



**Installation Guide
Release 9.0**

May 2015

Contents

Introduction	5
System Requirements.....	5
Prerequisites.....	5
Downloading EnterpriseTrack.....	5
Installing EnterpriseTrack Using WebLogic on Windows or Linux	7
Step 1: Configuring the Oracle Database	7
Installing the Oracle Database Client	7
Recommendations for Oracle Database	8
Creating an ETRACK Database.....	8
Creating an Oracle Text Index	9
Step 2: Configuring WebLogic for EnterpriseTrack	9
Setting the System Locale	9
Installing WebLogic	9
Creating a WebLogic Domain	10
Configuring the WebLogic Admin Server	10
Setting Mobile Authentication	11
Starting the WebLogic Admin Server	11
Stopping the WebLogic Admin Server.....	11
Step 3: Installing Oracle HTTP Server (OHS).....	12
Configuring Oracle HTTP Server (OHS)	12
Step 4: Installing a Secure Socket Layer (SSL) Certificate	13
Step 5: Configuring SiteWand	13
Extracting SiteWand File.....	13
Modifying the Site.Properties File	13
Configuring SiteWand	13
Step 6: Installing SiteWand	14
Step 7: Oracle Database Setup Follow-up Steps	14
Step 8: Setting the Daily Job Run Password.....	15
Step 9: SiteWand Procedures	16
Starting SiteWand	16
Stopping SiteWand.....	16
Restarting SiteWand	16
Changing the Database Password of ETRACK Account.....	16
Uninstalling SiteWand.....	16
Installing EnterpriseTrack Using Apache and Tomcat on Linux.....	17
Linux Prerequisites.....	17
Step 1: Installing and Configuring Oracle Database	17
Installing the Oracle Database Client	17
Recommendations for Oracle Database	18
Setting the System Locale	18

Creating an ETRACK Database.....	18
Creating an Oracle Text Index	19
Step 2: Configuring SiteWand	19
Extracting the SiteWand File	19
Modifying the Site.Properties File	20
Step 3: Installing SiteWand	21
Step 4: Oracle Database Setup Follow-up Steps	21
Step 5: Installing Secure Socket Layer (SSL) on Linux	21
Step 6: Setting the Daily Job Run Password.....	22
Step 7: SiteWand Procedures	22
Starting SiteWand on Linux	22
Stopping SiteWand on Linux	23
Restarting SiteWand on Linux.....	23
Restarting Apache as ROOT on Linux	23
Restarting Tomcat as a Regular User	23
Changing the Database Password of the ETRACK Account	23
Uninstalling SiteWand.....	23
Accessing and Customizing EnterpriseTrack.....	25
Accessing the SiteWand Login Page	25
Accessing the EnterpriseTrack Login Page.....	26
Enabling Organization-Specific User Interface Components in EnterpriseTrack	26
Configuring Single Sign-on for Hosted Customers	27
Deploying a Local Online Help.....	27
Frequently Asked Questions	29
For More Information.....	30
Where to Get Documentation.....	30
Where to Get Training	32
Where to Get Support	32
Legal Notices	34

Introduction

Oracle Instantis EnterpriseTrack can be installed on the following operating systems:

- ▶ Windows operating system with WebLogic application server, Oracle HTTP Server (OHS) and an Oracle database.
- ▶ Linux operating system with WebLogic application server, Oracle HTTP Server (OHS) and an Oracle database.
- ▶ Linux operating system with Tomcat and Apache.

In This Section

System Requirements	5
Prerequisites	5
Downloading EnterpriseTrack.....	5

System Requirements

Refer to the *Tested Configurations* document on the OTN website for the minimum hardware requirements and supported versions of operating systems and databases.

Prerequisites

Install the following applications:

- ▶ Oracle RDBMS, with full-text support
- ▶ Oracle WebLogic
- ▶ Oracle Sun Java JDK
- ▶ Oracle HTTP Server

Note: If you are installing EnterpriseTrack in a multilingual environment, ensure that the operating system you are installing EnterpriseTrack on has support for the languages you require. Refer to the documentation provided with your operating system to add the necessary languages.

Downloading EnterpriseTrack

Download EnterpriseTrack as follows:

- 1) Go to Oracle Software Delivery Cloud.

- 2) Download the Instantis EnterpriseTrack R9.0 for <platform> zip file, where Instantis EnterpriseTrack R9.0 for <platform> is the name of the media pack.
- 3) Extract the zip file to a directory.

Note: The directory, into which the zip file contents are extracted, is referred to as the IETRACK_Root directory throughout this install guide.

Installing EnterpriseTrack Using WebLogic on Windows or Linux

This chapter describes how to install and set up EnterpriseTrack using WebLogic.

Note: This section provides guidance for installing SiteWand and EnterpriseTrack in small or medium installations, where only one server is needed. In this case, the SiteWand application is placed directly on the WebLogic admin server. For larger installation or other configurations, including clustering and fault tolerance, refer to the documentation provided by WebLogic. Visit <http://www.oracle.com/technetwork/middleware/weblogic/documentation/index.html>.

In This Section

Step 1: Configuring the Oracle Database.....	7
Step 2: Configuring WebLogic for EnterpriseTrack	9
Step 3: Installing Oracle HTTP Server (OHS)	12
Step 4: Installing a Secure Socket Layer (SSL) Certificate.....	13
Step 5: Configuring SiteWand.....	13
Step 6: Installing SiteWand.....	14
Step 7: Oracle Database Setup Follow-up Steps	14
Step 8: Setting the Daily Job Run Password.....	15
Step 9: SiteWand Procedures.....	16

Step 1: Configuring the Oracle Database

This section describes how to configure the Oracle database. For more details on database versions, refer to the *Tested Configurations* document.

Installing the Oracle Database Client

Refer to the *Tested Configurations* document and install the correct version of the Oracle database client.

Recommendations for Oracle Database

The following settings are recommended for an Oracle database:

Notes:

- If you are not familiar with accessing or administering pluggable databases, Oracle recommends installing Oracle 12C without pluggable database.
 - When you attempt to create a database using Oracle Database 12c, the option to create a pluggable database will be enabled by default. If you do not want to create a container database, deselect the **Create As Container Database** check box during the database creation process. If you create a container database, you must also create a pluggable database on which to install your EnterpriseTrack instance.
-

Character Set Recommendations

For Unicode national language support, the NLS_CHARACTERSET should be set to AL32UTF8 while creating the database. Review this with your database administrator before adapting and implementing it to your environment.

