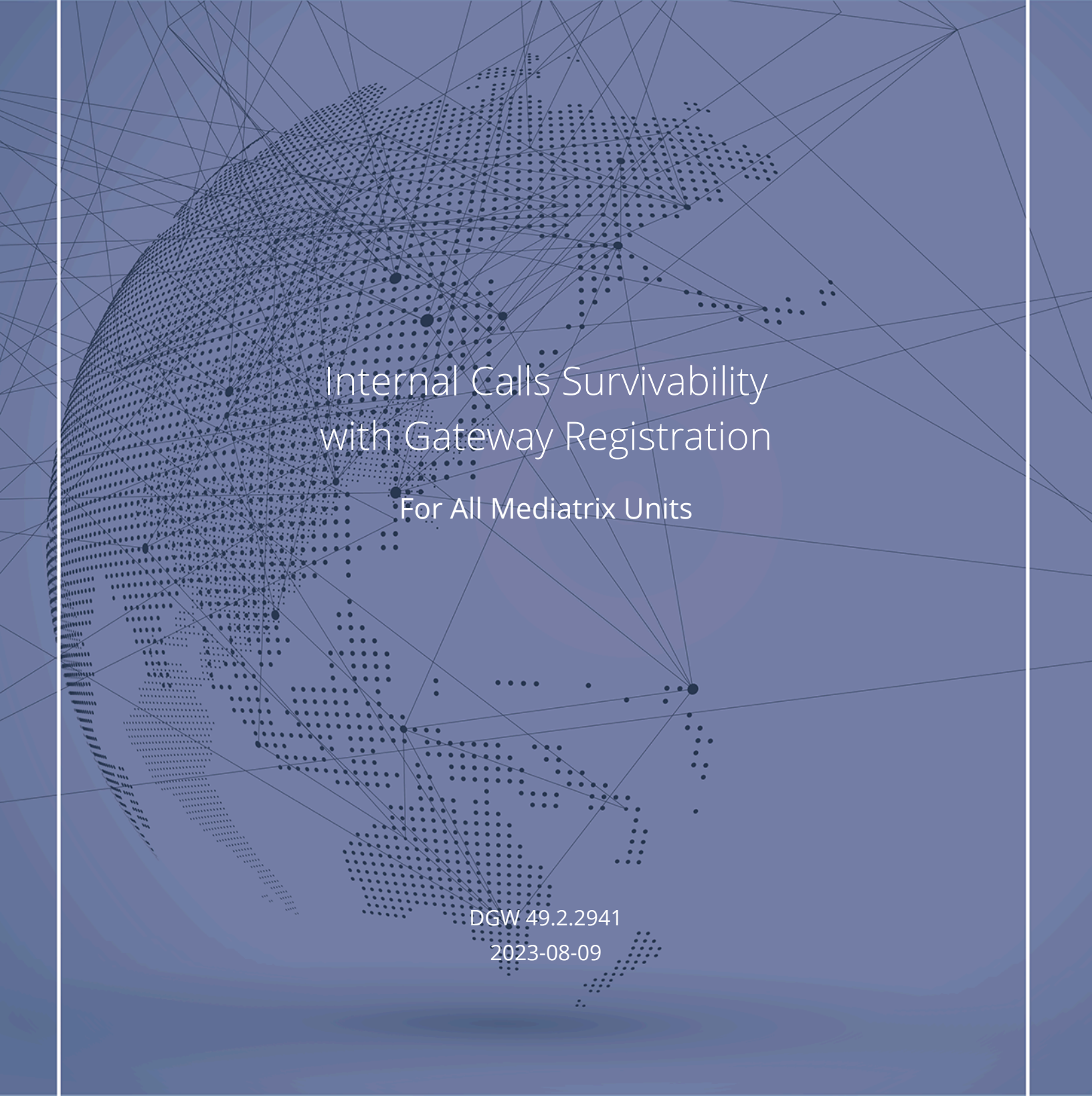


The background of the slide is a dark blue gradient with a complex, abstract network graphic. It consists of numerous small black dots connected by thin, light gray lines, forming a dense, interconnected web that resembles a globe or a complex data structure. The graphic is more prominent on the left side and fades towards the right.

