#### **Title**

AppCenter PPC/WM 2.0

# **Description**

AppCenter is an end-user application access control engine that restricts activity to a set of authorized applications on mobile devices

- Active and passive approach to restricting application activity
- Locks the user out of executing "unauthorized" applications

Presents a launch platform of authorized applications in icon form

- Unauthorized applications terminated
- Typical scenario kiosk application
- End-user runs ONLY specified application

# **Installation Prerequisites**

A valid Symbol security key must exist in the device registry before AppCenter will operate on the device. Refer to the RegFile-Readme.txt file located in the PlatformReg folder contained in the ZIP file.

#### Installation Instructions

Installation instructions are included in the AppCenter 2.0 WM Admin Guide (AppCenter 2.0 WM - Admin Guide.pdf).

# Compatibility

AppCenter PPC/WM 2.0 is compatible with the following Symbol devices:

Windows Pocket PC

PPT2800

PDT8000

PDT8100

PDT8100x

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Windows Mobile 2003
     PPT2800
     PDT8000
     PDT8100
     PDT8100x
     PPT8800
     MC9000-G/K/S
     MC50
Windows Mobile 5.0
     MC35
     MC70
     MC9090-G/K/S
Windows Mobile 6.x
     MC35
     MC55
     MC70 / MC75 / MC75A MC9090-G/K/S
      VC6096
     MC9500
     MC3100
     FR6000
     FR6800
     ES400
     MC65
     MC9100
     MC45
     MC67; including dual-radio
     MC9100
```

# **Version History**

- 1. Fixed an issue where the HideMenuBar setting wasn't working for some MFC programs.
- 2. There is a new setting named UseWinsockForIpAddress that is used in conjunction with the DisplayIpAddress setting. The new setting defaults to true and should provide more reliable display of the IP address with no need to ever manually enter an adapter name.

One difference from previous behavior is that if both a WLAN and WWAN IP address are available, the UseWinsockForIpAddress method will display the WLAN IP. The previous methodology would display the WWAN IP.

If the older behavior is preferred, set UseWinsockForIpAddress to false. The new setting has no effect unless DisplayIpAddress is true.

- 3. Improved the logic for automatically locating the correct adapter used by the DisplayIpAddress setting.
- 4. AppCenter no longer disables the Today screen. This was causing problems on some devices during clean boots.
- 5. It appears that calibration may sometimes cause AppCenter problems on WM65 clean boots, so AppCenter now provides the option of delaying calibration until 15 seconds after AppCenter launches. To activate this option, simply use the Welcome.Not method to disable default calibration.
- 6. The MSP AppCenter Plugin has been brought up to date.

The DefDoc is now version 1.23 and supports the ShowKeyStates and UseWinsockForIpAddress settings.

In order to access the ShowKeyStates setting, "WM Build 1097 Support" must be set true.

In order to access the UseWinsockForIpAddress setting, "WM Build 1161 Support" must be set true.

The new settings are under "Configure Options->WM Specific Settings".

#### Version v2.0 Build 1127

- 1. WM65+ AppCenter now uses TAPI rather than RIL to determine WAN signal strength.
- 2. Specifying an AlternateTitle of [WANSS] will display the raw WAN signal strength as the AppCenter title. This feature works with both RIL and TAPI. For RIL the minimum and maximum possible signal strengths are also displayed. For TAPI the minimum and maximum signal strengths are always 0 and 65535 and are not displayed. When this feature is active, the raw signal strength is also logged each time there is a change. Additionally a sound is played on each change. This feature is meant for debugging purposes and is not for normal use.

# Version v2.0 Build 1109

1. Fixed a problem with the TodayScreenInterval setting on Simplified Chinese devices.

# Version v2.0 Build 1105

 AppCenter now supports a ShowKeyStates setting. The default is false for backward compatibility. When set true, AppCenter displays the current state of the Alpha, Func, Shift, Ctrl and Alt keys on the AppCenter taskbar. HideStartMenu must be true and ShowStandardIcons must be false for key states to be displayed.

The new setting can be changed on the AppCenter Admin program's Keys tab. To turn on keys states via the MSP plugin, first enable "WM Build 1091 Support" and then "Enable Expert Mode" at the bottom of the screen, just after "Action 15". Add "ShowKeyStates True" to an empty configuration line.

ShowKeyStates is supported only on devices, except for the ES400 and MC65 devices, which are not supported.

To turn off the default WM key state display on the menubar, add the following registry setting and reboot.

[HKEY\_LOCAL\_MACHINE\HARDWARE\DEVICEMAP\KEYBD] "ShowKeyIcon"=dword:0

