

Call Router Simulator

All Mediatrix Products

DGW 49.2.2941

2023-08-09

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1 Call Router Simulator

The Call Router includes a call simulator allowing the simulated generation of a call from any available FXS, BRI, PRI or FXO telephony interface of a unit.

With this simulation it is easy to test the Call Router settings such as a number or header manipulation. The simulation creates the normal syslog traces just as with a call and it is then possible to follow the complete process.

The call router simulator is only available by the CLI. All commands to use the call simulator start with CRout. For more details refer to [Specific Call Router Simulation CLI Commands](#) (p.4) section of this document and the [Configuration Scripting Language](#) published on the [Media5 Documentation Portal](#).

IMPORTANT: Once call simulation is no longer needed, the unit must be restarted.

1.1 Using the Call Router Simulator

Before you start

The Call Router Simulator is only available with the CLI refer to the CLI documentation available under the [Provisioning section of the Technical Bulletins](#) section of the Media5 documentation portal at <https://documentation.media5corp.com>. Make sure there is a route configured on the unit. For more details refer to [Call Router Basic Routes](#) document published on the Media5 documentation portal.

IMPORTANT: Do not use the key buffer (arrow up) to write the parameters in the CLI, as syntax errors are sometimes introduced .

Information

Steps

- 1) Enter `CRout.ClearCallSimulationSettings` to clear all the settings of the previous call router simulation.
- 2) To define all needed properties, enter the following command:
`CRout.SetCallSimulationProperty Property="TheProperty" PropertyValue="TheValue"`
`CRout.SetCallSimulationProperty Property="CallingE164" PropertyValue="1234567"`
- 3) Enter the `CRout.StartCallSimulation sourceInterface="source"` command to start the simulation.

Note: If necessary, enter the `EpAdm.Endpoint` command to list available endpoints.

- 4) If simulation is no longer required, restart the unit.

1.2 Specific Call Router Simulation CLI Commands

Command	Definition
CRout.ClearCallSimulationSettings	Clear all settings of the previous call router simulation
CRout.StartCallSimulation sourceInterface="source"	Start Call router simulation for the defined source
CRout.SetCallSimulationProperty Property="TheProperty" PropertyValue="TheValue"	Define all needed properties for the simulation
EpAdm.Endpoint	List the available endpoints of the unit

1.3 Supported Call Property Names

Only a subset of the call properties can be simulated. The following table contains the supported Call Property names required for the Property argument of the `CRout.SetCallSimulationProperty` command.

Description	Argument name	Expect value type
E.164	<i>CalledE164 / CallingE164</i>	String
Name	<i>CalledName / CallingName</i>	String
Host	<i>CalledHost / CallingHost</i>	String
Uri	<i>CalledUri / CallingUri</i>	String
Numbering Plan Indicator (NPI)	<i>CalledNpi / CallingNpi</i>	Integer / String
Type Of Number (TON)	<i>CalledTon / CallingTon</i>	Integer / String
Information Transfer Capability (ITC)	<i>CalledItc / CallingItc</i>	Integer / String
Presentation Indicator (PI)	<i>CalledPi / CallingPi</i>	Integer / String
Screening Indicator (SI)	<i>CalledSi / CallingSi</i>	Integer / String
Clear Channel Codec	<i>CalledCcc / CallingCcc</i>	Integer
Emergency Flag	<i>CalledEf / CallingEf</i>	Integer
Distinctive Ringing	<i>CalledDr / CallingDr</i>	String
SIP Username	<i>CalledUsr / CallingUsr</i>	String
Bearer Channel	<i>CalledBchan / CallingBchan</i>	String
Diverting Counter	<i>CalledDivc / CallingDivc</i>	Integer
Last Diverting Reason	<i>CalledLdivr / CallingLdivr</i>	Integer
Last Diverting E.164	<i>CalledLdive / CallingLdive</i>	String
Last Diverting PNT	<i>CalledLdivpnt / CallingLdivpnt</i>	Integer
Last Diverting Private TON	<i>CalledLdivprton / CallingLdivprton</i>	Integer
Last Diverting Public TON	<i>CalledLdivpubton / CallingLdivpubton</i>	Integer
Last Diverting Presentation	<i>CalledLdivpre / CallingLdivpre</i>	Integer
Original Diverting Reason	<i>CalledOdivr / CallingOdivr</i>	Integer
Original Diverting E.164	<i>CalledOdiv / CallingOdiv</i>	String
Original Diverting Party Number Type	<i>CalledOdivpnt / CallingOdivpnt</i>	Integer
Original Diverting Private TON	<i>CalledOdivprton / CallingOdivprton</i>	Integer
Original Diverting Public TON	<i>CalledOdivpubton / CallingOdivpubton</i>	Integer
Original Diverting Presentation	<i>CalledOdivpre / CallingOdivpre</i>	Integer

2 Examples

2.1 Simulation - Incoming Call from a PBX to the PRI Port

This example is based on a Mediatrix G7 unit with a PRI card.

