



Mobility Pack

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Citrix Mobility Pack

Citrix Mobility Pack improves the experience of Citrix Receiver users working in supported Windows applications and published server desktops on mobile devices. Features include:

- The use of mobile device controls instead of native Windows controls such as combo boxes.
- Automatic display of the device keyboard when an editable field has the focus. The desktop session scrolls if needed to make the input area visible.
- A touch-optimized desktop for mobile devices that provides:
 - Improved access to the Windows Start menu: Tap the START button and use the touch-friendly menus to navigate to applications and documents. Start an application or open a document with a single tap.
 - Multiple pages of icons on the desktop: Swipe the desktop or tap the scroll icons to navigate.
 - One-tap return to the touch-optimized desktop when it is hidden by a full-screen application: Tap the icon in the bottom left corner of the desktop.
 - One-tap return to the traditional Windows desktop: Tap the icon in the top right corner of the desktop to toggle between the touch-optimized and Windows desktops.
- Support for providing mobile device location (GPS) information to remote application sessions. This feature enables the remote application to obtain mobile device location information from Citrix Receiver so that the application behavior can change just as if it were running locally on the mobile device.
- A mobile device development platform, the Mobile SDK for Windows Apps, that enables Enterprise Windows developers to write applications for mobile devices using familiar programming languages. The Mobile SDK for Windows Apps includes interfaces to:
 - Control how buttons are used on the mobile device
 - Set screen orientation
 - Activate the on-screen keyboard
 - Use local user interface controls instead of Windows controls
 - Access the device's telephone, SMS, and camera functions

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About mobility features

Fixed Issues

- The automatic keyboard and mobile combo box now appear on second use. [253264]
- The policy help text for Automatic keyboard display and Remote the combo box is correct. [256356]
- The error "wfshell shell has stopped working" no longer appears when you start Microsoft Notepad after previously exiting it before the keyboard opened. [261973]

Known Issues

- An application with a .NET 4.0 Calendar control can crash if Microsoft UI Automation monitoring is active in the same session and the user places the focus on the Calendar control. This issue results from a missing property (ComponentResourceKey) in the DataTemplate key for the .NET 4.0 Calendar control. A resource defined at the theme level must use a ComponentResourceKey as the key.

To avoid this issue with .NET 4.0, set the DataTemplate key for the Calendar control as follows:

```
<DataTemplate x:Key="{ComponentResourceKey  
TypeInTargetAssembly=CalendarItem,  
ResourceId=DayTitleTemplate}">
```

For more information, refer to the Microsoft Support article [Null reference exception when running a .net app with UI automation](#). [261165]

- The automatic keyboard feature does not scroll the display to show the input area when an iOS device resolution is set to a value other than Auto-Fit. [267307]
- During some operations, applications can unexpectedly minimize to the touch-optimized desktop taskbar. Tap the taskbar icon for the application to re-open it. [267606, 267609]
- When a Windows notification appears, the Windows taskbar displays on top of the touch-optimized desktop taskbar. To redisplay the touch-optimized desktop taskbar, dismiss the notification or tap the desktop. [268911]
- The touch-optimized desktop taskbar appears with the Windows desktop when the user presses Alt-Tab and then taps the gear icon from the Windows desktop (Receiver for iOS). To correct the display, tap the icon in the lower left corner. [269535]
- The keyboard covers the input area when the automatic keyboard is displayed and a Receiver for iOS user rotates the device. The user can pan the display or rotate the device to the original orientation to see the input area. [269920]
- The touch-optimized desktop taskbar displays when an application is running in full-screen mode. [272692]
- The automatic keyboard or device-native combo box do not display for applications run with elevated permissions (Receiver for iOS). [273016]

About mobility features

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System requirements for mobility features

Environments

- Citrix XenApp 6.5 for Windows Server 2008 R2 with HRP02 installed
- Microsoft .NET Framework 3.5 SP1

Devices

- Citrix Receiver for Android 3.x
- Citrix Receiver for iOS 5.5.x, 5.6.x, 5.7, and 5.8
- Citrix Receiver for Windows 8/RT 1.2, 1.3, and 1.4

Application

- Location sensing is supported for applications that use the Windows 7 Location API and can receive responses based on the client location sensor.

Mobile SDK for Windows Apps

- Development operating system: Microsoft Windows 7 (x64)
- Development platforms: Microsoft Visual Studio 2010 SP1
- Microsoft .NET Framework 3.5 SP1
- Microsoft Windows SDK 7.1 (for C++ location support)

Installing Citrix Mobility Pack

Citrix Mobility Pack components install onto XenDesktop and XenApp to provide the run-time environment that applications delivered to mobile devices need for mobile device user experience functionality and Mobile SDK for Windows Apps functionality.

The Mobile SDK for Windows Apps provides a mobile device programming interface for Windows programs hosted in XenDesktop and XenApp environments and delivered to any device with Citrix Receiver.

To install Citrix Mobility Pack into a XenDesktop environment

Download the XenDesktop 5.6 Feature Pack 1 Virtual Desktop Agent and its associated Citrix Group Policy Management installer and follow these installation instructions: [Installing XenDesktop 5.6 Feature Pack 1](#).

