Dialogic

Dialogic® IP Media Server

Release Notes

Release 3.1.0

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Dialogic® IP Media Server 3.1.0 Release Notes

These release notes provide information about Release 3.1.0 of the Dialogic® IP Media Server, including a summary of new features, issues resolved since Release 3.1.0, and known limitations. Please note that the Dialogic® IP Media Server also is referred to herein via one or more of the following terms: "IP Media Server," "Media Server," "IPMS."

For detailed information about installing and configuring the Dialogic® IP Media Server, refer to the *Dialogic® IP Media Server Installation and Operations Guide*; for detailed information about developing applications for the Dialogic® IP Media Server, see the *Dialogic® IP Media Server Application Developer's Guide*; for detailed information about activating your IP Media Server license, see the *Dialogic® IP Media Server License Activation Guide*.

Please direct any questions or inquiries to Dialogic Technical Services and Support at +1 (781) 433-9600 or americas.support@dialogic.com

New Features in Release 3.1.0

The following features have been added in Dialogic® IP Media Server Release 3.1.0.

Image Overlay

An image overlay provides the ability to superimpose one or more images (graphics) over a video stream. The resulting video stream contains both the overlay elements and the original video stream. Overlay elements can be of varying sizes, and in the case of text elements, also of varying fonts and colors. These elements can be inserted in real time. For example, you can create an interactive menu or display a corporate logo as an overlay over a video stream. Overlay functionality is implemented in VoiceXML 2.0.
The IP Media Server supports the following file types for image overlay:

- JPEG
- PNG

Please refer to the *Dialogic® IP Media Server Application Developer's Guide* for further information regarding this feature.

Linux 64 Bit Support (32 Bit Emulation Mode)

IPMS 3.1.0 supports the install of the 32 bit Snowshore packages running on a 64 bit version of Red Hat EL 5.2 Server. This is only supprted when following our detailed instructions to set up the RHEL 5.2 Server and to install the additional packages.

Please refer to the *Dialogic® IP Media Server Installation and Operations Guide* for further information regarding this feature.

RFC 3264 Sip Offer Answer

RFC 3264 functionality has been added to the IPMS3.1 release. The following is a summary of the functionality provided.

- Inbound Calls

  Sip Invite messages received with multiple audio codecs specified will be processed in a configurable order. If the IPMS is configured with a "required audio" or a "required video" codec and the sdp for the invite does not contain the required values, the call will be dropped and a 488 message will be sent. Configuring preferred audio and video codecs will enable the IPMS to attempt to use those preferred codecs first to establish the call. If neither the preferred or

required codecs are configured then the call will be established using the codec preferred order contained in the Sip Invite.

- Outbound Calls

  All SIP invites sent from the IPMS will contain a list of audio codecs configured in the WebUI on the page titled 'Dialogic IP Media Server Configure Late Media Audio Codec Preference', if they are licensed and available on the media server at the time that the invite is sent. A single video codec will be included in the SIP Invite if configured. All codecs identified in the response from the called endpoint will be supported on the IPMS. Licenses for the requested codecs will be held for the duration of the call.

- Late Media Calls

  Processing of late media calls will be identical to the processing performed for outbound calls. All configured, licensed and available codecs on the IPMS will be sent in response to a late media SIP invite.

OPTIONS Processing

Options processing for IPMS 3.1 will return a dynamic list of available codecs, as determined by their license availability, at the time the request is received. This approach will give the user the ability to make a rough guess on which codecs to request in a multi codec scenario before issuing a SIP Invite.

Upgrading from Previous Releases

Important Note: After completion of the upgrade to IP Media Server Release 3.1.0, the WebUI Admin password will have been reset to <blank>. You should change your password immediately after initial login; see "Changing Administrator Password" in the "Installation and Operations Guide".

If you are upgrading to Release 3.1.0 from an existing installation of a previous version of the Dialogic® IP Media Server, please refer to the *Dialogic® IP Media Server Upgrade from Release 3.0 to 3.1 on Red Hat Enterprise Linux Platforms* documentation for the upgrade instructions.

Note: If you are currently running a version of the Dialogic® IP Media Server earlier than Release 3.0.0, you must first upgrade your system to Release 3.0.0 before upgrading to release 3.1.0.

Note:

Important Note: Before upgrading to IP Media Server Release 3.1.0, there are required Red Hat packages that must be installed. For a list of such packages, please refer to the *Dialogic® IP Media Server Release 3.1.0 Installing Red Hat Enterprise Linux 5.2 for the Dialogic® IP Media Server* documentation.

Note:

Important Note Regarding Red Hat EL 5.0 Update 2:

The following packages MUST be installed on the IP Media Server if running Red Hat EL5.0 Update 2 in order to address an Operating System issue.

kernel-2.6.18-128.1.6.el5.i686.rpm

kernel-devel-2.6.18-128.1.6.el5.i686.rpm

kernel-headers-2.6.18-128.1.6.el5.i386.rpm

As part of the IP Media Server upgrade process, command shell scripts are provided that enable you to back up and restore necessary file systems. The upgrade documents and command shell scripts are available by contacting Dialogic Technical Service and Support.

