Communicator

Wavelink Communicator
User Guide

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Chapter 1: Introduction to Wavelink Communicator

This document is a guide to the functions and components of the Wavelink Communicator (Communicator). This document presents:

- An introduction to the Communicator

- Detailed information about the components of the Communicator

- Tasks for creating and using an effective, secure Communicator network

This document provides first time Communicator users with a guide for installing, configuring and operating the Communicator. The Communicator is a push-to-talk voice over IP application that enables users to communicate with one another in a one-to-one (device to device) or one-to-many (broadcast) mode of operation.

Communicator is paired with the Avalanche Console (either SE or MC). You must install the package to a software profile, configure the package and then send the configuration to the mobile devices that support the configuration.

About This Document

This document makes the following assumptions:

- You have a general understanding of the basic operational characteristics of your network operating systems.

- You have a working knowledge of your wireless networking hardware (i.e. your mobile devices).

- You have a working knowledge of your Avalanche Console system.

- You have administrative access to your network.

Document Conventions

This document uses the following typographical conventions:

`Courier New`	Any time you interact with the physical keyboard or type information into a text box that information appears in the `Courier New` text style. This text style is also used for any file names or file paths listed in the text.
	Examples:
	The default location is `C:\Program Files\Adobe\FrameMaker7.1.`
	Press `CTRL+ALT+DELETE`.
Bold	Any time this document refers to an option, such as descriptions of different options in a dialog box, that option appears in the **Bold** text style. This is also used for tab names and menu items.
	Examples:
	Click **Open** from the **File** Menu.
Italics	Any time this document refers to another section within the document, that section appears in the *Italics* text style. This style is also used to refer to the titles of dialog boxes.
	Example:
	See *Components of Avalanche MC* on page 15 for more information.
	The *Infrastructure Profiles* dialog box appears.

Installation Requirements

You can install Communicator on following types of hardware:

- CE mobile devices with OS version 5.0 or later

- Windows Mobile device with OS version 5.0 or later

- Desktops with Enabler version 3.0 or later

- Mobile computers with Enabler 3.0 or later

Additional Requirements

- Avalanche MC or Avalanche SE version 4.8 or later

- A headset is recommended for optimal performance.

Chapter 2: Installing the Communicator Package

The Communicator software package is delivered as an Avalanche package. To obtain the package, download it from the Wavelink Web site or contact Wavelink Customer Service.

The Communicator package must be installed to an Avalanche Console through a software profile before if can be configured or deployed to your mobile devices. You can add the package to an existing software profile or create a new profile. There are two methods you can use to create a profile:

• Through the **Software Profiles** tab

• Using the *Add Device Software Wizard*

The following steps provide instructions for using the wizard. If you would like to know more about the **Software Profiles** tab method refer to the *Avalanche User Guide*.

To add a software profile:

1 From the **Quick Start** tab, select **Add Device Software**.

The *Add Device Software Wizard* launches.
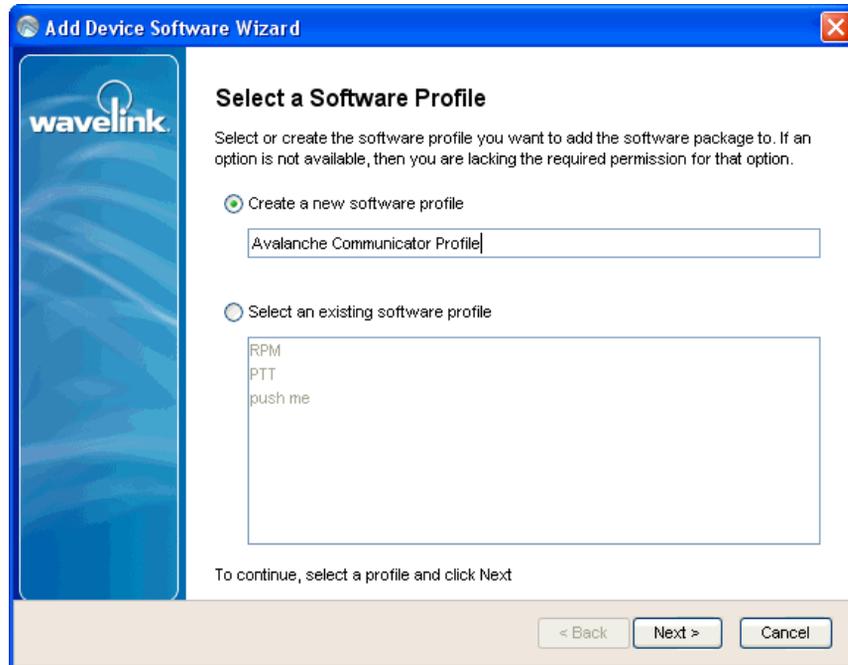
Figure 2-1. *Select a Software Profile*

2 In the **Create a New Software Profile** text box, enter the name of the profile and then click **Next**.

The *Configure Software Profile* dialog that appears.
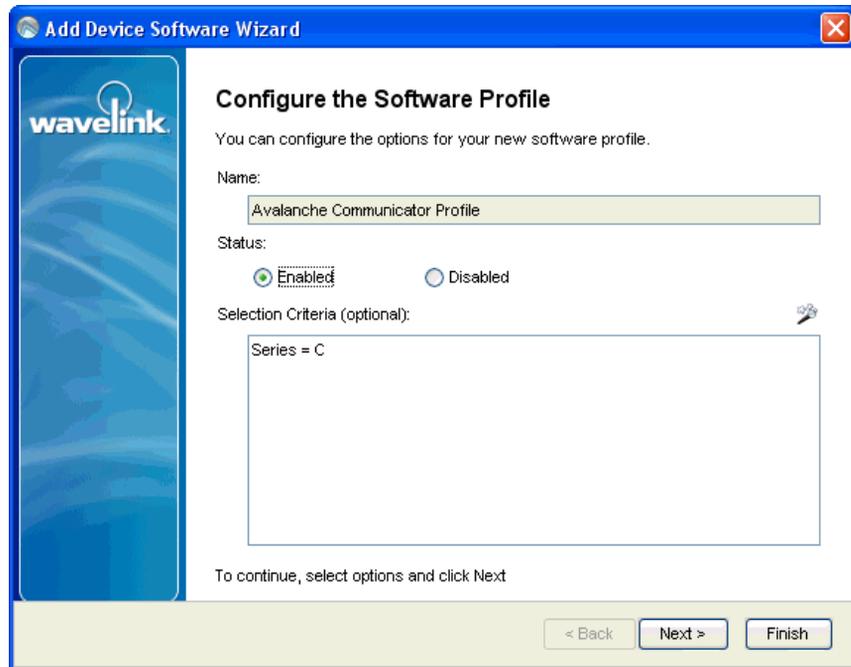
Figure 2-2. *Configure the Software Profile*

3   If desired, enable the software package and configure selection criteria.

NOTE You do not have to enable or configure selection criteria for the profile at this time. You will have the same options once the profile is created.

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4   Click **Next**.

The *Apply Software Profile* dialog box appears.
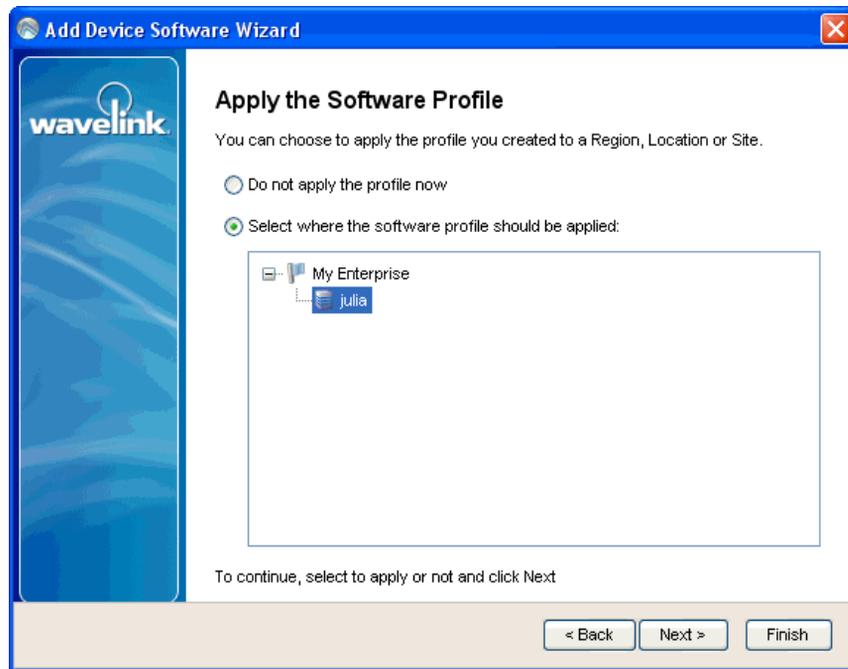
Figure 2-3. *Apply the Software Profile*

5   You can select which region or location to which you want to assign this profile or you can select to not apply the profile at this time. If you do not want to apply the profile right now, you can at a later time through the main console.

6   Click **Next**

7   In the *Select a Software Package* dialog box**,** click **Browse**.
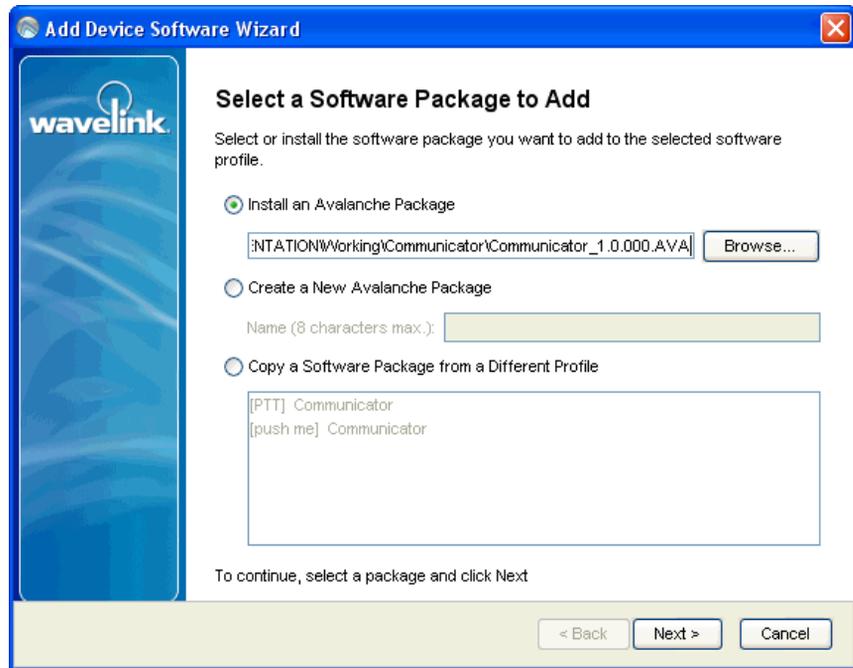
Figure 2-4. *Select a Software Package to Add*

8 From the *Select the Software Package to Add* dialog box, navigate to the location of the Communicator package and click **Select**.

