### **MOTOROLA RHOMOBILE SUITE V2.2**

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### **DESCRIPTION**

Thank you for selecting Motorola as your mobility solution tool provider. User friendly mobile applications are key to leveraging the power, value and return on investment of your mobile solutions and with Motorola RhoMobile Suite you can significantly reduce the time and cost associated with mobile application development.

RhoMobile Suite allows you to create flexible, OS-independent, hardware-agnostic applications that look, feel and act the same on every supported device. You can rapidly create robust mobile applications that can include a wide range of advanced data capture capabilities. Whether you want to streamline your warehouse, delivery or service operations or enable more robust asset tracking & visibility, Motorola RhoMobile Suite will help you get your enterprise mobility solution up and running.

# **DEVICE COMPATIBILITY**

RhoMobile Suite supports iOS, Android, Windows Embedded Handheld, BlackBerry, and Desktop Windows XP / 7 development. On MSI devices the Rhomobile Suite supports Android, Windows Embedded Handheld 6.1, 6.5 or Windows CE 6.

Not all APIs will be available on every supported platform, please refer to The online API compatibility document (http://docs.rhomobile.com/rhoelements/apicompatibility) for a comprehensive list.

### **Consumer Devices**

This software release has been approved with the following devices from other manufacturers

MANUFACTURER	DEVICE	OPERATING SYSTEM(S)
Apple	iPod Touch iPhone 3Gs iPhone 4 iPhone 4S iPhone 5 iPad Family	iOS 4.x, iOS 5.x, iOS 6.x
Android Devices	Android Devices	Android 2.3 (Gingerbread) Android 4.0 (Ice Cream Sandwich) Android 4.1 (Jellybean)
RIM	Blackberry Devices	Blackberry OS 7.0, 7.1

# **Motorola Solutions Devices**

This software release has been approved for use with the following Motorola Solutions Enterprise Mobility devices.

DEVICE FAMILY	DEVICE	OPERATING SYSTEM(S)
ES400	ES400	Windows Embedded Handheld 6.5
ET1	ET1 (Enterprise Tablet), ET1 WAN	Android 2.3 (Gingerbread)
MC2100*	MC2100, MC2180	Windows CE 6.0 Core
MC3100	MC3100R, MC3100S, MC3190G, MC3190R, MC3190S	Windows CE 6.0 Professional Windows Embedded Handheld 6.5
MC55	MC5574, MC5590	Windows Embedded Handheld 6.5
MC55A0	MC55A0	Windows Embedded Handheld 6.5
MC55N0	MC55N0	Windows Embedded Handheld 6.5
MC65	MC659B	Windows Embedded Handheld 6.5
MC75	MC7596, MC7598	Windows Embedded Handheld 6.5
МС75а	MC75A0, MC75A6, MC75A8	Windows Embedded Handheld 6.5
MC9100	MC9190-G	Windows CE 6.0 Professional Windows Embedded Handheld 6.5
MC9500	MC9590, MC9596, MC9598, MC959B (WM6.1)	Windows Embedded Handheld 6.1, Windows Embedded Handheld 6.5
VC6000	VC6000, VC6096	Windows Embedded Handheld 6.5

**Note:** Full Support for MK3000 / MK4000 devices is not available in this release; please use RhoElements 1.0.2.3 until support is returned in future versions.

<sup>\*</sup> The MC2100 family of devices are only supported by RhoElements 2.1.

#### Localizations

Motorola RhoMobile Suite has been approved to run on the following localized device operating systems:

- French
- Italian
- German
- Spanish
- Portuguese

- · Traditional Chinese
- · Simplified Chinese
- Korean (Windows Embedded Handheld Only)
- Japanese

Approved localized operating systems can be obtained from Support Central.

### Non-Motorola Solutions Devices

Motorola RhoMobile Suite will also run on competitor devices running Windows Embedded Handheld 6.5.

### **RELEASE NOTES**

#### Version 2.2 Service Pack 1

- New WebKit engine on Windows Mobile / CE allowing applications access to all memory available on the device. This allows more memory hungry applications to run in reduced memory situations.
- Implementation of Tel: hyperlink on Windows Mobile devices
- · Bug fixes.

