MEDIA SERVER SETUP

The media server is involved in audio processing in the IPedge system. The three basic audio processing functions are; to play, record, and mix audio streams of two or more parties. These functions are used for Music on Hold, Group Paging, and Ad-Hoc Conferencing. Media Server functions also includes voice compression and decompression, echo cancelation and DTMF detection and generation. These processes can take up to 30 Million Instructions per Second (MIPS) for each active media stream in a call. It is, therefore, necessary to limit the amount of media server channels on each platform.

The media server is a resource used by these types of applications. These functions effect network bandwidth use. Network bandwidth utilization needs to be considered when engineering the bandwidth requirements between endpoints and the IPedge server. In the IPedge system, signaling information flows from the IPedge server to the endpoints, and audio streams flow between the endpoints. However, when a feature involving media processing is used, the media server becomes an endpoint in the call, and sufficient bandwidth from the phones to the media server is required.

Media Server System Start

Channel

Enter the number Media Server channel information.

1. Select Application > Media Server.

2. Select the Media Server then, click on the Edit icon. Set the SysChannelBegin parameter as shown in the list below. The default value is 49.

   - **EC servers**: leave this set to 49 with or without the meeting application.
   - **EM servers** with **less** than forty eight meeting audio plus record licenses leave set to 49.
   - **EM servers** with **more** than forty eight meeting audio plus record licenses change this to 57.
   - **EP servers**: leave this value at the default nine.

3. The default value of the SysChannelTotal parameter is -1. Do not change this value unless directed by Toshiba Engineering.

Media Server Configuration

Toshiba recommends the Media Server configuration shown below.

- **Media Server Conferences**:
  - IPedge EP Server = 0
  - IPedge EC Server = 0
  - IPedge EM Server = 0

- **Media Server Generic**:
  - IPedge EP Server = 22
  - IPedge EC Server = 174
  - IPedge EM Server = 480

**Note**: When upgrading an IPedge EC server to R1.2, or later, set the Media server channel configuration then, apply licenses.
Media Server Conference channels are used for:
- Up to eight party ad-hoc conferences (Not meet-me Conference)
- ACD monitor, Privacy override, Executive Busy override, and other barge-in features use this function.

Media Server Generic channels are used for:
- Music on Hold
- Back Ground Music
- Group Paging (over IPT, not overhead paging)
- Ring Back Tone (RBT) and Busy Tone (BT) is provided by the Media Server for IPEdge NET calls after the called party answers. RBT and ROT for SIP stations and SIP trunks after the destination answers.

When Media Server Conference Channels are exhausted by these applications media server generic channels are be used. When the Media Server Conference Channels is set to 0, as recommended, Media Server channels are assigned as needed.

There may be specific applications where a guaranteed allocation of Conference Channels is appropriate. In this case, set the Conference Channel parameter to the number of channels you want reserved. If additional conference channels are needed the system will use available generic channels. The reserved conference channels will not be available for generic use.

Use the following to set the initial Media Server Channel allocation.
- Media Server Generic:
  2. Select the Media Server then, click on the Edit button.
  3. In the Media Server section enter 0 in the Media Server Conferences field.
  4. Enter the number of channels reserved for Media Server Conferences and Media Server Generic functions based on the IPEdge server type as shown above.
  5. Click on the Save icon.

After the system has been running for a few days the system administrator should check the traffic logs to see if adjustments to the number of Media Server channels is needed.

**Restart the Media Server**
1. Select Maintenance > System Maintenance > Core System Processes.
2. Check-mark the Media Server.
3. Click on the Send Restart action icon.

Repeat this setup for each IPEdge server.
SOFTWARE UPDATE NOTICE

When updating an earlier system to R1.2 (or later) or when applying new licenses to a system running software R1.1.2 or earlier perform the following steps.

1. Update the software to R1.2 (or later).
2. Set the Media Server as shown above.
3. Apply any new licenses.