

HP OpenView Management Suite for PDAs Using Radia

Radia Mobile Management Guide

Software Version: 1.7

for the Windows Mobile for Pocket PC operating system



Manufacturing Part Number: T3424-90071

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About this Guide

Who this Guide is for

This guide is for Radia System Administrators who wish to use Radia to manage wireless devices with Pocket PC 2000 and above operating system. The PDA RIM and RAM clients support Windows Mobile for PocketPC versions 2000, 2002, and 2003. You should have experience with the Radia System Explorer.

What this Guide is about

The *Radia Mobile Management Guide* is an introduction and installation guide for the Radia Mobile Manager, Version 1.7. It discusses all of the components needed to use Radia to manage mobile devices. In addition, it covers how to publish packages for mobile devices, and how to manage mobile devices using Radia.

In addition, Appendix A discusses how to use the Radia Inventory Manager components for cradled PDA devices, an alternative to the wireless method of obtaining inventory reports for PDA devices.

Summary of Changes

This printing of the *Radia Mobile Management Guide* contains the following changes to information and procedures for the following chapters.

Chapter 2: Installing the Radia Mobility Server

- 1.7** Page 22, Added a note to guide users with existing Radia Mobile Manager classes on how to update the Radia Database for this release.
- 1.7** Page 23, *Figure 2.1 ~ MBLCONFIG class is added to the POLICY domain*: new figure to show the new SHOWDLG attribute for the POLICY.MBLCONFIG class. This attribute determines whether the new Progress dialog box is shown or hidden when users are running the Radia Application Manager on the PDA to download applications.
- 1.7** Page 23, Added a definition for the Alert / Defer class in the SOFTWARE domain. This class can be imported using the import deck provided in this release.
- 1.7** Page 24, modified the procedure *To install the Radia Database updates* to include the procedures to import the ALERTDEF class, if needed.
- 1.7** Page 25, *Adding the SHOWDLG Attribute to the MBLCONFIG Class*: new section that describes how to edit an existing MBLCONFIG class for the new SHOWDLG attribute.
- 1.7** Page 31: Steps 6 and 7 of *Installing the Radia Mobility Server* were modified to indicate you must enter a license file in Step 6 to install the product.

Chapter 3: Installing and Using the Radia Mobile Client Applications

- 1.7** Page 40, *Figure 3.1 ~ RMRAM.INI file prior to customization*: added a row for SHOWDLG.
- 1.7** Page 45, *Table 3.1 ~ Attributes of the Mobile Device Config (MBLCONFIG) Class and Equivalent RMRAM.INI Parameters*: added a row for SHOWDLG.
- 1.7** Page 47, Step 1: added "or Hostname" to Web address.
- 1.7** Page 54, *Using the Radia Application Manager on the PDA*: added bullets to step 3 that describe what happens upon the first connect to the Radia Mobility Server if the mobile device has been assigned applications.

Chapter 4: Publishing and Deploying Applications

- 1.7** Page 69, *Figure 4.9 ~ Enter an administrator User ID, a colon, and any password to access the Radia Configuration Server database*: new figure that depicts a new step 4.
- 1.7** Page 77, *Figure 4.17 ~ Enter a User ID, a colon, and any password for administrative access to the Radia Configuration Server database*: new figure that depicts a new step 4.
- 1.7** Page 84, *Publishing Applications and Files from a Command Line*: Added **-user** and **-pass** parameters to the command syntax for publishing applications, to support passing security information to the Radia Configuration Server for administrative access. These are described in *Table 4.1 ~ Parameters for Mobile Publishing* on the same page.
- 1.7** Page 89, *Update the Radia Proxy Server*: added a note that indicates that you do not have to synchronize a Radia Proxy Server co-located with the Radia Configuration Server.
- 1.7** Page 89, *Enable the Radia Configuration Server for HTTP Communication*: updated this section with the recommended method of enabling the Radia Configuration Server for HTTP communication using a co-located Radia Proxy Server.
- 1.7** Page 92, *Using the Progress Dialog Box*: new section to describe new feature. The Progress dialog box indicates the status and details about the service being downloaded by the Radia Application Manager. The Progress dialog box will also display an Application Alert, if one was coded for the service. Application Alert Messages were introduced with Radia Application Manager Version 3.1 and require Radia Database Version 3.11.
- 1.7** Page 96, *Responding to Deferral Messages*: new section. Alert and Defer messages, if coded for a service, are displayed on the PDA prior to a download. The Defer option permits a user to defer the download. Deferral Messages were introduced with Radia Application Manager Version 3.1 and require Radia Database Version 3.11.

Appendix A: Radia Inventory Manager Reporting for Cradled PDAs

- 1.7** Pages 107 to 121, *Radia Inventory Manager Reporting for Cradled PDAs*: new appendix to describe using the Radia Inventory Manager components for cradled PDA devices to obtain inventory reports of PDA devices. Use of the cradled PDA components is an alternative to using the wireless Radia Inventory Manager application for obtaining inventory reports on PDA devices.

Editorial Improvements

In addition to the changes listed above, this version contains various editorial and style updates to each chapter and section and the index.

Conventions

You should be aware of the following conventions used in this book.

Table P.1 ~ Styles

Element	Style	Example
References	<i>Italic</i>	See the <i>Publishing Applications and Content</i> chapter in this book.
Dialog boxes and windows	Bold	The Radia System Explorer Security Information dialog box opens.
Code	Andale Mono	radia_am.exe
Selections	Bold	Open the \Admin directory on the installation CD-ROM.

Table P.2 ~ Usage

Element	Style	Example
Drives (system, mapped, CD)	Italicized placeholder	<i>SystemDrive</i> : \Program Files\Novadigm might refer to C:\Program Files\Novadigm on your computer. <i>CDDrive</i> : \client\radia_am.exe might refer to D:\client\radia_am.exe on your computer.
Files (in the Radia Database)	All uppercase	PRIMARY
Domains (in the Radia Database)	All uppercase	PRIMARY.SOFTWARE May also be referred to as the SOFTWARE domain in the PRIMARY file.
Classes (in the Radia Database)	All uppercase	PRIMARY.SOFTWARE.ZSERVICE May also be referred to as the ZSERVICE class in the SOFTWARE domain in the PRIMARY file.

The table below describes terms that may be used interchangeably throughout this book.

Table P.3 ~ Terminology*

* Depends on the context. May not always be able to substitute.

Term	May also be called
Application	software, service
Client	Radia Application Manager and/or Radia Inventory Manager
Computer	workstation, server
NOVADIGM domain	PRDMAINT domain Note: As of the 4.0 release of the database, the NOVADIGM domain is being renamed the PRDMAINT domain. Therefore, if you are using an earlier version, you will see the NOVADIGM domain in the database.
Radia Configuration Server	Manager, Active Component Server
Radia Database	Radia Configuration Server Database

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Introduction

At the end of this chapter, you will:

- Know the components of Radia support for mobile devices.
- Know the contents of this guide.

Overview

Mobile users need to be self-sufficient and productive wherever they are. Unpredictable bandwidth connections can prevent software and content updates. To function efficiently, mobile users must have the most current applications and content. In addition, they must be able to get the same result regardless of connection type, whether it is Local Area Network, Internet, dial-up, or wireless. Furthermore, the technology for mobile users is constantly changing. Mobile users are also some of the largest consumers of Help Desk services and application development.

Radia support for mobile management uses existing Radia architecture and administration tools to distribute software to Windows CE and Pocket PC 2000 and above architecture devices. These capabilities allow the Radia administrator to manage applications and content on the devices, and collect hardware and inventory information from them.

The Radia approach uses a minimal resident client on the mobile device. The mobile client builds on standard strategic Web enabled protocols and high-level Application Program Interfaces to communicate and transfer application materials and install them on the device. Reporting for mobile device inventory is integrated into the Radia Inventory Manager.

In summary, Radia support for Mobile Management:

- Uses industry standards such as HTTP, Synch, WBEM-CIM, SQL, and XML
- Supports wireless and cradled connections
- Includes a device-resident agent
- Can use any HTTP/HTTPS supported connection, *networked* or *wireless*

Radia Mobile Management Components

Radia components that support mobile devices include the Radia Configuration Server, the Radia Proxy Server, and the Radia Inventory Manager. The Radia Configuration Server hosts the Radia Database, which includes configuration and policy information for all Radia devices. The Radia Proxy Server houses and distributes resource for mobile devices. The Radia Inventory Manager reports hardware and software information, and produces reports specific to hand-held devices. The Radia Mobility Server and the Radia Application Manager for Pocket PC has been added to work in conjunction with the Radia Configuration Server, the Radia Proxy Server, and the Radia Inventory Manager.

The Radia Mobility Server

The Radia Mobility Server, a component of the Radia Integration Server, acts as the server for mobile device distribution activities. It is the interface between the mobile device and the Radia Configuration Server. The Radia Mobility Server drives resolution on the Radia Configuration Server for mobile devices. For more information on the resolution process, see the *Radia Essentials Guide* or the *Radia System Explorer Guide*.

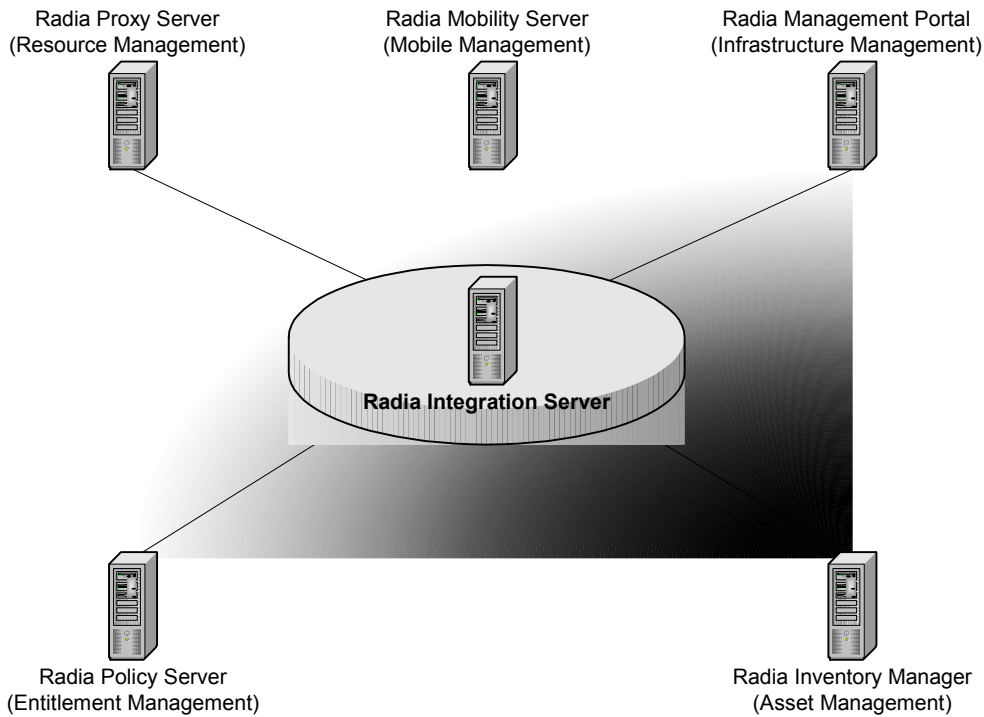


Figure 1.1 ~ Radia Integration Server.

The Radia Mobility Server provides the following services:

- Performs resolution and administers requests to the Radia Configuration Server.
- Reformats policy information from the mobile device into XML and delivers it in response to the original PDA GET request.
- Returns error information to the Radia Configuration Server, if unsuccessful.
- Serves file requests from the mobile device using standard Radia Proxy Server functionality.
- Posts inventory data to the Radia Inventory Manager.

The Radia Integration Server

The Radia Integration Server provides the foundation for a number of Radia infrastructure components, each of which resides in a Radia Integration Server's modules directories. These integrated components include the following separately licensed products:

- Radia Inventory Manager

- Radia Management Portal
- Radia Policy Server
- Radia Proxy Server
- Radia Mobility Server

When you install any of these products, the Radia Integration Server is installed automatically. Additional components that you install on the same machine will use the same core Radia Integration Server files, and run under the same process. The Radia Integration Server integrates these independent modules, giving them access to all the functions and resources under its control. The Radia Integration Server is *not* a separately licensed product.

Benefits of the Radia Integration Server are:

- All the products using the Radia Integration Server for Windows can be started from a single Windows NT or Windows 2000 Service called "Radia Integration Server (httpd)".
 - When the Radia Integration Server starts, it will scan its configuration file and try to load all the products marked as loadable.
 - Each product loaded from the Radia Integration Server is separately licensed, allowing customers to purchase only the products they need.
- The Radia Integration Server provides Web services that are shared by all loaded modules, resulting in a single entry point for all HTTP (Web based) requests. This integration provides performance, efficiency, and ease of maintenance in an adaptable and cohesive (server) framework.

Radia Mobile Device Applications

The Radia Application Manager and Radia Inventory Manager clients are available for mobile devices. The Radia Application Manager for Pocket PC manages applications for mobile devices, and provides support for mobile devices using the Pocket PC 2000 and above operating system. The Radia Application Manager for Pocket PC is used in a wireless or cradled environment and supports XML and HTTP. The Radia Inventory Manager client provides hardware and software inventory in a wireless environment. It, too, supports XML and HTTP and provides Web-based reports.

Summary

- The Radia Mobility Server provides communication between the mobile device and the Radia Configuration Server.
- The Radia Mobility Server is a module of the Radia Integration Server.
- The Radia Application Manager and the Radia Inventory Manager clients support mobile devices in wireless or cradled environments, using either XML or HTTP.

Installing the Radia Mobility Server

At the end of this chapter, you will:

- Know how to update the Radia Database for mobile devices and for support of the new features in this release.
- Be able to install the Radia Mobility Server.

Prerequisites

To support mobile devices, you must have already created a licensed Radia infrastructure. Install the following Radia components to the appropriate computers.

- Radia Configuration Server
- Radia Management Portal (optional)
- Radia Inventory Management Server (optional)

Updating the Radia Database

To be able to administer mobile devices, some changes need to be made to the Radia Database on the Radia Configuration Server. You will install these changes by running an import command to add the following classes to the database:

Important!

- Only run the import command for those classes not currently on your Radia Database. For example, existing Radia Mobile Manager users may have all classes, or may need to add the ALERTDEF class.
- If you have an existing MBLCONFIG Class, also see *Adding the SHOWDLG Attribute to the MBLCONFIG Class* on page 25 for instructions on how to modify your existing MBLCONFIG class to include the new SHOWDLG attribute.

- The **Mobile Device Config (MBLCONFIG)** class is added to the POLICY domain. This class includes attributes that specify the addresses of the Radia Inventory Manager, the Radia Proxy Server, the Radia Mobility Server, and the Radia Management Portal. It also includes other types of configuration data to be delivered to the mobile device.

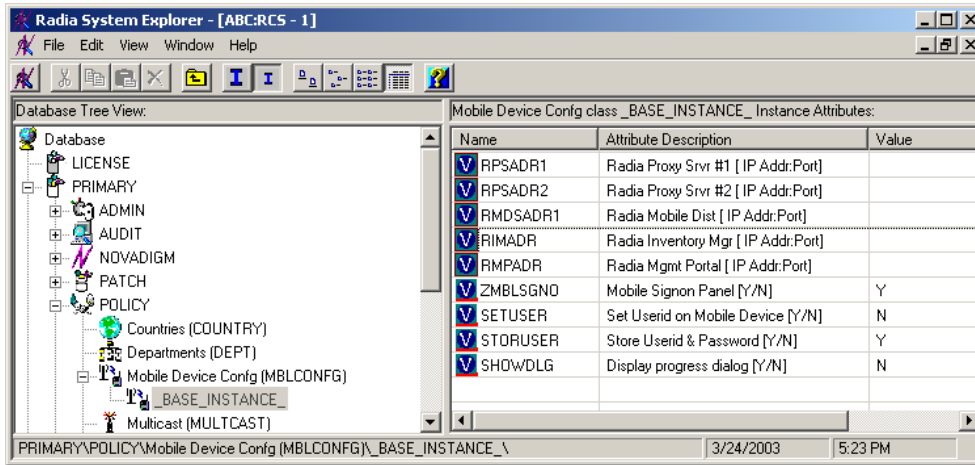


Figure 2.1 ~ MBLCONFG class is added to the POLICY domain.

- The **Mobile File Resource (RMMFILE)** class is added to the SOFTWARE domain. This class holds all resources that are created for distribution to the mobile devices.
- The **Alert/Defer (ALERTDEF)** class is added to the SOFTWARE domain to configure Application Alerts and Deferrals. Alert Messages and Deferral Dialogs can be displayed on the PDA during a Radia Application Manager session. For details, see *Using the Progress Dialog Box* on page 92 and *Responding to Deferral Messages* on page 96.

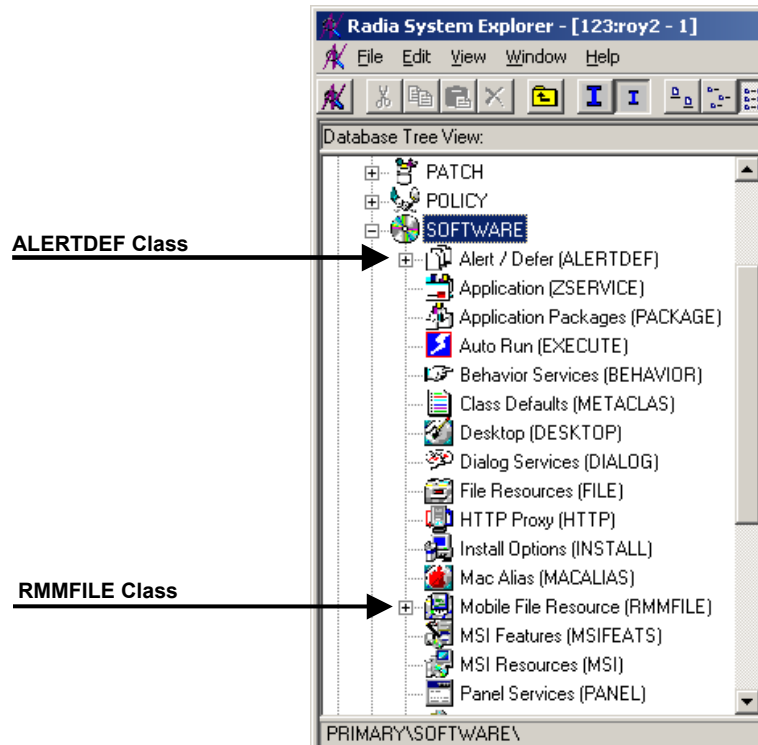


Figure 2.2 ~ The ALERTDEF and RMMFILE classes are added to the SOFTWARE domain.

To install the Radia Database updates

Caution

Only use this procedure to add classes not already on your Radia Database.

If you already have the MBLCONFIG and RMMFILE classes, see the procedure *Adding the SHOWDLG Attribute to the MBLCONFIG Class* on page 25.

1. Stop the Radia Configuration Server.
2. From your installation media, go to the **db_import** directory. This folder contains the import decks for the new classes to be added to the Radia Database.

Table 2.1 ~ Available Import Decks for Adding Classes

Import Deck Filename	Domain and Class
mblconfg.xpc	POLICY. Mobile Config (MBLCONFG)
rmmfile.xpc	SOFTWARE. Mobile File Resource (RMMFILE)
alertdef.xpc	SOFTWARE. Alert / Defer (ALERTDEF)

- For each class not currently in your Radia Database, copy its xpc file into the Radia Configuration Server's bin subdirectory. Use Table 2.1 above as a guide.

The default location of the bin directory is:

<System Drive>:\Novadigm\ConfigurationServer\bin.

- Open a command prompt.
- Navigate to the Radia Configuration Server's bin subdirectory. The default location of this directory is <System Drive>:\Novadigm\ConfigurationServer\bin.
- Execute the following commands from <System Drive>:\Novadigm\ConfigurationServer\bin for each class not currently on your Radia Database.

Caution

Do not import classes already on your database.

```
ZEDMAMS VERB=IMPORT_CLASS,FILE=mblconfg.XPC,PREVIEW=NO
```

```
ZEDMAMS VERB=IMPORT_CLASS,FILE=rmmfile.XPC,PREVIEW=NO
```

```
ZEDMAMS VERB=IMPORT_CLASS,FILE=alerdef.XPC,PREVIEW=NO
```

A return code of 0 indicates that there were no errors reported during the import, and the updates are applied to the database.

- Restart the Radia Configuration Server.

Adding the SHOWDLG Attribute to the MBLCONFG Class

If your Radia Database already includes the MBLCONFG class, use this procedure to add the SHOWDLG attribute. The SHOWDLG attribute supports the Progress dialog box available with this release.

To add the SHOWDLG attribute to the MBLCONFIG class

Note

We recommend backing up your Radia Database before performing this type of procedure, which modifies all instances of a class.

1. Open the Radia System Explorer. In the POLICY domain, select the **Mobile Device Config (MBLCONFIG)** class.
2. Right-click and select **Edit Class** from the shortcut menu.

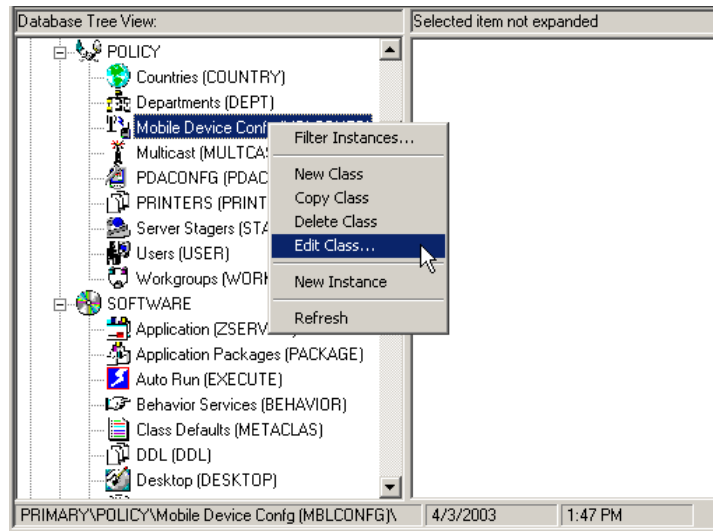


Figure 2.3 ~ Editing an Existing MBLCONFIG Class in the POLICY domain.

The **Editing MBLCONFIG** dialog box opens.

