Oracle® On Track Communication
Installation Guide
Release 1 (1.0)
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Preface

This installation guide provides information and instructions for installing Oracle On Track Communication.

Audience

This document is intended for system administrators or application developers who are installing Oracle On Track. It is assumed that readers are familiar with Web technologies and have a general understanding of Windows and UNIX platforms.

Documentation Accessibility

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Related Documents

For more information, see the following documents in the documentation library:

- Oracle On Track Communication Developer’s Guide
- Oracle On Track Communication Administrator Guide
- Oracle On Track Communication Security Guide
- Oracle On Track Communication Web Client Help
- Oracle On Track Communication Administration Console Help
- Oracle On Track Communication SDK Documentation
- Oracle On Track Communication Analytics Guide
- Oracle On Track Communication Licensing Information
- Oracle On Track Communication Release Notes
### Conventions

The following text conventions are used in this document:

<table>
<thead>
<tr>
<th>Convention</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>boldface</strong></td>
<td>Boldface type indicates graphical user interface elements associated with an action, or terms defined in text or the glossary.</td>
</tr>
<tr>
<td><em>italic</em></td>
<td>Italic type indicates book titles, emphasis, or placeholder variables for which you supply particular values.</td>
</tr>
<tr>
<td><strong>monospace</strong></td>
<td>Monospace type indicates commands within a paragraph, URLs, code in examples, text that appears on the screen, or text that you enter.</td>
</tr>
</tbody>
</table>
Installation Overview

Oracle On Track Communication is a Web-based collaboration solution that helps drive business conversations to decisions by providing a media-rich, real time contextual experience. It enables effective communication through group interactions with active business intelligence, annotated content, voice, video and application sharing. Oracle On Track can be integrated with Oracle Fusion Applications, Oracle Applications Unlimited and Oracle WebCenter to facilitate collaboration of people, documents and gadgets as well as to preserve the context and the history of various conversations.

This chapter provides an overview of the installation of Oracle On Track and outlines the tasks involved in installing and configuring it.

This chapter includes the following sections:

- Installation Topologies
- Installation Roadmap

1.1 Installation Topologies

Oracle On Track can be installed in the following topologies:

- Oracle On Track Single Instance Topology
- Oracle On Track High Availability Topology

1.1.1 Oracle On Track Single Instance Topology

The installation of Oracle On Track Single Instance consists of the following components:

- Oracle Database (RDBMS)
Oracle recommends that you install Oracle Database and the Oracle WebLogic Server on separate computers.

### 1.1.2 Oracle On Track High Availability Topology

Oracle On Track High Availability Topology is made up of the following components:

- Oracle Real Application Clusters Database (Oracle RAC)
- Clustered Oracle WebLogic Servers (WLS Server 01 and WLS Server 02) hosting the deployment of Oracle On Track instances (for example, ontrack01 and ontrack02)
- Load Balancer (Proxy Server)

As this topology is based on high availability, there are two or more Oracle WebLogic Servers and hence multiple Oracle On Track instances. The user requests go through a hardware load balancer. The load balancer routes them to the Oracle WebLogic cluster. The Oracle WebLogic cluster applications interact with the database cluster to service the request.

More information on load balancers is available in the "Load Balancing for EJBs and RMI Objects" section in the *Oracle® Fusion Middleware Using Clusters for Oracle WebLogic Server* guide.

### 1.1.3 Network Considerations

For Oracle On Track Single Instance Topology, the port to which HTTP or HTTPS connections are to be made must be enabled for HTTP access. Ensure that the port is open and available on the server. This port can either be configured in Oracle WebLogic Server or in the front-end proxy server.

Application sharing in Oracle On Track requires User Datagram Protocol (UDP) access. If a proxy server on another host is placed in front of Oracle WebLogic Server, then the network administrator should use Network Address Translator (NAT) for UDP access.

For Oracle On Track High Availability Topology, along with the HTTP port, each Oracle Fusion Applications middle tier must have its own port for application sharing. Each of these ports must be exposed at the load balancer.
For enterprises using browsers other than Microsoft Internet Explorer 8, Oracle recommends that the system used for installation has two Domain Name Server (DNS) resolvable host names assigned to it. The Web browsers limit the number of connections that can be made to a single host name at once. So, having at least two hosts doubles the number of simultaneous connections that are allowed to Oracle On Track. For more information, see Oracle On Track Administrator’s Guide.

### 1.2 Installation Roadmap

The high-level tasks that are required to install Oracle On Track are as follows:

1. Prepare your system for installation. Ensure that your system environment meets the installation requirements for Oracle On Track. For more information on installation requirements, see System Requirements. The Oracle On Track certification information is available at http://support.oracle.com


4. Run the Oracle On Track installer. Oracle On Track can be installed in two modes:
   - Graphical Mode
   - Silent Mode
   For more information, see Running the Installation Program.

5. Install Repository Creation Utility (RCU) for Oracle Database configuration. RCUs need to be installed for creating database schemas. For more information regarding RCU, see Installing Oracle Repository Creation Utility.

6. Create Oracle WebLogic Server Domain. After the installation of Oracle On Track, create a domain for it. For more information, see Creating or Extending a Domain.

7. Configure your Oracle On Track administrator account. Use Oracle WebLogic Scripting Tool (WLST) to set the user name and the password of the administrator account. For more information, see Setting the Oracle On Track Administrator Password.

---

**Important:** Ensure that you note the values of certain variables such as Schema Name, Schema Password, Middleware Home and so on. You will need these values during the installation of Oracle On Track.
Preparation for Installation

This chapter provides the steps to prepare for the installation of Oracle On Track. Ensure that your system environment meets the general installation requirements before installing Oracle On Track.