Internal Calls Survivability with Gateway Registration For All Mediatrix Units

DGW 49.2.2941
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Table of Contents

Information to Know Before Starting	3
Requirements	4
Internal Calls Survivability	5
Logging on to the Mediatrix Unit Web Interface	5
Adding the Local Gateway	6
Configuring the Default SIP Servers	7
Assigning a Specific Proxy Server to the Local Gateway	8
Configuring the Keep Alive Feature for Internal Call Survivability	9
Registering Endpoints to the Default Sip Gateway	10
Registering a Unit to a Specific Gateway for Internal Call Survivability	10
Configuring Authentication for Internal Call Survivability	11
Configuring OPTIONS Method Support	12
Creating a Hunt Group for Internal Call Survivability	13
Modifying Auto-Routing for Internal Call Survivability	14
DGW Documentation	15
Copyright Notice	16

Information to Know Before Starting

Before starting to use these configuration notes, complete the following table to make sure you have the required information to complete the different steps.

IMPORTANT: If you are not familiar with the meaning of the fields and buttons, click **Show Help**, located at the upper right corner of the Web page. When activated, the fields and buttons that offer online help will change to green and if you hover over them, the description will be displayed.

Note: The Mediatrix unit must be reinitialised to its factory default settings to make sure the configuration can be successfully executed.

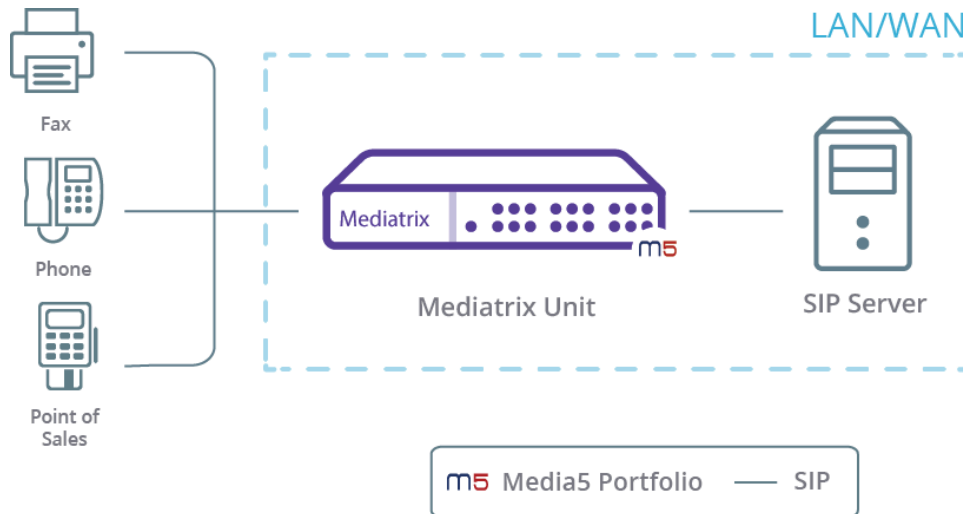
Information	Value	Used in Step
IP address used by your Mediatrix unit to communicate with the Management Interface. If your computer is connected to the Ethernet port meant to be connected to the Local Area Network (LAN), i.e. Eth2 on most devices	Use this value 192.168.0.10	Logging on to the Mediatrix Unit Web Interface (p.5)
If your Mediatrix unit is configured to use a DHCP server, use the DHCP server-provided IP address.		Logging on to the Mediatrix Unit Web Interface (p.5)
IP address or FQDN of the SIP Registrar Host		Configuring the Default SIP Servers (p.7)
IP address or FQDN of the Proxy Host		Configuring the Default SIP Servers (p.7)
IP address or FQDN of the SIP Proxy Host of Messaging Server Host (if required)		Configuring the Default SIP Servers (p.7)
IP address or FQDN of the unit		Assigning a Specific Proxy Server to the Local Gateway (p.8) and Configuring the Keep Alive Feature for Internal Call Survivability (p.9)

Requirements

- Network configuration (default router, DNS server, etc.)
- SIP gateway credentials configured on SIP server
- Static IP address on the Mediatrix gateway (network setup is not covered in this guide)

Internal Calls Survivability

This document describes how a Mediatrix gateway which uses Endpoint Registration can preserve its internal calls (among its endpoints) when the primary SIP server cannot be reached.



Logging on to the Mediatrix Unit Web Interface

Before you start

The computer IP address must be in the same TCP/IP network as the Mediatrix unit.