The package location will appear in the text box.

9 Click **Next**.

The *End User License Agreement* dialog box appears.
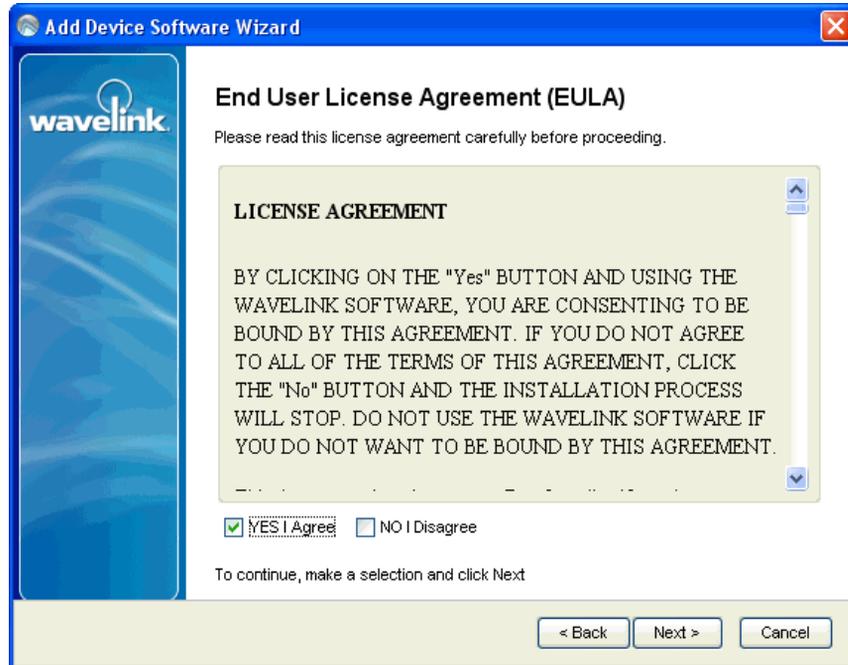
Figure 2-5. *End User License Agreement*

10 Enable the **Yes, I agree** option, if you agree to the license agreement.

The package begins extracting and installing in the Avalanche Console default location.
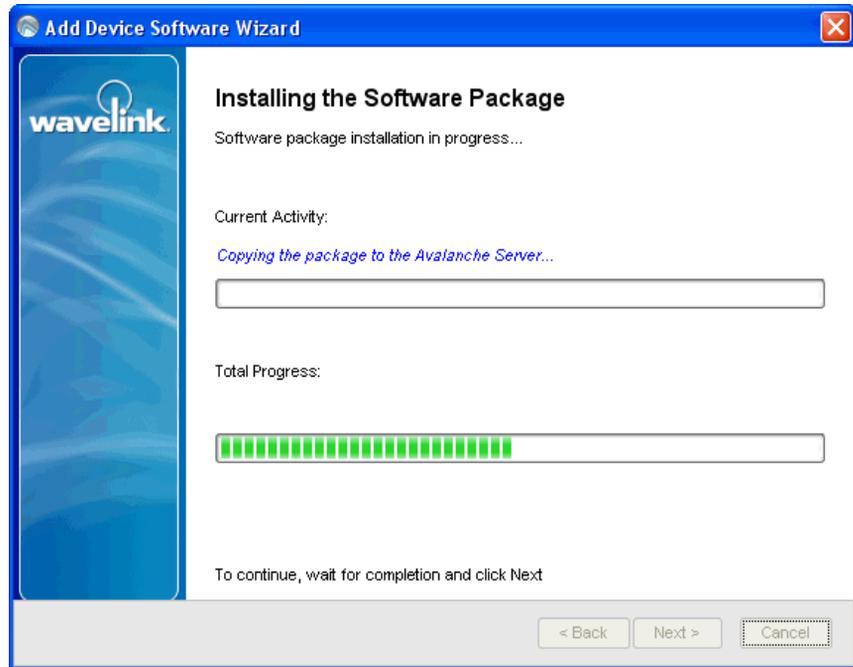
Figure 2-6. *Package Installation*

Once installed, the *Configure the Software Package* dialog box appears. From this dialog box you can enable the software package and configure it. Configuration is discussed in detailed in *Chapter 4: Basic Communicator Configurations* on page 19.

11 Click **Finish** to close the *Add Device Software Wizard*.

Chapter 3: Activating Communicator Licenses

After you install the Communicator package, you must license it with a valid license code. This code uses a technique called nodelocking, in which Avalanche MC is licensed only for a specific computer, or node, on your network. A node is defined as several specific system attributes that, in combination, uniquely distinguish it from any other system in your organization.

Once a license for the Communicator is activated and associated with a specific node (nodelocked) you cannot move that license to another node. If you want to move the license, you need to contact Wavelink Customer Service.

Communicator licenses are on a per device a basis, meaning you must have a license for each device you want to use with Communicator.

When you activate Avalanche Communicator licenses, a license file called `wavelink.lic` is installed on your system, which provides the information the product needs to operate.

After you install Communicator, you can access the *Wavelink Activation* dialog box from the software package or by selecting **Start > All Programs > Wavelink Avalanche > Activate**. Use this dialog box to activate your Communicator licenses in one of the following ways:

- Activating Automatically

- Activating Manually

- Importing a License

- Activating Demo Mode

Activating Automatically

If your Avalanche Console resides on a system that has Internet access, you can use the automatic license activation to activate Communicator licenses.

When you use the automatic activation method, Avalanche connects with a secure Wavelink Web Server location to verify your license. A nodelock and a

license file are sent to your host system. The license file called `wavelink.lic` is installed on your system, which provides the information the product needs to operate.

To activate Communicator licenses:

1 Obtain the Communicator product licensing code from Wavelink**.**

NOTE You receive this information in an e-mail from Wavelink upon purchasing Communicator licenses.

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2 Access the *Wavelink Activation* dialog box by clicking **Start > All Programs > Wavelink Avalanche MC > Activate**.

3 Type your license number for this installation in the **Product License** text box.

4 Click **Activate**.

Avalanche MC connects with a secure Wavelink Web site, your license and nodelock are verified, and a license file is sent to your host system. A new dialog box appears, displaying your licensing information and asking if you want to save the information for this installation.

5 Click **Yes** to accept the license file and activate your installation.

The Wavelink licensing process ties the Communicator licenses to a specific computer on your network. If a situation requires you to re-install Avalanche on a different system, please contact Wavelink Customer Service to unlock the Communicator licenses from that system. Once the license is unlocked, you can re-install the Avalanche on a new system, re-install the Communicator package and renew the licenses..

Activating Manually

If the machine on which Avalanche is installed is not connected to the Internet or if you have problems with the automatic activation, you can activate your license manually.

To activate your license manually you will need the following information:

- Node lock for the system. You can get this information from the Wavelink Activation dialog box.

- Product license code. This information comes from the e-mail you receive from Wavelink upon purchasing the Communicator.

To manually activate a license:

1 Obtain the information needed for the product license.

2 Open a Web browser and navigate to `http://www.wavelink.com/activation`.

3 Enter the **Hardware Node Lock** and the **License** code in the text boxes.

4 Click **Activate** button to activate license.

   The Wavelink activation server verifies the information you entered and provides you a link to download the `wavelink.lic` file if your node lock and license key are valid.

5 Click on the link and change **Save As** type to **All Files**.

6 Download the file to desired location.

7 Move `wavelink.lic` file to system where Avalanche is installed.

8 Follow the steps to import the Communicator license into your Avalanche installation. See below.

Importing a License

If you already have a license file for the Communicator or if you have received a `wavelink.lic` file using the manual activation method, you can activate the file by importing it. You have the option of importing multiple license files or consolidating several files.

To import a license:

1 Access the *Wavelink Activation* dialog box by clicking **Start > All Programs > Wavelink Avalanche MC > Activate**.

2 Click **Browse** and navigate to the location of the `wavelink.lic` file.

3 Select the `wavelink.lic` file and click **Yes**.

4 In the *Wavelink Activation* dialog box, click **Close**.

Activating Demo Mode

If you are installing the Communicator for demonstration purposes, you can run it in demo mode. Demo mode authorizes the Communicator to manage up to two mobile devices for 30 days.

To activate demo mode:

1 Access the *Wavelink Activation* dialog box by clicking **Start > All Programs > Wavelink Avalanche MC > Activate**.

The *Wavelink Activation* dialog box appears.

2 Click **Demo**.

Avalanche MC will run in demo mode.

Releasing Licenses

Licenses for mobile devices are frequently redistributed, providing flexibility in managing licenses. To encourage redistribution, you can configure the Mobile Device Server to release licenses from mobile devices that have not connected to the network within a specific number of days. You can also release licenses by deleting devices from the Mobile Device Inventory.

For information about releasing licenses, refer to the *Wavelink Avalanche User Guide, Chapter 9: Managing Mobile Device Distributed Servers*.

Chapter 4: Basic Communicator Configurations

This chapter provides information about the basic configuration of the Communicator. The tasks in this chapter will assist you in getting the Communicator configured and deployed to your mobile devices. For additional and advanced configurations refer to *Chapter 6: Advanced Configurations* on page 49.

