

Oracle® Field Service

Implementation Guide

Release 11*i* (11.5.2)

August 2000

Part No. A86153-01

ORACLE®

Oracle Field Service Implementation Guide, Release 11*i* (11.5.2)

Part No. A86153-01

Copyright © 2000, Oracle Corporation. All rights reserved.

The Programs (which include both the software and documentation) contain proprietary information of Oracle Corporation; they are provided under a license agreement containing restrictions on use and disclosure and are also protected by copyright, patent, and other intellectual and industrial property laws. Reverse engineering, disassembly, or decompilation of the Programs is prohibited.

The information contained in this document is subject to change without notice. If you find any problems in the documentation, please report them to us in writing. Oracle Corporation does not warrant that this document is error free. Except as may be expressly permitted in your license agreement for these Programs, no part of these Programs may be reproduced or transmitted in any form or by any means, electronic or mechanical, for any purpose, without the express written permission of Oracle Corporation.

If the Programs are delivered to the U.S. Government or anyone licensing or using the programs on behalf of the U.S. Government, the following notice is applicable:

Restricted Rights Notice Programs delivered subject to the DOD FAR Supplement are "commercial computer software" and use, duplication, and disclosure of the Programs, including documentation, shall be subject to the licensing restrictions set forth in the applicable Oracle license agreement. Otherwise, Programs delivered subject to the Federal Acquisition Regulations are "restricted computer software" and use, duplication, and disclosure of the Programs shall be subject to the restrictions in FAR 52.227-19, Commercial Computer Software - Restricted Rights (June, 1987). Oracle Corporation, 500 Oracle Parkway, Redwood City, CA 94065.

The Programs are not intended for use in any nuclear, aviation, mass transit, medical, or other inherently dangerous applications. It shall be the licensee's responsibility to take all appropriate fail-safe, backup, redundancy, and other measures to ensure the safe use of such applications if the Programs are used for such purposes, and Oracle Corporation disclaims liability for any damages caused by such use of the Programs.

Oracle is a registered trademark, and Oracle Field Service is a trademark or registered trademark of Oracle Corporation. Other names may be trademarks of their respective owners.

Contents

Send Us Your Comments	v
Preface.....	vii
Intended Audience	vii
Structure	vii
Related Documents.....	vii
Implementing Field Service	
Implementation Overview	2
Implementing Flowchart.....	2
Implementing Checklist	4
Implementing Steps.....	6
Step 1: Set Up System Administrator.....	6
Step 2: Define Key Flexfields	6
Step 3: Define Calendars, Currencies, and Set of Books.....	7
Step 4: Confirm Setup of Employees.....	8
Step 5: Confirm Setup of Resources	8
Step 6: Confirm Setup of Inventory	8
Step 7: Confirm Setup of Spares Management	9
Step 8: Confirm Setup of Order Management	9
Step 9: Confirm Setup of Service Request	10
Step 10: Confirm Setup of Territory Manager.....	10
Step 11: Confirm Setup of Tasks	10
Step 12: Confirm Setup of Escalations Manager.....	10

Step 13: Confirm Setup of Charges	10
Step 14: Confirm Setup of Knowledge Base	11
Step 15: Confirm Setup of Counters	11
Step 16: Confirm Setup of Notes	11
Step 17: Confirm Setup of Interaction History	11
Step 18: Confirm Setup of Installed Base	11
Step 19: Confirm Setup of Contracts Core	11
Step 20: Confirm Setup of Service Contracts	11
Step 21: Confirm Setup of Assignment Manager	11
Step 22: Confirm Setup of Calendar	12
Step 23: Setup Field Service	12
Step 24: Setup Scheduler	12
Step 25: Setup Time Distance Server	13
Step 26: Confirm Setup of Spatial Data	13
Check if the Spatial Data Option is Installed	14
Check whether the Data Tables are Empty or Not	14
Check if the Normal and Spatial Indexes are Created	16
Step 27: Confirm Setup of Style Sheet	18
Check Whether the Layer Style Sheets Tables are not Empty	19
Check Whether the mdsys.user_sdm_geo_metadata Table is not Empty	19
Check Map Display	20
Step 28: Setup CRM Gateway for Mobile Devices	20
Step 29: Setup Oracle Field Service/PalmTM Devices	20
Step 30: Setup Oracle Field Service/Laptop	21
Step 31: Setup Field Service Report	21
Setting Up Field Service	22
Assign Territories to Planner Groups	23
Generate Shift Tasks	23
Resources Subinventories Assignment	24
Profile Options	26

Send Us Your Comments

Oracle Field Service Implementation Guide, Release 11*i* (11.5.2).

Part No. A86153-01

Oracle Corporation welcomes your comments and suggestions on the quality and usefulness of this document. Your input is an important part of the information used for revision.

- Did you find any errors?
- Is the information clearly presented?
- Do you need more information? If so, where?
- Are the examples correct? Do you need more examples?
- What features did you like most?

If you find any errors or have any other suggestions for improvement, please indicate the document title and part number, and the chapter, section, and page number (if available). You can send comments to us via the postal service.

Oracle Corporation
CRM Content Development Manager Field Service
500 Oracle Parkway
Redwood Shores, CA 94065
U.S.A.