3. Select the last attribute, STORUSER, and click **Add After**.
4. Enter the following attribute information for the new SHOWDLG attribute:

Name: **SHOWDLG**
Length: **1**
Description: **Display Progress dialog (Y/N)**
Type: **Variable**
Properties: *allow Manager defaults*

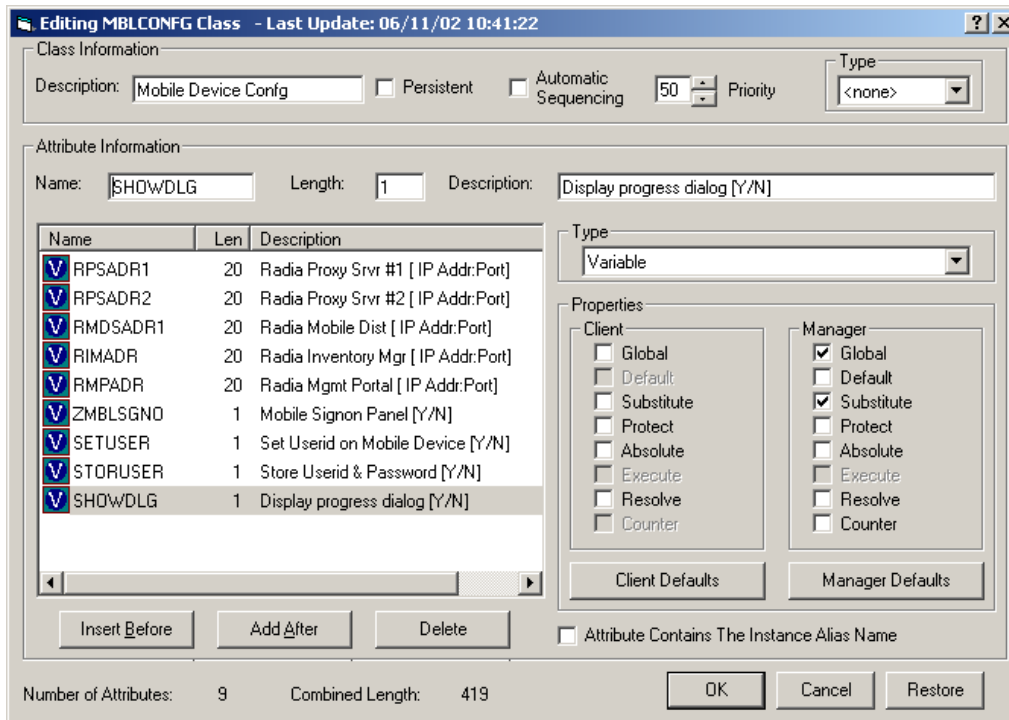


Figure 2.4 ~ New MBLCONFIG.SHOWDLG attribute settings.

- Click **OK** to complete the entry of **SHOWDLG**.
The **Class Edit Confirmation** dialog box opens.

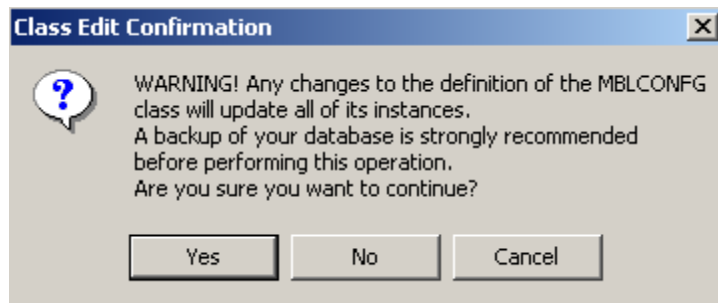


Figure 2.5 ~ Class Edit Confirmation dialog box.

6. Click **Yes** to confirm the MBLCONFIG class update for SHOWDLG.
The update is complete.

Installing the Radia Mobility Server

Install the Radia Mobility Server to allow communication between the mobile device and the Radia Configuration Server.

To install the Radia Mobility Server for Windows

1. If previously installed and running, stop the Radia Integration Server.

Note

The Radia Integration Server is installed automatically when you install a number of Radia licensed products. To review the list of these products, see *The Radia Integration Server* on page 17.

2. From the installation media, navigate to the following folder:
`\mobility_server\win32`
3. Double-click **Setup.exe**.
The **Welcome** window opens.



Figure 2.6 ~ Welcome window of the Radia Mobility Server.

4. Click **Next**.

The **Directory Location** window opens.

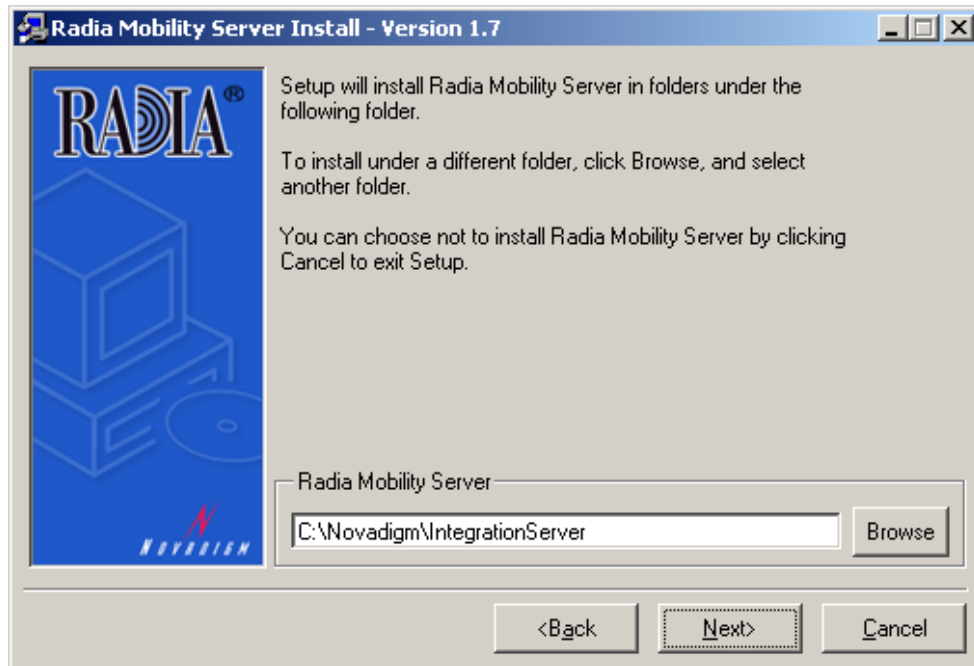


Figure 2.7 ~ Directory Location window for the Radia Mobility Server.

5. Type the name of the directory where you would like to install the Radia Mobility Server, or click **Browse** to select the location from the **Browse** dialog box.

Note

The Radia Integration Server is also installed with the Radia Inventory Manager, the Radia Management Portal, the Radia Policy Server, and the Radia Proxy Server. If you are installing the Radia Mobility Server on a computer that already has one of these Radia products installed on it, set the installation directory to your existing Radia Integration Server directory. The default is <System Drive>:\Novadigm\IntegrationServer or <System Drive>:\Novadigm\Radia Integration Server, depending on the product and version first installed.

6. Click **Next**.

If you have already installed another component of the Radia Integration Server, you will receive a warning about updating the Radia Integration Server directories. Click **OK** to continue the installation.

The **License File** window opens.

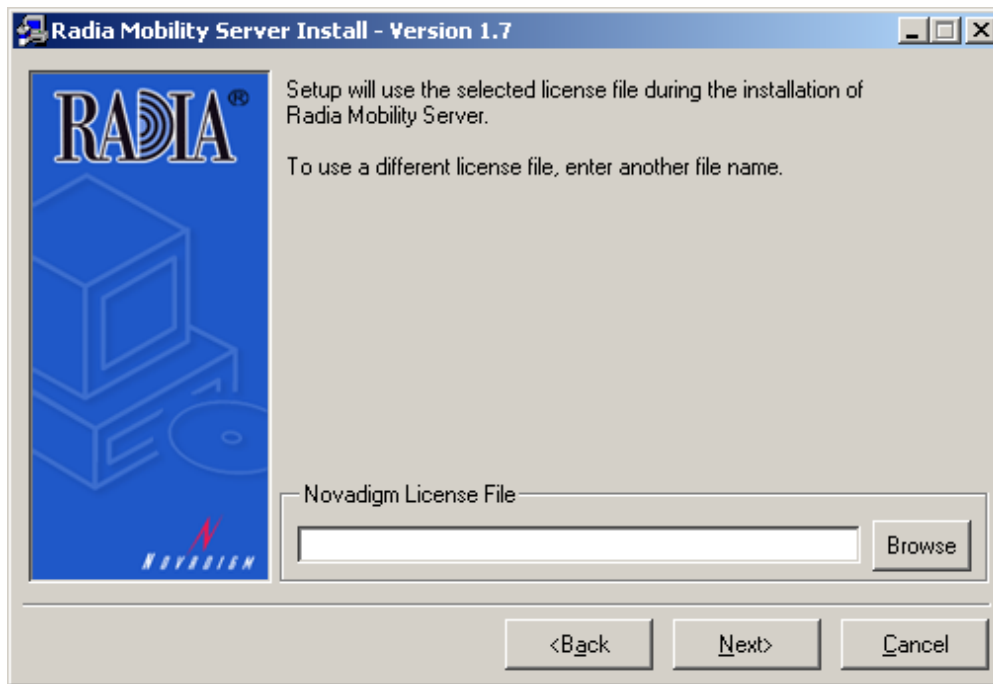


Figure 2.8 ~ License File window.

Type the name of your License File in the text box, or click **Browse** to locate the file in the **Browse** dialog box.

7. Click **Next**.

The **Installation Settings** window opens.

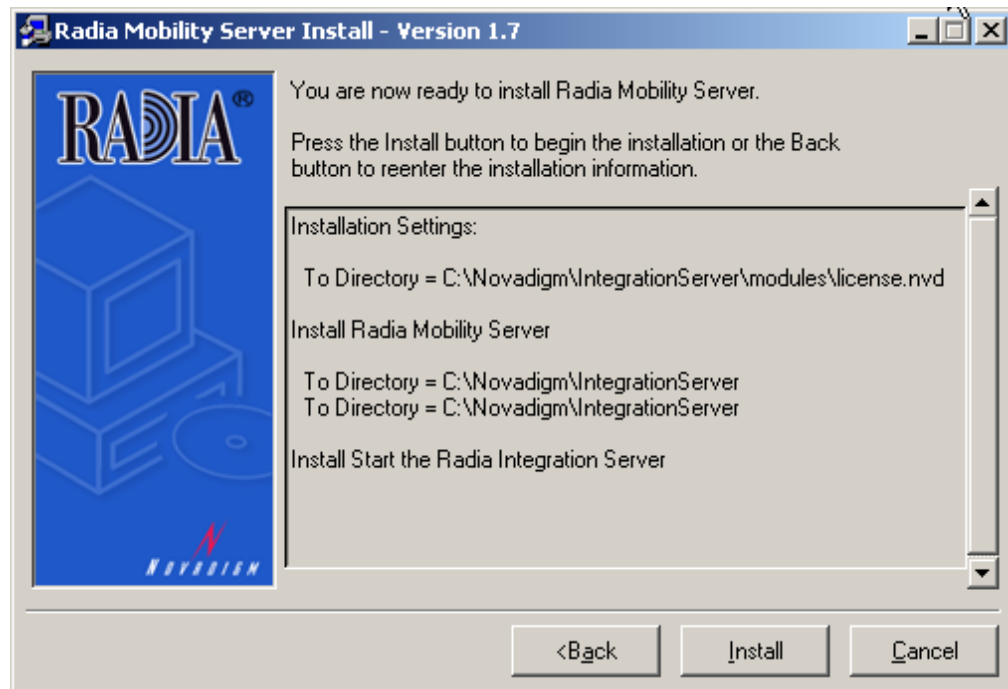


Figure 2.9 ~ Installation Settings window.

8. Click **Install**.
The **Installation Progress** window opens.

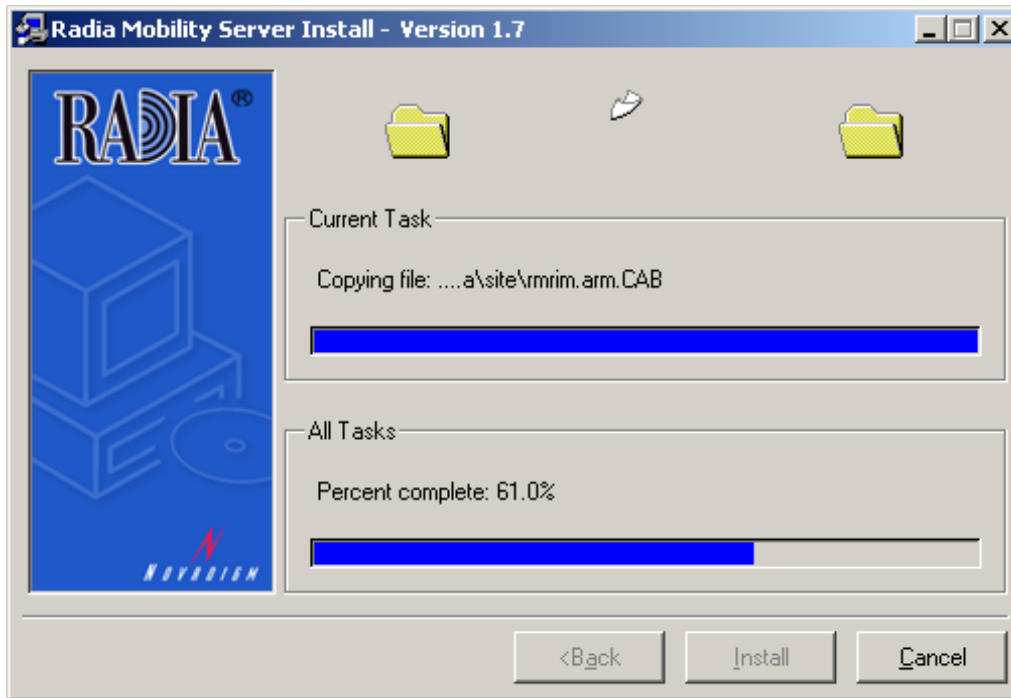


Figure 2.10 ~ Installation Progress window of the Radia Mobility Server.

If you get the error shown in *Figure 2.11 ~ Error copying httpd.tkd* shown below, abort the installation, stop the Radia Integration Server service, and retry the installation.



Figure 2.11 ~ Error copying httpd.tkd.

9. When the installation is complete, click **Finish**.

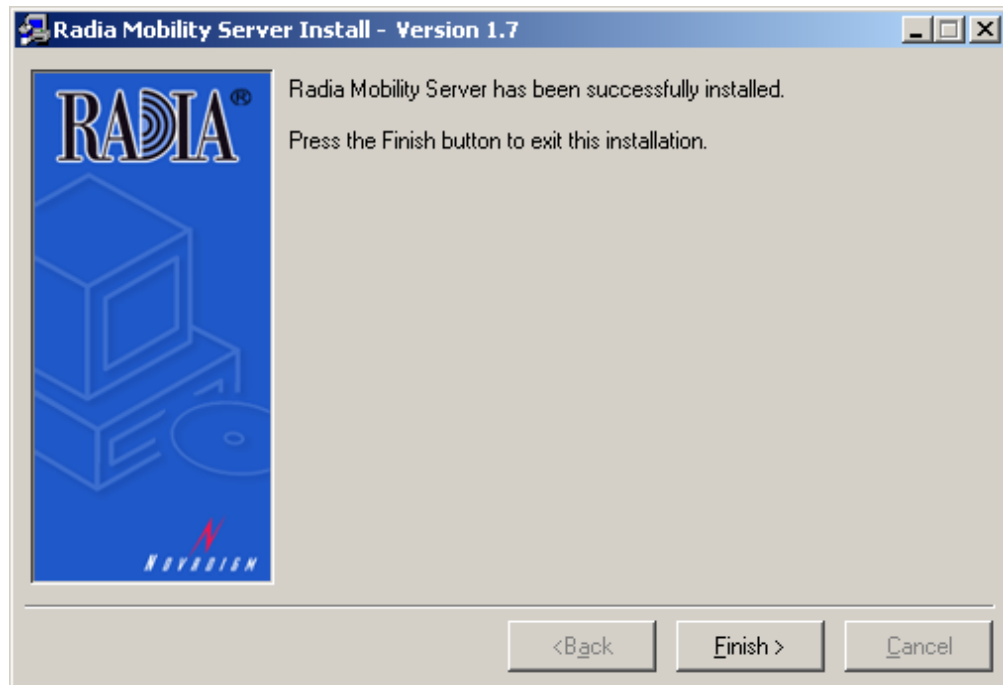


Figure 2.12 ~ The Radia Mobility Server has been installed.

You have successfully installed the Radia Mobility Server for Windows. You can find the Radia Mobility Server module, named `rmms.tkd`, in the Radia Integration Server's `\modules` directory.

Summary

- Import new classes, as necessary, into the Radia Database to support Radia Mobile Management.
- Install the Radia Mobility Server to provide an interface between the mobile device and the Radia Configuration Server.

Installing and Using the Radia Mobile Client Applications

At the end of this chapter, you will:

- Know the system requirements for the Radia Mobile Client Applications.
- Be able to build CAB files for the Radia Application Manager and the Radia Inventory Manager that also contain the initial server connection information for the mobile clients.
- Be able to use the Radia System Explorer to configure all connections and sign-on security options for the Radia Mobile clients.
- Know how to install the Radia Application Manager and Radia Inventory Manager on the mobile client.
- Be able to connect the mobile device's user to an instance in the Mobile Device Config (MBLCONFIG) class.
- If necessary, know how to configure the Radia Mobile Device after installation.
- Be able to connect the mobile device to the Radia Mobility Server.
- Be able to invoke the Radia Application Manager and Radia Inventory Manager clients from the mobile device. When running the Radia Application Manager client, you will understand how to use the Progress dialog box and how to respond to application alerts or deferral messages.

Prerequisites

The Radia Application Manager and Radia Inventory Manager clients are available for Pocket PC 2000 and greater (Microsoft Windows CE 3.0).

Configuring the Mobile Client

- Before distributing the client software, set the initial server connection information in a client initialization file, and use the distributed Microsoft "CAB" utility files to build a pre-configured CAB file for RAM and RIM installation on the mobile devices. For details, see *Building CAB Applications with Configuration Settings*, on page 39.
- Before distributing the client software, use the Radia System Explorer to define the full configuration of the mobile devices. At the first Client Connect from the Radia Application Manager for Pocket PCs, the mobile devices "inherit" this configuration information. To do this, establish and configure a policy instance in the Mobile Device Configuration (MBLCONFIG) class and connect this policy to a user instance. The mobile device will automatically inherit these values when it connects to the database. For details, see *Configuring the Mobile Clients Using Radia System Explorer* on page 41.
- After installation of a Radia application on the mobile device, run the Radia Configuration Tool in the Radia folder on the handheld device to view or set the configuration information for the Radia mobile applications. See the topic *Using the Radia Client Configuration Tool* on page 51.

Building CAB Applications with Configuration Settings

Use the steps that follow to configure the initialization (RMRAM.INI) file with the first connection server IP address and port, and then build new Radia Application Manager for Pocket PC (RMRAM) and Radia Inventory Manager for Pocket PC (RMRIM) CAB files for distribution to the mobile devices. When the applications are installed on the mobile clients, users can simply run the applications without any additional configuration on their end.

- If you are installing the Radia Application Manager for Pocket PC (with or without the Radia Inventory Manager for Pocket PC), follow the steps in the next topic *Building a Pre-Configured Radia Application Manager CAB File*.
- If you are installing only the Radia Inventory Manager for Pocket PC, follow the steps in *Building a Pre-Configured Radia Inventory Manager CAB File* on page 41.

Building a Pre-Configured Radia Application Manager CAB File

Use these steps to build a RMRAM.CAB file for the Radia Application Manager for Pocket PC. If you are installing both the Radia Application Manager for Pocket PC and the Radia Inventory Manager for Pocket PC, these steps guide you through building the RMRIM CAB file for the Radia Inventory Manager as well.

To build a pre-configured CAB file for the Radia Application Manager

1. Go to the `\client` folder of the installation media, and copy the entire `\WinCE` folder and its subdirectories to a local drive. For example, to `D:\WinCE`.
2. Make the local copy of the WinCE folder your home directory.
3. Go to the `<Base Directory>\rmram` directory. Edit the file `rmram.ini` with your Radia Mobility Server port and IP address:
 - **RPD_PORT**
Specify the port number of the Radia Mobility Server. Default is 3466.
 - **RPD_ADDR**
Specify the IP Address of the Radia Mobility Server. Required to run the Radia Application Manager from the mobile device.

```
RPD_PORT=3466
RPD_ADDR=xxx.xxx.xxx.xxx ← IP address of Radia Mobility Server
RPSPORT1=
RPSADDR1=
RPSPORT2=
RPSADDR2=
RIM_PORT=
RIM_ADDR=
RMP_PORT=
RMP_ADDR=
USERID=PDAUSER
PASSWORD=
ZMBLSGNO=Y
SETUSER=N
STORUSER=N
SHOWDLG=N
```

Figure 3.1 ~ RMRAM.INI file prior to customization.

Caution

All lines must be present in this file. Do not remove any lines.

We recommend that you do not specify any other parameters in this file since they are superseded by the equivalent, required entries in the MBLCONFIG Policy class instance. For more information, refer to *Table 3.1 ~ Attributes of the Mobile Device Config (MBLCONFIG) Class and Equivalent RMRAM.INI Parameters* on page 45.

As long as you run the Radia Application Manager first (before running the Radia Inventory Manager), you only need to set the RPD_PORT and the RPD_ADDR at this time. The other servers and port numbers for all other connections are picked up automatically from entries in the Radia Database the first time the PDA runs the Radia Application Manager. This is discussed in the topic *Configuring the Mobile Clients Using Radia System Explorer* on page 41.

4. Save the edited **rmram.ini** file.
5. Execute the **buildram.bat** file to create a **RMRAM.ARM.CAB** file.
6. If you are also installing the Radia Inventory Manager (RIM) application, continue with the next step. If you are not installing RIM, skip to Step 9.
7. For RIM, copy the **rmram.ini** file from the *<Base Directory>\rmram* location to the *<Base Directory>\rmrim* location. (RAM and RIM must use the same rmram.ini file.)
8. For RIM, execute the **buildrim.bat** file from the *\rmrim* folder to create a **RMRIM.ARM.CAB** file.
9. Copy the newly created CAB files to the Radia Integration Server's *\site* directory. The default location for this is *<System Drive>:\Novadigm\IntegrationServer\site*.