The following tasks are described:

- Accessing the Configuration Console

- Configuring General Settings

- Configuring Network Settings

- Backing Up Settings

- Restoring Settings

- Applying the Software Profile

- Deploying the Communicator Package

Accessing the Configuration Console

1 Launch the Avalanche Console.

2 Select **Software Profiles**.

3 From the **Software Profile List**, select the profile where the Communicator package is installed.

4 Select the Communicator package and click **Configure**.

The *Configure Software Package* dialog box appears.
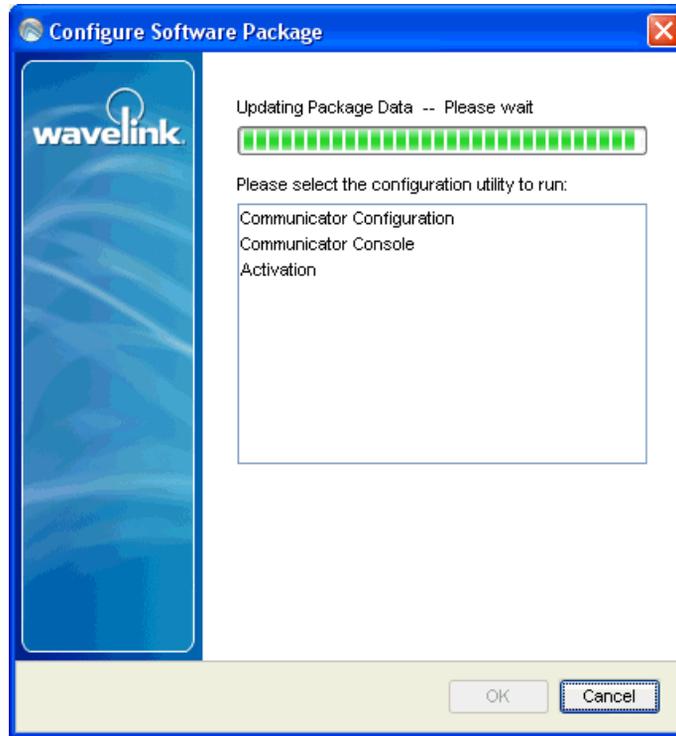
Figure 4-1. *Configure Software Package*

From this dialog box you can access the Communicator Configuration
Console, the Communicator Console or Activate licenses.

5 To access the Communicator Configuration Console, double-click
Communicator Configuration.

The Console appears.
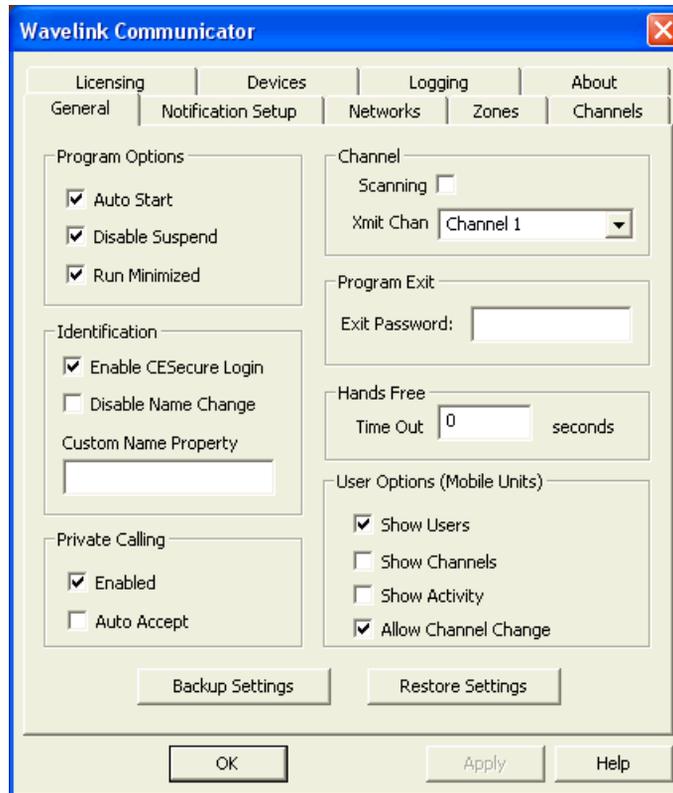
Figure 4-2. *Communicator Configuration Console*

Assigning the License Server

By default the License Server is installed with the Remote Control software package when you install your Avalanche system. The Communicator automatically assumes use of that License Server and port. However, you can change the License Server and port number from the **Licenses** tab of the Configuration Console.

NOTE Assigning the License Server IP address and Port are the only required configurations you must make to begin using the Communicator. Once these settings are assign, you can deploy the Communicator to your mobile devices.

Other configurations allow you to customize your Communicator experiences, but are not required. For information about deploying the Communicator, refer to *Deploying the Communicator Package* on page 37

- **Server**. You can enter the name of the License Server, the name of the computer on your network running the License Server, or the IP address of the computer running the License Server.

- **Port**. Port number, default 7221.

- **Status**. Displays the total number of licenses available and total number in use.

- **Test**. This tests whether your License Server information is valid.

- **Detect Server**.This tests for a License Server on the local machine. You can use this feature to find your License Server when Communicator is initially installed and the License Server is running on the same machine.

If a local license server is found, the **Server** address will be updated and the status message will reflect the number of total number of licenses contained on that Server as well as the number of licenses available.
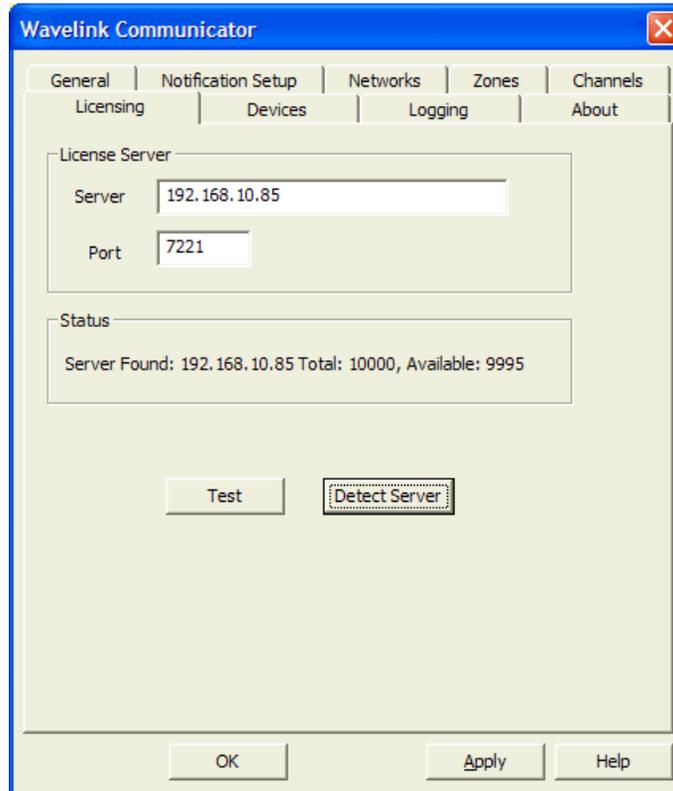
Figure 4-3. *License Server Detected*

If a local license server is not found, the **Status** message will indicate such.
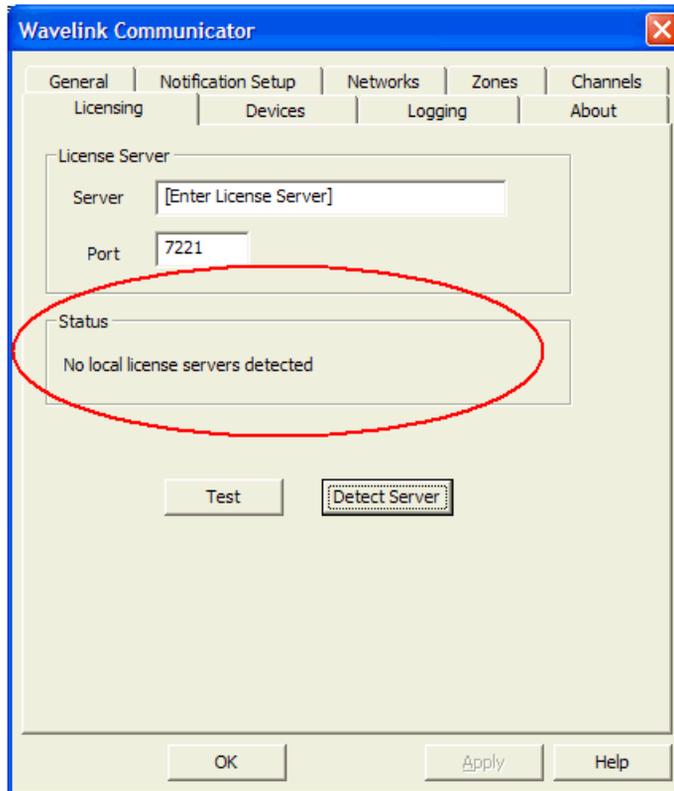
Figure 4-4. *No License Server Found*

To change the License Server:

1 Access the Configuration Console and select the **Licensing** tab.
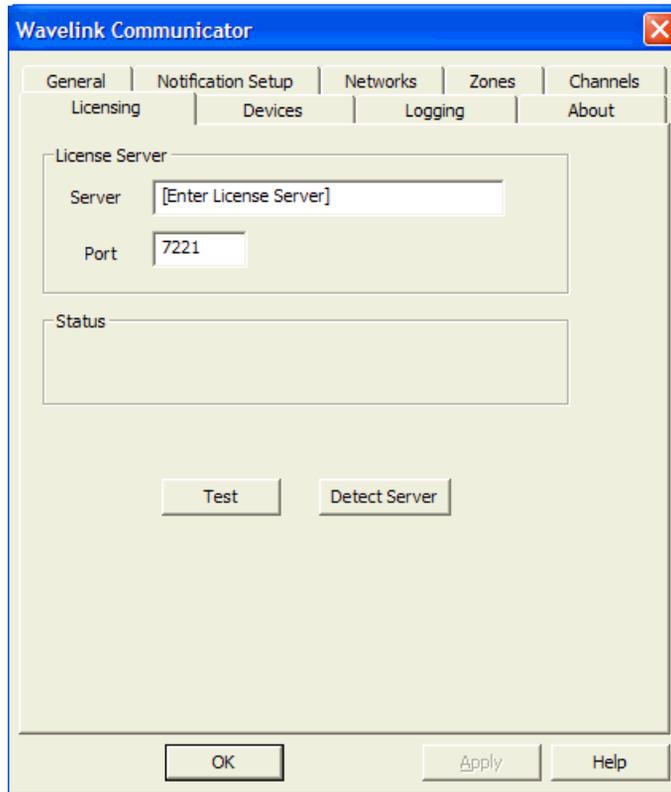
Figure 4-5. *Licensing*

2 In the **Server** text box, enter the name of the License Server.

3 In the **Port** text box, enter the port number you want the License Server to run on.

4 To verify the status of your License Server, click **Test**.

The **Status** region will display the total number of licenses contained on the License Server and the number of available licenses.