The following sections describe the installation prerequisites:

- System Requirements
- SSL Configuration
- Installation Steps
- Temporary Disk Space Requirements

### 2.1 System Requirements

Before performing any installation, you should read the system requirements and certification documentation to ensure that your environment meets the minimum installation requirements for the products you are installing. The system requirements for running the installation program are listed in Table 2–1.

#### Table 2–1 System Requirements

<table>
<thead>
<tr>
<th>Category</th>
<th>Requirement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Platform configuration</td>
<td>A supported configuration of hardware, operating system, JDK, and database specific to the product you are installing. For information about other prerequisites and recommendations, see the Certifications tab at <a href="http://support.oracle.com">http://support.oracle.com</a>.</td>
</tr>
<tr>
<td>Character Set AL32UTF8</td>
<td>The database must be in AL32UTF8 set.</td>
</tr>
<tr>
<td>Color bit depth display and size</td>
<td>For Graphical User Interface (GUI) mode installation, 8-bit color depth (256 colors) is required. For console-mode and silent-mode installation, there is no color bit depth requirement.</td>
</tr>
</tbody>
</table>
SSL Configuration

2.2 SSL Configuration

Secure Sockets Layer (SSL) secures communication by providing message encryption, integrity, and authentication.

When a client initiates an SSL session, the server typically sends its certificate to the client. The client verifies that the server is authentic by validating the certificate chain in the server certificate. The server certificate is guaranteed by the certificate authority (CA) who signed the server certificate.

Even though a valid certificate is always preferred, a test or self-signed certificate can be used when the user approves the hosting site. The user is warned if the site's certificate is not valid before the approval.

For non-SSL configured servers, the user is able to approve for the current session but is not be allowed to permanently store the trust relationship. In this way, the security is not compromised as DNS spoofing or cache poisoning can be used to turn any malicious site into approved but unprotected site.
2.3 Installation Steps

The installation of Oracle On Track consists of the following steps:

- Installing Oracle Database
- Installing Oracle Fusion Middleware and Oracle WebLogic Server
- Choosing a Product Installation Directory
- Installing Oracle On Track
- Installing Oracle Repository Creation Utility
- Creating or Extending a Domain

2.3.1 Installing Oracle Database

The configuration of Oracle On Track requires the availability of a supported database. The database must be up and a database instance must be running. It does not have to be on the same machine where you are installing Oracle On Track.

Oracle On Track requires the availability of Oracle Database Enterprise Edition with Oracle Text and Secure Files.

For the latest information about supported databases, see the Certification Tab at http://support.oracle.com

The database must also be compatible with RCU, which creates the schemas for the Oracle On Track.

**Note:** RCU is available only for a Linux or Windows operating system. You can use either the Linux-based RCU or Windows-based RCU to create schemas in any supported database.


2.3.2 Installing Oracle Fusion Middleware and Oracle WebLogic Server

Oracle On Track requires an Oracle Fusion Middleware home with Oracle WebLogic Server on your system. Oracle On Track supports Oracle WebLogic Server 10.3.3 and higher versions.

A Middleware home is a container for the Oracle WebLogic Server home, and, optionally, one Oracle Common home and one or more Oracle homes, with a directory structure as follows:

/middleware_home
  coherence_3.6
  jdk160_21
  jrockit_160.20_1.1.0-2119
  logs
  modules
  wls server_10.3
  oracle_common
  utils
  ECM_Oracle_ONTRACK1
The default Oracle Middleware home is /Oracle/Middleware on Linux and UNIX-based operating system or c:\Oracle\Middleware on a Windows operating system. **MW_HOME** represents the location of a Middleware home in path names. More information on the Oracle Web Logic Server is available at http://www.oracle.com/technetwork/middleware/weblogic/documentation/index.html

For more information about the structure and contents of a Middleware home, see Oracle Fusion Middleware Administrator’s Guide.

### 2.3.3 Choosing a Product Installation Directory

The product installation directory, where you install Oracle On Track, contains all the software components that you choose to install on your computer, including program files and examples.

For example, the default installation directory for Oracle WebLogic Server is **$MW_HOME\wlserver<version>**.

The installation program installs the software components in a product installation directory represented by the **MW_HOME** variable (the default is **Oracle\Middleware**).

### 2.3.4 Installing Oracle On Track

You can run the installation program in the following modes:

- **Graphical Mode**: Graphical-mode installation is an interactive, GUI-based method for installing your software. It can be run on both Windows and UNIX systems. For graphical installation procedures, see Installing in Graphical Mode.

- **Silent Mode**: Silent-mode installation is a non-interactive method of installing your software. You use **.rsp** response file to specify the installation options. You can run silent-mode installation from either a script or from the command line. Silent-mode installation allows you to define the installation configuration only once, and then use that configuration to duplicate the installation on many machines. For more information about silent mode installation, see Installing in Silent Mode.

### 2.3.5 Installing Oracle Repository Creation Utility

You need to install and run the Oracle Repository Creation Utility (RCU) to create a database schema for each Oracle On Track application that you plan to configure.

**Starting RCU**

RCU is available in your shiphome as **rcuontrack_home.zip** for Linux and **rcuontracknt_home.zip** for Windows. Unzip the file and extract the contents to a directory of your choice. Start RCU from the **bin** directory as follows:

On Linux operating systems

```
./rcu
```

On Windows operating systems

```
rcu.bat
```
Creating Schemas

After starting RCU, follow the instructions in Table 2–2 to create schemas.

