

## **uMobility™ Now Supports Android® and BlackBerry®**

A new release of uMobility is now available and includes support for Android and select BlackBerry devices. uMobility on select Android, BlackBerry, iPhone®, Windows® Mobile and Nokia® devices allows users to make and receive calls as an extension of the Strata CIX system. Calls can be made via wireless LAN while in the office, and calls can be carried over cellular or other available WiFi networks while travelling.

uMobility provides a compelling proposition for enterprises to achieve a cost optimization and better accessibility for its mobile users, resulting in improved business efficiency and effectiveness of the organization.

**Important!** See the section on Training and Certification at the end of this document.

### **Product Description**

Varaha's uMobility solution contains two software components: client (smart phone) and server (uMC). Varaha's smart phone client software is available for select Android, BlackBerry, iPhone®, Windows® Mobile and Nokia® devices. The client communicates with the network-based uMobility Controller (uMC), selecting the best WiFi or cellular network available and joins the smart phone to the Strata CIX as an extension.

After the uMobility application is loaded a uMobility icon will be displayed.



Android



BlackBerry

## Supported Devices

The following devices are supported with this release. While it would be ideal if the uMobility client would function on any device on a platform there are many variations from device to device that impacts uMobility including; CPU performance, WiFi interface, switching audio from cellular to WiFi, power saving mode, device OS version, etc. The devices listed are tested and will be supported by Toshiba's Technical Support Department Older devices are not likely to function due to the issues noted above. Newer devices may need software or configuration enhancements before they can be supported.

- **Android: Samsung Galaxy S, Motorola Droid, Motorola Droid X, HTC Incredible, HTC Hero**
- **BlackBerry: Bold 9700, 9000, Curve 8900, 8520, 8300<sup>1</sup>, 8310<sup>1</sup>, 8320<sup>1</sup>**
- iPhone 2G, iPhone 3G, iPhone 3GS<sup>2</sup>, iPhone 4<sup>2</sup>
- Nokia E51, E63, E66, E71, E90, and N95
- Windows Mobile: HTC Dash 3G, HTC Touch Pro 2<sup>3</sup>, Ozone<sup>2</sup>, Diamond

<sup>1</sup> Supported in single mode (cellular) only

<sup>2</sup> iOS 4 is supported by the non-multitasking uMobility Client 2.1.4

<sup>3</sup> See important Tech Alert from Varaha regarding these devices in the uMobility Leave Behind.

See important details about device support in the file:

[fyi.tsd.toshiba.com](http://fyi.tsd.toshiba.com) >TSD 3rd Party Partners > Varaha > Varaha uMobility Partner Page  
on the uMobility Channel Partners Area page, under Technical Documents click on Technical Bulletins  
then, download the Application Note - uMobility Supported Device - Customer Leave Behind.

Additional information is available on Toshiba FYI web site on the Varaha uMobility partner page at

[fyi.tsd.toshiba.com](http://fyi.tsd.toshiba.com) >TSD 3rd Party Partners > Varaha > Varaha uMobility Partner Page >

## Features

The uMobility solution provides these valuable features:

- **Mobile Desk Phone:** Secure access to the enterprise for email and data applications, extends PBX telephony services to the Mobile user regardless of wireless connectivity. Enterprise users can dial extension numbers of their enterprise network using cell phones like they can with their desk telephones. Users can also dial out using the enterprise network dial plan for local, national, and international calls. Along with the Single Number Reach feature, mobile Enterprise Dialing allows users to be always connected with the enterprise network.
- **Single Number Reach:** The uMobility Controller allows users to be reachable through a single public number provided by the Strata CIX even when they are on the move and not reachable at their desk telephone. Enterprise users, especially customer care, executives, or sales/support engineers usually distribute their direct dial numbers to people or their customers who need to contact the enterprise users. If someone from outside of enterprise network wants to reach an enterprise user, they will simply dial the direct dial number of that user and the controller will take care of connecting the call to the uMobility client of that enterprise user. This way enterprise user doesn't need to distribute their private mobile number to people in order to be reachable.
- **Single Voice Mail for Enterprise:** All unanswered inbound calls are routed through to the Strata CIX voice mail system. Business calls are left in the business voice mail not in cell voice mail, so users

have only one place to check for all business messages. Users get an indication when a new voice message is waiting in their enterprise voice mailbox. These voice mail indications are stored by the uMC in case the user is offline (i.e., not registered with the controller). As soon as user is registered, the uMC sends the pending indications to the client. On receiving the voice mail indication, the user gets connected to the enterprise voice mailbox with a single click on the client interface, allowing fast and easy access to their voice mailbox.

