Dialogic®

Dialogic® PowerMedia™ XMS Release 2.0

Release Notes

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Table of Contents

Revision History

This section summarizes the changes made in this and each previously published version of the Release Notes for PowerMedia XMS Release 2.0, which is a document that is planned to be periodically updated throughout the lifetime of the release.

Revision	Release Date	Notes
05-2712-006	September 2014	Updates to support PowerMedia XMS Release 2.0 Service Update 5. Release Issues: • Added the following Resolved Defects: IPY00115554, IPY00116430, IPY00116477, IPY00116593, IPY00116666, IPY00116714. • Added the following Known Issues: XMS-1220.
05-2712-005	June 2014	Updates to support PowerMedia XMS Release 2.0 Service Update 3. Post-Release Developments: • Special Notice to Customers Using NETANN, RESTful, VXML. Release Issues: • Added the following Resolved Defects: IPY00116078, IPY00116253, IPY00116343.
05-2712-004	March 2014	Updates to support PowerMedia XMS Release 2.0 Service Update 2. Release Issues: • Added the following Resolved Defects: IPY00115796, IPY00116061, IPY00116095, IPY00116096.

Revision	Release Date	Notes
05-2712-003	November 2013	Updates to support PowerMedia XMS Release 2.0 Service Update 1. Post-Release Developments: • PowerMedia XMS Release 2.0 Service Update. • SIP Session Timer Modifications. • Support for Early Media through MSML Media Server Interface. Release Issues: • Added the following Resolved Defects: IPY00102159, IPY00102264, IPY00102351, IPY00102370, IPY00102398, IPY00102449, IPY00102452, IPY00102512, IPY00102516, IPY00102592, IPY00102771, IPY00115350, IPY00115365, IPY00115371, IPY00115417, IPY00115438, IPY00115534, IPY00115655.
05-2712-002	March 2013	Overview: Updated with clarification that NETANN and VXML media options are currently audio-only. Release Features: Updated with clarification that current release of VXML does not support video.
05-2712-001	February 2013	Updates to support PowerMedia XMS Release 2.0.
05-2712-001-01	October 2012	Initial release of this document.
Last modified: September 2014		

Refer to www.dialogic.com for product updates and for information about support policies, warranty information, and service offerings.

1. Welcome

This Release Notes addresses new features and issues associated with the Dialogic® PowerMedia™ Extended Media Server (also referred to herein as "PowerMedia XMS" or "XMS") Release 2.0. This is a document that is planned to be periodically updated throughout the lifetime of the release.

This Release Notes is organized into the following sections (click the section name to jump to the corresponding section):

- Overview: This section provides an overview of the PowerMedia XMS Release 2.0.
- System Requirements: This section describes the system requirements for the PowerMedia XMS Release 2.0.
- Release Features: This section describes the new features and functionality in the PowerMedia XMS Release 2.0.
- Installation, Configuration, and Licensing: This section describes topics that are useful for getting started with the PowerMedia XMS Release 2.0, such as: Installation, Configuration, and Licensing.
- Post-Release Developments: This section describes significant changes to the PowerMedia XMS Release 2.0 subsequent to the general availability release date.
- Release Issues: This section lists the issues that may affect the PowerMedia XMS Release 2.0.
- Related Documentation: This section provides information about the documentation that supports the PowerMedia XMS Release 2.0.

2. Overview

PowerMedia XMS energizes application delivery by boosting performance with:

- State of the art mixing of media-rich communications
- Software providing a seamless transition to virtualization and cloud delivery
- Telco hardened scalability

PowerMedia XMS elevates what developers can create for their customers, from virtually any development environment, connecting to virtually any type of communication endpoint.

PowerMedia XMS is a powerful next-generation media server software that enables standards-based, real-time multimedia communications solutions. PowerMedia XMS offers a rich variety of advanced media processing functions, including audio and video play/record, multimedia conferencing and mixing, as well as transcoding with HD Voice and video codecs. It can be used to build numerous real-time multimedia processing solutions from traditional voice messaging, IVR, and conferencing to innovative video conferencing and social interaction applications.