### Table 2–2 How to Create Schemas

<table>
<thead>
<tr>
<th>No.</th>
<th>RCU Screen</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Welcome Screen</td>
<td>None</td>
</tr>
<tr>
<td>2</td>
<td>Create Repository Screen</td>
<td>Select Create</td>
</tr>
<tr>
<td>3</td>
<td>Database Connection Details Screen</td>
<td>Specify the connection details for your database.</td>
</tr>
</tbody>
</table>
| 4   | Select Components Screen (for Create Operation) | You can either select an existing prefix from the list or create a new prefix.  
If you are creating a prefix, then specify a schema prefix. Select the following components: 
  - Oracle AS Repository Components, AS Common Schemas, Metadata Services  
  - Oracle On Track, On Track Schema  
You must remember the prefix and schema names for the components you are installing. Oracle recommends that you write these values down. |
| 5   | Schema Passwords Screen                        | Specify the passwords for your schema owners.                          |
|     |                                                | You must remember the passwords you enter on this screen; you require this information during the configuration phase of Oracle On Track installation. Oracle recommends that you write these values down. |
| 6   | Map Tablespaces Screen                         | Configure the desired tablespace mapping for the schemas you want to create. |
| 7   | Summary Screen                                 | Review the information on this screen and click Create to begin schema creation. |
| 8   | Completion Summary Screen (for Create Operation) | Oracle recommends that you note the location of the log files. Click Close to dismiss the screen. |

For information about installing and running RCU, see *Oracle Fusion Middleware Repository Creation Utility User’s Guide.*

### 2.3.6 Creating or Extending a Domain

You must create an Oracle WebLogic Server domain if it does not already exist. If you already have a domain, you must extend the domain before it can run the Oracle On Track application. For more information on this, see Creating or Extending a Domain.

### 2.4 Temporary Disk Space Requirements

The installation program uses a temporary directory into which it extracts the files that are needed to install the software on the target system.

Depending on the platform that you are using, the requirement for temporary disk space may vary from 50 to 100 MB. The files in the temporary directory require approximately 2.5 times the space that is ultimately required for the installation.
During the installation process, your temporary directory must contain sufficient space to accommodate the compressed Java Run-time Environment (JRE) bundled with the installation program and a non-compressed copy of the JRE that is expanded into the temporary directory. The extracted files are deleted from the temporary directory after the installation process.
This chapter describes how to run the installation program both in graphical and silent modes.

It consists of the following sections:

- Installing in Graphical Mode
- Installing in Silent Mode

### 3.1 Installing in Graphical Mode

This section describes how to start the installation program in graphical mode in different environments, and describes the sequence of screens that may appear in the installation process, depending on the type of installer that you are using.

**Note:** In order to run the installation program in graphical mode, the console attached to the computer on which you are installing the software must support a Java-based GUI. All consoles for Windows systems support Java-based GUIs, but not all consoles for UNIX and Linux systems do. If you attempt to start the installation program in graphical mode on a system that cannot support graphical display, then the installation program automatically starts in console mode.

This section contains the following subsections:

- Configuration Instructions
- Specify Inventory Location
- Inventory Location Confirmation
- Welcome
- Prerequisite Checks
- Specify Installation Location
- Installation Summary
- Installation Progress
- Installation Complete

### 3.1.1 Configuration Instructions

Start the Configuration Wizard as follows:
1. In Windows, double click **setup.exe** located in the shiphome. The **Welcome** screen opens.

2. In UNIX and Linux, perform the following steps to start the Oracle On Track installer:
   1. Navigate to the directory **Disk1** that has the installer.
   2. Launch the installation:
      
      ```
      ./runInstaller
      ```

3. Specify the path of JDK when prompted.

### Note:

- If you are using Oracle JRockit, you might see a harmless warning during the installation. To avoid this warning, pass `-jreLoc` argument to `./runInstaller`.
- On Linux systems, if you are running the installer with 32-bit JDK in a 64-bit operating system, then run the command `linux32 bash`. Then run the installer.

In UNIX and LINUX, the **Specify Inventory Location** screen opens.

#### 3.1.2 Specify Inventory Location

![Specify Inventory Location](image)

You are starting your first installation on this host. As part of this install, you need to specify a directory for installer files. This is called the "inventory directory". Within the inventory directory, the installer automatically sets up subdirectories for each product to contain inventory data and will consume typically 150 kilobytes per product.

Enter the full path of the inventory directory.
You can specify an Operating System group that has write permissions to the above directory.

- **Inventory Directory**: `/home/nmabab/Oracleinventory`
- **Operating System Group Name**: `g900`

If this is your first Oracle installation on a host that is running UNIX or Linux, then you must use this screen to specify the location of the Oracle inventory directory.

The installer uses the inventory directory to keep track of all Oracle products installed on the computer.

The following table describes the fields on this page.
3.1.3 Inventory Location Confirmation

This dialog box appears only on UNIX and Linux systems. It prompts you to run a shell script that creates the Oracle inventory in the location you specified on the Inventory Location screen.

You must have root privileges to run the script.

If you do not have root privileges, but you want to continue with the installation, then select Continue Installation with Local Inventory.

**Note:** The preferred method of managing your Oracle installations is to create a central inventory directory with the shell script. If you create a central inventory directory, then the next time you install any Oracle software on this machine, the installer automatically locates and updates the inventory without prompting you. The installer uses the inventory to identify what Oracle software is installed. It also saves all your installation log files to the inventory location.

If you do not run the script and use a local inventory, a local copy of the inventory is created for this specific installation only. If you later run the installer to install additional Oracle software, the installer again prompts you to create an inventory.
3.1.4 Welcome

This page introduces you to the Oracle On Track installer and provides two important pieces of information:

- A navigation pane on the left that summarizes the tasks the installer helps you complete. Each item in the navigation pane represents a specific installer screen that prompts you for information required to install the software.

- Information about any prerequisites you might need to perform before continuing with the installation.