#### Version 2.2

- Support for Multiple applications running simultaneously on the device, hardware permitting.
- Support for RhoConnect Push
- · Javascript support for all Ruby APIs
- · New RhoElements APIs for Audio and Video Capture
- New RhoElements APIs for Audio and Video Playback
- Support for the accelerometer and magnetometer on iPhone and Android
- Support for Application level licensing on all devices except BlackBerry (added support for consumer devices)
- · Performance improvements for hybrid applications.

### Version 2.1.1

- · Application level licensing for Motorola Devices
- · Windows Desktop client use QT WebKit
- Ability to capture signatures and images as DataURI objects.
- New RhoElements APIs for RawSensors, 3D Gestures and Memory
- · RhoConnect-Push client (Beta) Android, Windows Mobile and Windows CE

### Version 2.0.5

- Create web based, native or hybrid applications leveraging the Motorola WebKit engine to take advantage of HTML5 functionality
- Access Motorola hardware using Javascript objects, Ruby objects or HTML meta tags
- · Additional APIs for database encryption.
- · Support for a range of Motorola devices and localized Operating Systems
- Support for a Motorola MPA1.5 based devices
- Support for consumer devices running iOS and Android

### [Show Previous Versions]

# **COMPONENTS OF RHOMOBILE SUITE**

# **PC Components**

If the default install location is not changed, the components are installed in the following folders:

COMPONENT	LOCATION
RhoStudio	C:\MotorolaRhoMobileSuite2.2.1.13\rhostudio
RhoConnect	$C:\\ \label{limits} C:\\ $
GNU make	C:\MotorolaRhoMobileSuite2.2.1.13\make-3.81
Redis database	C:\MotorolaRhoMobileSuite2.2.1.13\redis-2.4.0
RhoMobile application to build Shared Runtime	C:\MotorolaRhoMobileSuite2.2.1.13\RhoElements2
Pre-built Shared Runtimes	C:\MotorolaRhoMobileSuite2.2.1.13\RhoElements2 Shared Runtime
RhoMobile sample applications	C:\MotorolaRhoMobileSuite2.2.1.13\samples

# Device components for Windows Embedded Handheld and Windows CE devices:

COMPONENT	LOCATION
Runtime Executable	\Program Files\RhoElements\
Default Configuration Files	\Program Files\RhoElements\Config
Default HTML Files	\Program Files\RhoElements\HTML
Default Image Files	\Program Files\RhoElements\Image
MPM accessory libraries	\Program Files\RhoElements\MPM
NPAPI Plugin Directory	\Program Files\RhoElements\NPAPI
EMML Plugin Libraries	\Program Files\RhoElements\Plugin
Files required for Ruby Wrapper	\Program Files\RhoElements\rho

<sup>\*</sup> You can only have one shared runtime installed on your device at any one time, please uninstall any previous versions before installing a new one.

# **Device components for Android devices:**

COMPONENT	LOCATION
Runtime Executable	Internal device storage
Rendering Engine Libraries	Internal device storage
Configuration Files	\Android\data\com.motorolasolutions.rhoelements
Default HTML Files	\Android\data\com.motorolasolutions.rhoelements
Default Image Files	\Android\data\com.motorolasolutions.rhoelements\images
NPAPI Plugin Directory	Internal device memory
APD Support Files	\Android\data\com.motorolasolutions.rhoelements\APD
Feature Demo Files	$\verb \Android\data\com.motorolasolutions.rhoelements\Demos\FeatureDemo \\$

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### **INSTALLATION**

Instructions for installing RhoMobile Suite including all its components (RhoElements, Rhodes, RhoConnect, runtimes) on both Windows and Mac can be found in the online installation instructions (http://docs.rhomobile.com/rhoelements/rhoelements-install).

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# **USAGE NOTES**

- Once installed please refer to the online documentation at <a href="http://docs.rhomobile.com">http://docs.rhomobile.com</a> for a quick start guide and full list of functionality.
- Installation and Application paths on Windows must not contain spaces.

# **Usage Notes for Rhodes Applications**

Motorola RhoMobileSuite ships with version 3.5.1.13 of Rhodes. The latest guides and information on supported platforms is available at http://docs.rhomobile.com/rhodes/introduction.

