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Enabler Registry Key Configuration

The release of the Avalanche Enabler 4.02-27 (and later versions) provides the ability to create and configure registry keys. The registry contains extended information, settings and various other values for device operating systems. By configuring and creating new keys within the registry you can control a majority of the operating system functions, such as enabling or disabling specific settings. The limitations of the registry keys are dependent on the mobile device you are using.

This document is divided into two main sections:

- **Configuring Registry Keys.** This section of the document provides general information about configuring and editing registry keys.

- **Registry Key Tasks.** This section offers specific tasks and the actual key names that you create and push to the device to give the Enabler the task functionality.

Configuring Registry Keys

The Avalanche Enabler allows you to create and edit registry keys for your mobile device. Registry keys can be configured by accessing the *Registry* tab in the *Avalanche Update Settings* dialog box.

For more information about the *Avalanche Update Settings* dialog box, refer to the *Wavelink Avalanche Enabler User Guide*.

This section provides the following information:

- Creating a Registry Key

- Editing a Registry Key

Creating a Registry Key

To create a registry key, access the *Avalanche Update Settings* dialog box from Avalanche Enabler configuration utility.

**To create a registry key:**

1. On the host system, launch the Avalanche Enabler configuration utility.

The *Wavelink Product Configuration* dialog box appears.
2 Click the **Enabler Settings** icon button.

The *Avalanche Update Settings* dialog box appears.

3 Select the **Registry** tab.

![Avalanche Update Settings dialog box]

**Figure 1. Registry Tab**

4 From the **Root** drop-down list, select the root directory of your registry entry. The following options are available:

- **HKEY_CLASSES_ROOT**
- **HKEY_CURRENT_USER**
- **HKEY_LOCAL_MACHINE**

5 In the **Key** text box, enter the path of the registry key location.

6 Enter the desired name in the **Name** text box, and the desired value in the **Value** text box.
7 From the Type drop-down menu, select either STRING or DWORD.

8 Click Add.

9 Click OK.

   The new registry key appears in the registry key list.

10 Deploy the new configuration to the mobile device.

**Editing a Registry Key**

Use the Registry tab to edit the configuration of existing registry keys.

**To edit a registry key:**

1 Access the Registry tab.

2 From the registry key list, select the key you wish to edit.

3 Edit the Root, Key, Name, Value, and Type as desired.

4 Click Add.

5 Click OK.

6 Deploy the new configuration to the mobile device.

**Registry Key Tasks**

This section provides information about specific tasks you can perform through new registry keys and values. Tasks are dependent on the Enabler version and device support. Review the requirements for each task before attempting to create any of the registry keys.

This section contains information for the following tasks:

- Preserving Network Settings
- Adding WINS Support
- Adding a Custom Background
- Configuring Reboot Timing
• Enabling Scan to Configure Auto Display
• Creating Preferred Temporary Folders
• Creating Pseudo Drives
• Configuring Task Bar Restoration Options
• Configuring Cache Storage Location
• Enabling Regulatory Settings
• Setting Country Codes

**Preserving Network Settings**

The Avalanche Enabler allows you to create a registry key to mask and retain mobile device network settings in the event that a `NULL` value is received from the Avalanche Manager.

This event occurs if you have configured your network profile to be a manual network profile and assigned network settings to your mobile device by hand. When the mobile device is cold-booted, the manual network settings will be lost and you receive the `NULL` value. If you create and configure this registry key properly, the mobile device will retain the manual network profile settings after a warm or cold boot.

Device Support: CE devices

Enabler Version: 4.02-27

**To mask network settings:**

1. Access the **Registry** tab.
2. From the **Root** drop-down menu, select **HKEY_LOCAL_MACHINE**.
3. In the **Key** text box, enter the following path:
   \Software\Wavelink\Avalanche.
4. In the **Name** text box, enter the following name:
   AdditiveProfileMask.
5 In the **Value** text box, enter the desired registry value. The following options are available:

<table>
<thead>
<tr>
<th>Network Setting</th>
<th>Registry Mask Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>useDHCP</td>
<td>0x01</td>
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<tr>
<td>IPAddress</td>
<td>0x02</td>
</tr>
<tr>
<td>SubnetMask</td>
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<td>Gateway</td>
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<tr>
<td>Domain</td>
<td>0x80</td>
</tr>
<tr>
<td>All network settings</td>
<td>0xFF</td>
</tr>
</tbody>
</table>

**Table 1-1: Network Setting Mask Values**

6 From the **Type** drop-down menu, select **DWORD**.
7 Click Add.

8 Click OK.

9 Deploy the new configuration to the mobile device.

**Adding WINS Support**

WINS (Windows Internet Naming Service) provides a distributed database for registering and querying dynamic computer name-to-IP address mapping in a routed network environment. This means that CE devices can find each other on the network by registering themselves with the WINS centralized server, then asking the server about other devices.

