RADVISION

RADVISION Multimedia Terminal Framework version 2.5.1.54 Release Notes
November, 2007

This document contains late-breaking and other information that supplements the Multimedia Terminal Framework version 2.5.1.54 documentation.

Contents

1. General Description

This release is version 2.5.1.54 of the RADVISION Multimedia Terminal Framework. The Multimedia Terminal Framework is a set of modules that simplifies the task of building an IAD, IP Phone or Videophone using SIP.

The Multimedia Terminal Framework consists of the following components:

- Multimedia Terminal Framework version 2.5.1.54
- SIP Stack version 4.5.0.28
- SDP Stack version 3.1.0.21
- Common Core version 1.2.14

The Multimedia Terminal Framework supports a number of VoIP Phone models:

- SIP IP Phone or Videophone—A phone that offers features commonly found in business phones, such as multiple line appearance, LCD displays, speaker phone, and supplemental services such as Hold, Transfer, and Conference.

- Residential Gateway—A small device to which a number of traditional analog phones can be connected. Supports basic calls and caller ID only, but may support supplementary services.

The Multimedia Terminal Framework contains a sample application (MtfSipSample), which demonstrates how an IP Phone or a Videophone can be constructed by using the Multimedia Terminal Framework.

2. Multimedia Terminal Framework Design

- Object-oriented design in ANSI C
- Multiple operating system support

3. Package Contents

This package contains the following files:

1. **Source Code***
    - □ rvmtf_sip_basic_<OS>_Source_2.5.zip
    - □ rvmtf_sip_StunAddon_<OS>_Source_2.5.zip
    - □ rvmtf_sip_TlsAddon_<OS>_Source_2.5.zip
    - □ rvmtf_sip_VideoAddon_<OS>_Source_2.5.zip

    * The files contained in the package depend on the licensed operating system.
2. **Test Applications**
    - □ rvmtf_gui_media_windows_binaries.zip—for customers who do not have the Media add-on
    - □ rvmtf_gui_media_windows_source.zip—for customers who do not have the Media add-on
    - □ rvmtf_gui_no_media_windows_binaries.zip—for customers who have the Media add-on
    - □ rvmtf_gui_no_media_windows_source.zip—for customers who have the Media add-on
3. **Documentation**
    - □ rv_mtf_docs_2.5.zip

The package contains the source code for the Multimedia Terminal Framework, including the SIP Stack and the SDP Stack. The following directories are of interest:

- MTF—The following files contain the source libraries of the Multimedia Terminal Framework API:
    - □ MDM Control—The directory mdmControlApi contains Multimedia Terminal Framework API files.

  - □ SIP Control—The directory sipControlApi contains Multimedia Terminal Framework API files.
  - □ Call Control—The file rvCallControlApi.h contains Multimedia Terminal Framework API.
  - □ MDM—This library contains the Multimedia Terminal Framework API files.
- MtfSipSample—This directory contains the source code for the sample application.
- MtfGuiApplication—Phone simulator to run with the sample application.

The exact usage and contents of each component is covered in the product documentation.

4. Documentation Information

The documentation zip file contains the following documents:

- RADVISION_Multimedia_Terminal_Framework_Programmer_Guide_v2.5.1.54_200711.pdf
- RADVISION_Multimedia_Terminal_Framework_Reference_Guide_v2.5.1.54_200711.pdf
- RADVISION_Multimedia_Terminal_Framework_Online_Reference_HTML_v2.5.1.54_200711 (HTML help)
- RADVISION_Multimedia_Terminal_Framework_Online_Reference_v2.5.1.54_200711 (.chm format)
- RADVISION_Multimedia_Terminal_Framework_Release_Notes_v2.5.1.54_200711.pdf
- RADVISION_SDP_Stack_Prog _Ref_Guide_v3.1.0.21_200711.pdf
- RADVISION_Porting_Guide_v1.2_200711.pdf

5. Installation Procedure

The Multimedia Terminal Framework is installed as follows:

1. Create a directory named "rv" and two subdirectories under the "rv" directory, named "doc," and "src".
2. Unzip all source zip files into the "src" directory, and the documentation zip file into the "doc" directory created in Step 1.
3. Refer to the readme file (RADVISION Multimedia Terminal Framework version 2_5 Readme File.htm) for information on installing and building the Multimedia Terminal Framework libraries and the sample application.
4. Refer to the Multimedia Terminal Framework Programmer Guide for information on using the SIP sample application program (MtfSipSample) and the GUI application.

6. Compilation Configurations

According to the readme file.

7. New Features

The following is a summary of added features and functionality in the Multimedia Terminal Framework. Full details of these features can be found in the documentation accompanying the release.

