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ShoreTel Mobility Router Platform Support Guide

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Company Information

ShoreTel, Inc.
960 Stewart Drive
Sunnyvale, California 94085 USA
+1.408.331.3300
+1.408.331.3333 (fax)
www.shoretel.com

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Before You Start

This guide is written for the Administrator of the ShoreTel Mobility Router and is used in conjunction with the ShoreTel Mobility Solution. For more information on related components and documentation, refer to [“Related Documentation” on page iii](#).

Organization

This guide is documented as described in the following sections.

Table 1: In this Guide

Chapter	Title	Description
1	System Support	Describes system and hardware support for the ShoreTel Mobility Router.
2	Device Support	Describes the supported devices and codecs for the ShoreTel Mobility Router.

Related Documentation

Publications in the ShoreTel Mobility solution documentation suite include the following:

- ShoreTel Mobility Router Platform Support Guide (this document)
- ShoreTel Mobility Router Hardware Installation Guide
- ShoreTel Mobility Router Administration Guide
- ShoreTel Mobility Virtual Mobility Router (vSMR) Deployment Guide
- ShoreTel Mobility (mobile device) User's Guide
- ShoreTel Mobility (mobile device) Quick Reference Card
- ShoreTel Mobility Release Notes

CHAPTER

1

System Support

This chapter describes system and hardware support for the ShoreTel Mobility Router.

- [“ShoreTel Mobility Hardware” on page 2](#)
- [“Web Browsers” on page 2](#)
- [“IP PBX Platforms” on page 2](#)
- [“Mobility Platform Scalability” on page 4](#)
- [“Unified Communications Systems \(IM, Presence\)” on page 4](#)
- [“Gateway Requirements” on page 4](#)
- [“WLAN Requirements” on page 5](#)
- [“ShoreTel Virtual Mobility Hardware” on page 6](#)
- [“Quality of Service” on page 6](#)
- [“Video” on page 7](#)
- [“Supported Server Upgrade Paths” on page 7](#)
- [“Supported Client Upgrade Paths” on page 7](#)
- [“Cellular Carriers” on page 8](#)

ShoreTel Mobility Hardware

ShoreTel Mobility is supported on the following Mobility Router platforms:

- ShoreTel Mobility Router 2000
- ShoreTel Mobility Router 4000
- ShoreTel Mobility Router 6000

Web Browsers

The following Web browsers are qualified by ShoreTel:

- Microsoft Internet Explorer 10.0 and 11.0, or last two versions released and available to QA four weeks prior to phase change to Alpha, Beta, and CR or GA

All Web browsers must have the Adobe Flash 11 or later plug-in installed.

IP PBX Platforms

The following IP-PBX platforms are supported:

- **ShoreTel 12x**, with SIP line-side (where x is the latest GA dot release)
- **ShoreTel 13x** (where x is the latest GA dot release)
- **ShoreTel 14x** (where x is the latest GA dot release)
 - **ShoreTel 14.2 Build 19.43.1700.0+** is required for ShoreTel Communicator Integration.
- **ShoreTel Small Business Edition** 12.x, 13.x, 14.x
- **ShoreTel Sky** CC5.5, CC5.6
- **Avaya**: This Mobility release supports Avaya IP PBX versions:
 - Avaya Aura Session Manager and Avaya Aura Communication Manager with SIP line-side, version 6.1
 - Avaya Nortel CS1000, version 6.0 and version 6.1 with SIP line-side
- **Cisco**: This Mobility release supports Cisco IP PBX versions:
 - Cisco Unified Communications Manager version 6.0, 6.1.2, 7.0 and 8.5 with SIP line-side
 - Cisco Unified Call Manager w/AT&T IP Flex Integration, version 7.1.5

- Other: This Mobility release supports TDM-based PBXs when deployed with a TDM-to-SIP voice gateway for trunk-side

Mobility Platform Scalability

Table 1 lists the scalability parameters for the ShoreTel Mobility Router.