Review the information on this screen carefully to be sure you have performed all the necessary prerequisites.
3.1.5 Prerequisite Checks

This screen analyzes the host computer to ensure that certain prerequisites are met. If any of the prerequisite checks fail, then a short error message appears in the bottom portion of the screen. Fix the error and click Retry to try again. If you want to ignore the error or warning messages and continue with the installation, click Continue.

Click Abort to stop prerequisite checking for all components.

**Note:** Before performing any installation you should read the system requirements and certification documentation to ensure that your environment meets the minimum installation requirements for the products you are installing. Both of these documents are available on Oracle Technology Network (OTN).

For more information on system requirements, see System Requirements.

See the Certification Tab at http://support.oracle.com
3.1.6 Specify Installation Location

Use this screen to identify where you want to install Oracle On Track.

The following table describes the fields that appear on this page.

---

**Note:** If you are performing an installation on a Windows operating system, be sure that your directory paths are valid and do not contain double backslashes (\). 

<table>
<thead>
<tr>
<th>Field</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oracle Middleware Home</td>
<td>From the list, select the Oracle Middleware home directory in which you want to install Oracle On Track.</td>
</tr>
<tr>
<td>Oracle Home Directory</td>
<td>Your products are installed in the Oracle home directory. All software binaries reside in this directory, and no runtime process can write to this directory. Specify the directory inside the Oracle Middleware Home where you want to install your products, but note the following:</td>
</tr>
<tr>
<td></td>
<td>■ If you specify a new directory, then it is created inside the Middleware home.</td>
</tr>
<tr>
<td></td>
<td>■ If you specify a directory that already exists (for example, you are reinstalling due to an incomplete previous installation), then it must be inside the Oracle Fusion Middleware home. Ensure that the folder is empty before the installation.</td>
</tr>
<tr>
<td></td>
<td>■ All the binaries are installed into the Oracle Common home.</td>
</tr>
</tbody>
</table>

For more information about the Oracle Fusion Middleware home and the Oracle home requirements, see ‘Oracle Fusion Middleware Directory Structure and Concepts’ in the Oracle Fusion Middleware Installation Planning Guide.
3.1.7 Installation Summary

This screen summarizes the selections you have made during this installation session. It includes the following information:

- The location of your installation.
- The amount of disk space that will be used for the installation.
- The applications that you have selected for installation.

Review the information on this screen carefully, and take one of the following actions:

- If you want to make any changes to the configuration before starting the installation, then use the navigation pane to select the installer screen you want to return to and edit.
- If you are satisfied with the information, then click Install to begin the installation procedure.
- If you want to save this configuration to a text file (called a response file), then click Save. The resulting response file can be used later if you choose to perform the same installation from the command line.
3.1.8 Installation Progress

This screen shows you the progress of the installation.

If you want to quit before the installation is completed, then click Cancel. This results in a partial installation. The portion of the software that was installed on your system before you canceled the installation remains on your system, and you must remove it manually.
3.1.9 Installation Complete

This screen summarizes the installation that was just completed.

If you want to save this summary information to a text file for future reference, then click **Save**.

Click **Finish** to dismiss the screen and end your installation session.

3.2 Installing in Silent Mode

This section describes how to run the installation program in silent mode. Silent-mode installation is a way of setting installation configuration only once and then using those configuration to duplicate the installation on many machines. During installation in silent mode for Oracle On Track, the installation program reads the settings for your configuration from a .rsp file that you create before beginning the installation. The installation program does not display any configuration options during the installation process. Silent-mode installation works on all operating systems.

**Note:** In this section, UNIX conventions (such as backslashes in path names) are used. When entering path names on a Windows system, be sure to use Windows conventions. For example, use backward slashes in path names in UNIX.

Perform the silent mode installation as follows:

1. Locate the `ontrack.rsp` file on your system. It is usually available in your `shiphome` at `Disk1/stage/Response/ontrack.rsp`.

2. In `ontrack.rsp`, set the two parameters as follows:

   ```
   MIDDLEWARE_HOME=/scratch/aime/Oracle/Middleware
   ```
ORACLE_HOME=/scratch/aime/Oracle/Middleware/Oracle_ONTRACK1

3. For UNIX and Linux, perform the installation by using ontrack.rsp with the following command:

```
[ runInstaller | runInstaller.sh ] -jreLoc <path to JDK 6 location> -silent
-responseFile <full path to user modified response file> -invPtrLoc
/var/opt/oracle/oraInst.loc
```

On Solaris, OraInst.loc is located in:

/var/opt/oracle/oraInst.loc

On Linux, OraInst.loc is located in:

/etc/oraInst.loc

If OraInst.loc does not exist in the above paths, then you can create the file in the /var/opt/oracle directory. To create this file on UNIX or Linux, you need root privileges.

4. On Windows, run the following command for silent mode installation:

```
setup -jreLoc <jdk location> -silent -responseFile <full path to user modified ontrack.rsp file> -nocheckForUpdates
```

5. For setting up the central inventory location, exit the installer and run the script located at the following location:

```
Disk1/stage/Response/createCentralInventory.sh inventory_location group_name
```
Working with Managed Servers and Administrative Server

Managed Servers host business applications, application components, Web services, and their associated resources. To optimize performance, Managed Servers maintain a read-only copy of the domain's configuration document. When a Managed Server starts, it connects to the domain's Administration Server to synchronize its configuration document with the document that the Administration Server maintains.

If you have selected Managed Servers, Clusters and Machines in the Select Optional Configuration screen, then the following screens of the configuration wizard appear before the Configuration Summary screen.

- Configure Managed Servers
- Configure Clusters
- Configure Machines
- Assign Servers to Machines
- Target Deployments to Clusters or Servers Screen
- Target Services to Servers or Clusters Screen
4.1 Configure Managed Servers

From this screen, you can add or delete Managed Servers. You can also change the settings for an existing Managed Server.

