

Cascade Using SIP Redirects Feature

Mediatrix Units with FXO/PRI/BRI Ports

DGW 49.2.2941

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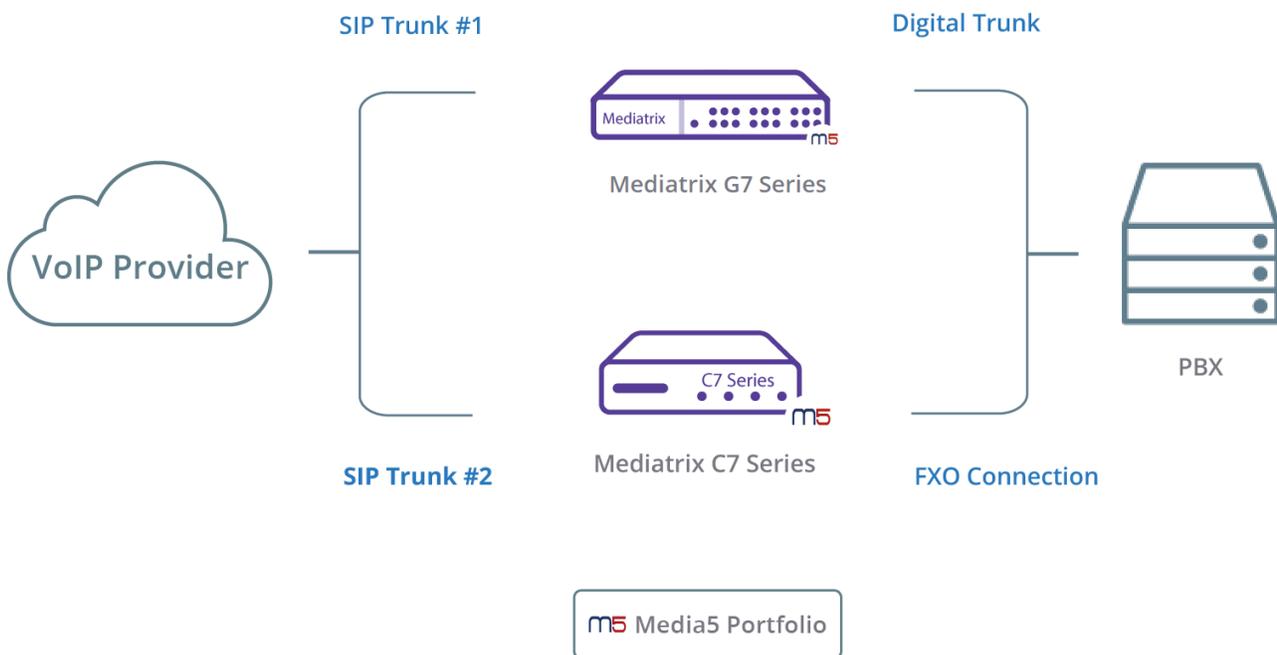
Use Cases

Cascade for Incoming Calls

A corporate PBX uses two VoIP gateways for inbound and outbound communication through a VoIP provider.

- Two Mediatrix devices connected to a SIP Trunk

For example: Cascade for incoming calls:



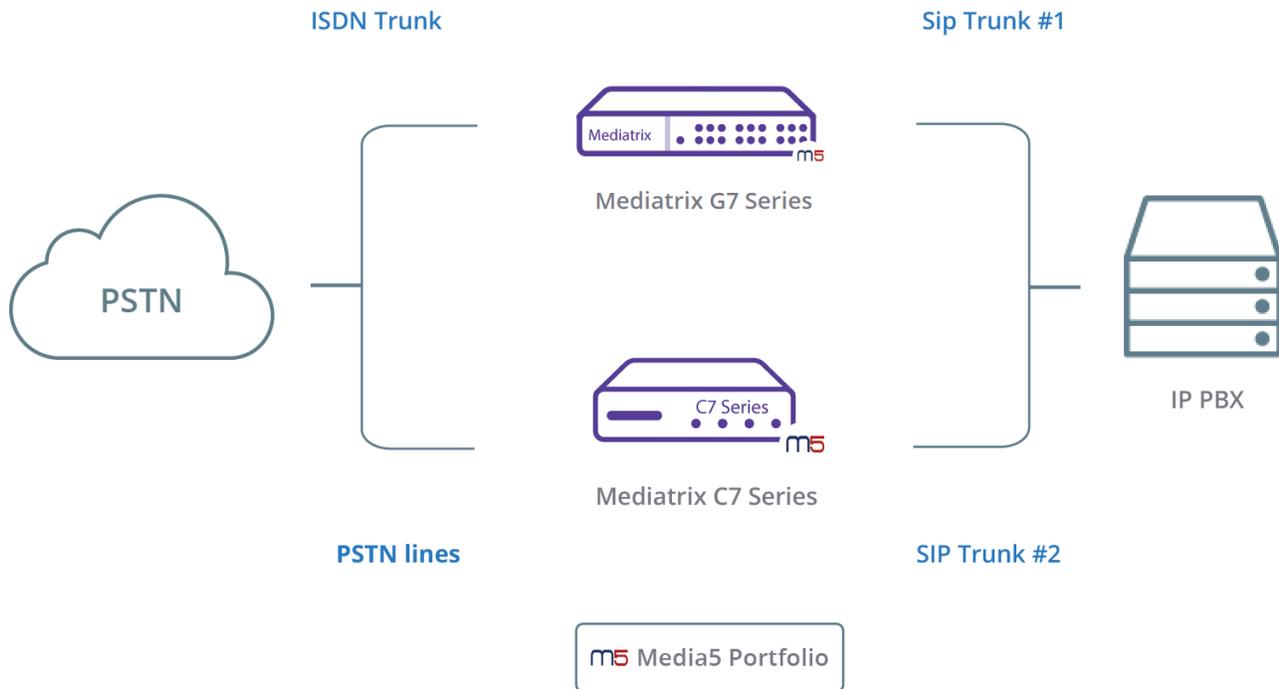
Note: When all channels of the primary Mediatrix unit are in use and there is a new incoming SIP call, by default, a Busy SIP message will be sent to the IP-PBX. If the analog/digital link is down, an error message will be sent. In both cases, the new incoming call will fail.