After building the CAB file(s), continue the mobile client configuration as discussed in *Configuring the Mobile Clients Using Radia System Explorer* on page 41.

Building a Pre-Configured Radia Inventory Manager CAB File

If you are installing the Radia Inventory Manger **without** the Radia Application Manager, follow these steps to configure and build a Radia Inventory Manager CAB file.

To build a pre-configured CAB file for the Radia Inventory Manager (only)

Note

If you are installing both applications, follow the directions given in the previous topic *Building a Pre-Configured Radia Application Manager CAB File*. Steps to create the RMRIM.CAB file begin with Step 6.

1. Go to the **\client** folder of the installation media, and copy the entire **\WinCE** folder and its subdirectories to a local drive. For example, to *D:\WinCE*.
2. Make the local copy of the WinCE folder your home directory.
3. Change the current directory to *<Base Directory>\rmrim*.
4. Edit **rmram.ini** with the Radia Inventory Manager port and server IP address.
 - **RIM_PORT**
Specify the Radia Inventory Manager Server's port: normally 3466.
 - **RIM_ADR**
Specify the Radia Inventory Manager Server's IP address.

Note

When using RIM without RAM, you don't need to specify the Radia Mobility Server Address and Port.

5. Execute the **buildrim.bat** file to create a **RMRIM.ARM.CAB** file.
6. Once the new CAB file is created, copy the CAB file to the Radia Integration Server's **site** directory. The default Radia Integration Server location is *<System Drive>:\Novadigm\IntegrationServer\site*.

Configuring the Mobile Clients Using Radia System Explorer

Use the Radia System Explorer to enter and maintain the full configuration of mobile device server connections, as well as the sign-on security options. A mobile device inherits the attributes established in the MBLCONFIG class of the Radia Database each time it connects for Application Management. These MBLCONFIG class attributes take precedence over both the equivalent

RMRAM.INI entries used to build the CAB applications, and the equivalent Radia Configuration Tool entries available on the mobile device.

To configure the Radia Mobile clients using Radia System Explorer

1. On your Radia Administrator Workstation, from the **Start** menu, select **Programs, Radia Administrator, Radia System Explorer**. The **Radia System Explorer Security Information** dialog box opens.

Note

The **User ID**, as shipped from HP, is **RAD_MAST**. No password is necessary. This may have been changed during installation. You can also change this by selecting the **Change Password** check box and typing the new password in the **New Password** and **Verify New Password** text boxes.

2. If necessary, type a **User ID** and **Password**, and then click **OK**. The **Radia System Explorer** window opens.
3. Double-click **PRIMARY**.
4. Double-click **POLICY**.
5. Double-click **Mobile Device Config (MBLCONFG)**. The **Mobile Device Config** class expands.

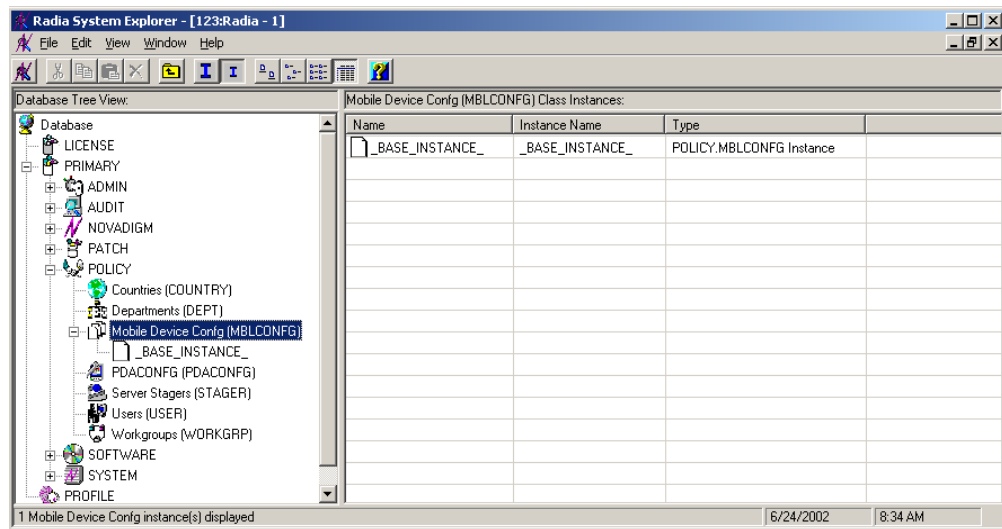


Figure 3.2 ~ Expand the Mobile Device Config (MBLCONFG) class.

6. Right-click **Mobile Device Config (MBLCONFG)**. A shortcut menu opens.
7. From the shortcut menu, select **New Instance**.
8. Type **RMMTEST** as the name for the new instance.
9. Click **OK**. The RMMTEST instance is created.

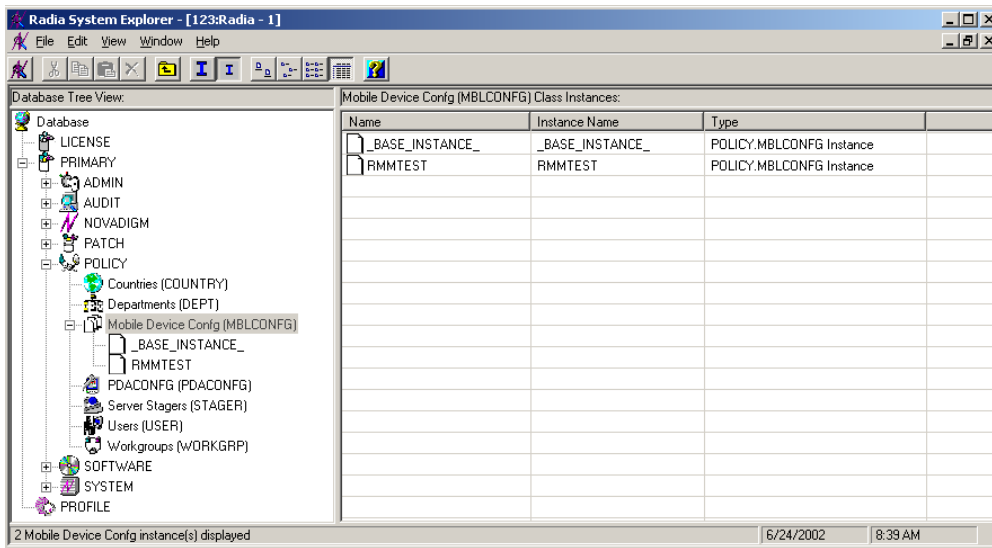


Figure 3.3 ~ The RMMTEST instance is created.

10. Right-click the **RMMTEST** instance. A shortcut menu opens.
11. Select **Edit Instance**. The **Edit Instance** dialog box opens.

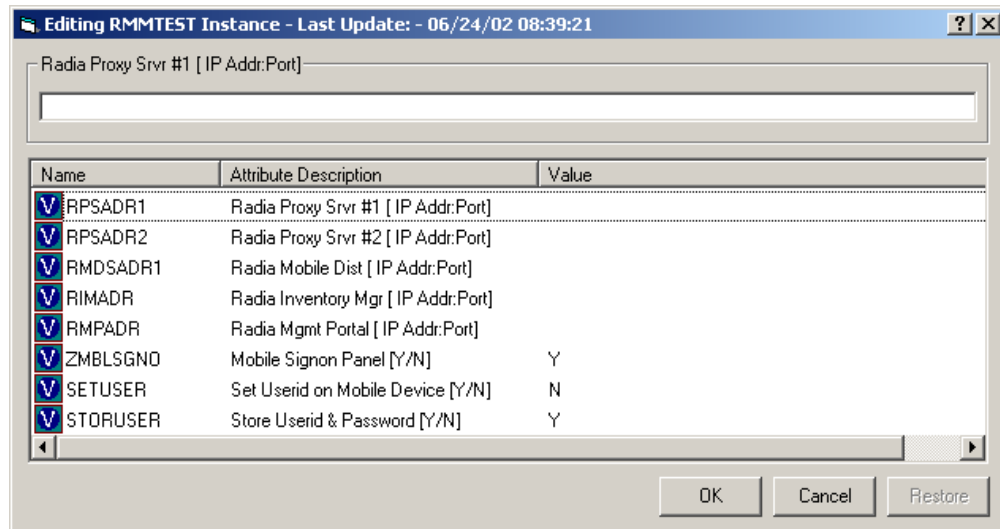


Figure 3.4 ~ Edit the RMMTEST instance with the appropriate Values.

- Using Table 3.1 ~ Attributes of the Mobile Device Confg (MBLCONFIG) Class and Equivalent RMRAM.INI Parameters on page 45, type in the addresses and ports for your Radia Proxy Servers, Radia Mobility Server, Radia Management Portal, and Radia Inventory Manager.

Note

Attributes in the MBLCONFIG class instance take precedence over equivalent entries made to the RMRAM.INI file (used to build the CAB files), and to the Client Configuration Tool fields (run from the mobile device).

Table 3.1 ~ Attributes of the Mobile Device Config (MBLCONFIG) Class and Equivalent RMRAM.INI Parameters

Attribute Description		RMRAM.INI Parameters
RPSADR1	Specifies the first Radia Proxy Server's IP address and port number, in the format of <IP Address>: <Port>. For example: 10.10.10.12:3466	RPSPORT1= & RPSADDR1=
RPSADR2	Specifies the second Radia Proxy Server's IP address and port number, in the format of <IP Address>: <Port>. For example: 10.10.10.13:3466	RPSPORT2= & RPSADDR2=
RMDSADR1	Specifies the Radia Mobility Server's IP address and port number, in the format of <IP Address>: <Port>. For example: 10.10.10.14:3466	RPD_PORT= & RPD_ADDR=
RIMADR	Specifies the Radia Inventory Manager Server's IP address and port number, in the format of <IP Address>: <Port>. For example: 10.10.10.15:3466	RIM_PORT= & RIM_ADDR=
RMPADR	Specifies the Radia Management Portal's IP address and port number, in the format of <IP Address>: <Port>. For example: 10.10.10.16:3466	RMP_PORT= & RMP_ADDR=
ZMBLSGNO	Specifies whether to display the mobile device's sign on panel. Use Y to display the panel and N to suppress the panel. The default is Y .	ZMBLSGNO=
SETUSER	Set this to Y if you want the user ID set to the serial number of the mobile device. Set this to N if you want this to be left as user entry. The default is N .	SETUSER=
STORUSER	Set to Y if you want to store the User/Password in the UPDATE.INI file. Set this to N if you want to clear the User/Password in the UPDATE.INI file. The default is Y .	STORUSER=
SHOWDLG	Set to Y to display the Progress dialog box on the mobile devices when Radia Application Manager applications are being deployed. The dialog box shows the transfer statistics and progress, a Application Alert Message (if coded for the Service) and permits the user to Pause, Restart, Cancel, or view more or less Details on the current transmission. (Pausing the transmission frees up processing power on the PDA for an urgent task.) See <i>Using the Progress Dialog Box</i> on page 92 for details. Set to N to suppress the Progress dialog box. The default is N .	SHOWDLG=

- 13.** Click **OK** when you have finished typing in your enterprise's values for the RMMTEST instance. The **Instance Edit Confirmation** message box opens.

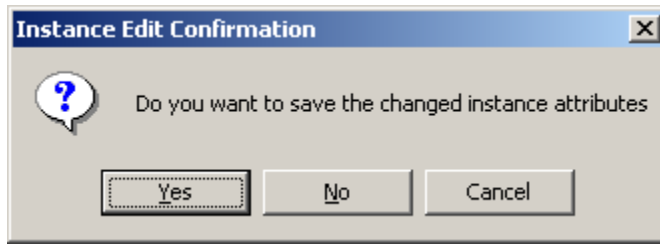


Figure 3.5 ~ Confirm changes to the instance.

14. Click **Yes** to confirm the changes.

The changes are made to the RMMTEST instance.

Installing the Radia Clients

To install the Radia Clients for Pocket PC from the Web

1. From your mobile device, use an Internet browser to go to the following address:
`http://<Radia Mobility Server IP Address or Hostname:Port>/site/rmappload.html`
where **Port** is the port number of the Radia Integration Server on the Radia Mobility Server computer. The default is 3466.
The mobile client installation page appears.



Figure 3.6 ~ Install the Radia Mobile Applications.

2. Click **Application Manager** or **Inventory Manager**.
The Radia Application Manager or Radia Inventory Manager is installed on the device to the Windows\Start Menu\Programs\Radia directory.

Connecting the Mobile Device Configuration to a User

To download the configuration options to the mobile device, the instance you created in the Mobile Device Config (MBLCONFIG) class must be connected to an instance in the User class in the POLICY Domain. In our example, we connect RMMUSER in the User class to RMMTEST in the Mobile Device Config (MBLCONFIG) class.

Note

See the *Radia System Explorer Guide* or the *Radia Application Manager Guide* for additional information on creating users and groups.

To connect a User instance to an MBLCONFIG instance

1. Create a new instance in the user class for the mobile device user. This name will be used on the mobile device's sign on panel. In this example, we named it **RMMUSER**.
2. Right-click the **RMMUSER** user in the User class in the tree view. A shortcut menu opens.
3. Select **Edit Instance**. The **Edit Instance** dialog box opens.

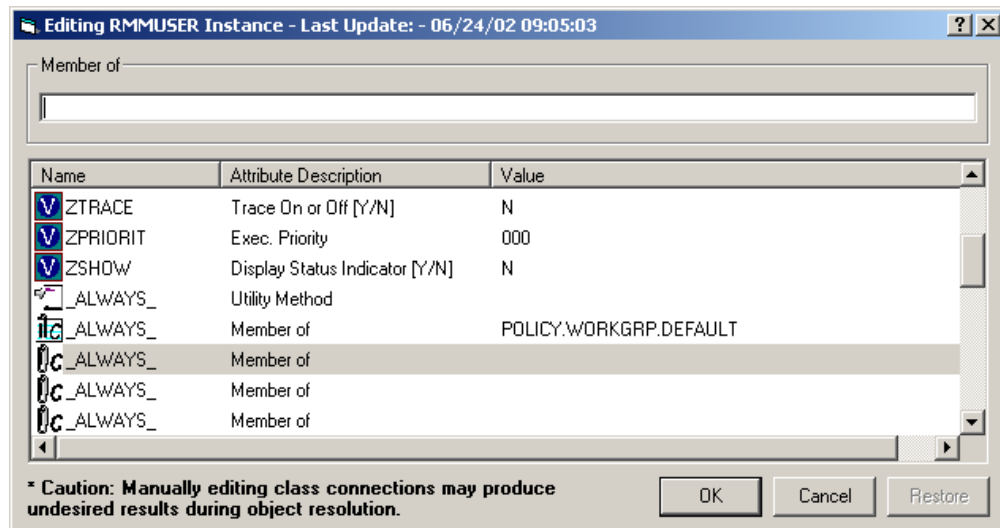


Figure 3.7 ~ Edit the RMMUSER instance.

4. Click on the **Always Class Connection** below the POLICY.WORKGRP.DEFAULT instance.

Note

If you want to be able to click and drag from the Mobile Device Config (MBLCONFIG) class to a User, Workgroup, or Department instance, you will need to add MBLCONFIG to the list of Connection Rules. To do this, add MBLCONFIG to the following instances:

ADMIN.ZLIST.CONNECT_USER_TO_RULES
 ADMIN.ZLIST.CONNECT_DEPT_TO_RULES
 ADMIN.ZLIST.CONNECT_WORKGRP_TO_RULES

5. Type in the full name of your Mobile Device Config (MBLCONFIG) instance that you want to connect to the RMMUSER instance. In this example, the path is **POLICY.MBLCONFIG.RMMTEST**.

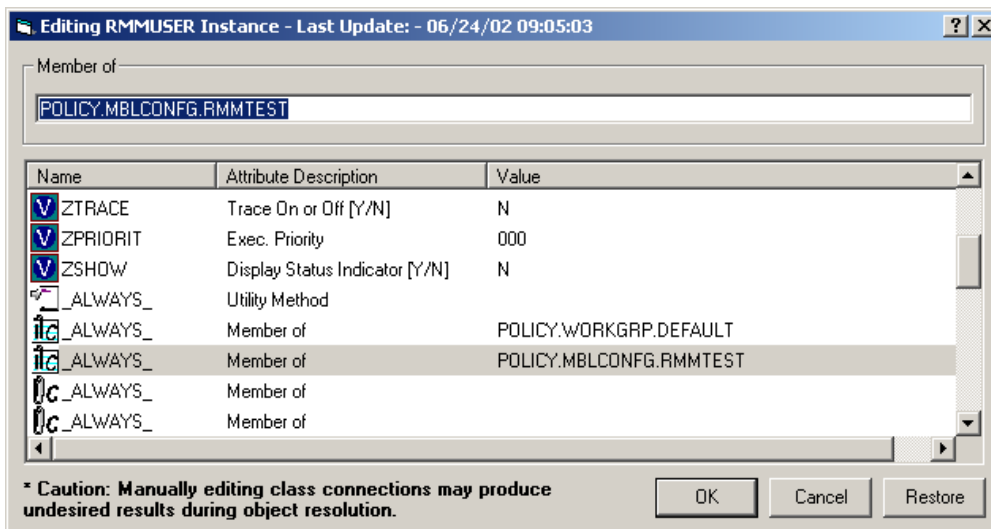


Figure 3.8 ~ Connect the RMMUSER instance to the RMMTEST instance.

6. Click **OK** when you have finished typing in the connection string. The **Instance Edit Confirmation** message box opens.

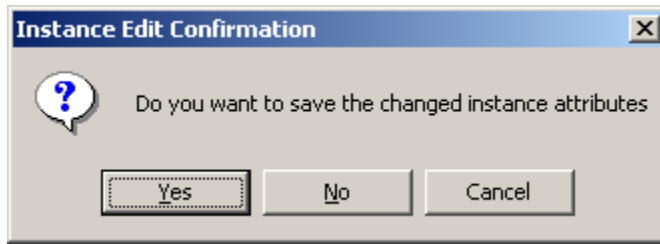


Figure 3.9 ~ Confirm changes to the instance.

7. Click **Yes** to confirm the changes.

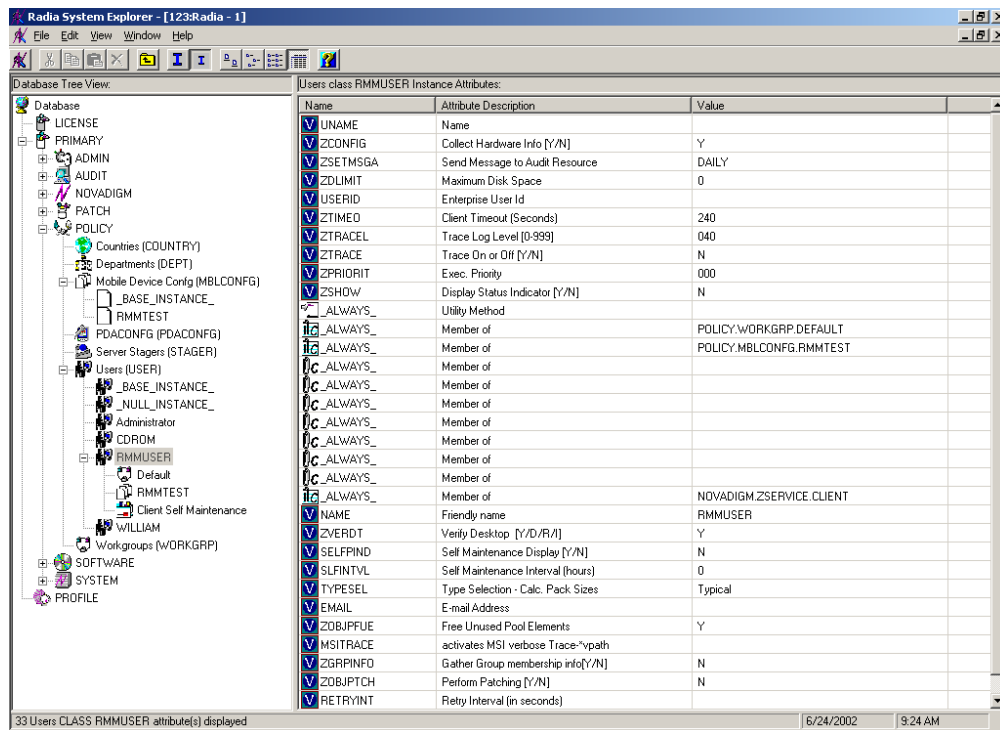


Figure 3.10 ~ The connection is complete.

The connection is made to the RMMTEST instance in the Mobile Device Config (MBLCONFG) class. When the mobile device connects, the values specified will be communicated to the device.

Using the Radia Client Configuration Tool

After installation, use the Radia Client Configuration Tool to view the current device configuration inherited from either the downloaded Radia CAB files or the MBLCONFIG class instance in the Radia Database.

If the device is missing configuration information, you can also use the Client Configuration Tool to configure the mobile device from the unit itself for the first connect to the Radia Mobility Server.

To configure the client using the Radia Client Configuration Tool on the mobile device

1. From the handheld device's **Start** menu, select **Programs**.
2. Tap on the **Radia** folder to open it. You should see icons for the Application Manager and the Client Configuration.
3. Tap **Client Configuration Tool**. The Radia Setup window opens.

The screenshot shows a dialog box titled "Client Configuration". It contains the following fields and labels:

- RMM Server**: A text input field.
- Port**: A text input field.
- RPS Server**: A text input field.
- Port**: A text input field.
- RMP Server**: A text input field.
- Port**: A text input field.
- RIM Server**: A text input field.
- Port**: A text input field.
- User ID**: A text input field.
- Password**: A text input field.

At the bottom of the dialog are two buttons: **Ok** and **Cancel**.

Figure 3.11 ~ Use the Radia Client Configuration tool to view or set the client configuration.

4. If any required values are missing, type them in the appropriate boxes.

- To run the Radia Application Manager, you must have the IP address and port set for your Radia Mobility Server (**RMM Server** and **Port**).
 - To run the Radia Inventory Manager without first running the Radia Application Manager, you must have the IP address and port set for your Radia Inventory Manager Server (**RIM Server** and **Port**).
 - The other server entries are for the Radia Proxy Server (RPS Server and Port) and Radia Management Portal (RMP Server and Port), if used. These items should be set in the MBLCONFIG class instance in the Radia System Explorer. For more information, see *To configure the Radia Mobile clients using Radia System Explorer* on page 42.
- 5.** You can also type in a **User ID** and **Password**.

