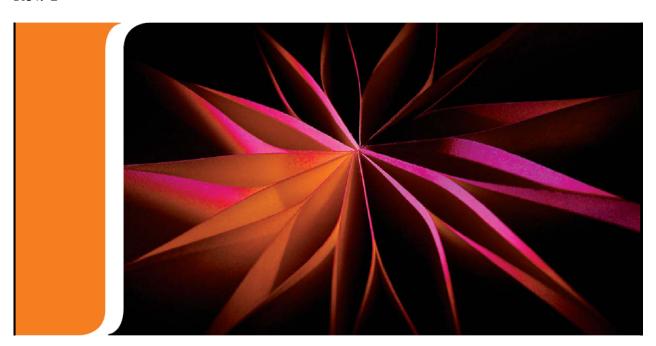


ShoreTel Mobility Version 4.6 Platform Support Guide

Rev. 1



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Version Information

ShoreTel Mobility Platform Support Guide, Version 4.6

Document Version: 1.0 Part Number: 800-1587-01 Date: December 12, 2011

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This document describes the hardware and software supported by ShoreTel Mobility Version 4.6. This document contains the following sections:

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- "Web Browsers" on page 2
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ShoreTel Mobility Hardware

ShoreTel Mobility is supported on the following Mobility Router platforms:

- ShoreTel Mobility Router 2000
- ShoreTel Mobility Router 2000, Rev. 2
- ShoreTel Mobility Router 4000
- ShoreTel Mobility Router 4000, Rev. 2
- ShoreTel Mobility Router 6000

Web Browsers

The following Web browsers are qualified by ShoreTel:

- Microsoft Internet Explorer, versions 8 and 9
- Mozilla Firefox¹ 3.x and 4.x

NOTE Uploading from browser functionality is not supported with Mozilla.

The following Web browser is compatible:

• The Apple Safari¹ Web browser (version 5.x running on Mac OS X 10.6 or later).

All Web browsers must have the Adobe Flash 10 or later plug-in installed.

^{1.} Uploading from browser functionality is not supported with this browser.

IP PBX Platforms

ShoreTel tests the core and advanced functionality of ShoreTel Mobility on the most widely used corporate platforms to assign a "qualified" or "compatible" rating:

- Qualified—Indicates that the ShoreTel Quality Assurance program has performed
 extensive internal testing on the respective platforms as part of our General
 Availability (GA) criteria. We stand behind the ShoreTel Mobility components when
 deployed on qualified platforms. If ShoreTel Mobility components do not interoperate
 as expected on qualified platforms, ShoreTel will actively troubleshoot and resolve any
 issues.
- Compatible—Platforms listed in the compatible category have not been systematically
 tested by the ShoreTel Quality Assurance program. Compatibility is assessed based on
 prior knowledge of cases when ShoreTel Mobility is known to have worked with the
 respective platforms, based on the ShoreTel Mobility architecture and solution
 requirements. If ShoreTel Mobility components do not interoperate as expected on
 compatible platforms, ShoreTel will actively troubleshoot any issues.

The following IP PBX platforms are qualified:

- Avaya Communication Manager 3.0 with SIP line-side with Avaya SIP Enablement Services 3.1
- Avaya Aura Session Manager and Avaya Aura Communication Manager version 6.1 with SIP line-side
- Avaya Communication Manager 5.0 or later with SIP line-side
- Cisco Call Manager version 4.x with SIP trunk-side
- Cisco Unified Communications Manager version 5.0, 5.1, 6.0, 6.1.2, and 7.0 with SIP line-side
- Cisco Unified Communications Manager version 8.5 with SIP line-side
- Cisco Access Control Server version, version xx
- Microsoft OCS 2007 and Microsoft OCS 2007 R2 with trunk-side
- Microsoft Lync 2010 with Microsoft OCS 2007 R2 CWA with trunk-side
- Nortel CS1000 7.5 with SIP line-side
- Mitel 3300 ICP 8.0+
- Nortel CS1000 6.0 and 6.1 with SIP line-side
- Nortel CS2100 with SIP line-side
- ShoreTel 11.2 (build 16.42.8411.0+) with SIP line-side
- ShoreTel 12 (build 17.10.1730.0+) with SIP line-side
- ShoreTel 12.1 with SIP line-side

- TDM-based PBXs when deployed with a TDM-to-SIP voice gateway for trunk-side
- other SIP PBXs with trunk-side

The following IP-PBX platforms include supported documentation:

- ShoreTel Mobility Router Integration Guide: Cisco Unified Call Manager with SIP line-side version 5.0 or version 7.0
- ShoreTel Mobility Router Integration Guide: Avaya Communication Manager with SIP line-side, version 5.x
- ShoreTel Mobility Router Integration Guide: Avaya Aura Session Manager and Avaya Aura Communication Manager with SIP line-side, version 6.1
- ShoreTel Mobility Router Integration Guide: Cisco Unified Call Manager w/AT&T IP Flex Integration, version 7.1.5
- ShoreTel Integration Guide: Microsoft Lync 2010 with Microsoft OCS 2007 R2 CWA with trunk-side
- ShoreTel Mobility Router Integration Guide: Nortel CS1000
- ShoreTel Mobility Router Integration Guide: ShoreTel version 11.2, 12, 12.1
- ShoreTel Mobility Router Integration Guide: Trunk Mode

The following platforms are not supported:

- ShoreTel Enterprise Contact Center
- ShoreTel Small Business Edition Core (SBE Core)

Mobility Platform Scalability

Table 2-1 lists the scalability parameters for the ShoreTel Mobility.

Table 2-1. 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 |

Unified Communications Systems (IM, Presence)

The following systems are qualified for IM and Presence support:

• Openfire Server (XMPP) version 3.7

The following systems are qualified for Presence support:

- Microsoft OCS 2007
- Microsoft OCS 2007 R2
- Microsoft Lync 2010

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:
 - o EAP -FAST
 - Cisco CCKM or PKC
 - WPA2 Enterprise with Proactive Key Caching
 - o WPA Personal
 - o WPA2 Personal (Pre-shared Key)
 - 802.11R

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.

Cellular Carriers

The following cellular carriers are qualified:

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

All international carriers are compatible.

Mobile Device Supportability Matrix

Table 2-2 lists the compatible mobile devices for ShoreTel Mobility.

IMPORTANT If you are upgrading from any version of ShoreTel Mobility prior to 4.6 for Apple iOS, RIM BlackBerry, or Nokia smartphones, you will first need to uninstall the "Agito Networks RADialer" application from your mobile device before installing the 4.6 ShoreTel RoamAnywhere Client software. After installing the 4.6 ShoreTel RoamAnywhere Client, end users need to re-provision their device using their initial authentication credentials. This upgrade process is due to the re-branding of the application from Agito Networks to ShoreTel, and is only required once. Future upgrades to versions beyond 4.6 will not require end users to uninstall the old application version.

NOTE The Android OS 2.2 and 2.3 platforms' Wi-Fi Access Point-to-Access Point handover functionality may cause devices to remain connected to the original associated Access Point for an excessive time, resulting in a dropped Wi-Fi connection. The call is handed over to the Cellular network, even when another Wi-Fi Access Point is available with strong signal. This is an Android platform limitation that ShoreTel has no control over. This limitation does not impact calls, however under these circumstances it will result in additional handover occurrences to the cellular network.

Table 2-2. Compatible Mobile Devices

| Mobile Device | VoIP over Wi-Fi | VoIP over Cellular Data | Operating System | ROM Version Tested | Bluetooth on VoIP |
|---|--------------------|-------------------------------|----------------------------|---|----------------------|
| Android® | | | | | |
| Motorola ATRIX 4G | \checkmark | | Android | 2.2.2, 2.3.4 | |
| Motorola Droid | V | | Android | 2.2.2 | |
| HTC Droid Incredible 2 | V | | Android | 2.3.3 | ✓* |
| HTC Thunderbolt | V | | Android | 2.2.1 | * |
| HTC Inspire 4G | \checkmark | | Android | 2.2.1 | ✓* |
| Samsung Galaxy S | V | | Android | 2.2.2 | |
| Samsung Droid Charge 4G | V | | Android | 2.2.2 | ✓* |
| Samsung Infuse 4G | \checkmark | | Android | 2.2.1 | ✓* |
| Samsung Epic 4G | | | Android | 2.2.2 | |
| BlackBerry® VoIP Support | ted | | | | |
| RIM BlackBerry [®] Curve [®] 8520 | | | BlackBerry [®] OS | 4.6.1.272 Note: 4.6.1.286 and 4.6.1 314 are not compatible | Ø |
| RIM BlackBerry [®] Curve [®] 8900 | ☑ | | BlackBerry [®] OS | 4.6.1.231 (Platform 4.2.0.108) 4.6.1.315 (Platform 4.2.0.108) 5.0.0.592 (Bundle 1004, Platform 5.2.0.58) | ☑ |
| RIM BlackBerry® Bold® 9000 | V | V | BlackBerry [®] OS | 5.0.0.1067 | V |

