



# Communicator

## **Wavelink Communicator User Guide**

wlc-ug-11-20091103

*Revised 11/4/09*

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# Chapter 1: Introduction to Wavelink Communicator

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

- A guide to installing, licensing, and deploying Communicator
- An introduction to using Communicator
- Detailed information about configuring the components of Communicator

Communicator is a push-to-talk 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. It works from the desktop as well as across different OS types or mobile device manufacturers.

Communicator can be installed as an Avalanche package into Avalanche MC or SE. If you use this installation method, 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.

You can also install a stand-alone version of Communicator, use the configuration utility to configure the settings, and then use ActiveSync to push the settings to your devices.

## 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 administrative access to your network.
- If using Avalanche MC or SE, you have a working knowledge of your Avalanche Console system.

## 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 the following types of hardware:

- CE mobile devices with OS version 5.0 or later

- Windows Mobile device with OS version 5.0 or later
- Desktop computers with Windows XP or Server 2003

### **Additional Requirements**

- If using Avalanche MC or SE (version 4.8 or later), you must also have Enabler 3.0 or later
- If using ActiveSync, version 4.5 or later
- A headset is recommended for optimal performance.

---

## Chapter 2: Installing and Licensing Communicator

The Communicator software is delivered as either an Avalanche package or a stand-alone executable. To obtain the software, download it from the Wavelink Web site or contact Wavelink Customer Service. After installing Communicator on your desktop, you must license it with a valid license.

This chapter provides the following information:

- Installing the Avalanche Communicator Package
- Installing the Communicator Executable
- Activating Communicator Licenses

### Installing the Avalanche Communicator Package

The Avalanche Communicator package must be installed to an Avalanche Console through a software profile before it 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:

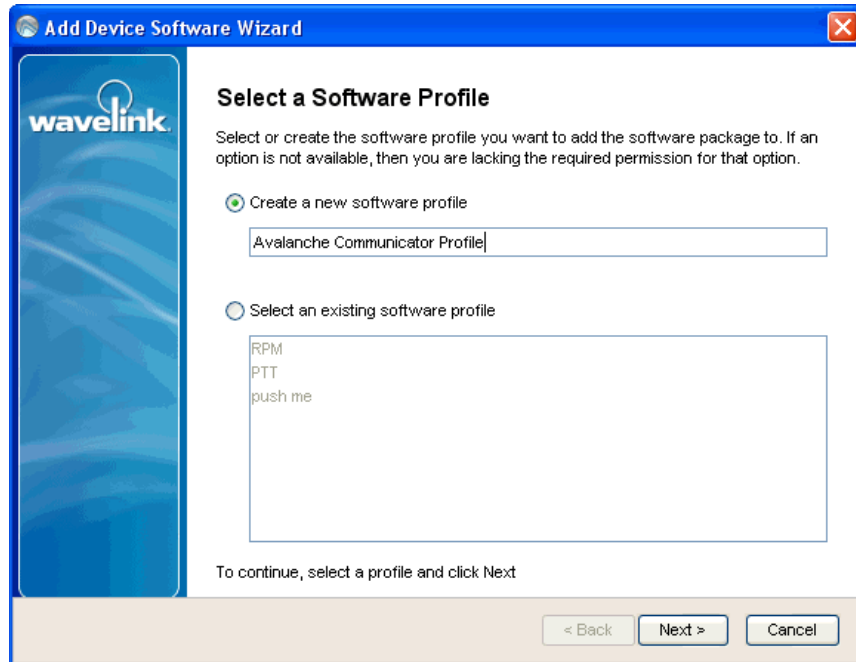
- Through the **Software Profiles** tab
- Using the *Add Device Software Wizard*

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 of the Avalanche Console, select **Add Device Software**.

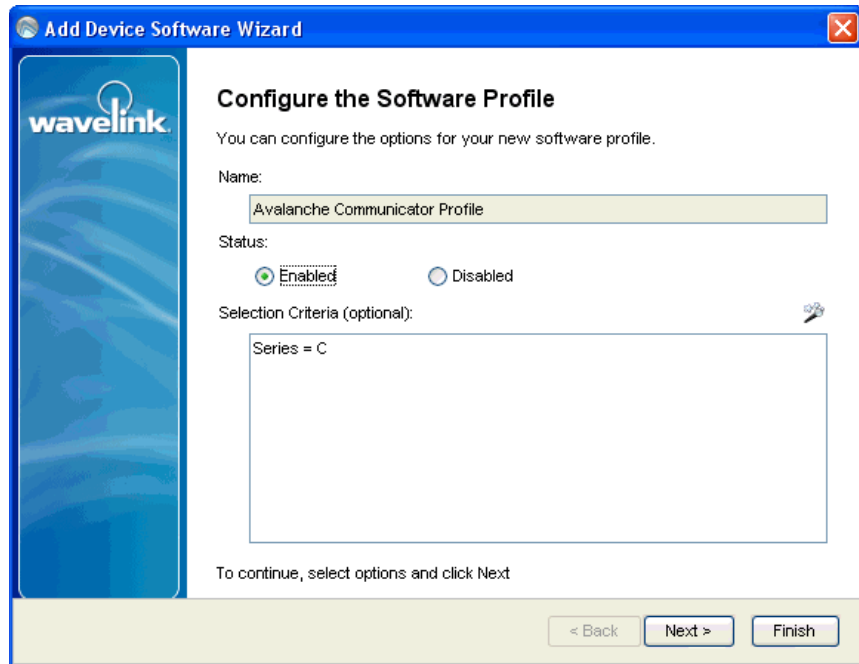
The *Add Device Software Wizard* launches.



**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.

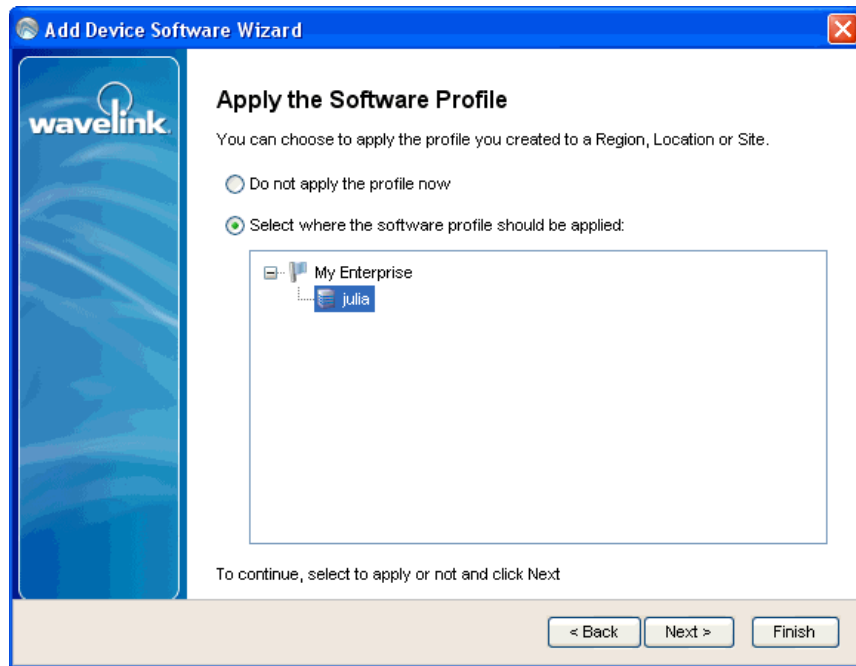
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**NOTE** You do not have to enable the profile or configure selection criteria at this time. You will have the same options once the profile is created.

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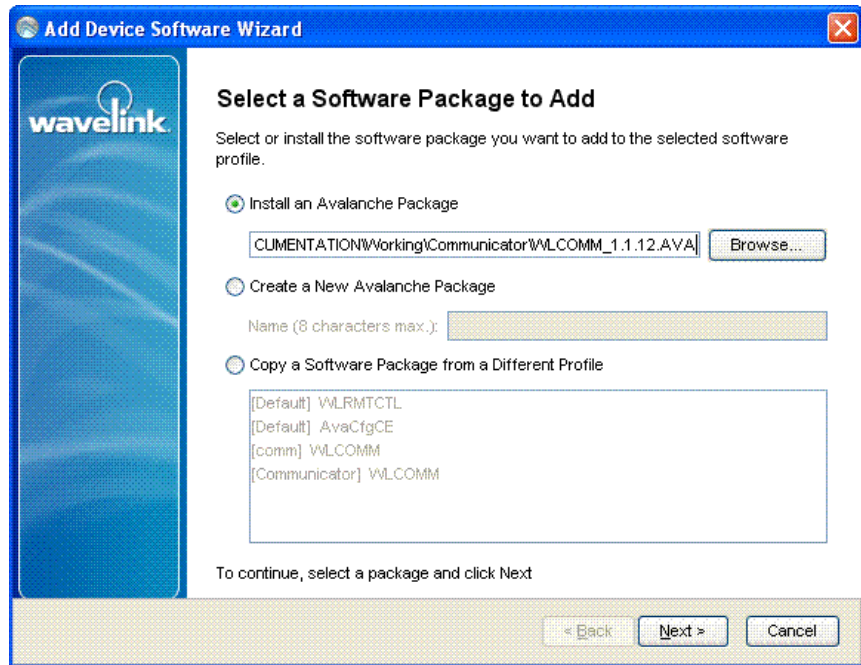
- 4 Click **Next**.

If you are using Avalanche MC, the *Apply Software Profile* dialog box appears. If you are using Avalanche SE, skip to step 7.



**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**.



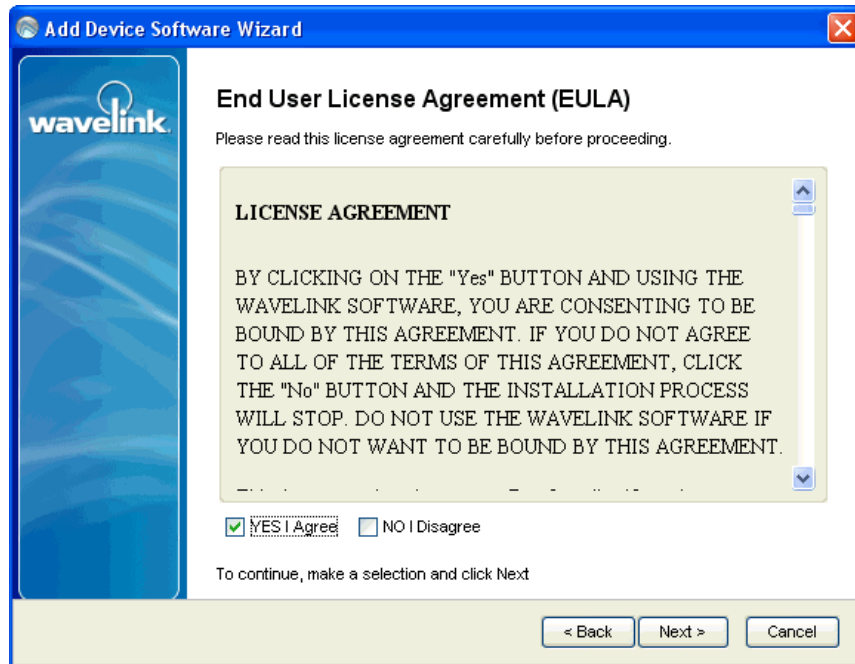
**Figure 2-4.** *Select a Software Package to Add*

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

The package location will appear in the text box.