Caution

The User ID and Password are required when logging in to the Radia Application Manager for mobile devices. The password is set the first time the user logs in.

- 6.** Click **OK** to save any entries or changes to the Radia Configuration values.

Using the Radia Application Manager on the PDA

Now that you have installed and configured the Radia Application Manager for Pocket PC, you can perform the first Client Connect. On the first connect, the following will occur:

- The user will sign on to the Radia Security panel and create a password (a non-null password is required).
- The server addresses and other configuration information specified in the Mobile Device Config (MBLCONFIG) instance will be transferred to the mobile device.
- The mobile device will be registered in the PROFILE file.
- If the mobile device user has been assigned any applications, these will be installed. See *Deploying the Applications to the Mobile Device* on page 90 for details.

To run the Radia Application Manager for Pocket PC for the first connect

1. From the handheld device's **Start** menu, tap **Application Manager**.

The Radia Security panel opens.

Note

The Radia Security panel may be suppressed, depending on your device's configuration.



Figure 3.12 ~ Sign on to the Radia Application Manager.

2. Type in a User ID and Password. The password is determined the first time a user logs on. In the previous procedure, we created the RMMUSER instance using the Radia System Explorer.

Caution

A non-null password is required. The password has the same limitations as the password for the Radia Configuration Server if authentication has been configured using EDMMSIGN or EDMMSGNR. If authentication has not been configured, any password will do. For more information, see the *Radia Configuration Server Guide* and the HP OpenView web site.

3. Tap **OK**. The mobile device connects to the Radia Mobility Server that retrieves and translates configuration and entitlement information from the Radia Configuration Server. At this point, we have not assigned any applications for deployment.

If the mobile device has been assigned applications, they will be installed, and the following will occur:

- During this process, a Radia Application Manager icon appears on the icon tray. It is removed when the application transmission is complete.
 - If configured for display, the Radia Application Manager Progress dialog box gives status and statistics and any alert message coded for each application being deployed, and provides buttons to Pause/Restart, Cancel, and display or hide transfer Details. For more information, see *Using the Progress Dialog Box* on page 92.
 - If an assigned application was coded with an Alert or Deferral message, the message will be displayed on the PDA. For more information, see *Responding to Deferral Messages* on page 96.
4. Tap the **Client Configuration Tool**. You should see the values that you entered into the Mobile Device Config (MBLCONFIG) class.
Use the Radia System Explorer to view the device in the PROFILE file of your Radia Configuration Server.

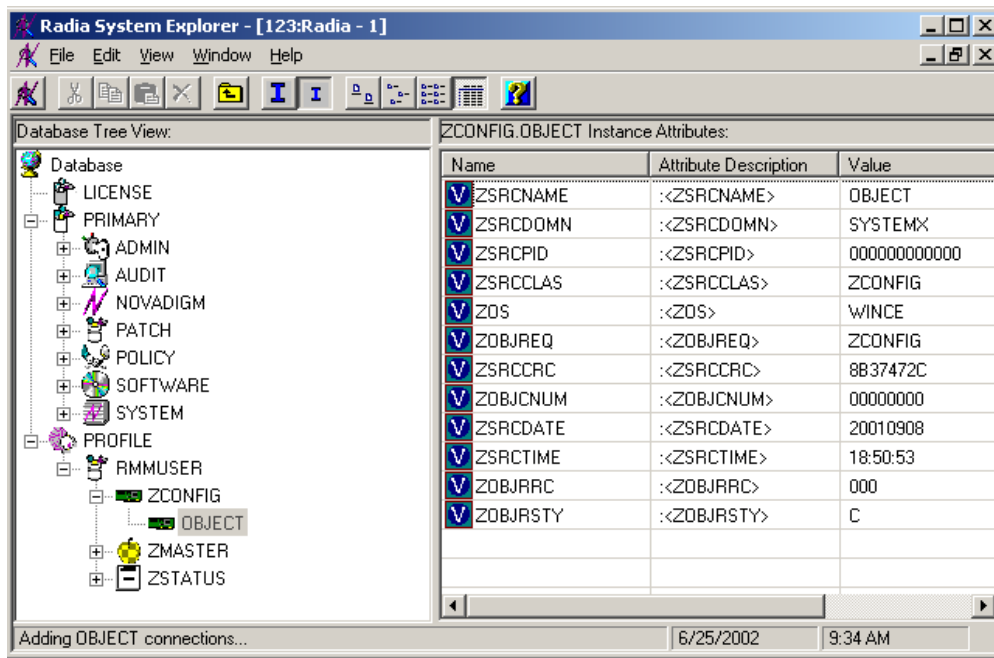


Figure 3.13 ~ View the RMMUSER in the PROFILE file.

You have completed your first Client Connect from the mobile device to the Radia Configuration Server.

Using the Radia Inventory Manager on the PDA

- The Radia Inventory Manager for Pocket PC is used to send current subscriber and application information from the handheld device to the Radia Inventory Manager database.
- You must initiate the transfer of information to the Radia Inventory Manager database using the following procedure.

To run the Radia Inventory Manager for Pocket PC (Wireless)

- From the handheld device's **Start** menu, tap **Inventory Manager**.

The mobile device connects to and transfers inventory information to the Radia Inventory Manager Server database.

During this process, an Inventory transmission icon appears on the icon tray. It is removed when the inventory transmission is complete.

For details on using the Radia Mobile Manager with the Radia Inventory Manager, see the chapter *Collecting Mobile Device Inventory* on page 100.

Summary

- Specify the address and port for the Radia Mobility Server prior to deploying the applications to mobile devices. To do this, modify the RMRAM.INI file, and then build the CAB files using the CABWIZ tools delivered with the product.
- Configure all server connections (for the Radia Proxy Server, the Radia Management Portal, and the Radia Inventory Manager) and sign-on security options for a mobile device using the Radia System Explorer to edit the instance in the Mobile Device Config (MBLCONFIG) class.
- Install the Radia Mobile clients from a Web page or by copying the CAB file to the mobile device, and tapping on the executable.
- In the Radia Database, connect the mobile device's user to an instance in the Mobile Device Config (MBLCONFIG) class.
- The User name for the mobile user is determined by an entry for RMMUSER in the Radia Explorer, or the first time a user signs on.
- The password for the mobile user is determined the first time that the Client Connects to the Radia Mobility Server
- Run the Application Manager from the PDA to connect to the Radia Mobility Server and have any assigned applications installed on the PDA.
- Run the Inventory Manager from the PDA to transmit information to the Radia Inventory Manager database.

Publishing and Deploying Applications

At the end of this chapter, you will:

- Be able to install the modules for publishing CABs and data for mobile devices.
- Know how to publish applications for mobile devices.
- Know how to deploy a mobile application.
- Know how to invoke the Radia Application Manager on the mobile device.
- Know how to use the Progress dialog box to monitor the service transfers, and optionally Pause, Resume, and Cancel the transfer.
- Know how to respond to Alert or Deferral messages for applications eligible for deployment

Installing the Publishing Components

The Radia Publishing Adapter for Pocket PC automates the publishing of mobile device resources to the Radia Configuration Server. The *.cab files are promoted to the Mobile File Resource class in the SOFTWARE domain.

For information on manipulating *.cab files, see the Installation and Configuration Guide in the Microsoft embedded Visual Tools on-line help. The two articles listed below may also be useful:

- "Successful Installation for Pocket PC Applications," located at:
<http://www.microsoft.com/mobile/developer/technicalarticles/installation.asp>
- "Creating an Application Installation Package with Microsoft Windows CE 3.0," located at:
<http://msdn.microsoft.com/library/default.asp?url=/library/en-us/dnce30/html/appinstall30.asp>

Prerequisites

To use the Radia Mobile Publisher you will need the Microsoft Cabinet Software Development Kit. This tool provides the ability to decompose .cab files. The Microsoft Cabinet Software Development Kit is available for download from the Microsoft Developer Network Web site. As of the time of this writing, the download is free from the location:
<http://msdn.microsoft.com/library/en-us/dncabsdk/html/cabdl.asp>.

At the end of the Radia mobile publishing tool installation instructions, you will be directed to copy the cabarc.exe file from the Microsoft Cabinet Software Development kit to the Radia Mobile Publisher directory. The default for the Radia Mobile Publisher directory is <System Drive>:\Novadigm\MobilePublisher.

To install the Radia Mobile Publishing Tool

1. From the installation media, navigate to the following directory:
 \mobile_management_publisher\win32
2. Double-click **Setup.exe**.
 The **Welcome** window opens.

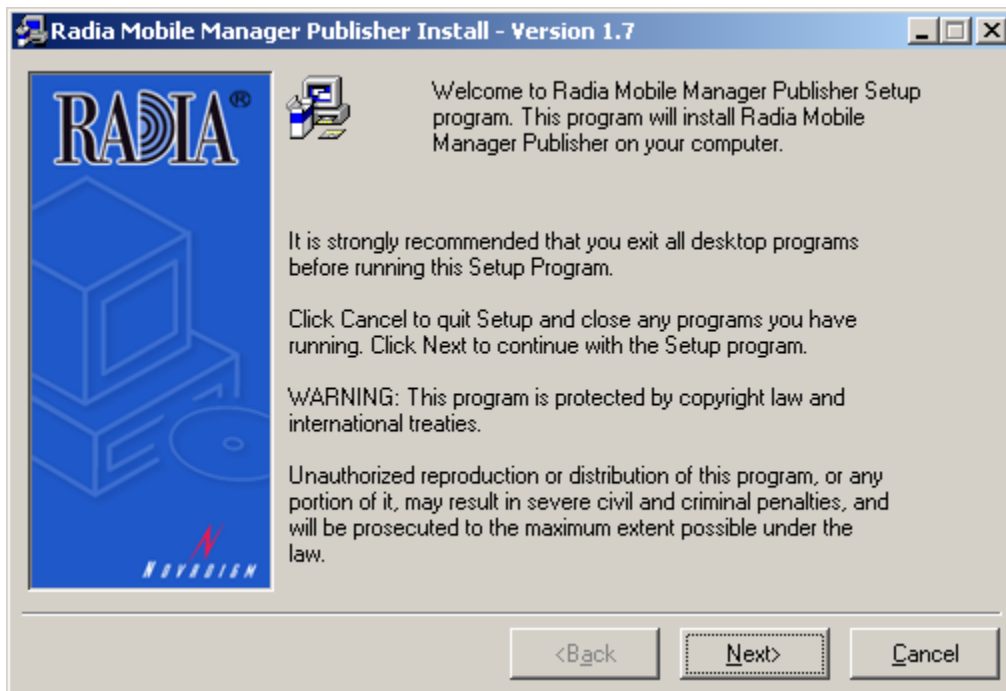


Figure 4.1 ~ Welcome window of the publishing tool.

3. Click Next.

The **Directory Location** window opens.

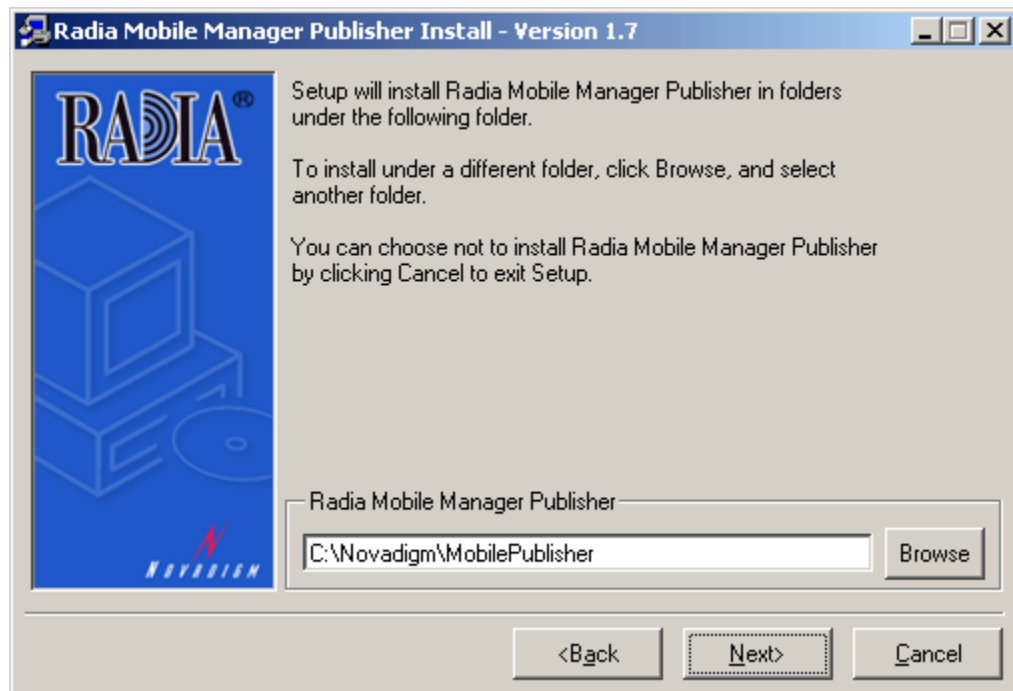


Figure 4.2 ~ Directory Location window for the Radia Mobile Publishing Tool.

4. Type the name of the directory where you would like to install the Radia Mobile Publisher, or click **Browse** to select the location from the **Browse** dialog box. The default location is <System Drive>:\Novadigm\MobilePublisher.
5. Click **Next**.
The **Installation Settings** window opens.

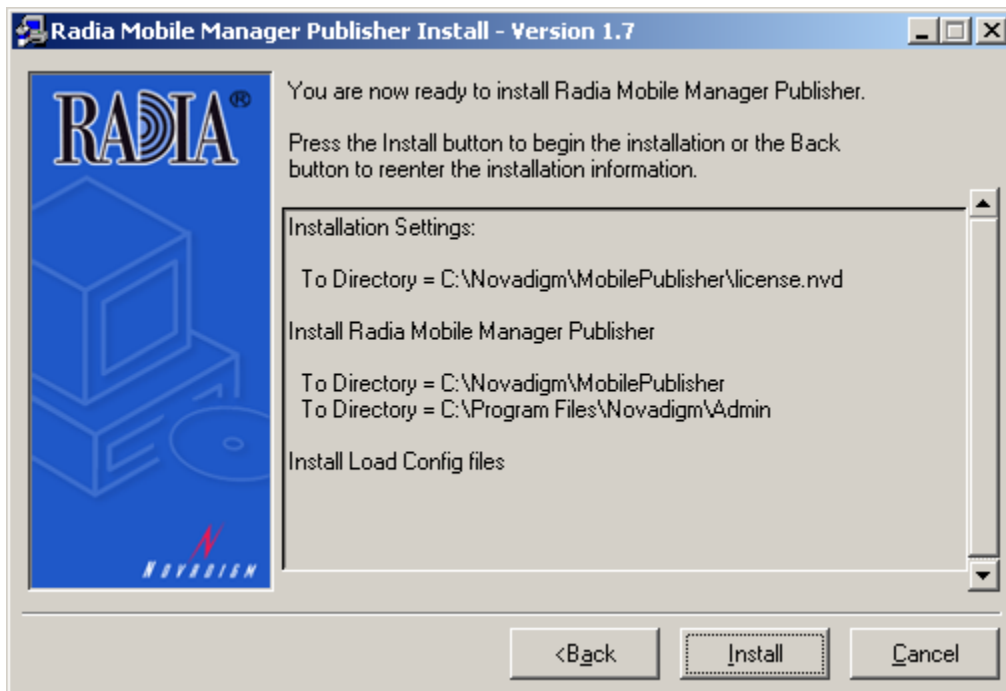


Figure 4.3 ~ Installation Settings window.

6. Click **Install**.

The **Installation Progress** window opens.

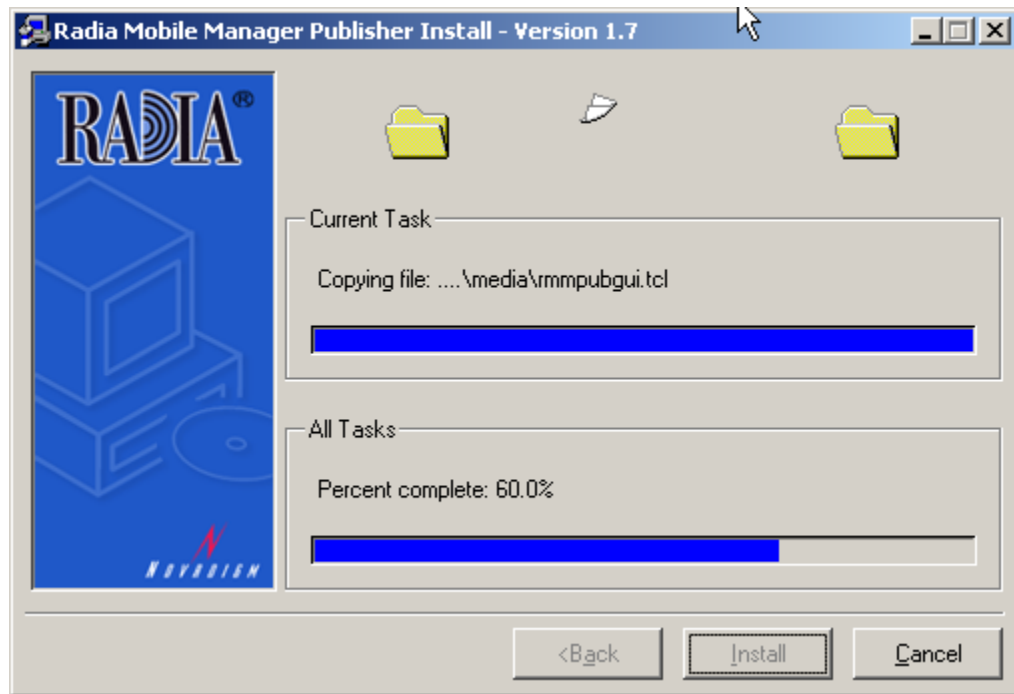


Figure 4.4 ~ Installation Progress window of the Radia Mobile Publisher.

7. When the installation is complete, click **Finish**.

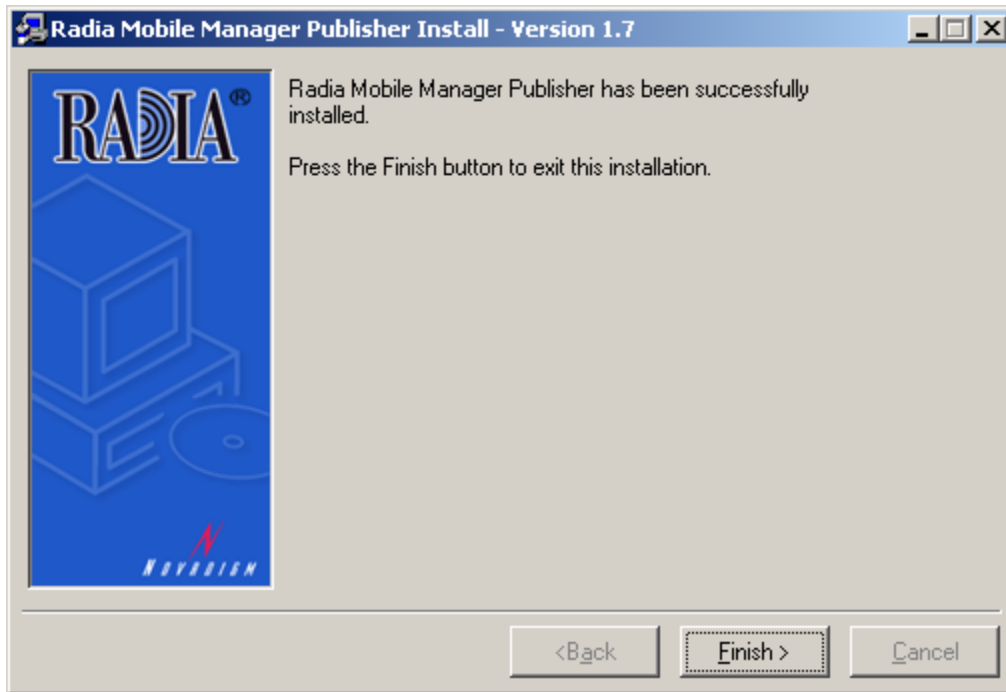


Figure 4.5 ~ The Radia Mobile Publisher has been installed.

8. Either add the location of the Microsoft Cabinet Software Development Kit to your path or copy the cabarc.exe file from the Microsoft Cabinet Software Development Kit to the Radia Mobile Publisher's directory. The default location is <System Drive>:\Novadigm\MobilePublisher.

You have successfully installed the Radia Mobile Manager Publisher. To launch the Radia Mobile Manager Publisher, select it from the Windows Program group for Radia Administrator Workgroup.

Now that you have installed the Radia Mobile Publisher, you are ready to publish cab and data files to the Radia Database for deployment.

Publishing Mobile Applications and Files

The Radia Publishing Adapter for Mobile Devices provides a user interface for publishing cab and data files. It creates an instance for the mobile application in the Application Packages (PACKAGE) class, the Mobile File Resource (RMMFILE) class, and in the Service (ZSERVICE) class. The names for these are extracted from the cab file. Before publishing the application, obtain the cab file for the application.

To publish applications with the Radia Mobile Manager Publisher

1. From the computer on which the Radia Mobile Manager Publisher is installed, click **Start**, **Programs**, and from the **Radia Administrative Workgroup** menu, choose **Radia Mobile Manager Publisher**.



Figure 4.6 ~ Launch Radia Mobile Management Publisher from the Radia Administration Workgroup.

The Radia Mobile Manager Publisher opens.

