Oracle® Field Service/Palm[™] Devices

Installation Guide

Release 11i

April 2001

Part No. A87358-02

1 Installation Overview

This document describes the installation of the Oracle Field Service/PalmTM Devices application, Release 11*i*, and related components.

Topics Include

- System Architecture
- Installation Requirements
- Installing Oracle Field Service/PalmTM Devices

1.1 Intended Audience

This document is intended for Systems Administrators or other IT professionals who are responsible for installing and maintaining Oracle Field Service/PalmTM Devices. We recommend you have experience in database administration.

1.2 Related Documents

For more information, see the following manuals:

- Installing Oracle Applications 11i
- Oracle Applications Concepts
- Oracle CRM Gateway for Mobile Devices Implementation Guide
- Oracle Field Service Concepts and Procedures
- Oracle Field Service/Palm Concepts and Procedures

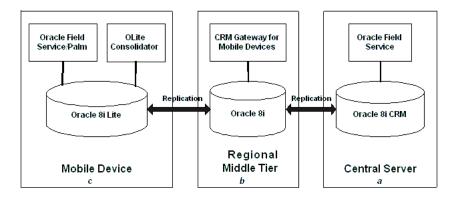
We recommend checking Metalink for any updates on already released documentation or new documentation.



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2 System Architecture

This installation guide covers the installation and configuration of Oracle Field Service/PalmTM Devices, Release 11*i* on the mobile device using the Web to Go publishing wizard. The following diagram shows the components of an operational Mobile Field Service installation. The letter next to the component definitions relates to the letter on the diagram.



a. Oracle Field Service

Oracle Field Service is a one stop planning area where you can plan, dispatch, and monitor tasks for service representatives out in the field.

It is assumed that you have installed and configured Oracle Field Service on the Oracle Applications Enterprise Server (Central Server) prior to the installation of Oracle Field Service/Laptop.

b. CRM Gateway for Mobile Devices

The CRM Gateway for Mobile Devices, also known as the Synchronization Server, synchronizes data between the Oracle CRM enterprise database (Oracle 8*i* CRM) and the Oracle mobile client database (Oracle 8*i* Lite). This is done wired (HTTP).

Note: The CRM Gateway for Mobile Devices must be installed and configured prior to the installation of Oracle Field Service/Laptop. See *Oracle CRM Gateway for Mobile Devices Implementation Guide*.

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c. Oracle Field Service/PalmTM Devices

Oracle Field Service/PalmTM Devices is a channel product of the Oracle Field Service suite. The Oracle Field Service/PalmTM Devices application works independently from the corporate network and changes are communicated to the Oracle CRM enterprise database, either over a phone line, or a LAN/WAN.

3 Installation Requirements

This section describes hardware, software, and other installation requirements for Oracle Field Service/PalmTM Devices.

3.1 Hardware Requirements

Hardware	Requirement	
On Desktop PC:		
Computer	IBM-compatible, Pentium I or better	
Hard Drive	50 MB free space	
Other Drives	CD-ROM drive, or the ability to access a CD-ROM drive over a network.	
Monitor	256 color display	
RAM	32 MB	
Miscellaneous	 Serial Port, Internet connection 	
	 Mouse or pointer device 	
On Palm Device:		
RAM	2 MB of available RAM	
Handheld device	■ 3Com Palm III, IIIe, IIIx, V, and VII	
	■ Symbol SPT 1500	
	 Symbol SPT 1700 series 	
	■ IBM WorkPad	
	 Qualcomm pdQ Smartphone 	
	 Handspring Visor 	

3.2 Software Requirements

Software	Requirement	
On Desktop PC:		

Software	Requirement
Operating System	Windows NT 4.0 (Service Pack 5), Windows 95, Windows 98, Windows 2000, or Windows ME.
Palm Desktop	At least the HotSync Manager and Install Tool.
Browser	Microsoft Internet Explorer or Nestcape Communicator.
On Palm Device:	
Operating System	Palm OS 3.0, 3.1, 3.2, or 3.3.