Check the character set by using the following syntax:

```
SQL> select name, value$ from sys.props$ where name = 'NLS_CHARACTERSET';
```

This should return AL32UTF8.

Byte Length Semantics

Check for byte length semantics using the following syntax:

```
SQL> select name, value$ from sys.props$ where name =  
'NLS_LENGTH_SEMANTICS';
```

This should return 'BYTE'.

Creating an ETRACK Database

Create an ETRACK database as follows:

- 1) Log in to the Oracle database as a user with database administration privileges to create users.
- 2) Enter the following command:

```
SQL> @IETRACK_ROOT/utls/etrack.sql
```
- 3) In the directory, IETRACK_ROOT/data, locate the Oracle database dump, mydata.dmp.
- 4) The dmp file must be on the database machine. If the database machine is different from the machine running SiteWand, then copy the mydata.dmp file to the database machine.
- 5) Create a directory on the database machine using the following syntax:


```
SQL> create or replace directory et_dpump_dir as  
'/.../dir_containing_mydata.dmp/';
```

In the command above, replace `/.../dir_containing_mydata.dmp/` with the full name of the directory that contains the `mydata.dmp` file on the database machine.

- 6) Grant read and write access as follows:

```
SQL> grant read, write on directory et_dpump_dir to etrack;
```

- 7) From the command prompt, execute the following syntax:

```
c:\> impdp etrack directory=et_dpump_dir dumpfile=mydata.dmp  
logfile=undump1.log
```

For 12C with pluggable database, replace `etrack` with the full database URL with the pluggable database service name. For example, `etrack/etrack@localhost:1521/pdborcl`

- 8) Drop the directory `et_dump_dir` as follows:

```
SQL> drop directory et_dpump_dir;
```

Creating an Oracle Text Index

To enable document search capabilities in EnterpriseTrack, complete the following steps:

- 1) Set CTXSYS password, and unlock the account.
- 2) In the directory, `IETRACK_ROOT/utls/` locate the SQL script, `OracleTextindex.sql`.
- 3) Edit the script to set values for the database user and database connect string for both `etrack` and `CTXSYS`.
- 4) Log in to the database as the database user created for EnterpriseTrack and run the `OracleTextindex.sql` script.
- 5) Lock the CTXSYS account.

Step 2: Configuring WebLogic for EnterpriseTrack

This section describes how to configure WebLogic for EnterpriseTrack.

Setting the System Locale

In the application server, you must set the **System Locale** to English. To set the locale in the application server, select **Control Panel, Region and Language, Administrative** tab.

To set the language in the database, set the **Language Selection** field to English during installation.

Installing WebLogic

You will need to install WebLogic Generic 12 to deploy EnterpriseTrack. For supported versions, see the Tested Configurations document. Also, consult WebLogic's documentation for installation instructions. Visit

<http://www.oracle.com/technetwork/middleware/weblogic/documentation/index.html>.

Creating a WebLogic Domain

Create a WebLogic domain for EnterpriseTrack, as follows:

- 1) Run the WebLogic Configuration Wizard.

Note: Click **Next** on each wizard dialog box to advance to the next step.

- 2) In the **Welcome** window, select **Create a new WebLogic domain**.
- 3) In the **Select Domain Source window**, accept all default selections.
- 4) In the **Specify Domain Name and Location** window, enter the domain name, and domain location.
- 5) In the **Configure Administrator User Name and Password** window, enter the user name and password information for the administrator.
- 6) In the **Configure Server Start Mode and JDK** window,
 - a. Select **Production Mode** in the left pane.
 - b. Select the appropriate JDK in the right pane.
- 7) Select the **Weblogic Plugin Enabled**, in the **Web Applications** tab of the main SiteWand domain.
- 8) In the **Select Optional Configuration** window, select the **Administration Server** option.
- 9) In the **Configuration Summary** window, click **Create**.
- 10) Click **Done** if available, or continue to the next step.
- 11) In the Creating Domain window, select **Start Admin Server** and click **Done**.
- 12) When prompted, enter the Administrator user name and password created in step 5.
- 13) Navigate to the domain's WebLogic directory and copy the JDBC driver in the **lib** folder.

Configuring the WebLogic Admin Server

To configure the WebLogic admin server, edit the file `bin/setDomainEnv.sh` (for Linux), `bin/DomainEnv.bat` (for Windows) to set the following options:

- ▶ Set the Java heap space for the WebLogic server to: **-Xms256m -Xmx6000m -XX:MaxPermSize=256m**.

Important!: Oracle recommends setting the Java heap space for the WebLogic server to:
-Xms256m -Xmx6000m -XX:MaxPermSize=256m. SiteWand will not install if the Java heap space is not set per the recommendation.

If the WebLogic precompile option is enabled, the WebLogic console displays the following message after precompiling, *Server started in RUNNING mode*. For details on how to enable precompilation, see WebLogic Server documentation.

- ▶ Add the following line to enable the headless mode:
`JAVA_OPTIONS="-java.awt.headless=true"`

Add the following line if you are installing on Windows:

```
set JAVA_OPTIONS=-java.awt.headless=true
```

- ▶ Add the following line if you are installing on Linux and if you are using OAM to provide SAML authentication. The line below also enables the headless mode.

```
JAVA_OPTIONS="-Dweblogic.http.enableRemoteUserHeader=true  
java.awt.headless=true"
```

Add the following line if you are installing on Windows:

```
set JAVA_OPTIONS=-Dweblogic.http.enableRemoteUserHeader=true  
java.awt.headless=true
```

Important: Use this option only if no one has access to the WebLogic machine, and there is an OHS web server proxy in front of the WebLogic machine.