- 9 Click **Next**.

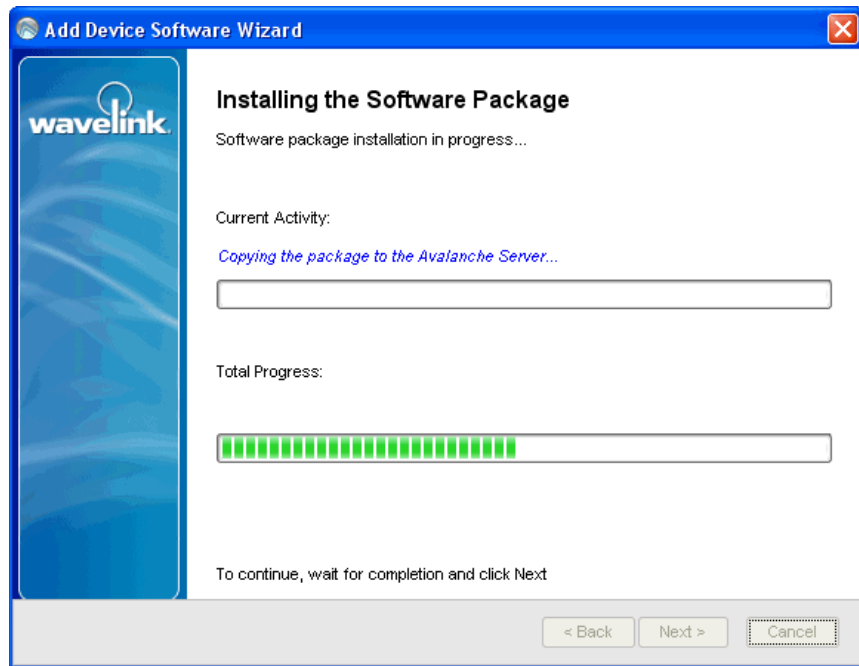
The *End User License Agreement* dialog box appears.



**Figure 2-5.** *End User License Agreement*

- 10 Enable the **Yes, I agree** option if you agree to the license agreement, and click **Next**.

The package begins extracting and installing in the Avalanche Console default location.



**Figure 2-6.** *Package Installation*

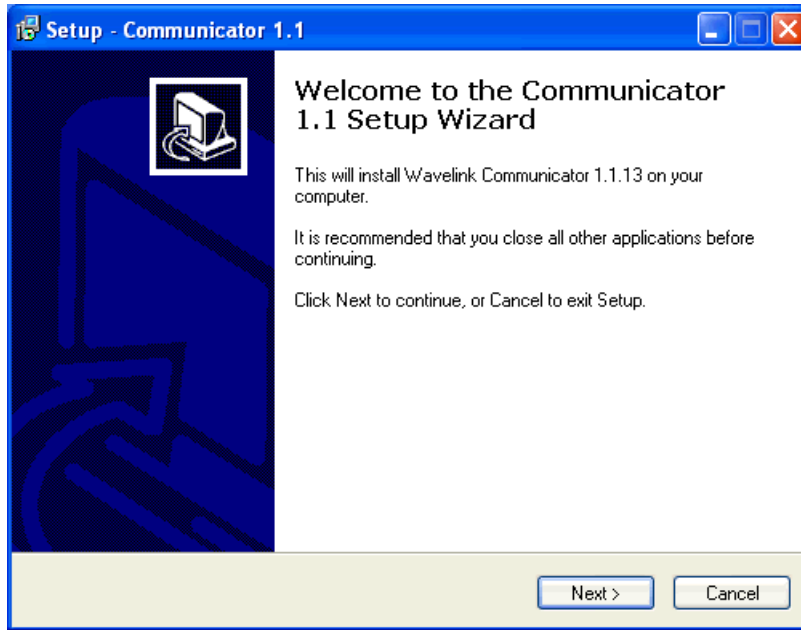
Once installed, the *Configure the Software Package* dialog box appears. From this dialog box you can enable the software package or launch the Communicator Configuration utility, Communicator Console, and license activation utility. Configuration is discussed in detail in *Chapter 3: Basic Configuration and Deployment* on page 27. License activation is discussed in *Activating Communicator Licenses* on page 22.

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

## Installing the Communicator Executable

- 1 Download the file from the Wavelink Web site.
- 2 Double-click the executable to begin installation.

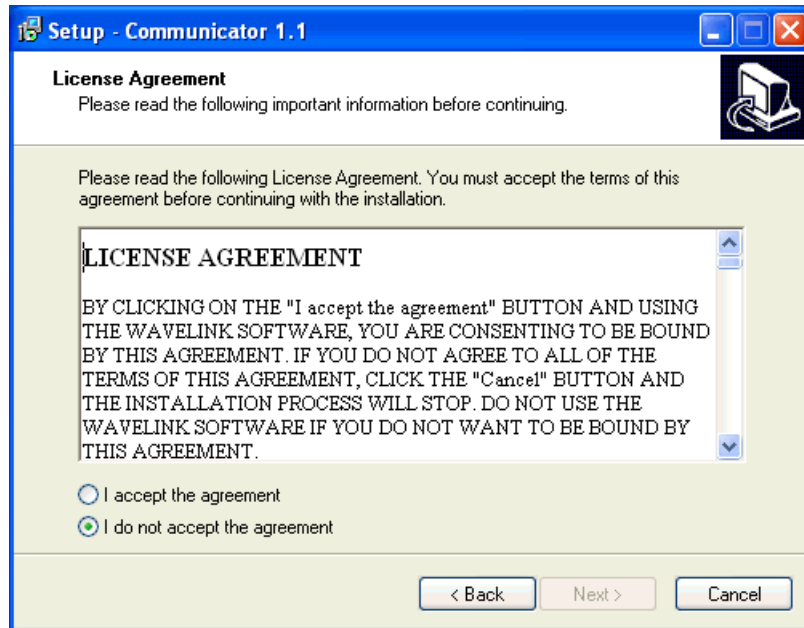
A *Welcome* dialog box appears.



**Figure 2-7.** *Welcome*

**3** Click **Next**.

*A License Agreement dialog box appears.*



**Figure 2-8.** License Agreement

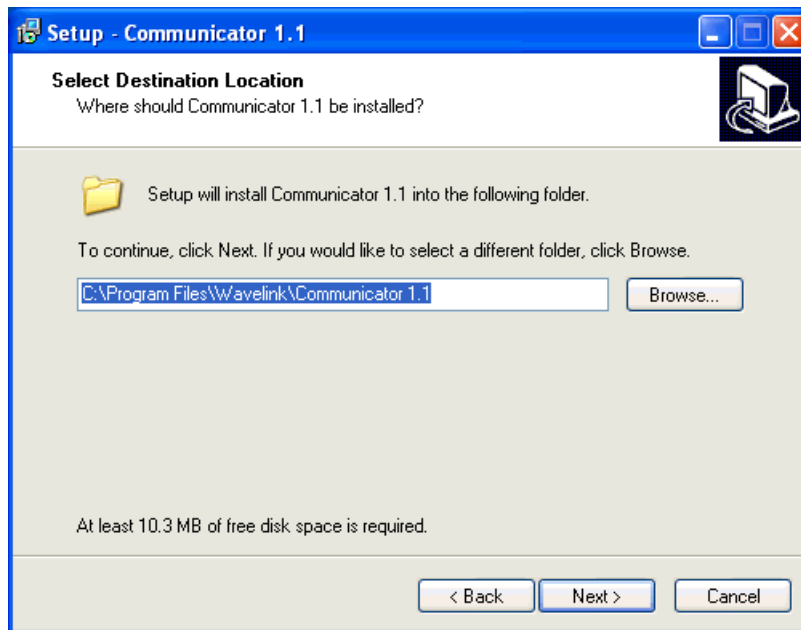
- 4 Select **I accept the agreement** and click **Next** to continue.

---

**NOTE** If you do not accept the license agreement, you will not be able to continue the installation.

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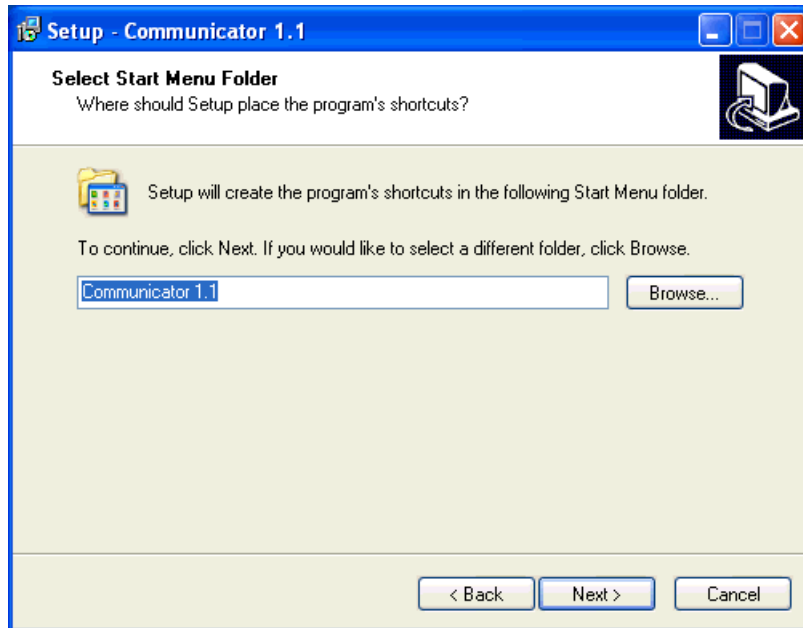
A *Select Destination Location* dialog box appears.