Configuring General Settings

Many of the general settings are configured by default. However, you can change them according to your preferences. This section provides information about the each of the following settings:

- Program Options

- Identification

- Private Calling

- Channels

- Quit Action

- Hands Free

- User Options

Program Options

Program options are settings you can select about how the Communicator behaves on the mobile device. The following program options are configurable:

- **Auto Start**. If enabled, this option configures the Communicator to automatically launch upon start of the mobile device. By checking this option, a new .ini file is created for the Enabler. This adds the startup program link for the Communicator.

- **Disable Suspend**. If this option is enabled and the Communicator is running, the device will be prevented from going into sleep mode.

- **Run Minimized**. If enabled, this option will run the Communicator minimized instead of full screen. The device will still be able to receive transmissions.

Identification

These options determine what user name will display in the Main tab of the Communicator. If these options are left as default, the user name will display the IP address of the device. The user name of the mobile device is determined in the following order:

1 Current CESecure User ID

2 Value from specified Custom Property Name

3 IP Address

You can configure the following identification properties:

- **Enable CESecure Login.** If enabled, CESecure will be queried for the current user id logged into the Avalanche Console.

- **Disable Name Change**. If enabled, this option will ensure the users cannot change the device name.

- **Custom Name Property**. Configure this text box to specify an Avalanche property that will be read from the device to be used as the user identity.

Private Calling

- **Enabled**. If enabled, this allows private messaging between mobile devices. If not enabled, mobile devices will not be allowed to call privately. All communications will be heard through the Communicator Console and any mobile devices on the same channel.

- **Auto Accept**. If enabled, this option forces the device to automatically accept the call. The device user cannot reject a call.

Channels

- **Scanning**. When enabled, this allows the Communicator to scan every available channel.

- **xmit Chan** drop-down. Enables you to select which channel you want the device to transmit on.

Quit Action

- **Quit Action** drop-down. This option gives you the choice to either minimize the Communicator or exit completely upon selecting to quit the program.

Hands Free

- This option allows you to configure the number of seconds before communication will stop if you are using the Hands Free mode. The option is configured in seconds with the default being zero (meaning that in order to end communication you must manually click the button). When the configured time has elapse, the Communicator will cease transmission to the mobile device. When setting the number of seconds, be

mindful of how long a user might want to speak for communication times-out.

User Options

The User Options allow you to control what the mobile device user can view on the Communicator.

- **Show Users**. If enabled, this option allows the mobile device user to view other devices using the Communicator as well as which channel they are communicating over.

- **Show Channels**. If enabled, this option allows the mobile device user to view other Communicator Channels in use from the mobile device. It displays each user on each working channel.

- **Show Activity**. If enabled, this option allows the user to view an Activity tab that displays real-time statistics of all mobile devices using the Communicator. It is not a log and there is no way to save this information..

- **Allow Channel Change**. If enabled, this option allows the mobile device user to change the communication channels.

To configure general Communicator settings:

1 Access the Communicator Configuration Console.

2 Select the **General** tab.
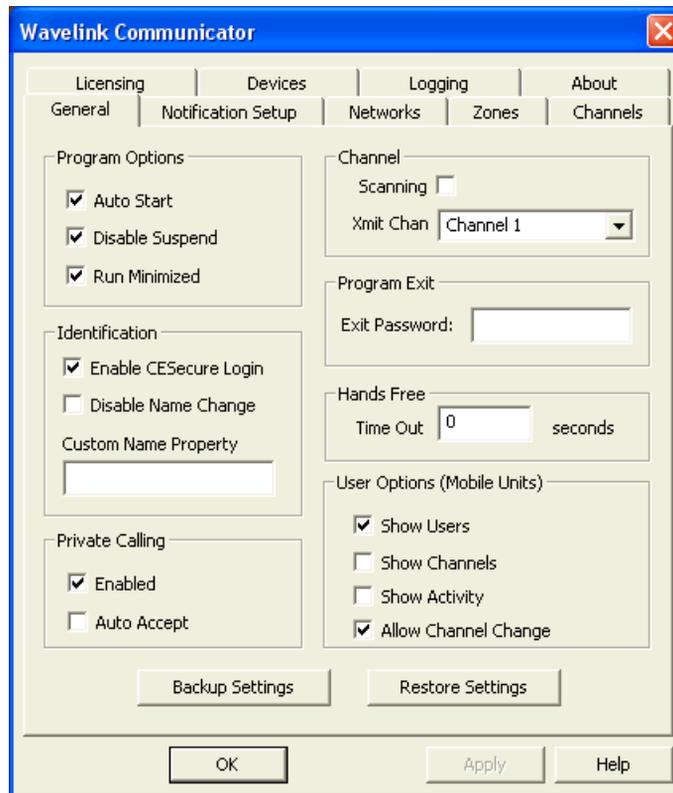
Figure 4-6. *General Tab*

3 Configure the options as desired and click **Apply**.

4 When you are finished, click **OK**.

Once the client portion of the Communicator is deployed, the configuration will take affect.

Configuring Network Settings

You can create new network profiles based on how you want to segment which mobile devices you want to communicate with. The Communicator can then send out multicasts to all the devices that are configured with that network profile. When you create a new network you name the location and

then enter the IP addresses and subnets to be part of the profile. Network profiles cannot have duplicate names.

To configure network profiles:

1 Access the Communicator Configuration Console.

2 Click the **Networks** tab.
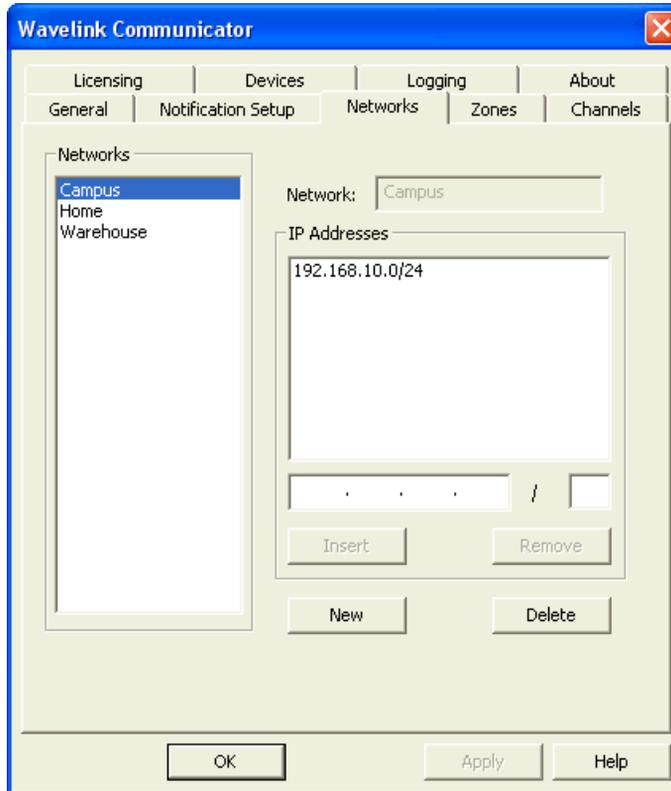
Figure 4-7. *Network Tab*

3 Click **New**.

4 In the **Network** text box, enter the name of the network profile you are creating.

5 Click **Apply**.

6 In the available text box, enter the IP address and subnet of where you want the multicast for this network profile to go.

7 Click **Insert**.

8 Continue adding IP addresses that you want to include in the profile.

9 When you are finished, click **Apply** and then click **OK**.

Once the client portion of the Communicator is deployed, the mobile device will be configured with the profile.

Configuring Notification Options

The notification options allow you to customize the way you want your mobile device user to be alerted that someone is calling or paging. You can configure the following notification options:

- Notification Set up

- All Devices

- Wave Files

- Calling Notifications

- Paging

Notification Set up

These options are available based on the specific features of the mobile device.

- **Use Beeper If Available**. If enabled, this option configures the device to beep if the Communicator is attempting contact.

- **Use Vibrate Mode If Available**. If enabled, this option configures the device to vibrate if the Communicator is attempting contact.

All Devices

- **Sound**. This list allows you to select a system sound that plays when a page is received. You can select one of the system sounds listed in the box.

If you have added wave files via the Manage wave files option, those
options will appear as well. or enter an absolute path to a wave file if you
want a sound of your choice.

NOTE The combo box is filled with values guaranteed to be available on all
Windows systems.

Wave Files

• Click the **Manage** button to display a *Wave Files* dialog box. From here,
  you can add wave files that you want to use as notification sounds. Once a
  file is added it will appear in the **Sound, Talk** and **Private Call** drop-down
  lists and be available for use.

Calling Notifications

These options allow you to customize what sound plays for each type of call.

• **Talk**. This sound plays when the device receives a message.You can select
  one of the system sounds listed in the box or enter an absolute path to a
  wave file if you want a sound of your choice.

• **Private Calling**. This sound plays when the device receives a private call.
  You can select one of the system sounds listed in the box or enter an
  absolute path to a wave file if you want a sound of your choice

Paging

• **Max tries**. Indicates the number of times the device will beep to alert the
  user of an incoming page.