- **Network Convergence:** Use the same GUI for WiFi and Cellular telephone calls. The smart phone client will auto-connect to the WiFi network reducing the use of cellular air-time/minutes while increasing the use of FREE WiFi minutes.
- **Seamless Hand-off Between WiFi and Cellular Networks:** The uMobility Controller controls seamless hand-off between the WiFi and cellular networks for an active call. The controller will automatically switch between the WiFi or cellular network and hand-off whenever service quality deteriorates during an active call. The hand-off will occur with no loss of voice or delay, requiring no user intervention. (Note: for the iPhone (OS 3.1.2) the user must manually accept the handoff between cellular and WiFi, for BlackBerry Hand-off is not supported)
- **Device Mobility:** An active call can be moved from the smartphone to desk telephone and back without losing the call or letting the remote party know of the change. This is useful for a user who is leaving their desk or returning to it. The hand-off will occur without loss of voice or delay.
- **WiFi Interoperability:** The uMobility FMC solution works over public hot spots, home WiFi, and enterprise WiFi networks. It has been well tested with different WLAN equipment from different manufacturers. (On public hot spots the user will need to take care of their account and login before uMobility can be used).

Users using the uMobility client have access to many Strata CIX telephony features:

- Make/Receive calls over WiFi and Cell (Answer/Release)
- Call Hold over WiFi and cell
- Call Mute and Volume control
- Blind Call Transfer
- Call Mute and Volume control
- Keypad dialing / DTMF support
- Viewable call status
- Missed call indication
- G711 Audio Codec (SIP/WiFi)
- Personal directory
- Last Number Redial
- Voice Mail setting/access for SIP (WiFi) and Cellular using a common user interface
- Do Not Disturb (DND)
- Speed Dial
- Call History (Redial, Missed Call, Callers Lists)
- Access to contact list for dialing numbers
- WiFi/Cellular hand-off

**Important!** Not all of the listed features are supported by all of the listed phones.

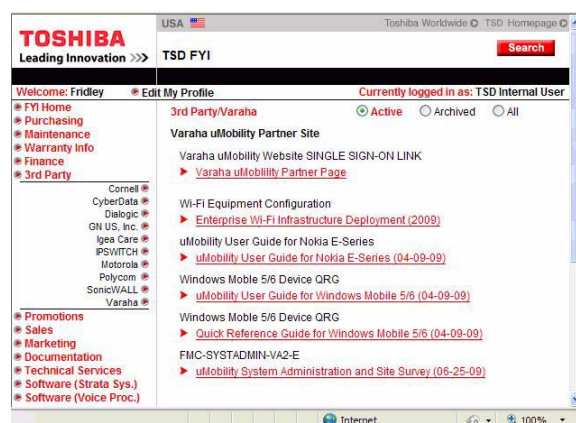
## Benefits

The uMobility FMC solution provides these valuable benefits:

- **Business Connectivity for Mobile Workers:** Reach staff via one number on premise and off campus. Originate calls from the enterprise network. Provide coverage for telecommuters. Provide Strata CIX telephony features such as abbreviated extension dialing, and call control.
- **Reduced International Calling Costs:** International calls from cell phones are routed through the enterprise network. VoIPoWLAN calling while traveling internationally. Long distance charges eliminated while traveling internationally. Local country SIM supported without losing enterprise calls.
- **Business Identity for Mobile Users:** The user can use one device and one number to be extremely reachable. Using one dual-mode smart phone device (WiFi and cellular), the user can always be connected with the enterprise network and avoid missing calls. Using the business number to contact the user protects their private mobile number from the outside world.
- **Improved Productivity and Efficiency:** Irrespective of the location, the enterprise user will always be accessible through the enterprise network. This facilitates timely communication between mobile users and their enterprise network and customers. Even when the user logs into enterprise network, after being offline for sometime, the message waiting indication of enterprise voice mails will be promptly delivered.
- **Enterprise Cost Reduction:** Cost savings result by using the enterprise WiFi network for voice calls instead of costlier cellular minutes. Even when the user is not in the enterprise network, the uMobility solution helps to reduce the cost by using public WiFi networks whenever available. And if user is in a cellular network, cost is reduced by allowing the uMobility Controller to place the outbound call through the enterprise network, utilizing cheaper wireline long distance rates.
- **Dual Mode Functions:** The uMobility client for PDA and smart phones provides a single telephone interface for VoIP and cellular calls with integrated features like contacts, call logs, telephone features and more. The user-friendly and intuitive dialer-based interface of uMobility allows users to make/ receive VoIP calls over WLAN and cellular networks.
- **Integrated Experience:** The dual mode smart phone handles both VoIP and cellular calls. The device phone book contacts and call history functions are natively integrated with the uMobility client resulting in a single application for all voice call related needs of the user.
- **Improved Coverage:** Get coverage even when there is no cellular. Especially valuable in rural areas

## Documentation

Documentation for uMobility can be found at [fyi.tsd.toshiba.com](http://fyi.tsd.toshiba.com) > 3rd Party -> Varaha