3.3 Additional Requirements

 A user account for the service representative needs to be created on the CRM Gateway for Mobile Devices, refer to the Oracle CRM Gateway for Mobile Devices Implementation Guide.

4 Installing Oracle Field Service/Palm[™] Devices

This section describes the prerequisites and procedures for installing Oracle Field Service/PalmTM Devices.

Topics include:

- Installation Process Overview
- Step 1: Loading Oracle Field Service/PalmTM Devices onto the CRM Gateway for Mobile Devices
- Step 2: Downloading and Installing Consolidator, Oracle 8i Lite, and Bootstrap
- Step 3: Performing a Hotsync of all iConnect Palm Components
- Step 4: Configuring Windows Remote Application Server (RAS)
- Step 5: Creating a RAS User Account for the Palm Device
- Step 6: Configuring the Palm Device
- Step 7: Configuring and Executing the iConnect Consolidator Client on Palm Computing Platform Devices
- Step 8: Configuring the Oracle Field Service/PalmTM Devices Application

4.1 Installation Process Overview

An overview of the installation process, necessary equipment, and location of installation is shown in the following diagram. Perform these steps in sequential order.

Step	Action	Performed At	CD Required
1.	Use the Web-to-go Publishing Wizard to load the Oracle Field Service/Palm TM Devices application onto the MDG	MDG	Field Service Laptop/Palm CD
2.	Mobile User uses URL to download and run setup.exe to install:	Client PC (MDG)	N/A
	 Consolidator (N/A for Palm) 		
	■ Oracle8 <i>i</i> Lite (N/A for Palm)		
	 Bootstrap (downloaded only if Palm desktop is installed on PC) 		
3.	Hotsync all iConnect Palm Components, including the Bootstrap.	Client Palm	N/A
4.	Configure the Windows remote Application Server (RAS)	Client PC (MDG)	N/A
5.	Create a RAS USer Account for the Palm Device	Client PC (MDG)	N/A
6.	Configure the Palm Device	Client Palm	N/A
7.	Configure and Execute the iConnect Consolidator client	Client Palm	N/A
8.	Configure the installation of the Oracle Field Service/Palm TM Devices application	Client Palm	N/A

4.2 Step 1: Loading Oracle Field Service/Palm[™] Devices onto the CRM Gateway for Mobile Devices

This section describes how to load Oracle Field Service/PalmTM Devices onto the CRM Gateway for Mobile Devices using the Web-to-go Publish Wizard.

- **1.** Insert the gold CD into your CD-ROM drive.
- **2.** At the command prompt, type the following to launch the Web-to-go Publish Wizard:

wtgpack

The Publish Wizard appears and, by default, displays the Welcome panel. Only use the Application and Files panel. The other panels are not applicable.

3. On the Welcome panel, choose **Create a new application**.

Note: Choose **Edit** when you have already loaded the Oracle Field Service/PalmTM Devices aplication onto the CRM Gateway for Mobile Devices before.

- 4. Click OK
- **5.** Use the Application panel to name the application and to specify where you want to store it on the Web-to-go server.
- **6.** Enter the following values into the fields on the panel:

Field	Value
Application Name	Field Service/PalmTM Devices
Virtual Path	/FieldServicePalm
Description	Field Service/PalmTM Devices
Application Classpath	(leave empty)
Default Page	index.html
Local Application Directory	<cd-drive>:\</cd-drive>
Icon	(leave empty)

7. Click **Next** in the Files panel list to see a list of all the files under <cd-drive>:\.

Choose FieldService in the file panel and remove all the other files.

- **8.** Keep clicking the **Next** button until the Finish button appears.
- 9. Click Finish to complete the application registration.

The Application Definition Completed window appears with the following options:

- Create Files
- Publish the current application
- Restart Wizard
- **10.** Choose **Publish the current application**.