If you would like a reply, please give your name, address, telephone number, and (optionally) electronic mail address.

If you have problems with the software, please contact your local Oracle Support Services.

Preface

Welcome to the Oracle Customer Relationship Management, Release 11*i* (11.5.2), suite of applications.

This Implementation Guide provides information and instructions to help you implement Oracle Field Service effectively.

This preface explains how the Implementation Guide is organized and introduces other sources of information that can help you.

Intended Audience

This guide is aimed at the following users:

- System Administrators (SA), Database Administrators (DBA), and others with similar responsibility

Structure

This manual contains the following chapters:

“Implementing Field Service” provides overviews of the implementation and its components to perform essential business tasks, as well as the application’s relationships to other Oracle or third-party applications. It provides process-oriented, task-based procedures for setting up the application.

Related Documents

For more information, see the following manuals:

- *Installing Oracle Applications, Release 11*i**

- *Implementing CRM Applications*
- *Oracle Field Service Concepts and Procedures*
- *Oracle Foundation Concepts and Procedures*

Implementing Field Service

This topic group provides general descriptions of the setup and configuration tasks required to implement the Field Service application successfully.

Topics covered are:

- [Implementation Overview](#)
 - [Implementing Flowchart](#)
 - [Implementing Checklist](#)
- [Implementing Steps](#)
- [Setting Up Field Service](#)
 - [Assign Territories to Planner Groups](#)
 - [Resources Subinventories Assignment](#)
 - [Generating Shift Tasks](#)
 - [Profile Options](#)

Implementation Overview

Before setting up Field Service, you must install and fully implement these Oracle applications or components:

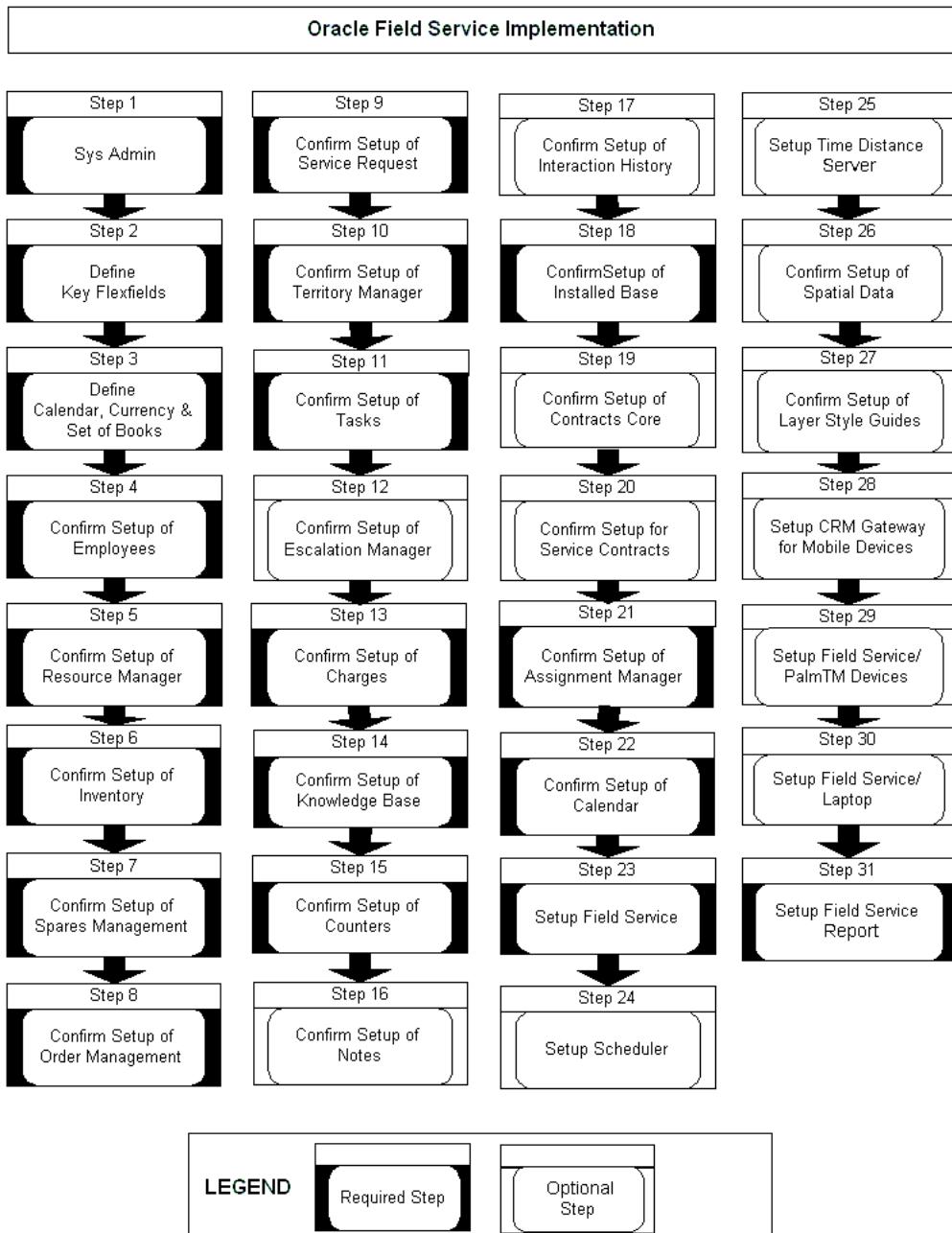
- Oracle Human Resources
- Oracle Inventory
- Service Core
- Order Management
- Assignment Manager
- Resource Manager
- Territory Manager
- Spares Management
- Tasks
- Calendar

For information regarding the installation and implementation of these applications and components, see the appropriate documentation for each product.