- Once the installer has completed you can use 'rhodes-setup' command to provide paths to various SDKs : http://docs.rhomobile.com/rhodes/install#setup-rhodes.
- You can also edit rhobuild.yml manually or copy it from old Rhodes installation.
- Another way to edit your rhobuild.yml is to use RhoStudio. From the Windows menu select Preferences and then RhoMobile to access the dialog.
- Applications should not raise more than one simultaneous popup via the Ruby Alert API.
- The Image Format option in the Signature module will have no effect on Android
- When dropping a table using the Rhom API you should always provide at least two non-nil parameters, e.g. tx.executeSql('DROP TABLE todo',[]);

 Bluetooth radio does not turn off when BluetoothManager.off\_bluetooth is called and will not turn on automatically on Android when Bluetooth APIs are exercised.

# **Usage Notes for RhoConnect**

Motorola RhoMobileSuite ships with version 3.4.2 of RhoConnect. The latest guides and information on supported platforms is available at <a href="http://docs.rhomobile.com/rhoconnect/introduction">http://docs.rhomobile.com/rhoconnect/introduction</a>.

- To upgrade existing RhoConnect applications to use RhoConnect 3.4.2, it is necessary to change the 'rhoconnect' line version in the Gemfile to '3.4.2' and run 'bundle install' inside of the application.
- Certain features require modification to the config.ru and Gemfile files in your application, we recommend you
  re-generate those files using RhoConnect 3.4.2.
  - To do this run 'rhoconnect app <name\_of\_existing\_app>' at the parent directory of your application and choose the "Overwrite" option for the config.ru and Gemfile. Other files can be skipped.
- For production installations on Linux, it is necessary to download the latest RPM or Debian package and reinstall the package. RhoConnect 3.4.2 is no longer using PhusionPassenger and is now using Thin.
- RhoConnect 3.4.2 uses concurrent processing of http requests so it is necessary avoid global variables in your code. Gobal variables should be stored in Redis instead to avoid race conditions and corrupt data.
- All ruby processes should be killed before debugging RhoConnect.
- Warning Alerts shown whilst using RhoConnect Push on Android devices can be ignored.
- RhoConnect Push will not work on Motorola MC9190 device.
- To create a RhoConnect application from RhoStudio first install the latest version of redis-namespace gem by running the following command in the console:
   gem install redis-namespace
- After uninstalling RhoConnect push from a Windows Mobile / CE device you must also remove the shortcut from the startup folder normally found at
  - '\Windows\StartUp\rhoconnect-push-service.lnk'
- To use predefined push commands like do\_sync, vibrate, alert and sound on Windows mobile/Windows CE clients you should send all commands in one package from the server application. For unnecessary commands, specify empty values.

# **Usage Notes for RhoStudio**

Motorola RhoMobileSuite ships with RhoStudio. The latest guides and information on supported platforms is available at <a href="http://docs.rhomobile.com/rhostudio.tutorial">http://docs.rhomobile.com/rhostudio.tutorial</a>.

- If you are running Windows, Motorola RhoMobile Suite Installer installs the Ruby stack, Redis, RhoConnect, Rhodes and a pre-built RhoElements runtime.
- If you are running Mac OS, Motorola RhoMobile Suite Installer installs Redis, RhoConnect, Rhodes a pre-built RhoElements runtime.
- Although Mac OS has Ruby installed, the official way to install Ruby for RhoStudio is to install Ruby Version Manager and then install Ruby version 1.9.3
- · Avoid using custom conditions for breakpoints.
- If your application is of app\_type: RhoElements you should not build with the Barcode capability for your Windows Mobile / CE builds, instead use the Scanner API.
- If you are running Windows 64-bit, you need to use 32-bit Java when you run RhoStudio. You can include the 32-bit Java in the PATH, or you can run RhoStudio with a link to 32-bit Java:
   C:\RhoStudio\eclipse\RhoStudio.exe -vm "<32-bit java path>\bin\javaw.exe"
- Network proxy or firewall settings preventing outgoing https or SSH connections may prevent RhoHub build from working in RhoStudio

# Usage Notes for RhoElements applications using Motorola WebKit

Do not suspend the device while launching a RhoElements application

#### Interaction with Datawedge

In order to run RhoElements alongside DataWedge please configure a DataWedge profile as documented under the 'Profile Configuration Menu' page in the DW help file under the following scenarios:

- You are running on Windows Embedded Handheld / Windows CE devices
- · You are running on the ET1 and not using the 'shared runtime'

You can also refer to the RhoElements scanner documentation page for step by step instructions on how to do this.

