Streaming Media Server configuration

OPERATIONAL DIRECTIONS

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TRADEMARKS

1 GENERAL

The Media Streaming functions in MiVoice MX-ONE require a media gateway of the MiVoice MX-ONE Media Server type, i.e. a SW based media gateway, with a SIP based interface supporting the MSCML (Media Server Control Markup Language) protocol. You can configure this functionality via the Service Node Manager, but these Operational Directions describe the alternative to do it via command line commands.

There are different optional streaming functions that can be supported in the MX-ONE system, like streaming-on-idle-SIP-extension, streaming of certain RVA (and MoW) announcements, streaming of MoH announcements, and streaming of Vocal Guidance announcements.

For this optional functionality these Operational Directions describe how to configure the media gateway/Media Server data.

As a prerequisite, the general Media Gateway data shall have been configured, with the appropriate MGW type ‘MS’.

See the Prerequisites below, and installation instructions INSTALLING AND CONFIGURING MIVOICE MX-ONE, UPGRADING TO MIVOICE MX-ONE 7.0 and MIGRATING MD110/MITEL TSW TO MIVOICE MX-ONE 7.0.

1.1 GLOSSARY AND ACRONYMS

For a complete list of abbreviations and glossary, see the description for ACRONYMS, ABBREVIATIONS AND GLOSSARY.

2 PREREQUISITES

To initiate and configure media gateways, you must have the products as such, the servers, HW and/or SW that provide the MGW functionality.

Relevant licenses for media gateways and media server must be available.

The existence of a media gateway(s) is checked for example with the commands *media_gateway_info* or *media_gateway_config -p*.

The existence and status of the program units AUXP (proprietary protocol) and AUXMSP (SIP based protocol transporting MSCML), which handle “auxiliary devices”, including voice announcements, can be checked with the command *pu_info*. Both programs are normally loaded.

Here it is required that the SIP based protocol MSCML (RFC 5022) is used, since only that protocol supports streaming. This interface is activated via the *media_server* command, parameter --service-name.

The *media_gateway_config* and *media_gateway_interface* commands must have been executed for the intended streaming server (media server).

3 AIDS

I/O terminal.

4 REFERENCES

These Operational Directions refer to the following documents:

Command descriptions:	*(media_gateway_config)* *(media_gateway_interface)* *(media_gateway_info)* *media_server* *media_server_message* in the Technical Reference Guide, unix commands
Operational Directions:	Streaming on idle extension

5 PROCEDURE

1) Plan which streaming functions to use, and how to dimension them.
2) Media gateway data for a Media Server, which shall act as streaming server, shall have been configured, as mentioned in section Prerequisites.
3) Configure the media server SIP interface.
4) If streaming functions shall be used, configure media server with SIP interface (MSCML protocol).
5) Configure the conversion from Service Node internal message to message file name in the Media Server.
6) Print the data for the configured media server(s) to verify.

6 EXECUTION

6.1 GENERAL

The Media Server functions are required for streaming.

Normally you would use MX-ONE Service Node Manager (SNM) to configure the Media Servers in the system, as it gives the best system overview. In the SNM, the location of the MGW unit is defined for the MX-ONE, that is, to which MX-ONE Service Node (SN, LIM) it belongs primarily.

The interfaces of the MGW (MX-ONE Media Server, but also other MGW types) can in addition to the Service Node Manager, also be set via command line commands:

To configure the SIP based MSCML interface and message conversions, use the *media_server* and *media_server_message* commands in addition to the basic *media_gateway_config* and *media_gateway_interface* commands (prerequisites).

6.2 INITIATING AND CONFIGURING A MEDIA SERVER

6.2.1 INITIATING A MEDIA SERVER AS STREAMING SERVER

Initiate a Media Server which shall be a Streaming Server. The MS can be co-located with the Service Node, or if better capacity is wanted, be deployed on a separate server. This better capacity may be needed for example if a lot of queue announcements are to be played (in call center traffic), if streaming-on-idle-extension is used on a lot of SIP terminals (e.g. in hospitality applications), or when a lot of “forced gateway” is configured for some reason.

If the optional streaming-on-idle-extension or other streaming functions shall be used in the system, it is required to configure dedicated Media Server(s) with SIP/MSCML interface, which can act as streaming server.

This is done with the command:

media_server -i

The activation can be done per service, i.e. for Streaming On Idle, RVA and MoH separately, or for all services.

Note: There is a certain delay of the complete activation of a Media Server, since the SIP connection must come up, and depends on a periodic SIP:OPTIONS message, which may take 1-2 minutes before it is executed. This also occurs after MS restarts, or when a lost network connection to the MS comes back.

For RVA and MoH a conversion of Service Node internal message numbers to MS message file names is also needed, which is done with the command:

media_server_message -i

For Streaming on idle extension you will “instead” need the command *streaming_data*. For further configuration of the SOI feature, see the Operational Directions STREAMING ON IDLE EXTENSION.

6.3 CHANGING THE CONFIGURATION OF A MEDIA SERVER

6.3.1 CHANGING A MEDIA SERVER AS GATEWAY

Modify the configuration of an existing Media Server used as streaming server. Start by printing the MS already existing (if any).

media_server -p

Then do the wanted configuration changes:

(media_gateway_config -c) possibly

(media_gateway_interface -c) possibly

media_server -c

media_server_message -c

Print the data to verify the changes:

media_server -p

media_server_message -p

Note: A restart of the Media Server(s) may be done automatically for some types of configuration changes (like IP address changes).

6.4 PRINTING THE CONFIGURATION OF A MEDIA SERVER

6.4.1 PRINT MEDIA SERVER DATA

Print the streaming server media gateway (MS) data using the commands:

Possibly print the basic MGW settings:

media_gateway_config -p (control interface data in the SN)

media_gateway_interface -p (media interface data in the SN)

media_gateway_info (some more details from the actual MGW entity)

Print the actual streaming server MS data using:

media_server -p (SIP/MSCML interface data in the SN, optional)

media_server_message -p (message conversion settings)

6.5 REMOVING A STREAMING SERVER MS

6.5.1 REMOVING A MEDIA SERVER

Remove the media gateway (MS and all its data) using the commands below.

Check what is initiated by printing:

media_server-p

media_gateway_config -p

media_gateway_interface -p

Remove the MS data:

media_server_message -e (message conversion settings removed)

media_server-e (SIP/MSCML interface data removed)

Remove the basic MGW data for the removed MS:

media_gateway_config -e (control interface data in the SN removed)

media_gateway_interface -e (media interface data in the SN removed)

Print again to verify that all has been removed.

media_server-p

7 TERMINATION

Dump to backup media is to be executed if exchange data have been changed and no further commands are to be entered.