- **Name**: Valid server names are a string of characters (alphabetic and numeric). The name must be unique in the domain.
- **Listen address**: From the list, select a value for the listen address.
- **Listen port**: Enter a valid value for the listen port to be used for regular, secure requests (through protocols such as HTTP and T3). The default value is the next available listen port. If you leave this field blank, then the default value is used. The valid listen port range is from 1 to 65535.
- **SSL enabled**: Ensure that you enable SSL always because it is required for real-time plugin. By default, SSL is disabled for all new servers.
- **SSL listen port**: This field is enabled only if you selected the SSL enabled check box. Enter a valid value to be used for secure requests (through protocols such as HTTPS and T3S). The default value is the next available listen port. If you leave this field blank, then the default value is used. The valid listen port range is from 1 to 65535.

To add a server, click **Add** and configure the settings for the new server.

To delete a server, select the server and click **Delete**. You can delete only one server at a time.
4.2 Configure Clusters

By creating clusters, you can group Managed Servers such that they operate as a single unit for hosting applications and resources.

Use this screen to add or delete clusters. You can also change the settings for an existing cluster.

- **Name**: Enter a valid name. The name of the cluster must be unique among all component names within the WebLogic domain.
- **Cluster messaging mode**: Select whether the messaging mode is unicast or multicast.
- **Multicast address**: If you select multicast as the cluster message mode, then enter the multicast address for the cluster. This address is used by cluster members to communicate with each other.
- **Multicast port**: If you select multicast as the cluster message mode, enter the multicast port for the cluster. The multicast port is used by cluster members to communicate with each other. The default value is 443.
- **Cluster address**: Enter the addresses for identifying the Managed Servers in the cluster. A cluster address can be one of the following:
  - Comma-separated list of IP addresses or DNS names and ports
  - DNS name that maps to multiple IP addresses
  - `localhost`, DNS name, or IP address if the listen address of all Managed Servers is listening to the same address with unique port numbers

To add a cluster, click **Add** and configure the settings for the new server. For more information, see Appendix A.

To delete a cluster, select the server and click **Delete**.
4.3 Configure Machines

Use this screen to add or delete machines to the cluster, or to modify the settings for an existing machine. Each machine has the following configuration settings:

- **Name**: Enter a valid machine name. The machine name is used to identify the machine within the WebLogic domain. It does not have to match the network name for the machine. The name must be unique among all component names within the domain.

- **Node manager listen address**: Select a value from the list for the listen address used by Node Manager to listen for connection requests. By default, the IP addresses defined for the local system and local host are shown in the drop-down list. The default value is `localhost`. If you specify an IP address for a machine that hosts the Administration Server and you need to access the WebLogic Server Node Manager, then you must disable host name verification.

- **Node manager listen port**: Enter a valid value for the listen port used by Node Manager to listen for connection requests.

- **Post bind GID enabled** (Linux and UNIX machines only): Select this check box to enable a server running on this machine to bind to a UNIX group ID (GID) after it finishes all privileged startup actions. By default, this check box is not selected.

- **Post bind UID enabled** (Linux and UNIX machines only): Select this check box to enable a server running on this machine to bind to a UNIX user ID (UID) after it finishes all privileged startup actions. By default, this check box is not selected.
Post bind UID: (Linux and UNIX machines only) Enter the UID under which a server on this machine runs after it finishes all privileged startup actions. Otherwise, the server continues to run under the account from which it was started. For this setting to take effect, you must select the post bind UID enabled check box.

Select the Machine tab (for Windows) or the UNIX Machine tab (for UNIX and Linux).

Click Add to add a new machine.

Click Delete to delete an existing machine.

4.4 Assign Servers to Machines

Use this screen to assign Oracle On Track instances to each of the systems you defined.

1. In the Machine list box, select the machine to which you want to assign a Oracle On Track (Ontrack1 as shown in the figure) instance.

2. Assign Oracle On Track instance to the selected system in one of the following ways:
   - Double-click the Oracle On Track instance in the Server list box.
   - Select the appropriate WebLogic Server instance in the Server list box and click the right arrow.
   - Hold Shift and click to select multiple servers in the Server list box. Then, click the right arrow.

The name of the Oracle On Track instance is removed from the Server list box and added, below the name of the target machine, in the Machine list box.

3. Click Next.
4.5 Target Deployments to Clusters or Servers Screen

This screen enables you to target your deployments to servers or clusters. The Configuration Wizard automatically takes care of all necessary deployment targeting.

Select **Admin Server**. You do not have to change anything on this screen unless specifically directed to do so.

Click **Next**.
Ensure that you select the Managed Server and then click Select All.

**Note:** If you do not select the managed server in the above screen, then the installation fails and you will have to do a manual clean up.

Click Next.

For more information, see Creating WebLogic Domains Using the Configuration Wizard.
4.6 Target Services to Servers or Clusters Screen

Use this screen to target your services (for example, JMS, JDBC, startup and shutdown classes) to servers or clusters. This enables your applications to use these services.

The Configuration Wizard automatically takes care of all necessary services targeting for administration server. You should not have to change anything on this screen unless specifically directed to do so.

In the left pane, select the server or cluster. Then, click Select All to deploy all the services to the server or the cluster. The Target column in the right pane shows you the servers and clusters to which each service is targeted.

Click Next.

The Configuration Summary screen opens.
A domain is a logically related group of Oracle WebLogic Server resources. It consists of a special Oracle WebLogic Server instance known as Administration Server, which is the central point. You can configure and manage all resources in the domain from the Administration Server. Any additional Oracle WebLogic instances in a domain are known as Managed Servers. You can run Oracle On Track on the Administration Server or on the Managed Servers.