PowerMedia XMS is controlled by the business logic of applications deployed on SIP application servers and web application servers. PowerMedia XMS offers multiple media control protocols that can be used in a variety of network infrastructures. For example, a SIP application server (AS) can drive PowerMedia XMS using the MSML control interface or use Network Announcement (NETANN) to direct the PowerMedia XMS VoiceXML (VXML) browser to execute VXML scripts. For Web 2.0 and Cloud development, a web application written in an appropriate language (such as, Python or JavaScript) can control PowerMedia XMS using the HTTP RESTful interface.

Note: Network Announcement (NETANN) and VoiceXML (VXML) with Media Resource Control Protocol (MRCP) are new interfaces and integral components of PowerMedia XMS Release 2.0.

The MSML and RESTful interfaces support multimedia – both audio and video, using a variety of codecs. NETANN and VXML media options are currently audio-only.

PowerMedia XMS provides powerful and user-friendly OA&M functionality, and can be managed remotely through a web-based operator console and the HTTP RESTful Management interface.

A wide variety of SIP endpoints can be handled by PowerMedia XMS, resulting in the delivery of rich full-duplex audio and video media streams to a variety of fixed and mobile devices.

The following figure illustrates an example of a video conferencing delivery platform for a PowerMedia XMS-based multimedia conferencing solution.

Related Information

See the following for additional information:

- PowerMedia XMS datasheet at http://www.dialogic.com.
- PowerMedia XMS documentation at http://www.dialogic.com/manuals.
- Dialogic technical support at http://www.dialogic.com/support.

3. System Requirements

This section describes the system requirements for the PowerMedia XMS Release 2.0.

The recommended **minimum** and **recommended** system requirements are as follows:

Item	Requirement
Hardware	Intel Architecture-based server
Operating System	**Note:** 32-bit operating systems are not supported. Community ENTerprise Operating System (CentOS) 6.2 or higher (provided with the installation) Red Hat Enterprise Linux (RHEL) 6.2 or higher Oracle Enterprise Linux (OEL) 6.2 or higher **Note:** The *perl-core-5.10.1-xxxxx.x86_64.rpm* is required if using the RPM Method.
Processor	**Minimum:** Intel Xeon E5420 Quad-Core (2.50 GHz, 1333 MHz FSB, 80W) **Recommended:** Intel Xeon X5650 Dual Hex-Core (2.66 GHz, 1333 MHz FSB) or better for performance systems
Ethernet	Dual 1000Base-TX (RJ-45)
Memory	**Minimum:** 4 GB RAM **Recommended:** 8 GB RAM or higher
Storage	60 GB HDD
Note: The recommended server configuration is applicable for higher density audio solutions of 1500 or greater sessions, video transcoding solutions, or solutions utilizing virtualization.	

Supported Virtual Machines

The supported virtual machines (VM) are as follows:

- VMWare ESXi 5.x
- Kernel Virtual Machine (KVM)

Note: Virtualization systems chosen for PowerMedia XMS should be configured for enterprise or private virtual environments that permit customization of virtual machine (VM) settings and hypervisor performance tuning. Virtual environments running PowerMedia XMS must also restrict the number of VMs hosted on a single platform to facilitate the real-time low-latency scheduling demands required for high quality media processing. Density capacity in virtual environments may vary and are generally a factor of the host platform capacity and the number of VMs running PowerMedia XMS. Generally, the aggregate density of all VMs running PowerMedia XMS will be less than the bare metal capacity of the platform. Testing has shown hypervisor overhead to reduce density by 15-20 percent. Additionally, running more VMs requires extra overhead for hypervisor scheduling of resources between real-time systems.

4. Release Features

This section describes the new features and functionality supported in the PowerMedia XMS Release 2.0.

For more information, see the documents listed in the Related Documentation section.