To install Citrix Mobility Pack into a XenApp environment

1. On each server on which you want to enable mobility features, install the latest hotfix rollup pack for XenApp 6.5, which includes server-side components as well as critical fixes. To view a list of the latest hotfixes, click here: http://support.citrix.com/product/xa/v6.5_2008r2/hotfix/general/
2. Download the XenApp 6.5 Mobility Pack installation package from the [XenApp 6.5 download page](#) and copy it to a shared folder on the network. The download package contains CitrixGroupPolicyManagement_x64.msi and CitrixGroupPolicyManagement_x86.msi, which install the Citrix XenApp Group Policy Management Experience. The Citrix XenApp Group Policy Management Experience enables you to view and edit the policy settings added by the XenApp 6.5 Mobility Pack. You do not need any other files from the download package.
3. On each 32-bit XenApp server on which you want to enable mobility features, save and run CitrixGroupPolicyManagement_x86.msi. On each 64-bit XenApp server on which you want to enable mobility features, save and run CitrixGroupPolicyManagement_x64.msi.

To install the Mobile SDK for Windows Apps on development computers

1. Download the Mobile SDK for Windows Apps installation package from the [XenApp 6.5 download page](#).
2. Install XenApp65MobileApplicationSdk64.msi onto each development computer. The Mobile SDK for Windows Apps installs into C:\Program Files (x86)\Citrix\MobilitySDK. The installed folders contain these components:
 - **bin** - DLLs
 - **doc** - SDK documentation
 - **inc** - Include files needed to use the SDK in C/C++ code
 - **lib** - Static library files needed to link the SDK in C/C++ code
 - **samples** - Code samples using the SDK

You can learn more about the Mobile SDK for Windows Apps on the [Citrix Developer Network](#).

Configuring policies for mobility features

The following Citrix user configuration policy settings control mobility feature settings.

Under ICA > Mobile Experience:

- Automatic keyboard display
- Launch touch-optimized desktop
- Remote the combo box

Under ICA > Client Sensors > Location:

- Allow applications to use the physical location of the client device

To set the keyboard display behavior

The **Automatic keyboard display** policy setting determines the behavior of the keyboard during application sessions on mobile devices. By default, a mobile Receiver user must manually open the keyboard. To enable the keyboard to automatically open when an editable field has the focus, set this policy to Allowed. When this setting is allowed, a user can change a Receiver for iOS session setting to prevent the keyboard from automatically opening.

To provide a touch-friendly interface

The **Launch touch-optimized desktop** policy setting determines the overall Receiver interface behavior. By default, a touch-friendly interface that is optimized for tablet devices is used. To use only the Windows interface, set this policy to Prohibited.

To set the type of combo box displayed

The **Remote the combo box** policy setting determines the type of combo box displayed during application sessions on mobile devices. To display the device-native combo box control, set this policy to Allowed. When this setting is allowed, a user can change a Receiver for iOS session setting to use the Windows combo box.

To allow applications to use mobile device location information

The **Allow applications to use the physical location of the client device** policy setting determines whether applications running in a XenApp session on a mobile device are allowed to use the physical location of the client device.

Configure

By default, the use of location information is prohibited. To allow use of location information, set this policy to Allowed. When this setting is allowed, a user can prohibit use of location information by denying a Receiver request to access the location. Android and iOS devices prompt at the first request for location information in each session.

Mobile SDK for Windows Apps



The Mobile SDK for Windows Apps provides a mobile device programming interface for Windows programs hosted on Citrix environments and delivered to any device with Citrix Receiver. The SDK provides Enterprise Windows developers with the means to develop Windows applications with capabilities and behaviors typical of native mobile applications. The functionality provided by the SDK significantly improves the user experience.

Developers can use the SDK with the Windows application development framework that best suits their needs. Download the SDK from the [Citrix download pages](#).

Typical Windows applications are based on an expansive desktop space with access to a keyboard and a mouse. Legacy Windows applications do not accommodate on-screen keyboards and other features specific to mobile devices. The Mobile SDK for Windows Apps enables Windows developers to write new applications and to improve existing applications for delivery to supported mobile devices.

The Mobile SDK for Windows Apps enables a Windows application to control mobile device features such as:

- **Buttons** - Get the current button target, set the button target, and specify whether to handle a button press on the server or the mobile device.
- **Camera** - Take, download, and remove pictures using the built-in camera of the mobile device. Get picture state information.
- **Device properties** - Retrieve device feature support information.
- **Display** - Get and set mobile device screen metrics such as orientation, scroll mode, and viewport origin to ensure that text is easy to read and controls are easy to use.
- **Keyboard** - Check the keyboard state and control whether to show or hide the on-screen keyboard. The keyboard state includes the keyboard type, keyboard flags, auto-capitalization, return key type, and edit field rectangle.
- **Notification** - Notify the user about special events using sound, vibration, light, and text.
- **Phone** - Make phone calls based on the contacts list on a server.
- **Picker control** - Select an item from a list using a control that is native to the device.
- **SMS** - Send an SMS from content on a server.

For features such as phone calls, SMS, and camera functions enabled by the Mobile SDK for Windows Apps, Receiver prompts the user for permission to perform the action so that the user always has the option to protect potentially sensitive information.

When developing hosted applications that use the Mobile SDK for Windows Apps, consider the following:

- A secure connection (for example, using SSL/TLS or a VPN) should be enforced for the applications. Citrix Receiver should connect to trusted servers.
- Consider obtaining legal advice regarding the use of mobile device features, such as the camera, which raise privacy issues.

Learn more about the Mobile SDK for Windows Apps on the [Citrix Developer Network](#).