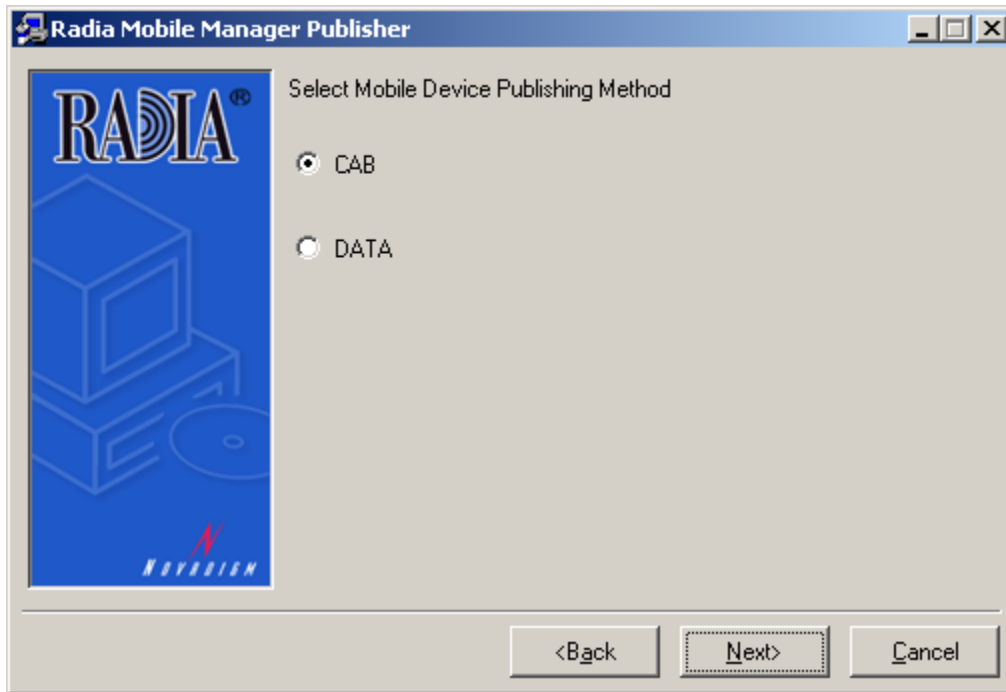


Figure 4.7 ~ Select Mobile Device Publishing Method.

2. Select the method to use for this publishing session. Select **CAB** to publish a mobile device application. Click **Next**.

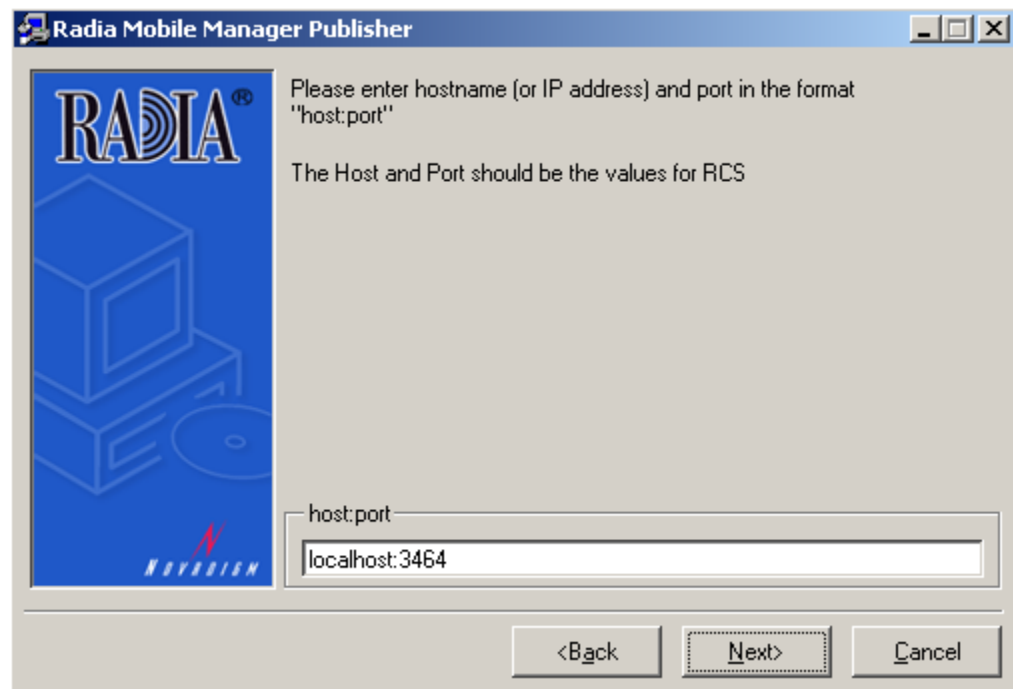


Figure 4.8 ~ Select Radia Configuration Server to publish to.

3. Type the IP address and port of the Radia Configuration Server that you want to publish to, use a colon to separate the IP address and port. The default is **localhost:3464**. Click **Next**.

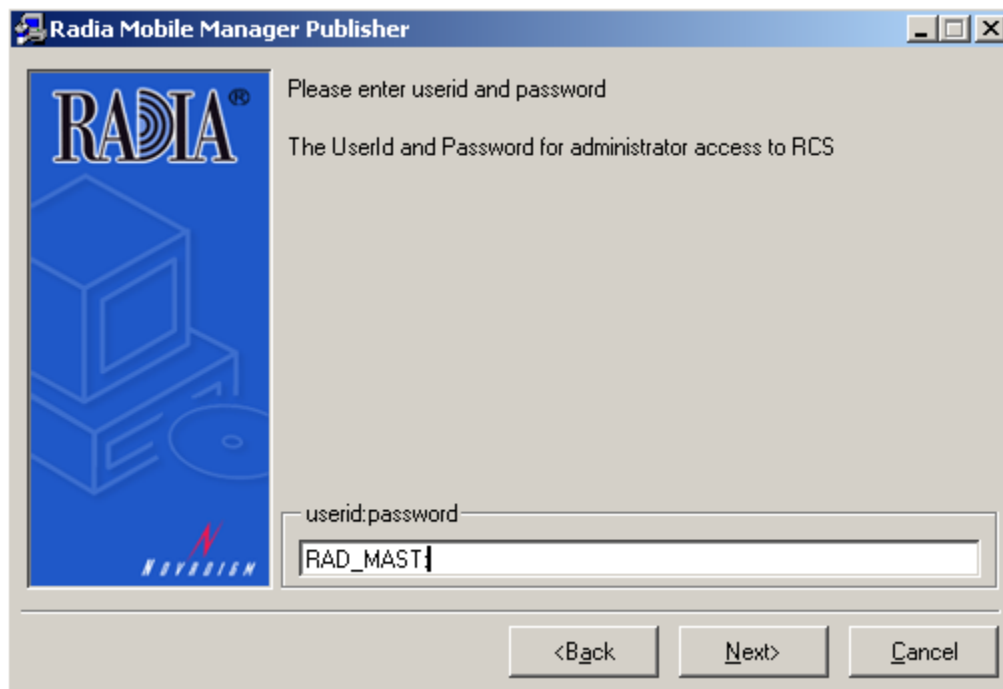


Figure 4.9 ~ Enter an administrator User ID, a colon, and any password to access the Radia Configuration Server database.

4. Type your User ID, a colon, and any password needed for administrator access to the Radia Configuration Server database. The default is: **RAD_MAST:** (without a password).

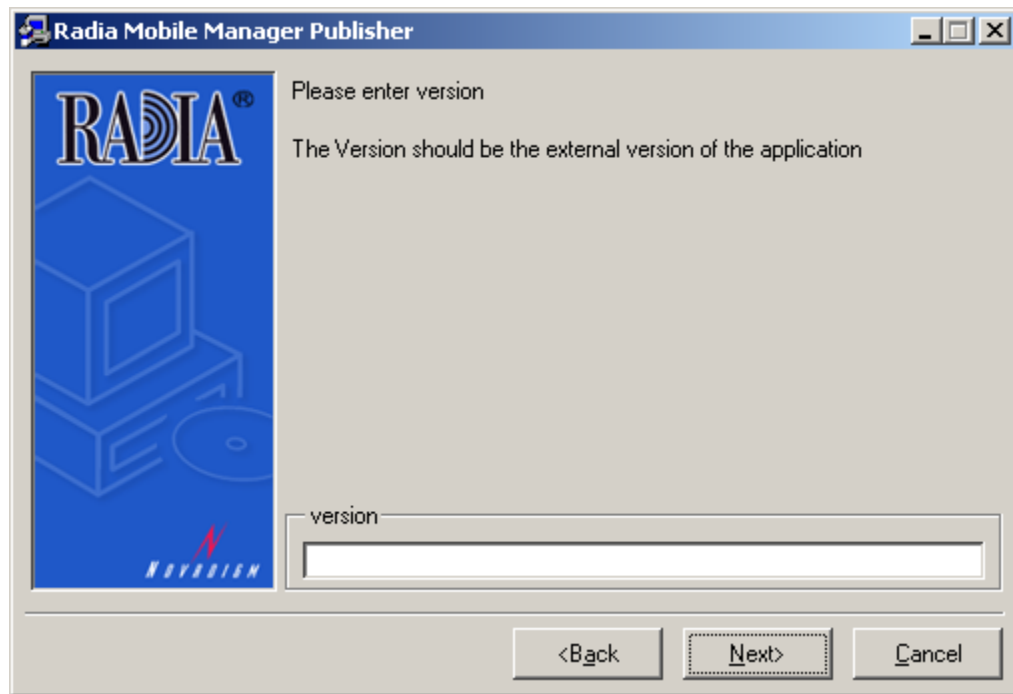


Figure 4.10 ~ Enter the external version for the application.

5. Type the external version number for the application. Click **Next**.

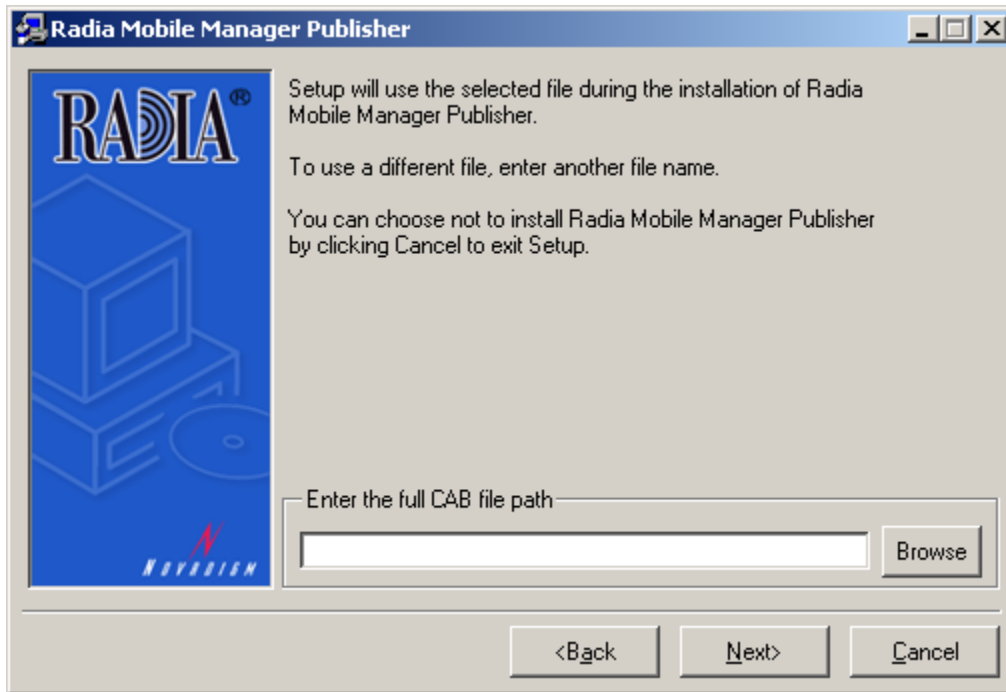


Figure 4.11 ~ Enter the path for the CAB file.

6. Type the path to the mobile application you want to publish or click **Browse** to navigate to its location. Click **Next**.

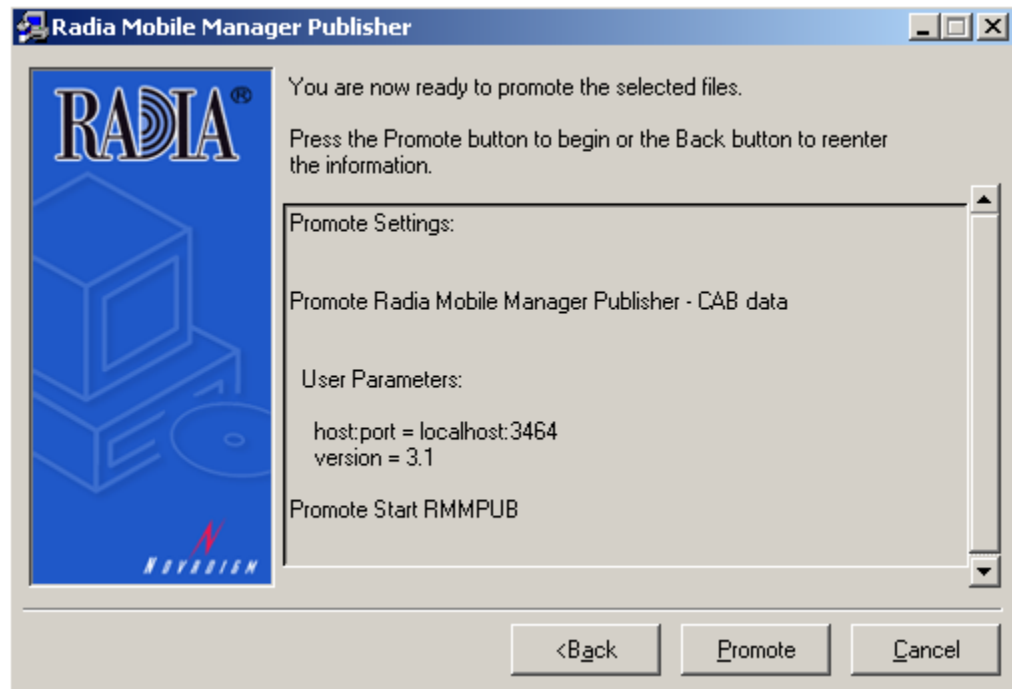


Figure 4.12 ~ Radia Mobile Manager Publisher is ready to promote.

7. Click **Promote** to promote the application to the Radia Database.
The Radia Mobile Manager Publisher promotes the application to the Radia Database.

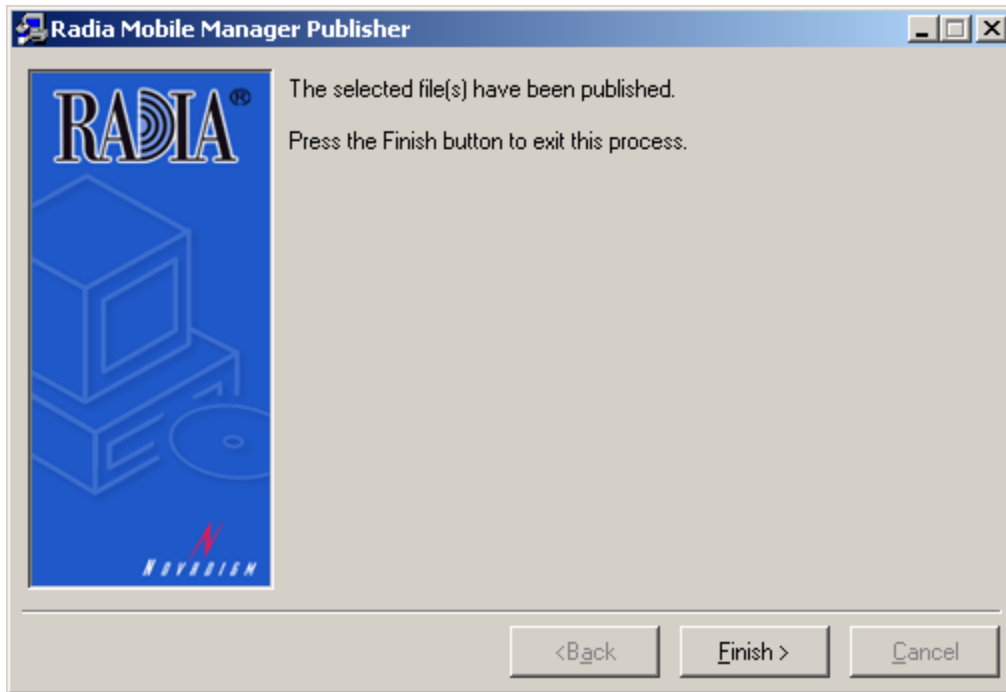


Figure 4.13 ~ The files have been published.

8. Click Finish.

The application has been promoted. Use the Radia System Explorer to view the package and service created by the publishing process. See *Figure 4.14 ~ Use Radia System Explorer to view the Resco Blocks package* on page 74 for an example of a cab file package.

Note

If the User ID and password entered during the publishing session are not valid to obtain administrative access to the Radia database, the published files cannot be promoted to the Radia database. In this case, the **promote.log** file will include the following error message:

Error: connecting to "localhost:3464" ZPWD VARIABLE NOT FOUND

The promote.log is located in the folder where RMMPUB.TKD executes. For example, `<SystemDrive>:\Novadigm\MobilePublisher.`

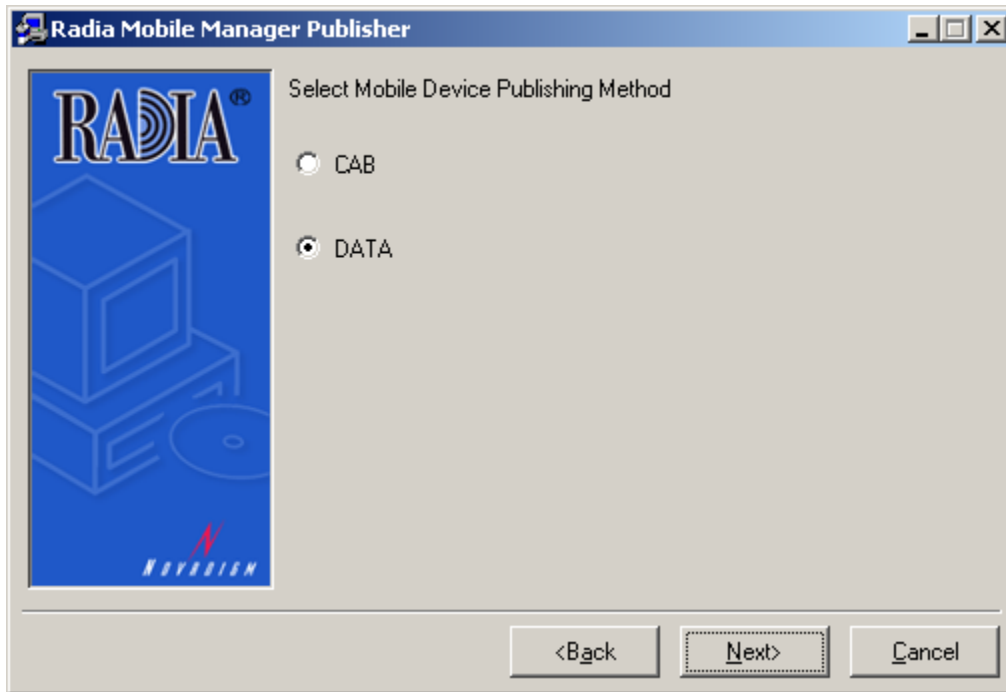


Figure 4.15 ~ Select Mobile Device Publishing Method.

2. Select the method to use for this publishing session. Select **DATA** to publish a data file. Click **Next**.

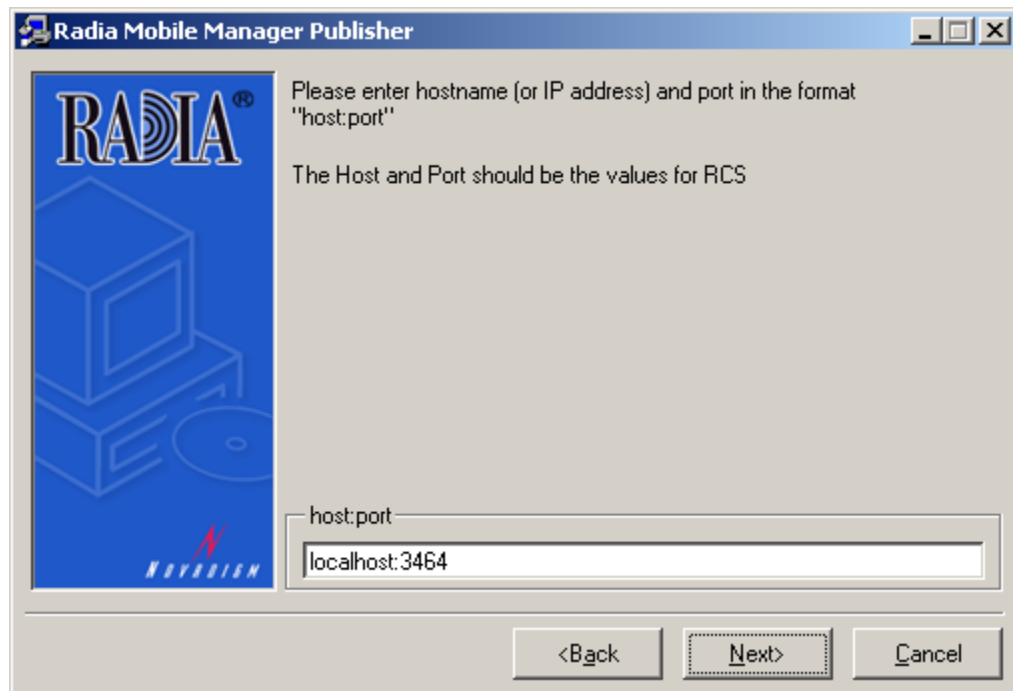


Figure 4.16 ~ Select Radia Configuration Server to publish to.

3. Type the IP address and port of the Radia Configuration Server that you want to publish to, separated with a colon. The default is **localhost:3464**. Click **Next**.

