

Quest® Stat® 6.0.0

## Install Notes



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## Legend

 **CAUTION:** A CAUTION icon indicates potential damage to hardware or loss of data if instructions are not followed.

 **IMPORTANT, NOTE, TIP, MOBILE, or VIDEO:** An information icon indicates supporting information.

Stat Install Notes -Install Notes  
Updated – March 31, 2017  
Version – 6.0.0

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# Installing Stat

This guide documents the steps necessary to install Quest® Stat® version 6.0.0 on either an Oracle® or a Microsoft® SQL Server® database. The guide is divided into the following sections.

- [Prepare for installation](#)
- [Unpack the 6.0.0 Installer](#)
- [Install the Stat Database](#)
- [Create a Staging Database \(PeopleSoft Only\)](#)
- [Install the Stat Client](#)
- [Configure the Stat Database](#)
- [Update the System Maintenance Table](#)
- [Install the Stat Central Agent](#)
- [Install the Stat Oracle Agent \(Oracle E-Business Suite only\)](#)
- [Configure the SYSTEM user account](#)
- [Update the PS Object Mover Instructions \(PeopleSoft Only\)](#)
- [Implement Stat](#)

The sections are listed in the order that they need to be performed. The Stat Installation CD contains the scripts that are used to build the Stat database. A new database must exist in order to do configurations.

This document assumes the user has a working knowledge of Stat and access to the user manuals, especially *Stat 6.0.0: System Administration Guide*. The section [Configure the Stat Database](#) assumes that data is being created in the new Stat database. However, the instructions could be applied to any Stat database.

# Prepare for installation

- The Stat® Client can be installed as a local installation or a network installation. If the network installation is chosen, each workstation must have a net install of Stat performed on that workstation.
- The user installing or uninstalling the Stat Client must be logged in as an Administrator locally on that server/workstation due to enhanced security on Windows® operating systems.
- Verify the location of the database directories on the server and the instance names (check with your DBA for this information).
- Depending on available resources, the Stat database can reside on the same server as the current PeopleSoft®, Oracle® E-Business Suite, or generic application database, or on a stand-alone server.
- Verify connectivity to the database that was created for Stat:
  - **Oracle:** Oracle client connectivity, compatible to the database version, on all workstations.
  - **SQL Server®:** SQL Server client connectivity, compatible to the database version, on all workstations.
- Ensure that the new Stat databases are included in the Maintenance, Backup and Recovery Strategy for this organization before continuing.

## Installation checklist

The following checklist summarizes the main steps of a complete Stat® installation. After you have performed each task, see [Implement Stat](#) for information on the additional configuration tasks that you will perform to customize your copy of Stat to fit your particular business needs.

### Step

- 1 Verify the location of the database directories on the server and the instance names.
- 2 Verify connectivity to the database created for Stat.
- 3 Verify that the Stat database backup is defined.
- 4 Modify and execute the appropriate database scripts (Oracle/MSS)
- 5 Install the Stat Client application, either locally or over the network
- 6 For PeopleSoft users only, modify and execute the required database scripts and staging database script
- 7 Add a record for the new database to the Stat INI file
- 8 Login in to Stat and update the System Maintenance table with appropriate values including license information

## Step

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- |    |   |
|----|---|
| 9  | Install and configure the Stat Central Agent  |
| 10 | For Oracle E-Business Suite users only, install and configure the Stat Oracle Agent |
| 11 | Configure the SYSTEM user account   |
| 12 | For PeopleSoft users only, update the PS Object Mover Instructions                  |
- 

# Unpack the 6.0.0 installer

The Stat® cd comes with an Autorun executable that launches the installer when the disc is inserted.

If you have downloaded the Stat 6.0.0 zip file from Supportlink, unzip the whole file into a location of your choice. Locate the autorun.exe in the root directory of that location and double-click it to launch the installer.

The installer **Documentation** menu give you access to the following documents:

- **Release Notes** opens Stat\_6.0.0\_Release\_Notes.pdf. Refer to these notes for modifications that may affect daily business processes.
- **Upgrade Notes** opens Stat\_6.0.0\_Upgrade\_Notes.pdf.
- **Install Notes** opens Stat\_6.0.0\_Install\_Notes.pdf.

The installer **Install** menu give you access to the following components:

- **Stat Central Agent** opens the folder containing the Stat Central Agent files for both a standalone and WebLogic platform. See the section [Install the Stat Central Agent](#).
- **Stat Agent for Oracle E-Business Suite** opens the folder containing the Stat Oracle® Agent zip file (*stat\_ora.zip*). See the section [Install the Stat Oracle Agent \(Oracle E-Business Suite only\)](#).
- **Scripts** gives you access to the database scripts.
- **Stat Windows® Client** installs the Stat 6.0.0 Client. See [Install the Stat Client](#).