PowerMedia XMS Release 2.0

The key new features and functionality include:

- JSR 309 Connector Software for PowerMedia XMS
- VoiceXML (VXML) Support
- Media Resource Control Interfaces (MRCP) Support
- Network Announcement (NETANN) Support
- RESTful Management API Support
- RESTful Media API Enhancements
- OA&M Enhancements
- MSML Enhancements
- Video Text and Image Overlay Support
- Kernel Virtual Machine (KVM) Virtualization Support
- Oracle Enterprise Linux 6.2 64-bit Support

JSR 309 Connector Software for PowerMedia XMS

The JSR 309 Connector is the Dialogic implementation of the JSR 309 version 1.0 final specification. This connector software runs on a Java EE (J2EE) application server and enables a multimedia application on the application server to control the PowerMedia XMS using an industry recommended Java API for media control.

VoiceXML (VXML) Support

Voice Extensible Markup Language (VoiceXML or VXML) for PowerMedia XMS is designed for creating audio dialogs that feature synthesized speech, digitized audio, speech recognition, DTMF key input, speech recording, telephony, and mixed initiative conversations. The current release of VXML in PowerMedia XMS does not support video.

Media Resource Control Interfaces (MRCP) Support

Media Resource Control Protocol (MRCP), accessible only through VXML, is used by PowerMedia XMS as an industry standard interface to speech servers that enable Automatic Speech Recognition (ASR) and Text-to-Speech (TTS). MRCP provides an easy way to build voice user interfaces, allowing grammar to be built for speech input and providing a way to easily translate text into voice prompts without reading and recording them.

Network Announcement (NETANN) Support

Network Announcement (NETANN) is a protocol specified by RFC 4240 that specifies techniques used to provide basic network media services with SIP, such as announcements, basic conferences, and invoking dialogs using VXML. NETANN can be used to build announcement servers that can be directed to play media files or put callers into a basic conference by adding directives to the SIP URL used to contact PowerMedia XMS.

RESTful Management API Support

The RESTful Management API is an alternate way of configuring and performing system management tasks for PowerMedia XMS. The RESTful Management API is a remote API carried over HTTP transport that allows the option to incorporate configuration elements into the application or web interface in a more automated or distributed manner.

RESTful Media API Enhancements

The RESTful Media API uses a Representational State Transfer (RESTful) web service. This web service is a software system designed to support call and media control over a network, using the HTTP protocol.

The RESTful Media API consists of a series of requests and responses built around the transfer of representations of "resources". These resources are accessed through Universal Resource Indicators (URIs).

Enhancements to the RESTful Media API include new methods and attributes, such as call actions: send_dtmf, send_info, send_info_ack, transfer, redirect, and hangup.

OA&M Enhancements

Operations, Administration, and Maintenance (OA&M) enhancements include new configuration menus, pages, and updates to the following PowerMedia XMS Admin Console functions.

New VXML Configuration Menu

The **VXML Interpreter Configuration** page accessed from the **VXML** configuration menu is used to configure general settings for the VXML Interpreter, in addition to the local web server settings.

New MRCP Client Configuration Menu

The **Global Configuration**, **Speech Server 1 Configuration**, and **Speech Server 2 Configuration** pages accessed from the **MRCP Client** configuration menu are used to configure the MRCP Client and speech server.

New RESTful API Configuration Menu (Native mode only)

The **RESTful API Configuration** page accessed from the **RESTful API** configuration menu is used to configure several aspects of the RESTful call control and media API.

New HTTP Client Configuration Menu (Native mode only)

The **HTTP Client Configuration** page accessed from the **HTTP Client** configuration menu is used to configure cache on the HTTP client.

NTP Server Support

The **Time** page accessed from the **System** configuration menu provides the option to configure and set the NTP Server (Network Time Protocol).

Upgrade System Support

The **Upgrade** page accessed from the **System** configuration menu provides the option to upgrade the system by uploading a system upgrade package.

NFS Mount Points Support

The **NFS Mount Points** page accessed from the **System** configuration menu allows Network File System (NFS) version 4 file systems, offered by external servers, to be mounted on PowerMedia XMS. Resources used by PowerMedia XMS, such as media files or VXML scripts, may be kept on an external file server, but may be needed by for handling calls.

CPA Tone Configuration Support (MSML mode only)

The **MSML CPA Configuration** page accessed from the **MSML** configuration menu includes support with parameters for call progress analysis (CPA) tone configuration.