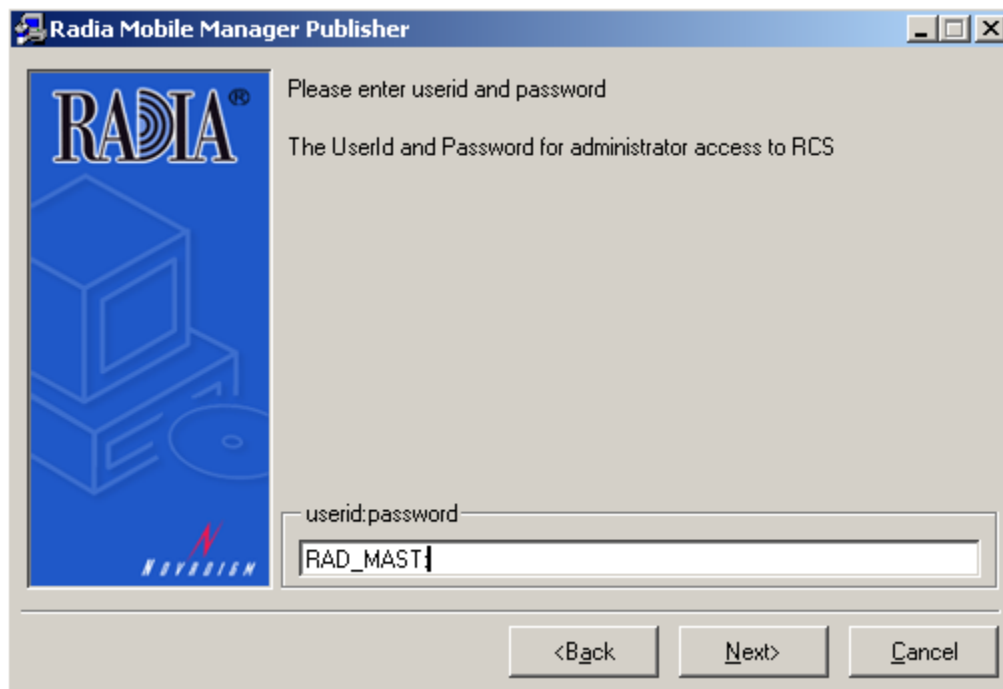


Figure 4.17 ~ Enter a User ID, a colon, and any password for administrative access to the Radia Configuration Server database.

4. Type the User ID, a colon, and any password needed for administrator access to the Radia Configuration Server database. The default is **RAD_MAST:** (without a password). Click **Next**.

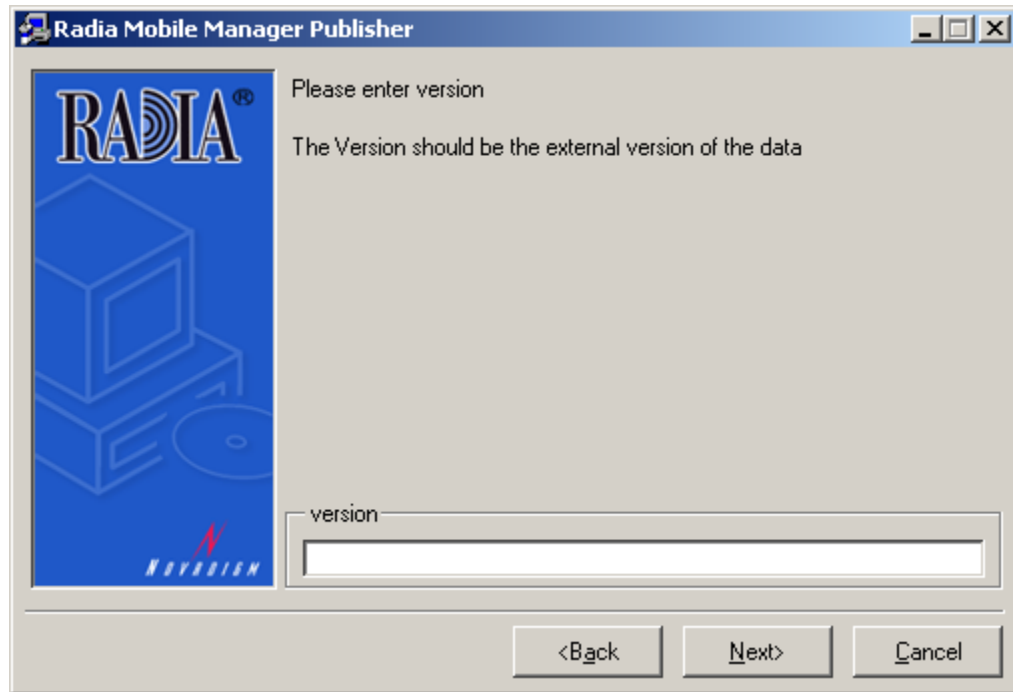


Figure 4.18 ~ Type the external version for the application.

5. Type the external version number for the data. Click **Next**.

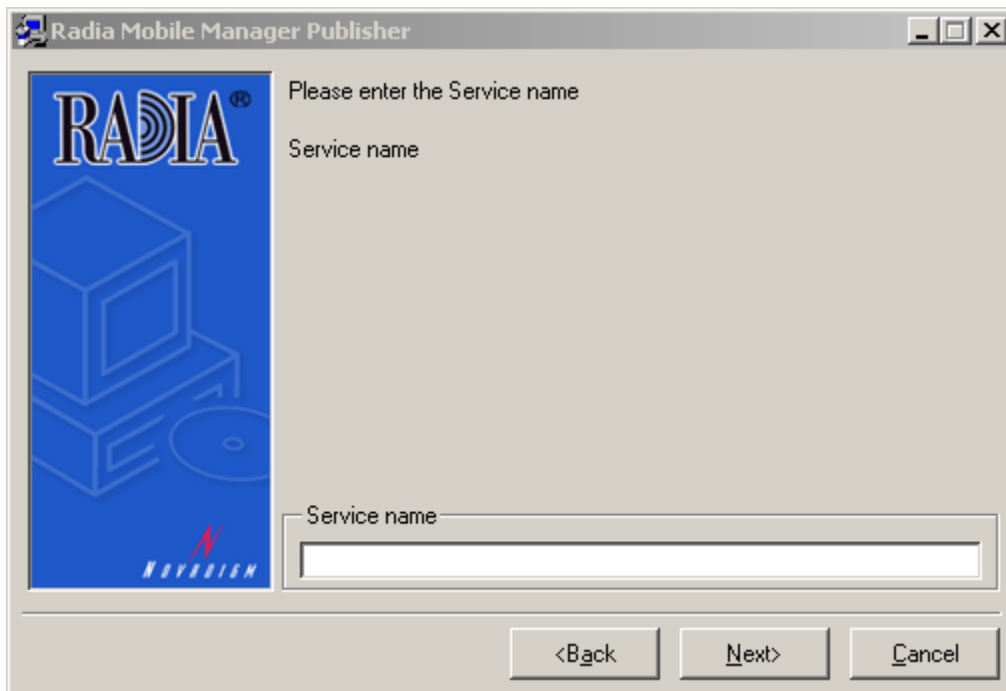


Figure 4.19 ~ Type the service name.

6. Type the name for the service that will be created for the file. The service name must be unique to the Radia Database, and may contain up to 32 characters, with no embedded spaces or special characters.
Click **Next**.



Figure 4.20 ~ Type the target directory for the file.

7. Type the target directory on the mobile device for the file you want to publish. The default is **\My Documents**. Click **Next**.

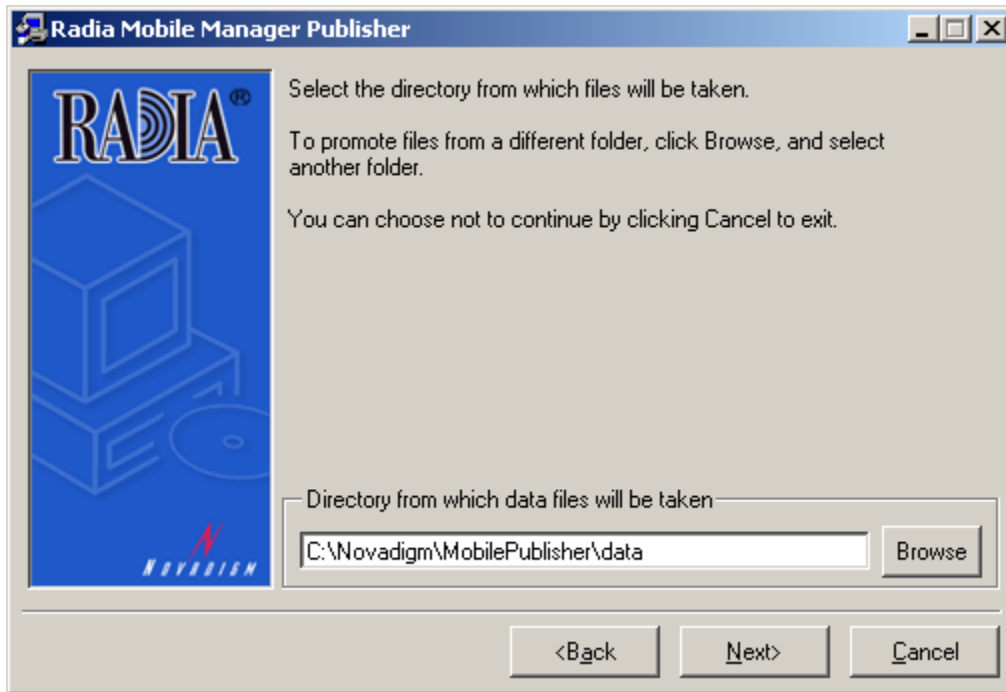


Figure 4.21 ~ Select the directory containing the data files to be published.

8. Type the path to the data files you want to publish, or click **Browse** to navigate to its location. The default is <System Drive>\Novadigm\MobilePublisher\data. Click **Next**. A warning message will display.

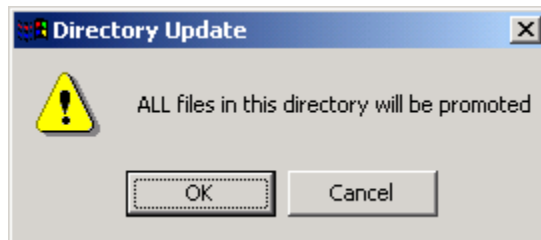


Figure 4.22 ~ All files in the directory will be promoted.

9. Click **OK** to respond to the warning.

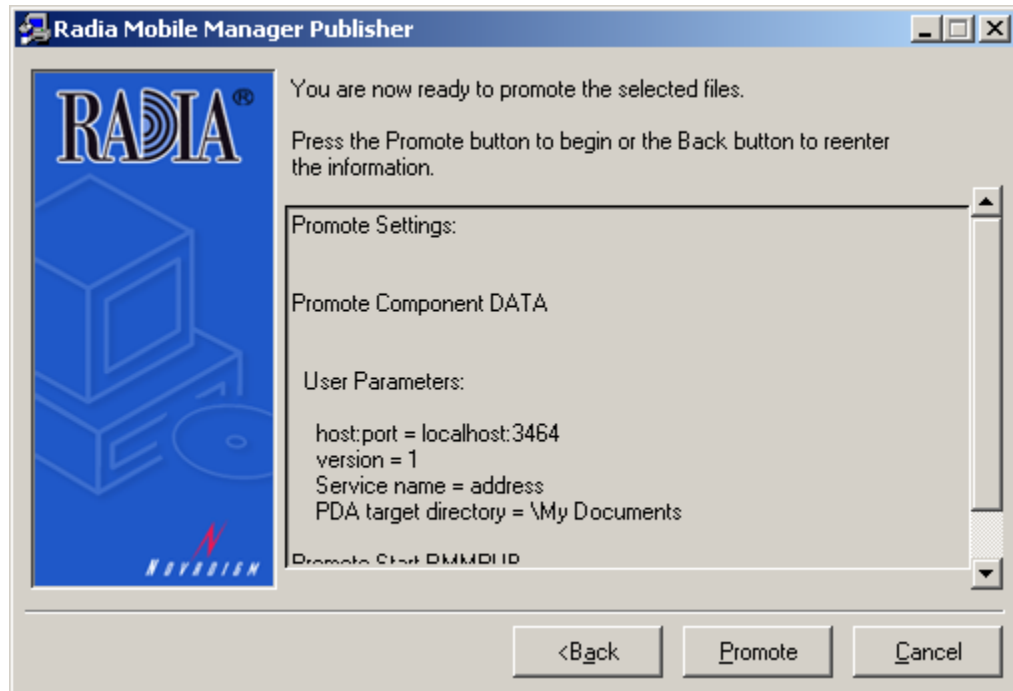


Figure 4.23 ~ Radia Mobile Manager Publisher is ready to promote.

10. Click **Promote** to promote the application to the Radia Database.
The Radia Mobile Manager Publisher promotes the files to the Radia Database.

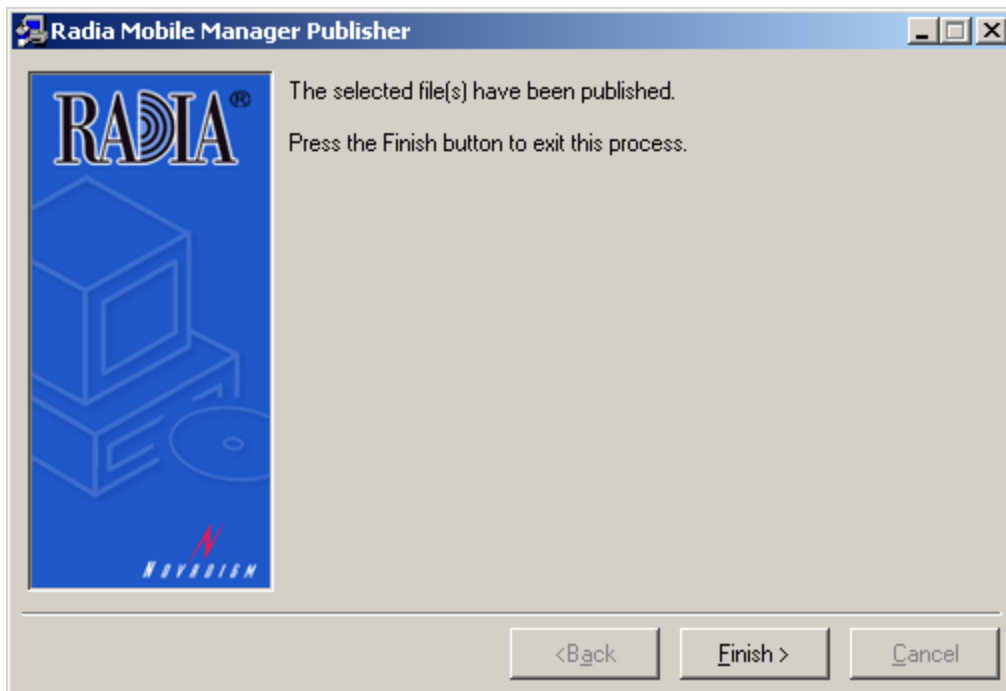


Figure 4.24 ~ The files have been published.

11. Click Finish.

The files have been promoted. Use the Radia System Explorer to view the package and service created by the publishing process.

Note

If the User ID and password entered during the publishing session are not valid to obtain administrative access to the Radia database, the published files cannot be promoted to the Radia database. In this case, the **promote.log** file will include the following error message:

Error: connecting to "localhost:3464" ZPWD VARIABLE NOT FOUND

The promote.log is located in the folder where RMMPUB.TKD executes. For example, `<SystemDrive>:\Novadigm\MobilePublisher`.

Publishing Applications and Files from a Command Line

You can also use the Radia Mobile Manager Publisher from a command line. Attributes for the command line are described in *Table 4.1 ~ Parameters for Mobile Publishing* below. The syntax for the Radia Mobile Publisher follows. Enter it all on one line.

```
nvdokit rmmplib.tkd -cab xxx.cab -version x.x -cfg rmmplib.cfg
      -fs-dir <cab file location> -host radia://<Configuration Server IP Address:Port>
      -user <User_ID> -pass <password>
```

Table 4.1 ~ Parameters for Mobile Publishing

Parameter	Description
-cab <filename>.cab (required)	Applications for mobile devices are published in .cab (cabinet) files. If a .cab file is not specified, the following error is generated: Error: .cab file must be specified Specify the .cab file to be published on the command line as: -cab <filename>.cab
--version xx.xx (required)	This is the VERSION attribute of the ZSERVICE class instance that will be created in the publishing session. This version is known as the external version and the delivery of the resource to the mobile device is dependent on the existence of this attribute. The version value must be numeric and can contain periods Examples of valid VERSION attribute values are: 22, 3.4, 2.6.7 If the version is not included on the command line, the following message is printed to the console and the script execution stops: Error: -zservice-attr-version must be specified If the VERSION attribute value contains non-numeric values, the following message is printed to the console and the script execution stops: Info: Service version = 2.a Error: -zservice-attr-version value must be numeric
-fs-dir (required)	Specifies the directory to scan for the file to be promoted. If this parameter is included, the directory specified is scanned for the .cab file to be promoted. If this parameter is not specified on the command line, the directory where the script rmmplib.tkd is executed from is scanned for the .cab file to be promoted. If the .cab file is not found the following message is printed to the console: Error: c:/pdapub/wcec.cab - file does not exist Error: Check directory specified If the -fs-dir attribute is not specified on the command line to rmmplib.tkd, it must be specified in the .cfg file used by the Radia Mobile Publisher.
-cfg	Specifies the configuration file for the Radia Publishing Adapter. The default configuration file is rmmplib.cfg, which is created when the Radia Mobile Publisher is installed.
-host	Specifies the IP address of the Radia Configuration Server to which you want to promote the package. Uses the format: -host radia://<Radia Configuration Server IP Address:Port>

Table 4.1 ~ Parameters for Mobile Publishing

Parameter	Description
-user	Specifies a User ID for administrative access to the Radia Configuration Server to which you are promoting the package. If not specified, defaults to the User ID supplied with Radia: RAD_MAST with no password. Uses the format: -user <User ID>
-pass	If the User ID entered with the -user parameter is password protected, specifies the password needed to gain administrative access to the Radia Configuration Server. Uses the format: -pass <password>

EXAMPLE: PUBLISHING A MOBILE APPLICATION FROM THE COMMAND LINE

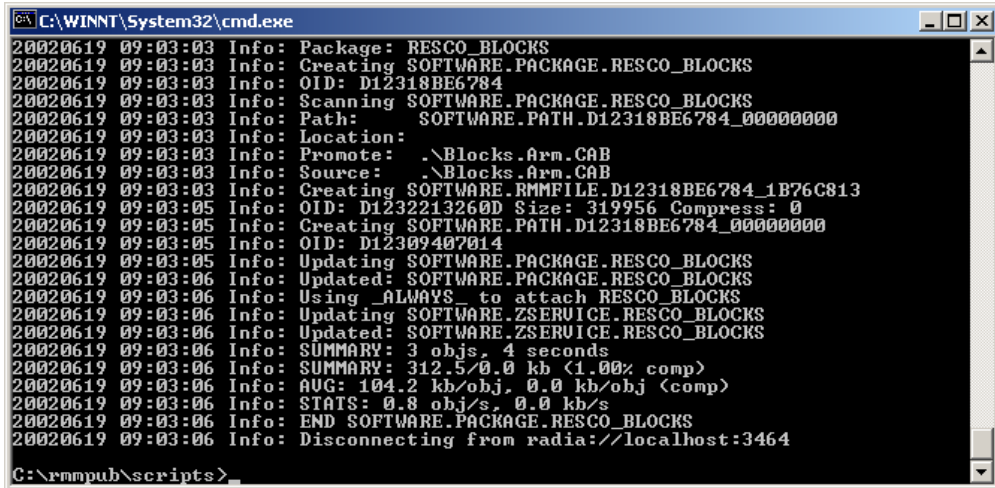
In the example below, we will publish the Resco Blocks application.

1. Open a command prompt.
2. Navigate to the Radia Mobile Publisher directory. The default location is <System Drive>:\Novadigm\MobilePublisher\modules.
3. Using the parameters described in *Table 4.1 ~ Parameters for Mobile Publishing* on page 84, type the following command line:

```
nvdkit rmpub.tkd -cab blocks.arm.cab -version 1.0 -cfg rmpub.cfg -fs-dir
```

Note

In this example, we copied the *.cab file to the Radia Mobile Publisher directory. Since the *.cab file was in the current directory, we used a period (.) as the value of the -fs-dir parameter. If the *.cab file is not in the current directory, you must specify the path explicitly.



```
C:\WINNT\System32\cmd.exe
20020619 09:03:03 Info: Package: RESCO_BLOCKS
20020619 09:03:03 Info: Creating SOFTWARE.PACKAGE.RESCO_BLOCKS
20020619 09:03:03 Info: OID: D12318BE6784
20020619 09:03:03 Info: Scanning SOFTWARE.PACKAGE.RESCO_BLOCKS
20020619 09:03:03 Info: Path: SOFTWARE.PATH.D12318BE6784_00000000
20020619 09:03:03 Info: Location:
20020619 09:03:03 Info: Promote: .\Blocks.Arm.CAB
20020619 09:03:03 Info: Source: .\Blocks.Arm.CAB
20020619 09:03:03 Info: Creating SOFTWARE.RMMFILE.D12318BE6784_1B76C813
20020619 09:03:05 Info: OID: D1232213260D Size: 319956 Compress: 0
20020619 09:03:05 Info: Creating SOFTWARE.PATH.D12318BE6784_00000000
20020619 09:03:05 Info: OID: D12309407014
20020619 09:03:05 Info: Updating SOFTWARE.PACKAGE.RESCO_BLOCKS
20020619 09:03:06 Info: Updated: SOFTWARE.PACKAGE.RESCO_BLOCKS
20020619 09:03:06 Info: Using ALWAYS to attach RESCO_BLOCKS
20020619 09:03:06 Info: Updating SOFTWARE.ZSERVICE.RESCO_BLOCKS
20020619 09:03:06 Info: Updated: SOFTWARE.ZSERVICE.RESCO_BLOCKS
20020619 09:03:06 Info: SUMMARY: 3 objs, 4 seconds
20020619 09:03:06 Info: SUMMARY: 312.5/0.0 kb (1.00% comp)
20020619 09:03:06 Info: AUG: 104.2 kb/obj, 0.0 kb/obj (comp)
20020619 09:03:06 Info: STATS: 0.8 obj/s, 0.0 kb/s
20020619 09:03:06 Info: END SOFTWARE.PACKAGE.RESCO_BLOCKS
20020619 09:03:06 Info: Disconnecting from radia://localhost:3464
C:\rmpub\scripts>
```

Figure 4.25 ~ Publish a mobile application.

4. When complete, you should see a new package in SOFTWARE.PACKAGE class, and in the SOFTWARE.RMMFILE class. In addition, you should see a new Application (ZSERVICE) instance.

Note

When program execution begins a log file called PROMOTE.LOG is created in the same directory where the script rmpub.tkd is executed.

Deploying Applications

During the publishing process, the Radia Mobile Publisher promotes the mobile resource files to the Radia Database, and creates an instance in the Application (ZSERVICE) class. *Figure 4.27 ~ The Resco Blocks service is created*, below, shows the Resco Blocks service created in the previous exercise.