11. Click OK.

The Publish the Application window appears.

12. Enter the following values into the fields

Field	Value
Web-to-go Server URL	http:// <web-to-go ip="" server=""></web-to-go>
Web-to-go username	administrator
Web-to-go password	admin
Repository Directory	/FieldServicePalm

- **13.** Check the **Public** checkbox.
- 14. Click OK.

The Publish Wizard uploads the application to the Web-to-go repository.

When nothing happens, start the Oracle Web-to-go service from Service on the Windows Control panel.

- **15.** When the application is published successfully, click OK.
- **16.** Click Exit to quit the program.

4.3 Step 2: Downloading and Installing Consolidator, Oracle 8*i* Lite, and Bootstrap

This section describes how to install the iConnect Consolidator client (Oracle8*i* Client Library) and ensure that your browser is configured to connect to the CRM Gateway for Mobile Devices (Synchronization Server).

This configuration includes installing the Oracle8*i* Lite database. The components are installed automatically but are of no use for the installation of the Oracle Field Service/PalmTM Devices application.

The Bootstrap for Palm is downloaded in this procedure and installed on the Palm device in Step 3: Performing a Hotsync of all iConnect Palm Components.

Prerequisites

Synchronization Server name for downloading.

Steps

1. Start your Web browser and connect to the Synchronization Server (Web-to-go server) by typing the following URL:

http://<server_name>/setup

Note: Replace the <server_name> variable with the host name of the Synchronization Server.

The Oracle CRM client setup screen is opened with a section to download the CRM client setup program and updates when available.

2. If you are using Netscape, choose a location to save the setup program and click **Save**. In Windows Explorer, double-click setup.exe from the chosen location to run the setup program.

If you are using Internet Explorer, choose the option Save this file and click **Save**. When downloading is completed, click **Open Folder** and run the setup program

Once started, the setup program prompts you to provide an install directory.

- **3.** Choose a directory, for example, C:\orant, and click **OK**. The setup program downloads all the required components.
- **4.** After you download the necessary files, the setup program prompts you to select a Palm user.

Note: If the Palm desktop is not installed, the setup program will prompt you to install it and then terminate. Once you have installed the Palm desktop and created a user, run the setup program from C:\ora_HOME\icpalm\palminst.exe.

5. When you successfully create a Palm user, the setup program informs you that the components are successfully installed and will be uploaded with the next hotsync.

4.4 Step 3: Performing a Hotsync of all iConnect Palm Components

1. Perform a Hotsync of all iConnect Palm components. This installs all of the iConnect client modules for Palm onto the Palm Device.

Note: Oracle's installation mechanism does not use the Palm Desktop Install tool. See the Palm documentation for more information.

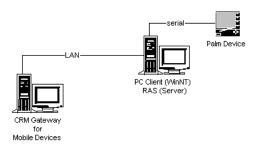
4.5 Step 4: Configuring Windows Remote Application Server (RAS)

Replicating with the Palm Computing Platform using Scout or HTTP requires the TCP/IP communication protocol. Palm uses serial lines for connection to the network. This step provides instructions for enabling TCP/IP communications for handheld devices using Windows NT RAS.

Perform this procedure to enable TCP/IP communications between handheld devices and your Windows NT server using Windows NT RAS.

The following two figures show the architecture that can be used by the Field Service representative to synchronize data between the Palm device and the CRM Gateway for Mobile Devices, at home or in the office.

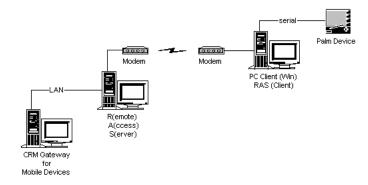
This first figure shows the most direct connection of a Palm device with the CRM Gateway for Mobile Devices.



This connection requiers the following setup steps:

- Setting up a RAS Server as described in Step 4: Configuring Windows Remote Application Server (RAS) and Step 5: Creating a RAS User Account for the Palm Device.
- Setting up the Palm Device as described in Step 6: Configuring the Palm Device (connected to a PC Client).