To configure paging sounds:

1 Access the Communicator Configuration Console.

2 Select the **Paging** tab.
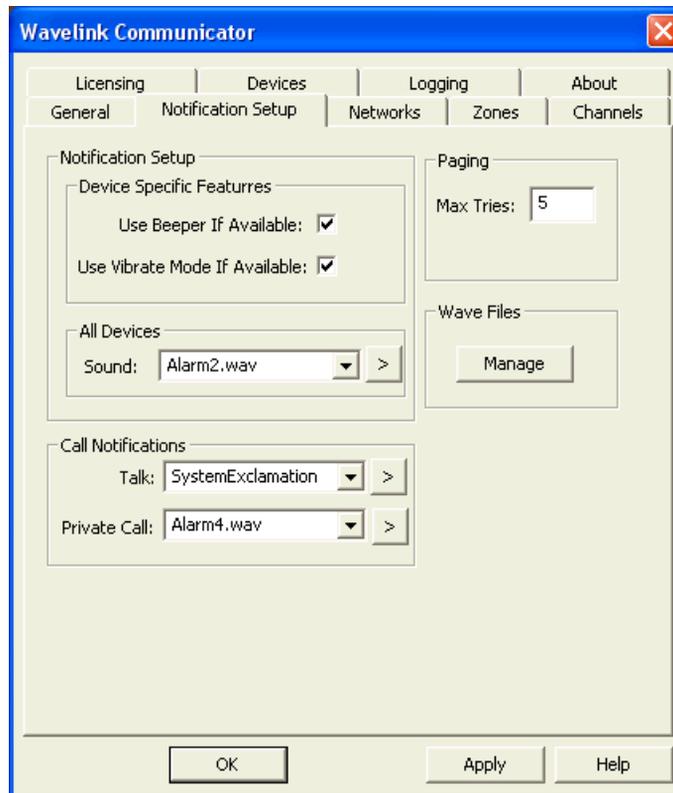
Figure 4-8. *Paging Tab*

3 Ensure you are aware of the features specific to your device.

4 Configure the options according to your preference.

5 Click **Apply**.

Once the client portion of the Communicator is deployed, the mobile device will be configured with the changes.

Backing Up Settings

You should backup your Communicator configurations regularly and if you plan to uninstall Avalanche. If for any reason the configurations are deleted or

corrupted, you will be able to restore the files from the backup. The backups are saved as configuration files and stored in a location of your choosing.

To back up Communicator configurations:

1 Access the Communicator Configuration Console.

1 In the **General** tab, click Backup.

A *Browse for Folder* dialog box appears.
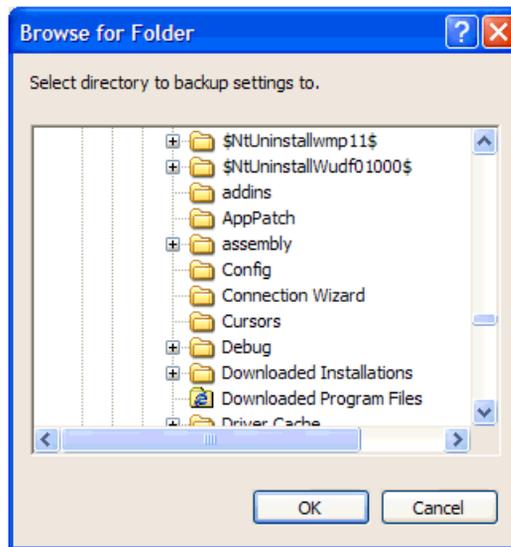
Figure 4-9. *Browse for Folder*

2 Navigate to where you want to save the backup file.

3 Click **OK**.

The configuration is saved and available to restore later.

Restoring Settings

If you created a Communicator configuration, you can restore those settings from the **General** tab in the Configuration Console

To restore Communicator Configurations:

1   Access the Communicator Configuration Console.

In the **General** tab, click **Restore**.

An *Open* dialog box appears.
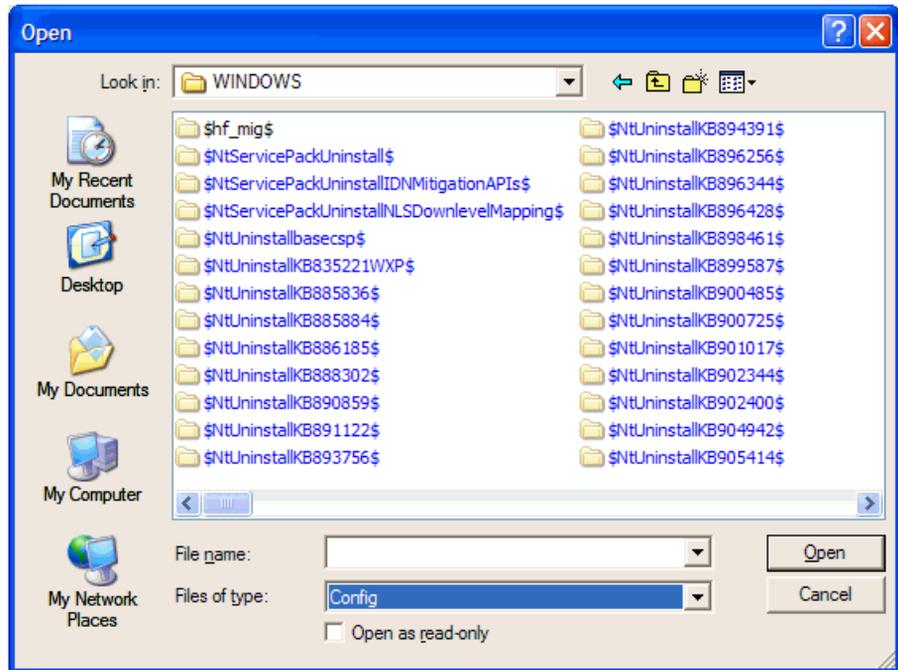
Figure 4-10. *Open*

2   Navigate to where you stored your Communicator backup files and select the file.

3   Click **Open**.

The settings are restored and appear in the open Configuration Console.

Applying the Software Profile

If you are running Avalanche SE, the software profile containing the Communicator configurations is automatically applied to your Server Location.

If you are running Avalanche MC, you will need to apply the software profile containing the Communicator to the region or location where you want the package to be deployed. The following steps provide information about how to apply the software profile.

To assign software profiles

1 From the Navigation Window, select the region or location where you want to assign the software profile.

2 Select **Region Properties** and then select the **Software Profiles** tab.

3 Click **Edit,** then **Add**.

The *Add Software Profile Application* dialog box appears.
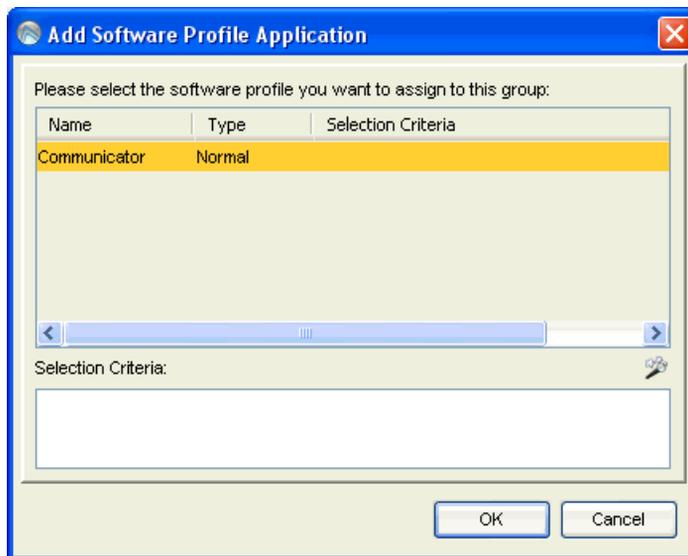
Figure 4-11. *Add Software Profile Application*

4 From the list of available software profiles, select the profile containing the Communicator package.

5 If you want to configure selection criteria for the profile, click the selection criteria button and use the Selection Criteria Builder to build the selection criteria for this network profile.

6 Click **OK**.

The profile is added to the **Software Profiles** tab for the region.

7 Save your changes.

The assigned profile will be deployed to the Servers when you perform a Universal Deployment.

Deploying the Communicator Package

If you are running Avalanche SE, the software package will be deployed to the Mobile Device Server and then the mobile devices the next time the server contacts the Enterprise Server.

If you are running Avalanche MC, you will need to perform a Universal Deployment to send the Communicator package to the Mobile Device Server. The next time the mobile devices contact the Mobile Device Server, the package will be downloaded to the device. The following steps provide information about how to perform the Universal Deployment.

To perform a universal deploy:

1 Select **Task Schedule** from the **Tools** menu.

The *Task Schedule* dialog box appears.

2 Click Add.

The *Select A Task* dialog box appears.

3 Select Universal Deployment from the **Task Type** list and click Next.

The *Select Task Destinations* dialog box appears.

4 Select the regions or Server Locations by enabling the checkbox next to the region or Server Location name. You can also select all regions by clicking **All**.

5 Click **Next.**

The *Select Scheduling Options* dialog box appears.

6   Determine when the event will occur.

If you want the event to occur immediately, select the **Perform the task now** option.

If you want the event to occur at some point in the future, select the **Schedule a one-time event for the task** option.

If you want the event to occur on a regular basis, select the **Schedule a recurring event for the task** option.

7   Click **Next**.

8   If you selected the **Schedule a one-time event for the task** option, the *Schedule the Time Window* dialog box appears.

Within this dialog box, you can set the following parameters for the event:

• Select the start date and time for the event.

• Determine when you want the event to end. If you want the event to end only after the deployment is complete, select the Run until complete option. If you want the event to end after a specified amount of time, select the **End** by option and then select the end date and time for the event. If the event is not finished by this date and time, Avalanche MC will generate an alert.

• If you want the start and end time for this event to be based on the local time for the Server Location, enable the **Use Server Location's Local Time** option. Otherwise, the start and end times are based on the local time for the Avalanche MC Console.

9   If you selected the **Schedule a recurring event** option, the *Configure Task Recurrence* dialog box appears.

Within this dialog box, you can set the following parameters for this event:

• Select the start time for the event.