- 2. If an application isn't processing messages, AppCenter can't retrieve the application's window title. Previously in this situation, AppCenter waited for 1 second and then set the window title to a blank string. Now AppCenter waits 2 seconds and if the title can't be retrieved, sets the title to "Unavailable". The 2 second wait gives AppCenter a better chance of retrieving the window title and "Unavailable" makes it clearer what is going on when AppCenter can't retrieve the window title and needs to log a rejected window. To approve an application that doesn't always process messages, the best method is to approve \*|\*. If that isn't an option, you can also add "Unavailable" as an approved window, for example, "Unavailable|Dialog".
- 7. Based on customer feedback, the new behavior of the red phone key instituted in build 1067, has been reverted to the previous behavior. Additionally, some problems with the previous behavior have been fixed. The red phone key behavior is as follows:

The red phone key will hang up an active call regardless of what application is in the foreground.

When there isn't an active call, the red phone key is ignored unless the phone application is in use. This includes any applications such as Contacts or Text that were reached via the phone application. In these cases, pressing the red phone key

returns the user to the application that was being used before the phone app was activated.

#### Version v2.0 Build 1091

- 1. WM 6.5 changed how password masking behaves. Password characters are briefly displayed before changing to asterisks. This version of AppCenter works around this problem. Password characters are no longer exposed in WM 6.5.
- 2. AppCenter no longer disables the SettingsUI program, but rather ensures that AppCenter starts after SettingsUI. This solves the taskbar subclassing conflict that existed between the two.
- 3. The taskbar window procedure watchdog has been removed as it caused problems with Wavelink.
- 4. Depending on the device, tapping the WM 6.5 taskbar either brings up the WM 6.5 taskbar ribbon or the SettingsUI program. Under default AppCenter settings, with ShowStandardIcons true, neither is approved and will briefly open before AppCenter hides them again.

To completely disable SettingsUI/Ribbon, set the new DisableStandardIconTaps setting to true. Now taskbar taps are ignored unless ShowHome is true in which case, tapping anywhere on the taskbar returns you to AppCenter. DisableStandardIconTaps is only supported on WM65+, defaults to false, and has no effect on the normal AppCenter taskbar.

To completely enable SettingsUI:

- a) Add SettingsUI.exe to the System approved EXE names.
- b) Set ShowStandardIcons true for System.

To completely enable the WM 6.5 taskbar ribbon:

- a) Add \*|Confettiplus\* to the Shell32 approved window titles.
- b) Set ShowStandardIcons true for Shell32.
- 5. The AlternateTitle config file setting now supports special tokens. Tokens are designated by surrounding keywords with square brackets. If a token is invalid, [Invalid Token] will display as the title. If a token is not supported on a device, [Not Supported] will display as the title.

Specifying an AlternateTitle of [UUID] will display the results of the GetUniqueUnitIdEx function as the title. Most devices support this function. The System Info applet under Settings can be used to check the value of UUID.

Specifying an AlternateTitle of [DeviceID] will display the results of IOCTL\_HAL\_GET\_DEVICEID as the title. This is a generic call that can be used on all Windows Mobile devices. Often the results of UUID and DeviceID are identical.

Specifying a registry key and value inside square brackets will display the registry value as the title. Only string values are supported. A full registry key should be specified followed by a colon and the value name (no spaces). If the default value for the registry key is desired, leave off the colon and value name.

#### Examples:

AlternateTitle [ESN]

AlternateTitle [UUID]

AlternateTitle [DeviceID]

AlternateTitle "[HKEY\_LOCAL\_MACHINE\SOFTWARE\XYZ

Incorporated]" (Default value)

 $Alternate Title "[HKEY\_LOCAL\_MACHINE \SOFTWARE \XYZ Incorporated: Title]"$ 

- 6. Support for the new DisableStandardIconTaps setting has been added to the AppCenter MSP plugin. First enable "WM Build 1091 Support" and then access the setting under "Configure Options->WM Specific Settings".
- 7. An expert mode has been added to the AppCenter MSP plugin. First enable "WM Build 1091 Support" and then "Enable Expert Mode" at the bottom of the screen, just after "Action 15". Lines entered in expert mode will be added verbatim at the end of the AppCenter-User.cfg file and will override any previous settings. In general, expert mode is intended for new AppCenter settings that haven't yet been added to the plugin.
- 8. Under WM 6.5, AppCenter now disables admin login for 30 seconds the first time AppCenter starts after a reboot. This solves a problem, where some devices were locking up when exiting AppCenter shortly after a reboot.