The implementation steps described here are tasks that are necessary to use the additional functionality included with Field Service.

Implementing Flowchart

While you can implement Field Service in many different ways, the following flow chart shows the recommended order:



Implementing Checklist

Complete the following implementation steps in sequential order.

Step	Required	Step Title
1.	Yes	Sys Admin
2.	Yes	Define Key Flexfields
3.	Yes	Define Calendar, Currency & Set of Books
4.	Yes	Confirm Setup of Employees
5.	Yes	Confirm Setup of Resource Manager
6.	Yes	Confirm Setup of Inventory
7.	Yes	Confirm Setup of Spares
8.	Yes	Confirm Setup of Order Management
9.	Yes	Confirm Setup of Service Request
10.	Yes	Confirm Setup of Territory Manager
11.	Yes	Confirm Setup of Tasks
12.	Yes	Confirm Setup of Escalation Manager
13.	Yes	Confirm Setup of Charges
14.	Yes	Confirm Setup of Knowledge Base
15.	Yes	Confirm Setup of Counters
16.	Optional	Confirm Setup of Notes
17.	Optional	Confirm Setup of Interaction History
18.	Yes	Confirm Setup of Installed Base
19.	Optional	Confirm Setup of Contracts Core
20.	Optional	Confirm Setup of Service Core
21.	Yes	Confirm Setup of Assignment Manager
22.	Yes	Confirm Setup of Calendar
23.	Yes	Setup Field Service
24.	Optional	Setup Scheduler
25.	Optional	Setup Time Distance Server

26.	Optional	Confirm Setup of Spatial Data
27.	Optional	Confirm Setup of Layer Style Guides
28.	Optional	Setup CRM Gateway for Mobile Devices
29.	Optional	Setup Field Service/Palm™ Devices
30.	Optional	Setup Oracle Field Service/Laptop
31.	Yes	Setup Field Service Report

Implementing Steps

Perform the following implementation steps in sequential order:

Step 1: Set Up System Administrator

This step involves the following tasks:

- Define responsibilities. For more information, see: *Oracle Applications System Administrator's Guide*.
- Set up printers (optional). For more information, see: Setting Up Your Printers, *Oracle Applications System Administrator's Guide*.

Step 2: Define Key Flexfields

If you are, or will be, fully installing other applications, such as Oracle Human Resource Management or Oracle Inventory, be sure to coordinate with those products' flexfield Setup before defining the key flexfields here, as it is not recommended to change flexfields frequently. For more information, see: *Oracle Applications Flexfields Guide*.

For each key flexfield, you perform the following tasks, some of which are optional for some flexfields:

- Define the flexfield structure.
- Define value sets.
- Define flexfield segments.
- Define flexfield segment values.
- Define security rules.
- Assign security rules.
- Define roll-up groups.
- Define cross-validation rules.

Set up the following Accounting flexfield. You may not need to perform this step if you have already installed and set up Oracle General Ledger or performed a common-applications Setup. For more information, see *Oracle General Ledger User's Guide*.

Set up the following Human Resources key flexfields. You may not need to set up these key flexfields if you have already installed and set up Oracle Human Resource

Management Systems or performed a common–applications Setup. For more information, see: *Oracle Human Resources User's Guide*.

- Grade flexfield
- Job flexfield
- Position flexfield
- People Group flexfield

Step 3: Define Calendars, Currencies, and Set of Books

If you have defined your calendars, currencies, and set of books while setting up a different Oracle Applications product, proceed to the next step. However, if you are performing a Multi–Org implementation, see the note below.

Context: If you are performing a Multi–Org implementation, you may optionally create more than one calendar, currency, or set of books. For more information, see: *Multiple Organizations in Oracle Applications*.

This step involves the following tasks:

- Set up calendars:
- Define period types. For more information, see: *Defining Period Types, Oracle General Ledger User's Guide*.
- Define accounting calendar. For more information, see: *Defining Calendars, Oracle General Ledger User's Guide*.
- Define transaction calendar. For more information, see: *Defining Transaction Calendars, Oracle General Ledger User's Guide*. (Optional)
- Define workday calendar. For more information, see: *Overview of Workday Calendar, Oracle Bills of Material User's Guide*. (Optional)
- Define exception templates. For more information, see: *Creating a Workday Exception Template, Oracle Bills of Material User's Guide*. (Optional)
- Define currencies. For more information, see: *Defining Currencies, Oracle General Ledger User's Guide*.
- Define conversion rate types. For more information, see: *Defining Conversion Rate Types, Oracle General Ledger User's Guide*.
- Assign your set of books to a responsibility. For more information, see: *Oracle General Ledger User's Guide*.