Setting Mobile Authentication

For basic and digest authentication:

1. Search for `enforce-valid` in the file `sitewanddomain/config/config.xml`.
2. Add the following at the end of the `<security-configuration>` block:
`<enforce-valid-basic-auth-credentials>false<enforce-valid-basic-auth-credentials>`

Starting the WebLogic Admin Server

Start the admin server to deploy the EnterpriseTrack application in WebLogic as follows:

- 1) Start **Oracle WebLogic**.
- 2) In the WebLogic console window, enter the WebLogic server administrator user name and password that was specified when creating the WebLogic domain.

Stopping the WebLogic Admin Server

To stop the WebLogic admin server:

- 1) From the **Start** menu, select **Oracle WebLogic, User Projects, Domain**, then **Stop Server**.
- 2) If prompted for a user name and password in the WebLogic console window, enter the WebLogic server administrator user name and password you specified when creating the domain.

Note: The WebLogic console closes automatically when shutdown.

Step 3: Installing Oracle HTTP Server (OHS)

Install the Oracle HTTP server (OHS). For supported version levels, see the Tested Configurations document. For installation instructions, refer to the Administrator's Guide for Oracle HTTP Server document at http://docs.oracle.com/cd/E23943_01/web.1111/e10144/toc.htm

Configuring Oracle HTTP Server (OHS)

Configure Oracle HTTP Server (OHS) for EnterpriseTrack as follows:

- 1) Shut down all applications.
- 2) Modify the OHS httpd.conf file as follows:
 - a. Change the OHS_LISTEN_PORT (listen port) from **7777** to Listen **80**.
 - b. Configure HTTP stream compression by adding the following to the load module section.

```
LoadModule deflate_module
"${ORACLE_HOME}/ohs/modules/mod_deflate.so"
<IfModule mod_deflate.c>
# Compression for saving on transmission-time/bandwidth
SetOutputFilter DEFLATE
SetEnvIfNoCase Request_URI \.(?:gif|jpe?g|png)$ no-gzip dont-vary
SetEnvIfNoCase Request_URI \.(?:exe|t?gz|zip|bz2|sit|rar)$ no-gzip
dont-vary
SetEnvIfNoCase Request_URI \.pdf$ no-gzip dont-vary
SetEnvIfNoCase Request_URI \.avi$ no-gzip dont-vary
SetEnvIfNoCase Request_URI \.mov$ no-gzip dont-vary
SetEnvIfNoCase Request_URI \.mp3$ no-gzip dont-vary
SetEnvIfNoCase Request_URI \.mp4$ no-gzip dont-vary
SetEnvIfNoCase Request_URI \.rm$ no-gzip dont-vary
DeflateFilterNote Ratio ratio
AddOutputFilterByType DEFLATE text/plain text/html
application/postscript
# Some more knobs with their default values (all happen to be max
allowed)
DeflateBufferSize 20000
</IfModule>
# Inode numbers should never be included in ETag for servers in a
cluster
FileETag MTime Size
```
- 3) Add the following to the \$ORACLE_INSTANCE/config/OHS/ohs1/mod_wl_ohs.conf file.

```
<Location /SiteWand>
    SetHandler weblogic-handler
```

```
WebLogicHost localhost
WebLogicPort 7001
</Location>
```

- 4) Disable the SSL Session Cache by commenting out the SSLSessionCache directive in `ssl.conf`.
- 5) Use `opmn` to restart the OHS server.

Step 4: Installing a Secure Socket Layer (SSL) Certificate

EnterpriseTrack works in secure and non-secure modes. Installing a Secure Socket Layer (SSL) with a valid certificate is strongly recommended otherwise communication between the server and browser can be compromised.

Step 5: Configuring SiteWand

If there is an existing installation, associated servers will interfere with resources being configured (such as network port numbers). Ensure that you stop the servers following the associated documentation.

Extracting SiteWand File

Extract the SiteWand file as follows:

- 1) Change directory to `IETRACK_ROOT`.
- 2) Extract the `IETRACK_ROOT/SiteWand-Linux_90_64.zip` or `IETRACK_ROOT/SiteWand-Windows_90_64.zip` file.

Modifying the Site.Properties File

Configure SiteWand by modifying the `site.properties` file as follows:

- 1) Login to the server as a user with Windows administrator privileges.
- 2) In the `IETRACK_ROOT` directory, locate the `site.properties` file.
- 3) Use the appropriate example in the properties file to modify the configuration property specific to the server installation.

Configuring SiteWand

To configure SiteWand:

- 1) Change directory to `IETRACK_ROOT`.
- 2) Run the following command:
`configMiddleTier application` (on Windows)
`perl configMiddleTier.pl application` (on Linux)
- 3) Enter database user and password when prompted.

- 4) (For Windows only) If you are using database 12c or a database that uses service name or RAC, edit the `environment.properties` file:
 - a. Update the DB JDBC connection string URL for the `db.url` property knob.
 - b. Run the following command to update the app:
`%JAVA_HOME%/bin/jar uf SiteWand.war environment.properties`

Step 6: Installing SiteWand

The EnterpriseTrack Server runtime is called SiteWand. Install SiteWand as follows:

- 1) Start the WebLogic Admin Server Console for the domain.
- 2) Select **Lock and Edit** to change the domain.
- 3) Select **Deployments, Install**.
- 4) Select `SiteWand.war` in the directory `IETRACK_ROOT`.
- 5) Select **Next**.
- 6) Select **Install this deployment as an application**.
- 7) Select **Next**.
- 8) In the **Name** field, select a name for the deployment.
- 9) In the **Security** field, select **DD Only: Use only roles and policies that are defined in the deployment descriptors**.
- 10) In the Source accessibility field select **Use the defaults defined by the deployment's targets**.
- 11) Select **Finish**.
- 12) Select **Activate Changes**.
- 13) In **Deployments**, select the deployment and **Start all requests**.

Note: The Admin console will shut down and not be accessible until launched again.

Step 7: Oracle Database Setup Follow-up Steps

Run the following command to load the Java stored procedures into the Oracle database:

- 1) Install Oracle full client on Windows or Linux to ensure that the necessary `loadjava` command is included.
- 2) Change directory to `IETRACK_ROOT`.
- 3) In the `site.properties` file, update the `ORACLE_HOME` property based on the setting during Oracle Client installation in step 1.
- 4) Run the command:
`configMiddleTier.exe oracleJsp` (on Windows)

```
perl configMiddleTier.pl oracleJsp all (on Linux)
```

5) Enter the database user ID and password.