IMPORTANT: Do not use the key buffer (arrow up) to write the parameters in the CLI, as syntax errors are sometimes introduced .

1. To clear all the settings of the previous call router simulation, enter the following command:

```
CRout.ClearCallSimulationSettings
```

2. To define the required parameters, enter the following command:

```
CRout.SetCallSimulationProperty Property="CallingE164"  
PropertyValue="11111"
```

3. Enter the following command:

```
CRout.SetCallSimulationProperty Property="CalledE164"  
PropertyValue="22222"
```

4. To start the simulation, enter the following command:

```
CRout.StartCallSimulation SourceInterface="PRI1"
```

5. In no other simulation is required, restart the unit.

2.2 Simulation - Call from PRI to SIP with Number Manipulation

For this example a Mediatrix G7 unit is used a PRI interface, do not forget to create the Call Property Transformation in DGW as follows.

1. **IMPORTANT:** Do not use the key buffer (arrow up) to write the parameters in the CLI, as syntax errors are sometimes introduced .

Routes							
Index	Sources	Criteria Property	Criteria Rule	Transformations	Signaling Properties	Destination	
1	sip-default	None				isdn-PRI1	    
2	isdn-PRI1	None		fix_number		sip-default	    
							

Call Property Transformations

Transformations				
Index	Name	Criteria Based On	Transformation Applies To	
1	fix_number	Called E164	Called E164	   
				

Transformation Rules				
Index	Name	Criteria Rule	Transformation Rule	Next Transformation
1	fix_number	.*	0123\0	   
				

2. To clear all the settings of the previous call router simulation, enter the following command:

```
CRout.ClearCallSimulationSettings
```

3. To define the required parameters, enter the following command:

```
CRout.SetCallSimulationProperty Property="CallingE164"
PropertyValue="203303"
```

4. Enter the following command:

```
CRout.SetCallSimulationProperty Property="CalledE164"
PropertyValue="204401"
```

5. Enter the following command:

```
CRout.StartCallSimulation SourceInterface="PRI1"
```

6. If simulation is no longer required, restart the unit.

Result

```
Nov 14 08:43:24 syslog: CallRouter [03B4] Call 16-17 enter in callrouter:
Nov 14 08:43:24 syslog: CallRouter [03B5] Src=[CID:16 IID:isdn-PRI1 CP:date=14.11.2019
UTC,time=13:43:24 UTC,LID=1,CID=1,cstime=13:43:24 UTC,cstime=14.11.2019 UTC,e164=203303,ocde164=204401,ocge164=203303,]
Nov 14 08:43:24 syslog: CallRouter [03B6] Dst1/1=[CID:17 IID:- CP:e164=204401,]
Nov 14 08:43:24 syslog: CallRouteTable [03B7] Handle Call 16-17.
Nov 14 08:43:24 syslog: CallRouteTable [03B8] Source interface isdn-PRI1 doesn't match source criteria sip-default
Nov 14 08:43:24 syslog: CallRouteTable [03B9] Source interface isdn-PRI1 matches source criteria isdn-PRI1
Nov 14 08:43:24 syslog: CallRouteTable [03BA] Match default criteria.
Nov 14 08:43:24 syslog: CallRouteTable [03BB] Insert new destination sip-default.
Nov 14 08:43:24 syslog: CallMappingTable [03BC] Execute mapping 'fix_number' (calling-e164 to calling-e164)
Nov 14 08:43:24 syslog: CallMappingTable [03BD] Property calling-e164=203303 match expression '+'
Nov 14 08:43:24 syslog: CallMappingTable [03BE] Transform calling-e164 with expression '0123\0' to 0123203303
Nov 14 08:43:24 syslog: CallRouter [03BF] Call 16-17 exit from callrouter:
Nov 14 08:43:24 syslog: CallRouter [03C0] Src=[CID:16 IID:isdn-PRI1 CP:date=14.11.2019
UTC,time=13:43:24 UTC,LID=1,CID=1,cstime=13:43:24 UTC,cstime=14.11.2019 UTC,e164=0123203303,ocde164=204401,ocge164=203303,]
Nov 14 08:43:24 syslog: CallRouter [03C1] Dst1/2=[CID:17 IID:- CP:e164=204401,]
Nov 14 08:43:24 syslog: CallRouter [03C2] Dst2/2=[CID:18 IID:sip-default CP:e164=204401,]
Nov 14 08:43:24 syslog: CallTable [03C3] UseNextDestination - Call 16-18 use new destination sip-default.
```

3 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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