



Enabling Live Communications at the Edge of IP Networks

Dgw v2.0

LED Patterns and Default Reset Button

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Proprietary

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Indicators (LEDs)

LED Patterns – Specific Conditions

The following table describes the different states a Mediatrix unit can have and their associated LED patterns.

Condition	Description	LED Pattern
RestartPending	Triggered when the <i>RESET/DEFAULT</i> button is pressed in the <i>ResetPending</i> state. The unit prepares for a physical shutdown and restart.	<p><i>Power</i> LEDs:</p> <ul style="list-style-type: none"> blinking green, 1Hz, 50% duty <p>All other LEDs:</p> <ul style="list-style-type: none"> OFF
RecoveryPending	Triggered when the <i>RESET/DEFAULT</i> button is pressed at start-time or for at least 7 seconds.	<p>All LEDs:</p> <ul style="list-style-type: none"> blinking, 1Hz, 50% duty
DefaultSettingsPending	<p>Triggered when the <i>RESET/DEFAULT</i> button is not released while in <i>ResetPending</i> state.</p> <p>At run time, if the <i>RESET/DEFAULT</i> button is released within 5 seconds, the unit applies default settings, otherwise the action is cancelled and the unit goes back to the operation mode state or it resets.</p> <p>At start time, the unit stays in this state until the <i>RESET/DEFAULT</i> button is released. The unit then applies the default settings and restarts.</p>	<p>All LEDs:</p> <ul style="list-style-type: none"> steady ON
UpdateInProgress	A firmware pack is downloaded into the unit and written to persistent storage.	<p>All LEDs:</p> <ul style="list-style-type: none"> cycling from left to right, individually blinking 1Hz, 33% duty
UpdateFailed	Triggered after a failure of a firmware pack download operation. After 4 seconds, the unit restarts.	<p>All LEDs:</p> <ul style="list-style-type: none"> blinking at 3Hz, 50% duty. One LED out of two has a 180 degree phase. This pattern lasts for 8 seconds.
Rescue Network Enabled (3000 platforms)	Triggered after the user has performed a partial reset procedure.	<p><i>Power</i> and <i>Ready</i> LEDs:</p> <ul style="list-style-type: none"> blinking (synchronized) 1Hz, 75% duty
Rescue Network Enabled (4100/4400 platforms)	Triggered after the user has performed a partial reset procedure.	<p><i>Power</i> and <i>Ready</i> LEDs:</p> <ul style="list-style-type: none"> blinking (synchronized) 1Hz, 75% duty
BootOnRecoveryBank	Triggered when the unit is booting on the recovery bank and no update is pending.	<p><i>Power</i> LEDs:</p> <ul style="list-style-type: none"> blinking green, 0.25Hz, 75% duty
No network address set	Triggered when the unit cannot be	<p><i>Power</i> LEDs:</p>

	contacted because DHCP failed, PPP failed, and no static interface is configured.	<ul style="list-style-type: none"> blinking green, 3 Hz, 50% duty.
NetworkRescue	The unit tries to download and install a firmware given by the Network Rescue server.	<p>Ready LED:</p> <ul style="list-style-type: none"> Off <p>All other LEDs:</p> <ul style="list-style-type: none"> blinking to show a LED displacing light from left to right and right to left.

LED Patterns – Default Behaviour

When no specific condition matches those described in the previous table, the LEDs behave individually according to the following rules:

LED Type1	Condition	Behaviour
Mediatix 3000 Platforms		
Power	RestartInProgress	Blinking green, 1 Hz, 50% duty
	RestartCompleted	Steady green
Ethernet	No network traffic, 100 Mbits/s	Steady green
	No network traffic, 10 Mbits/s	Steady orange
	Network traffic, 100 Mbits/s	Blinking green, variable rate
	Network traffic, 10 Mbits/s	Blinking orange, variable rate
In Use	Lines Idle and Unlocked	Off
	Lines InUse and Unlocked	Steady green
	Shutting Down	Steady yellow
	Locked	Blinking yellow, 1 Hz, 50% duty
Mediatix 4100/4400 Platforms		
Power	RestartInProgress	Blinking, 1 Hz, 50% duty
	RestartCompleted	Steady ON
LAN (4100)	Network traffic	Blinking, variable rate
	No network traffic	Steady ON
ETH/ETH1 (4102/4104/4400)	Network traffic	Blinking, variable rate
	No network traffic	Steady ON
ETH2 (4104/4400)	Network traffic	Blinking, variable rate

1 The ERROR/ALARM and ERROR/TROUBLE indicators on the Mediatix 3000 platforms do not currently have individual behaviours like the other indicators.

LED Type1	Condition	Behaviour
	No network traffic	Steady ON
In Use	Lines Idle and Unlocked	Steady OFF
	Lines InUse and Unlocked	Steady ON
	Shutting Down	Steady yellow
	Locked	Blinking yellow, 1 Hz, 50% duty
Ready	All lines are enabled (operational state).	Steady ON
	All lines are disabled (operational state).	Steady OFF
	At least one line is enabled and at least one line is disabled (operational state).	Blink 0.25 Hz 75%

RESET/DEFAULT Button

The *RESET/DEFAULT* button allows you to:

- Cancel an action that was started.
- Revert to known factory settings if the Mediatrix unit refuses to work properly for any reason or the connection to the network is lost.
- Reconfigure a unit.

At Run-Time

You can use the *RESET/DEFAULT* button at run-time – you can press the button while the Mediatrix unit is running without powering the unit off. [Linksable](#) describes the actions you can perform in this case.