Step 8: Setting the Daily Job Run Password

The EnterpriseTrack application requires an automated scheduled task, **DailyJob.bat** (or **dailyjob.pl**), to be run daily. This job updates the project status based on the associated project dates and their relation to the current date, and sends appropriate notification emails. The daily job is password-protected. The password to run the daily job must be setup using the Configuration Workbench in EnterpriseTrack. For further assistance, contact Oracle Support.

On Windows

A template script to run the daily job is available at IETRACK_ROOT/utls/DailyJob.bat. Edit this file to pass correct values for these parameters to the DailyJob.exe program:

- ▶ **IETRACK_ROOT**: Set this to the full path name to the script file.
- ▶ **daily_job_error_email**: Set this to an email address at which you would like to receive email reporting errors that occur when the Daily Job is run.
- ▶ **hostname[:port]**: Set this to the host name and port number at which the SiteWand server listens. (Contact your application server administrator if you need further assistance).
- ▶ **accountname**: Set this to etrack. In general this would be the name of the SiteWand account in which Etrack is installed.
- ▶ **daily_job_password**: Set this to the Daily Job Password that you configured above.

Configure the Windows Task Scheduler to schedule the DailyJob.bat file for execution once every 24 hours (preferably at night). The Windows Task Scheduler can be accessed from the Windows Control Panel

On Linux

Setup a cron job to run DailyJob.pl once every 24 hours (preferably at night). Here's an example cron entry, which happens to run the script every day at 3:00 AM.

```
00 3 * * * /usr/bin/perl /full-path/DailyJob.pl daily_job_error_email https://hostname[:port]
accountname daily_job_password >> etrack.log 2>&1
```

The parameters in the cron entry are set as follows:

- ▶ **full-path**: Set this to the full path name to the script file.
- ▶ **daily_job_error_email**: Set this to an email address at which you would like to receive email reporting errors that occur when the Daily Job is run.
- ▶ **https://hostname[:port]**: Set this to the host name and port number at which the SiteWand server listens. (Contact your Application server administrator if you need further assistance).
- ▶ **daily_job_password**: Set this to the Daily Job Password that you configured above.
- ▶ **accountname**: Set this to **etrack**. In general this would be the name of the SiteWand account in which Etrack is installed.

Step 9: SiteWand Procedures

This section describes administration procedures for SiteWand.

Starting SiteWand

To start SiteWand, complete the following steps:

- 1) Ensure the database server is started and running.
- 2) Set the SiteWand access passwords. For more information, see topic *Accessing the SiteWand Login Page*.
- 3) Start **Oracle WebLogic, User Projects, Domain, Start Server**.
- 4) If prompted, enter the administrator user name and password you specified when creating the domain in the WebLogic console window.

Stopping SiteWand

Oracle recommends stopping SiteWand before shutting down the database. To stop WebLogic, refer to Stopping the WebLogic Admin Server.

Restarting SiteWand

To restart SiteWand, refer to WebLogic documentation to restart the server.

Changing the Database Password of ETRACK Account

To change the password for the ETRACK database account used by SiteWand:

- 1) Stop SiteWand.
- 2) Change directory to **IETRACK_ROOT**
- 3) Execute the following command:
`configMiddleTier.exe application`
The **SiteWand.war** file will be updated with the new password and must be redeployed.
- 4) Start SiteWand.

Uninstalling SiteWand

To uninstall SiteWand, complete the following steps:

- 1) Follow WebLogic documentation to undeploy the SiteWand.war application and delete the domain directory.
- 2) Restart WebLogic.

Installing EnterpriseTrack Using Apache and Tomcat on Linux

This chapter describes how to install and set up EnterpriseTrack on Linux. On Linux, EnterpriseTrack installation works with:

- ▶ Oracle database
- ▶ Apache
- ▶ Tomcat as the application server

In This Section

Linux Prerequisites	17
Step 1: Installing and Configuring Oracle Database.....	17
Step 2: Configuring SiteWand.....	19
Step 3: Installing SiteWand.....	21
Step 4: Oracle Database Setup Follow-up Steps.....	21
Step 5: Installing Secure Socket Layer (SSL) on Linux.....	21
Step 6: Setting the Daily Job Run Password.....	22
Step 7: SiteWand Procedures.....	22

Linux Prerequisites

The prerequisites for installing EnterpriseTrack on Linux include the following:

- ▶ Oracle database
- ▶ Perl
- ▶ Java JDK from Oracle

For more details, refer to the *Tested Configurations* document for the recommended Java version.

Step 1: Installing and Configuring Oracle Database

This section describes how to configure an Oracle database on Linux.

Installing the Oracle Database Client

Refer to the *Tested Configurations* document and install the correct version of the Oracle database client.

Recommendations for Oracle Database

The following settings are recommended for an Oracle database:

Notes:

- If you are not familiar with accessing or administering pluggable databases, Oracle recommends installing Oracle 12C without pluggable database.
- When you attempt to create a database using Oracle Database 12c, the option to create a pluggable database will be enabled by default. If you do not want to create a container database, deselect the **Create As Container Database** check box during the database creation process. If you create a container database, you must also create a pluggable database on which to install your EnterpriseTrack instance.

Character Set Recommendations

For Unicode national language support, the NLS_CHARACTERSET should be set to AL32UTF8 while creating the database. Review this with your database administrator before adapting and implementing it to your environment.

Check the character set by using the following syntax:

```
SQL> select name, value$ from sys.props$ where name = 'NLS_CHARACTERSET';
```

This should return AL32UTF8.

Byte Length Semantics

Check for byte length semantics using the following syntax:

```
SQL> select name, value$ from sys.props$ where name =  
'NLS_LENGTH_SEMANTICS';
```

This should return 'BYTE'.

Setting the System Locale

The language in the database must be set to English in the **Language Selection** field during installation.

Creating an ETRACK Database

Create an ETRACK database as follows:

- 1) Log in to the Oracle database as a user with database administration privileges to create users.
- 2) Enter the following command:

```
SQL> @IETRACK_ROOT/utls/etrack.sql
```
- 3) In the directory, IETRACK_ROOT/data, locate the Oracle database dump, mydata.dmp.

