ORACLE

Instantis

EnterpriseTrack

Installation Guide
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Contents

Introduction

You can install Oracle Instantis EnterpriseTrack 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.

Use the following documentation to help you prepare for your installation:

- Tested Configurations

In This Section

System Requirements

Refer to the *Tested Configurations* document 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.

Linux

If you are installing on Linux servers, update the following system settings:

Edit/add the following lines to the file `/etc/security/limits.conf` as root or via sudo to set the open file descriptor limits for any user, e.g. pgbu_app, provisioned to run SiteWand.

```
pgbu_app  soft    nofile    65535
pgbu_app  hard    nofile    65535
```

Downloading Instantis EnterpriseTrack

Download Instantis EnterpriseTrack as follows:

1) Go to Oracle Software Delivery Cloud.
2) Download the media pack zip file for the relevant platform.
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

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

Recommendations for Oracle Database

The following settings are recommended for Oracle database:

> **Note:** 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.

Separation of Duties

If required, you can separate the database administration role and the EnterpriseTrack system administration role, so that the database administrator is not required to share the database password with the system administrator. When the database password is changed, the database administrator can use the below URL to generate an encrypted password by entering a plain text password in the servlet.

http://etrack_host/SiteWand/Encrypt/submit

This new encrypted string can be copied and communicated with the EnterpriseTrack system administrator. The system administrator can then configure system properties with the encrypted string.

TDE

Oracle recommends using TDE with Oracle Wallet, and recommends keeping the Oracle Wallet and TDE keys very secure. Refer to the *Oracle Database Operation Guide* for instructions on how to setup TDE and Key Management for Oracle Database.

Availability

As followed in Oracle Cloud, ensure that the database is replicated, and secure backups are taken frequently (more than 30 days). Oracle recommends using Oracle RAC which has inbuilt features of replication and high availability. This ensures PII data is available once entered and can be retrieved even in case of disaster or server failure.

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 the ETRACK Schema

To create the ETRACK schema:

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/utils/etrack.sql
```

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 to deploy EnterpriseTrack. For supported versions, see the Tested Configurations document. Refer to the WebLogic documentation for installation instructions. Visit **http://www.oracle.com/technetwork/middleware/weblogic/documentation/index.html**.

> **Note**: Always use HTTPS (HTTP Secure) during the deployment of Enterprise track on WebLogic Container. This avoids data being viewed by unwanted party when data is transferred from server to web browser.

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) In the **Web Applications** tab of the main SiteWand domain, select **Weblogic Plugin Enabled**.
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.

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`

> **Important!:** Oracle recommends setting the Java heap space for the WebLogic server to:
> `-Xms256m –Xmx6000m`
> SiteWand will not start 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 headless mode:

  For Linux systems:

  ```
  JAVA_OPTIONS="${JAVA_OPTIONS} -Djava.awt.headless=true"
  Export JAVA_OPTIONS
  ```

  For Microsoft Windows systems:

  ```
  set JAVA_OPTIONS=%JAVA_OPTIONS% -Djava.awt.headless=true
  ```

- If you are using OAM to provide SAML authentication, add the following line. The line below also enables the headless mode.

  For Linux systems:

  JAVA_OPTIONS="${JAVA_OPTIONS} -Dweblogic.http.enableRemoteUserHeader=true"
  Export JAVA_OPTIONS

  For Microsoft Windows systems:

  ```
  Set JAVA_OPTIONS=%JAVA_OPTIONS%
  -Dweblogic.http.enableRemoteUserHeader=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:

I. Search for `enforce-valid` in the file <location of the SiteWand domain>`/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**, and 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 https://docs.oracle.com/middleware/1213/core/WTINS/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 **4443** to Listen **443**.
   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`.

> **Important**: To ensure maximum security, Oracle recommends that you run EnterpriseTrack only over SSL. If required for testing, you can run EnterpriseTrack over unencrypted HTTP. To do this, you must remove the `WEB-INF/weblogic.xml` from the `SiteWand.war` file.

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

Installing a Secure Socket Layer (SSL) with a valid certificate is strongly recommended to ensure that the communication between the server and browser is not compromised.

Step 5: Configuring SiteWand

If there is an existing SiteWand installation, the 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 `SiteWand-Linux_x86_64.zip` or `SiteWand-Windows_x86_64.zip` file.

The extracted files will be under the IETRACK_ROOT directory.

Modifying the Site.Properties File

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

1) In the `IETRACK_ROOT` directory, locate the `site.properties` file.
2) 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.

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: Setting the Daily Job Run Password

The EnterpriseTrack application requires an automated scheduled task, **DailyJob.bat** or **dailyjob.pl**, to 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. Use the Configuration Workbench in EnterpriseTrack to set the daily job password. For further assistance, contact Oracle Support.