MSML Enhancements

PowerMedia XMS includes the following MSML enhancements.

MSML DNS Translation for HTTP Request Support

PowerMedia XMS adds support for MSML Domain Name System (DNS) translation for HTTP request.

In the previous release, the MSML Media Server uses only the h_addr value returned from the Linux system call gethostbyname() as the IP address for the HTTP request, and if is not accessible, the MSML operation is terminated.

In this release, this feature extends the MSML Media Server such that upon failure of the initial HTTP request using the first IP address in h_addr_list, an attempt is made for each remaining IP addresses in the array until an entity is successfully reached and processes the HTTP request or the list is exhausted.

MSML HTTP 1.1 Support

PowerMedia XMS adds support for Hypertext Transfer Protocol (HTTP) version 1.1 as defined in IETF RFC 2616 when in MSML mode. This feature enables PowerMedia XMS supports for HTTP message exchanges, in connection with processing MSML request, between web servers that are compliant with version 1.1 of the HTTP protocol. PowerMedia XMS now processes MSML media request (i.e. dialogs) that designate a remote location for the target source file to be retrieved for playback or storage when recording using HTTP 1.1 GET and PUT operations respectively.

Note: Some features defined in RFC 2616 may not be fully supported.

MSML Forwarding Media Server ID to AS Support

PowerMedia XMS adds support for forwarding media server ID to application server (AS). This feature will allow the MSML Media Server to utilize the Location response-header returned from the destination server storing the file in conjunction with a record operation. The Location value will be copied from the HTTP PUT response (201 Created) and returned to the application in a final response message (INFO).

MSML <record> Element Append Attribute Support

PowerMedia XMS adds support for MSML <record> element append attribute. The append attribute is a boolean and when set to "true" will append a recording operation to an existing file in cases where the destination file already exists. The default value is "false" and is only applicable for locally stored files. The attribute is ignored if the scheme is HTTP.

Video Text and Image Overlay Support

PowerMedia XMS adds support for video text and image overlay on MSML conferencing. These new capabilities include support for both static and scrolling text and image overlays.

Kernel Virtual Machine (KVM) Virtualization Support

PowerMedia XMS introduces virtualization support for two commercially available hypervisors, KVM and VMware. Host platforms running VMware ESXi 5.x or KVM with RHEL 6.2/CentOS 6.2 are required for best performance. For KVM, it is required that guest install runs RHEL 6.2/CentOS 6.2/Oracle 6.2 or higher.

Virtualization systems chosen for PowerMedia XMS should be configured for enterprise or private virtual environments that permit customization of virtual machine (VM) settings and hypervisor performance tuning. Virtual environments running PowerMedia XMS must also restrict the number of VMs hosted on a single platform to facilitate the real-time low-latency scheduling demands required for high quality media processing. Density capacity in virtual environments may vary and are generally a factor of the host platform capacity and the number of VMs running PowerMedia XMS. In general, the aggregate density of all VMs running PowerMedia XMS will be less than the bare metal capacity of the platform. Testing has shown hypervisor overhead to reduce density by 15-20 percent. Additionally, running more VMs require extra overhead for hypervisor scheduling of resources between real-time systems.

The following documents provide tips and best known methods for optimal performance tuning, and are recommended guides when configuring virtual environments running PowerMedia XMS:

KVM documentation:

- https://access.redhat.com/knowledge/docs/en-US/Red_Hat_Enterprise_Linux/6/html/Virtualization_Host_Configuration_and_Guest_Installation_Guide/index.html

Note: For KVM, the **OS type** and **Version** setting is essential when creating the VM (see Section 6.3 "Creating guests with virt-manager" for more information). This setting triggers the correct setting for several other parameters.

VMware documentation:

- http://www.vmware.com/files/pdf/techpaper/VMW-Tuning-Latency-Sensitive-Workloads.pdf
- http://www.vmware.com/pdf/Perf_Best_Practices_vSphere5.0.pdf
- http://pubs.vmware.com/vsphere-50/topic/com.vmware.ICbase/PDF/vsphere-esxi-vcenter-server-50-basics-guide.pdf

Oracle Enterprise Linux 6.2 64-bit Support

PowerMedia XMS adds support for Oracle Enterprise Linux 6.2 64-bit with Unbreakable Linux Kernel (UEK).