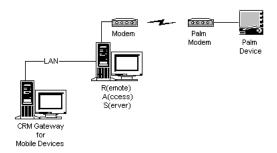
The second figure shows another possible connection.



This connection requires the following setup steps:

- Setting up a RAS Server as described in Step 4: Configuring Windows Remote Application Server (RAS) and Step 5: Creating a RAS User Account for the Palm Device.
- Setting up the Palm Device as described in Step 6a: Connected to a RAS Client.

Another way to connect the Palm device to the CRM Gateway for Mobile Devices is shown in the following figure. This is a valid setup when the Field Service Representative is on duty in the field.



This connection requires the following setup steps:

 Setting up the Palm Device as described in Step 6b: Connected to a wired modem.

Prerequisites

None.

Steps

1. In the Windows Control panel, double-click the **Network** icon.

- **2.** Click the **Add** button in the Services tab of the Network window.
- **3.** Select Remote Access Service and then click the **OK** button.
- 4. Insert the Windows NT CD-ROM into the CD-ROM drive and specify the location where you want the setup program to search for existing Windows NT RAS files. Click the Continue button. The setup program copies the Windows NT RAS files into the appropriate directories. If the setup program fails to detect a modem, it prompts you to add a modem.
- Click the Yes button and enter the required information to install a modem.

The Add RAS Device window appears.

Select COM1-Dial-Up Networking Serial Cable from the drop-down list.

When no COM1-Dial-Up Networking Cable option is available from the drop-down-list, perform the following steps to add it to the drop-down-list.

- **a.** Click **Install Modem**. The Install New Modem dialog window appears.
- b. Check Don't detect my modem.
- c. Select Dial-Up Networking Serial Cable.
- **d.** Select the port on which the Palm device is connected.
- e. Click Next.
- f. Click Finish to leave the Install New Modem dialog window and return to the Add RAS Device window and select the option from the drop-down-list.
- **7.** Click the **OK** button.

The Remote Access Setup window appears.

8. Under Port, select COM1 and click the **Configure** button.

The Configure Port Usage window appears.

- **9.** Select the "Receive calls only" radio button and click the **OK** button.
- **10.** Click the **Network** button in the Remote Access Setup window.

The Network Configuration window appears.

11. Select TCP/IP and click the **OK** button.

The RAS Server TCP/IP Configuration window appears.

12. Select Entire Network and Use Static Address Pool.

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Important: You must ensure that the TCP/IP addresses in your selected range are not already in use by other computers in your network.

13. You can specify a range of TCP/IP addresses for multiple devices. Enter the beginning of a TCP/IP address range in the Begin field and enter the ending of a TCP/IP address range in the End field.

The range should be equal to the number of clients plus 1. Typically one Palm device is connected to the COM port, therefore the End address will be one number higher than the Start address.

Example: If you have fifty devices you could define the following range:

Begin: 10.1.0.1 End: 10.1.0.51

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Note: Define a range of TCP/IP addresses compliant with your own network, do not use the example above.

- **14.** Click the **OK** button.
- **15.** In the Network Configuration window, select Any Authentication Including Clear Text, and click the **OK** button.

The Remote Access Setup window appears.

16. Click the **Continue** button.

The Setup Message window appears.

17. Click the OK button.

The Network window appears.

18. Click the **Close** button.

The Network Settings Change window appears.

19. Click **Yes** to restart the system.

When the system is restarted and you have logged again an error message might be shown, describing that HotSync manager is unable to open COM1. Ignore this error message.

20. Once the system reboots, click the **Services** icon in the Windows Control Panel.

The Services window appears.

- **21.** Select Remote Access Server and click the **Startup** button.
- **22.** Select Automatic and click the **OK** button.
- **23.** Click the **Close** button.
- **24.** Logon as a local administrator.
- **25.** From the Windows Start menu select Administrative Tools and then select User Manager.