Cascade for Outgoing Calls

Corporate IP-PBX uses two VoIP gateways for inbound and outbound communication through the PSTN

- Two Mediatrix units in the LAN

For example:



Note: When all channels of the primary Mediatrix unit are in use and there is a new incoming SIP call, by default, a Busy SIP message will be sent to the IP-PBX. If the analog/digital link is down, an error message will be sent. In both cases, the new incoming call will fail.

Call Flows

Busy Call Flow

| Time | 200.10.10.254 | 192.168.0.10 | Comment |
|-----------|----------------------------------|--------------|--|
| 10.753491 | INVITE SDP (g711U g729 g711A CN) | | SIP From: <sip:18005554444@192.168.0.10 To:<sip:18883330001@192.168.0.10 |
| 10.783802 | 486 Busy Here | | SIP Status |
| 10.801977 | ACK | | SIP Request |

Analog/Digital Link Down Call Flow

| Time | 200.10.10.254 | 192.168.0.10 | Comment |
|-----------|----------------------------------|--------------|--|
| 55.630048 | INVITE SDP (g711U g729 g711A CN) | | SIP From: <sip:18005554444@192.168.0.10 To:<sip:18883330001@192.168.0.10 |
| 55.658573 | 503 Service Unavailable | | SIP Status |
| 55.676320 | ACK | | SIP Request |

Cascade Call Flow

| Time | 200.10.10.254 | 192.168.0.10 | 192.168.0.20 | Comment |
|------------|----------------------------------|--------------|--------------|--|
| 442.645092 | INVITE SDP (g711U g729 g711A CN) | | | SIP From: <sip:18005554444@192.168.0.10 To:<sip:18883330001@192.168.0.10 |
| 442.677757 | 302 Moved Temporarily | | | SIP Status |
| 442.694817 | ACK | | | SIP Request |
| 442.698498 | INVITE SDP (g711U g729 g711A CN) | | | SIP From: <sip:18005554444@192.168.0.10 To:<sip:18883330001@192.168.0.10 |
| 442.873274 | 180 Ringing | | | SIP Status |
| 447.052558 | 200 OK SDP (g711U g729 g711A CN) | | | SIP Status |
| 447.091667 | ACK | | | SIP Request |
| 450.857992 | BYE | | | SIP Request |
| 450.882530 | 200 OK | | | SIP Status |

Adding the SIP Redirects to the Call Router

Creating SIP Redirection

Steps

- 1) Go to **Call Router/Route Config**.
- 2) In the **SIP Redirects** table, click **+**.
 - click **+** located on the same row as an existing SIP redirection to add a new SIP redirection above or,
 - click **+** located at the bottom of the table to add a SIP redirection at the end of the table.
- 3) Set the **Name** field, for example Cascade.
- 4) Set the **Destination Host** field.
- 5) Click **Save**.

Result

The SIP redirection will be available to be used in routes.

| Configure New SIP Redirect | |
|----------------------------|--|
| Name | <input type="text" value="Cascade"/> |
| Destination Host | <input type="text" value="FQDN/IP address"/> |
| Config Status | |

Creating a Hunt - SIP Redirection

Before you start

The [Creating SIP Redirection](#) task must be completed.

Steps

- 1) Go to **Call Router/Route Config**.
- 2) In the **Hunt** table,
 - click **+** located on the same row as an existing Hunt to add a new Hunt above or,
 - click **+** located at the bottom of the table to add a Hunt at the end of the table.
- 3) click **+**.
- 4) In the **Name** field, provide a name to the Hunt group. For example Outgoing.

5) In the **Destinations** dropbox list, select the destinations pertinent to your set-up.

Note: For example, if you need the SIP Redirect to take effect after the two slots of the unit are tried, please select the respective E1 ports, such as isdn-Slot1/E1T1, isdn-Slot2/E1T1"

6) In the **Destinations** field, manually add SipRedirect-Cascade.

Note: Do not forget to add a comma before SipRedirect-Cascade

7) Using the drop box next to the **Causes** field, select the causes pertinent to your situation.

8) Click **Save**.

Result

For example:

| Configure New Hunt | | Suggestion |
|---------------------|--|---|
| | Value | |
| Name | <input type="text" value="Outgoing"/> | |
| Destinations | <input type="text" value="isdn-Slot1/E1T1,isdn-Slot2/E1T1,SipRedirect-Cascade"/> | <input type="text" value="--- Suggestion ---"/> |
| Selection Algorithm | <input type="text" value="Sequential"/> | |
| Timeout (seconds) | <input type="text" value="0"/> | |
| Causes | <input type="text" value="31, 34, 38, 41, 42, 43, 44, 47"/> | <input type="text" value="--- Suggestion ---"/> |
| Config Status | | |

Online Help

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.

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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