5. Installation, Configuration, and Licensing

This section describes topics that are useful for getting started with the PowerMedia XMS Release 2.0, such as: Installation, Configuration, and Licensing.

For more details describing how to install software, access the PowerMedia XMS Admin Console for configuration management, and run the verification demo, see the *Dialogic® PowerMedia™ XMS Quick Start Guide*.

For more details providing instructions for installing, configuring, administering, and maintaining PowerMedia XMS, see the *Dialogic® PowerMedia™ XMS Installation and Configuration Guide*.

Installation

There are two installation methods available:

- ISO Method
- RPM Method (used for a CentOS or RHEL installation)

ISO Method

The ISO installation method is a complete system installation that includes the CentOS, OS optimizations, and PowerMedia XMS software. The ISO can be installed from a DVD drive or to a Virtual Machine.

For more information, see the *Dialogic® PowerMedia™ XMS Quick Start Guide* and *Dialogic® PowerMedia™ XMS Installation and Configuration Guide*.

RPM Method

The stand-alone RPM installation method is used for installation on top of a pre-existing CentOS or RHEL installation. The RPM installation will install the PowerMedia XMS software and required packages required to run PowerMedia XMS. The RPM installation will also make OS adjustments for real-time audio and video processing required for optimal performance.

For more information, see the *Dialogic® PowerMedia™ XMS Quick Start Guide* and *Dialogic® PowerMedia™ XMS Installation and Configuration Guide*.

Configuration

There are two configuration methods available:

- PowerMedia XMS Admin Console
- RESTful Management API

PowerMedia XMS Admin Console

The PowerMedia XMS Admin Console ("Console") is a secure web-based GUI used to manage PowerMedia XMS. The Console can be reached using a web browser and the PowerMedia XMS IP address.

For more information, see the *Dialogic® PowerMedia™ XMS Quick Start Guide* and *Dialogic® PowerMedia™ XMS Installation and Configuration Guide*.

RESTful Management API

The RESTful Management API is an alternate way of configuring and performing system management tasks for PowerMedia XMS. The RESTful Management API is a remote API carried over HTTP transport that allows the option to incorporate configuration elements into an application or web interface in a more automated or distributed manner.

For more information, see the *Dialogic® PowerMedia™ XMS RESTful Management API Developer's Guide*.

Licensing

PowerMedia XMS comes with a 2-port verification license to get started. The name of the license file is *verification.lic*.

A temporary 4-port trial license for 45 days can also be obtained from the Dialogic website at http://www.dialogic.com/products/media-server-software/xms/xms-download.aspx.

PowerMedia XMS production licenses or trial licenses for larger session installations can be obtained through your authorized Dialogic distributor or by contacting Dialogic Inside Sales (insidesales@dialogic.com).

The following licensing capabilities are supported in this release:

- **Host-based Licensing**
  The license is associated with a particular machine based on the machine's MAC address (Host ID).
- **Additive Licensing**
  To increase licensed resources or scale system capability, you can augment an existing license with multiple licenses. The licenses must be production (non-trial or non-verification) licenses.

6. Post-Release Developments

This section describes significant changes to the PowerMedia XMS Release 2.0 subsequent to the general availability release.

PowerMedia XMS Release 2.0 Service Update

This Service Update for PowerMedia XMS Release 2.0 is now available. This updates provide fixes to known problems, and may also introduce new functionality. It is intended that new versions of the Service Update will be released periodically.

For information about installing this release, refer to the *Dialogic® PowerMedia™ XMS Installation and Configuration Guide*.

Special Notice to Customers Using NETANN, RESTful, VXML

PowerMedia XMS supports a number of control interfaces including NETANN, RESTful, VXML, MSML, JSR 309, etc. It must be noted that prevailing standards related specifically to NETANN, RESTful, VXML have quickly evolved. Dialogic is fully committed to ensure that PowerMedia XMS complies to the latest standards and has enhanced PowerMedia XMS software to support newer additions to these control interfaces.