**Figure 2-9.** *Destination Location*

- 5 Select the location where you want to install Communicator and click **Next**.

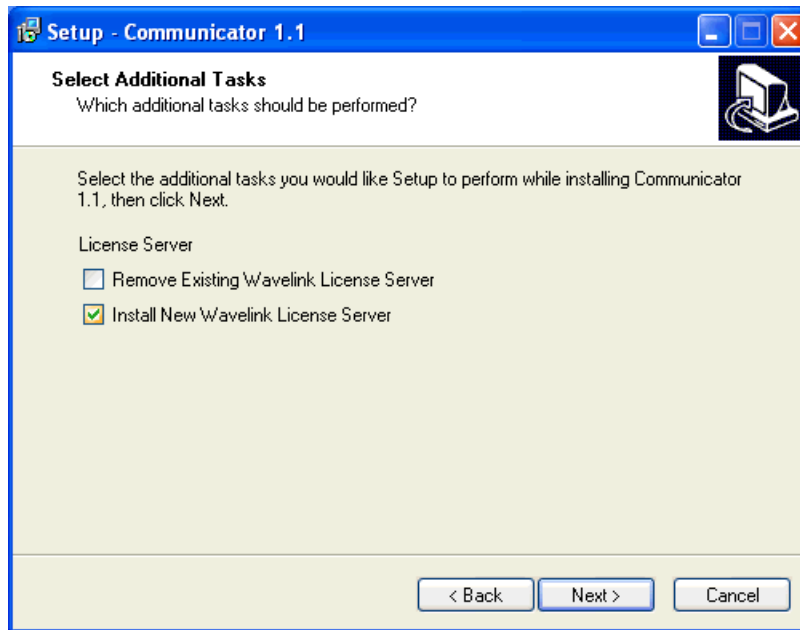
*A Select Start Menu Folder dialog box appears.*



**Figure 2-10.** *Start Menu Folder*

- 6** If you want to change the folder in which Communicator will appear, click **Browse**, locate the folder and click **OK**.
- 7** Click **Next**.

A *Select Additional Tasks* dialog box appears.



**Figure 2-11.** *Select Additional Tasks*

- 8** If you do not have any Wavelink License Servers installed, select **Install New Wavelink License Server**. If there is already a Wavelink License Server on your system, you must also enable **Remove Existing Wavelink License Server**.

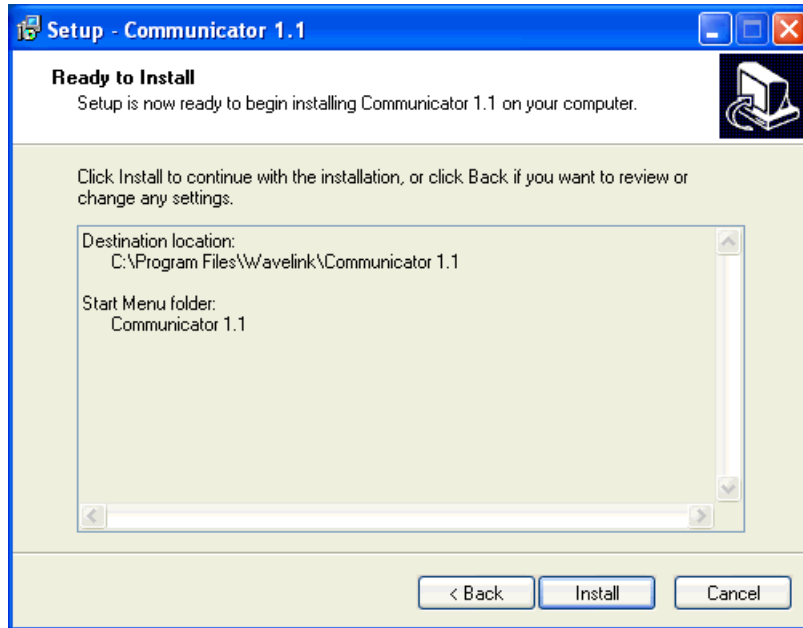
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**NOTE** If you have multiple Wavelink License Servers running on the same system, there may be errors in distributing your licenses.

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- 9** Click **Next**.

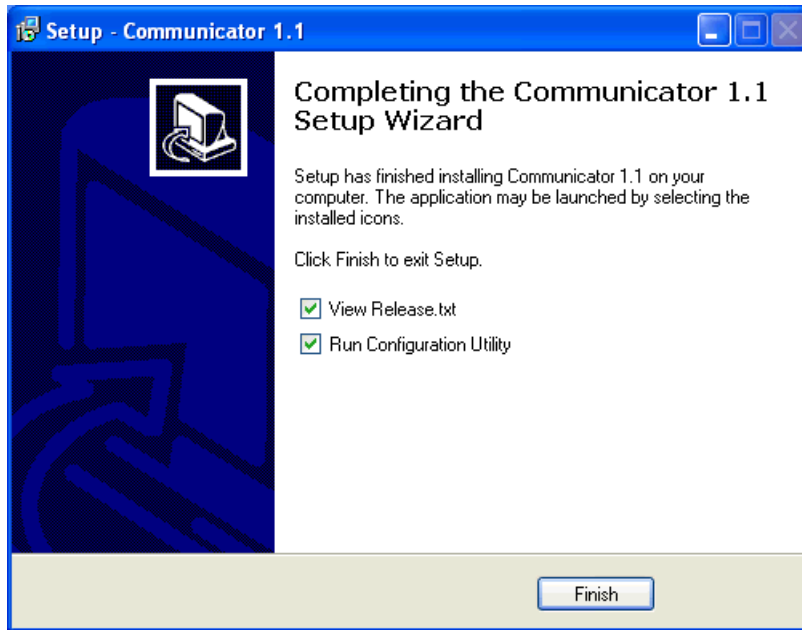
*A Ready to Install dialog box appears.*



**Figure 2-12.** *Ready to Install*

**10** If you are ready to install Communicator, click **Install**.

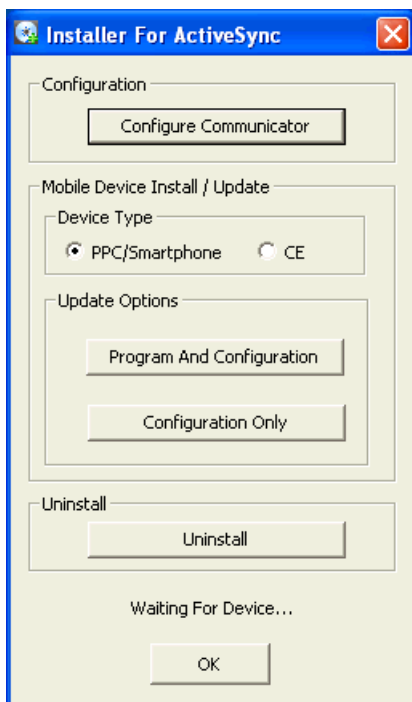
The installation begins. Once it is complete, a *Completing the Communicator 1.1 Setup Wizard* dialog box will appear. You can select to open the release notes text file and run the Communicator configuration utility at this time.



**Figure 2-13.** *Completing the Setup Wizard*

**11** Select the options you want and click **Finish**.

**12** If you select to run the Communicator configuration utility, the *Installer For ActiveSync* window appears.



**Figure 2-14.** *Installer for ActiveSync*

From the *Installer for ActiveSync* window, you can access the Communicator Configuration utility, install and update Communicator on your mobile devices, and uninstall Communicator from your mobile devices.

- **Configure Communicator.** This opens the Communicator Configuration utility. For information on configuring Communicator, see *Chapter 3: Basic Configuration and Deployment* on page 27 for basic configuration and *Chapter 5: Advanced Configurations* on page 47 for advanced configuration.
- **Device Type.** Select the OS type on the device for which you are configuring Communicator.
- **Update Options.** When connected to a device over ActiveSync, you can use these options to push Communicator and the configuration or just the configuration to the device.
- **Uninstall.** When connected to a device over ActiveSync, use this option to uninstall Communicator from the mobile device.

## Activating Communicator Licenses

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

When you activate Communicator licenses, a license file called `wavelink.lic` is installed on your system, which provides the information the product needs to operate. Once a license file for Communicator is activated and associated with a specific node (*nodelocked*) you cannot move it to another node. If you want to move the license file, you need to contact Wavelink Customer Service.

Communicator licenses are on a per-device basis, meaning you must have a license for each device you want to use with Communicator. The license is leased to the device by the license server for a random period (between 2-9 days). As long as the device is on your network, the license server automatically renews the lease on the license. If the device doesn't connect to your network and renew the lease, the license is returned to the license server to be redistributed. For more information about releasing licenses in *Avalanche*, refer to the *Wavelink Avalanche User Guide, Chapter 9: Managing Mobile Device Distributed Servers*.

After you install Communicator, you can activate your Communicator licenses in one of the following ways:

- Activating Automatically
- Activating Manually
- Importing a License
- Activating Demo Mode

### Activating Automatically

If you installed Communicator 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, Communicator connects with a secure Wavelink Web site to verify your license. The license file called

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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 license key from Wavelink.

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

---

- 2 If you installed Communicator as an executable file, Access the *Wavelink Activation* dialog box by clicking **Start > All Programs > Communicator 1.1 > Activate**.

-Or-

If you installed Communicator as an Avalanche package, access the *Wavelink Activation* dialog box by clicking **Start > All Programs > Wavelink Avalanche > Activate**.

The *Installed Licenses* dialog box appears.

- 3 Click **Yes** to activate your licenses.
- 4 Type your license key for this installation in the **Product License** text box.
- 5 Click **Activate**.

Communicator 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.

- 6 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 Communicator 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 on a new system and renew the licenses.

## Activating Manually

If the machine on which Communicator 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 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 Key** code in the text boxes.
- 4 Click **Activate** button to activate license.

The Wavelink 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 Communicator is installed.
- 8 Follow the steps for Importing a License. See below.

## Importing a License

If you already have a license file for 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 If you installed Communicator as an executable file, Access the *Wavelink Activation* dialog box by clicking **Start > All Programs > Communicator 1.1 > Activate**.

-Or-

If you installed Communicator as an Avalanche package, access the *Wavelink Activation* dialog box by clicking **Start > All Programs > Wavelink Avalanche > Activate**.

The *Installed Licenses* dialog box appears.

- 2 Click **Yes** to import your licenses.
- 3 Click **Browse** and navigate to the location of the `wavelink.lic` file.
- 4 Select the `wavelink.lic` file and click **Yes**.
- 5 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.