Table 1: ShoreTel Mobility Router Scalability

Mobility Router	Max Users	Max Calls	Max Calls with Transcoding	Max SRV Users	Max SRV Calls
2000	100	100	50	100	20
4000	1000	500	300	500	200
6000	5000	2000	1250	2500	1000

Table 2 lists the scalability parameters for the ShoreTel Virtual Mobility Router.

Table 2: ShoreTel Virtual Mobility Router Scalability

Virtual Mobility Router (MRVirtual)	Max Users	Max Calls	Max Calls with Transcoding	Max SRV Users	Max SRV Calls
mrVirtual 1000	1000	500	300	500	200

Unified Communications Systems (IM, Presence)

The following systems are qualified for IM and Presence support:

- Microsoft OCS 2007/2007 R2 with Microsoft Communicator Web Access (CWA)
- Microsoft Lync 2010 with Microsoft Communicator Web Access (CWA)

Gateway Requirements

An IP voice-enabled gateway with the following specifications is required:

- Jitterbuffer (adaptive Jitterbuffer with a recommended setting of at least 200 ms or greater)
- G.711 compliant (20 ms sample period)

The following gateway features are recommended if available:

- DTMF Relay using RFC 2833
- G.729 and/or iLBC codecs to enable additional codec options for deployments

WLAN Requirements

To integrate the Mobility Router, there are no required WLAN configuration settings. The WLAN should, however, meet the following requirements:

- Voice-ready with approximately one access point every 3,000 to 5,000 square feet.
- Enable Unscheduled Automatic Power Save Delivery (U-APSD) on WLAN controllers.
- For fingerprint support, broadcast SSID must be enabled.
- 802.11 retries should be set to a minimum of 5 retries.
- If a separate ESSID is deployed for voice, then it is recommended to remove the 54 Mbps data rate from the list of supported rates to improve performance.
- A fast roaming security protocol is recommended. The security protocol must also be supported by the mobile device. For example:
 - EAP -FAST
 - Cisco CCKM or PKC
 - WPA2 Enterprise with Proactive Key Caching
 - WPA Personal
 - WPA2 Personal (Pre-shared Key)
 - 802.11R

ShoreTel Virtual Mobility Hardware

Virtual ShoreTel Mobility Router recommended configuration:

- 4 Virtual CPUs, minimum
- 4G RAM
- 100G disk space
- 2 network interfaces

VMware Virtual Environment

The following versions of VMware are supported:

- VMWare vSphere ESXi 5.1 or 5.5



Notes for VMWare Support:

High Availability and VMWare vSphere vMotion are supported.

Fault Tolerance is not supported. VMware does not support this feature across multiple CPUs.

Snapshots are not supported. Snapshots can consume significant CPU and memory resources impacting system operation.

Quality of Service

Currently, ShoreTel recommends the following:

- Keeping the Quality of Service setting for the Cisco WLAN Solution to the default of Silver/Best Effort.
- Enabling the voice module within Aruba WLAN controllers to ensure high-quality VoIP experience.
- Enabling WMM and WMM-Power Save settings on voice SSID.

Video

Supported between two video-enabled ShoreTel Mobility Clients or between one ShoreTel Mobility Client and one Communicator for Windows.

Video is limited to 1 simultaneous video call on the ShoreTel Mobility Client.

ShoreTel Mobility video conferencing is supported on:

- LifeSize UVC Multipoint
- Polycom RMX



Note:

ShoreTel Mobility video is not supported if the LifeSize or Polycom equipment is configured as an H.323 client only (no SIP support).

Video codecs supported:

- H.264/SVC (ShoreTel end-point to ShoreTel end-point only)
- H.264/AVC

Refer to [“Video Conference System Support Matrix” on page 13](#) for details on supported models and versions.

Supported Server Upgrade Paths

Upgrade paths are supported as listed below (2 latest):

- 7.0 -> 8.0
- 7.1 -> 8.0

The Release 9.0 upgrades only the client and not the server.

Supported Client Upgrade Paths

Upgrade paths are supported as listed below (3 latest):

- 7.0 -> 8.0
- 7.1 -> 8.0
- 8.0 -> 9.0

The SMC 9.0 client supports SMR 7.1 and 8.0 only.