This chapter discusses the process of creating an Oracle WebLogic domain.

This chapter consists of the following sections:

- Configuration Instructions
- Welcome
- Select Domain Source
- Specify Domain Name and Location
- Configure Administrator User Name and Password
- Configure Server Start Mode and JDK
- Configure JDBC Component Schema
- Test Component Schema
- Select Optional Configuration
- Configure Administration Server
- Configuration Summary
- Creating Domain
- Extend an Existing WebLogic Domain

**Note:** If you are using Oracle WebLogic Server for the first time, then follow these steps before you create the domain:

1. Start the Node manager from $Middleware_Home/wlserver_10.3/server/bin/startNodeManager.sh.

2. Set StartScriptEnabled=true and StopScriptEnabled=true in the nodemanager.properties file. The location is $Middleware_Home/wlserver_10.3/common/nodemanager/nodemanager.properties.

5.1 Configuration Instructions

To start the Configuration Wizard, perform the following steps:
Welcome

- The file `config.sh` is located in the following path in UNIX and Linux operating systems:
  
  `<MIDDLEWARE HOME>/wlserver_10.3/common/bin`

  Run `config.sh`.
  ```sh
  sh config.sh
  ```

- The file `config.cmd` is located in the following path in Windows operating systems:
  
  `C:\Oracle\Middleware\wlserver_10.3\common\bin`

  Run the following command:
  ```cmd
  config.cmd
  ```

You can also start the Configuration Wizard from the Start Menu by clicking on **Start, All Programs, Oracle On Track, Home, Configure Application Server**.

The Welcome screen is displayed.

### 5.2 Welcome

The Welcome screen is displayed each time you start the Configuration Wizard.

If you are performing a fresh installation of Oracle WebLogic Server, then select **Create a new WebLogic domain** to create a new WebLogic domain in your projects directory.

Select **Extend an existing WebLogic Domain** if you have an already existing domain with Oracle On Track. If you have selected this option, then see **Extend an Existing WebLogic Domain**.
5.3 Select Domain Source

Select the source from which you want to create your new domain.

Select **Generate a domain configured automatically to support the following products** to create your domain to support selected products. Select **Oracle On Track - 1.0.0.0**, **Oracle JRF - 11.1.1.0**, and any other product for which you need the support.

**Note:** For the Oracle On Track Communication Release 1.0, you should only select **Generate a domain configured automatically to support the following products**.

Select **Base this domain on an existing template** if you want to create your domain based on an existing domain template. Click **Browse** to navigate your directories to find an existing template.
Specify the following information for the domain you are creating:

- Domain name: The name of the domain you want to create. The default name is `base_domain`.
- Domain location: The absolute path to the directory where this domain should be created. The default location is `MW_HOME/user_projects/domains` (on UNIX and Linux) or `MW_HOME\user_projects\domains` (on Windows).

**Note:** On Windows, be sure to include the drive letter when you specify the domain location.
Create a user that will be assigned to the Administrator role of Oracle WebLogic Server.

- **User name**: Specify the administrator name. The default name is `weblogic`.
- **User password**: Specify the password for the administrator. The password must be at least eight characters long and contain at least one number.
- **Confirm user password**: Re-enter the administrator password.
- **Description**: Enter a description for the user. This field is optional.
5.6 Configure Server Start Mode and JDK

In the WebLogic Domain Startup Mode section, select one of the following startup modes:

- Development Mode: This mode should be used while you are developing your applications. Development mode enables you to auto-deploy applications. In this mode, `boot.properties` is used for username and password. Polling is used for application deployment.

- Production Mode: This mode should be used when your application is running in its final form. A production domain uses full security and may use clusters or other advanced features. In this mode, enter the username and password. Polling is not used for application deployment.

In the JDK Selection section, select the recommended JDK for your startup mode from the list of available JDKs, or select Other JDK and click Browse to find another JDK on your system. The recommended JDKs are described in the text for each mode in the WebLogic Domain Startup Mode section.
5.7 Configure JDBC Component Schema

Configure the schema owner and password.

Review the table on this screen and identify which fields you need to modify:

- **Vendor:** Select Oracle from the drop-down list.
- **Driver:** Select Oracle's Driver(Thin) for Service connections; Versions 9.0.1, 9.2.0, 10, 11 from the drop-down list.
- **Schema Owner:** Specify the schema owner for the schema. This schema owner was assigned when you created the schema using RCU. For more information, see Installing Oracle Repository Creation Utility.
- **Password:** Specify the password for the schema. You specified this password when creating the schema using RCU. For more information, see Installing Oracle Repository Creation Utility.
- **DBMS/Service:** Specify the service name for your database. This is the database on which the schema resides.
- **Host Name:** Specify the name of the machine where your database is running.
- **Port:** Specify the database listen port number.
Verify that the connections to your data sources are successful.

5.9 Select Optional Configuration
There are many configuration options available depending on the topology. In a simple installation, you select **Administration Server** as the server for Oracle On Track.

Select any category for which you want to perform custom or advanced configuration. Note that selection of any of these categories is optional, and your domain is created or extended even if you choose not to customize any of these categories.

- **Administration Server**: Select this option to edit your Administration Server settings. You are able to do the following:
  - Change the name of your Administration Server (default is AdminServer).
  - Specify custom port numbers.
  - Configure the Administration Server to accept SSL connections.

- **Managed Servers, Clusters and Machines**: Select this option to add or delete managed servers, clusters, and machines. You can also modify the settings of any existing server, cluster, or machine.

  For more information about these concepts, see "Oracle Fusion Middleware Concepts for All Users" in *Oracle Fusion Middleware Installation Planning Guide*.

- **Deployments and Services**: Select this option to customize how deployments and services are targeted to machines and clusters.