RESET/ DEFAULT Button Pressed for:	Action	Comments	LEDs Pattern
2 to 6 seconds	Restarts the Mediatrix unit	No changes are made to the Mediatrix unit settings.	Power LED: <ul style="list-style-type: none"> • blinking , 1Hz, 50% duty All other LEDs: <ul style="list-style-type: none"> • OFF
7 to 11 seconds	Sets the Mediatrix unit in Partial Reset Mode	Sets some of the Mediatrix unit configuration to pre-determined values	All LEDs <ul style="list-style-type: none"> • blinking, 1Hz, 50% duty
12 to 16 seconds	Restarts the Mediatrix unit in Factory Reset	Deletes the persistent configuration values, creates a new configuration file with the default factory values, and then restarts the unit.	All LEDs <ul style="list-style-type: none"> • steady ON
17 seconds and more	No action is taken	The RESET/DEFAULT button pressed event is ignored.	N/A

At Start-Time

You can use the *RESET/DEFAULT* button at start-time – you power the unit off, and then depress the button until the LEDs stop blinking and remain ON. This applies the “Factory Reset” procedure (Factory Reset7). This feature reverts the Mediatrix unit back to its default factory settings.

Partial Reset

The Partial reset provides a way to contact the Mediatrix unit in a known and static state while keeping most of the configuration unchanged.

Following a partial reset, the Mediatrix unit management interface is set to the *Rescue* interface. The default address for this interface is 192.168.0.1/24. Any existing network interface that conflicts with the *Rescue* interface address is disabled.

You can contact the Mediatrix unit at this address to access its configuration parameters. It is not advised to access the unit on a regular basis through the *Rescue* network interface. You should reconfigure the unit’s network interfaces as soon as possible in order to access it through another interface.

In a partial reset, the following services and parameters are also affected:

- AAA service: Sets the “admin” password to **administrator** and the “public” password to an empty string.
- SNMP service: Resets the *enableSnmpV1*, *enableSnmpV2*, *enableSnmpV3* and *snmpPort* values to their default values.
- WEB service: Resets the *serverPort* to its default value.

• To trigger the Partial Reset:

1. **Insert a small, unbent paper clip into the *RESET/DEFAULT* hole located at the rear of the Mediatrix unit .** While pressing the *RESET/DEFAULT* button, restart the unit.
Do not depress before all the LEDs start blinking (between 7-11 seconds).

2. **Release the paper clip.**

This procedure can also be performed at run-time.

After a Partial Reset

Following a partial reset, you should:

1. Create or activate network interfaces **Error! Bookmark not defined..** Do not disable the *Rescue* interface!
2. Change the Mediatrix unit system management network interface to something other than *Rescue* **Error! Bookmark not defined..** Note that you must be able to contact the interface you select in order to continue with the following steps.
3. Contact the Mediatrix unit through the new system management network interface.
4. Disable the *Rescue* network interface **Error! Bookmark not defined..**

Disabling the Partial Reset

This section describes configuration that is available only in the MIB parameters of the Mediatrix unit. You can configure these parameters as follows:

- by using a MIB browser
- by using the CLI
- by creating a configuration script containing the configuration variables
- You can disable the partial reset procedure, even if users depress the *Reset/Default* button. The following parameters are supported:

Parameter	Description
All	All the actions are allowed: reset, partial reset and factory reset.
DisablePartialReset	All actions are allowed except the partial reset.

- The reset action restarts the unit.
- The partial reset action provides a way to contact the unit in a known and static state while keeping most of the configuration unchanged.
- The factory reset action reverts the unit back to its default factory settings.

- **To change the partial reset behaviour:**

1. In the MIB related to your Mediatrix unit, set the *ResetButtonManagement* variable to the proper behaviour. You can also use the following line in the CLI or a configuration script:

```
MIB.ResetButtonManagement="Value"
```

where:

- *MIB*: The MIB module where to locate the variable to set varies depending on the Mediatrix unit you are using:

Model	MIB
Mediatrix 3000 Series	MbSbc
Mediatrix 4102	MbLdp
Mediatrix 4108 Mediatrix 4116 Mediatrix 4124 Mediatrix LP16 Mediatrix LP24	MbAgw24
Mediatrix 4104 Mediatrix 4400 Series	MbXgw

- *Value* may be as follows

Value	Meaning
100	All
200	DisablePartialReset

Factory Reset

The Factory reset reverts the Mediatrix unit back to its default factory settings. It deletes the persistent MIB values of the unit, including:

- The firmware pack download configuration files.
- The SNMP configuration, including the SNMPv3 passwords and users.
- The PPPoE configuration, including the PPP user names and passwords.

The Factory reset creates a new configuration file with the default factory values. It should be performed with the Mediatrix unit connected to a network with access to a DHCP server. If the unit cannot find a DHCP server, it sends requests indefinitely.

The following procedure requires that you have physical access to the Mediatrix unit. However, you can also trigger a factory reset remotely:

- via the web interface of the Mediatrix unit.
- via the Command Line Interface of the Mediatrix unit by using the *fpu.defaultsetting* command.

- **To trigger the Factory Reset:**

1. Power the Mediatrix unit off.
2. Insert a small, unbent paper clip into the *RESET/DEFAULT* hole located at the rear of the Mediatrix unit . While pressing the *RESET/DEFAULT* button, restart the unit.

Do not depress before the LEDs stop blinking and are steadily ON. This could take up to 30 seconds.

2. Release the paper **clip**.

The Mediatrix unit restarts.

This procedure resets all variables in the MIB modules to their default value.

When the Mediatrix unit has finished its provisioning sequence, it is ready to be used with a DHCP- provided IP address and MIB parameters.

This procedure can also be performed at run-time.

Note:

The Factory reset alters any persistent configuration data of the Mediatrix unit.