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**NOTE** If you decide to launch the Communicator Console on your desktop, this will be assigned one of the two demo licenses.

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**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.

---

## Chapter 3: Basic Configuration and Deployment

This chapter provides information about basic configuration and deployment for Communicator. To use Communicator, you must assign the License Server IP address and port. Unless you have devices with multiple IP addresses, this is the only configuration required before you can deploy Communicator to your mobile devices. Other configurations allow you to customize your Communicator experiences, but are not required. For additional information about configuration refer to *Chapter 5: Advanced Configurations* on page 47.

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**NOTE** If you will be installing Communicator on any device with multiple IP addresses, you must configure a Communicator network profile before you begin to use Communicator. For information on how to configure a network profile, see *Configuring Network Profiles* on page 51.

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Depending on your installation method and which version of Avalanche you are running, there are different steps for deploying Communicator to your mobile devices.

- If you installed Communicator as an executable file, you must deploy Communicator and its configurations to your mobile devices using ActiveSync.
- If you are using Communicator with Avalanche SE, the Communicator package will be automatically deployed as long as the software profile is enabled. For information on how to enable a software profile, see your *Avalanche SE User Guide*.
- If you are using Communicator with Avalanche MC, you must apply and deploy the software profile.

The following tasks are described in this chapter:

- Accessing the Configuration Console
- Assigning the License Server
- Deploying Communicator using ActiveSync
- Applying the Software Profile in Avalanche MC

- Deploying the Communicator Package in Avalanche MC

## Accessing the Configuration Console

The Communicator Configuration Console provides options for configuring Communicator. If you installed Communicator as an executable file, the Communicator Configuration Console is accessed from the *Installer for ActiveSync* window. If you installed Communicator as an Avalanche package, the Communicator Configuration Console is accessed from Avalanche. The following tasks are described in this section:

- Accessing the Configuration Console from the Installer for ActiveSync
- Accessing the Configuration Console from Avalanche

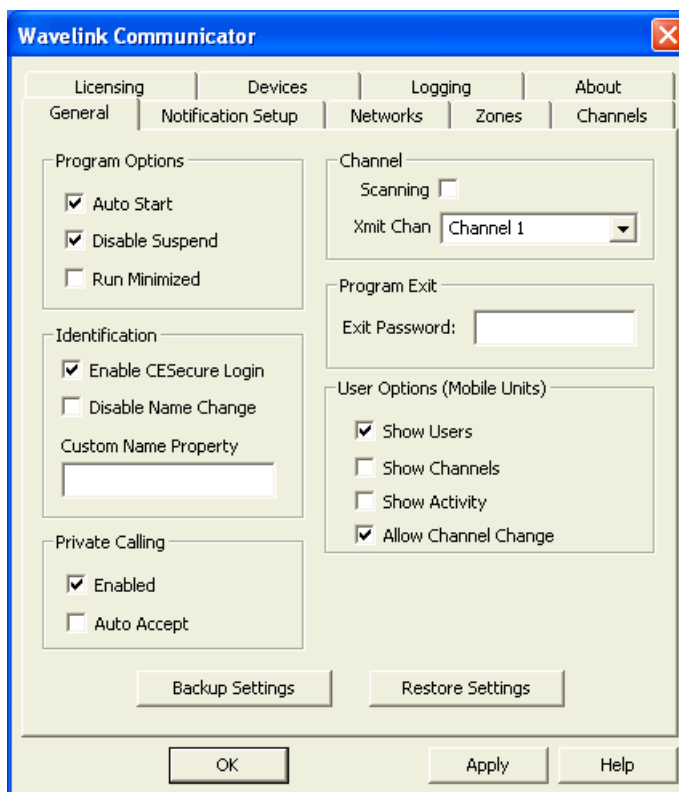
### **Accessing the Configuration Console from the *Installer for ActiveSync***

- 1 Click **Start > All Programs > Communicator 1.1 > Configure**.

The *Installer for ActiveSync* window appears.

- 2 Click **Configure Communicator**.

The Configuration Console appears.

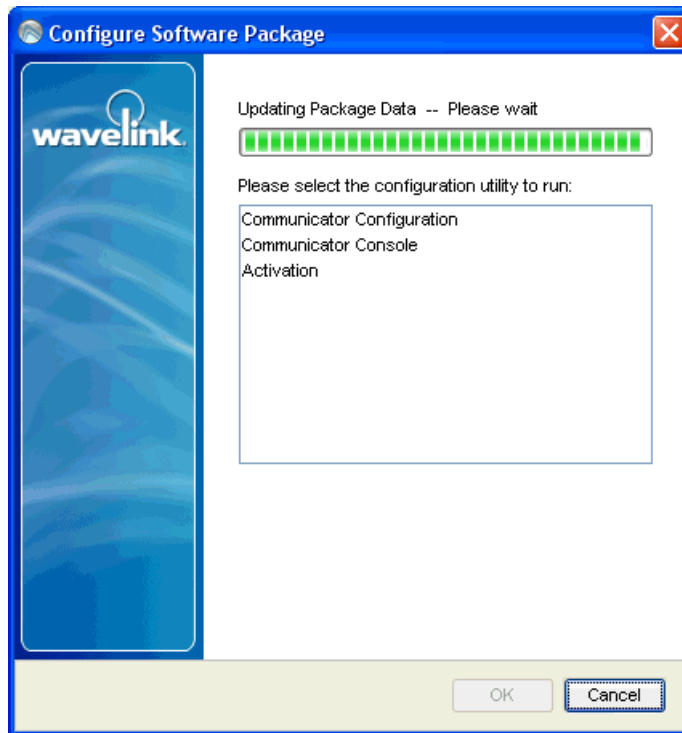


**Figure 3-1.** *Communicator Configuration Console*

## Accessing the Configuration Console from Avalanche

- 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 From the list on the **Software Packages** tab, select the Communicator package and click **Configure**.

The *Configure Software Package* dialog box appears.

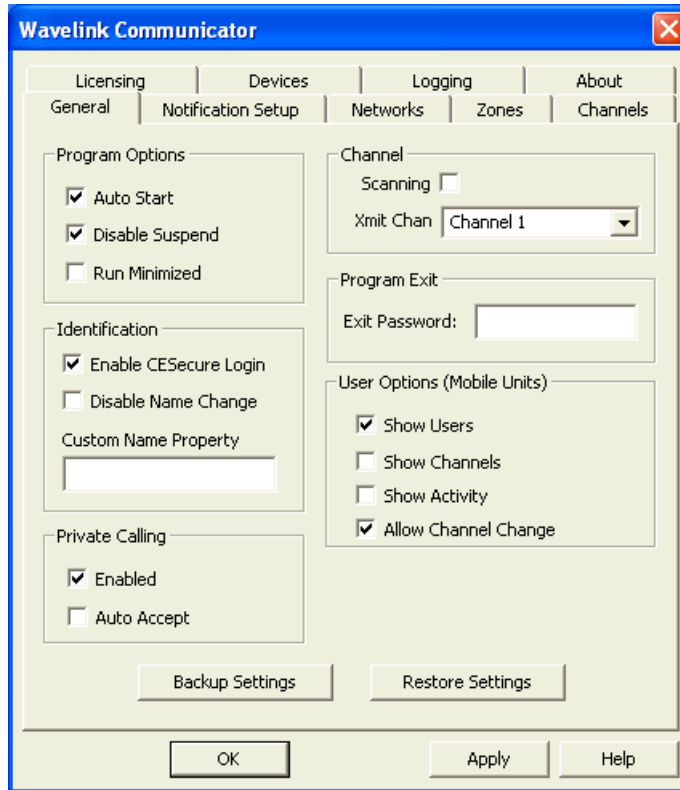


**Figure 3-2.** *Configure Software Package*

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 Configuration Console appears.

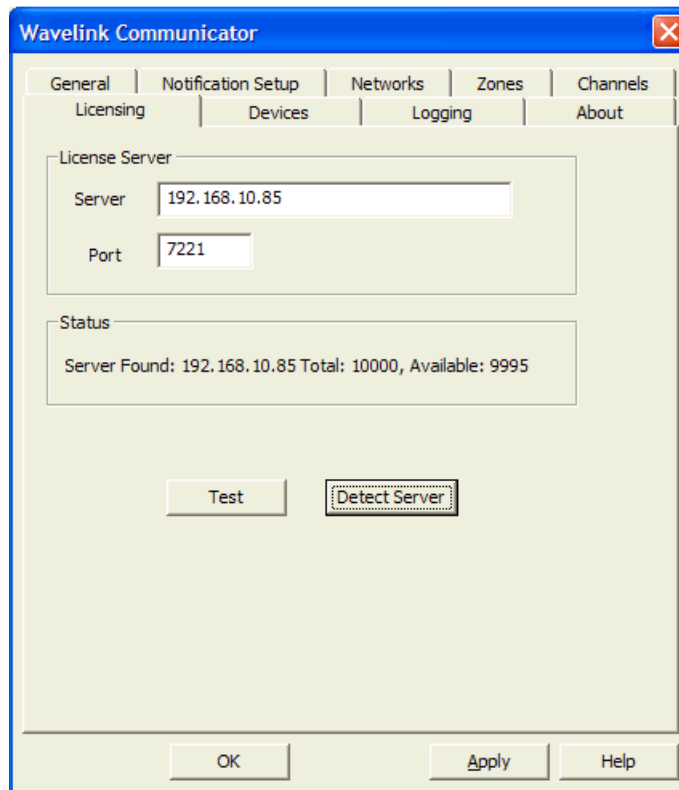


**Figure 3-3.** *Communicator Configuration Console*

## Assigning the License Server

If you have Avalanche MC or SE, the License Server is installed with your Avalanche system. The Communicator automatically assumes use of that License Server and port. If you installed Communicator as an executable file, the License Server was installed at the same time.

You can assign the License Server and port number from the **Licensing** tab of the Configuration Console.



**Figure 3-4.** License Server Detected

- **Server.** You can enter the name 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. The location of the License Server is also displayed if you push the **Detect Server** button.
- **Test.** This tests whether your License Server information is valid.
- **Detect Server.** This searches for a local License Server and automatically updates the **Server** text box when one is found.

---

If a local license server is not found, the **Status** message will display “No local license servers detected.”

**To assign the License Server:**

- 1 Access the Configuration Console and select the **Licensing** tab.
- 2 Click **Detect Server**. If Communicator detects the License Server, the **Server** text box will automatically update to reflect the location of the License Server.