#### **Localized Builds**

- Running on localized Windows Embedded Handheld / CE builds requires an appropriate truetype font for the language to be installed on the device; in your configuration file you will need to direct RhoElements to use the localized font.
- In order to use the shared runtime or Native application on localized Windows devices(including Korean) install application to non-localized 'Program Files' folder.
- APD functionality is not available on localized German and Italian builds on MC75a and MC31xx devices.
- RhoElements only supports non latin fonts when they are encoded in one of the following character sets: US-ASCII, ISO-8859-1 and Unicode.

#### Licensing

- Neither RhoElements 1.x, RhoElements 2.x or PocketBrowser can be licensed on the same device; in order to deploy to a device previously using PocketBrowser or RhoElements 1.x you should first cancel the previous license for that device.
- The ES400 is not able to scan the license barcodes, to license these devices please use the registry key or enter the license code manually.
- Application licenses for Android check whether an off device navigation is allowed based on case sensitive URLs.

### Module specific notes

- Applications using FileTransfer should configure their file's destination before configuring its source. It is recommended Ruby applications use the AsyncHttp API to transfer files.
- Authentication is not available for HTTP file transfer. It is recommended to use FTP instead for authenticated file transfers on Windows devices.
- Scanner and Imager viewfinder parameters are not infinitely adjustable and the requested resolution must be supported by the hardware, otherwise the output may be scaled or snapped to the closest supported size. The viewfinder should be configured prior to being displayed. Additionally on Windows Embedded Handheld the Imager module width and height parameters should not be set to 500 or greater when using the color camera.
- The PowerOn event is not available on the MC65 when specified through Ruby, please use JavaScript to register for this event.
- When using relative URLs in any RhoElements File Transfer call you should avoid navigating up to the root of the local device filesystem.
- To prevent users overriding the application program flow it is recommended that the following RhoElements modules should be limited to debugging your application only: AddressBar, BackButton, ForwardButton, GoButton, StopButton, HomeButton, QuitButton.
  - You may notice the loading screen visible behind the page if you invoke the keyboard on Windows Embedded Handheld devices whilst using the debug functionality.
- When initiating a File Transfer on the ET1 either directly through the File Transfer module or indirectly through Signature Capture, Imager etc. the 'username' and 'password' should be specified using the corresponding module properties rather than being included in the destination or source URL.
- The SIP module's 'left' and 'top' parameters are not supported on Windows devices. With finger scrolling enabled, the web view will automatically move so input fields are not obssured by the SIP.
- The SIP can not be set to manual mode on the ET1 through Ruby, to work around this issue use the Javascript SIP interface.
- To use the Audio Capture API on Android you should not use the Javascript Rho.AudioCapture syntax, instead please use either the RhoElements Javascript API or access the module via Ruby.
- Do not leave the current page if a FileTransfer is in progress.

- The RhoElements push API can not be used via Ruby on the ET1, please use either the Javascript API or RhoConnect Push instead.
- The VideoPlayer module should not be used in a multiple instance scenario on Windows Embedded Handheld devices.

### **Device specific notes**

- The contents or size of rholog.txt is unaffected by the configuration settings <LogMaxSize/> or <LogError/> on the ET1.
- EMML Profiles should be stored locally when used on the ET1.
- The return value of the "Pre-existing" Javascript objects (e.g. generic) should not be used on the ET1
- ET1 P1, P2 and P3 keys do not have default system behavior when function keys are enabled.
- · Scrolling left or right inside a textbox will not work on the ET1
- The Home Key cannot be intercepted or blocked on the ET1; please refer to the device documentation for details of how to enable OS lockout.
- Whilst RhoElements is running on the ET1 do not enable USB storage
- Entering data into a password field will not be visible on the ET1 using the default 'Droid Sans Fallback' font.
- On the ET1 you should delay setting RhoElements event callbacks for one second after page load if they are set in your onLoad() handler.