Typically, these screens do not need to be modified unless required. For more information, see *Oracle Fusion Middleware Enterprise Deployment Guide for Oracle WebCenter*.

If you want to run Oracle On Track on a separate server than the administration server, then select both the Deployment Services and Managed Server and cluster options. For more information on this configuration, see Chapter 4, "Working with Managed Servers and Administrative Server".

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**Note:** In the Select Optional Configuration screen, if you have selected **Managed Servers, Clusters and Machines**, then refer **Target Deployments to Clusters or Servers Screen**.
The Administration Server is the primary tool used to manage an Oracle WebLogic Server domain.

One Oracle WebLogic Server instance in each domain is configured as the Administration Server. If you have multiple Oracle WebLogic Server instances, then all the other instances are referred to as Managed Servers. In a domain with only one Oracle WebLogic Server instance, that instance functions both as Administration Server and Managed Server.

- **Name**: Specify the name of your Administration Server. The default name is AdminServer.
- **Listen Address**: Use the list to select an address or range of addresses that the Administration Server listens for events. The default selection is All Local Addresses.
- **Listen Port**: Specify the listen port number. The default port number is 7001. The default port number is 7001.
- **SSL enabled**: Ensure that you always select SSL enabled and specify the SSL Listen Port because SSL is essential for the real-time plugin.
5.11 Configuration Summary

Verify the information on this screen. In the Summary View field, select a category from the list to view information about that category:

- **Deployment**: This option shows the deployments that are configured in each cluster and server. Click the name of a deployment to view detailed information about the selected deployment.

- **Application**: This option shows the applications that are configured in each cluster and server. Click the name of an application to view detailed information about the selected application.

- **Service**: This option shows the services that are configured in each cluster and server. Click the name of a service to view detailed information about the selected service.

- **Cluster**: This option shows the clusters that are configured in this domain and the servers that are configured in each cluster. Click each server name to view information specific to that server.

- **Machine**: This option shows the machines that are configured in this domain and the servers that are configured in each machine. Click each server name to view information specific to that server.

Use the Previous button if you want to return to a previous screen to alter some portion of the configuration.

If everything is correct, then click Create.
5.12 Creating Domain

This screen shows the progress of the domain creation. When it is finished, click Done to dismiss the window.

5.13 Extend an Existing WebLogic Domain

The following screens open if you have selected Extend an existing Weblogic Domain in the Welcome.
5.13.1 Select a WebLogic Domain Directory

Select the domain that you want to extend in the directory screen. Click Next.

5.13.2 Configuration Summary Screen
Check the configuration summary and if everything is satisfactory, then click **Extend**.

### 5.13.3 Extending Domain

This screen shows the progress of domain extension.

When the domain creation process completes, click **Done** to close the Configuration Wizard.
This chapter covers the following sections:

- Setting the Oracle On Track Administrator Password
- Testing the Configuration

### 6.1 Setting the Oracle On Track Administrator Password

After installing Oracle On Track, set the administrator password. You can change the password after the installation. To set the password, the steps are as follows:

1. On UNIX and Linux, if you have deployed the application on administration server, then start the server by running the following script:
   ```sh
   <MW_HOME>/user_projects/domains/base_domain/startWebLogic.sh
   ```

   On Windows, start the admin server by clicking **start --> all programs --> Oracle Weblogic --> User projects --> <domain> --> Start Admin Server for Weblogic Server Domain**.

   If you have deployed the application on a managed server, then ensure that the administration server is running and run the following command on UNIX and Linux:
   ```sh
   ./startManagedWebLogic.sh OnTrackServer
   ```

2. Navigate to the `oracle_common/common/bin` directory in your Oracle WebLogic Server home and run the following commands:
   - On UNIX and Linux, run `wlst.sh`.
   - On Windows, run the following commands:
     ```sh
     MW_HOME/WLSHome/common/bin
     wlst.cmd
     ```

3. Run the `connect()` command to connect to the managed server and enter the following value when prompted.
   ```sh
   connect()
   username:
   password:
   admin server url:
   ```
4. Run the following commands to set the admin password:

```plaintext
custom()
ls();
cd('OnTrack(1.0.0.0).Configuration')
cd ('OnTrack(1.0.0.0).Configuration:type=AdminUser');
set('AdminUserPassword','Pwd');//Pwd is the password that you need to set.
exit();
```

6.2 Testing the Configuration

Once you set the admin password, you need to test the application.

Contact the administration server from the following URL:

`https://machine1.us.oracle.com:443/ontrackAdmin/`

Before you start using Oracle On Track Communication, you must configure your system. For more information, see Oracle On Track Communication Administrator’s Guide.

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**Note:** You must connect to the managed server that has Oracle On Track deployed on it. If you installed Oracle On Track in a managed server, then use the Managed Server host:port.
Deinstalling the Software

This chapter contains the following sections:

- Deinstalling Oracle On Track in Graphical Mode
- Deinstalling Oracle On Track in Silent Mode

### 7.1 Deinstalling Oracle On Track in Graphical Mode

Use the following procedure to deinstall the complete product installation, or individual components, in graphical mode:

1. Shut down any servers that are running. If any of these servers is configured as a Windows service, then stop the service before deinstalling the software.
2. Start the deinstallation program.
   a. On Windows:
      - From the Windows Start menu, choose Start > Programs > Oracle OnTrack > Uninstall Oracle OnTrack.
      - The Oracle Uninstaller Welcome window is displayed.
   b. On UNIX and Linux:
      - Navigate to the following directory.
        Middleware/ORACLE_ONTRACK1/oui/bin
      - Initiate the deinstallation.
        sh runInstaller.sh -d
3. The Welcome screen opens. Click Next.
4. The Deinstall Oracle Home screen opens. Click Next.
5. The Deinstallation Complete Screen opens.
6. Run RCU and ensure that you drop the existing schema in the Create Repository screen. For more information, see Installing Oracle Repository Creation Utility.