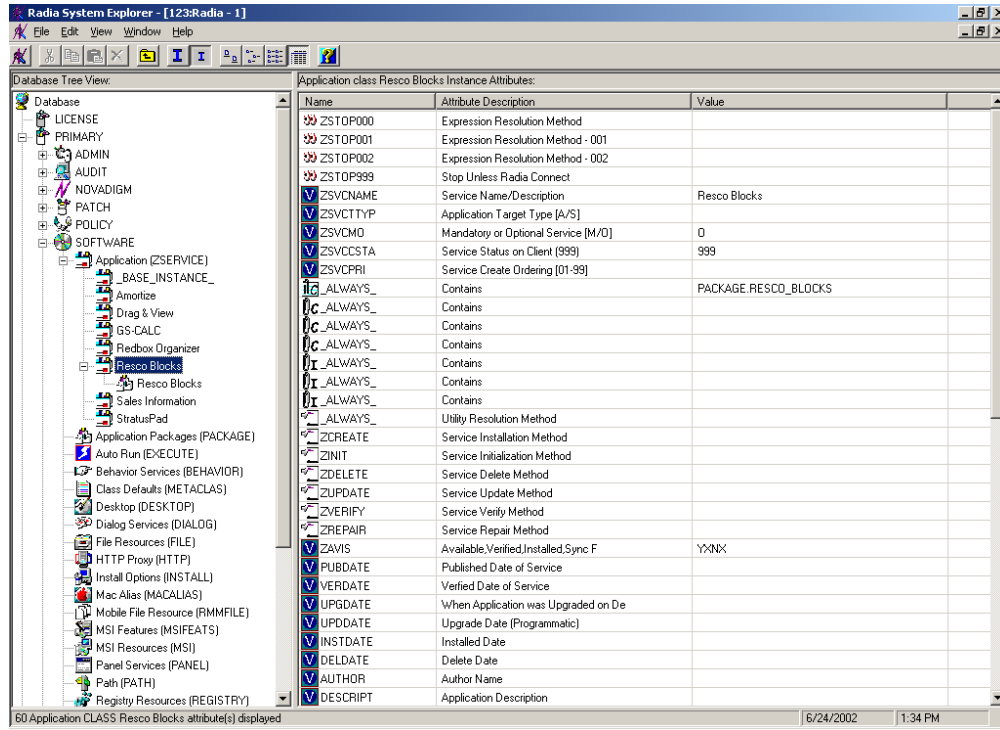


Figure 4.27 ~ The Resco Blocks service is created.

Connect the Application (ZSERVICE) instance to your mobile device user. Earlier in this guide, we created the RMMUSER. For information on how to entitle a user or group of users to an Application (ZSERVICE), see the *Radia Application Manager Guide* or the *Radia Software Manager Guide*. *Figure 4.28 ~ The RMMUSER is entitled to Resco Blocks* below shows an example.

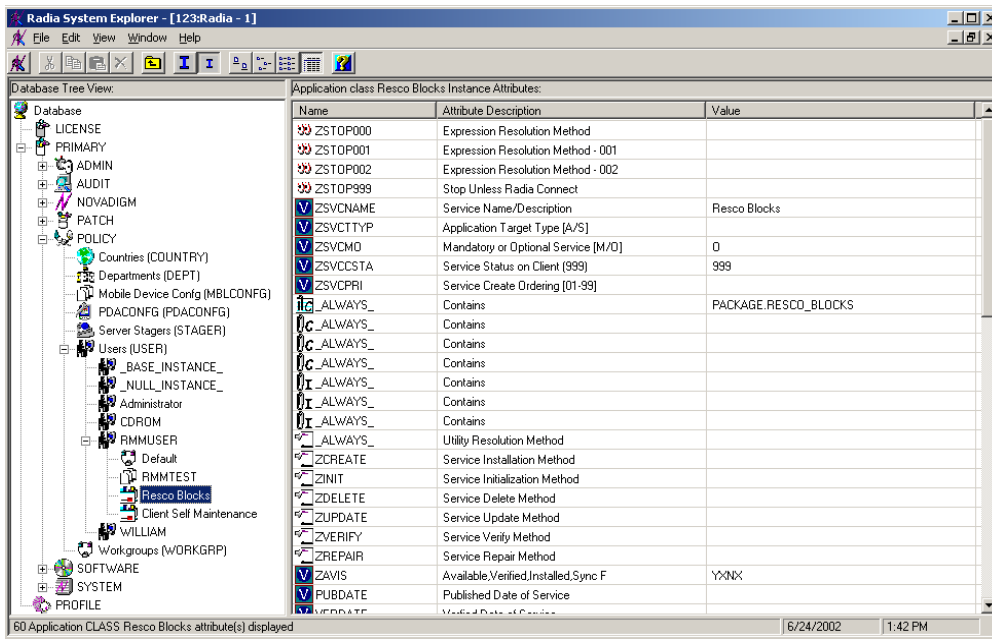


Figure 4.28 ~ The RMMUSER is entitled to Resco Blocks.

Update the Radia Proxy Server

If you are using a Radia Proxy Server, you will need to synchronize the Radia Proxy Server before deploying the application. For information, see the *Radia Proxy Server Guide*.

Note

You do not need to synchronize a Radia Proxy Server co-located with the Radia Configuration Server.

Enable the Radia Configuration Server for HTTP Communication

You can use the Radia Configuration Server to deploy the applications if you enable it for HTTP download communications. We recommend co-locating a Radia Proxy Server with the Radia Configuration Server to enable it for HTTP download support. To configure a Radia Proxy Server that is co-located with the Radia Configuration Server, see the *TechNote: Radia Configuration Server HTTP Support* or the topics in the *Radia Proxy Server Guide*.

Deploying the Applications to the Mobile Device

After the applications have been published, and the user has been entitled to the appropriate applications, run the Radia Application Manager from the handheld device's menu to install the applications on the mobile device.

The handheld device may be running cradled or wireless during this procedure.

To run the Radia Application Manager for Pocket PC

1. From the handheld device's **Start** menu, tap **Application Manager**.

The **Radia Security** panel opens.

Note

The Radia Security panel may be suppressed, depending on your mobile device configuration.

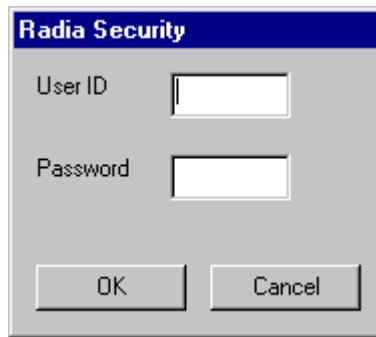


Figure 4.29 ~ Sign on to the Radia Application Manager.

2. Type in a User ID and Password. The password is determined the first time the user logs on. In the previous procedure, we created the RMMUSER instance using the Radia System Explorer.

Caution

A non-null password is required. The password has the same limitations as the password for the Radia Configuration Server if authentication has been configured using EDMMSIGN or EDMMSGNR. If authentication has not been configured, any password will do. For more information, see the *Radia Configuration Server Guide* and the HP OpenView support web site.

3. Click OK.

The mobile device connects to the Radia Mobility Server, which retrieves and translates configuration and entitlement information from the Radia Configuration Server. Then, the mobile applications are installed.

- If the PDA is configured with SHOWDLG=N (the default), an icon for the Radia Application Manager appears on the system tray while transfers are taking place. It is removed when the transmission is complete. See *Figure 4.30 ~ Radia Application Manager icon indicates application transmission is in progress* below.

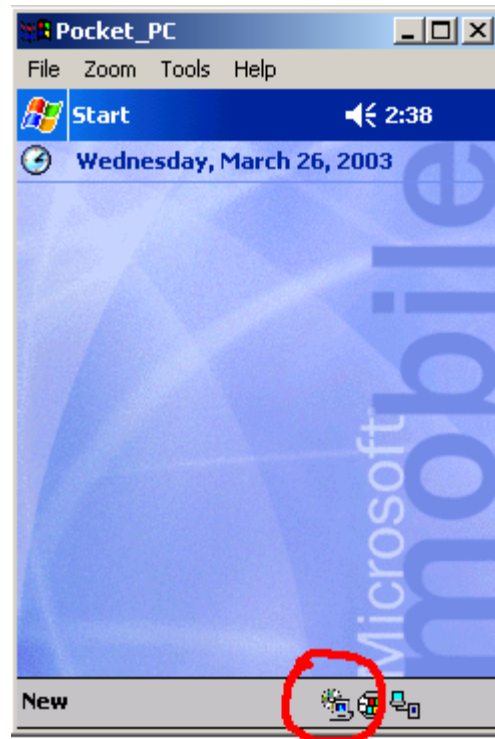


Figure 4.30 ~ Radia Application Manager icon indicates application transmission is in progress.

- If the PDA is configured with SHOWDLG=Y, the Progress dialog box opens and gives status, statistics, and Pause and Cancel options for the applications being deployed. See *Using the Progress Dialog Box* on page 92.

- If an application was coded with a Defer option, the Deferral Available dialog box opens and allows you to defer the transfer until another time. See *Responding to Deferral Messages* on page 96.

Using the Progress Dialog Box

When actively deploying services to the PDA, the Radia Application Manager client may be configured to display or suppress the transmission Progress dialog box shown in *Figure 4.31* on page 93. This Progress dialog box reflects the current application being transferred. It provides the user options to Pause, Cancel, or view more or less details on the size and status of the transmission. Each field in the Progress dialog box is discussed below.

Note

To configure the Progress dialog box to be shown or hidden, see the SHOWDLG attribute in *Table 3.1 ~ Attributes of the Mobile Device Config (MBLCONFIG) Class and Equivalent RMRAM.INI Parameters* on page 45.

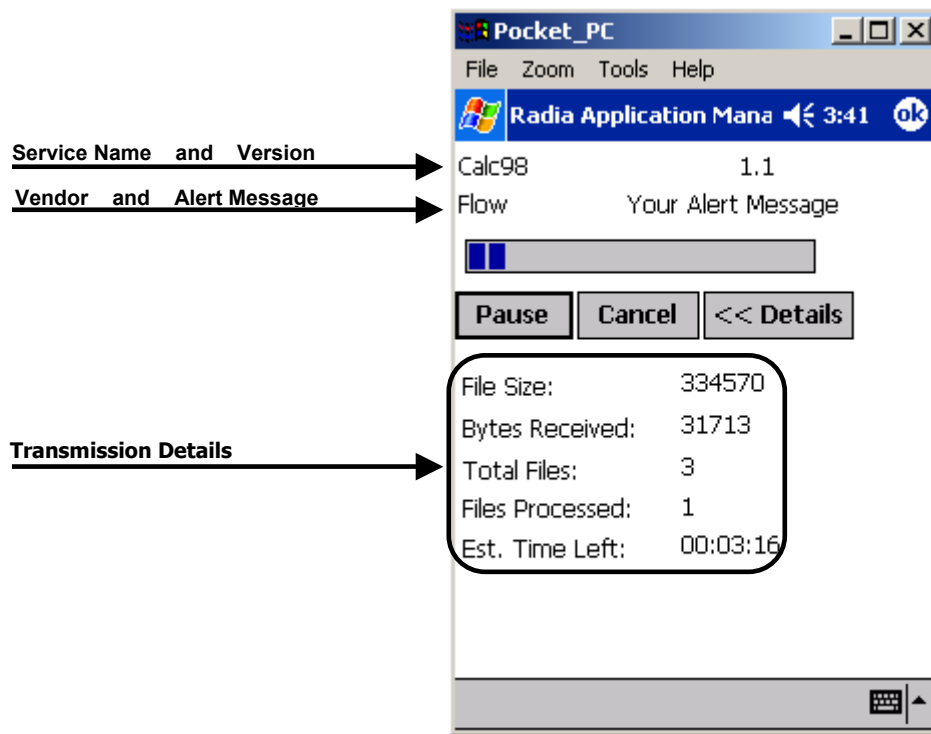


Figure 4.31 ~ Radia Application Manager Progress dialog box, all details shown.

Progress Dialog Box Fields

Line 1: Service Name and Version Number

The top line gives the **Service Name** (ZSVCNAME) and **Version** number (VERSION) of the current application. For example: *Figure 4.31* above indicates the current application being transferred is Calc98, Version 1.1.

Line 2: Vendor and Application Alert Message

Line 2 displays the service **Vendor**, if specified, followed by the any **Application Alert Message** attached to the service. Due to the limited screen space on a PDA, these fields display only the first 14 characters of the Vendor information and the first 20 characters of the Alert Message. In *Figure 4.31* above, the Vendor is Flow, and "Your Alert Message" indicates where an alert message is displayed.

An Application Alert Message is coded in the ALERTMSG variable of a SOFTWARE.ALERTDEF class instance. The ALERTDEF class instance was introduced with Radia Database Release 3.11.

Alert Message Note

Code short messages (up to 20 characters) for display on a PDA's Progress Dialog. For details on coding and implementing an application alert message, see the topic *Application Alert Messages and Deferrals*, in *Chapter 7: Deploying Applications of the Radia Application Manager Guide for Windows*.

Progress Bar

A visual transmission progress bar tracks the transmission; it is updated to reflect the percentage of bytes received to the total bytes in the service.

Pause or Resume button

Use the **Pause** button, shown in Figure 4.32, to pause the transfer, thus freeing up processing power on the PDA for an urgent task. When paused, use the **Resume** button to resume the session. The session resumes as long as a connection to the Radia Mobility server exists or can be established.

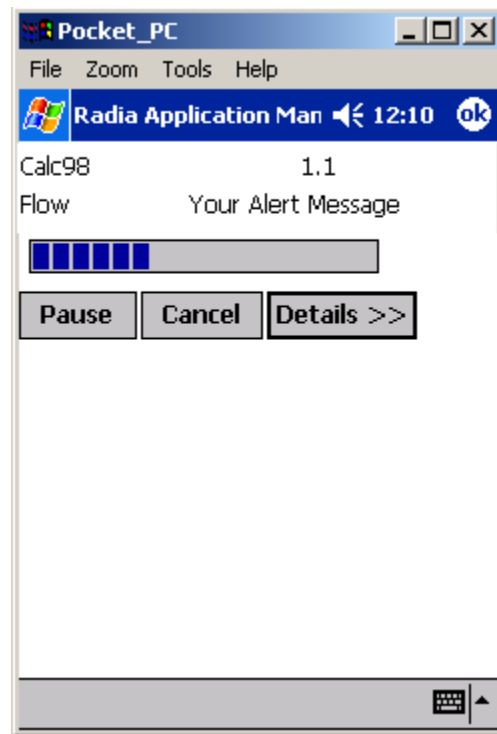


Figure 4.32 ~ Progress dialog box for a Paused Radia Application Manager session, no details.

Cancel button

Use the **Cancel** button to cancel the Radia Application Manager session. A message asks you to confirm the cancellation.

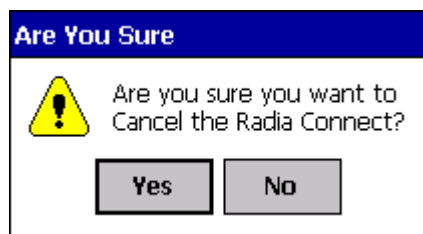


Figure 4.33 ~ Cancel Confirmation dialog box.

- Tap **Yes** to cancel the Radia Connect, which stops the Radia Application Manager session.
- Tap **No** to continue the Radia Application Manager session.

Details button

- Use the [<<Details] button to hide the transmission details.
- When hidden, use the [Detail >>] button to show the transmission details.

Transmission Details

The transmission details include the following fields:

- **File Size**
The total size, in bytes, of the application currently being deployed. The application Name, Version and Vendor are identified at the top of the Progress dialog box.
- **Bytes Received**
The actual bytes received for the current application.
- **Total Files**
The total number of files being transferred for **all services** in this connect. For PDA transfers, this is normally one CAB file per application.
- **Files Processed**
The number of files that have been downloaded or deferred for **all services**, plus the current file being processed.
- **Est. Time Left**
The estimated time in hours, minutes and seconds (HH:MM:SS) needed to transfer the remaining bytes (that is, Total Size less Bytes Received), based on typical modem transmission speeds.

After the last application completes transmission, the Progress dialog box closes.

Responding to Deferral Messages

If the Radia Application Manager client on the PDA is deploying an application that was coded with a Defer option and it meets all defer requirements, the user will see the "Deferral Available" dialog box on the PDA and be able to respond to it. *Figure 4.34 ~ Radia Application Manager Defer alert display* on page 97 shows a sample deferral dialog box. "Deferral Available" dialog boxes display whether or not the PDA is configured to show or hide the Progress dialog box using SHOWDLG.

For details on coding and implementing an application alert or deferral, see the topic *Application Alert Messages and Deferrals*, in *Chapter 7: Deploying Applications* of the *Radia Application Manager Guide for Windows*.

For example, if the application being deployed was coded with a deferral option, and it meets all requirements for the deferral, the user will see a Deferral alert similar to that shown in *Figure 4.34 ~ Radia Application Manager Defer alert display* on page 97.

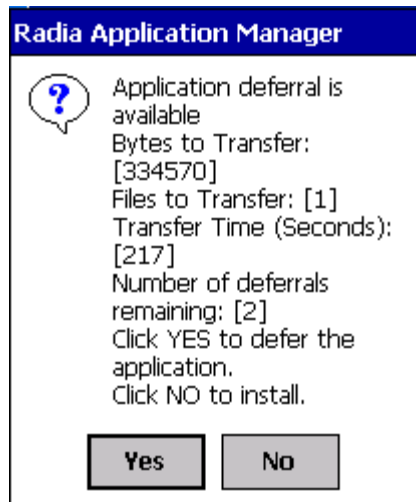


Figure 4.34 ~ Radia Application Manager Defer alert display.

As the subscriber, you can choose to continue the action or defer it. Notice the number of deferrals remaining is displayed.

Summary

- Radia provides a Mobile Manager Publisher program, as well as a command line utility, to publish applications for your mobile device.
- The Radia Mobile Publisher creates a package and service instance.
- Connect the user to the service instance.
- Synchronize the Radia Proxy Server or enable the Radia Configuration Server to use HTTP communications by using a co-located Radia Proxy Server.
- Deploy the applications to the mobile device by running the Radia Application Manager from the mobile device. The Radia Security password is determined the first time a user logs on to a Radia application.
- If enabled during configuration, The Radia Application Manager Progress dialog box displays the progress of each service transferred to the PDA. Detailed statistics let you monitor the transferred bytes, file size, and expected transfer time left for the current application's transmission. It also lets you see the total number of files available for all services. The Progress dialog box lets users **Pause** the current transfer, perform another task, and later **Resume** the transmission. Users can also **Cancel** the session from the Progress dialog box.
- If an application being deployed to the PDA is coded with Alerts or Defer options, you will see the Alert message on the Progress dialog box (if enabled), or the Deferral Available dialog box (whether or not the Progress dialog box is enabled) when the application is about to be downloaded. For example, if configured with a defer option, the Deferral dialog box lets you choose to defer an application's deployment.

Collecting Inventory Information from Mobile Devices

At the end of this chapter, you will:

- Be able to collect inventory information from your mobile devices.
- Be able to view mobile device inventory reports from the Radia Inventory Manger.

You can use the Radia Inventory Manager and Radia Mobile Manager to collect information about your mobile devices.

Prerequisites

- The Radia Inventory Manager must be installed, and updated for Mobile Management support. See the README.TXT file delivered with the product.
- The WBEM_AUTOCREATE option must be enabled in the RIM.CFG file of the Radia Inventory Manager. See the *Radia Inventory Manager Guide* for more information.
- The Radia Inventory Manager client modules must be installed on the mobile devices. See *Installing the Radia Clients* on page 47 for more information.

Collecting Mobile Device Inventory

Inventory for mobile devices can be collected from the mobile devices when they are operating wireless or cradled.

For details on collecting inventory from a cradled mobile device, refer to the *Radia Inventory Manager Guide for Windows*.

To collect inventory from a wireless mobile device

To collect inventory from a wireless mobile device, you must run the Radia Inventory Manager installed on that device.

1. From the handheld device's **Start** menu, tap **Inventory Manager**. The Radia Security panel opens.

Note

The Radia Security panel may be suppressed, depending on your mobile device configuration.




Figure 5.1 ~ Sign on to the Radia Inventory Manager.

2. Type in your User ID and Password. The password is determined the first time the user logs on. In an earlier procedure, we created the RMMUSER instance using the Radia System Explorer.

Caution

A non-null password is required. The password has the same limitations as the password for the Radia Configuration Server if authentication has been configured using EDMMSIGN or EDMMSGNR. If authentication has not been configured, any password will do. For more information, see the *Radia Configuration Server Guide* and the HP OpenView support web site.

3. Click **OK**. The mobile device connects to and transfers inventory information to the Radia Inventory Manager Server database.
 This Radia Inventory Manager icon appears in the PDA's system tray while the inventory transmission is active.

Viewing Mobile Device Inventory

Use the following example to see how to view mobile device information.

To view user inventory

1. If the Radia Inventory Manager is co-located with the Radia Management Portal, click **INVENTORY** in the banner area of the Radia Management Portal. See the *Radia Management Portal Guide* for more information.

OR

Connect to your Radia Inventory Manager.

Home > Inventory > [Summary] | [Detail]

Summary - 8 subscribers in database

Action:

Application Subscribers

Subscriber	Modified	Installed Apps (#)
PDAUSER CONFIG APPLICATIONS PDA	2003-04-08 11:17:56	6
PDAUSER2 CONFIG APPLICATIONS	2003-04-08 10:22:31	4
QACE CONFIG APPLICATIONS PDA	2003-04-08 18:02:58	1
QAPALM CONFIG APPLICATIONS PDA	2003-04-10 16:54:43	1
ROB CONFIG APPLICATIONS	2003-04-09 10:07:05	1
SAMPLE1 CONFIG APPLICATIONS	2000-11-02 16:51:21	4
TECHLINUX CONFIG APPLICATIONS	2003-04-02 15:49:50	0
TECHWINCE CONFIG APPLICATIONS	2003-04-07 18:26:16	1

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Figure 5.2 ~ The Radia Inventory Manager showing PDA devices as Application Subscribers.

2. Go to the device for which you want to view information about the subscribers and click **PDA**. The **PDA Devices** window will vary slightly, according to whether the PDA is wireless or cradled when the inventory was collected. The two versions of the PDA Devices window follow.



Figure 5.3 ~ The PDA Devices window for a cradled device.



Figure 5.4 ~ The PDA Devices window for a wireless device.

3. To see detailed information for the device, do one of the following:
 - Click on the blue entry in the **Type** column.
 - or
 - Open the **Action** drop-down list, and select **WBEM_PDA Config**.

The detailed information about the mobile device opens.