With Service Update 3, current PowerMedia XMS Release 2.0 customers that integrate to PowerMedia XMS via one of the aforementioned control interfaces (NETANN, RESTful, VXML) are strongly encouraged to upgrade their current deployment to PowerMedia XMS Release 2.2 or later to take advantage of the advancements in the product. For NETANN, RESTful, VXML, functionality remains in this release but goes through minimal validation. The issues reported against NETANN, RESTful, VXML interfaces will be fixed in PowerMedia XMS Release 2.2 or later. For clarity, we do not expect customers using MSML to be affected by this.

As a general policy, we encourage all our customers to consider using the latest generally available software release for their network deployment. If you have any questions or require assistance to upgrade to PowerMedia XMS Release 2.2 or later, please contact Dialogic global support.

SIP Session Timer Modifications

The MSML Media Server has been updated to resolve several issues related to handling of SIP Session timers. The previous version of the media server includes the Supported and Session-Expires header fields in the 2xx response, but did not refresh the call session using re-INVITE messages when "refresher=uas" is specified.

With Service Update 1, if the caller / AS doesn't specify the support of SIP session timers by including the Supported header field with the option tag "timer", the media server will assume responsibility of session refreshes and send a re-INVITE for sessions that are connected for longer than the default session expiry of 1 hour. See http://www.ietf.org/rfc/rfc4028.txt for additional information regarding use of Session timers in SIP.

Support for Early Media through MSML Media Server Interface

Service Update 1 adds support for Early Media through MSML Media Server Interface. This feature when enabled modifies the MSML media server operational behavior to start media sessions (i.e., the RTP Receive port) in unison with sending a 200 OK containing an offer SDP. The media session is configured based on the preferred codec, which is specified by listed order in the SDP. The local receive port is initialized and configured to accept RTP packets. Once the media server starts receiving an RTP stream, it will detect if the streams payload type matches the configured settings. Upon satisfying a payload type mismatch criteria, the media server will transition to a new coder configuration corresponding to the RTP stream's coder type as specified by the payload type of the incoming packets.

The Early Media feature is disabled by default. The feature is enabled through the PowerMedia XMS Admin Console under **MSML Advanced Configuration** page of the **MSML** menu by setting the **Early Media Audio** parameter to "yes" and clicking the **Apply** button.

Limitations

This feature is restricted to audio profile types as defined in RFC 3551 http://www.ietf.org/rfc/rfc3551.txt. Only static payload types are supported. This feature is restricted to two coders types, G.711 and G.729.

7. Release Issues

This section lists the issues that may affect the PowerMedia XMS Release 2.0.

Limitations

The following limitations apply to this release:

- Only the 16 bit/16 KHz record file format is supported.
- The Play prompt file types supported are:
  – wav: 16 bit/16 KHz and 8 bit/8 KHz
  – alaw and ulaw: 8 bit/8 KHz
  The file extension determines the encoding law, as in .alaw or .ulaw.

Issues Table

The table below lists issues that affect the PowerMedia XMS Release 2.0. The following information is provided for each issue:

Issue Type

This classifies the type of release issue based on its effect on users and its disposition:

- Known – A minor issue. This category includes interoperability issues and compatibility issues. Known issues are still open but may or may not be fixed in the future.
- Known (permanent) – A known issue or limitation that is not intended to be fixed in the future.
- Resolved – An issue that was resolved (usually either fixed or documented) in this release.

Defect No.

A unique identification number that is used to track each issue reported.

SU No.

For defects that were resolved in a Service Update, the Service Update number is shown.

Product or Component

The product or component to which the problem relates; for example, an API.

Description

A summary description of the issue. For non-resolved issues, a workaround is included when available.