Table 2-2. Compatible Mobile Devices (continued)

| Mobile Device | VoIP over Wi-Fi | VoIP over Cellular Data | Operating System | ROM Version Tested | Bluetooth on VoIP | | |
|--|----------------------------------|---|---|---|----------------------|--|--|
| RIM BlackBerry [®] Bold [®] 9700 | ☑ | | BlackBerry [®] OS | 5.0.0.979, 6.0.0.526** | Ø | | |
| RIM BlackBerry [®] Bold [®] 9780 | V | V | BlackBerry [®] OS | 6.0.0.2647**+ | \square | | |
| RIM BlackBerry [®] Torch [®] 9800 | V | V | BlackBerry [®] OS | 6.0.0.2342**+ | \square | | |
| BlackBerry® VoIP Not Support | ted | | | | | | |
| RIM BlackBerry® Curve® 8320 | | | BlackBerry OS | | | | |
| RIM BlackBerry [®] Curve [®] 8330 | | | BlackBerry OS | | | | |
| RIM BlackBerry [®] Curve [®] 8530 | | BlackBerry [®] OS 4.6.1.259 (Platform 4.2.0.116) | | | | | |
| RIM BlackBerry® 8820 | | | BlackBerry OS | | | | |
| RIM BlackBerry® 8830 | | | BlackBerry OS | | | | |
| RIM BlackBerry [®] Storm2 [®] 9520 | | | BlackBerry OS | | | | |
| RIM BlackBerry [®] Storm2 [®] 9550 | | | BlackBerry [®] OS 5.0.0.320 (Platform 4.2.0.123){17} | | | | |
| RIM BlackBerry [®] Tour [®] 9630 | | | BlackBerry [®] OS | 5.0.0.337 (Platform 4.2.0.136) | | | |
| RIM BlackBerry [®] Bold [®] 9650 | | | BlackBerry [®] OS | 5.0.0.621 (Bundle 1055, Platform 4.2.0.282) | | | |
| iPhone [®] OS | | | | | | | |
| Apple iPhone® 4S ☑ | | | iOS | 5.0 | | | |
| Apple iPhone [®] 3GS ☑ | | | iOS 4.0, 4.2.1, 4.3.5, 5.0 | | ☑ | | |
| Apple iPod touch [®] (4G) | ⁽³⁾ (4G) | | iOS 4.0, 4.2.1, 4.3.5, 5.0 | | | | |
| Apple iPhone [®] 4 (GSM) | pple iPhone [®] 4 (GSM) | | iOS | 4.2.1, 4.3, 5.0 | | | |
| Apple iPhone [®] 4 (CDMA) | ✓ | | iOS | 4.2.6, 5.0 | \square | | |
| Apple iPad [®] | ✓ | | iOS | 4.2.1 | | | |
| Apple iPad2 [®] | ✓ | \square | iOS | 4.3.5, 5.0 | \square | | |
| Apple iPod touch® (2G, 3G) | Ø | | iPhone OS,iOS | 4.2.1 | | | |
| Symbian OS | | | | | | | |
| Nokia E5 | | | Nokia S60, 3.0,3.1,3.2 | Note: 071.003 is not compatible. | V | | |
| Nokia E51 | ☑ | | Nokia S60 3.1 | 100.34.20, 200.34.36 | V | | |
| Nokia E52 | | | Nokia S60 3.2 021.013 | | V | | |
| Nokia E61i | | | Nokia S6o 3.o | | V | | |
| Nokia E63 | V | | Nokia S60 3.1 200.21,012 | | V | | |
| Nokia E65 | V | | Nokia S6o 3.o | | V | | |
| Nokia E66 | | | Nokia S60 3.2 | 100.07.78 | \square | | |