The User Manager window appears. Proceed to "Step 5: Creating a RAS User Account for the Palm Device".

4.6 Step 5: Creating a RAS User Account for the Palm Device

Proceed with the procedure started in Step 4: Configuring Windows Remote Application Server (RAS) to create a RAS User Account to enable replication.

1. Select New User from the User menu.

The New User window dialog appears.

- **2.** Enter a user name, password, and password confirmation in the required fields.
- **3.** Select Password Never Expires.
- **4.** Click the **Dial-In** button.

The Dial-In Information dialog appears.

- **5.** Select Grant Dial-In Permission to User. Click the **OK** button.
- **6.** Click the **OK** button to exit the New User dialog.
- **7.** Exit the User Manager screen.
- **8.** From the Windows Start menu select Administrative Tools and then select Remote Access Administration.

The Remote Access Admin window appears.

9. Verify that the new RAS user is granted remote access permission and click the **OK** button.

4.7 Step 6: Configuring the Palm Device

Configuring the Palm Device connected to a RAS Client is described in Step 6a: Connected to a RAS Client; Configuring the Palm Device connected to a wired modem is described in Step 6b: Connected to a wired modem.

4.7.1 Step 6a: Connected to a RAS Client

To configure HTTP as the transport mechanism for Palm use one of the following procedures:

- For Palm OS 3.0, 3.1, or 3.2
- For Palm OS 3.3

4.7.1.1 For Palm OS 3.0, 3.1, or 3.2 1. In the Preferences screen of the Palm Computing Platform device, select **Modem** from the menu.

The Preferences screen appears.

- **2.** Verify that the Speed is set to 19200 bps.
- **3.** Select **Network** from the menu.

The Preferences screen appears.

4. Enter the required information in the fields of the Preferences screen:

Field	Value
Service	Windows NT RAS
User Name	The user's name
Password	The user's password
Phone	00
End	No information required

5. Tap the **Details** button.

The Details dialog appears.

- **6.** Ensure that the Connection Type is set to PPP.
- **7.** Ensure that for IP Address: Automatic is selected.
- **8.** Tap the **Script** button.

The Log in Script dialog appears.

9. Enter the following:

Field	Value
Send CR	no information required
Delay	1
Send	CLIENT
Wait For	CLIENTSERVER
End	no information required

- **10.** Tap the **OK** button to close the Log in Script dialog.
- **11.** Tap the **OK** button again to close the Details dialog.
- **12.** Place the device in the HotSync cradle.
- **13.** Tap the **Connect** button to test the connection. If the PPP connection is successful, the device is ready for data synchronization.
- **4.7.1.2 For Palm OS 3.3 1.**In the Preferences screen of the Palm Computing Platform device, select **Connection** from the menu.

The Preferences screen appears.

2. Tap **New**.

The Edit screen appears.

3. Enter the following:

Field	Value
Name	HTTP
Connection Method	Serial to PC

- **4.** Tap **OK** to close the Edit screen.
- **5.** Tap **OK** to close the Preferences screen.
- **6.** Select **Network** from the menu.

The Preferences screen appears.

7. Enter the required information in the fields of the Network Preferences screen:

Field	Value	
Service	Windows RAS	
User Name	The user's name	
Password	The user's password	

Field	Value
Connection	HTTP
	Note: Value entered at step 3 in Name field.
End	No information required

8. Tap the **Details** button.

The Details dialog appears.

- **9.** Ensure that IP Address: Automatic is selected.
- **10.** Tap the **Script** button.

The Log in Script dialog appears.

11. Enter the following:

Field	Value
Send CR	no information required
Delay	1
Send	CLIENT
Wait For	CLIENTSERVER
End	No information required

- **12.** Tap the **OK** button to close the Log in Script dialog.
- 13. Tap the OK button again to close the Details dialog.
- **14.** Place the device in the HotSync cradle.
- **15.** Tap the **Connect** button to test the connection. If the PPP connection is successful, the device is ready for data synchronization.