- Set up currency rates.
- Set up accounting code combinations. For more information, see: *Oracle General Ledger User's Guide*.
- Open and close accounting periods. For more information, see: *Opening and Closing Accounting Periods, Oracle General Ledger User's Guide*.

Step 4: Confirm Setup of Employees

Please refer to the appropriate section in *Oracle Human Resource Management Systems* used to enter and maintain employees.

Step 5: Confirm Setup of Resources

Make sure you set up Resource Manager as described in Implementing Oracle Resource Manager in *Oracle CRM Foundation Implementation Guide*.

Setup resources in the Resource Manager application. Ensure that all the following steps have been reviewed and completed:

- Setup service representatives. In Resource Manager assign role 'Field Service Representative' to a resource to make it visible in the Control Tower.
A field service representative does not have to be defined as an employee and does not have to be an Oracle Applications User.
- Setup planners. A planner does not need a specific role assigned. You can assign the role 'Field Service Dispatcher' in Resource Management.
A planner needs to be defined as an employee and assigned an Oracle Applications User. Define the planner as an employee and import the employee into Resource Management to define it as a resource. It is then automatically assigned an Oracle Applications User.
- Create planner groups by creating resource groups with only planners assigned to it. The planner groups are used to assign groups of service representatives created in Territory Management to.

Step 6: Confirm Setup of Inventory

Make sure you set up Inventory as described in Overview of Setting Up, *Oracle Inventory User's Guide*. Ensure that all the following required steps have been reviewed and completed as necessary:

- Define Sub-inventories

A standard setup is required for each sub-inventory.

Step 7: Confirm Setup of Spares Management

Please refer to *Oracle Spares Management Implementation Guide* for Spares Management setup.

Step 8: Confirm Setup of Order Management

Make sure you set up Order Management as described in Overview of Setting Up, *Oracle Order Management User's Guide*. Ensure that all the required steps have been reviewed and completed as necessary:

- Profile Options
- Parameters
- Invoicing
- Sales persons
- Tax
- Quick Codes
- Workflow
- Document Sequences
- Order Import Sources
- Customer Classes
- Customers
- Transaction Types
- Cost of Goods Sold
- Processing Constraints
- Defaulting Rules
- Credit Checking
- Holds
- Attachments
- Freight Charges and Carriers

- Pricing
- Shipping

Step 9: Confirm Setup of Service Request

Please refer to the appropriate section from *Oracle Support Implementation Guide* for Service Request setup.

Step 10: Confirm Setup of Territory Manager

Make sure you set up territories as described in Implementing Territory Management, *Oracle CRM Foundation Implementation Guide*.

Setup territories in the Territory Manager application. Ensure that all the following steps have been reviewed and completed:

- Create territories with only service representatives assigned to it. The territories are used to connect to the planner groups created in Resource manager, during the setup of Field Service.

Step 11: Confirm Setup of Tasks

Please refer to the appropriate section from *Oracle CRM Foundation Implementation Guide* for Task setup.

Note: Set Task_Type ='DISPATCH' for all Field Service specific tasks to enforce dispatch business logic like making the service request and task address mandatory. The address is necessary for scheduling tasks.

Step 12: Confirm Setup of Escalations Manager

Please refer to the appropriate section from *Oracle CRM Foundation Implementation Guide* for Escalations Manager setup.

Step 13: Confirm Setup of Charges

Please refer to the appropriate section from *Implementing Oracle Service Core* for Charges setup in the iHelp system.

Step 14: Confirm Setup of Knowledge Base

Please refer to the appropriate section from *Implementing Oracle Service Core* for Knowledge Management setup in the iHelp system.

Step 15: Confirm Setup of Counters

Please refer to the appropriate section from *Implementing Oracle Service Core* for Counters setup in the iHelp system.

Step 16: Confirm Setup of Notes

Please refer to the appropriate section from *Oracle CRM Foundation Implementation Guide* for Notes setup and to define source types.

Step 17: Confirm Setup of Interaction History

Please refer to the appropriate section from *Oracle CRM Foundation Implementation Guide* for Interaction History setup.

Step 18: Confirm Setup of Installed Base

Make sure you set up Installed Base as described in *Implementing Oracle Service Core* in the iHelp system.

Step 19: Confirm Setup of Contracts Core

Please refer to *Implementing Oracle Contracts Core* for Contracts setup in the iHelp system.

Step 20: Confirm Setup of Service Contracts

Please refer to *Implementing Oracle Contracts for Service* for Service Contracts setup in the iHelp system.

Step 21: Confirm Setup of Assignment Manager

Please refer to the appropriate section from *Oracle CRM Foundation Implementation Guide* for Assignment Manager setup.

Please ensure the following profile options are set before using Field Service.

The profile options are set at the application level and are unique to Assignment Manager.

You can set these options in any sequence.

Step	Option	Description
1	Activate Auto Selection of Resources	To activate auto selection of resources. Default set to: Y (yes).
2	Activate Workflow Name	To activate the workflow plug-in. Default set to: "None".
3	Activate Installed Base Preferred Resource	To retrieve preferred resource information from the installed base application. Default set to: Y (yes).
4	Activate Contracts Preferred Resources	To retrieve preferred resource information from the contracts application. Default set to: Y (yes).