-Or-

In the **Server** text box, enter the name of the License Server or the IP address of the computer running the License Server.

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

- 3 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.

- 4 Click **Apply**.

## Deploying Communicator using ActiveSync

If you installed Communicator as an executable file, you must use ActiveSync to install Communicator and its configurations on your mobile device.

**To deploy Communicator and/or its configurations to your mobile device:**

- 1 Using the Configuration Console, configure Communicator for the desired mobile device.
- 2 Open the *Installer for ActiveSync* window by clicking **Start > All Programs > Communicator 1.1 > Configure**.
- 3 Make sure the mobile device is connected via ActiveSync. “Connection has been established” will be displayed at the bottom of the *Installer for ActiveSync* window.
- 4 Click the **Program and Configuration** button to install Communicator and its current configuration to the mobile device.

-Or-

Click the **Configuration Only** button to configure Communicator on the mobile device.

Communicator will begin to send files to the mobile device. When it finishes, "Please disconnect device" is displayed.

- 5 Disconnect the mobile device. If Communicator is set to auto launch, it will launch on the mobile device.

## Applying the Software Profile in Avalanche MC

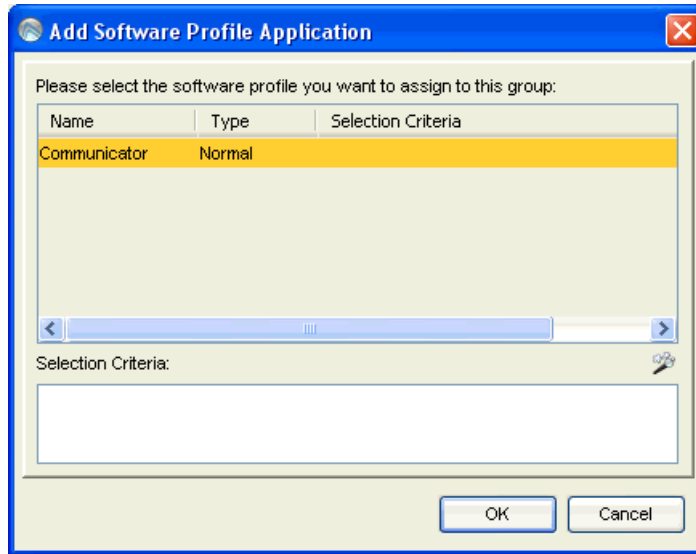
If you are running Avalanche SE, the software profile containing the Communicator configurations is automatically applied to your Server Location as long as it is enabled.

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 apply software profiles:

- 1 From the Navigation Window, select the region or location where you want to assign the software profile.
- 2 Select **Region Properties** (or **dServer Location Properties** if you are applying the profile to a specific region) and then select the **Software Profiles** tab.
- 3 Click **Edit**, then **Add**.

The *Add Software Profile Application* dialog box appears.



**Figure 3-5.** *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 in Avalanche MC

If you are running Avalanche SE, the software package will be deployed to the mobile devices the next time the device contacts the 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 deployment:**

- 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 **Select 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 **Use end time** 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 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 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 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 4: Using the Communicator

Once you have installed Communicator on your mobile devices, you may use it to communicate. You may also use the Communicator Console on the desktop computer where Communicator is installed.

The following tasks are described in this chapter:

- Launching the Communicator Console
- Broadcasting on Communicator
- Paging a Mobile Device
- Making a Private Call
- Changing Settings on the Device
- Viewing Channels
- Viewing Users
- Viewing Communicator Activity
- Adjusting the Audio

### Launching the Communicator Console

Depending on how you installed Communicator, you launch the Communicator Console on your computer from either the Avalanche Console or from the Start menu. The following steps provide information about launching the Communicator Console.

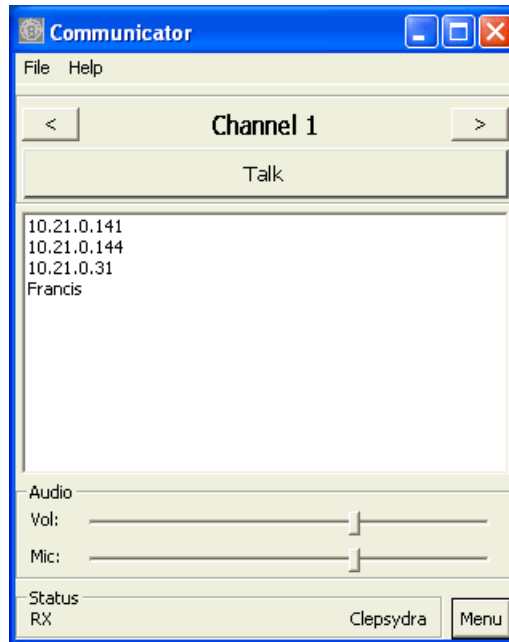
**To begin communication:**

- 1 Launch the Communicator from the **Start** menu by clicking **Start > All Programs > Communicator 1.1 > Communicator**.

-Or-

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

The Communicator Console appears.



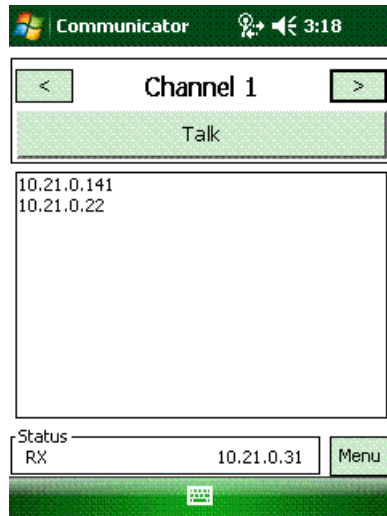
**Figure 4-1.** *Communicator Console*

## Broadcasting on Communicator

When you are running Communicator, you can send voice transmissions by broadcast to everyone whose device is on the same channel.

### To send a broadcast:

- 1 From the main screen in Communicator (or on the Communicator console) select the channel on which you want to communicate by using the arrow buttons.



**Figure 4-2.** Main screen

- 2 To begin speaking you can either click and hold the **Talk** button or press and hold the Talk hot key. (You must configure the desktop with a Talk hot key before this feature is available. For information on configuring hot keys, see *Configuring Hot Keys* on page 58.)
- 3 Begin speaking into your headset.  
  
During your transmit, mobile device users on the same channel will be able to receive the communication and reply in the same manner.
- 4 When you are finished speaking, release the **Talk** button or hot key.

## Paging a Mobile Device

You can page a mobile device from the main screen of Communicator. When you do, the device will receive a notification as configured.

### To page a mobile device:

- 1 From the main screen in Communicator, right-click the mobile device you want to page 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 49.

### To make a private call:

- 1 From the main screen on your device, select the mobile device you want to call and push the Private Call hot key.

-Or-

From the main screen on the Console, right-click the device you want to call and select **Private Call**.

If **Auto Accept** is enabled, the private call will initiate. If **Auto Accept** is disabled, the person you are calling will see a private call request. He can click **Ok** to accept the call or **Cancel** to reject it. When he accepts the call, Communicator will create a private call between the two of you.

- 2 To exit private call mode, click **Cancel**.

## Changing Settings on the Device

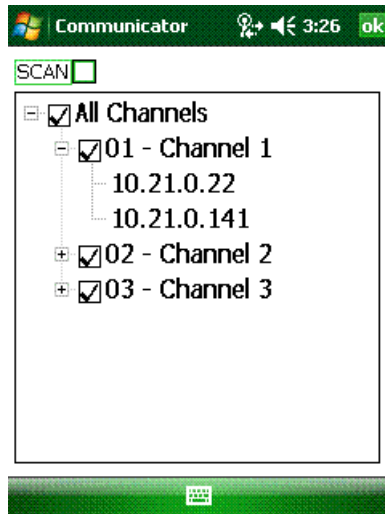
Some settings can be viewed or changed from the device by clicking **Menu > Settings** from the main screen of Communicator. These settings may include the following:

- **License.** This displays the expiration date of the license currently leased to the device.
- **Device ID.** This displays the device ID.
- **Echo Cancellation.** This will enable the echo cancellation feature on the device (if available) to reduce feedback.
- **Device.** You can change the device groups profile being used by the device. It is recommended that you only use a profile configured for the specific model of mobile device so that hot key configurations function correctly. Select the desired profile from the drop-down menu and click **Save**.

- **User Name.** You can change the user name for the mobile device. This is the name that shows on the main display. Enter the desired name in the text box and click **Save**.
- **Log Level.** You can change the level of logging for troubleshooting. It is recommended that the log level be kept at the default level (ERR) unless instructed otherwise by customer support. Select the log level from the drop-down menu and click **Save**.
- **Log Size.** You can change the maximum size of the log file.
- **Remove All Settings.** You can reset all settings available on this menu to the default settings by clicking **Save**.

## Viewing Channels

To view each channel in use, click the **Menu** button from the main screen and then click the **Channel** button. This also shows all of the mobile devices currently on each channel.



**Figure 4-3.** Channels Screen

## Viewing Users

To view all of the users currently on the channel, click the **Menu** button from the main screen and then click the **Users** button. 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.

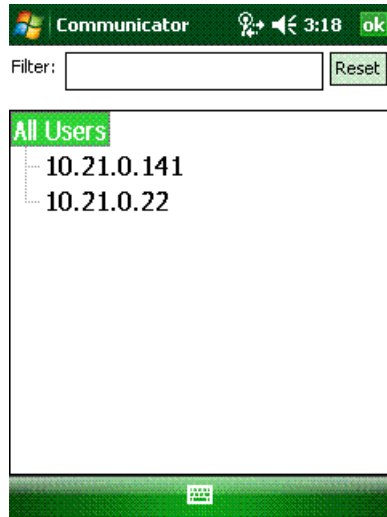


Figure 4-4. Users Screen

## Viewing Communicator Activity

To view Communicator activity, click the **Menu** button from the main screen and then click the **Activity** button. The **Activity** screen provides real-time statistics about devices using Communicator. If the device has changed channels since logging on, the current channel will be displayed. If it has not changed channels, the **Activity** screen will display “Logged on” next to the name of the device. The **Activity** screen is only available from the Communicator Console and is a real-time statistics view, not a log file.