- 4) The dmp file must be on the database machine. If the database machine is different from the machine running SiteWand, then copy the mydata.dmp file to the database machine.

- 5) Create a directory on the database machine using the following syntax:

```
SQL> create or replace directory et_dpump_dir as  
'/.../dir_containing_mydata.dmp/';
```

In the command above, replace `/.../dir_containing_mydata.dmp/` with the full name of the directory that contains the mydata.dmp file on the database machine.

- 6) Grant read and write access as follows:

```
SQL> grant read, write on directory et_dpump_dir to etrack;
```

- 7) From the command prompt, execute the following syntax:

```
c:\> impdp etrack directory=et_dpump_dir dumpfile=mydata.dmp  
logfile=undump1.log
```

For 12C with pluggable database, replace etrack with the full database URL with the pluggable database service name. For example,
etrack/etrack@localhost:1521/pdborcl

- 8) Drop the directory et_dump_dir as follows:

```
SQL> drop directory et_dpump_dir;
```

Creating an Oracle Text Index

To enable document search capabilities in EnterpriseTrack, complete the following steps:

- 1) Set CTXSYS password, and unlock the account.
- 2) In the directory, IETRACK_ROOT/utils/ locate the SQL script, OracleTextindex.sql.
- 3) Edit the script to set values for the database user and database connect string for both etrack and CTXSYS.
- 4) Log in to the database as the database user created for EnterpriseTrack and run the OracleTextindex.sql script.
- 5) Lock the CTXSYS account.

Step 2: Configuring SiteWand

If there is an existing SiteWand installation, associated servers will interfere with resources being configured (such as network port numbers). Ensure that you stop the servers following the associated documentation.

To configure SiteWand, complete the following tasks:

- ▶ Extracting the SiteWand File
- ▶ Configuring the Site Properties File

Extracting the SiteWand File

Extract the SiteWand file as follows:

- 1) Change directory to IETRACK_ROOT.

2) Untar the IETRACK_ROOT/SiteWand-Linux_90_64.tar.gz file.

Modifying the Site.Properties File

To configure SiteWand, copy the base configuration properties file `linux.properties` located in the `ROOT_DIR/deploy/middleTier/siteProperties/` directory to the `ROOT_DIR/deploy/middleTier/` directory. Rename `linux.properties` to `site.properties`. It specifies properties specific to the server installation.

The `site.properties` file also contains examples to modify the configuration properties. Use the appropriate example to modify the configuration property specific to the server installation. After modifying the `site.properties` file, proceed to Starting SiteWand on Linux.

In the `site.properties` file, modify the following properties:

- ▶ To run the server as a non-root user, set the port number to a value greater than 1024 for the following properties:

- ▶ `BASE_APACHE_SERVER_PORT`
- ▶ `URL_PORT`

Lower-valued port numbers are usually reserved for system services.

- ▶ If you will be running Apache as root and using https, then specify the following property values:

- ▶ `ENABLE_APACHE_SSL=true`
- ▶ `BASE_APACHE_SERVER_AUX_PORT=443`

- ▶ To customize Apache installed as a part of the EnterpriseTrack installation, configure the following properties:

- ▶ `CUSTOM_APACHE_CONFIG_PRE_LOADMODULES`

Enter a filename as the property value.

This file must contain “httpd.conf” compatible commands and will be included just before the first of the `LoadModule` commands is executed. For example, use this feature to load custom Apache modules, such as SSO.

- ▶ `CUSTOM_APACHE_CONFIG_POST_LOADMODULES`

Enter a filename as the property value.

This file must contain “httpd.conf” compatible commands and will be included just after the last of the `LoadModule` commands is executed, and the following “httpd.conf” directives have been executed: `USER`, `GROUP`, `ServerAdmin`, `ServerName` and `UseCanonicalName Off`.

- ▶ `CUSTOM_APACHECTL_CMDS`

Enter a Bourne shell filename as the property value.

The file will be included (sourced) in the `apachectl` file used to start / stop the Apache “httpd” process.

Step 3: Installing SiteWand

Install SiteWand on Linux as follows:

- 1) Change directory to **ROOT_DIR/deploy/middleTier**
- 2) Run the following command to install Apache, Tomcat and SiteWand:
`perl -w configMiddleTier.pl all all`
Install the full client to ensure that the necessary loadjava command is included.
- 3) To make EnterpriseTrack server auto-start on a machine reboot.
 - a. Login as "Root".
 - b. Edit **ROOT_DIR/deploy/middleTier/S99instantisSiteWand**-example to suit your environment and save.
 - c. Copy the edited **S99instantisSiteWand** file to **/etc/init.d** as **/etc/init.d/instantisSiteWand**.
 - d. Link the following rc-files to **/etc/init.d/instantisSiteWand** script.
`/etc/rc{3,5}.d/S99instantisSiteWand` and `/etc/rc{0,1}.d/K99instantisSiteWand`
For example,
`lrwxrwxrwx 1 root root..... /etc/rc0.d/K99instantisSiteWand -> ../init.d/instantisSiteWand`
`lrwxrwxrwx 1 root root..... /etc/rc3.d/S99instantisSiteWand -> ../init.d/instantisSiteWand`

Step 4: Oracle Database Setup Follow-up Steps

If you restore the database from the database dump file `IETRACK_ROOT/data/mydata.dmp` (recommended), then the following steps are not required. Otherwise, upload Oracle java-stored procedures to the Oracle database as follows:

- 1) Change directory to `ROOT_DIR/sitewand/deploy/middleTier`
- 2) Run the command: `perl configMiddleTier.pl oracleJsp all`
- 3) Enter the database user ID and password.

Step 5: Installing Secure Socket Layer (SSL) on Linux

EnterpriseTrack works in secure and non-secure modes. Installing a Secure Socket Layer (SSL) with a valid certificate is strongly recommended, otherwise communication between the server and browser can be compromised.

Set up SSL on SiteWand, as follows:

- 1) Rename the certificate and key as **\$URL_HOST.crt** and **\$URL_HOST.key**, respectively, where:
`$URL_HOST` is the value of the property knob, `URL_HOST`, defined in the `site.properties` file. For example, `etrack.example.com.crt`.