- **Upgrade to SIP 4.5**—The latest RADVISION SIP Stack, version 4.5, includes support for IMS features.
- **Early Media**—The Multimedia Terminal Framework enables an external callee to connect media before a final INVITE response is sent. This is done when 183 Call In Progress is received with a SDP body.
- **Distinctive Ringing**—Allows the sender of an INVITE or 180 Ringing message to instruct the receiver of the message to play a non-default Ringing/Ringback tone according to the content of the Alert-Info header in the message.
- **PRACK**—The Multimedia Terminal Framework supports the Reliable Provisional Request mechanism by sending a PRACK response to provisional requests.
- **Advanced DNS**—The Multimedia Terminal Framework enables the user application to use the Advanced DNS supported in the SIP Stack, which supports the client DNS procedures defined in RFC 3263 and RFC 3824. This includes usage of NAPTR and SRV DNS queries and the ability to maintain a list of resolved addresses that the application can try one after the other in case of a send failure. The Multimedia Terminal Framework supports Advanced DNS for Invite and Register messages only. The most common use of Advanced DNS in the Multimedia Terminal Framework is for locating SIP Servers (RFC 3263).
- **New Dialing API**—Previously the Multimedia Terminal Framework enabled the user to establish a call by collecting one digit at a time. With this API the Multimedia Terminal Framework enables the user to make a call with a destination address (any valid SIP address).
- **Cache Allocations**—In earlier versions, the Multimedia Terminal Framework allocated memory dynamically. In the current version, the Multimedia Terminal Framework still uses dynamic allocations by default, but may be set to work with cached allocations by using the Cache Allocator module. When using the Cache Allocator, memory blocks are allocated at startup and additional memory blocks are allocated or deallocated during runtime according to Multimedia Terminal Framework memory consumption. This reduces the number of systems calls or allocations significantly, thereby enhancing performance.

8. Interface Changes

For a description of interface changes, see the Appendix *"What's new in Version 2.5 Patch"* in the Programmer Guide.

9. Supported Operating Systems

This release is supported under the following operating systems:

OS	OS Versions	Compiler	Compiler Versions	Processors Tested	Notes
Windows	2000, XP	Visual C++	6.0	i686	
Redhat Linux	7.3	GNU	2.96	i686	
	9.0 kernel 2.2.16-22	GNU	3.3	i686	
MontaVista	3.0, 3.1	GNU	3.2.1 MontaVista	MCP750 PowerPC	
VxWorks	5.5	GNU	gcc 2.96 or 2.96+	MCP750 PowerPC	Tornado 2.2
	6.0	GNU	gcc 3.3.2	MCP750 PowerPC	Tornado 3.1
	6.1	GNU		MCP750 PowerPC	Tornado 3.1
Suse	9.0 Kernel 2.6.5-7.97	GNU	3.3.3	AMD	
	9.0 Kernel 2.6.5-7.97	GNU	3.3.3	Intel	
	8 Kernel 2.4.19	GNU	3.2	Intel	
WinMobile	5.0	Visual Studio	2005	Intel	PocketPC (ARMI)

For more detailed information about available development environments, please contact RADVISION Support.

Note The **OS Abstraction layer (Common Core)** is the only component of the Multimedia Terminal Framework that is platform-specific. It exports OS services to the other components, such as network services and memory allocation, so that all components of the Multimedia Terminal Framework can be kept platform-independent. For more information about porting the Common Core, see the *Porting Guide for RADVISION Stacks*.

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10. Implementation Notes

None.

11. Known Issues

- STUN—For Outgoing SIP messages with addresses that should be resolved (RvIppStunIsAddressResolveNeededCB returns True), STUN queries will be sent to replace addresses and port numbers in the following fields (one query per header):
  - SIP headers (“via” and “contact”)
  - SDP headers (“origin” and “connection” in the session level; “connection” in the media descriptor level; “media descriptor” and “rtcp” attribute)
- Cache Allocator cannot be configured to zero values in the table rvDefAllocCacheMemoryConfig.
- Conference—Hold indicator continues to be set.
- Transfer on a held call does not work in incoming calls.
- Cannot register to Proxy using a TCP connection.
- SIP PROXY TLS—Call is not completed when one side has PostConnectionAssertFlag=0
- SEMI Transfer and Blind Transfer: 'Referred-By' header with URI is in the SIPS format while the original Invite was sent without TLS (causing the transferred call to be a TLS call, while the original call was not).
- Hold indicator is still on after Semi Transfer on a held call is completed.
- Cannot make IPV6 call with fe80 address on Linux.
- Transfer via Proxy—NOTIFY message is unauthenticated.
- In a Conference Call, the party initiating the conference cannot disconnect one of the parties.

- In a Conference Call, when the party initiating the conference leaves the call, the call between the remaining parties is also disconnected.
- A conference call that is transferred does not work properly.
- If the callback RvIppSipExtPreRegClientStateChangedCB() is called when parameter “autoRegistration” is set to zero, the parameter “RegistrationExpire” is greater than zero, and the first Register message is sent when the timer expires (and not by the user application), then “mdmTerminalHndl” will be NULL.
- The callback RvMdmTermUnregisterTermCompletedCB is called twice if the termination was registered to the Proxy before shutdown.
- A call that was put on Hold by the user (local party) cannot be transferred. The user needs to Unhold the call first.

12. Contacting RADVISION Support

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Note When you contact RADVISION technical support, please write the following in the **Subject** field of your e-mail: "Multimedia Terminal Framework version 2.5.1.54 question" and a summary/headline describing the problem.

RADVISION website http://www.radvision.com