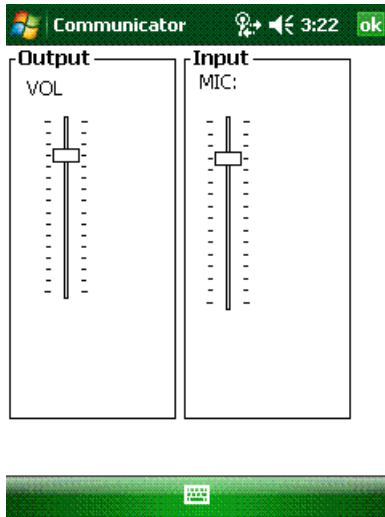


**Figure 4-5.** *Activity Screen*

## Adjusting the Audio

You can configure the following audio settings for the audio coming through the mobile device.

- **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.



**Figure 4-6.** *Audio Screen*

## Chapter 5: Advanced Configurations

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

The following information is provided:

- Configuring General Settings
- Configuring Network Profiles
- Configuring Zones
- Configuring Channels
- Configuring Device Groups
- Configuring Notification Options
- Backing Up Settings
- Restoring Settings

Any change in the configuration requires that you deploy the updated configurations to your mobile devices using either Avalanche or ActiveSync.

### 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 each of the following settings on the **General** tab on the Configuration Console:

- Program Options
- Identification
- Private Calling
- Channels

- Program Exit
- User Options

## Program Options

Program options are settings you can select about how the Communicator behaves on the mobile device. From the **General** tab of the Configuration Console, you can configure the following program options:

- **Auto Start.** If enabled, this option configures the Communicator to automatically launch upon start of the mobile device.
- **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 screen of the Communicator. From the **General** tab of the Configuration Console, you can configure the following identification properties:

- **Enable CESecure Login.** If enabled, Communicator will display the ID of the current CE Secure user. If CE Secure is not in use, Communicator will default to the custom name property. If no custom name property is specified, the IP address will be displayed.
- **Disable Name Change.** If enabled, this option will ensure that users cannot change the device name.
- **Custom Name Property.** Specifies an Avalanche device property to be displayed as the user name. This option can only be used if Communicator was installed as an Avalanche package. An example of a custom name property could be ModelName. Communicator would then display the model name of the device (example: SYM9090) as the user name. For more information on device properties, see your Avalanche User Guide. If no custom name property is specified, the IP address will be displayed.

## Private Calling

From the **General** tab of the Configuration Console, you can configure the following options for private calling:

- **Enabled.** If enabled, this allows private calling between mobile devices. If disabled, 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 a private call. The device user cannot reject a call.

## Channels

From the **General** tab of the Configuration Console, you can configure the following options for channels:

- **Scanning.** When enabled, this allows the Communicator to scan every available channel. The user will hear all communications on all available channels, but still transmit only on the currently set channel.
- **Xmit Chan** drop-down. Enables you to select which channel you want the device to transmit on.

## Program Exit

From the **General** tab of the Configuration Console, you can configure the following option for a password to exit Communicator:

- **Program Exit.** Configure this text box to specify a password the user must provide in order to exit Communicator.

## User Options

From the **General** tab of the Configuration Console, you can configure the following user options:

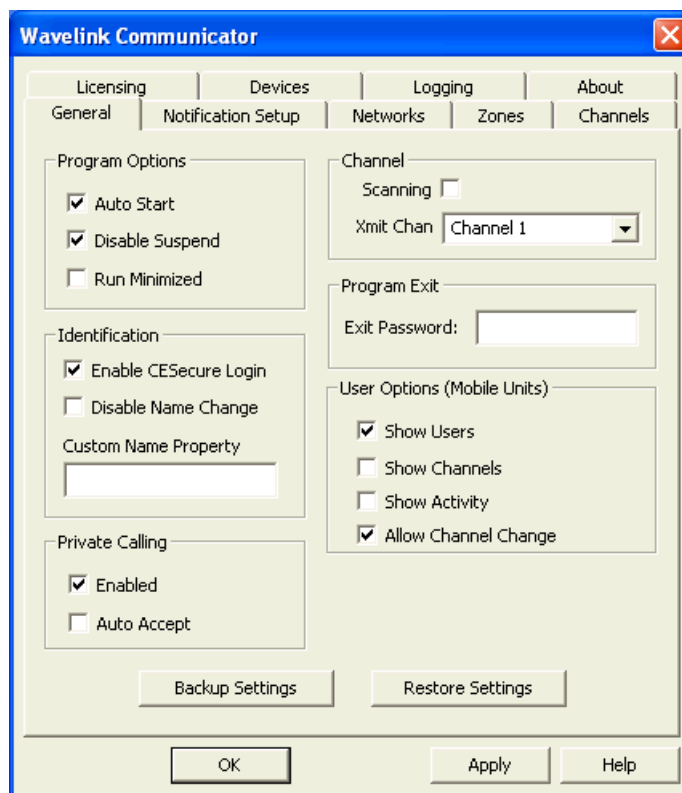
- **Show Users.** If enabled, this option allows the mobile device user to view other devices and the channel they are using by clicking **Menu > Users** from the main screen of Communicator.
- **Show Channels.** If enabled, this option allows the mobile device user to view other Communicator channels in use by clicking **Menu > Channels**

from the main screen of Communicator. It displays each user on each working channel.

- **Show Activity.** If enabled, this option allows the user to view an Activity window that displays real-time statistics of all devices using Communicator. This window is only available from the Communicator Console on the desktop. 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 communication channels.

**To configure general Communicator settings:**

- 1 Access the Communicator Configuration Console.
- 2 Select the **General** tab.



**Figure 5-1.** General Tab

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

You must deploy these configurations in order for them to take effect on your mobile devices.

## Configuring Network Profiles

You can create new network profiles if you want to restrict communication on specific networks. Communicator can then send out multicasts to all the devices that are configured within that network profile. When you create a new network profile, you name the network and then enter the network address(es) to be part of the profile. Network profiles cannot have duplicate names.

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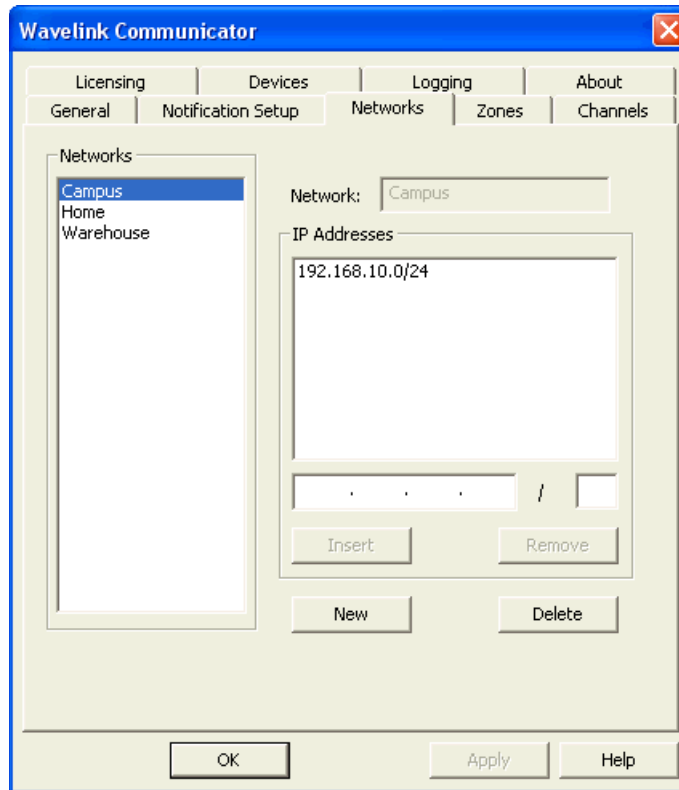
**NOTE** If any devices running Communicator have multiple IP addresses, you need to create a network profile to restrict Communicator to bind to specific adapters on those devices. Creating a network profile reduces the chance of dropped packets.

---

An example of when a network address is necessary could be if the computer on which Communicator is installed has one IP address for a wired network connection (10.21.0.31) and another IP address for a wireless network connection (10.22.0.144). The network profile could be defined as 10.21.0.0/16 so that Communicator would bind only to the wired adapter on that computer.

### To add a network profile:

- 1 Access the Communicator Configuration Console.
- 2 Click the **Networks** tab.



**Figure 5-2.** *Networks Tab*

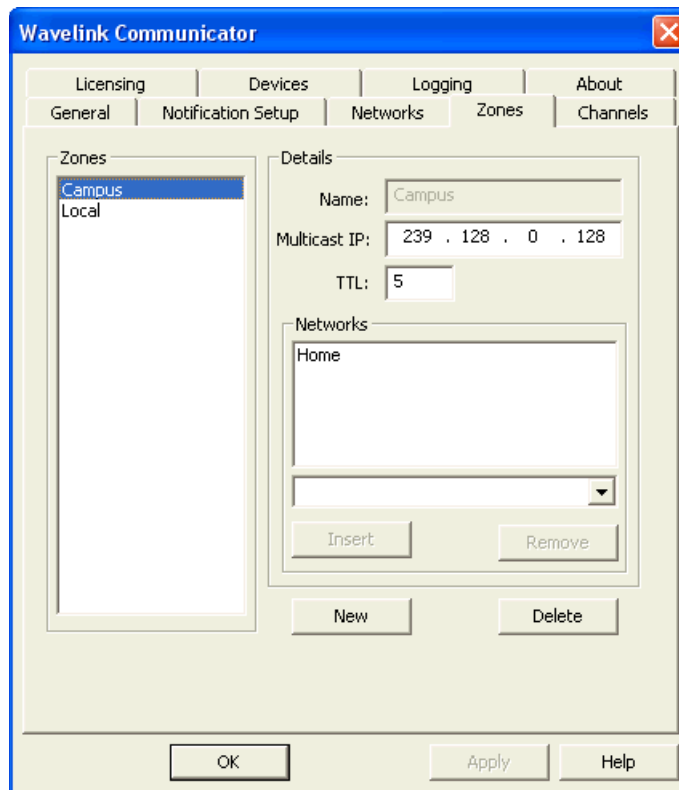
- 3** Click **New**.
- 4** In the **Network** text box, enter a name for the network profile you are creating.
- 5** In the available text box, enter the network address (in CIDR notation) for this network profile.
- 6** Click **Insert**.
- 7** Continue adding network addresses that you want to include in the profile. If you want to remove a network address from a profile, click to highlight the address and then click **Remove**.

- 8 When you are finished, click **Apply**. After creating a network profile, you must configure which zones and channels will be using the network profile.

## Configuring Zones

A zone is a multicast address that allows you to segment your network communication beyond the simple network profiles. You can create multiple zones to allow devices in different areas in your network to communicate on separate multicast addresses. You can configure the following options for zones from the **Zones** tab:

- **Name**. Indicates the name of the zone.
- **Multicast IP**. This must be a multicast address.
- **TTL (Time to Live)**. Refers to the number of hops the packet will take 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 at least one network profile configured when you are creating a zone.