### 7.2 Deinstalling Oracle On Track in Silent Mode

Use the following procedure to deinstall Oracle On Track in silent mode:

- On Windows:
1. Remove the application from the domain using console/wlst (or remove the domain itself depending on configuration).


3. Delete the ONTRACK_HOME directory.

   On UNIX and Linux:
   1. Remove the application from the domain using console/wlst (or remove the domain itself depending on configuration).
   2. Run the following command to deinstall:

```
./runInstaller -d -jreLoc /scratch/aime/jdk1.6_64bit/jdk -silent -responseFile (complete path of ontrack_deinstall.rsp)
```

**Note:** When you use `./runInstaller -d` to deinstall Oracle On Track, click Enter to exit once the deinstallation process is over. To avoid this, you may manually pass `-waitForCompletion` parameter as follows:

```
./runInstaller -d -jreLoc /scratch/aime/jdk1.6_64bit/jdk -silent -responseFile (complete path of ontrack_deinstall.rsp) -waitForCompletion
```

**Note:** When you run the deinstallation program in silent mode, no messages are displayed indicating the deinstallation is in progress or has completed successfully, even if errors are encountered.
Sample Oracle On Track High Availability Configuration

This appendix provides an example of installing Oracle On Track in a high availability configuration. This is one way of configuring the Oracle On Track cluster with Oracle WebLogic Server.

The appendix consists of the following sections:
- Requirements
- Installing Oracle On Track High Availability Configuration

A.1 Requirements

Before performing the procedure described in this appendix, ensure that you have performed the following:
- Install Oracle WebLogic Server on all the nodes.
- Ensure that you use the same operating system path on all nodes.

A.2 Installing Oracle On Track High Availability Configuration

The steps to install Oracle On Track High Availability Configuration are as follows:

1. Run `config.sh` on the first node. The Welcome screen opens. For more information, see Welcome.
2. Select the domain source. For more information, see Select Domain Source.
3. Specify the domain name and the location. For more information see Specify Domain Name and Location.
4. Configure administrator user name and password. For more information, see Configure Administrator User Name and Password.
5. Configure server start mode and JDK. Select Production Mode. For more information, see Configure Server Start Mode and JDK.
6. Configure the JDBC Component Schema. For more information, see Configure JDBC Component Schema.
7. Test the Component Schema. For more information, see Test Component Schema.
8. Select the optional configuration. You can either select Administration Server, Managed Servers, Clusters and Machines, and Deployments and Services.
9. Configure Managed Servers. Assign the following values:
10. Configure the clusters.
   Specify Name: OnTrackCluster
   Assign the servers to the clusters:
   ontrack01 OnTrackCluster
   ontrack02 OnTrackCluster

11. Configure the machines.
   Specify Names:
   machine01.us.oracle.com
   machine02.us.oracle.com

   Assign the servers to the machines:
   Admin Server
   machine01.us.oracle.com
   ontrack01
   machine01.us.oracle.com
   ontrack02
   machine02.us.oracle.com

12. Target Deployments to Clusters or Servers. For Oracle On Track Cluster, check Select All.

13. Target Services to Clusters on Servers. For Oracle On Track Cluster, check Select All. For Admin Server, check Select All.

14. Run config.sh on the remaining nodes. Select Create the Domain only. Fill in the database credentials.

15. Start servers on all the machines. Start the Admin Server. Start the Managed Server ontrack01. Start the Managed Server ontrack02.

A.3 Post-Installation Tasks

After installing Oracle On Track in the high availability configuration, perform the following steps:

1. Ensure that Node 1 is up and running.
2. Start the Admin Server.
3. Start the first Managed Server.
4. Enter the following commands using WLST:

```bash
wls:/offline> connect();
Please enter your username [weblogic] :weblogic
Please enter your server URL [t3://localhost:443] :t3://dc6170751.us.oracle.com:7003
wls:/ontrack_domain/serverConfig> custom();
wls:/ontrack_domain/custom> cd ('OnTrack(1.0.0.0).Configuration')
wls:/ontrack_domain/custom/OnTrack(1.0.0.0).Configuration> cd ('OnTrack(1.0.0.0).Configuration:type=Cluster');
wls:/ontrack_domain/custom/OnTrack(1.0.0.0).Configuration/OnTrack(1.0.0.0).Configuration:typ
Use the following format for port settings in the managed servers:

<managed server name>/<Network Bind Address>:<Port to Bind on>, <managed server name>/<Network Bind Address>:<Port to Bind on>, ...

For example:

-waggle.server.backchannel.router.listen.addresses
OnTrack01/machine1:10100, OnTrack02/machine2:10101
-waggle.server.backchannel.router.peer.addresses
OnTrack01/machine1:10100, OnTrack02/machine2:10101
-waggle.server.object.cache.listen.addresses
OnTrack01/machine1:10200, OnTrack02/machine2:10201
-waggle.server.object.cache.peer.addresses
OnTrack01/machine2.us.oracle.com:10200, OnTrack02/adc6170612.us.oracle.com:10201

To set the ports:

set('waggle.server.backchannel.router.listen.addresses', 'OnTrack01/machine1:10100,OnTrack02/machine2:10101')

Note: While setting the ports, note the following points:

- For the **listen** settings, the address of the machine that matches the current one is unavailable. For the **peer** settings, the addresses of the machines that do not match the current address are unavailable.

- In the **listen** settings, you can list a machine more than once. This might be of help in cases where the machine has multiple homes. In the **peer** settings, you can list a machine only once.