You can add WINS support to the Enabler by creating a registry key configured with the support value. This allows the device to contact a WINS server.

Devices Support: CE devices with Fusion based radios

Enabler Version: 4.02-27

**To add WINS support:**

1 Access the Registry tab.

2 From the Root drop-down menu, select HKEY_LOCAL_MACHINE.

3 In the Key text box, enter the following path:
   Software\Wavelink\Unified Network Interface\DDI

4 In the Name text box, enter the following name: WINS1.

5 In the Value text box, enter the IP address of your WINS server.

6 From the Type drop-down menu, select String.

7 Click Add.

8 Repeat the preceding steps, this time entering WINS2 in the Name text box.

9 Click OK.

10 Deploy the new configuration to the mobile device.


**Adding a Custom Background**

The default Enabler background image is a Wavelink logo. If you want to change this image to any other image, you can create and configure a registry key on the Enabler that replaces the default image.

The image that appears is controlled by a registry key. To change the background, simply update this key.

Device Support: Windows Mobile 5 and PPC devices support .bmp, .jpg, .gif, and .png files. Other CE devices support .bmp files only.

Enabler Version: 4.02-28 and later

**To change the background image:**

1. Access the Registry tab.

2. From the Root drop-down menu, select HKEY_LOCAL_MACHINE.

3. In the Key text box, enter the following path: SOFTWARE\Wavelink\Avalanche\Config

4. In the Name text box, enter the following name: CustomBackground.

5. In the Value text box, enter the full file path to the image.

6. From the Type drop-down menu, select String.

7. Click Add and then OK.

8. Deploy the configuration to the mobile device.

   The image will appear in place of the default Wavelink image.

**Configuring Reboot Timing**

The Enabler can detect when settings that have changed on the mobile device require a reboot before taking effect. When the Enabler detects that it should reboot the mobile device, a dialog box appears counting down the seconds until the reboot. You can configure the number of seconds that elapse before the reboot by configuring a registry key.

Device Support: Global for devices that support reboot.

Enabler Version: 4.02-28 and later
To configure device reboot timing:
1. Access the Registry tab.
2. From the Root drop-down menu, select HKEY_LOCAL_MACHINE.
3. In the Key text box, enter the following path:
   SOFTWARE\Wavelink\Avalanche\Config
4. In the Name text box, enter the following name: RebootTimer.
5. In the Value text box, enter the number of seconds you want to elapse before the device reboots.
6. From the Type drop-down menu, select DWORD.
7. Click Add and then OK.
8. Deploy the configuration to the mobile device.

Enabling Scan to Configure Auto Display

If a mobile device is not assigned a network profile, you can create a registry key that will automatically display the scan to configure screen upon Enabler start up. This prompts the user to scan a barcode that contains the network profile for that mobile device.

Device Support: Global for devices.

Enabler Version: 4.02-03 and later

To configure device reboot timing:
1. Access the Registry tab.
2. From the Root drop-down menu, select HKEY_LOCAL_MACHINE.
3. In the Key text box, enter the following path:
   SOFTWARE\Wavelink\Avalanche\Unsupported
4. In the Name text box, enter the following name:
   scanner.config.autodisplay.
5. In the Value text box, enter:
   • 1 if you want to enable the registry key.
• 0 if you want to disable the registry key.

6 From the Type drop-down menu, select DWORD.

7 Click Add and then OK.

8 Deploy the configuration to the mobile device.

Creating Preferred Temporary Folders

Using registry keys, you can set up preferred temporary folders on the mobile device.

Device Support: Global for devices.

Enabler Version: 4.01-02 and later

To enable preferred temporary drives:

1 Access the Registry tab.

2 From the Root drop-down menu, select HKEY_LOCAL_MACHINE.

3 In the Key text box, enter the following path:
   SOFTWARE\Wavelink\Avalanche\ 

4 In the Name text box, enter the following name: TEMP_Preferred.

5 In the Value text box, enter the complete location for the temporary folder. For example:
   \Application\Temp

6 From the Type drop-down menu, select Multistring.

7 Click Add and then OK.

8 Repeat the steps to create multiple temporary folders.

9 Deploy the configuration to the mobile device.

Creating Pseudo Drives

Pseudo drives all you to a reference to a folder, but have it treated like a directory. This simplifies the management of the files in some packages eliminating the need to specify sub-directories.
Device Support: Global for devices.