Home > Inventory > [Summary] | [Detail]

Subscriber Detail - 8 subscribers in database

Reporting: Inventory General History Action: WBEM PDA Config

Subscriber Filtering: * GO! Subscriber: QACE

PDA Configuration (QACE, Microsoft Windows CE Hardware Reference Platform)

Configuration

Modified	2003-04-08 18:03:26
Primary Owner	Roy-ipaq
OS	Win 32 on Windows CE [Version 3.0]
Free Physical Memory	7 MB
Total Virtual Memory	32 MB
Free Virtual Memory	31 MB

PDA Installed Products (QACE, Microsoft Windows CE Hardware Reference Platform)

Modified	Type	Status	Version
2003-04-08 18:03:31	AddrBook	Installed	N/A
2003-04-08 18:03:30	ADO	Installed	N/A
2003-04-08 18:03:33	Calc	Installed	N/A
2003-04-08 18:03:30	Calendar	Installed	N/A
2003-04-08 18:03:26	Cisco Wireless LAN Adapter	Installed	N/A
2003-04-08 18:03:26	Citadel Development PocketExplorer	Installed	N/A
2003-04-08 18:03:31	Clock	Installed	N/A
2003-04-08 18:03:28	Excel	Installed	N/A
2003-04-08 18:03:27	Hwx	Installed	N/A
2003-04-08 18:03:32	InkWord	Installed	N/A

33 rows found, viewing rows 1 to 10 Page: | 1 | 2 | 3 | 4 | ALL

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Internet

Figure 5.5 ~ Viewing a PDA's detailed configuration and installed applications.

Summary

- Collect wireless mobile device inventory information by running the Radia Inventory Manager from each mobile device after applications have been deployed.
- View mobile device subscription and application information through the Radia Inventory Manager.



Radia Inventory Manager Reporting for Cradled PDAs

This Appendix discussed how to install and implement Radia Inventory Manager Reporting for cradled PDAs, which is an alternative to using the Radia Inventory Manager application for wireless PDAs. Radia Inventory Manager reporting for cradled PDAs does not require or use the Radia Mobility Server.

Note

The setup and implementation of Radia Inventory Manager support for wireless PDAs is discussed in the earlier chapters of this guide.

At the end of this appendix, you will:

- Know how to obtain Radia Inventory Manager reports from cradled PDAs running Microsoft CE or Palm operating systems.
- Know how to update the Radia Database and then use client-self maintenance to install the Radia "Inventory RIM" application to the cradled PDAs.

Radia Inventory Manager Reporting for Cradled PDAs

- Know how to obtain the PDA Inventory Results on the desktop client, and use an audit service to pass it to the Radia Inventory Manager database.
- Know how to use the web-based Radia Inventory Manager to access the PDA reports.

Modifying the Radia Database

We provide sample client self-maintenance packages and sample audit services for cradled PDA inventory reporting. Separate packages and services are provided for Microsoft CE and Palm Operating Systems.

The sample audit services are already in your Radia database, and are discussed later in this appendix. See *Deploying the Cradled PDA Audit Services* on page 116.

The sample self-maintenance packages are described in the following table and shown in the following figure. These need to be imported into your Radia database.

Table A.1 ~ Novadigm (Self-Maintenance) Packages for Cradled PDA Inventory

Application Package	Description
CE RIM Components	This package contains the Inventory RIM component resources that must be installed on the Windows CE PDA devices for cradled inventory reporting. Connect this service to client self-maintenance to deploy it to the mother PC, and then install it to the cradled PDA using a sync session.
Palm RIM Components	This package contains the Inventory RIM component resources that must be installed on the Palm PDA devices for cradled inventory reporting. Connect this service to client self-maintenance to deploy it to the mother PC, and then install it to the cradled PDA using a sync session..

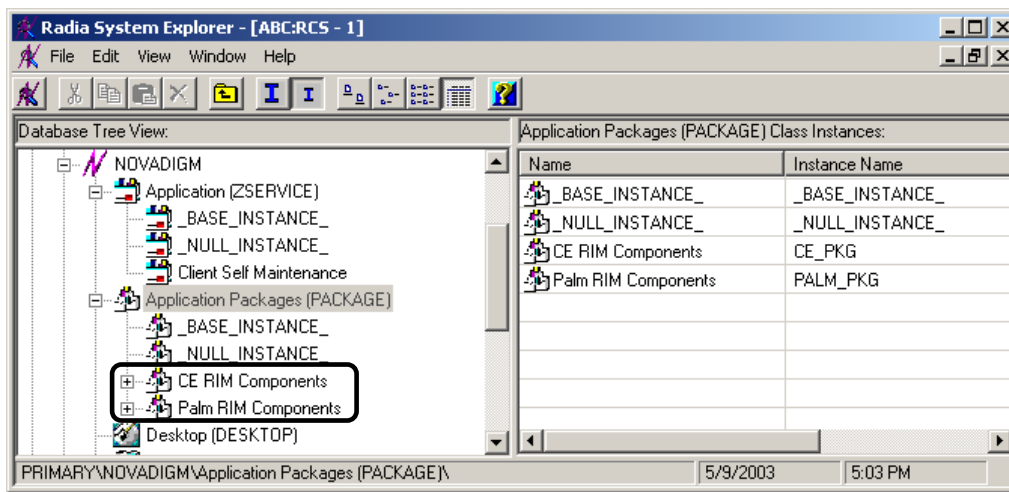


Figure A.1 ~ Sample Client Self-Maintenance Packages for Cradled PDA Inventory

Use the following procedures to update your database for the client-self maintenance packages for cradled PDA RIM Components.

To import the client self-maintenance packages for cradled PDA inventory reporting

1. Stop the Radia Configuration Server.
2. From your Radia Mobile Manager installation media, go to the **cradled_rim** directory. This folder contains the self-maintenance import decks for the new instances and resources to be added to the PRDMAINT domain of the Radia Database.
3. Copy the **pda_inv.xpi** and **pda_inv.xpr** import decks into the Radia Configuration Server's **bin** directory.
4. From a command prompt, run the following command from the Radia Configuration Server's bin directory to import the new instances.

```
ZEDMAMS VERB=IMPORT_INSTANCE , FILE=PDA_INV.XPI , PREVIEW=NO , REPLACE=YES
```

A return code of 0 indicates that there were no errors reported during the import, and the updates were applied to the database.
5. Import the resources for the instances. These are also provided in an import deck.

```
ZEDMAMS VERB=IMPORT_RESOURCE , FILE=PDA_INV.XPR , PREVIEW=NO , REPLACE=YES
```

A return code of 0 indicates that there were no errors reported during the import, and the updates are applied to the database.
6. Restart the Radia Configuration Server. You will see the following new instances added to the Application Packages class of the PRDMAINT domain:
 - CD RIM Components
 - Palm RIM Components

Figure A.2 illustrates the newly imported packages.

These are the only updates needed to the Radia database to support RIM reporting for cradled PDAs.

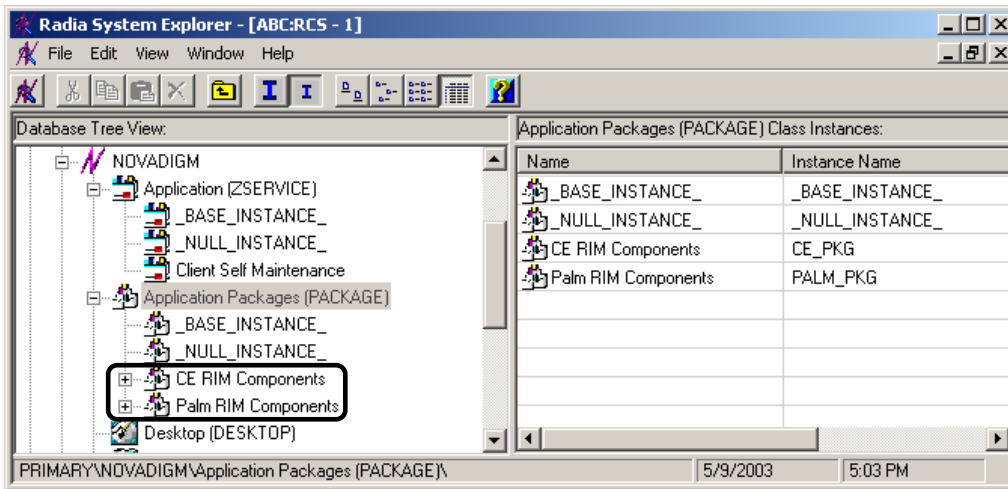


Figure A.2 ~ Sample Client Self-Maintenance packages for cradled PDA inventory.

Installing the "Inventory RIM" Application to a Cradled PDA

The procedures for installing the "Inventory RIM" application to a cradled PDA consist of the following two procedures:

1. Use client self-maintenance to install the cradled-PDA RIM components to the mother PC.
2. Use a Sync session to install the "Inventory RIM" application on the PDA.

Variations for Microsoft CE and PALM PDAs

The general procedures are the same for all PDAs, regardless of operating system. However, there are separate Novadigm self-maintenance packages and separate audit services provided for PDAs running Palm operating systems and Microsoft CE operating systems. Thus, apply the following procedures by substituting the variable <os> with either CE or PALM wherever it occurs in the names of packages and services.

To install the CE or Palm RIM components to the mother PC using client self-maintenance

1. Connect the Novadigm self-maintenance package for the appropriate PDA operating systems to PRDMAINT.ZSERVICE.CLIENT.
 - For Palm PDA's, connect the PRDMAINT.PACKAGE.PALM.PKG.
 - For Microsoft CE PDA's, connect the PRDMAINT.PACKAGE.CE_PKG.

Figure A.3 illustrates the process of making this connection.

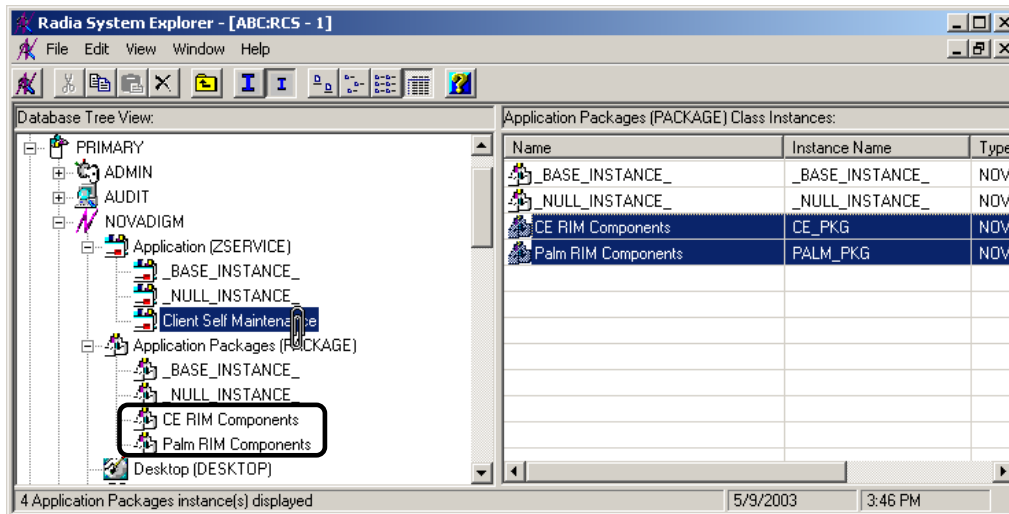


Figure A.3 ~ Connecting the RIM Component Packages to the Client Self Maintenance Service.

2. Assign self-maintenance to the mother PC (the client). If PDA's with both operating systems are being used with the mother PC (the client), assign both services.
 - For Microsoft CE PDA's, assign AUDIT.ZSERVICE.CE_PDA_XML_SVC.
 - For Palm PDA's, assign AUDIT.ZSERVICE.PALM_PDA_XML_SVC.

If you are running a Radia 3.1 client on the mother PC, the client automatically detects the PDA's operating system(s), and sets ZMASTER.PDA to CE, PALM, or PALM CE (when both are detected). Figure A.4 shows a sample ZMASTER for a client that has a PDA with the CE Operating System.

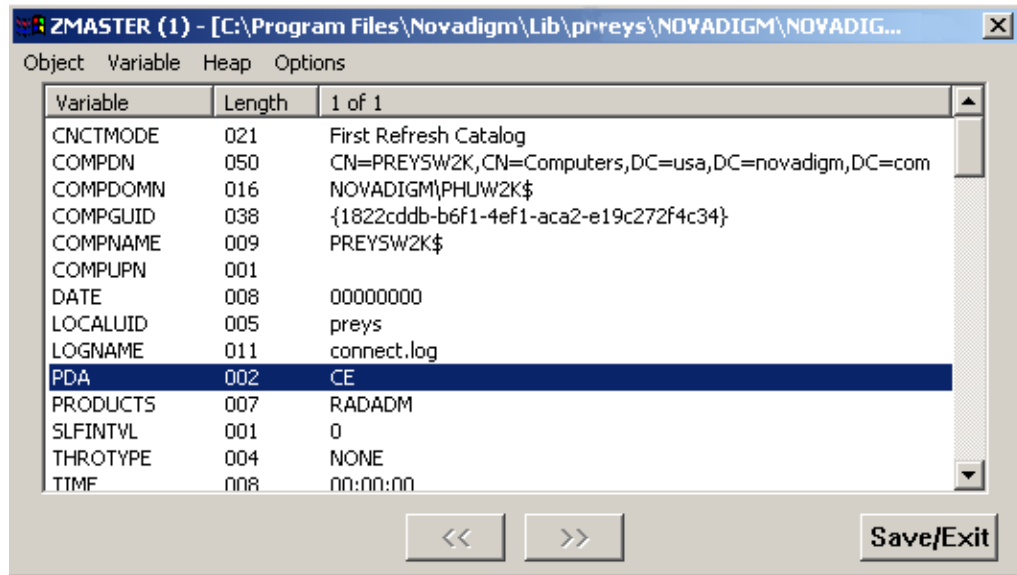


Figure A.4 ~ ZMASTER.PDA on the Client (mother PC) set to Operating System for PDA.

Note

Customers running Radia 2.x clients do not have a ZMASTER PDA variable. Please contact HP OpenView support for assistance.

During the next Radia connect, the Radia CE or Palm components are installed to the mother PC, in the folder: **C:\CEInst** or **C:\Palminst**.

This completes the steps to install the PDA RIM components on the mother PC.

To install and confirm the "Inventory RIM" application on the PDA

Note

Administrators should announce to all PDA users that the application "Inventory RIM" will ask for installation.

1. Once the PDA RIM components are installed on the mother PC, run a HotSync or ActiveSync session between the mother PC and the cradled PDA.

The "Inventory RIM" application asks the PDA user to confirm the installation. This is due to the operating system design, and cannot be changed by HP.

2. Confirm the installation for "Inventory RIM."

The Inventory RIM components are installed on the PDA, and the Radia Inventory software runs an inventory of the PDA.

Deploying the Cradled PDA Audit Services

We provide sample audit services for PDAs in the Radia database. Separate packages and services are provided for Microsoft CE and Palm Operating Systems. The sample audit services are described in the following table and shown in the following figure.

Table A.2 ~ Sample Audit Services for Cradled PDA Inventory		
Audit Service	Connected to Audit Package (PACKAGE)	Description
CE PDA XML Inventory	CE PDA XML Inventory	This service scans for and reports back information on installed Windows CE PDA devices. Will only report back if a device is found.
Palm PDA XML Inventory	Palm PDA XML Inventory	This service scans for and reports back information on installed Palm PDA devices. Will only report back if a device is found.

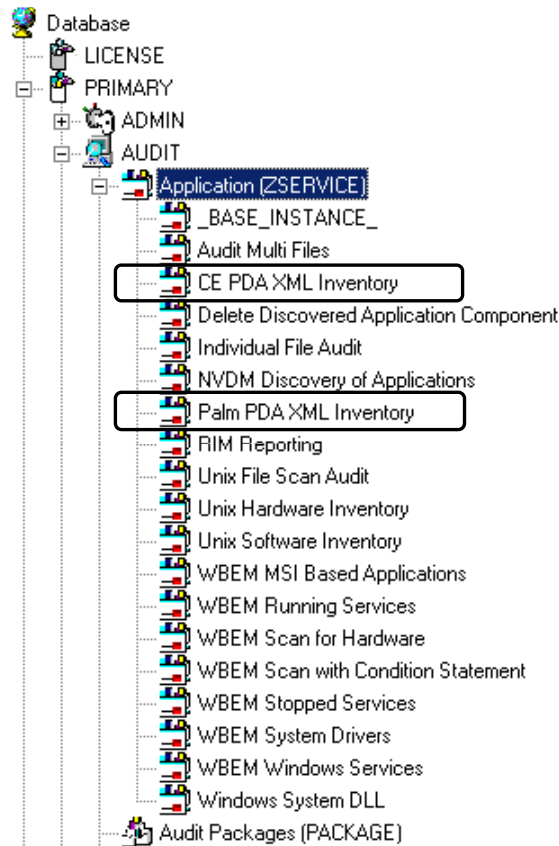


Figure A.5 ~ Sample Auditing services for cradled PDA Inventory.

To install the audit services for cradled PDA inventory collection

Once the "Inventory RIM" applications are installed on the PDA, connect the appropriate audit service, CE PDA XML Inventory, Palm PDA XML Inventory, or both, to the mother PC (client) of your cradled PDA.

During the next Client Connect, the assigned Radia audit services, AUDIT.ZSERVICE.<os>_PDA_XML_SVC, are downloaded to the mother PC.

Performing the PDA Audit

Prior to performing this audit, have the "Inventory RIM" application installed on the PDA, and have the Radia audit service for cradled PDAs installed on the mother PC:
AUDIT.ZSERVICE.<os>_PDA_XML_SVC.

To collect the PDA Inventory Data and View Reports from Radia Inventory Manager

1. Once the "Inventory RIM" application is installed on the PDA, run a HotSync or ActiveSync session to transfer the PDA inventory results to the Mother PC.

The main file containing the PDA inventory results are contained in:
IDMDATA\PDAInfo\

2. During the next Client Connect, the Radia audit service:
AUDIT.ZSERVICE.<os>_PDA_XML_SVC, looks for this file and transfers the information to the Radia Configuration Server, which passes it to the Radia Inventory Manager.
3. To view the PDA reports from the Radia Inventory Manager, do the following:
 - a. Start a Radia Inventory Manager session.
 - b. On the Summary starting page, locate the entry for the mother PC. It will show a PDA icon.
 - c. Click on the PDA icon to obtain a report.

Detailed Reporting information includes:

- PDA Owner
- PDA Serial Number (Device ID)
- Operating System
- Available Memory
- Total Memory
- Installed Applications

Figure A.6 shows a sample PDA Devices Inventory Summary for a subscriber that cradles both a CE and Palm PDA.

The screenshot shows the Radia Management Portal interface. At the top, it says "Radia Management Portal" and "INVENTORY | HOME". Below that, there are navigation links "Home > Inventory >" and "[Summary] | [Detail]". The main heading is "Subscriber Detail - 4 subscribers in database". There are filters for "Reporting" (Inventory, General, History), "Subscriber Filtering" (with a search box and "GO!" button), "Action" (set to "PDA Devices"), and "Subscriber" (set to "BOTHPDA"). Below this, there is a section titled "PDA Devices (BOTHPDA)" containing a table with the following data:

Modified	Device Id	Type	Status
05/08/2003 11:54:14 AM	10GB12F1A8W9	Palm Computing	OK
05/08/2003 02:04:44 PM	qace	Microsoft Windows CE Hardware Reference Platform	OK

At the bottom of the table, there is a "Back to top" link. The browser's address bar shows "Internet".

Figure A.6 ~ Sample Inventory Report for a client with both CE and Palm cradled PDAs.

From the PDA Devices Summary Page, click the Type field for one of the entries to view that device's inventory report. For example, Figure A.7 shows a sample inventory report for the cradled Palm PDA on subscriber BOTHPDA.

The screenshot displays the 'Subscriber Detail' page for 4 subscribers in the database. The interface includes a navigation bar with 'Home > Inventory >' and '[Summary] | [Detail]'. The 'Reporting' section has radio buttons for 'Inventory' (selected), 'General', and 'History'. The 'Subscriber Filtering' section has a search box and a 'GO' button. The 'PDA Device' is set to 'Microsoft Windows CE Hardware Reference Platform'. The 'Action' dropdown is 'WBEM PDA Config' and the 'Subscriber' dropdown is 'BOTHPDA'.

PDA Configuration (BOTHPDA, Microsoft Windows CE Hardware Reference Platform)

Configuration

Modified	05/08/2003 02:04:44 PM
Primary Owner	R-ipaq
OS	Win 32 on Windows CE [Version 3.0]
Free Physical Memory	6 MB
Total Virtual Memory	32 MB
Free Virtual Memory	31 MB

PDA Installed Products (BOTHPDA, Microsoft Windows CE Hardware Reference Platform)

Modified	Type	Status	Version
05/08/2003 02:04:51 PM	AddBook	Installed	N/A
05/08/2003 02:04:49 PM	ADO	Installed	N/A
05/08/2003 02:04:52 PM	Calc	Installed	N/A
05/08/2003 02:04:48 PM	Calendar	Installed	N/A
05/08/2003 02:04:45 PM	Cisco Wireless LAN Adapter	Installed	N/A
05/08/2003 02:04:45 PM	Citadel Development PocketExplorer	Installed	N/A
05/08/2003 02:04:51 PM	Clock	Installed	N/A
05/08/2003 02:04:48 PM	Excel	Installed	N/A
05/08/2003 02:04:46 PM	Flow Simulation Calc98	Installed	N/A
05/08/2003 02:04:46 PM	Hwx	Installed	N/A

34 rows found, viewing rows 1 to 10 Page: | 1 | 2 | 3 | 4 | ALL

[Back to top](#)

Figure A.7 ~ Sample PDA Inventory Report for a Palm PDA cradled on subscriber BOTHPDA.

Summary

- The procedures for installing the "Inventory RIM" application to a cradled PDA includes two parts. First, use client self-maintenance to install the cradled RIM components to the mother PC. Second, use a sync session to install the "Inventory RIM" application on the cradled PDA.
- Inventory information is collected on the Radia Inventory Manager client computer when a user connects to the Radia Configuration Server.
- The first connection downloads the audit service. The second connection sends the audit results back to the Radia Configuration Server. The audit-related scans are performed between the two connections.
- To view cradled-PDA reports from a Radia Inventory Manager session, locate the entry for the mother PC on the Summary page, and click the PDA icon.

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