Information

For better performances, it is recommended to use the latest available version of Microsoft Internet Explorer, Google Chrome, or Mozilla Firefox.

Note: You may not be able to log on to the Mediatrix unit Web interface if you are using older browser versions.

Steps

- 1) In your Web browser, enter the IP address at which the Web interface of your Mediatrix unit can be reached.
 - If your network has an IPv4 DHCP server, connect the primary Ethernet port of the Mediatrix unit to the network (ETH1 port), use the provided DHCP server IP address.
 - You can also connect your computer to the secondary Ethernet port of the Mediatrix unit (ETH2), use the 192.168.0.10 IP address. However, the computer must also own an IP address in the 192.168.0.0/24 network.

- 2) Enter **admin** as your username and **administrator** as the password.

Note: You can also use **public** as a username and leave the password field empty; it has the full administration rights by default.

- 3) Click **Login**.

Result

The **Information** page of the Web interface is displayed.

Related tasks

[Adding the Local Gateway \(p.6\)](#)

Adding the Local Gateway

Before you start

When using the trunk SIP gateway type, the Mediatrix unit may require a SIP gateway username and password. These need to be obtained from your SIP server administrator.

Steps

- 1) Go to **SIP/Gateways**.
- 2) In the **Gateway Configuration** table, in the **Name** field, enter **local**.
- 3) Click **+**.
- 4) Complete the fields as follows:
 - From the **Type** selection list, select **Trunk**.
 - From the **Signaling Network** selection list, select **Uplink**.
 - In the **Port** field, enter 5062.
 - In the **Secure Port** port field, enter 5068.
- 5) Click **Apply**.
- 6) Click **restart required services** located at the top of the page.

Result

The **local** gateway will be available under the **SIP/Servers** page.

Gateway Status						
Name	Signaling Network	Media Networks	Port	Secure Port	State	
default	Uplink	Uplink	0	0	Ready	
local	Uplink	Uplink	5062	5068	Ready	

Gateway Configuration						
Name	Type	Signaling Network	Media Networks	Media Networks Suggestion	Port	Secure Port
default	Trunk	Uplink		--- Suggestion ---	0	0
local	Trunk	Uplink		--- Suggestion ---	5062	5068

Next Step

[Configuring the Default SIP Servers \(p.7\)](#)

Configuring the Default SIP Servers

Information

In some instances, the configuration of the default servers may already be completed.

Steps

- 1) Go to **SIP/Servers**.
- 2) In the **Registrar Host** field, indicate the server IP address or FQDN of the SIP Registrar server .
- 3) In the **Proxy Host** field, indicate the server IP address or FQDN of the SIP Proxy server.
- 4) In the **Messaging Server Host** field, indicate the server IP address or FQDN of the Messaging server, if needed.
- 5) Leave the **Outbound Proxy Host** field empty, unless specifically instructed to set a value.

Note: Setting the address to 0.0.0.0:0 or leaving the field empty disables the outbound proxy host.

- 6) Click **Apply**.
- 7) Located at the top of the page, click **restart required services**.

Result

Default Servers		
Registrar Host:	sip.registrarserver.com	
Proxy Host:	sip.proxyserver.com	
Messaging Server Host:		
Outbound Proxy Host:		

Next Step

[Assigning a Specific Proxy Server to the Local Gateway \(p.8\)](#)

Assigning a Specific Proxy Server to the Local Gateway

Before you start

You can assign a specific messaging server to the default gateway, or to a gateway you have created. The **local** gateway must be created. Refer to [Adding the Local Gateway \(p.6\)](#).

Steps

- 1) Go to **SIP/Servers**.
- 2) In the **Proxy Servers** table, from the **Gateway Specific** drop down located on the same row as **local**, select **Yes**.
- 3) In the **Proxy Host** field, indicate the IP address or FQDN of the unit, and the SIP port number of the local gateway.

Note: This must be consistent with the value used when the **local** gateway was configured.

- 4) In the **Outbound Proxy Host**, leave 0.0.0.0:0

Note: Setting the address to 0.0.0.0:0 or leaving the field empty disables the outbound proxy host.

- 5) Click **Apply**.
- 6) Click **restart required services**.

Result

The gateway will now use the specified server IP address or FQDN instead of the default server address.