### Notes for running multiple applications simultaneously

- Only licensed RhoElements applications should be run simultaneously on Windows Mobile, this applies regardless of whether or not the application is using the shared runtime.
- Windows applications running in the background should not attempt to display a Javascript alert.
- Scanner parameters 'ScanTimeout' and 'DisconnectBtOnDisable' are not application specific and their default should not be assumed prior to use.
- Minimized applications should be bought to the foreground by using the application shortcut.
- On the ET1 the Scanner will not necessarily start automatically when being brought back to the foreground.
- The RS507 ring scanner is not compatible with multiple simultaneous applications.
- Notifications such as the beeper must not be enabled twice with state 'ON'.

#### Scanning

- UsPlanetReportCheckDigit and UsPostNetReportCheckDigit have no effect on the ET1
- Default meta tags cannot be used to specify scanner decoder tags on the ET1.
- Once disabled, EAN13 barcodes should not be scanned with the ET1.
- Barcode symbology Code128isbt128 is not decoded on the ET1.
- RSS symbologies are supported on the ET1 but must be accessed using their new names, GS1DataBarxxx
- It is not recommended to use alert boxes to display scanned information in a production environment.
- Configuring the data buffer size or data format on Windows CE or Windows Embedded handheld should be done prior to enabling the scanner.

#### **Memory Considerations**

- JavaScript libraries such as Sencha touch or JQuery Mobile can use a significant amount of memory at runtime. This should be considered when creating applications for low memory devices. To improve performance in RhoElements 2.x applications, consider removing the JQuery Mobile styling from your layout.erb file.
- It is recommended to have at least 20MB RAM free to run RhoElements. More than 20MB will be needed for more complex apps.

#### Rendering Engine

• SMS, Email and Telephone URIs e.g. <a href="tel:18006535350"> are not supported by the browser.

• It is strongly recommended to avoid using framesets and make use of <div> and <span> tags. A single page is faster to process and it is not possible to guarantee which frames' tags will be parsed first; also any JavaScript callbacks will always be sent to the parent frameset page.

### HTML5 Features / CSS functionality in the Motorola WebKit browser

- Form input types http://www.w3.org/TR/html5/forms.html are not yet supported.
- HTML5 Video / Audio is not yet supported.
- The 'viewport' meta tag is only supported on the Windows and Android platforms.
- CSS Gradients, Complicated CSS shadows or displaying shadows on rotated objects have been known to cause visual and performance issues in the Motorola WebKit browser.
- The HTML5 web worker functionality should not be used on Windows devices
- You can not select multiple items simultaneously from a combo box on Android devices.

### **SVG Applications**

- Web Sockets http://www.w3.org/TR/websockets/ are not supported for applications written in SVG
- Web Workers <a href="http://www.w3.org/TR/workers/">http://www.w3.org/TR/workers/</a> are not supported for applications written in SVG

### **Configuration Options**

- On the ET1 preloading Pre-existing Javascript objects (e.g. generic) cannot be disabled individually; they must all be disabled to have any effect.
- On Windows Embedded Handheld and Windows CE the configuration option <LogURI> is not fully supported. The name of the log file will always be 'rholog.txt' and for native applications it will always be stored in the \rho directory of the application.
- The only <LogProtocol /> configuration option supported is 'file'
- On reinstalling RhoElements on an ET1, the previous config.xml file will not be overwritten.
- The <LogUser /> log severity has no effect if <LogInfo /> is disabled, disabling <LogInfo /> will have no effect on info logs.
- The <CAFile /> and <CAPath /> Configuration options are only available on the ET1
- If you specify <DisableScannerDuringNavigation/> as 0 you must disable the scanner prior to quitting your application.
- Android applications wishing to ignore SSL certificates should set VerifyPeerCertificate to 'false' in their Config.xml, not '0' as documented.

#### Backward compatibility with the Internet Explorer rendering engine

• The Internet Explorer rendering engine is not supported in Motorola RhoElements. It is recommended to upgrade existing PocketBrowser applications to use Motorola WebKit in order to function in RhoElements.

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# **KNOWN ISSUES**

# **Known Issues with Rhodes Applications**

- The native Tab bar is not supported in Motorola WebKit.
- The WebView.current location() function returns the referrer page URL rather than the current URL.
- The Alert.vibrate function does not work on Windows Embedded Handheld 6.5 devices.
- Not all properties of the Alert.show\_popup call are available on Windows CE, to reliably display an alert box on this platform use the simplified Alert.show popup 'message'.