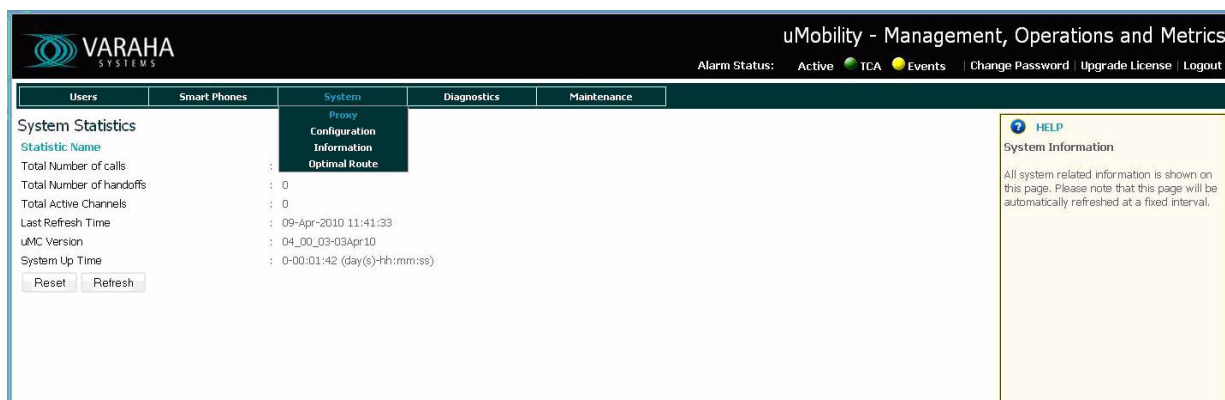
The Varaha uMobility Partner Page is a link to Varaha's web portal for TSD dealers.

The following documents are available:

- uMobility System Administration and Site Survey
- uMobility user Guide for Android V1.xx
- uMobility user Guide for BlackBerry 2.x.x

## uMC Configuration

This new release of the uMobility controller has a new administration interface called Management, Operations and Metrics (MOM) which combines the two separate administration interfaces of previous releases.



## Upgrading to Version 4

Section 1 of the uMobility System Administration and Site Survey Manual, page 1-4, covers Upgrading the uMC Software

## Training and Certification

uMobility installation requires a technician proficient in CIX installation, VoIP networks, WiFi QoS, as well as installation and configuration of the uMobility Controller. The technician must be a Toshiba Certified Technical Expert (TCTE). Dealers are cautioned that installing uMobility without such training, certification, and proficiency could result in unexpected diagnostic and installation costs to the dealers as well as a poor end customer experience.

Toshiba has on-line training at:

ToshibaTraining.com > Technical Training > Course Categories > Third Party Products > uMobility.  
(Note: This is currently the training for the previous release)

Varaha will be holding some live training seminars for uMobility, you can find out more at:

fyi.tsd.toshiba.com > 3rd Party -> Varaha -> Varaha uMobility Partner Page  
on the left side click on "uMobility course"

## Known Issues

### uMobility Controller

The Voice Mail Detect Time (Cell\_VM\_Direct\_Answer\_Timeout) parameter is set to four seconds by default. However the correct value for this parameter is carrier dependent. To check this value, place a call from a DP or IPT extension on the Strata CIX system to the uMobility extension over cellular and answer the call as quickly as it rings. If the call is disconnected, reduce the value of Cell\_VM\_Direct\_Answer\_Timeout by one second and repeat.

If upgrading to version 4, document the OTA configuration parameters: Mail Server IP Address, Mail Server User Name and eMail address. These will need to be re-entered after upgrading to version 4.

This release of the uMobility controller should only be used with a single MIPU card. There is a know issue when trying to transfer a call when more than one MIPU is involved.

If upgrading to Version 4 the uMobility controller "Products" administration screen does not show the version number of the client. There is a script available from the Beta FTP web site that will update the version number correctly.

### Android

If you have problems with calls not handing off from WiFi to cellular the Cell\_VM\_Detect\_Answer\_Timeout should be set to zero.

With Android release 2.2, on some devices, changes to the power saving mode can effect the use of WiFi during a call. Make sure the device does not go into sleep mode during a call. When answering a call, bring the device out of power-saving mode by using the power/sleep button on the top of the device.

### BlackBerry

With the current BlackBerry client, when a call is transferred to the BlackBerry and the BlackBerry user answers, the user will hear a call waiting tone during the call. Pressing the answer button two more times will remove the call waiting state. This will be addressed in new version of the uMobility client.

In the BlackBerry client, when setting the voicemail password, the password should be proceeded with two commas ".,," in order to allow for a delay for how it takes for the call to be answered.

To make a call from the address book on a BlackBerry:

1. Select Address book.
2. Enter name to find or scroll to name.
3. Click the BlackBerry button (**do not** click the user name to go into the contact).
4. Scroll up and select the "Call from uMobility" option.

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