Table 2-2. Compatible Mobile Devices (continued)

| | | VoIP over | | ROM | |
|-------------------|--------------------|------------------|-------------------------|---|-------------------|
| Mobile Device | VoIP over Wi-Fi | Cellular Data | Operating System | Version Tested | Bluetooth on VoIP |
| Nokia E71 | ☑ | | Nokia S60 3.2 | 100.07.127 (Europe) 100.07.76, 110.07.127, 200.21.118, 501.21.001 (United States) | ☑ |
| Nokia E71x (AT&T) | V | | Nokia S60 3.2 FP2 | 03.27 | ☑ |
| Nokia E72 | ✓ | | Nokia S60 3.2 FP2 | 051.018 | |
| Nokia E73 | ✓ | | Nokia S60 3.0, 3.1, 3.2 | | |
| Nokia E90 | ✓ | | Nokia S60 3.1 | | |
| Nokia N95 (4 GB) | ✓ | | Nokia S60 3.1 | | |
| Nokia N95 (8 GB) | V | | Nokia S6o 3.o | | V |
| Nokia N96 | ✓ | | Nokia S60 3.2 FP2 | 12.043 | ✓ |

^{*} On Android devices, Bluetooth support for VoIP calling is an experimental and unsupported feature. You may observe unexpected behavior during VoIP calls when a Bluetooth audio device is connected.

Mobile Device Supported Features

Table 2-3 lists the features per mobile device platform for ShoreTel Mobility.

Table 2-3. Mobile Device Features per Platform

| Mobile Device | Android | BlackBerry (CDMA) | BlackBerry (GSM/HSPA) | iOS | Nokia |
|-----------------|---------|----------------------|--------------------------|----------|--------------|
| Presence | | V | \checkmark | V | V |
| Instant Message | | | | | \checkmark |

^{**} Due to a RIM BlackBerry limitation in the OS 6 platform (Issue# JAVAAPI-1772), VoIP calls may have degraded audio performance that include: (a) intermittent audio delay, (b) occasional audio gaps, (c) audio jitter in the first 3-5 seconds of a call. ShoreTel will not support or troubleshoot VoIP audio issues related to this RIM OS 6 platform limitation. ShoreTel does not recommend making VoIP calls on devices running the RIM OS 6 platform.

⁺ These BlackBerry devices are RIM OS 6 and can not be downgraded to a older operating system.

Table 2-3. Mobile Device Features per Platform

| Mobile Device | Android | BlackBerry (CDMA) | BlackBerry (GSM/HSPA) | iOS | Nokia |
|------------------------|-------------------------|----------------------|--------------------------|----------|--------------|
| VoIP over Wi-Fi | \checkmark | | V | V | V |
| VoIP over 3G/4G | | | V | abla | |
| Reverse Dial | | | \checkmark | | \checkmark |
| Personal Dial | $\overline{\checkmark}$ | \checkmark | \checkmark | | \checkmark |
| Conference on Cellular | | | | | \checkmark |
| Transfer on Cellular | | | | | V |

Supported Codecs

Table 2-4 lists the supported Codecs per Platform for ShoreTel Mobility.

Table 2-4. ShoreTel Mobility Router Device Codec Support

| Platform | Codec | | |
|------------|-----------------------|--|--|
| Android | G.711u, G.711a | | |
| BlackBerry | | | |
| OS 4 | G.711u, G.711a | | |
| OS 5, OS 6 | G.711u, G.711a, AMR | | |
| iOS | G.711u, G.711a, G.729 | | |
| Nokia | G.711u, G.711a, G.729 | | |

Related Documentation

Other publications in the ShoreTel Mobility documentation suite include the following:

- ShoreTel Mobility Solution Release Notes
- ShoreTel Mobility Router Administrator's Guide
- ShoreTel Mobility Router 6000 Hardware Installation Guide
- ShoreTel Mobility Router 4000 Hardware Installation Guide
- ShoreTel Mobility Router 2000 Hardware Installation Guide
- ShoreTel RoamAnywhere User's Guide for Android® OS
- ShoreTel RoamAnywhere User's Guide for BlackBerry® Smartphones
- ShoreTel RoamAnywhere User's Guide for iPhone®
- ShoreTel RoamAnywhere User's Guide for Symbian® OS
- ShoreTel RoamAnywhere Quick Reference Card: Android® OS Features
- ShoreTel RoamAnywhere Quick Reference Card: BlackBerry[®]Features
- ShoreTel RoamAnywhere Quick Reference Card: iOS® OS Features
- ShoreTel RoamAnywhere Quick Reference Card: Nokia[®] Features
- ShoreTel RoamAnywhere Quick Reference Card: Android $^{\circledR}$ OS Configuration
- ShoreTel RoamAnywhere Quick Reference Card: BlackBerry[®]Configuration
- ShoreTel RoamAnywhere Quick Reference Card: iOS® OS Configuration

ShoreTel RoamAnywhere Quick Reference Card: Nokia[®] Configuration