- Applications should not be minimized, this feature can have undesired side effects.
- HTTP authentication (Basic and Digest) does not work on Non Motorola WM devices.
- Setting color-model to Grayscale on the ET1 will have no effect with the Camera API.
- When using the File API ensure the file exists before attempting to open the file.
- Barcode scanning is not yet available on IPod
- The front facing camera is not supported via the Camera API on the Samsung Galaxy Tab.
- Native applications will not launch on the MC21XX series of devices, only hybrid applications are supported using RhoElements which ships on the device.
- On Blackberry the take\_picture method of the Camera module may not work when you display more than 10 images on one screen.
- The Is Motorola Device and Date Time picker APIs do not work as expected on Blackberry devices.
- The System.zip file JavaScript APIs are not supported. Please use Ruby instead.
- The Signature pen colour and background colour can not be modified when accessing the Signature API via javascript.
- Rhom.database import does not work on Android devices.
- Map created by Rho.MapView.create API is unstable when page with the map keeps in idle state for long period of time on Android devices. Recommend using JavaScript MapView instead.
- System.set\_network\_status\_notify method does not work on Windows Mobile, Windows CE and Windows Desktop platforms
- The Bluetooth method stop\_current\_connection\_process method will not work on iPhone devices.
- When Android devices running Android 3.2 have no connectivity applications may not work for some carrier providers.
- System.get property(attribute) issues:

#### Attribute name Note

has\_calendar Always returns false on ET1 phone\_id Only available on Android

country Not supported on Windows Mobile and BlackBerry. Use System.get\_property('locale') instead.

real\_screen\_\* width and height do not work on BlackBerry.

# **Issues with Sample Applications**

- The BluetoothChat application, part of the system-api-sample, should not be exercised on Windows Mobile.
- The samples for the following methods will not work: Rho.AsyncHttp.post, Rho.AsyncHttp.get and Rho.AsyncHttp.upload file methods.
- Camera coordinate parameters are not working for the viewfinder on Android for the Rho.Camera samples.
- The rollback functionality is not working in the Rhom Database sample.

### **Known Issues with RhoConnect**

- The EventMachine gem must be 1.0.0.beta or greater on Windows, an appropriate version is included in the RhoMobile Suite installation.
- WAR files produced in JRuby cannot be started with the 'java jar' command and the WinStone servlet cannot be started with the latest version of Rack.
- Only Ruby 1.9.3-p125 is supported on Windows. The latest patch (p194) is not supported due to incompatibility issues
- Async mode is not supported on JRuby, Ruby-1.8.7, or REE.
- Async mode is not supported with RhoStudio debugger.
- · Async mode is only supported with Thin Server.
- To use predefined push commands like do\_sync, vibrate, alert and sound on a Windows Mobile or Windows CE
  client you should send all the commands in one package from the server application. For unnecessary
  commands specify empty values.
- RhoConnect applications currently do not run on Windows XP due to issues with the redis server.
- RhoConnect Push does not play sound on Windows Mobile/CE devices. Therefore, use Alert.play\_file on receiving the push method.

 Application may be unstable if ping request is triggered when RhoConnect sync is in progress. Avoid pinging while syncing.

### Known Issues with RhoStudio

- · You are not able create a new project using keyboard shortcut from the edit window
- · Output from rhoconnect applications does not appear in the eclipse console

### Known Issues with RhoElements Applications Using Motorola WebKit

- Applications wishing to access any Secure site should disable the 'VerifyPeerCertificates' configuration option.
- NPAPI Objects (Javascript Object syntax and ActiveX replacement in WebKit) are not available in HTML embedded within an SVG application.
- · CSS Font-Family property is not functioning.