• Determine when you want the event to end. If you want the event to end only after the deployment is complete, select the **Run until complete** option. If you want the event to end after a specified amount

of time, select the **End** by option and then select the end date and time for the event. If the event is not finished by this date and time, Avalanche MC will generate an alert.

- Set the frequency of the event. You can set whether the event occurs daily, weekly, or monthly.

- Set the start and end dates for the event.

- If you want the start and end time for this event to be based on the local time for the Server Location, enable the **Use Server Location's Local Time** option. Otherwise, the start and end times are based on the local time for the Avalanche MC Console.

NOTE Once Avalanche MC begins to send data to a Server Location, it does not stop until all data is sent. This prevents a Server Location from receiving only part of the information it needs. When an event's end time is reached, Avalanche MC completes any deployments that are in progress, but does not start sending data to any of the remaining Server Locations.

10 Click **Next**.

The *Review Your Task* dialog box appears.

11 Review your the task to ensure that it is correct and click **Next**.

The *Task Scheduled* dialog box appears.

12 Click **Next** to schedule a new event, or click **Finish** to return to the *Task Schedule* dialog box.

The task is added to the **Scheduled and Recurring Tasks** list. The task will run according to its schedule, and once it has completed, it will move to the **Successfully Completed Tasks** list.

Chapter 5: Using the Communicator

The Communicator client application enables two or more mobile device users to communicate via voice over the wireless data network.Once you have sent your the client portion of the Communicator to your mobile devices, you use it to speak with other Communicator-enabled mobile devices.

This section provides the following information about using the Communicator:

• Communicating from the Console

• Communicating from the Device

Communicating from the Console

You can launch the Communicator from either the Avalanche Console or from the mobile device. The following steps provide information about launching from the Avalanche Console.

To begin communication:

1 Launch the Communicator from the Avalanche Console by either right-clicking the mobile device with which you want to communicate or through the software profile.

The Communicator appears.

Figure 5-1. *Communicator Console*

2   Using the arrow buttons in the **Main** tab, select which channel on which you want to communicate.

3   To begin communicating you can either click the **Hands Free** button or press and hold the red transmit button located in the upper-left.

When you use the red button transmit button, you must keep the button pressed while speaking. The transmit button will change to green and indicate you can speak. If you click **Hands Free**, the locks into talk mode and the button switches to **Stop**.

4   Begin speaking into your headset.

During your transmit, mobile device users on the same channel and in the correct network zone will be able to receive the communication and converse back, similar to a telephone.

5   If the volume and microphone audio are not acceptable, use the sliders to adjust the audio to your preference.

6   When you are finished communicating either stop holding down the red transmit button or click **Stop**.

Paging a Mobile Device

You can page a mobile device from the **Main** tab. When you do, the device will receive a notification as configured.

To page a mobile device:

1 In the **Main** tab, right-click the mobile device you want to call and select Page Device.

The device is sent the notification.

Making a Private Call

When you make a private call, communication goes only to the device selected. No other devices will receive the transmission. The selected device must have private call enabled. Enabling private calls is done in the Configuration Console. Refer to *Private Calling* on page 27.

To make a private call:

1 In the **Main** tab, right-click the mobile device you want to call and select Private Call.

To exit private mode, right-click the device again.

Viewing Channels

The **Channel** tab allows you to review each channel that is in use as well as the IP addresses of the mobile devices currently on the channel. Enable the **Scan** checkbox to listen and communicate on all available channels. If disabled, the Communicator only listens on the selected channel in the **Main** tab.
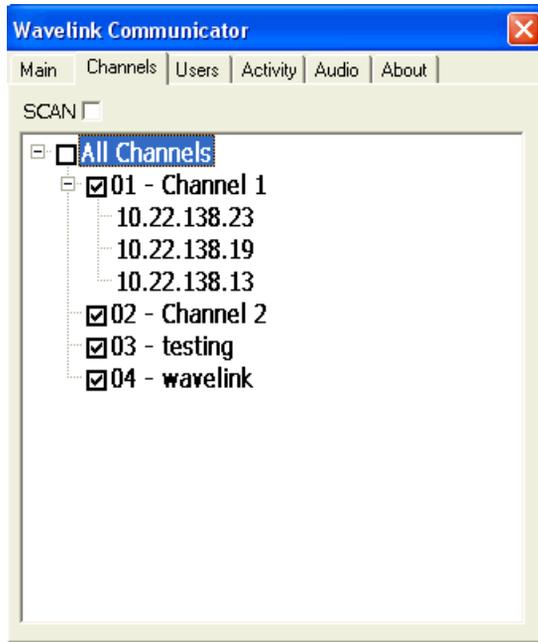
Figure 5-2. *Channels Tab*

Viewing Communicator Users

The **Users** tab allows the administrator to view which users are currently using the Communicator as well as the IP address of the mobile device. You can use the **Filter** text box to filter the IP addresses. If you enter a partial IP address, all users matching that partial filter will display. If you enter the entire IP address, only that user will display.
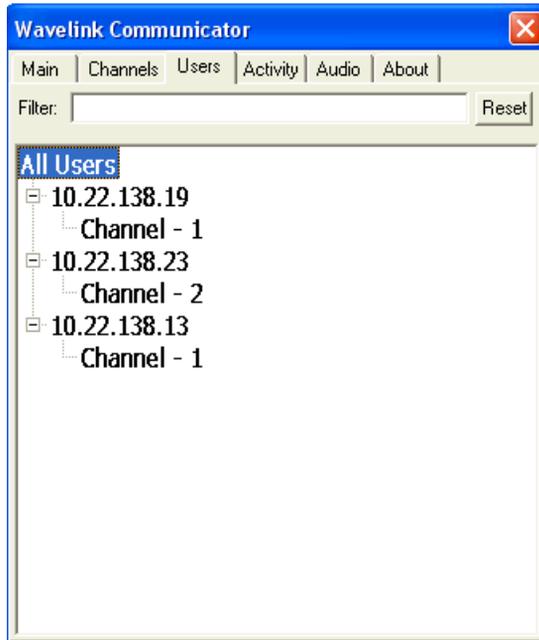
Figure 5-3. *Users Tab*

Reviewing Communicator Activity

The **Activity** tab provides real-time statistics occurring between the mobile devices on the channel selected in the **Main** tab. The **Activity** tab displays information such as when a transmit is occurring and from what mobile device. The **Activity** tab is a real-time statistics view and not a log file..

Figure 5-4. *Activity Tab*

Adjusting the Audio

You can configure the following settings for the audio coming through the mobile device. The volume configurations are for all mobile devices set to that channel. You can configure the volume from the Communicator on the mobile device as well.

- **Output Speaker Volume**. Adjust the slider to set the speaker volume level.

- **Input Microphone Gain**. Adjust the slider to set the microphone gain. A lower gain setting generally produces less background noise.

- **Input Echo Cancellation**. Enable echo cancellation to activate the advanced echo cancellation feature of the device which minimizes background noise.
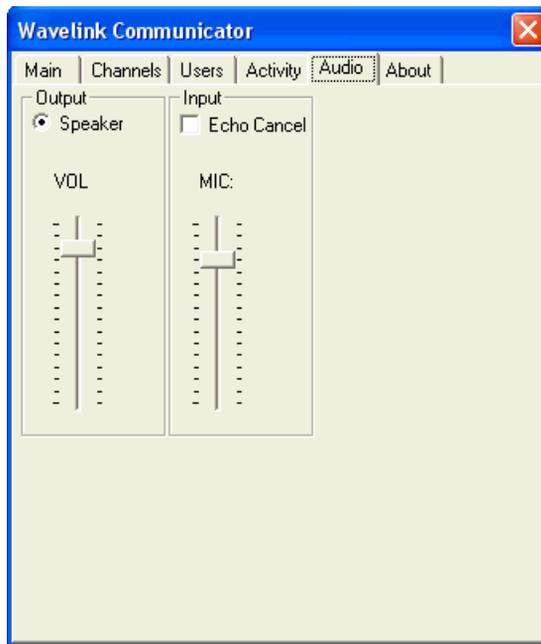
Figure 5-5. *Audio Tab*

Reviewing the About Tab

The **About** tab provides options to exit the Communicator and view the **Advanced** information. When you click the **Advanced** button, a dialog box displays information about any devices using multiple Network Interface Cards (NICs). You cannot edit this information.
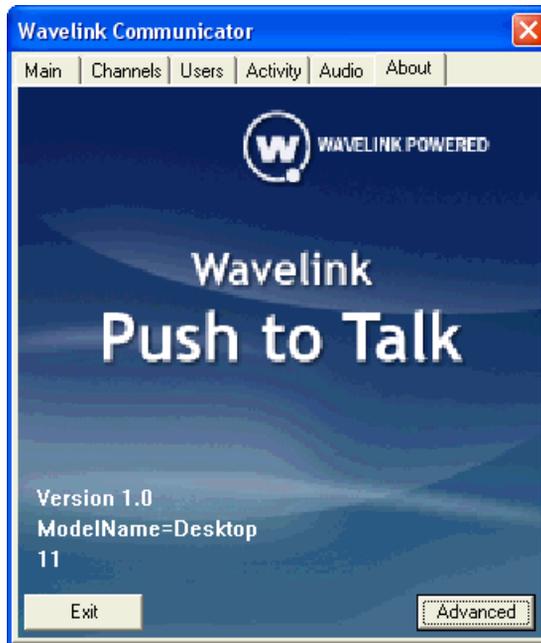
Figure 5-6. *About Tab*

Communicating from the Device

Communicating from the mobile device is similar to communicating from the Communicator Console. However, depending on what privileges you have configured for the device, you may not be able to see and use all the tabs.

When you want to switch between tabs, click the keyboard icon located at the bottom of each screen and select which tab you want to view from the list that appears.

To communicate from the device:

1   Launch the Communicator on the mobile device.

Figure 5-7. *Main Console*

2 Using the arrow buttons in the **Main** tab, select the channel on which you want to communicate.

3 To begin communicating you can either click the **Hands Free** button or press and hold the red transmit button located in the upper-left. Alternately, if you have configured a hot-key to enter Talk mode, press that key.

When you use the red button transmit button, you must keep the button pressed while speaking. If you click **Hands Free**, the button switches to **Stop** and you do not need to keep the button pressed.