On Windows

A template script to run the daily job is available at `IETRACK_ROOT\utils\DailyJob.bat`.

1) Create a file **dailyjobpwd.txt** in the same directory that the cron job will run from (for example, `IETRACT_ROOT\utils\`). This file should be owned by the OS user who will run the cron job.
2) Ensure that only the user running the cron job has permission to read this file.
3) Put the daily job password in this file. Set this to the Daily Job Password that you configured using the Configuration Workbench.
4) Edit this file to pass correct values for these parameters to the `DailyJob.exe`:
   - **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, for example, `Server1.oracle.com`. Contact your application server administrator if you need further assistance.
   - **accountname:** Set this to the SiteWand account name in which Etrack application is installed, for example, etrack.
5) Give the full path to this file on the invocation command in the crontab.

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

> **Note:** An email summarizing the daily job is not sent if the server fails while executing the daily job on Windows.

On Linux

Setup a cron job to run DailyJob.pl once every 24 hours (preferably at night). The following example cron entry runs 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 >> etrack.log 2>&1
```

1) Create a file **dailyjobpwd.txt** in the same directory that the cron job will run from. This file should be owned by the OS user who will run the cron job.
2) Ensure that only the user running the cron job has permission to read this file.
3) Put the daily job password in this file. Set this to the Daily Job Password that you configured using the Configuration Workbench.
4) Edit this file to pass correct values for these parameters to the `DailyJob.pl`:
   - **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.
5) Give the full path to this file on the invocation command in the crontab.

Step 8: SiteWand Procedures

This section describes administrative procedures for SiteWand.

Starting SiteWand

To start SiteWand:

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, see topic Stopping the WebLogic Admin Server.

Restarting SiteWand

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

Uninstalling SiteWand

To uninstall SiteWand:

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

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.

Recommendations for Oracle Database

The following settings are recommended for Oracle database:

Note: 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.

Separation of Duties

If required, you can separate the database administration role and the EnterpriseTrack system administration role, so that the database administrator is not required to share the database password with the system administrator. When the database password is changed, the database administrator can use the below URL to generate an encrypted password by entering a plain text password in the servlet.

http://etrack_host/SiteWand/Encrypt/submit

This new encrypted string can be copied and communicated with the EnterpriseTrack system administrator. The system administrator can then configure system properties with the encrypted string.

TDE

Oracle recommends using TDE with Oracle Wallet, and recommends keeping the Oracle Wallet and TDE keys very secure. Refer to the *Oracle Database Operation Guide* for instructions on how to setup TDE and Key Management for Oracle Database.

Availability

As followed in Oracle Cloud, ensure that the database is replicated, and secure backups are taken frequently (more than 30 days). Oracle recommends using Oracle RAC which has inbuilt features of replication and high availability. This ensures PII data is available once entered and can be retrieved even in case of disaster or server failure.

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

Set the language in the database to English in the **Language Selection** field during installation.

Creating the ETRACK Schema

To create the ETRACK schema:

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/utils/etrack.sql`

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.

Extracting the SiteWand File

Extract the SiteWand file as follows:

1) Change directory to `IETRACK_ROOT`.
2) Untar the `IETRACK_ROOT/SiteWand-Linux_x86_64.zip` 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.

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 are 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
   ```
3) To make EnterpriseTrack server auto-start on 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: Installing Secure Socket Layer (SSL) on Linux

Installing a Secure Socket Layer (SSL) with a valid certificate is strongly recommended to ensure communication between the server and browser is not compromised.

To set up SSL on SiteWand:

1) Rename the certificate as `$URL_HOST.crt` and key as `$URL_HOST.key`, 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, refer to http://www.openssl.org/source/

> **Note:** Ensure the base href is also configured to the protocol used.

Step 5: Setting the Daily Job Run Password

The EnterpriseTrack application requires an automated scheduled task, DailyJob.bat or dailyjob.pl, to 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. Use the Configuration Workbench in EnterpriseTrack to set the daily job password. For further assistance, contact Oracle Support.

