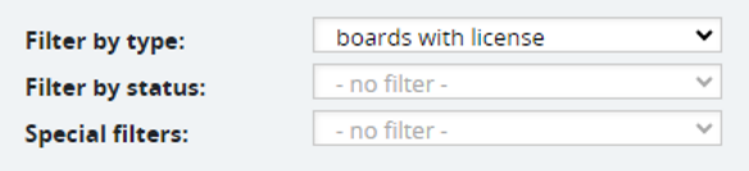



**Figure 18: License tab filters**

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 found 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.

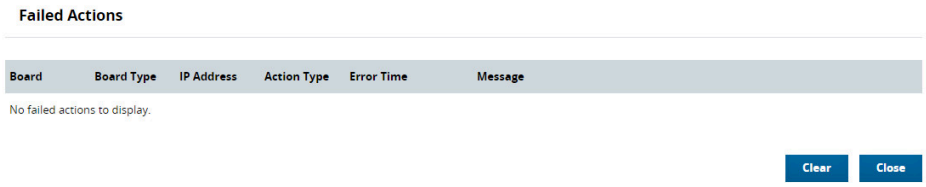



**Figure 19: Gateway Manager – "Failed Action" screen**

**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

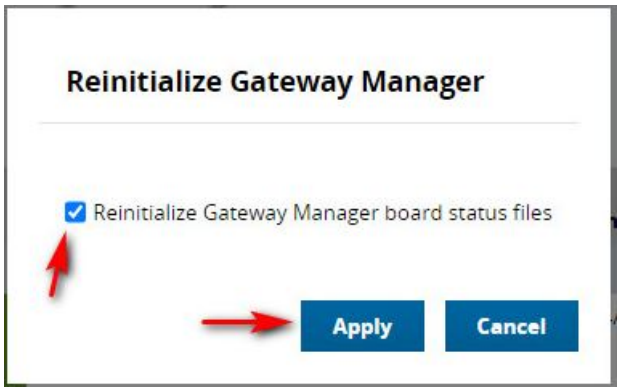
**Reinitialize GWM**

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** buton.

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

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