**Figure 5-3.** *Zones Tab*

**To add a new zone:**

- 1 Access **Zones** tab from the Configuration Console.
- 2 Click **New**.
- 3 Enter the name of the zone in the **Name** text box.
- 4 Enter the multicast address in the **Multicast IP** box.
- 5 Enter the **TTL** number.
- 6 Select the network profile you want to associate with this zone from the drop-down list and click **Insert**.

To remove a network profile from the list associated with this zone, select the network profile from the **Networks** list and click **Remove**.

- 7 Click **Apply**. After creating a zone, you must configure what channels will be using the zone.

**To delete a zone:**

- 1 Access the Configuration Console and click the **Zones** tab.
- 2 From the list, select the zone you want to delete from the **Zones** list and click **Delete**.
- 3 Click **Apply**.

The zone will be deleted from your devices the next time the configuration is deployed.

## Configuring Channels

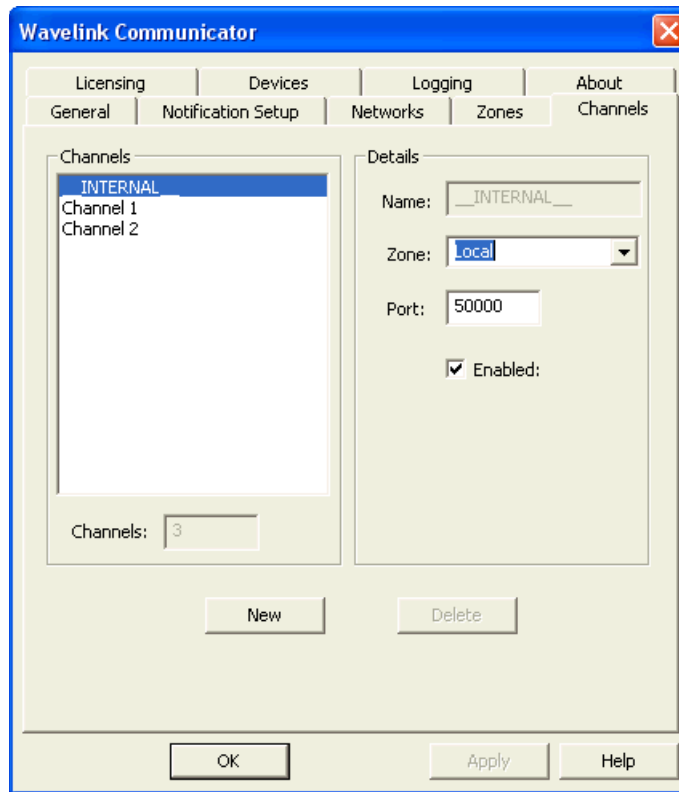
When you use Communicator to broadcast from the Console or from your mobile device, your message is sent on a specific channel. Everyone listening on that channel will be able to hear your message. Communicator has two channels configured by default. You can configure additional channels from the **Channels** tab on the Configuration Console.

You can configure the following options for channels:

- **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. Communicator has two zones configured by default or you can assign a zone you have created. Each channel can only be assigned to one zone.
- **Port**. You cannot use the same port number for different channels. Ports must be an even number. The port number must be greater than zero but less than 65535.
- **Enable**. You must select the **Enabled** option for the channel to be available.

**To add a channel:**

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



**Figure 5-4.** Channels Tab

- 2 Click **New** and type the name of the channel in the **Name** text box.
- 3 From the drop-down list, 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 **Enabled**.
- 6 Click **Apply**.

The channel will appear in the list box and be available to use after the configuration is deployed.

**To delete 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 **Enabled** option.
- 4 To completely remove the channel, click **Delete**.
- 5 Click **Apply**.

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

## Configuring Device Groups

From the **Devices** tab, you can configure settings specific to a model or device. You can create device groups for device-specific configurations, configure hot keys for each device group, and assign audio settings for each device group. The following tasks are described in this section:

- Adding Device Groups
- Configuring Hot Keys
- Using Key Helper
- Configuring Device Audio

### Adding Device Groups

If you have different models of mobile devices, you can configure Communicator hot keys and audio settings for each device type.

- 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 buttons or keys on the mobile device or keyboard to a specific action. You can use the default hot keys configuration or you can specify your own. Configuration is based on the hex value of the key.

To find the hex value, you can use Key Helper (for instructions, see *Using Key Helper* on page 59) or access the **About** screen on the Communicator Console or on the mobile device and press the key or button you want to assign. The hex value of the key is displayed in the lower corner of the screen. You can then enter this value in the appropriate text box in the **Devices** tab of the Configuration Console.

You can configure hot keys for the following actions:

- **Popup Key.** When pressed on the mobile device, this key will bring the Communicator to the foreground and provides access to the **Menu** screen of the Communicator.

---

**NOTE** The Popup key is always configured as a global setting, meaning that it will function the same way even if pressed when Communicator is not in the foreground. If the Popup key is configured to perform other functions in another program, you should change the Communicator default settings. If you do not change the settings, the Communicator will override the original use of the key. This may change the way your applications behave.

---

- **Talk Key.** When pressed and held on the mobile device or console, you are able to transmit on your assigned channel. You can set this to global.
- **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 From the mobile device or Communicator Console on your desktop, click **Menu**.

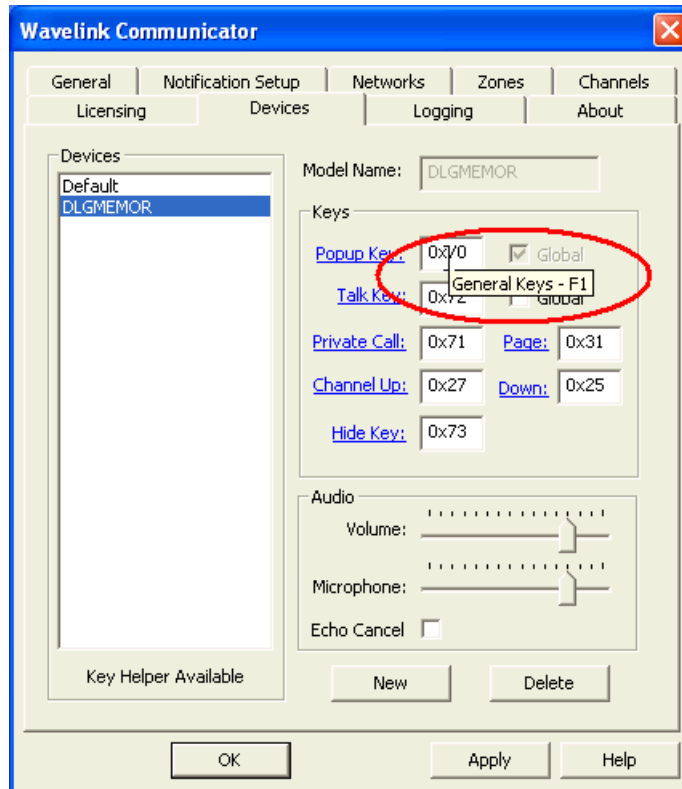
- 2 Click the **About** button.
- 3 Press the key you want to be used as a hot key. The hex value of that key appears in the lower corner of the screen.  
  
Note the value.
- 4 Go to the **Devices** tab in the Configuration Console.
- 5 From the device list, select the group of devices for which you are configuring the hot key.
- 6 Enter the hex value in one of the 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 **Apply** when you are finished.

The keys on the device will perform the actions after the configuration is deployed to the mobile device.

## Using Key Helper

The **Key Helper Available** notification appears at the bottom of the **Devices** list if Key Helper is available for a device model. Key Helper allows you to choose a hot key value from a list of key names. Key assignments in Key Helper are based on the device manufacturer.

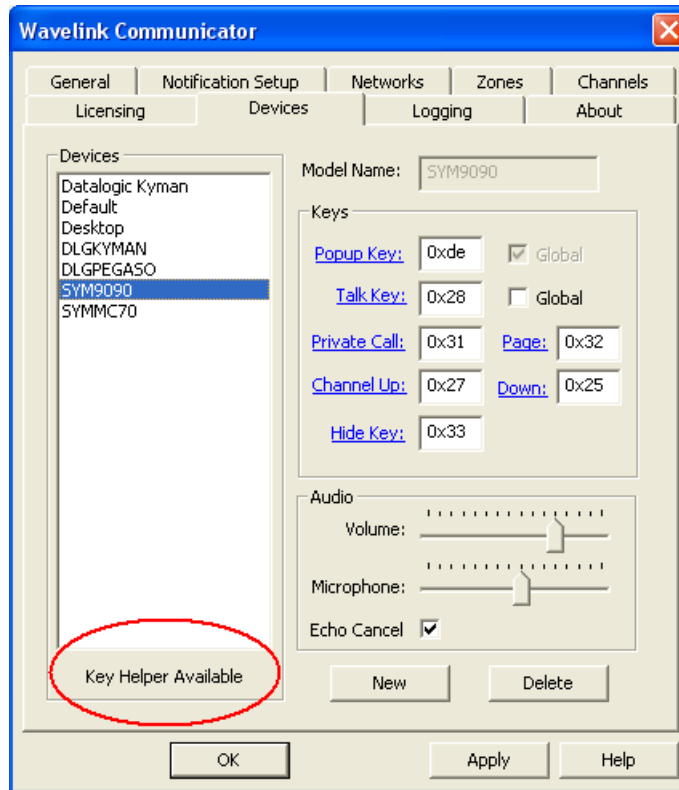
When Key Helper is available, you can view the key name of a configured key by holding the mouse over the text box. A tool tip appears displaying the key name for that value. This allows you to view which key is actually assigned.



**Figure 5-5.** Key Description on the Devices Tab

**To use Key Helper:**

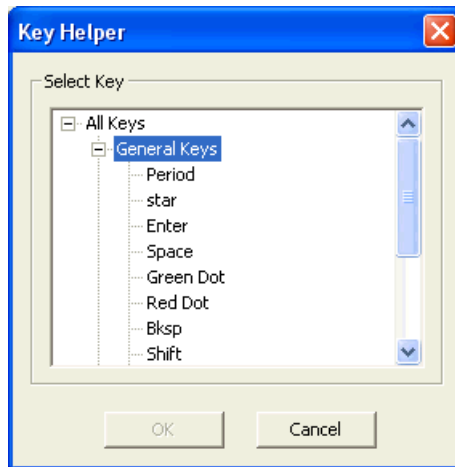
- 1 Access the **Devices** tab in the Configuration Console.
- 2 From the **Devices** list, select a device that has Key Helper available.