Proxy Servers Gateway	Gateway Specific	Proxy Host	Outbound Proxy Host
local	Yes ☐	IP Address/FQDN + SIP port of local gateway	0.0.0.0:0

Next Step

Configuring the Keep Alive Feature for Internal Call Survivability (p.9)

Configuring the Keep Alive Feature for Internal Call Survivability

Steps

- 1) Go to **SIP/Servers**.
- 2) In the **Keep Alive** table, from the selection list, select **SIP OPTIONS**.
- 3) In the **Keep Alive Interval** field, enter 30.

Note: This is the recommended value.

- 4) From the **Keep Alive Destination** selection list, select **Alternate Destination**.
- 5) In the **Keep Alive Destination** table, in the **Alternate Destination** field, enter the server IP address or FQDN for the default gateway and the unit IP address or FQDN for the local.

Note: The **local** gateway must point to the Mediatrix unit IP address and port if you did not use the default port 5060.

- 6) Click **Apply**.
- 7) Click **restart required services**.

Result

Keep-Alive	
Keep-Alive Method:	SIP OPTIONS ▼
Keep-Alive Interval (s):	30
Keep-Alive Retry:	3
Keep-Alive Destination:	Alternate Destination ▼

Keep Alive Destination Gateway	Alternate Destination
phone_lines_gw	sip.server.com
trunk_lines_gw	SIP IP Address of unit

Next Step

Registering Endpoints to the Default Gateway

Registering Endpoints to the Default Sip Gateway

Steps

- 1) Go to **SIP/Registrations**.
- 2) In the **Endpoints Registration** table, from the **Register** selection list, select **Enable** for each endpoint to register.
- 3) In the **Endpoints Registration** table, from the **Messaging** selection list, select **Enable** for each endpoint to register if a messaging server was set in the [Configuring the Default SIP Servers](#) (p.7) step.
- 4) From the **Gateway Name** selection list, select **default** for each endpoint to register.
- 5) Click **Apply and Refresh**.

Result

Endpoints Registration					
Endpoint	User Name	Friendly Name	Register	Messaging	Gateway Name
Slot1/E1T1	user_name 1		Enable ▼	Disable ▼	default ▼
Slot2/FX01	user_name 2		Enable ▼	Disable ▼	default ▼
Slot2/FX02	user_name 3		Enable ▼	Disable ▼	default ▼
Slot2/FX03	user_name 4		Enable ▼	Disable ▼	default ▼

Registering a Unit to a Specific Gateway for Internal Call Survivability

Steps

- 1) Go to **SIP/Registrations**.

- 2) In the **Unit Registration** table, enter **default_user** in the **User Name** field to uniquely identify the user in the domain.
- 3) From the **Gateway Name** selection list, select **default**.

Note: Do not use the **local** gateway as the unit is unable to register itself.

- 4) Click **Apply and Refresh**.

Result

The information will be displayed in the **Unit Registration Status** table.

Unit Registration			
Index	User Name	Gateway Name	
1	user_name	default	-
			+

Next Step

[Configuring Authentication for Internal Call Survivability \(p.11\)](#)

Configuring Authentication for Internal Call Survivability

Steps

- 1) Go to **SIP/Authentication**.
- 2) In the **Authentication** table, click  on the same line of an unconfigured line.
- 3) In the **Authentication** table, from the **Criteria** selection list, select **Endpoint**.
- 4) From the **Endpoint** selection list, choose the proper endpoint.
- 5) From the **Validate Realm** selection list, select **Disable**.
- 6) In the **User Name** field, enter the registration username for that Endpoint.
- 7) In the **Password** field, enter the appropriate password.
- 8) Click **Apply and Refresh Registration**.

Result

The unit will register to the default server.

Authentication								
Priority	Criteria	Endpoint	Gateway	Username Criteria	Validate Realm	Realm	User Name	Password
1	Endpoint ▾	Slot3/FXS1 ▾	▾		Disable ▾		user_name-1	

Next Step

Configuring OPTIONS Method Support (p.12)

Configuring OPTIONS Method Support

Information

Note: This step is required if your server is configured to only receive 200 OK by the Mediatrix unit, when it polls the Mediatrix with SIP OPTIONS.

Note: This is not supported by all SIP servers, this feature is not mandatory in most use cases.

Steps

- 1) Go to **SIP/Interop**.
- 2) In the **SIP Interop** table, from the **OPTIONS Method Support** selection list, select **Always 200 OK**.
- 3) Click **Apply**.