Issues Sorted by Type, PowerMedia XMS Release 2.0

Issue Type	Defect No.	SU No.	Product or Component	Description
Resolved	IPY00116714	5	MSML	When fetching prompts from HTTP server, there is a crash on the MSML Media Server.
Resolved	IPY00116593	5	MSML	When removing and adding connection to a conference on XMS, there is a crash on the Media Server.
Resolved	IPY00116509	5	MSML	When SIP ACK carries a hold SDP answer, XMS responds with a BYE.
Resolved	IPY00116477	5	MSML	The MSML Media Server deadlocks after announcements are expired from cache and web server is unavailable.
Resolved	IPY00116430	5	MSML	MSML announcements and recordings can fail when a single HTTP server is unavailable.
Resolved	IPY00115554	5	MSML	HTTP "External Document Fetch Error" is returned instead of "Put Error" when web server is unavailable.
Resolved	IPY00116666	5	XMS	Under rare conditions, a media engine segmentation fault is observed.
Known	XMS-1220	5	HMP	Under rare conditions, there is a crash when playing 16k 16bit prompts from HTTP server.
Resolved	IPY00116343	3	MSML	Joining 2 call legs (bridge connection) sometimes result in a "Response Code = 500, Description = Create Streams has failed" error message.
Resolved	IPY00116253	3	MSML	XMS sends BYE if it receives re-INVITE with a=recvonly in the SDP.

Issue Type	Defect No.	SU No.	Product or Component	Description
Resolved	IPY00116078	3	XMS	Intermittent hang when shutting down XMS, which requires powering off to recover.
Resolved	IPY00116096	2	MSML	XMS does not stop sending MSML messages when call leg has ended. In some cases, this caused XMS to send MSML messages on an incorrect call leg.
Resolved	IPY00116061	2	MSML	Intermittent MSML play dialog returns 200 OK with 502 "No resource to fulfill request" resulting in no audio.
Resolved	IPY00115796	2	MSML	Compatibility issue with SIP session timers, WebUI parameter added to control behavior.
Resolved	IPY00116095	2	XMS	Script file installed in crontab during XMS install is in DOS file format.
Resolved	IPY00115438	1	Conferencing	One way media on some long lived (over 6 days) calls in conference.
Resolved	IPY00115365	1	Conferencing	Intermittent one way audio with calls placed into conference.
Resolved	IPY00115655	1	MSML	The MSML Media Server will segmentation fault intermittently when unjoining and joining the same connection.
Resolved	IPY00115534	1	MSML	The MSML Media Server will segmentation fault in some cases when mixing <var> and audio files.
Resolved	IPY00115417	1	MSML	The MSML Media Server will not play audio fetched via HTTP with chunked encoding.

Issue Type	Defect No.	SU No.	Product or Component	Description
Resolved	IPY00115371	1	MSML	The MSML Media Server stops processing calls after HTTP server fails and recovers.
Resolved	IPY00115350	1	MSML	The MSML Media Server was not allowing DTMFs to pass thru the conference when <clamp dtmf=''false''> was sent.
Resolved	IPY00102771	1	MSML	The MSML Media Server responds with "Bad Request - Invalid Dialog Id Requested" during DTMF detect under load.
Resolved	IPY00102592	1	MSML	The MSML Media Server attempts to fetch HTTP announcement after 404 file not found had already returned, resulting in garbled audio being played.
Resolved	IPY00102516	1	MSML	The MSML Media Server does not refresh the session when "refresher=uas" is specified.
Resolved	IPY00102512	1	MSML	The MSML Media Server does not honor the OFFERED preferred codec list during SDP negotiation.
Resolved	IPY00102452	1	MSML	G.726 codec errors when handling calls.
Resolved	IPY00102449	1	MSML	The MSML Media Server fails to respond with a 200 OK to an INVITE with a disabled audio stream (audio m= line contains port 0).
Resolved	IPY00102398	1	MSML	The maxptime in SDP was ignored and not parsed.
Resolved	IPY00102351	1	MSML	The MSML Media Server does not refresh the session when "refresher=uas" is specified.