- 2) Install the Apache openssl shared libraries (libssl.so.*), to let SiteWand process SSL.

For more information on download and installation instructions, refer to <http://www.openssl.org/source/>

Note: If you do not use https, then ensure the base href is also configured to http.

Step 6: Setting the Daily Job Run Password

The EnterpriseTrack application requires an automated scheduled task, `dailyjob.pl`, to be run daily. This job updates the project status based on the associated project dates and their relation to the current date, and sends appropriate notification emails. The daily job is password-protected. The password to run the daily job must be setup using the Configuration Workbench in EnterpriseTrack. For further assistance, contact Oracle Support.

Setup a cron job to run `DailyJob.pl` once every 24 hours (preferably at night). Here's an example cron entry, which happens to run the script every day at 3:00 AM.

```
00 3 * * * /usr/bin/perl /full-path/DailyJob.pl daily_job_error_email
https://hostname[:port] accountname daily_job_password >> etrack.log
2>&1
```

The parameters in the cron entry are set as follows:

- ▶ **full-path:** Set this to the full path name to the script file.
- ▶ **daily_job_error_email:** Set this to an email address at which you would like to receive email reporting errors that occur when the Daily Job is run.
- ▶ **https://hostname[:port]:** Set this to the host name and port number at which the SiteWand server listens. (Contact your Application server administrator if you need further assistance).
- ▶ **daily_job_password:** Set this to the Daily Job Password that you configured above.
- ▶ **accountname:** Set this to **etrack**. In general this would be the name of the SiteWand account in which Etrack is installed.

Step 7: SiteWand Procedures

This section describes administration procedures for SiteWand.

Starting SiteWand on Linux

To start SiteWand:

Execute the following command from the directory:

- 1) Change the directory to: `ROOT_DIR/deploy/middleTier`
- 2) Start Apache as root:
`perl launchMiddleTier.pl start apache all`
- 3) Start Tomcat as a regular user:
`perl launchMiddleTier.pl start tomcat all`

- 4) Wait a few minutes for the server startup to complete.
- 5) Set the SiteWand access passwords. For more information, see topic *Accessing the SiteWand Login Page*.

Stopping SiteWand on Linux

Oracle recommends stopping SiteWand before shutting down the database.

To stop SiteWand:

- 1) Change directory to `INSTALL_DIR/sitewand/deploy/middleTier`
- 2) Execute the following command:

```
perl launchMiddleTier.pl stop all all
```

Restarting SiteWand on Linux

Restart the SiteWand server as follows:

Change directory to `INSTALL_DIR/sitewand/deploy/middleTier`

Restarting Apache as ROOT on Linux

Execute the following command:

```
perl launchMiddleTier.pl restart apache all
```

Restarting Tomcat as a Regular User

Execute the following command:

```
perl launchMiddleTier.pl restart tomcat all
```

Changing the Database Password of the ETRACK Account

To change the password for the ETRACK database account used by SiteWand:

- 1) Stop SiteWand.
- 2) Change directory to `IETRACK_ROOT/sitewand/deploy/middleTier`
- 3) Execute the following command:

```
perl configMiddleTier.pl changePassword all
```
- 4) Start SiteWand.

Uninstalling SiteWand

To uninstall SiteWand, complete the following steps:

- 1) Stop SiteWand.

- 2) Delete IETRACK_ROOT and INSTALL_DIR
- 3) Remove the following rc-files:
 - ▶ /etc/rc{3,5}.d/S99instantisSitewand
 - ▶ /etc/rc{0,1}.d/K99instantisSitewand

Accessing and Customizing EnterpriseTrack

This chapter describes how to access the URLs for the following applications:

- ▶ EnterpriseTrack
- ▶ SiteWand

In This Section

Accessing the SiteWand Login Page	25
Accessing the EnterpriseTrack Login Page	26
Enabling Organization-Specific User Interface Components in EnterpriseTrack	26
Configuring Single Sign-on for Hosted Customers.....	27
Deploying a Local Online Help.....	27

Accessing the SiteWand Login Page

The SiteWand backend can be useful for certain maintenance and support activities. During initial installation, you must log in to set a new password as follows:

- 1) Access the backend URL:
`http://<hostname>[:<port>]/SiteWand/Login`

The following SiteWand screen displays.

ORACLE Instantis SiteWand

SiteWand Control Panel

ENGINES

ACCOUNT

INTRO

Set Manage Accounts Password

In order to start using SiteWand, you must provide a password for the manage_accounts account that is used to administrate all other SiteWand accounts on this server.

Enter your new password for the manage_accounts account here. This account can be used to create, delete, and set passwords for other accounts in the system.

Password for manage_accounts

Confirm Password

Password Hint

Password Hint Email

For convenience you may also set the credentials for the etrack account here.

Password for etrack

Confirm Password

Password Hint

Password Hint Email

ok

Copyright © 2000, 2014 Oracle and/or its affiliates. All rights reserved.

- 2) Enter a password for manage_accounts.

25

- 3) Reenter your password.
- 4) Enter your email address and a password hint.
- 5) Enter a login name, password, email address, and password hint for the Etrack account.
- 6) Click **OK**.
- 7) Log out of SiteWand.

Accessing the EnterpriseTrack Login Page

The following URL displays the EnterpriseTrack Login page:

`https://<hostname>[:<port>]/SiteWand/Submission/etrack/login`

To log in to EnterpriseTrack:

- 1) In the **Login ID** field, enter **sys_admin**.
- 2) In the **Password** field, enter **change_on_install**.
- 3) Click the **Login** button. The **Change Password** page displays.
- 4) In the **Change Password** page, enter a new password.
- 5) Reenter the new password.

The Configuration Workbench page displays. The Configuration Workbench allows you to customize EnterpriseTrack for your organization. For further assistance, contact Oracle Support.