- 9. When starting AppCenter at boot time, other programs were not receiving the ESC key when pressed. This has been fixed.

#### Version v2.0 Build 1067

1. Fixed an issue with Internet Explorer on MC55 WM 6.1 devices when HideMenuBar was set true. AppCenter now waits 2 seconds before hiding the IE menu bar on WM 6.1 devices. Because booting can interfere with the timing of

this fix, it is recommended that IconsDisabledCount be set to 10 seconds so IE can't be manually launched immediately on startup. If auto-starting IE, it is recommended that the StartupDelay be set to 10 seconds.

- 8. The red phone key behavior in AppCenter has been modified to be more consistent with standard Windows Mobile behavior. When a phone call is in progress, AppCenter will hangup the call and remain in the current application. At all other times, pressing the red phone key will return you to the AppCenter screen regardless of what application you are currently in.
- 9. AppCenter now adds info to the log file to indicate whether the config file was successfully loaded and whether a default config file was created. The following log entries are possible:

Loaded config file from:

\Program Files\AppCenter\AppCenter-User.cfg

No config file found. Creating default config file at:

\Program Files\AppCenter\AppCenter-User.cfg

Error! Unable to open existing config file at:

\Program Files\AppCenter\AppCenter-User.cfg

10. AppCenter now deletes the log file at startup. All items in the log are now only from the most recent run of AppCenter.

### Version v2.0 Build 1045

- 1. Added support for MC65.
- 2. Fixed an issue where the red phone key was allowed during cellular data calls. The red phone key is now only allowed during voice calls.
- 3. HideDoneButton now works on WM 6.5 devices.
- 4. Case sensitive passwords are allowed once more.
- 5. The window caching logic has been improved.

- 1. Added support for ES400.
- 2. AppCenter now disables the SettingsUI.exe program. This program replaces the standard Windows Mobile behavior when you tap on the taskbar. In some rare instances, a warm boot is required before SettingsUI.exe is disabled.

- 3. The TodayScreenInterval default value has been changed to zero for WM 6.5+. This disables the TodayScreenInterval behavior, which appears to be no longer needed under WM 6.5.
- 4. The changes made in build 987 to support WM 6.5 now apply only to WM 6.5 build 23034+. Earlier versions of WM 6.5 hadn't yet implemented the skinnier taskbar or moved the start icon to the menubar.
- 5. The methodology of disabling the start icon in WM 6.5 build 23034+ has been changed as the previous method was occasionally causing other programs such as Calendar to crash.
- 6. The AppCenter volume icon and the volume keys stopped working correctly in WM 6.5. This has been fixed in WM 6.5 build 23034+. On these devices the volume icon works slightly differently than on WM 6 and earlier. Tapping the volume icon behaves the same as pressing a volume key in that the current volume sounds and the volume dialog will automatically close 2 seconds after the last modification to the volume settings.
- 7. On WM 6.5 builds earlier than 23034, volume is not fully supported. If using the AppCenter taskbar, ShowVolume and VolumeKeysAllowed should be set to false. If access to volume is required, the ShowStandardIcons setting should be set to true.
- 8. A new volume icon has been added to the AppCenter taskbar to show when the volume is set to vibrate.
- 9. Portable Network Graphics (PNG) files are now supported in the IconFile setting for approved programs. Any size PNG file can be used, but will be shrunk to 32x32 or 16x16 depending on the ViewMode setting used. Transparency is not currently supported for PNG files.

- 1. Added support for WM 6.5. The HideStartMenu, HideSip and HideDoneButton settings disable, rather than remove the associated icons from the menu bar.
- 2. The new ShowDate setting allows displaying the date on the taskbar. ShowDate can be used in conjunction with ShowTime to display only the date, only the time, both or neither. The date is displayed in the short format as specified in the device's Regional settings. The default is false which is compatible with previous versions.
- 3. The taskbar date/time are now shown in the same font as the title.
- 4. The TaskbarTextColor and TaskbarBackgroundColor settings added in the last version, now default to zero, which indicates that AppCenter should calculate the colors based on the Windows CE version. This is compatible with previous versions.
- 5. A Taskbar(2) tab has been added to the Admin Options dialog in support of the TaskbarTextColor and TaskbarBackgroundColor settings. The TitleBold and TitleFontSize settings have been moved from the Title tab to the Taskbar(2) tab.
- 6. Both the View and Taskbar(2) tabs of the Admin Options dialog now support a preview of what the settings will look like.

7. As of this version, AppCenter will no longer convert old registry settings to the config file format introduced in 2005.