Issue Type	Defect No.	SU No.	Product or Component	Description
Resolved	IPY00102264	1	MSML	Clearing a cancelled call results in a BYE being transmitted from the Media Server.
Resolved	IPY00102159	1	MSML	The MSML Media Server unjoin failures when using wildcard "*".
Resolved	IPY00102370	1	WebUI	NFS Mount Points, Maintenance, and Account Manager tabs are missing when using Internet Explorer (IE) in compatibility mode.
Known	IPY00092127	--	JSR 309 Connector	OCCAS shows "session is already invalidated" in some situations during releasing. This has no negative impact. When the session timer expires, per SIP specification, the JSR 309 Connector is required to send a BYE message to the XMS. The problem is that if sipd on the XMS was killed, that's what caused the session timer to expire, then it will never be able to receive nor respond to the sip BYE message. The OCCAS tries to resend the message several times and then prints this message indicating that the session is invalidated and therefore cannot deliver the message.

Issue Type	Defect No.	SU No.	Product or Component	Description

Known	IPY00101220	--	VXML	Playing .ulaw and .alaw files fail when fetching from a Web server, but work fine when fetching local audio files of these types. This issue appears to be related to remote Web server mime-type settings. Refer to the Web server configuration to set .ulaw and .alaw file extension respectively to audio/basic and audio/x-alaw-basic. Tomcat web server configuration example:
				`/tomcat/conf/web.xml`
				`<mime-mapping>`
				`<extension>ulaw</extension>`
				`<mime-type>audio/basic</mime-type>`
				`</mime-mapping>`
				`<mime-mapping>`
				`<extension>alaw</extension>`
				`<mime-type>audio/x-alaw-basic</mime-type>`
				`</mime-mapping>`

Known	IPY00101279	--	VXML	A NoMatch event is received instead of a NoInput event during hotword barge-in.
Known	IPY00101313	--	VXML 2.0	Conformance test cases 505 & 506: Unsupported language is not triggering an unsupported.language event. The speech recognition continues and triggers a NoInput event instead of unsupported.language.
Known	IPY00101343	--	VXML 2.1	The recordutterance property is being ignored leaving shadow variables like recording, recordingsize, and recordingduration left undefined.
Known (permanent)	IPY00102496	--	MSML	Simultaneous play and record with record beep is not possible because both play and record cannot transmit to the same connection.

Issue Type	Defect No.	SU No.	Product or Component	Description
Known (permanent)	IPY00102025	--	MSML	MSML returns error when using the var element with "duration" type and "yrs" subtype.

8. Related Documentation

This section provides information about the documentation that supports the PowerMedia XMS Release 2.0.

The following documents are available for the PowerMedia XMS Release 2.0 at http://www.dialogic.com/manuals/xms/xms2.0.aspx.

Document	Description
Dialogic® PowerMedia™ XMS Release 2.0 Release Notes	Addresses new features and issues associated with PowerMedia XMS Release 2.0.
Dialogic® PowerMedia™ XMS Quick Start Guide	Describes how to install software, access the PowerMedia XMS Admin Console for configuration management, and run the verification demo.
Dialogic® PowerMedia™ XMS Installation and Configuration Guide	Provides instructions for installing, configuring, administering, and maintaining PowerMedia XMS.
Dialogic® PowerMedia™ XMS RESTful API Developer's Guide	Provides information for application developers using this media control and a SIP Call Control interface to control the features provided by PowerMedia XMS.
Dialogic® PowerMedia™ XMS RESTful Management API Developer's Guide	Provides an alternative method of performing PowerMedia XMS system management tasks in an automated or distributed manner.
Dialogic® PowerMedia™ XMS VoiceXML Reference Guide	Contains an alphabetical reference of supported VoiceXML elements and provides information about application properties, SSML support, session variables, and application variables.

Document	Description
Dialogic® MSML Media Server Software User's Guide	Provides guidelines for using the Media Sessions Markup Language (MSML) software. The MSML media server software enables a remote client, also known as an Application Server (AS), to control media resources on a media server (MS). The connection between the AS and MS is established using the SIP protocol, thereafter media control commands/responses (in the form of MSML control syntax) are exchanged in SIP messages, such as the INFO message or the 200 OK response.
JSR 309 Connector Software for Dialogic® PowerMedia™ XMS Quick Start Guide	Describes the JSR 309 Connector, provides installation and configuration information, and describes the test servlets included in PowerMedia XMS.