4 Begin speaking into your headset.

During your transmit, mobile device users on the same channel and in the correct network zone will be able to receive the communication and converse back, similar to a telephone.

5 If the volume and microphone audio are not acceptable, use the sliders to adjust the audio to your preference.

6 Press the hot key you configured to access the Communicator Menu.
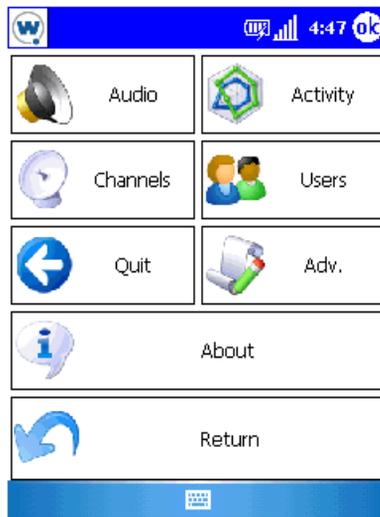
Figure 5-8. *Communicator Menu*

7 Click the icons to display the information. Depending on the configuration of the Communicator, you may have the option to view the **Channels**, **Users**, and **Activity** tabs as shown below. Screens that are not available to view will be grayed out and unable to access.
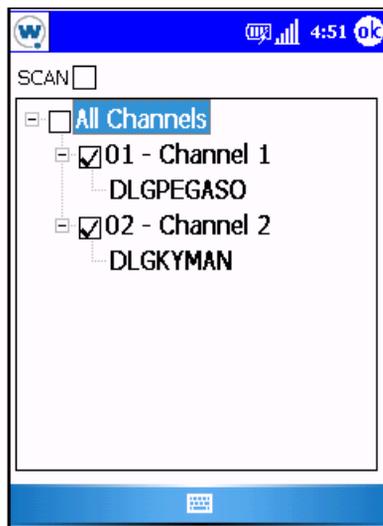
Figure 5-9. *Channels tab*
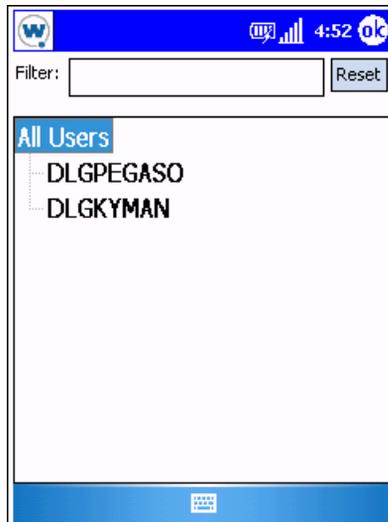
Figure 5-10. *Users tab*
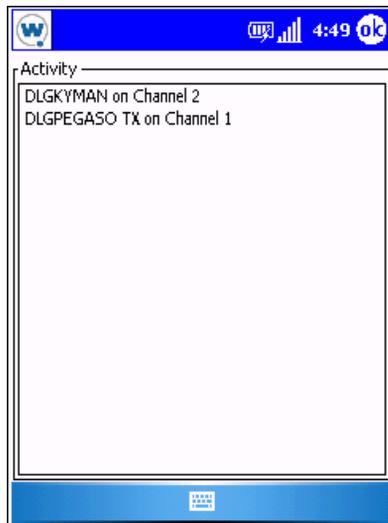
Figure 5-11. *Activity tab*

8 When you are finished communicating or viewing information, click the Return button to go back to the Main talk window. Either stop holding down the red transmit button or click **Stop**.

Chapter 6: Advanced Configurations

This chapter provides information about advanced settings you can configure for the Communicator. These settings are not necessary to use the Communicator, but provide additional ways to customize your network transmission and communication.

The following information is provided:

- Configuring Zones

- Adding Channels

- Adding Device Groups

- Configuring Hot Keys

- Using the Key Helper

- Assigning Device Audio

Each of the tasks requires that you deploy the updated configurations to your mobile devices. The settings will also be applied if the mobile device checks in to the Avalanche system.

Configuring Zones

A Zone is a multi-case IP address that allows you to segment your network communication beyond the simple network profiles. You can create multiple zones based on the transmission areas. You can configure the following options for zones:

- **Name**. Indicates the name of the zone. You can name the zone anything based on how you want to distinguish between each zone.

- **IP Address**. The IP address must be a multi-cast address.

- **TTL** (Time to Live). Refers to the number of hops the transmission willtake from router to router, decrementing by 1 each time. The higher the TTL count, the more likely a packet may be delayed or dropped.

- **Networks**. Displays the available networks to add to the Zone. Because a network associates the Zone to the devices IP addresses, you must have a

at least one network profile configured when you are creating a zone. The Communicator looks at the current IP address(es) to determine which adapter to bind communications to. This is used mainly for the XP client when multiple network adapters are used.
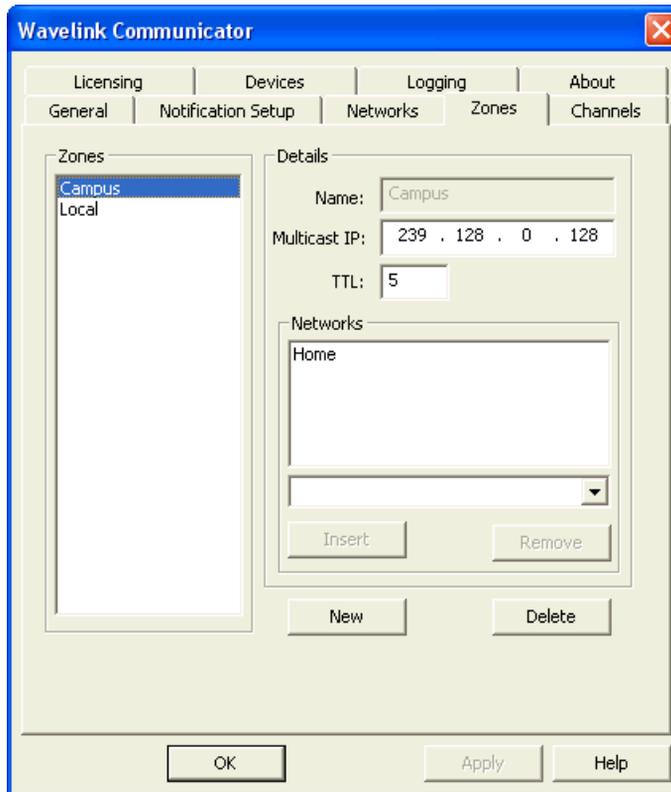
Figure 6-1. *Zones*

To create a new zone:

1 Access **Zones** tab from the Configuration Console.

2 Click **New**.

3 Enter the **Name** of the zone.

4 Enter the **TTL** number.

5 Click **Insert** to view the available networks to add to this zone.

6 From the list, select the networks you want to include in the zone.

7 Click **Apply**.

The new Zone will appear in the list box. The configuration will be applied to the mobile devices upon next deployment.

Deleting Zones

If you no longer need a zone, you can delete it.

To delete a Zone:

1 Access the Configuration Console and click the **Zones** tab.

2 From the list, select the **Zone** you want to remove and click **Delete**.

3 Click **Apply**.

The Zone will not be available.

Adding Channels

A channel is a port on a IP address. Configuring additional channels allows you to assign exactly which channels can be used in each Zone. It is another way to segment your network communications.

You cannot use duplicate ports and channels. Ports must be an even number.

- **Name**. Specifies the name of the channel. You can name your channels anything to help you distinguish between them.

- **Zone**. Assigns the Zone for the channel. If you do not have any Zones configured, you will not be able to configure the channel.

- **Port**. The port must be an even number. Duplicate ports and channels are not allowed. The port number must be greater than zero but less than 65535.

- **Enable**. You must select the **Enable** option for the channel to be available.

To add a Channel:

1 Access **Channels** tab from the Configuration Console.
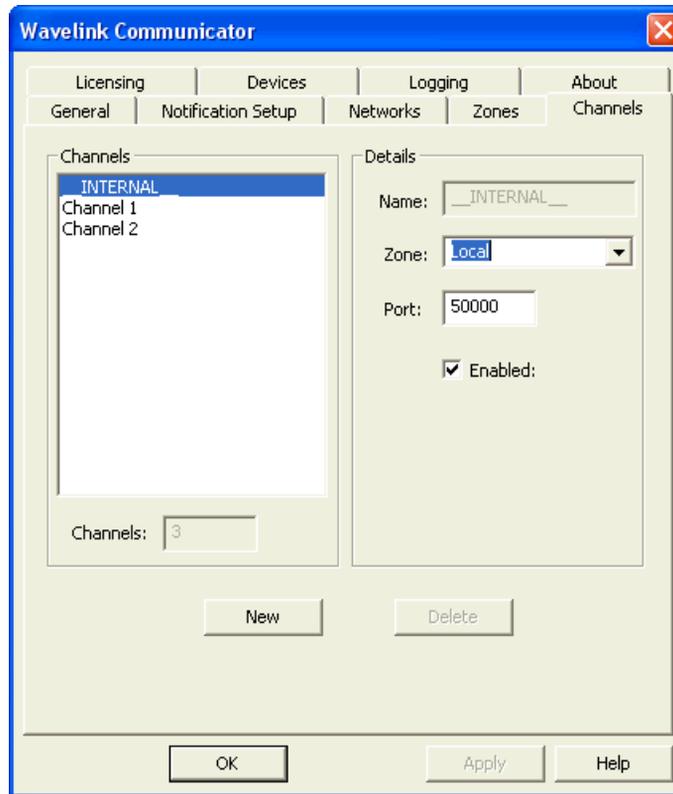
Figure 6-2. *Channels Tab*

2 Click **New** and enter the **Name** of the channel.

3 From the drop-down menu, select the **Zone** you want assigned to the channel.

4 Enter the **Port** number for the Channel.

5 If you want to enable the Channel for use, select **Enable**.

NOTE If you do not enable the Channel, it will be created, but not available to use.Server

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6 Click **Apply**.

The Channel will appear in the list box and be available to use upon next deployment.