Result

The unit will always answer 200 OK to SIP OPTIONS messages received (Keep Alive).

SIP Interop	
Secure Header:	Disable
Default Username Value:	Anonymous
OPTIONS Method Support:	Always 200 OK
Ignore OPTIONS on no Usable Endpoints:	Disable
SIP URI User Parameter Value:	
Behavior on Machine Detection:	Re-INVITE on Fax T38 Only
Registration Contact Matching:	Strict
Transmission Timeout:	32

Next Step

[Creating a Hunt Group for Internal Call Survivability \(p.13\)](#)

Creating a Hunt Group for Internal Call Survivability

Steps

- 1) Go to **Call Router/Route Config**
- 2) In the **Hunt** table, click **+** located at the bottom of the table.
- 3) In the **Configure Hunt** table, in the **Name** field, enter **SIP**.
- 4) In the **Destinations** field, enter:
 - sip-default
 - sip-local

Note: The order is important.

- 5) From the **Selection Algorithm** selection list, select **Sequential**.
- 6) In the **Causes** field, leave the default values.
- 7) Click **Save**.
- 8) In **Call Router/Route Config** page , click **Save** again.

Result

The Hunt-SIP will be available in the **Suggestion** selection list of the **Auto-Routing Destination** field, in the **Call Router/Auto-Routing** page.

Configure Hunt 1		Suggestion
	Value	
Name	SIP	
Destinations	sip-default, sip-local	--- Suggestion --- ▾
Selection Algorithm	Sequential	
Timeout (seconds)	0	
Causes	31, 34, 38, 41, 42, 43, 44, 47	--- Suggestion --- ▾
Config Status		

Next Step

Modifying Auto-Routing for Internal Call Survivability (p.14)

Modifying Auto-Routing for Internal Call Survivability

Steps

- 1) Go to **Call Router/Auto-Routing**.
- 2) In the **Endpoints auto-routing** table, click .
- 3) In the **Configure Auto-Routing**, in the **Auto-Routing Gateway** field, enter **default, local**.
- 4) In the **Auto-Routing Destination** field, enter hunt-SIP.
- 5) Click **Check All**.
- 6) Click **Apply**.

Result

Endpoints auto-routing						
Endpoint	Auto-routable	Auto-routing Gateway	Auto-routing Destination	E164	SIP Username Name	
Port01	H/W Dependent	default, local	hunt-SIP	7102	7102	
Port02	H/W Dependent	default, local	hunt-SIP			
Port03	H/W Dependent	default, local	hunt-SIP			
Port04	H/W Dependent	default, local	hunt-SIP			
Port05	H/W Dependent	default, local	hunt-SIP			
Port06	H/W Dependent	default, local	hunt-SIP			

DGW Documentation

Mediatrix devices are supplied with an exhaustive set of documentation.

Mediatrix user documentation is available on the [Media5 Documentation Portal](#).

Several types of documents were created to clearly present the information you are looking for. Our documentation includes:

- **Release notes:** Generated at each GA release, this document includes the known and solved issues of the software. It also outlines the changes and the new features the release includes.
- **Configuration notes:** These documents are created to facilitate the configuration of a specific use case. They address a configuration aspect we consider that most users will need to perform. However, in some cases, a configuration note is created after receiving a question from a customer. They provide standard step-by-step procedures detailing the values of the parameters to use. They provide a means of validation and present some conceptual information. The configuration notes are specifically created to guide the user through an aspect of the configuration.
- **Technical bulletins:** These documents are created to facilitate the configuration of a specific technical action, such as performing a firmware upgrade.
- **Hardware installation guide:** They provide the detailed procedure on how to safely and adequately install the unit. It provides information on card installation, cable connections, and how to access for the first time the Management interface.
- **User guide:** The user guide explains how to customise to your needs the configuration of the unit. Although this document is task oriented, it provides conceptual information to help the user understand the purpose and impact of each task. The User Guide will provide information such as where and how TR-069 can be configured in the Management Interface, how to set firewalls, or how to use the CLI to configure parameters that are not available in the Management Interface.
- **Reference guide:** This exhaustive document has been created for advanced users. It includes a description of all the parameters used by all the services of the Mediatrix units. You will find, for example, scripts to configure a specific parameter, notification messages sent by a service, or an action description used to create Rulesets. This document includes reference information such as a dictionary, and it does not include any step-by-step procedures.

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