A MITEL
PRODUCT
GUIDE

Unify OpenScape 4000

OpenScape 4000 Assistant V10 HG3550 Manager and STMI/NCUI Manager

Administrator Documentation

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Mitel

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1 Overview of the Gateway Manager Application

The **Gateway Manager** application provides detailed overview of Gateways connected to Assistant (configured in RMX). Only the boards known to the operations technology of the OpenScape 4000 system are displayed.

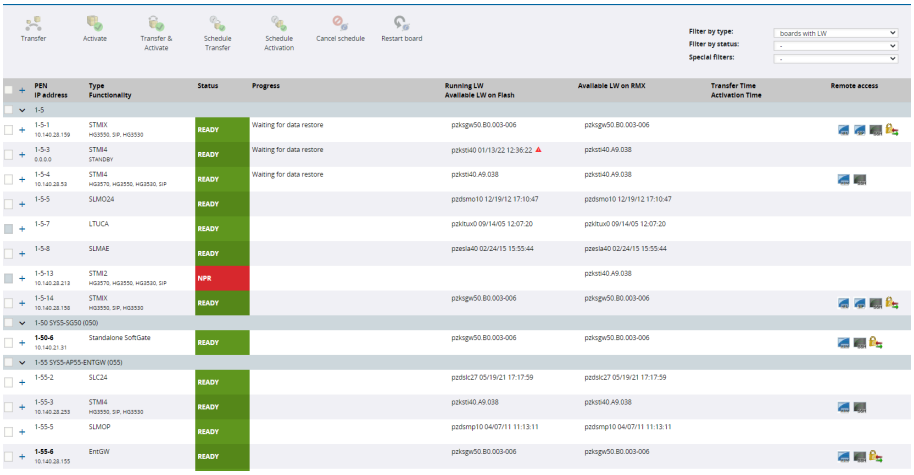
The application provides:

- Hierarchical list of HG boards and OpenScape Access modules currently connected and configured on Assistant,
- description of type and functionality of them,
- current loadware versions of all boards,
- current status of all boards,
- further, detailed information about all boards,
- location of access points of the boards,
- security mode of the board"s connection,
- remote access to web based administration GUI for administration of a board via direct link.
- remote SSH access to HG boards via direct link.
- remote SSH/SFTP access to SoftGate
- display of the SNMP configuration of the gateways
- option to change the SNMP configuration on a list of selected IP gateways
- option to change the QDC (QoS data collection) setting on a list of selected IP gateways
- option to restart selected gateway(s) or SoftGate(s) from the Gateway Manager using the **Restart** button
- display of SoftGate License Information (ALI, license type and validity)
- display of the SIEL-ID

Starting Gateway Manager

The Gateway Manager application can be started in the OpenScape 4000 Assistant start page via the following link:

- **Expert Mode** | **Gateway Manager**
- The list of all boards is displayed.



Operation and Display Controls of the Application

Pen	The used Pen is displayed.

Board Type	Describes the type of the boards. The possible board types are e.g.: STMIX, STMI2 and STMI4 NCUI2, NCUI2+ and NCUI4 SoftGate vHG3550
Functionality	Board functionality is displayed. E.g SIP, WAML, STANDBY
IP Address	The used IP address is displayed.
Board Status	Information about operation status of the board is displayed : Ready (green – regular operation)/Not present (red – unreachable, switched off)
Secure Mode	Information about the security mode, in which the board is operating presently: • CLASSIC: Board is accessible for SSH and WBM from public network. • MAINTENANCE: Board is accessible for SSH and WBM from Assistant. • SECURITY: Board is not accessible at all.
Remote access	• `[WBM]` **link** Clicking the `[WBM]` hyperlink opens the web-based administration GUI for the corresponding board. • `[SSH]` **link** Clicking the [SSH] hyperlink opens SSH access and the Gateway **Terminal** window for the corresponding board. • `[SFTP]` **link** The [SFTP] hyperlink opens the SFTP access to the corresponding SoftGate using the SFTP client program registered for sftp:// URI on your client PC. (See also in the *Access Management* application: "*Security Mode Configuration*")
more/less link	Clicking the more link from the **Detail** column displays detailed information about board. The link changes to less, which closes the details again.
Update Board List	Clicking this button starts a query for all existing gateways in the system.
(toggle button)	Switches to **Reload table** button when there is a change in list of boards on Assistant"s side in the background.
Reload table	Clicking this button refreshes table content from database on Assistant.
(toggle button)	Switches back to **Update Board List** button after loading the refreshed database content.
Change configuration	Clicking this button opens the Change Configuration window where you can • change the SNMP configuration on a list of selected IP gateways and • change the QDC (QoS data collection) setting on a list of selected IP gateways.
The following buttons are only available when "*Enable Gateway Security Mode*" checkbox is activated in *Security Mode Configuration* of *Access Management* application:	
Select/deselect all boards	Clicking this button selects/deselects all boards in the **Board List** table.
Maintenance	Clicking this button switches the selected board(s) to security mode "Maintenance".