Removing Channels

If you no longer use a Channel, you can remove it from the list of available channels or simply disable it. Once you delete a Channel, you must deploy your changes to the mobile devices. Until you deploy, the mobile devices will still be able to communicate over the Channel.

To remove a channel:

1 Access the **Channels** tab from the Configuration Console.

2 From the list box, select the Channel you want to remove.

3 To disable the Channel, but retain the settings, disable the **Enable** option.

4 To completely remove the Channel, click **Delete**.

5 Click **Apply**.

The Channel settings are updated and can deployed to your mobile devices.

Adding Device Groups

From the **Devices** tab, you can add groups of devices, configure hot keys, and assign audio settings.

To add a device group:

1 Access the **Devices** tab in the Configuration Console.

2 Click **New**.

The **Model Name** text box becomes active.

3 Enter the model name for the mobile device group you are creating.

4 If desired, configure the hot keys and audio settings.

5 Click **Apply** to save your changes.

Configuring Hot Keys

Hot keys allow you to assign specify buttons or keys on the mobile device to a specific action. You can use the default hot keys configuration (the **Popup** key and **Talk** key are defined by default) or you can specify your own. configuration is based on the HEX value of the key. To find the HEX value, access the **About** tab of the Communicator Console and press the key or button you want to make assign. The Hex value of the key will display in the lower corner. You can then enter this value in the appropriate text box in the **Devices** tab of the Configuration Console.

When a key is configured and you mouse-over the text box, a tool tip appears displaying the key description for that value. This allows you to view what key that is actually assigned.
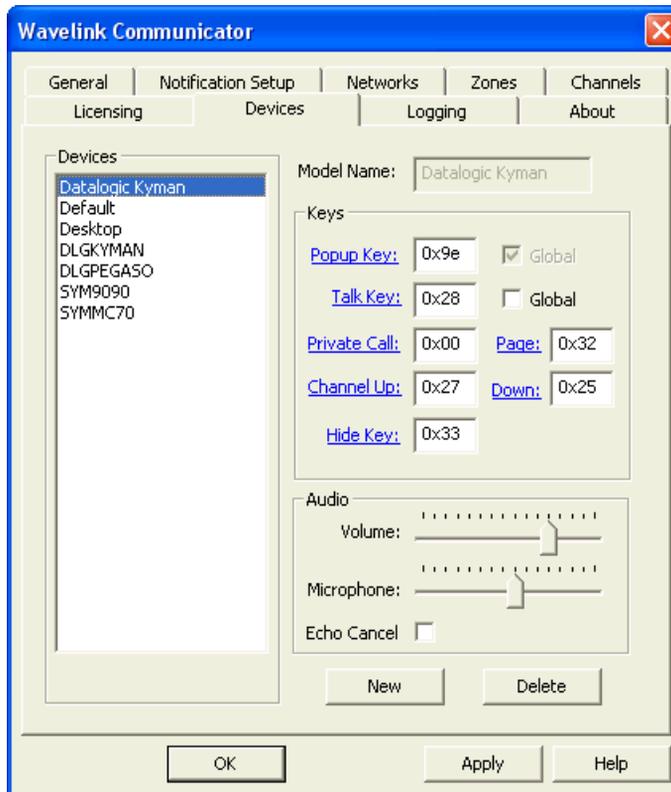
Figure 6-3. *Keys*

You can configure key triggers for the following actions:

- **Popup Key**. When pressed, launches the Communicator. This option is always set to global. Global indicates that it can be pressed when the Communicator is not in the foreground, but the functionality will still work. This key will be assigned by default.When pressed on the mobile device, this key will bring the Communicator to the foreground. It provides access to the **Menu** screen of the Communicator. If this key is configured to perform other functions in another program, you should change the default settings. If you do not change the settings, the Communicator will override the original use of the key and work as the global Communicator Popup key. This may change the way your applications behave.

- **Talk Key**. Enables Speak mode. You can set this to global. This key will be assigned by default.

- **Private Call**. Begins a private call with the selected device.

- **Page Key**. Sends a page to the selected mobile device.

- **Channel Up/ Down**. Changes the channel up or down.

- **Hide Key**. Minimizes the Communicator.

To configure hot keys:

1 Access the **About** tab from the Communicator Console.

2 On the mobile device, press the key you want to be used as a a trigger key. The HEX value of that key appears in the lower corner of the tab.

3 Note the value.

4 Return to the **Devices** tab in the Configuration Console.

5 From the device list, select the group of devices you are configuring the hot key for.

6 Enter the HEX value in one of the **Keys** text boxes according to the action you want to assign to that key.

7 Continue until you have configured all the hot keys.

8 Click **OK** when you are finished.

The keys on the device will take on the actions as configured upon the next deployment.

Using the Key Helper

The **Key Helper Available** notification appears if there is a Key Helper available for a device. The Key Helper allows you to choose a key value from a list of pre-assigned keys. The key assignments are based on a key file included with the Communicator software package. Key assignments are based on the device manufacturer.

To use the Key Helper:

1 Access the **Devices** tab in the Configuration Console.

2 From the list of the devices, select a device that has a key helper available.
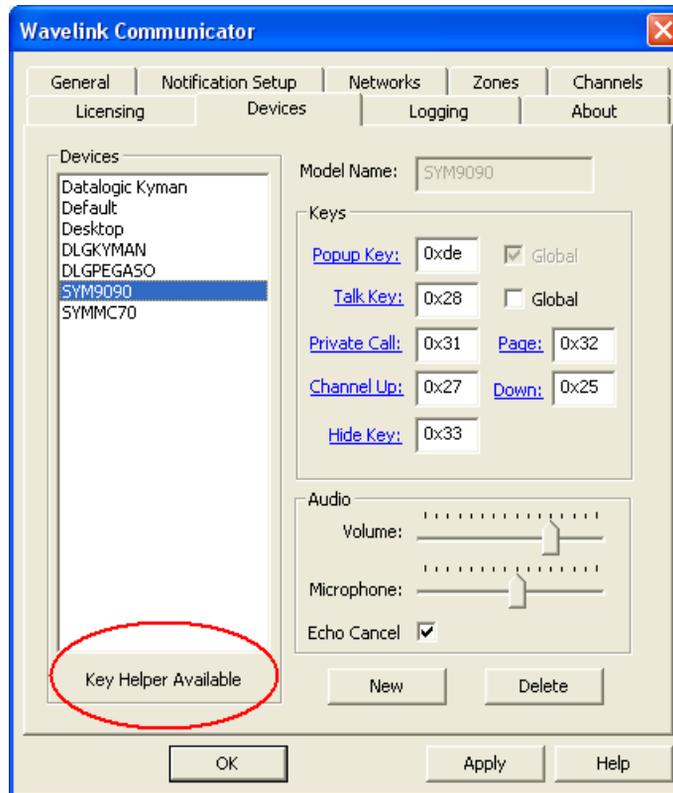
Figure 6-4. *Key Helper*

3 Click the name of the key you want to configure.

A dialog box appears and displays the available key configurations for that specific key.
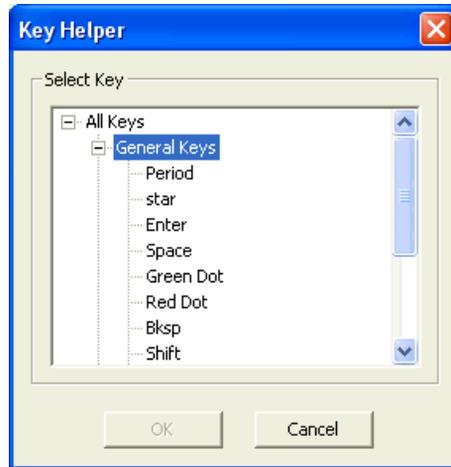
Figure 6-5. *Key Helper*

4 Select the configuration you want to use and click **OK**.

The configuration will appear in the text box next to the key name.

5 Continue configuring keys and when you are finished click **Apply** to save the configuration.

Assigning Device Audio

From the **Devices** tab you can set the audio level for a specific group of devices.

To assign the audio level:

1 Access the **Devices** tab in the Configuration Console.
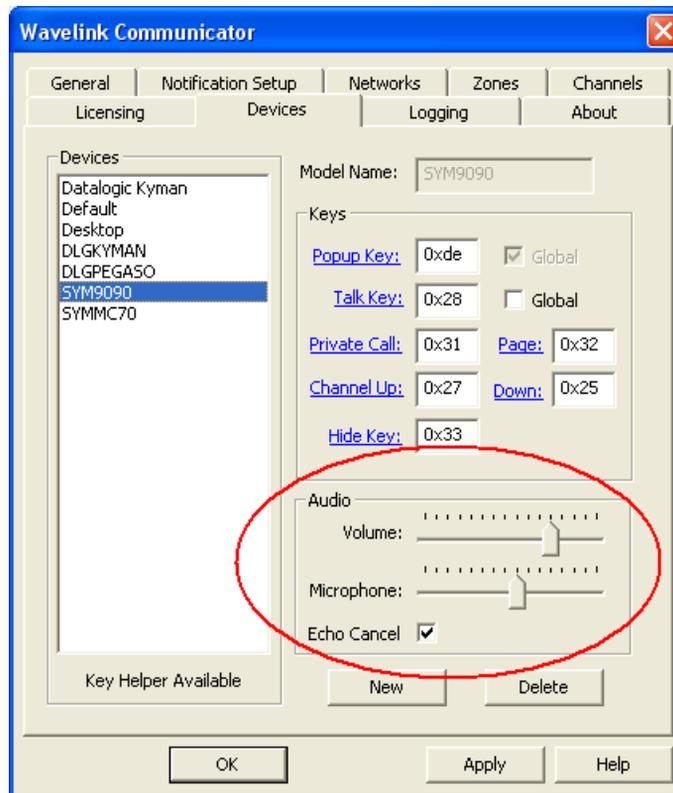
Figure 6-6. *Audio*

2 Select the device group you want to configure.

3 In the **Audio** section, adjust the **Volume** and **Microphone** sliders based on how loud or soft you want the audio to be.

4 Enable the **Echo Cancel** option to activate the advanced echo cancellation feature of the devices.

5 When you are finished, click **OK**.

The group of devices will receive the audio assignments upon the next deployment.

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