CREATING DEVICE-SIDE AVALANCHE PROPERTIES

OVERVIEW

This document explains how a user can create Avalanche properties at the mobile device that can be viewed from the Avalanche Console.

- Creating Properties Files
- Modifying Registry Settings
- Transferring Properties to the Avalanche Console
- Document Revision History

Avalanche provides the ability to turn third-party information that is generated at the mobile device into properties that can then be transferred to and displayed in the Avalanche Console. These properties are called device-side properties. This document explains how a user can create and send device-side properties to the Avalanche Console to be displayed in the *Mobile Device Details* dialog box.

The device-side properties feature could be used to:

- Obtain dynamic, device-specific information (for example, state changes within a specific application).

- Obtain static, device-specific information (for example, a serial number or other unique value).

NOTE: It is important to note that the Avalanche Enabler sends device-side properties to the Enterprise Server; it does not collect the information. Vendors must create their own applications and utilities to gather the required information and write it to a plain-text file on the device.

When you use device-side properties, a utility or application collects the data and converts it into key-value pairs. These key-value pairs are stored in a plain-text properties file. When the device updates, the Avalanche Console displays the key-value pairs as properties in the *Mobile Device Details* dialog box.

CREATING PROPERTIES FILES

Applications and utilities that collect information that will be used as a device-side property must be able to do the following:

- Collect the required information.

- Convert the information into key-value pairs.

- Write the pairs to a plain-text file.

- Create a vendor entry in the file.

- Provide a name for the plain-text file with a `.prf` extension.

- Write the file to a specified location on the mobile device. (This must be the location that is specified in the `PROPS` value of the `HKEY_LOCAL_MACHINE\Software\Wavelink\Avalanche` registry key. For information on modifying this location, see Modifying Registry Settings.)

PROPERTIES FILE OVERVIEW

A properties file is a plain-text file with an arbitrary name followed by the `.prf` extension. The plain-text file contains key-value pairs that represent properties. The Avalanche Enabler reads the key-value pairs and transfers them to the Avalanche Console as properties for the mobile device. These properties are displayed in the **Properties** tab of the *Mobile Device Details* dialog box in the Avalanche Console.

A properties file must:

- Have a unique name

- Have a `.prf` extension

- Contain a vendor entry

- Contain only one unique key-value pair per line

- Mark supplemental text with the appropriate comment delimiters

NAMING AND SAVING PROPERTIES FILES

You may create multiple properties files. Because multiple properties files are allowed and because all properties files are stored in the same directory on the mobile device, each properties file should have a unique name.

When searching for device-side properties, the Avalanche Enabler searches the location specified in the registry key for properties files. When searching for device-side properties, the Avalanche Enabler opens and processes any file with a `.prf` extension that is in the directory and disregards the name of any file that does not have a `.prf` extension.

If you want a properties file to survive a cold boot, then the file should be written to a location on the mobile device that will survive a cold boot (for example, the Flash drive). If you decide to save the properties file to a location other than the default, you must change the `PROPS` value in the registry key. For more information, see Modifying Registry Settings.

NOTE: Wavelink does not supply write protection or other methods to secure the integrity of the data within a properties file; vendors must supply their own methods and naming conventions.

PROPERTIES FILE FORMAT

The properties file is a plain-text file that contains the following:

- A vendor entry

- One key-value pair (property) per line

- Comments (optional)

The properties file uses the Java standard for creating lists of properties. The following is an example of text from a properties file:

```
#Sample.prf

vendor = UniqueVendor
UniqueValue1 = 1
UniqueValue2 = 2
UniqueValue3 = 3

#End Sample.prf
```

Vendor Entry

Each properties file must contain one vendor entry. The vendor entry must be the first property specified in the properties file. The vendor entry uses the following format:

```
vendor = [vendor name]
```

where `[vendor name]` is a name of up to 255 alpha-numeric characters. It is recommended that you use a unique vendor name for each properties file that you create.

NOTE: Ensure that the `vendor` portion of the parameter is formatted in all lower-case letters.

Avalanche uses the vendor name to organize user-defined properties. The **Properties** tab in the *Mobile Device Details* dialog box displays the device-side properties that it has collected from the mobile device. Each property that displays in the *Mobile Device Details* dialog box is prefaced with the vendor name that is specified in the properties file from which Avalanche obtained the property. A period (.) separates the vendor name and the property.

Key-Value Pairs

Each property in the properties file must appear on a new line and must use the following format:

```
[key] = [value]
```

where `[key]` is the name of the property and `[value]` is the value assigned to the property.

Each line must terminated with a hard return or a line terminator. There is no limit to the number of properties that a properties file may contain.

Comment Delimiters and White Space

Use either `#` or `!` to comment out a line of text. A line that begins with one of these two characters or contains only white space is ignored.

MODIFYING USER-DEFINED PROPERTIES FILES FROM AVALANCHE

Once you have created a device-side properties file and uploaded it to the server, you can use the Avalanche Console to add a property to the device-side properties file.

For example, a mobile device has a properties file with the vendor name of `UniqueVendor`. A user at the Avalanche Console wants to create a property that is written to that properties file on the device. The property that the user wants to assign is `UniqueValue4`.

1. The user opens the *Mobile Device Details* dialog box and clicks **Add Property**.

2. He selects `UniqueVendor` from the **Category** drop-down list, and types `UniqueValue4` in the **Property Name** text box.

3. When he finishes defining the property, it appears in the Properties List under the `UniqueVendor` heading. When the device updates, the property is added to the `UniqueVendor` properties file.

MODIFYING REGISTRY SETTINGS

The value of `PROPS` in the registry key `HKEY_LOCAL_MACHINE\Software\Wavelink\AVALANCHE` indicates the location on the mobile device where device-side properties are stored. If the Avalanche Enabler is installed in the default location on a mobile device, then this value may be `C:\Program Files\Wavelink\Avalanche\Config\Props`. (This path may vary between mobile devices.)

TRANSFERRING PROPERTIES TO THE AVALANCHE CONSOLE

Device-side properties are sent to the Avalanche Console during an update. After the mobile device performs an update, the device-side properties will appear in the **Properties** tab of the *Mobile Device Details* dialog box for the mobile device.

DOCUMENT REVISION HISTORY

- 5/18/05. Beta document released.

- 1/14/10. Document updated.

Wavelink Corporation
6985 Union Park Ave., Suite 335
Midvale, UT 84047-4155
Telephone: 801.316.9000