#### Version v2.0 Build 955

1. Additional options have been added for Taskbar colors. TaskbarTextColor controls the color of the text and icons on the taskbar. TaskbarBackground color controls the color of the taskbar background.

# Version v2.0 Build 947

- 1. Added support for FR6000 and FR6800 devices.
- 2. Fixed an issue with the TodayScreenInterval logic.

#### Version v2.0 Build 941c

1. Added support for MC3100.

#### Version v2.0 Build 941b

1. Added support for MC9500.

### Version v2.0 Build 941

- 1. AppCenter now supports connectivity icons for Edge, 3G, HSDPA and EVDO. Previously only GPRS and 1XRTT were supported.
- 2. The new TodayScreenInterval setting allows control over previously hard coded behavior that fixes a Windows bug. On WM6 devices with phones, the phone app doesn't create its dialog windows until the Today screen displays. If an app such as AppCenter or Pocket IE is configured to start with the device, the Today screen often doesn't display and the green phone button then can't display the missing phone dialog. When TodayScreenInterval is non-zero AppCenter brings the Today screen to the foreground after the specified number of seconds. AppCenter only does this on WM6 devices with phones and only when the phone dialogs are missing. Unless the Today screen is approved, AppCenter should immediately send it back to the background. The default is 10 seconds. A setting of 0 disables this behavior.
- 3. AppCenter now disables the Today screen when it is running.
- 4. AppCenter now adds the version number to the config file.
- 5. A new CAB file has been added to the distribution (AppCenter-WM5-MC9090) that should be used for the WM5 version of the MC9090 only. The existing CAB file (AppCenter-PPC-2.0) should be used on all other devices.

#### Version v2.0 Build 929

1. The MSP Plugin for AppCenter has been added to this release.

# Version v2.0 Build 903

1. Support for WM 6.1 color scheme added.

#### Version v2.0 Build 899

- 1. Fixed bug on MC7506 device which was causing AppCenter to crash.
- 2. The maximum startup delay has been increased from 30 to 120 seconds.
- 3. The AppCenter admin program wasn't properly handling string settings with double quotes when saving the CFG file. This has been fixed.

### Version v2.0 Build 885

- 1. Added support for Windows Mobile 6 devices.
- 2. Fixed a problem where the red phone button wasn't hanging up phone calls on some WM6 devices.
- 3. Fixed a problem where the red phone button wasn't being blocked in non-phone applications on some WM6 devices.
- 4. A new configuration file setting named BrowseControlPanel has been added. This setting is located on the Browse tab of the Options dialog and specifies whether or not control panel applets are included in the "Select a program..." dialog when creating a new approved program. The default is true which is compatible with previous versions.
- 5. There is a new config file setting named SuppressSmsNotifications. It defaults to false which is backwards compatible with previous versions. When set true, the "New Text Message" notification bubble is automatically closed.

# Version v2.0 Build 837

1. A new configuration file setting named BlockTaskbarKey has been added. This setting is located on the Keys tab of the Options dialog. The main purpose of this setting is to block keys that bring up the start menu. This behavior was previously hardcoded in AppCenter and the default settings are consistent with past versions. Different keys bring up the start menu on different devices, so the default settings are not all needed on every device and can in fact interfere with desired behavior.

- 1. AppCenter now supports custom background bitmaps. There is no configuration file setting for this feature. Simply include a BMP, JPG, PNG, GIF or ICO file with the same name and location as the AppCenter EXE.
- 2. Additional options have been added to control the font size and foreground/background colors of the approved programs.
- 3. AppCenter can now be configured to display the list of approved programs in small icon and list mode.
- 4. The StoneStreetOne Bluetooth stack is now utilized when using the "Disable Bluetooth" security feature.

5. Safeguarded the writing of the configuration file (CFG) to help prevent overwriting.

### Version v2.0 Build 777

1. The Symbol Fusion library, if available, is now used to calculate WLAN signal strength. Previously the Symbol S24 library was used on Symbol devices. This worked with Fusion 2.4 radios, but broke when Fusion 2.5 was introduced.

### Version v2.0 Build 715

1. Several new options have been added to better support Phone Edition devices. Please refer to the AppCenter 2.0 WM - Admin Guide for further details.

BlockIncomingCalls – this setting is located on the phone options tab and defaults to false. When set true, AppCenter will hangup the phone whenever an incoming call is detected. This setting is only supported under WM5.