Step 22: Confirm Setup of Calendar

Make sure you set up calendar as described in *Oracle CRM Foundation Implementation Guide*.

Setup shifts in the calendar application. Ensure that all the following steps have been reviewed and completed:

- Create shifts for each service representative.

Step 23: Setup Field Service

Make sure you setup Field Service as described in [Setting Up Field Service](#). This step involves the following tasks:

- [Assign Territories to Planner Groups](#)
- [Resources Subinventories Assignment](#)
- [Generating Shift Tasks](#)
- [Profile Options](#)

Step 24: Setup Scheduler

Make sure you set up Scheduler as described in *Oracle Scheduler Implementation Guide*.

Step 25: Setup Time Distance Server

The setup for Time Distance Server is done by setting the following Field Service specific profile options:

You can set these options in any sequence.

1.	CSF: Default travel distance for Time Distance Server	If no geocode exist for a task the value is used as the default travel distance between two tasks. Note: When a value is entered this is always used to indicate travel distance and overrules the capability to calculate it with the Time Distance Server.
2.	CSF: Default travel duration for Time Distance Server	If no geocode exist for a task the value is used as the default travel duration between two tasks. Note: When a value is entered this is always used to indicate travel duration and overrules the capability to calculate it with the Time Distance Server.
3.	CSF: Location Finder Installed	Value set to check if the location finder is installed. It is launched when a location for a task is missing, see profile option CSR: Create location . Note: This profile option needs to be set only when using Oracle Scheduler
4.	CSF: Time distance server calculation factor	If the factor is set the Time Distance Server calculates travel distance and duration faster but less accurate. Note: This profile option needs to be set only when using Oracle Scheduler

Step 26: Confirm Setup of Spatial Data

Spatial data is used for Map Display, Route Calculation and Location finding, it provides the TimeDistance Server with route information and the location finder with address information. Map Display is directly available to the user as part of the control tower functionality. The TimeDistance Server uses spatial data to calculate travel time and distances for Field Service and Scheduler. The same applies to the location finder for address information.

After installing spatial data, check whether the data is csf_loaded into the system correctly. Perform the following checks:

- Check if the Spatial Data Option is Installed
- Check whether the Data Tables are Empty or not

- Check if the Normal and Spatial Indexes are Created

Check if the Spatial Data Option is Installed

Even though it's impossible to load spatial data when the spatial data cartridge is not installed, a DBA task is to check whether it is installed. The MDSYS user schema must be there.

Check whether the Data Tables are Empty or Not

The following data tables contain the necessary spatial data. For each country, the number of rows in each table might differ.

Check as a user with DBA access that none of the following data tables are empty:

Note: Please note that the installation script delivered with the data should provide for this. The above is only required when a confirmation test is needed.

CSF.CSF_LF_BLOCKS
CSF.CSF_LF_NAMES
CSF.CSF_LF_PLACES
CSF.CSF_LF_PLACE_NAMES
CSF.CSF_LF_PLACE_POSTCS
CSF.CSF_LF_POIS
CSF.CSF_LF_POI_NAMES
CSF.CSF_LF_POSTCODES
CSF.CSF_LF_ROADSEGMENTS
CSF.CSF_LF_ROADSEGM_NAMES
CSF.CSF_LF_ROADSEGM_PLACES
CSF.CSF_LF_ROADSEGM_POSTS
CSF.CSF_MDADM_BOUNDS
CSF.CSF_MD_HYDROS
CSF.CSF_MD_INST_STYLE_SHTS

CSF.CSF_MD_LAND_USES
CSF.CSF_MD_LYR_METADATA
CSF.CSF_MD_LYR_STYLE_SHTS
CSF.CSF_MD NAMES
CSF.CSF_MD_POIS
CSF.CSF_MD_POI_NM_ASGNS
CSF.CSF_MD_RAIL_SEGS
CSF.CSF_MD_RDSEG_NM_ASGNS
CSF.CSF_MD_RD_SEGS
CSF.CSF_MD_THEME_METADATA
CSF.CSF_SDM_CTRY_PROFILES
CSF.CSF_TDS_CONDITIONS
CSF.CSF_TDS_COND_SEGS
CSF.CSF_TDS_INTERVALS
CSF.CSF_TDS_NODES
CSF.CSF_TDS_RDBLCK_INTVLS
CSF.CSF_TDS_RDBLCK_SGMNTS
CSF.CSF_TDS_ROADBLOCKS
CSF.CSF_TDS_SEGMENTS
CSF.CSF_TDS_SEGM_NODES
CSF.CSF_TDS_TILES
CSF.CSF_TDS_BINARY_MAPS
CSF.CSF_TDS_BINARY_TILES
CSF.CSF_TDS_BINARY_MAPS_COPY

Check if the Normal and Spatial Indexes are Created

After loading the spatial data, indexes have to be created to achieve optimal performance. These indexes should exist and have status VALID. If these don't exist or are invalid, the performance will be less. A particular statement to see the list of indexes:

```
select object_name, object_type from all_objects
where object_name like 'CSF%'
and OBJECT_TYPE = 'INDEX';
```