4.7.2 Step 6b: Connected to a wired modem

- **1.** Tap the Applications picker.
- **2.** Tap Prefs.
- **3.** In the Preferences screen of the Palm Computing Platform device, select **Modem** from the menu. The Preferences screen appears.
- **4.** Verify that the Speed is set to 19200 bps.
- **5.** Select Network from the Menu. The Preferences screen appears.
- **6.** Enter the required values in the following fields:

Field	Value	
Service	Windows NT RAS	
User Name	The user's name	
Password	The user's password	
Phone	Telephone number of modem to dial	

- **7.** Tap the **Details** button. The Details dialog appears.
- **8.** Ensure that the Connection Type is set to PPP.
- **9.** Ensure that the Query DNS is not tapped.
- **10.** Enter the primary DNS and Secondary DNS of the RAS system.
- 11. Ensure that for IP Address: Automatic is selected.
- **12.** Tap the **Script** button. The Log in Script dialog appears.
- **13.** Enter the following:

Field	Value
Send CR	No information required
Delay	1
Send	CLIENT
Wait for	CLIENTSERVER
End	No information required

- **14.** Tap the **OK** button to close the Log in Script dialog.
- **15.** Tap the **OK** button again to close the Details dialog.
- **16.** Place the device in the HotSync cradle.
- **17.** Tap the **Connect** button to test the connection. If the PPP connection is successful, the device is ready for data synchronization.

4.8 Step 7: Configuring and Executing the iConnect Consolidator Client on Palm Computing Platform Devices

Use this procedure to configure the iConnect Consolidator client on the Palm Device.

This procedure installs the Oracle Field Service/PalmTM Devices application and the database on the Palm Device.

Prerequisites

None

Steps

 Start the iConnect Consolidator (consolidatorClient.prc) on the handheld device.

The iConnect Consolidator Sync screen appears.

2. Enter the following values in the fields:

Field	Value
User Name	iConnect Consolidator client user name. This must be written in uppercase.
Password	iConnect Consolidator client password. This field is case sensitive.
Change	Leave this check box unselected.
Save Password	Select this check box to save the iConnect Consolidator client password.
http:// <machine.ip>/Consolidator</machine.ip>	Enter the HTTP listener machine's IP address. The complete URL http://machine.IP/webtogo/Consolidator is not displayed on the device screen. It is not necessary to enter "/webtogo" after the machine IP address.
Use Proxy	Select if appropriate.

- **3.** Tap the **Apply** button.
- **4.** Tap the **Sync** button.

A progress bar indicates the completion of each synchronization task: composing, sending, receiving, and processing. If synchronization executes successfully, the synchronization Success screen appears.

If synchronization fails, an error message appears. To determine the cause of a failed synchronization, the server administrator can view tracing information on the Synchronization Server.

4.9 Step 8: Configuring the Oracle Field Service/Palm[™] Devices Application

To establish communication with the Synchronization Server, configure the Oracle Field Service/PalmTM Devices application on the Mobile Device according to the following procedure..

- **1.** Tap the **Applications** icon on the Palm device to display the application picker.
- **2.** Tap the **Field Service** icon from the application launcher.

The first time the Oracle Field Service/PalmTM Devices application is started the User Information screen is opened automatically displaying the name of the user acount on the CRM Gateway for Mobile Devices. Enter the name of the user acount on the CRM Gateway for Mobile Devices when it is not showing.

- **3.** Tap **OK**.
- **4.** To modify this information tap **I**.
- 5. Tap User.

This completes the configuration of the Oracle Field Service/PalmTM Devices application, necessary to enable the communication with the Oracle Field Service server.

For more information on the setup of the Oracle Field Service/PalmTM Devices application, refer to *Oracle Field Service/PalmTM Devices Implementation Guide*.