ShowPhoneIcons – this setting is located on the phone options tab and defaults to false. When set true, AppCenter will display icons for missed calls, unread text messages and voice mail. This setting is only supported under WM5.

VoiceMailPhoneNumber – this setting is located on the phone options tab and defaults to an empty string. If a number is specified, AppCenter will dial the number when the voice mail icon is tapped. This setting is only supported under WM5.

2. A new configuration file setting named ShowStandardIcons has been added. This setting works in conjunction with the HideStartMenu setting to control taskbar functionality and similar to HideStartMenu it can be configured on a program by program basis. Please refer to Appendix F of the AppCenter 2.0 WM – Admin Guide for details.

# Version v2.0 Build 669

1. The DisableIR feature was causing a delayed start of AppCenter on some devices, following a reboot. This problem has been fixed.

- 1. A new configuration file setting named ShowConnectivity has been added. This setting is located under taskbar options. The default is false. When set true a connectivity icon is displayed on the taskbar. The icon indicates whether or not there is any connection available. All connection types are covered, including ActiveSync, Ethernet cradle, WLAN, WWAN and Bluetooth. This setting is only supported under WM5.
- 2. A new configuration file setting named AddWwanPhoneMenu has been added. This setting is located under taskbar options. The default is false. When set true a menu displays when the WWAN signal strength icon is tapped. The menu contains choices for turning the phone on and off. The ShowWwanSignalStrength

settings must be true for this setting to have any effect. This setting is only supported on devices that have RIL installed.

#### Version v2.0 Build 639

- 1. The WWAN icon was still showing signal strength after the WWAN radio was turned off. This has been fixed.
- 2. This build now waits up to 10 seconds for a valid platform registry key before failing. This should solve the cold reset issue where AppCenter was starting before the registry key.

#### Version v2.0 Build 597

- 1. Additional work has been done to support Windows Mobile 5 specific UI changes.
- 2. Additional Admin options have been added:
  - 1. DisableMemoryCardInsert stops memory cards from being mounted in the file system
  - 2. DisableIR disables the "Receive all incoming beams" setting
  - 3. DisableBluetooth will turn off the Bluetooth radio on devices where the Windows CE BthSetMode function is operative
  - 4. DisableActiveSync disables a device from connecting via ActiveSync 5. Hide SIP allows the SIP to be displayed in the AppCenter user program. The "Hide SIP" setting defaults to true which is compatible with previous versions
- 3. To help reduce cluster in the configuration file more than one ExeName setting can be set for approved programs.
- 4. AppCenter now does a better job of calculating the default adapter name. The adapter name must be correct on all devices that want to display the MAC or IP address as the AppCenter title. The adapter name is also used on some devices to get the signal strength.

- 1. AppCenter now uses text-based (CFG) files to store the current configuration information. The registry is no longer used to store this information. When AppCenter 2.0 is first run on a device with a previous version of AppCenter installed it will read the current configuration from the registry and saves it to the new configuration file format.
- 2. Access to the AppCenter Administrator Configuration Options has now been broken out into a separate executable named AppCenterAdmin.exe. This file is not required to be deployed on the device for AppCenter to operate.
- 3. All AppCenter Administrative Configuration Options are now available through the AppCenterAdmin executable.
- 4. The new -Config command line option can be used to specify the location of the configuration (CFG) files and the log file.

# Components of .zip file

# Define the files in the .zip file

Component	Description
AppCenter_Windows_Mobile_Administrator_Guide.pdf	AppCenter Admin Guide
AppCenter PPC 2.0 Release Notes (Build 1141).pdf	This document
PPC 2002/2003 WM 5/6 Folder	
AppCenter.exe	Main AppCenter executable
AppCenterAdmin.exe	AppCenter Admin settings executable
AppCenter-PPC-2.0.cab	WM 5-6 AppCenter CAB installation file
AppCenter-PPC-2.0-Shortcut.cab	WM5-6 AppCenter CAB with localized shortcut support
AppCenter-PPC-2.0-WM6.cab	WM 6 AppCenter Signed CAB
AppCenter-WM5-MC9090.cab	WM 5 AppCenter CAB installation file for MC9090
Platform Folder	
RegFile-Readme.txt	Readme file for security registry key information
*,reg	Symbol security registry files for devices
Reset Folder	Windows Mobile 5/6 Cold Boot Persistence Information

### **Known Issues**

None. **Notes** 

None. Late

#### **Additions**

None.

# **Document Number / Revision / Release Date**

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