Security	Clicking this button switches the selected board(s) to security mode "Security".
Restart	Clicking this button restarts the selected board(s).

Launching the Web-based Board Administration

The web-based administration GUI can be launched from the **Gateway Manager** page:

- Click in the **Remote Access** column on the hyperlink [WBM] for the desired board.

After the administration GUI for the board is started, you will receive further information on administration, maintenance and configuration in the online help of the administration GUI.

Additional information is also available in the OpenScape 4000 service documentation (see System Components for board description and IP Solutions for administration, maintenance and configuration of CGW).

Launching the SSH access to HG Gateway

The Gateway **Terminal** window for the SSH access can be launched from the **Gateway Manager** page:

- Click in the **Remote access** column on the hyperlink [SSH] for the desired board. (Please refer to section SSH Access to HG Gateway.)

Launching the SFTP access to SoftGate(s)HG Gateway

The Gateway **Terminal** window for the SFTP access can be launched from the **Gateway Manager** page:

- Click in the **Remote access** column on the hyperlink [SFTP] for the desired board. (Please refer to section SSH/SFTP Access to SoftGate.)

Application Messages

The messages of the **Gateway Manager** application are displayed in colors. After a period of about 5 minutes, the message is displayed normally again (in black color) For each error message, an explanation is offered together with a workaround.

The following messages can be displayed:

- Error messages (red color):
- – `Board List update could not be started.`
  – `The last update operation failed - please try again.`
- Neutral messages:
- – (yellow color) `Board List update in progress.`
  – (blue color) `No information found about last update.`
- Positive acknowledgment (green color):
- – `The last update operation completed successfully.`

2 SSH/SFTP Connections

There are two kinds of SSH connections:

- SSH Access to HG Gateway
- SSH/SFTP Access to SoftGate
- SSH Access to System

2.1 SSH Access to HG Gateway

SSH access to gateways is integrated in Assistant"s **Gateway Manager Application**.

The application "Gateway Terminal" provides web-based terminal access to selected gateway.

Terminal access from **Gateway Manager** Application is limited for specific types of gateways.

- STMI gateways – access is possible
- NCUI gateways – access is possible
- SoftGate gateways – SSH access is possible via a Linux console installed on the SoftGate.
- vHG3500 gateways – access is blocked. User can get access to the terminal of vHG3550 by connecting to Linux where associated SoftGate is installed.