The list indexes are:

```
CSF.CSF_MD_RDSEGS_N1
CSF.CSF_MD_RDSEG_NM_ASGNS_N1
CSF.CSF_MD_RDSEG_NM_ASGNS_N2
CSF.CSF_MD_NAMES_N1
CSF.CSF_MD ADM_BNDS_N1
CSF.CSF_MD_RD_SEGS_N1
CSF.CSF_MD_HYDROS_N1
CSF.CSF_MD_RLSEGS_N1
CSF.CSF_MD_LND_USE_N1
CSF.CSF_MD_POIS_N1
CSF.CSF_LF_BLOCKS_N1
CSF.CSF_LF_BLOCKS_N2
CSF.CSF_LF_NAMES_N1
CSF.CSF_LF_NAMES_N2
CSF.CSF_LF_PLACES_U1
CSF.CSF_LF_PLACES_N2
CSF.CSF_LF_PLNMS_U1
CSF.CSF_LF_PLPCS_N1
CSF.CSF_LF_PLPCS_N2
CSF.CSF_LF_POIPL_N1
```

CSF.CSF_LF_POIS_N1
CSF.CSF_LF_PNAMES_N1
CSF.CSF_LF_PNAMES_N2
CSF.CSF_LF_POSTCODES_N1
CSF.CSF_LF_POSTCODES_N2
CSF.CSF_LF_RDSEGS_N1
CSF.CSF_LF_RDSEGNMS_N1
CSF.CSF_LF_RDSEGNMS_N2
CSF.CSF_LF_RDSEGPL_N1
CSF.CSF_LF_RDSEGPL_N2
CSF.CSF_LF_RDSEGMPC_N1
CSF.CSF_LF_RDSEGMPC_N2
CSF.CSF_TDS_BINARY_TILES_N1
CSF.CSF_TDS_BINARY_TILES_N2
CSF.CSF_TDS_BINARY_TILES_N3
CSF.CSF_TDS_TILES_N1
CSF.CSF_TDS_TILES_N2
CSF.CSF_TDS_TILES_N3
CSF.CSF_TDS_TILES_N4
CSF.CSF_TDS_SEGMENTS_N1
CSF.CSF_TDS_SEGMENTS_N2
CSF.CSF_TDS_SEGMENTS_N3
CSF.CSF_TDS_SEGMENTS_N4
CSF.CSF_TDS_SEGM_NODES_N1
CSF.CSF_TDS_SEGM_NODES_N2
CSF.CSF_TDS_SEGM_NODES_N3
CSF.CSF_TDS_SEGM_NODES_N4
CSF.CSF_TDS_SEGM_NODES_N5

```
CSF.CSF_TDS_NODES_N1
CSF.CSF_TDS_NODES_N2
CSF.CSF_TDS_NODES_N3
CSF.CSF_TDS_NODES_N4
CSF.CSF_TDS_NODES_N5
CSF.CSF_TDS_NODES_N6
CSF.CSF_TDS_CONDITIONS_N1
CSF.CSF_TDS_CONDITIONS_N2
CSF.CSF_TDS_COND_SEGS_N1
CSF.CSF_TDS_COND_SEGS_N2
CSF.CSF_TDS_COND_SEGS_N3
CSF.CSF_TDS_ROADBLOCKS_N1
CSF.CSF_TDS_ROADBLOCKS_N2
CSF.CSF_TDS_RDBLCK_INTVLS_N1
CSF.CSF_TDS_RDBLCK_INTVLS_N2
CSF.CSF_TDS_RDBLCK_SGMNTS_N1
CSF.CSF_TDS_RDBLCK_SGMNTS_N2
CSF.CSF_TDS_RDBLCK_SGMNTS_N3
CSF.CSF_TDS_INTERVALS_N1
CSF.CSF_TDS_INTERVALS_N2
```

Step 27: Confirm Setup of Style Sheet

After installing spatial data, check whether the data is csf_loaded into the system correctly. Perform the following additional checks:

- Check whether the Layer Style Sheets Tables are not Empty
- Check whether the MDSYS.user_sdm_geo_metadata Table is not Empty
- Check Map Display

Check Whether the Layer Style Sheets Tables are not Empty

The following tables contain the layer sheets information:

CSF.CSF_MD_INST_STYLE_SHTS

CSF.CSF_MD_LYR_METADATA

CSF.CSF_MD_LYR_STYLE_SHTS

Layer style sheets define the “display” of the spatial data. These are all predefined and optimized for the data set used but it is possible to modify the style sheets. It is recommended to involve a consultant with experience in Geographic Information to define alternative settings in the layer style sheets.

By default in the style sheets it is defined per spatial object type (i.e., motorway, waterway, residential area, etc.) how and under what conditions it is displayed. For example when looking at an entire country there is no reason to display “local roads” as this kind of detail shows up as a colored blob on the screen. Also every object is given its own color. The color to display a road is different depending on the part of the world one is in, the style sheet also describes this information.

Knowledge required to modify the layer style sheets besides Oracle database is:

- Spatial cartridge and some geographic experience

Check Whether the mdsys.user_sdm_geo_metadata Table is not Empty

When the mdsys user is installed, a special table called mdsys.user_sdm_geo_metadata should be filled out. This table contains rows with the spatial data object type. Registering these rows will improve performance.

While the values can be changed, these are already optimal for every country.