Enabling Organization-Specific User Interface Components in EnterpriseTrack

All the images, logos and stylesheets used by EnterpriseTrack are located using a base URL which can be configured using the Configuration Workbench. By default, the base URL points to a server at Oracle. If you want to customize these, you will need to install them on your web server and change the base URL to point to your server as follows:

- 1) Copy to the following folders that are provided in the distribution.
 - ▶ On Windows, unzip the `basehref.zip` to the `DocumentRoot` directory defined in `httpd.conf` for OHS webserver
 - ▶ On Linux, copy the `<customer_name>basehref` folder to `INSTALL_DIR/apache-X/htdocs/Sitewand/public`

For more details on `INSTALL_DIR`, refer to the `linux.properties` file.

- 2) Configure the Base URL Link as follows:
 - a. From the **Administration** module, click on the **Deployment Options** tab.
 - b. Click the **Base URL** link, under **Global Settings**.
 - c. Save the current value of the Base URL as a backup.
 - d. Enter the new value for the Base URL.
 - e. Click **Validate** to test access to an icon.
 - f. Click the **Update** button to set the new Base URL link.

Configuring Single Sign-on for Hosted Customers

EnterpriseTrack uses the SAML 2.0 standard for Single Sign-On authentication. To configure EnterpriseTrack for Single Sign-On, your organization must provide the following entities:

- ▶ Identity provider metadata
The identity provider metadata is provided by the client.
- ▶ The identity provider entity ID
The identity provider entity ID is defined by the identity provider metadata. The entity ID must match the ID set in the application login engine to redirect the user when there is no valid SSO session.
- ▶ The attribute containing the end-user login identifier

Note: The attribute contains a name and a type; and must match exactly. You can send the attribute as a normal attribute or as a SubjectName. The end-user login identifier value is used by the REMOTE_USER variable to access EnterpriseTrack.

After configuring EnterpriseTrack for SSO for your organization, Oracle will provide the hostname of EnterpriseTrack to your organization. You can then log in to EnterpriseTrack using SSO.

Deploying a Local Online Help

By default Oracle Instantis EnterpriseTrack online help is deployed from the Oracle Technology Network site. If you want to deploy the application online help locally, you must download the online help WAR file from the Oracle Technology Network (OTN) website and deploy it in your environment. After you download and deploy the online help, you must specify the URL to access the online help in the Administration module.

You can download the online help WAR file from the following URL:

http://docs.oracle.com/cd/E55237_01/help/war/help.war

To deploy online help locally:

- 1) Download the online help WAR file from the OTN website.
- 2) From the EnterpriseTrack Administrator's console, click the **General Settings** tab.
- 3) Click the **Online Help URL** link.
- 4) In the **Online Help URL** field, enter the alternative URL.
- 5) Click **Update**.
- 6) Extract the contents of the .war file to the folder specified in the Online Help URL field.

Frequently Asked Questions

- 1) What are the disk space requirements for a middle-tier machine?

For more information, refer to the Tested Configurations document.

- 2) How do I get the application images to display?

- a. Right-click on the image that is not shown and select properties.
- b. Ensure that the URL for the image is pointing to the correct server.

- 3) Where are the various log files located? How are these logs rotated?

On Linux, Apache logs are located in the directory, `INSTALL_DIR/apache-X/logs`. Apache logs are rotated using the program “rotatelogs”.

On Linux, Tomcat logs are located in the directory, `INSTALL_DIR/tomcat-X/logs`.

On Windows, refer to the OHS and WebLogic documentation for the location of OHS log files and application-generated log files respectively.

The application log files are typically named `instantisTrace-*`. These log files are periodically rotated, compressed (gzip) and moved to the ‘old-logs’ directory in `INSTALL_DIR` on Linux.

The rotation action simply causes the current log to be switched by renaming it by suffixing a timestamp or a phrase such as “-full” while continuing to write to a newly created log file. The archival or removal of these older rotated log files are up to the administrator and need to be done per the customer’s policies; we recommend keeping each log file for at least a month or more to help with troubleshooting.

- 4) How do I backup the EnterpriseTrack application?

The best practice is to backup the database schema (or the Instance) associated with the application with the help of a database administrator.

- 5) One of the servers is not starting. What are the common problems?

Here are some of the common problems:

- ▶ Check available disk space on the middle-tier machine.
- ▶ Verify that a database connection can be established from the middle-tier machine.
- ▶ Review the logs for the web server, application server and the application.

- 6) The application has stopped sending emails. What are the possible causes?

Check for the following:

- ▶ Ensure that the mail server is up and accessible from the machine where EnterpriseTrack is installed.
- ▶ Review the middle-tier server firewall settings.
- ▶ Review any mail server changes. Update SiteWand with the new mail servers IP address details. To update the mail servers:
 - For Windows, follow the steps in [Configuring SiteWand \(Windows\)](#)
 - For Linux, follow the steps in [Configuring SiteWand \(Linux\)](#)

For More Information

In This Section

Where to Get Documentation	30
Where to Get Training	32
Where to Get Support	32

Where to Get Documentation

Complete documentation libraries for EnterpriseTrack releases are available on the Oracle Technology Network (OTN) at:

<http://www.oracle.com/technetwork/documentation/default-1956119.html>

From this location you can either view libraries online or download them to have local copies. We recommend viewing them from OTN to ensure you always access the latest versions, including critical corrections and enhancements.

EnterpriseTrack is configured to access its help system directly on OTN. However, a downloadable version of the help system is also available on OTN if you need to download, deploy, and access a local copy.

The documentation assumes a standard setup of the product, with full access rights to all features and functions.

The following table describes the core documents available for EnterpriseTrack and lists the recommended readers by role.

Title	Description
<i>EnterpriseTrack User Help</i>	Describes how to work with EnterpriseTrack and provides information to assist users with using EnterpriseTrack features. All users should read this Help.
<i>EnterpriseTrack Administrator's Help</i>	Describes how to work with EnterpriseTrack Administrator's console to manage your deployment and change various aspects of the application. EnterpriseTrack administrator should read this Help.
<i>EnterpriseTrack User Guide</i>	Guides users on how to use the EnterpriseTrack application. All users should read this guide.