Enabler Version: 4.01-02 and later

**To enable pseudo drives:**

1. Access the **Registry** tab.

2. From the **Root** drop-down menu, select **HKEY_LOCAL_MACHINE**.

3. In the **Key** text box, enter the following path:
   
   \SOFTWARE\Wavelink\Avalanche\Drive

4. In the **Name** text box, enter specify the drive letter for the pseudo drive (s:\, h:\, etc.).

5. In the **Value** text box, enter the path to actual storage location.

6. From the **Type** drop-down menu, select **String**.

7. Click **Add** and then **OK**.

8. Deploy the configuration to the mobile device.

**Configuring Task Bar Restoration Options**

Upon launch the Enabler takes control of the mobile device task bar. You can create a registry key that restores that task bar to a specific state when the Enabler shuts down.

You can set the registry key to the following values:

- **0=restore.** This value returns the task bar to the state it was before the Enabler started.

- **1=show.** This value allows the task bar to display.

- **2-hide.** This setting hides the task bar.

Device Support: Global for devices.

Enabler Version: 4.02-18 and later

**To restore the task bar:**

1. Access the **Registry** tab.
2 From the Root drop-down menu, select HKEY_LOCAL_MACHINE.

3 In the Key text box, enter the following path:
SOFTWARE\Wavelink\Avalanche\.

4 In the Name text box, enter the following name: RestoreTaskbarMode.

5 In the Value text box, enter one of the following
   • 0=restore
   • 1=show
   • 2=hide

6 From the Type drop-down menu, select DWORD.

7 Click Add and then OK.

8 Deploy the configuration to the mobile device.

**Configuring Cache Storage Location**

If you are working with peer to peer devices, you can configure the location where you want to store the packages that will be available for other devices to download.

Device Support: Global for devices.

Enabler Version: 4.02-11 and later

**To configure cache storage location:**

1 Access the Registry tab.

2 From the Root drop-down menu, select HKEY_LOCAL_MACHINE.

3 In the Key text box, enter the following path:
   SOFTWARE\Wavelink\Avalanche\.

4 In the Name text box, enter ProxyPath.

5 In the Value text box, enter the path to where you want to cache software packages.

6 From the Type drop-down menu, select String.
7  Click **Add** and then **OK**.

8  Deploy the configuration to the mobile device.

**Enabling Regulatory Settings**

When you enable regulatory settings, you ensure the wireless device meets the regulatory compliance requirements for a specific country. If you enable regulatory settings, you must also set a country code.

Devices Support: CE devices with Fusion based radios

Enabler Version: 4.04-06 and later

**To configure regulatory settings:**

1  Access the **Registry** tab.

2  From the **Root** drop-down menu, select **HKEY_LOCAL_MACHINE**.

3  In the **Key** text box, enter the following path:

   SOFTWARE\Wavelink\Unified Network Interface\DDI

4  In the **Name** text box, enter the following name: **Enabler802.11d**.

5  In the **Value** text box, enter one of the following

   • 0  (where 0 means disabled)

   • 1  (where 1 means enabled)

6  From the **Type** drop-down menu, select **DWORD**.

7  Click **Add** and then **OK**.

8  Deploy the configuration to the mobile device.

**Setting Country Codes**

When you configure the country code, you enforce the channels on which the wireless devices communicate. You must configure the country code if regulatory settings are enabled.

Devices Support: CE devices with Fusion based radios

Enabler Version: 4.04-06 and later
To configure country codes:

1. Access the Registry tab.

2. From the Root drop-down menu, select HKEY_LOCAL_MACHINE.

3. In the Key text box, enter the following path:
   SOFTWARE\Wavelink\Unified Network Interface\DDI

4. In the Name text box, enter the following name: CountryCode.

5. In the Value text box, enter the desired country code (refer to the list below). the full file path to the image.

6. From the Type drop-down menu, select String.

7. Click Add and then OK.

8. Deploy the configuration to the mobile device.

   The device is configured to use the time zone for the country you configured.
## Country Codes

<table>
<thead>
<tr>
<th>Country Name</th>
<th>Code</th>
<th>Country Name</th>
<th>Code</th>
</tr>
</thead>
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*Table 2-1: Country Codes*
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<th>Enabler</th>
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<th>Key Configuration</th>
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<tr>
<td>Venezuela</td>
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</tr>
</tbody>
</table>

**Table 2-1: Country Codes**
Wavelink Contact Information

If you have comments or questions regarding this product, please contact Wavelink Customer Service via e-mail or telephone.

Email: customerservice@wavelink.com

Phone: 801-316-9000