Cellular Carriers

The following cellular carriers are qualified:

- AT&T Wireless
- Bell Canada
- Sprint Nextel
- T-Mobile
- Verizon Wireless

All international carriers are compatible.

CHAPTER

2

Device Support

This chapter describes the supported devices and codecs for the ShoreTel Mobility Router:

- [“Mobile Device Supported Operating System per Platform” on page 10](#)
- [“Mobile Device Support Matrix” on page 11](#)
- [“Video Conference System Support Matrix” on page 13](#)
- [“Mobile Device Supported Features Matrix” on page 14](#)
- [“Supported Codecs” on page 15](#)

Mobile Device Supported Operating System per Platform

[Table 1](#) lists the supported operating system per mobile device platform for ShoreTel Mobility. Refer to [“Mobile Device Supported Operating System per Platform” on page 10](#) for a more detailed breakdown of ShoreTel Mobility-compatible devices per operating system.

Table 1: Mobile Device OS by Platform

Mobile Device OS	Version
Android	4.0+
BlackBerry	7.0+
iOS	7.0+

Mobile Device Support Matrix

Table 2 lists the compatible mobile devices for ShoreTel Mobility.

Table 2: Compatible Mobile Devices

Mobile Device	Version	Carrier	ShoreTel Mobility 9.0
Android®			
Google Nexus 5 (LG-D820)	4.4.2	GSM	☑
Google Nexus 7 (ME571K)	4.3		☑
HTC One	4.3	AT&T	☑
HTC One X	4.0.3	AT&T	☑
HTC One X Plus	4.1.1	AT&T	☑
LG Nexus 4 (Nexus 4)	4.4.2	GSM	☑
Motorola Moto X (XT1058)	4.3	AT&T	☑
Motorola Moto X (XT1060)	4.4	Verizon	☑
Samsung Galaxy S3 (SGH-GT-i9300) (International version)	4.1.2	GSM	☑
Samsung Galaxy S3 (SGH-i747) (U.S. version)	4.0.4, 4.1.1	AT&T	☑
Samsung Galaxy S4 (SGH-i337)	4.2	AT&T	☑
Samsung Galaxy S4 (SGH-i537)	4.2	AT&T	☑
Samsung Galaxy S4 (SGH-i545)	4.2	Verizon	☑
Samsung Galaxy S4 (SGH-GT-i9500) (International version)	4.4.2	GSM	☑
Samsung Galaxy S4 (SGH-GT-i9505) (International version) (Google Edition)	4.3	GSM	☑
Samsung Galaxy S4 (SGH-GT-i9505)	4.4	GSM	☑
Samsung Galaxy S5 (SM-G870A)	4.4.2	AT&T	☑
Samsung Galaxy S5 (SM-G900V)	4.4.2	Verizon	☑
Samsung Galaxy Note II (Galaxy Nexus)	4.1	Verizon	☑
Samsung Galaxy Note 3 (SM-N900A)	4.4.2	AT&T	☑
Samsung Galaxy Note 3 (SM-900V)	4.3	Verizon	☑
Samsung Galaxy Rugby Pro (SGH-i547)	4.1	AT&T	☑
Sony Xperia Ion (LT28aat)	4.0.4	AT&T	☑
BlackBerry® OS			
RIM BlackBerry® Curve® 9310	7.1.0.714	AT&T	☑
RIM BlackBerry® Curve® 9360	7.1.0.714	AT&T	☑
RIM BlackBerry® Curve® 9370	7.1.0.163	Verizon	☑
RIM BlackBerry® Bold® 9790	7.1.0.714	AT&T	☑
RIM BlackBerry® Torch® 9810	7.1.0.714	AT&T	☑

Table 2: Compatible Mobile Devices (Continued)