Supported Platforms

The Dialogic® IP Media Server is distributed in two forms:

An integrated server, including a hardware platform based on the Dell R410 server or the Intel TIGW1U NEBS-Compliant Server and preinstalled Dialogic® IP Media Server software.

- The standard configuration of the integrated Dialogic® IP Media Server that currently ships on the Dell R410 Server with Release 3.1.0 installed has the following specifications:
  - Dual Quad Core Intel Xeon E5530, 8MB Cache, 2.4 GHz, 1066 MHz FSB
  - 73GB 15k RPM Serial-Attached SCSI 3Gbps 3.5
  - 8GB 667 MHz (4x2GB) Dual Ranked DIMMs
  - Red Hat Enterprise Linux 5.2

- The standard configuration of the integrated Dialogic® IP Media Server that currently ships on the Intel TIGW1U NEBS-Compliant Server with Release 3.1.0 installed has the following specifications:
  - Dual Quad Core Intel Xeon L5410, 2x6MB Cache, 2.33 GHz, 1066 MHz FSB
  - 73GB, SAS, 2.5"
  - 8GB DDR2-667 FBDIMM ECC
  - Red Hat Enterprise Linux 5.2

  Note: The MS-10A, MS-10B, MS-20A, and MS-20B hardware platforms, based on the Intel SR1300 and Intel SR2300, are no longer available for purchase.

A software-only releases for installation on an existing hardware platform meeting the standard specifications for the integrated server and running Red Hat Enterprise Linux 5.2.

Issues Resolved

The following known issues in the Dialogic® IP Media Server (which is referred to below as "IP Media Server", "Media Server", or "IPMS") have been resolved as of Release 3.1.0.

Issues Resolved in Release 3.1.0

The following known issues relating to the Dialogic® IP Media Server (referred to in the table below as "IPMS") have been resolved in Release 3.1.0.

Functional Area	Description
SIP	Added support for enabling TCP in SIP. (CQ91944)
	Added support for SIP options during an active call. (CQ91927)
	Resolved an issue where if an INVITE with a malformed SDP is received by the IPMS, sipd will core if the o line doesn't specify the IP version and address. (CQ 55672)
	Resolved an issue where the Radvision stack could leak memory due to improper deletion of Radvision messages leading to SIP 408 timeouts when calls are attempted.(CQ 55841)
	Resolved an issue where if the MAXBR parameter is present in the SDP from the INVITE received, the IPMS sends an invalid parameter in the subsequent 200 OK response (CQ91166)
Media Processing	Resolved an issue where a play mscml request that has repeat="infinite" will provide a playduration="0" when stopped regardless of how long it actually played. (CQ 91571)
	Resolved two issues where a single quote was not being handled properly in both a header session variable and in a diversion header session variable. (CQ 91309 and CQ 91762)
	Resolved an issue where the IPMS was not generating an MSCML response after receiving a <stop /> request during a <play/> operation with infinite duration.(CQ55669)
	Resolved an issue whereannexb=no will not be sent for the g729 codec if there is more than one offered codec in late media mode. (CQ 90897)
VoiceXML 2.0	Resolved an issue where if a transfer destination is incorrect, the VoiceXML browser would incorrectly indicate that the network was busy. (CQ54852)
	Resolved an issue where if '#' is used as a prompt, it is not matched properly (CQ 55263)
	Resolved an issue where a call is terminated during a record, and the duration of the record returns a -1 which is invalid. (CQ 55900)
Logging	Resolved an issue with logging where multiple threads would cause our log client to core. (CQ 91412)
	Resolved an issue where mserv may core if TRCR cores. (CQ 91049)
Installation	Resolved an issue where the resolve.conf file may be modified during

Functional Area	Description
	IPMS upgrade. (CQ 91634)
WebUI	Resolved issues with the shutdown calls WebUI page. (CQ 54925)
	Resolved an issue where if the configured route is accidentally deleted, communication with host is lost until the server is rebooted.

Known Issues and Limitations

The following are known issues and limitations relating to the Dialogic® IP Media Server (referred to in the table below as "IP Media Server") Release 3.1.0.

Functional Area	Description
Announcement Service	The maximum value of the "repeat" URI parameter for announcements is 250. If a larger value is supplied, only 250 repetitions will occur and the duration timer will not limit the announcement.
Apache	The Apache parameter MaxClients is currently set to 310.
Backup/Restore	The backup function does not back up the current user database. After a restore, the database will remain the same as it was prior to the restore.
Console	The following message might appear on the console of the IP Media Server: NFS mount version older than kernel This does not interrupt operation of the system, and can be ignored.
Error Messages	The error code contained in MSCML responses may not always indicate a failure (4XX) when the request does not conform to the MSCML grammar. This scenario does not cause issues for the IP Media Server, but it may make application debugging more difficult.
	If establishing sessions using a complex codec (e.g., G.726, G.729ab) on the EDP–10 processing card of the IP Media Server, be aware that it takes about one (1) minute for the card to initialize after the rest of the IP Media Server is up and running. If calls that require a complex codec are placed during this one (1) minute initialization period, the following SIP response will be returned: 480 BUSY HERE.
	The Fido process may generate a core dump during normal process termination due to an issue in a standard Linux library. This has been observed to occur infrequently and is not harmful because the process is being shut down. (brkt-4161)
	Mserv may generate a core dump when the IPMS negotiates annexb=no, but gets annexb anyway. (CQ 55875)
Installation	It is poassible, although rare that the software upgrade process can fail and leave the IPMS in a bad state and the upgrade must be redone. (CQ 56001)
	The web caching mechanism on the IP Media Server uses the Squid package provided by the Red Hat 5.0 Update 2 distribution. However, this version of Squid does not support IPv6; therefore, to utilize IPv6 while accessing files and documents across an IPv6 network, the system administrator must either disable Squid or upgrade to Squid 3.1. Please