**Figure 5-6.** *Key Helper Available*

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

The *Key Helper* dialog box appears and displays available keys for that specific device.



**Figure 5-7.** *Key Helper*

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

The hex value of the key will appear in the hot key text box.

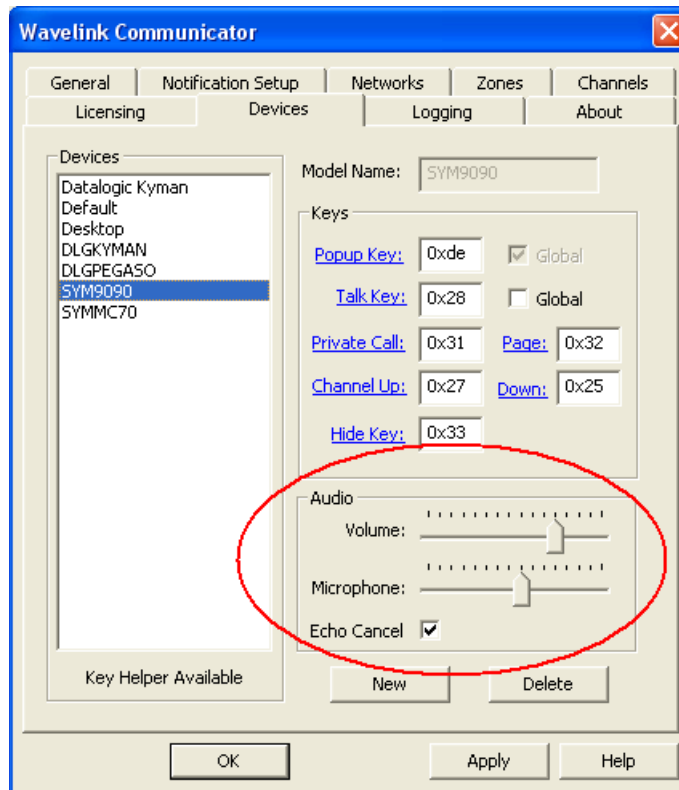
- 5 When you are finished configuring keys, click **Apply**.

## **Configuring Device Audio**

From the **Devices** tab you can set the speaker volume, microphone volume, and enable echo cancellation on the mobile device.

### **To set the volume and echo cancellation:**

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



**Figure 5-8.** Audio on the Devices Tab

- 2 Select the device group you want to configure from the **Devices** list.
- 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.

---

**NOTE** Echo cancellation is only available from certain mobile device manufacturers. Even though the box is available, some devices may not support this feature.

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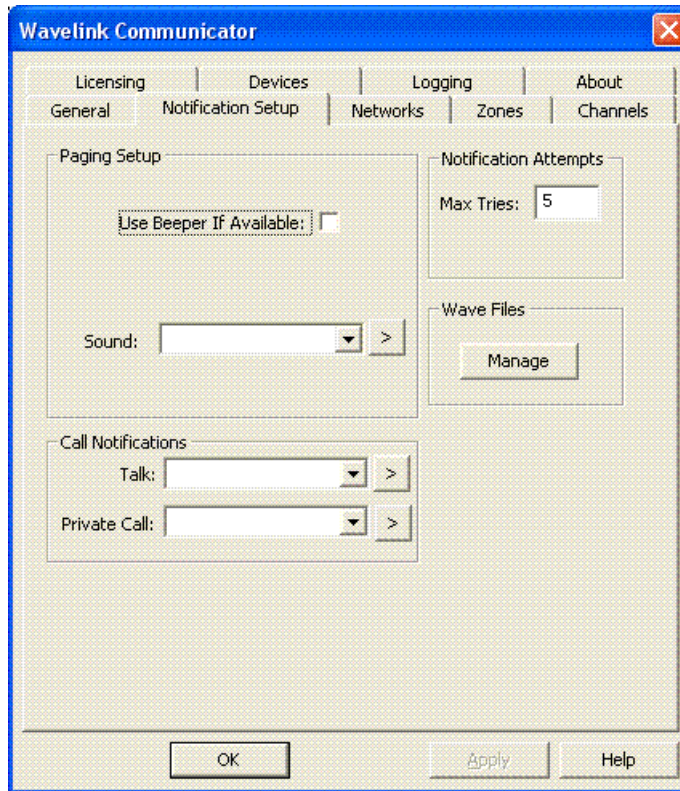
- 5 When you are finished, click **Apply**.

The group of devices will receive the audio assignments when the configuration is deployed.

## **Configuring Notification Options**

The **Notification Setup** tab allows 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:

- Paging Setup
- Call Notifications
- Notification Attempts
- Wave Files



**Figure 5-9.** Notification Setup Tab

## Paging Setup

These options on the **Notification Setup** Tab 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 Communicator is attempting contact.
- **Sound.** This sound plays when a page is received. You can select one of the sounds listed in the box or enter an absolute path to a wave file.

---

**NOTE** The drop-down list is filled by default with values already available on the device or installed along with Communicator. To add sounds to the list, use the **Manage** button on the **Notification Setup** Tab.

---

## Call Notifications

The following options on the **Notification Setup** Tab allow you to customize what sound is played when the user receives a call:

- **Talk.** This sound plays when the device receives a broadcast. You can select one of the sounds listed in the box or enter an absolute path to a wave file.
- **Private Call.** This sound plays when the device receives a private call. You can select one of the sounds listed in the box or enter an absolute path to a wave file.

---

**NOTE** The drop-down list is filled by default with values already available on the device or installed along with Communicator. To add sounds to the list, use the **Manage** button on the **Notification Setup** Tab.

---

## Notification Attempts

The following option is available on the **Notification Setup** Tab:

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

## Wave Files

The following file option is available on the **Notification Setup** Tab:

- 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 by providing the location of the file on the host system. The file will be copied to the mobile device when the configuration is applied. Once a file is added it will appear in the **Sound**, **Talk** and **Private Call** drop-down lists and be available for use.

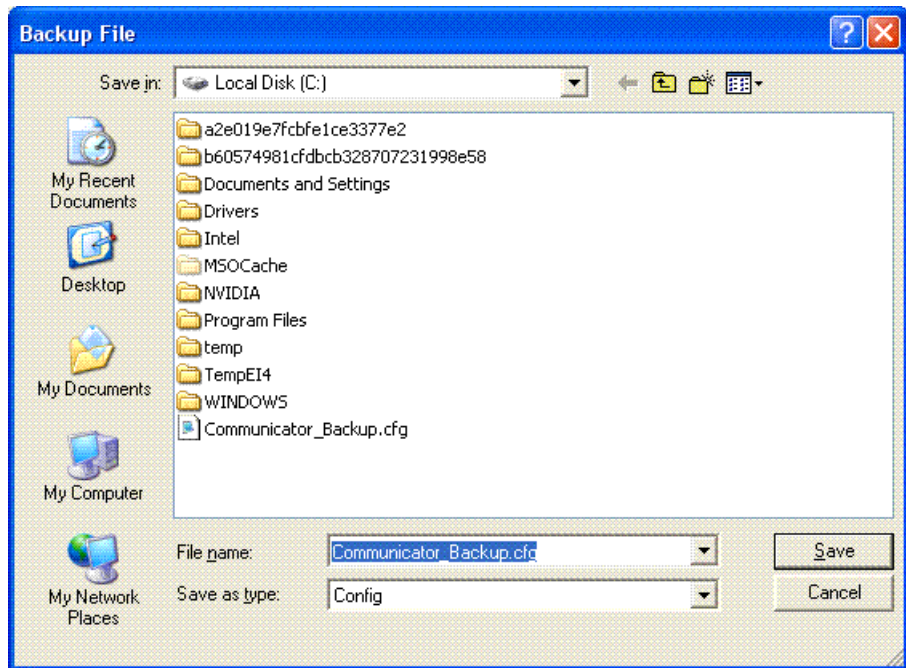
## Backing Up Settings

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 *Backup File* dialog box appears.



**Figure 5-10.** *Backup File*

- 2 Navigate to where you want to save the backup file.
- 3 Click **Save**.

The configuration is saved and available to be restored later.

## Restoring Settings

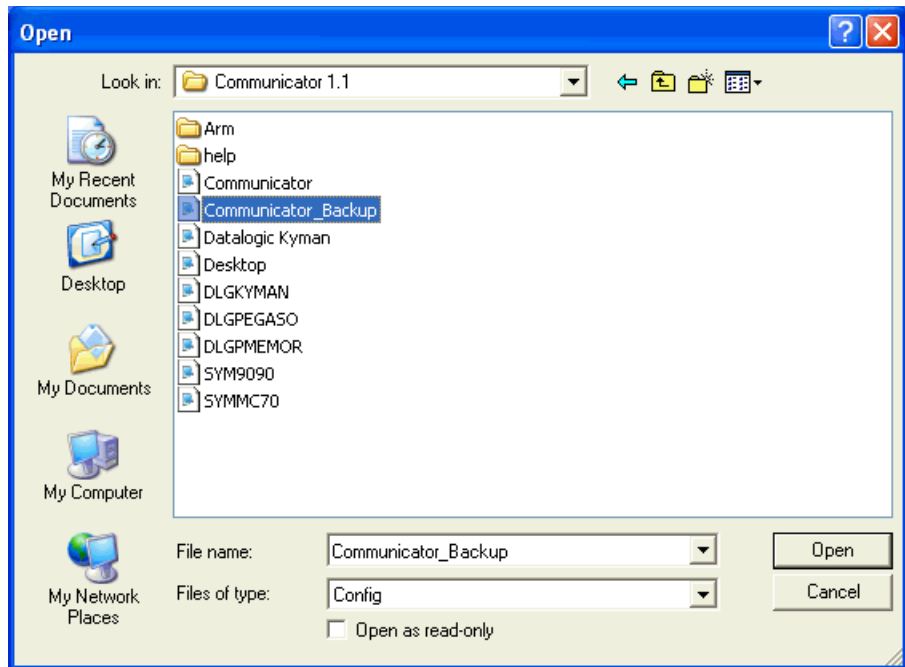
If you created a Communicator configuration, you can restore those settings from the **General** tab in the Configuration Console

**To restore Communicator Configurations:**

- 1 Access the Communicator Configuration Console.

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

An *Open* dialog box appears.



**Figure 5-11.** *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.

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