### Module Specific Issues

- The KeyHandling and KeyState modules are not fully supported on the ES400 or MC65.
- The Push module's "Unattended" parameter has no effect.
- The RhoElements 'home' button (not to be confused with the home button on the Rhodes toolbar or the ET1 hardware home key) and RhoElements KeyCapture module property 'homeKeyValue' are not supported.
- The 'TopCommandArea' and 'BottomCommandArea' modules are not yet supported on the ET1.
- The setLEDNumberOfCycles paramter of the Notification API has no effect on Windows Mobile or CE devices.
- The resolution should not be changed from the default value when using the Camera API.
- The WAN module's wanStatusEvent is not compatible with CDMA networks.
- Signatures and Images cannot locally transferred after capture if previous captures have been uploaded to a remote server.
- The Rho.GeoLocation API will not work on Windows Mobile devices.
- Bluetooth printers should be paired to the device prior to using APD, otherwise the first call may not be received.
- The Screen Orientation or Application events do not function on Windows Mobile.
- The AlarmEvent will not be fired reliably when accessed from Ruby in Native applications.
- On Android, videoSaveEvent is not currently supported.
- The transfer capability of the video capture module should not be exercised
- The Restore method of the Application module should not be used in hybrid or native applications.

### **Device Specific Issues**

- The following modules are not available on the MC959B, ES400 or MC65 devices: 'Camera', 'Imager' (using color camera)
- On the ET1 if you are running RhoElements you should disable the Imager and Scanner when they are not in use.
- The FaceUp 3D gesture does not work on the ET1
- Both the TriggerEvent or AlarmFiredEvent do not get fired on ET1.
- · The Notification module does not support the LED on the ET1
- The Backlight module's BacklightSettingsEvent is not yet supported on the ET1.

### Scanning

- Supplementals will not be decoded if picklist mode is enabled on the MC65.
- convertGs1DataBarToUpcean property has no effect when scanning GS1Databar barcodes.
- ViewfinderModes 'StaticReticle' and 'DynamicReticle' are not supported on the MC65 or ES400
- Setting the Scanner illuminationMode will have no effect on the ET1.

 displayBtAddressBarcodeOnEnable parameter will fail to re-pair the RSM device after connection timeout. The RSM will need to be reconnected by clicking hardware reconnection button.

### Rendering Engine

- The following HTML5 canvas methods / properties have not yet been fully implemented
  - o CreatePattern(), GlobalCompositeOperation (Copy), fill(), animation using drawImage and StrokeText
- · Cookie expiration times should not be relied upon in Windows Mobile and Windows CE.

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### SUPPORTED CIPHERS

### The following SSL Ciphers are supported in Motorola WebKit

- TLS\_DHE\_RSA\_WITH\_AES\_256\_CBC\_SHA (0x0039)
- TLS\_DHE\_DSS\_WITH\_AES\_256\_CBC\_SHA (0x0038)
- TLS\_RSA\_WITH\_AES\_256\_CBC\_SHA (0x0035)
- TLS DHE RSA WITH 3DES EDE CBC SHA (0x0016)
- TLS\_DHE\_DSS\_WITH\_3DES\_EDE\_CBC\_SHA (0x0013)
- TLS\_RSA\_WITH\_3DES\_EDE\_CBC\_SHA (0x000a)
- TLS\_DHE\_RSA\_WITH\_AES\_128\_CBC\_SHA (0x0033)
- TLS DHE\_DSS\_WITH\_AES\_128\_CBC\_SHA (0x0032)
- TLS RSA WITH AES 128 CBC SHA (0x002f)
- TLS\_RSA\_WITH\_RC4\_128\_SHA (0x0005)
- TLS\_RSA\_WITH\_RC4\_128\_MD5 (0x0004)
- TLS\_DHE\_RSA\_WITH\_DES\_CBC\_SHA (0x0015)
- TLS\_DHE\_DSS\_WITH\_DES\_CBC\_SHA (0x0012)
- TLS RSA WITH DES CBC SHA (0x0009)
- TLS DHE RSA EXPORT WITH DES40 CBC SHA (0x0014)
- TLS DHE DSS EXPORT WITH DES40 CBC SHA (0x0011)
- TLS RSA EXPORT WITH DES40 CBC SHA (0x0008)
- TLS\_RSA\_EXPORT\_WITH\_RC2\_CBC\_40\_MD5 (0x0006)
- TLS\_RSA\_EXPORT\_WITH\_RC4\_40\_MD5 (0x0003)
- TLS EMPTY RENEGOTIATION INFO SCSV (0x00ff)

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