Functional Area	Description
	contact Dialogic Technical Services and Support for further details.
Interoperability	Conference participants using certain Cisco phones may hear a click at regular intervals if the session timer is set on both the IP Media Server and the phone. Disabling the Session Timer on the IP Media Server is an acceptable workaround.
Logging	In VXML, the transferred calls do not show up on the statistics page of the IP Media Server Web UI. (brkt-3509)
	It is possible during MS Accounting operations that msAccountingLogOverallMax and msAccountingLogIntervalMax could be different values in sample entry when msAccountingLogOverallMax is first viewed. (CQ54482)
Media Processing	The IP Media Server supports an RFC–1890 compliant version of G726–32 with a payload as specified in ITU-T Recommendation I.366.2 Annex E. This is the reverse of what is currently specified in RFC-3551 for G726-32. (brkt-6180)
	The IP Media Server does not support CNG tone clamping within a conference. (CQ53860)
MRCPv2	The IP Media Server has been qualified against a third party MRCPv2 server for test-to-speech (TTS) and Automatic Speech Recognition (ASR) services. A threshold of MRCP resource usage can be met, which may lead to MRCP server latency, socket corruption and/or other effects. These effects on the MRCP server can result in instability within the IP Media Server MRCPv2 client that may in turn result in a segmentation fault. Proper profiling should be carefully considered while estimating capacity requirements for a given solution.
Networking	The IP Media Server has been qualified on an IPV6 network, but the 3.1.0 release does not work properly when configured for an IPV6 address. This will be addressed in the following maintenance release.
	The IP Media Server does not support sequential late media re-INVITEs with hold SDP. (brkt-4905)
SIP	The call-id is currently limited to 63 characters. (brkt-4952)
	The IP Media Server requires at least one m= line in an SDP body. (brkt-4996).
	The IP Media Server SIP implementation limits the size of some header fields to conserve memory, even though the SIP specification does not have such a limitation. The SIP RFC does not dictate maximums for these fields. This is planned to be addressed in a future release of the IP Media Server. (brkt-5016)
	The IP Media Server does not respond to messages that have

Functional Area	Description
	missing or malformed required header fields. This includes, but is not limited to, the TO and FROM headers. (brkt-5124)
	The total length of the string passed from SIPD to VXML is limited to 1024 bytes. This string includes the request-URI portion of the request line, the user name portions of the from and to headers, the content of the top-most diversion header, the entire "to" and "from" headers (including parameters), the call-id, the audio and video codecs, the hostname, the port value of the audio RTP destination, and keywords. (brkt-5399)
	H.263 video is offered by the IP Media Server for late media invites when "Offer Video Codec" is configured to "None." A workaround is to manually edit the IP Media Server configuration file and change the line "SDPVideoCodec=" to "SDPVideoCodec=None". (brkt-6428)
	The sipd application may dump core after kickstart installation. This issue does not occur after the Web UI is used to configure the network interfaces. (brkt-6350)
	Based on the "Media Server Availability via SIP Options" feature, the application/media_server_usage+xml Content-Type might return a packet larger than the negotiated MTU size. (CQ53885)
	An Early Announcment will return a 404 status code when 1+ errors exist in CGI/URI file lists (CQ53928)
Video	It is not possible to have a video-only recording session with the IP Media Server. This is the case even if the silence timeout is disabled. (brkt-3837)
	If an original INVITE message does not have a video SDP section, and video SDP is then added in a re-INVITE message, the IP Media Server fails to create a video stream. This issue has been observed only with the eyeBeam softphone, and that softphone has a configuration option that sends the video SDP in the original INVITE. (brkt-6380)
	When navigating though the text overlay demo and the audio is set to AMR 12.2, you will sometimes here a loud audio distortion after a pressing a menu selection. (CQ 90931)
	VtpXcoderDecoderH264 errors can be seen in the mserv log while running 300 video calls on a Dell R410 server using 6GB of RAM. A lesser machine will not see these errors. (CQ 91988)
	If a video call is made with Video and Audio enabled in SIP, but if the Video is disabled, when a record command is issued, the record tone is not sent. (CQ 55962)
VoiceXML	In VoiceXML 2.0, if a requested file does not exist, no badfetch error is generated. (brkt-6376)