Title	Description
<i>EnterpriseTrack Administrator's Guide</i>	Provides detailed information on using the EnterpriseTrack Administrator's console. EnterpriseTrack administrator should read this guide.
<i>EnterpriseTrack Dashboards User's Guide</i>	Provides detailed instruction on using the EnterpriseTrack Dashboards modules to view and generate dashboards. All users should read this guide.
<i>EnterpriseTrack Reports User's Guide</i>	Provides detailed instruction on using the EnterpriseTrack Reports modules to generate standard reports, ad-hoc reports and user-defined reports. All users should read this guide.
<i>EnterpriseTrack Quick Reference Guide</i>	Provides a quick introduction to common EnterpriseTrack tasks. All users should read this guide.
<i>EnterpriseTrack Installation Guide</i>	Provides information on how to install and configure EnterpriseTrack. EnterpriseTrack administrator, network administrator and database administrator should read this guide.
<i>EnterpriseTrack MSP Integration Guide</i>	Provides an overview of MS Project integration for EnterpriseTrack. EnterpriseTrack users who will perform MS Project integration should read this guide.
<i>EnterpriseTrack API Integration Guide</i>	Provides information that allows customers to customize existing third-party integration. Developers interested in customization and existing third-party providers that integrate with EnterpriseTrack should read this book.
<i>EnterpriseTrack Upgrade Guide</i>	Provides a sequence of procedures that must be completed to upgrade to a new version of EnterpriseTrack. EnterpriseTrack administrator and database administrator should read this guide.
<i>EnterpriseTrack Architecture Data Sheet</i>	Provides the server system requirements and the deployment configuration options for EnterpriseTrack.
<i>EnterpriseTrack Tested Configurations</i>	Lists the configurations that have been tested and verified to work with EnterpriseTrack. EnterpriseTrack administrator, network administrator, and database administrator should read this guide.

Title	Description
<i>EnterpriseTrack Cumulative Features Overview Tool</i>	Provides an overview of features and enhancements included in the Oracle EnterpriseTrack product. It is intended solely to help you assess the business benefits of upgrading. All users should read this guide.
<i>EnterpriseTrack Security Guide</i>	Provides guidelines on how to plan your security strategy for EnterpriseTrack. All users, EnterpriseTrack administrators, network administrators and database administrators should read this guide.

Distributing Information to the Team

You can copy the online documentation to a network drive for access by project participants. Each team member can then view or print those portions that specifically relate to his or her role in the organization.

Throughout this documentation, the Security Guidance icon  helps you to quickly identify security-related content to consider during the installation and configuration process.

Where to Get Training

To access comprehensive training for all Primavera products, go to:

<http://education.oracle.com>

Oracle Learning Library

The Oracle Learning Library (OLL) provides online learning content covering Primavera products. Content includes videos, tutorials, articles, demos, step-by-step instructions to accomplish specific tasks, and self-paced interactive learning modules.

To access the learning library's Primavera content, go to:

<http://www.oracle.com/oll/primavera>

Where to Get Support

Access to Oracle Support

Oracle customers have access to electronic support through My Oracle Support. For information, visit <http://www.oracle.com/us/support/contact-068555.html> or visit <http://www.oracle.com/us/corporate/accessibility/support/index.html> if you are hearing impaired.

Using Primavera's Support Resource Centers

Primavera's Support Resource Center provides links to important support and product information. Primavera's Product Information Centers (PICs) organize documents found on My Oracle Support (MOS), providing quick access to product and version specific information such as important knowledge documents, Release Value Propositions, and Oracle University training. PICs also offer documentation on Lifetime Management, from planning to installs, upgrades, and maintenance.

Visit <https://support.oracle.com/epmos/faces/DocumentDisplay?id=1486951.1> to access links to all of the current PICs.

PICs also provide access to:

- ▶ **Communities** are moderated by Oracle providing a place for collaboration among industry peers to share best practices.
- ▶ **News** from our development and strategy groups.
- ▶ **Education** contains a list of available Primavera product trainings through Oracle University. The Oracle Advisor Webcast program brings interactive expertise straight to the desktop using Oracle Web Conferencing technology. This capability brings you and Oracle experts together to access information about support services, products, technologies, best practices, and more.

For more information about working with Support, visit <https://support.oracle.com/epmos/faces/DocumentDisplay?id=888813.2>.

Legal Notices

Oracle Instantis EnterpriseTrack Installation Guide

Copyright © 2000, 2015, Oracle and/or its affiliates. All rights reserved.

Oracle and Java are registered trademarks of Oracle and/or its affiliates. Other names may be trademarks of their respective owners.

This software and related documentation are provided under a license agreement containing restrictions on use and disclosure and are protected by intellectual property laws. Except as expressly permitted in your license agreement or allowed by law, you may not use, copy, reproduce, translate, broadcast, modify, license, transmit, distribute, exhibit, perform, publish or display any part, in any form, or by any means. Reverse engineering, disassembly, or decompilation of this software, unless required by law for interoperability, is prohibited.

The information contained herein is subject to change without notice and is not warranted to be error-free. If you find any errors, please report them to us in writing.

If this is software or related documentation that is delivered to the U.S. Government or anyone licensing it on behalf of the U.S. Government, the following notice is applicable:

U.S. GOVERNMENT END USERS: Oracle programs, including any operating system, integrated software, any programs installed on the hardware, and/or documentation, delivered to U.S. Government end users are "commercial computer software" pursuant to the applicable Federal Acquisition Regulation and agency-specific supplemental regulations. As such, use, duplication, disclosure, modification, and adaptation of the programs, including any operating system, integrated software, any programs installed on the hardware, and/or documentation, shall be subject to license terms and license restrictions applicable to the programs. No other rights are granted to the U.S. Government.

This software or hardware is developed for general use in a variety of information management applications. It is not developed or intended for use in any inherently dangerous applications, including applications that may create a risk of personal injury. If you use this software or hardware in dangerous applications, then you shall be responsible to take all appropriate failsafe, backup, redundancy, and other measures to ensure its safe use. Oracle Corporation and its affiliates disclaim any liability for any damages caused by use of this software or hardware in dangerous applications.

This software or hardware and documentation may provide access to or information on content, products and services from third-parties. Oracle Corporation and its affiliates are not responsible for and expressly disclaim all warranties of any kind with respect to third-party content, products, and services. Oracle Corporation and its affiliates will not be responsible for any loss, costs, or damages incurred due to your access to or use of third-party content, products, or services.