Mobile Device	Version	Carrier	ShoreTel Mobility 9.0
RIM BlackBerry® Torch® 9850	7.1.0.163, 7.0.0.374	Verizon	<input checked="" type="checkbox"/>
RIM BlackBerry® Torch® 9860	7.0.0.444	AT&T	<input checked="" type="checkbox"/>
RIM BlackBerry® Bold® 9900	7.1.0.714	Verizon	<input checked="" type="checkbox"/>
RIM BlackBerry® Bold® 9930	7.1.0.163, 7.0.0.374	Verizon	<input checked="" type="checkbox"/>
iOS®			
iPhone® 6	8.1	AT&T, Verizon	<input checked="" type="checkbox"/>
iPhone® 5	7.0, 7.1, 8.1	AT&T, Verizon, Sprint	<input checked="" type="checkbox"/>
iPhone® 5s	7.0, 7.1, 8.1	AT&T, Verizon, Sprint	<input checked="" type="checkbox"/>
iPhone® 5c	7.0, 7.1, 8.1	AT&T, Verizon, Sprint	<input checked="" type="checkbox"/>
iPhone® 4S	7.0, 7.1, 8.1	AT&T, Verizon, Sprint	<input checked="" type="checkbox"/>
iPhone® 4	7.0, 7.1	AT&T, Verizon	<input checked="" type="checkbox"/>
iPad 2®	7.0, 8.1	AT&T, Verizon	<input checked="" type="checkbox"/>
iPad - 3rd Generation®	7.0, 8.1	AT&T, Verizon	<input checked="" type="checkbox"/>
iPad - 4th Generation®	7.0, 7.1, 8.1	AT&T, Verizon	<input checked="" type="checkbox"/>
iPad Mini	7.0, 7.1, 8.1		<input checked="" type="checkbox"/>
iPad Mini with Retina	7.0, 7.1, 8.1		<input checked="" type="checkbox"/>
iPad Air	7.0, 7.1, 8.1	AT&T, Verizon	<input checked="" type="checkbox"/>
iPod touch - 5th Generation®	7.0, 8.1		<input checked="" type="checkbox"/>

Video Conference System Support Matrix

Table 3 lists the compatible video conference systems for ShoreTel Mobility.

Table 3: Compatible Video Devices

System	Model	Version
LifeSize	Team MP	LS-TM1-4.7.17 (1)
LifeSize	Room 220	LS_RM1_4.6.19 (3)
Polycom	HDX6000	3.0.3-14451
Polycom	HDX8000	3.1.1.3-36019, 3.04 -20259
Polycom	MCU RMX 2000	7.6.0.172

Mobile Device Supported Features Matrix

Table 4 lists the features per mobile device platform for ShoreTel Mobility.

Table 4: Mobile Device Features by Platform

Feature	Android	BlackBerry (CDMA)	BlackBerry (GSM/HSPA)	iOS
Video****	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>
Presence	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Instant Message	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
VoIP over Wi-Fi	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
VoIP over 3G/4G*	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Reverse Dial	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Country-based Local Access Numbers	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Personal Dial	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Conference on Cellular			<input checked="" type="checkbox"/>	
Transfer on Cellular			<input checked="" type="checkbox"/>	
Visual Voice mail**	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Extension Assignment**	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Call Handling Modes**	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
ShoreTel Dock***				<input checked="" type="checkbox"/>

* VoIP over 3G/4G not supported on Wi-Fi only iPad and iPod touch devices.

** Supported on ShoreTel IP-PBX ST12.3 - Build 17.61.9000.0, ST13.1+, and ST14+

*** ShoreTel Dock supports iPhone and iPad devices with 30-pin and "Lightning" connections using ShoreTel Mobility 7.1+ and iOS 7.1+.

**** Supported on ShoreTel IP-PBX ST14.2 - Build 19.43.1700.0+

Supported Codecs

Table 5 lists the supported Codecs per device platform for ShoreTel Mobility.

Table 5: ShoreTel Mobility Router Device Codec Support

Mobile Device	Android	BlackBerry (CDMA)	BlackBerry (GSM/HSPA)	iOS
H.264/SVC *	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>
H.264/AVC	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>
AMR		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
iLBC	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>
G.711 a-law	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
G.711 u-law	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
G.729b				<input checked="" type="checkbox"/>

* H.264/SVC (ShoreTel end-point to ShoreTel end-point only)