Setup a cron job to run `DailyJob.pl` once every 24 hours (preferably at night). The following example cron entry runs 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>> etrack.log 2>&1
```

1) Create a file **dailyjobpwd.txt** in the same directory that the cron job will run from. This file should be owned by the OS user who will run the cron job.
2) Ensure that only the user running the cron job has permission to read this file.
3) Put the daily job password in this file. Set this to the Daily Job Password that you configured using the Configuration Workbench.
4) Edit this file to pass correct values for these parameters to the `DailyJob.pl`:

- **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 the SiteWand account name in which Etrack application is installed, for example, etrack.

1) Give the full path to this file on the invocation command in the crontab.

Step 6: SiteWand Procedures

This section describes administrative 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 Configuring EnterpriseTrack

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

- EnterpriseTrack
- SiteWand

In This Section

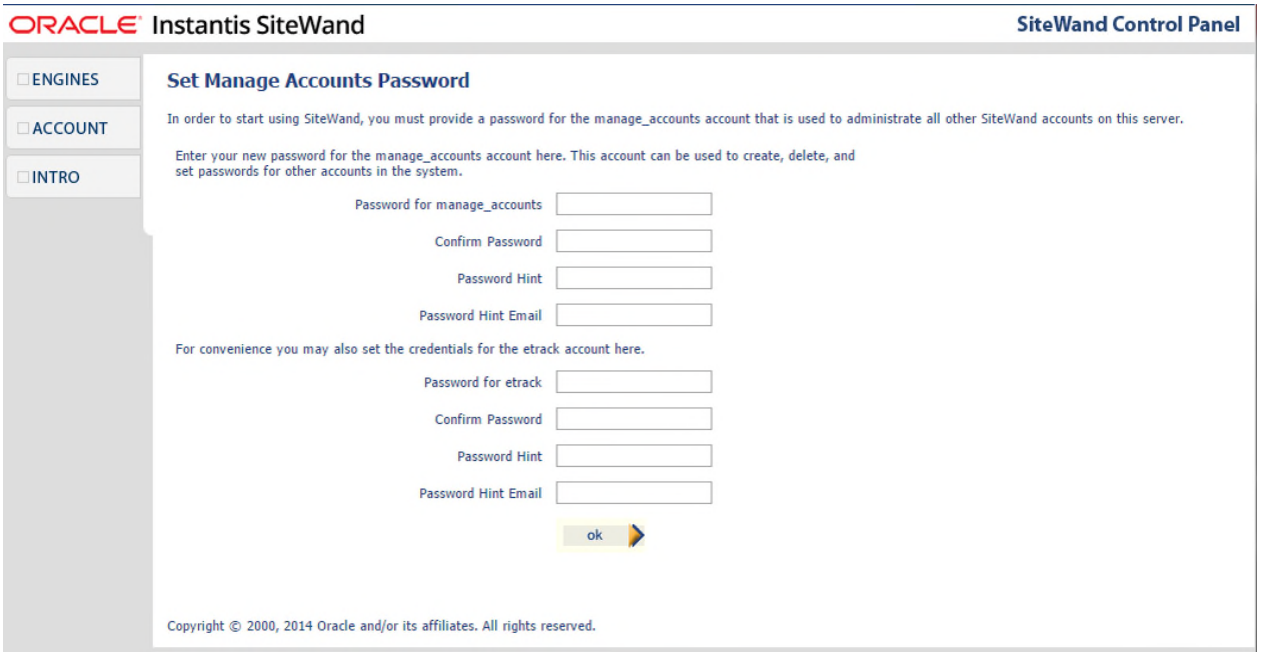
Accessing the SiteWand Login Page

The SiteWand backend is useful when performing maintenance and support activities. During initial installation, you must log in to set a new password as follows:

1) Access the backend URL:

   `https://<hostname>[:<port>]/SiteWand/Login`

   The following SiteWand screen displays:



2) Enter a password for manage_accounts.

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.

Setting the SiteWand Time Zone

When you log in to SiteWand, your time zone is displayed on the SiteWand control panel. If the time zone is not accurate, follow the steps below to set the time zone:

1) Log in to SiteWand.
2) From the **SiteWand Control Panel**, click **Engines**.
3) Click **Account**.
4) From the **Account Settings** page, click **Login Password**.
5) From the **Time zone** drop-down list, select your time zone.
6) Click **OK**.

Importing the SiteWand XML Configuration

You can import the SiteWand configuration using the `EnterpriseTrack.swi` file. This file is part of the Instantis EnterpriseTrack software media pack.

To import the SiteWand XML configuration:

1) Log in to the SiteWand **etrack** account. Use the credentials you set for the **etrack** account.
2) From the **SiteWand Control Panel**, click **Browse** next to the field **Upload Configuration File**.
3) Select the `EnterpriseTrack.swi` configuration file.
4) Click **Upload**.

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.

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. Use the Configuration Workbench to configure your EnterpriseTrack deployment. For further assistance, contact Oracle Support.

Configuring Single Sign-on for Cloud Deployments

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 hosted by Oracle. If you want to deploy the application online help locally, you must download the online help WAR file from the hosted 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. Please note that all the help systems must be deployed in the same environment (locally or on OTN); you cannot have some help systems deployed locally (such as the user help), and others deployed on OTN (such as mobile.)

You can download the online help WAR file from the following URL:
http://docs.oracle.com/cd/E80486-01/help/war/help.war

To deploy online help locally:

1) Download the online help WAR file from the hosted 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)

Legal Notices

Oracle Instantis EnterpriseTrack Installation Guide