Following is the script to insert all the rows needed:

```
Insert statements:
delete from user_sdo_geom_metadata where table_name in ('CSF_MD_RD_SEGS',
'CSF_MD_HYDROS', 'CSF_MD ADM_BOUNDS', 'CSF_MD_LAND_USES',
'CSF_MD_RAIL_SEGS');
      insert into user_sdo_geom_metadata values ('CSF_MD_HYDROS', 'GEOMETRY',
mdsys.sdo_dim_array(mdsys.sdo_dim_element('X', -180, 180, .0000005),
mdsys.sdo_dim_element('Y', -90, 90,.0000005)), null);
      insert into user_sdo_geom_metadata values ('CSF_MD ADM_BOUNDS',
'GEOMETRY', mdsys.sdo_dim_array(mdsys.sdo_dim_element('X', -180, 180,
.0000005), mdsys.sdo_dim_element('Y', -90, 90, .0000005)), null);
      insert into user_sdo_geom_metadata values ('CSF_MD_LAND_USES',
'GEOMETRY', mdsys.sdo_dim_array(mdsys.sdo_dim_element('X', -180, 180,
```

```
.0000005), mdsys.sdo_dim_element('Y', -90, 90, .0000005)), null);
  insert into user_sdo_geom_metadata values ('CSF_MD_RAIL_SEGS',
'GEOMETRY', mdsys.sdo_dim_array(mdsys.sdo_dim_element('X', -180, 180,
.0000005), mdsys.sdo_dim_element('Y', -90, 90,.0000005)), null);
  insert into user_sdo_geom_metadata values ('CSF_MD_RD_SEGS', 'GEOMETRY',
mdsys.sdo_dim_array(mdsys.sdo_dim_element('X', -180, 180, .0000005),
mdsys.sdo_dim_element('Y', -90, 90,.0000005)), null);
```

Check Map Display

After the preceding checks, perform a quick check to see if the data is really there.

1. Navigate to the Control Tower in the Field Service application.
2. Select the Map.
3. Enter the user-id/password of the geographical database at the left of the **Init** button.
4. Click **Init**. The Map displays. Should it not be visible select zoom out.

When the map doesn't display at all, the data isn't there.

Step 28: Setup CRM Gateway for Mobile Devices

Make sure you set up CRM Gateway for Mobile Devices as described in *Oracle CRM Gateway for Mobile Devices Implementation Guide*. Ensure that all the steps have been reviewed and completed as necessary.

Step 29: Setup Oracle Field Service/Palm™ Devices

Make sure you set up Oracle Field Service/Palm™ Devices as described in *Oracle Field Service/Palm™ Devices Implementation Guide*. This includes the following setup screens on the CRM Enterprise database:

- Resources Subinventories Assignment
- Configuration Parameters

Step 30: Setup Oracle Field Service/Laptop

Make sure you set up Oracle Field Service/Laptop as described in *Oracle Field Service/Laptop Implementation Guide*. This includes the following setup screens on the CRM Enterprise database:

- Resources Subinventories Assignment
- Agenda Layout
- Configuration Parameters
- Field Service Report Type
- Field Service Report Manager
- User Defined Queries

The following tasks need to be performed on the laptop device:

- Enabling Communication on the Laptop Device

Step 31: Setup Field Service Report

There is no specific setup required for implementing Field Service Report.

Setting Up Field Service

Setting up the Field Service application includes the following setup steps, perform these steps in sequential order:

Step	Description
1. Assign Territories to Planner Groups	Use this Field Service setup screen to connect the groups of service representatives, territories, to the planner groups. These service representatives are shown to the planner in the control tower by default.
2. Resources Subinventories Assignment	Use this setup screen in Field Service > Spares Management to connect sub inventories to service representatives.
3. Generating Shift Tasks	Use this Field Service concurrent program to create departure and arrival tasks for field service representatives based on their shifts. These tasks are used for scheduling
4. Profile Options	Set all the field service specific profile options. Additionally set the following profile options: <ul style="list-style-type: none">■ TCF: HOST■ TCF: PORT

Assign Territories to Planner Groups

This setup screen is used to assign territories to planner groups. Planner groups are a group of resources dedicated to planning and are setup in Resource Management. Territories consist of service representatives and are setup in Territory Management. Once this is setup this is the default group of territories that is shown to a planner group in the Control Tower.

Note: When you have opened the Assign Territories to Planner Groups setup screen you are prompted to select a resource group. Choose the resource group that represents the planner group you want to assign territories to.

Options

Step	Option	Description
1.	Territories	Select a territory from the list of values you want to add to the planner group. You can add multiple territories to a planner group.

Generate Shift Tasks

Generate Shift Tasks is a concurrent program used to create departure and arrival tasks for each service representative. The departure and arrival tasks are used by Scheduler to schedule tasks in between and calculate the travel time and distance in the complete trip. These departure and arrival tasks are created based on the shifts defined for each service representative in Calendar, and normally use the service representatives home address for departure and arrival location.

Run this program for a specific period or choose to run it every night. When running this program for a specific period the Scheduler profile option CSR: Plansope is used to determine the length of the period for which the tasks are created in days. When running this program every night the profile option determines how many days in advance the tasks are created.