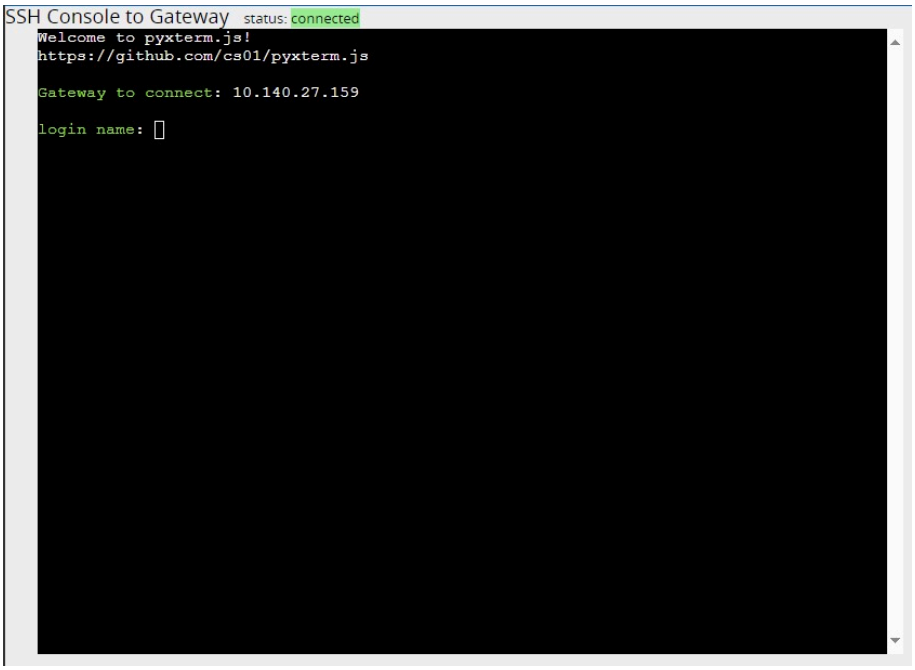
Access to Terminal Server is provided with the TRM account. User is automatically logged into the gateway. The amount of concurrent terminal connections is limited to **only one** connection per gateway.

NOTICE: Connection via web-based terminal is slower than via other terminal clients (e.g. putty).

Launch SSH Access in a "Gateway Terminal" Window

- In the **Gateway Manager Application** page click in the **Remote access** column on the hyperlink [SSH] for the desired board.

1) The **Gateway Terminal** window is displayed to administrate the system via CLI commands (see "List of CLI Commands").



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 1: 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

Command	Description
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>	
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

Command	Description
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
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

2.2 SSH/SFTP Access to SoftGate

SSH/SFTP access to SoftGate is directly accessible from the Gateway Manager.

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

NOTICE: Please note that the SoftGate SSH access is a Linux console of the SoftGate. There is NO Gateway CLI functionality.

Launching the SFTP access to SoftGate(s)HG Gateway

The Gateway **Terminal** window for the SFTP access can be launched from the **Gateway Manager** page:

- Click in the **Remote access** column on the hyperlink [SFTP] for the desired board.

2.3 SSH Access to System

SSH access to system is directly accessible from OpenScape 4000 start page.

This application is intended for service, development, administrators only, therefore access to Terminal Server is limited to system accounts (engr, rsta, rsca, cusa). Users with that account are automatically logged into system, based on his security level. The amount of terminal connections is not limited for connection to Manager/Assistant.

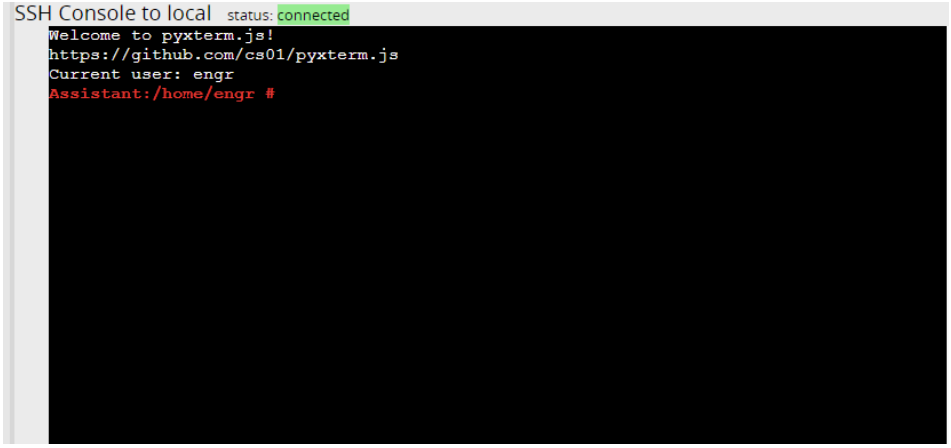
NOTICE: Connection via web-based terminal is slower than via other terminal clients (e.g. putty), but is available when firewall prohibits connection to ssh port.

Launch the SSH Connection Terminal Window

To launch the SSH connection terminal window, select the following link from OpenScape 4000 start page:

- **Expert Mode –>SSH Access to Assistant (or Manager)**

The **SSH connection** window is displayed.



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