Prerequisites

Setup of shifts in Calendar.

Steps

1. From the Navigator, choose **Setup**.

2. Open **Generate Shift Tasks**. The Parameters screen is opened.
3. Enter the **Start date of time frame** if you want to run the program for a specific period. Clear the **Start date of time frame** field if you want to run the program every night.
4. Click **Ok**. The Generate Shift Tasks setup screen is opened.
5. The Parameters field contains the entered start date of time frame or is empty when running the program every night.
6. Click **Languages** to change the language of the created tasks.
7. Click **Schedule**. The Schedule screen is opened.
8. Click **Apply a Saved Schedule** to use the settings of a previous saved schedule.
9. Choose one of the options at **Run the Job**.
10. Click **Help** for assistance.
11. Click **OK** when finished.
12. Click the **Options** button. The Upon Completion screen is opened.
13. Click **Help** for assistance.
14. Click **Submit** when you have finished.

Resources Subinventories Assignment

The resources to subinventories assignment screen is used to connect resources to subinventories. For now resources will be service representatives, in future other type of resources might be available.

Note: The first time this setup screen is opened you will be prompted to select the code that applies for your organization. Make sure you choose the right organization code because you will not be able to change this once you have selected it.

Options

Perform these steps in sequential order.

Note: Updating a record results in the creation of a new record, requery to make the record visible. You cannot delete a record.

Step	Option	Description
1.	Organization: Code	This field is populated with the code that was selected the first time the setup screen was opened.
2.	Organization: Name	The name of the organization will automatically be populated once the code of the organization is selected.
3.	Resource Type	Enter a resource type.
4.	Resource	Select a service representative.
5.	Subinventory	Select the subinventory you want to connect to the service representative. Press OK to save.
6.	Default	Select IN for good subinventory, OUT for bad subinventory and nothing for all other subinventories.
7.	Startdate	Select the date for the assigning to be effective.
8.	Enddate	Select the date for the assigning to end.

Profile Options

The following profile options are unique to Field Service.

Note: The profile options numbered 1 to 4 regarding task statuses have seeded values. There is no immediate need to set these up differently. When a new status flow is implemented these profile options need to be changed to match the change in state transitions.

Profile Options

You can set these options in any sequence.

	Option	Description
1.	CSF: Default New tasks status	Default status that is assigned to a new task.
2.	CSF: Default "In planning" task status	Default status that is assigned to tasks that are set to "In planning" in the Field Service Control Tower.
3.	CSF: Default Assigned task status	Default status that is assigned to tasks that are set to "Assigned" in the Field Service Control Tower.
4.	CSF: Default Cancelled tasks status	Default status that is assigned to tasks that are set to "Canceled" in the Field Service Control Tower.
5.	CSF: Address of the Database machine	Enter the address of the hosting database machine.
6.	CSF: Address of the Map server	Enter the address of the MapXtreme server.
7.	CSF: Database port to receive data	Enter the port number of the hosting database.
8.	CSF: Default travel distance for Time Distance Server	If no geocode exist for a task the value is used as the default travel distance between two tasks. Note: When a value is entered this is always used to indicate travel distance and overrules the capability to calculate it with the Time Distance Server.

	Option	Description
9.	CSF: Default travel duration for Time Distance Server	If no geocode exist for a task the value is used as the default travel duration between two tasks. Note: When a value is entered this is always used to indicate travel duration and overrules the capability to calculate it with the Time Distance Server.
10.	CSF: Last used service area on the map	This value is set automatically to store the last used service area on the map.
11.	CSF: Location Finder Installed	Value set to check if the location finder is installed. It is launched when a location for a task is missing, see profile option CSR: Create location .
12.	CSF: Map Left Top X-coordinate	The top left x-coordinate of the shown area on the Field Service Map. This value is set automatically.
13.	CSF: Map Left Top Y-coordinate	The top left y-coordinate of the shown area on the Field Service Map. This value is set automatically.
14.	CSF: Map Right Bottom X-coordinate	The bottom right x-coordinate of the shown area on the Field Service Map. This value is set automatically.
15.	CSF: Map Right Bottom Y-coordinate	The bottom right y-coordinate of the shown area on the Field Service Map. This value is set automatically.
16.	CSF: Resource progress delay margin	Add a value for the period of time, minutes, a resource is allowed to be late in his trip before it is escalated. This affects the instant shown status of the resources on the Field Service Map.
17.	CSF: SID of the database	Enter the database name.
18.	CSF: Selected territories	This value is set automatically to store the territories selected and show them to the planner when the control tower is started.
19.	CSF: Web server address where the images are stored for the map	Enter the address of the web server where the images are stored. The images are used to show instant status of the resource on the Field Service Map.
20.	CSF: Time distance server calculation factor	If the factor is set the Time Distance Server calculates travel distance and duration faster but less accurate.
21.	CSF: The unit of measure for hour	The setting of the unit of measure for hours must be entered and correspond with the MTL_UNITS_OF_MEASURE. Default setting is HRS (hours).

	Option	Description
22.	CSF: The unit of measure for minutes	The setting of the unit of measure for minutes must be entered and correspond with the MTL_UNITS_OF_MEASURE. Default setting is MIN (minutes).