# Install the Stat database

This section contains instructions for the scripts that need to be run against the Development (optional), and Production databases. The scripts are located under a scripts directory on the Stat® CD. Each script, which is supplied with the Stat Installation CD, must be edited to replace certain variables prior to its execution. Because they perform actions such as granting access to the Stat User ID and creating database objects, the path information supplied in the scripts is critical.

Read all instructions included within the scripts before proceeding with script execution.

**i** **NOTE:** The Stat user password is set in the first new install script. This password can be modified after the installation is completed. At least one administrative user needs to be logged into the Stat application at the time. For more information, see the section Changing the Database Password, in the book, *Stat 6.0.0: System Administration Guide*, Chapter 3, Stat Security.

## Stat on Oracle

- 1 Locate the necessary scripts.

Oracle® install scripts are located in **<target directory>\scripts\Oracle\Install**. Run the first three scripts to create the Stat® database regardless of your change management module. See the comments in each script for a complete description of its purpose.

- [NORAv600-1.sql](#)
- [NORAv600-2.sql](#)
- [NORAv600-3.sql](#)

- 2 Modify the scripts as noted below.

- 3 Execute the appropriate scripts for your development environment using SQL\*Plus or Toad® for Oracle only (Do not use other third-party tools).

**!** **CAUTION:** Each script should be run one-time only.

### NORAv600-1.sql

- 1 Locate the script **NORAv600-1.sql**.
- 2 Find and replace the bracketed variables with the appropriate values from the database pages of the Pre-Installation Checklist completed by the customer:

- Replace **[DATABASENAME]** with the name of the database.
- Replace **[SYSTEMPWD]** with the password of the Oracle® user SYSTEM.
- Replace **[SPOOLPT]** with the directory for the Session Log.
- Replace **[MOUNTPT]** with the directory path for the data file. If possible, spread MOUNTPT over multiple disks.

**i** **NOTE:** We recommend the use of locally managed tablespaces and, if running Oracle 11g or 12c, Automatic Segment Space Management as included in the script.

You must have Automatic Undo Management enabled on your database.

Auto-extensibility is enabled by default in this script. The Database Administrator may choose to alter the Tablespace create statements to disable Auto-extensibility.



## NORAv600-2.sql

- 1 Locate the script **NORAv600-2.sql**.
- 2 Find and replace the bracketed variables with the appropriate values.
  - Replace **[DATABASENAME]** with the name of the database.
  - Replace **[SPOOLPT]** with the directory for the Session Log.

## NORAv600-3.sql

- 1 Locate the script **NORAv600-3.sql**.
- 2 Find and replace the bracketed variables with the appropriate values.
  - Replace **[DATABASENAME]** with the name of database.
  - Replace **[SPOOLPT]** with the directory for the Session Log.

## Execute the scripts

The Stat® database scripts are run via Oracle® SQL\*Plus or Toad™ for Oracle.

- 1 For SQL\*Plus, at the prompt, type: @ <drive:\> <path information>\ <filename>, and press Enter.
- 2 Execute NORAv600-1.sql.
- 3 Execute NORAv600-2.sql.
- 4 Execute NORAv600-3.sql.
- 5 For PeopleSoft users only, execute the appropriate archive table create scripts as documented below.
- 6 Review the database logs and validate that the scripts ran without error.

### Execute required PeopleSoft scripts (PeopleSoft only)

For PeopleSoft® users only, execute the NORAv600ps8x.sql archive table create script. Modify the bracketed variables in a similar manner to the prior mandatory scripts.

### Execute required Oracle E-Business Suite scripts (Oracle E-Business Suite only)

For Oracle® E-Business Suite users only, execute the NORAv600oa.sql script, located in the <target directory>\Scripts\Oracle\Install directory.

## Oracle patch compare support: Stat database (Oracle E-Business Suite Only)

If you are running Oracle® E-Business Suite and plan to use the object compare feature for developer objects (form, form libraries and reports) in patches, the Oracle JVM must be installed with your Stat® Repository. Refer to the Oracle Metalink document appropriate for the Oracle release of your Stat Repository:

- Oracle Note: 457279.1 (11.1.0.x)
- Oracle Note: 1112983.1 (11.2.0.x)
- Oracle Note: 1612279.1 (12.1.0.x)

After installing the Oracle JVM, you need to install the **stat\_db.jar** file, located in the directory, **<target directory>\scripts\Oracle**. To do this, execute the following command, adding the appropriate connection parameters:

```
$>loadjava -user [username]/[password]@[database] -force -resolve stat_db.jar
```



**NOTE:** For Oracle 12c , execute the loadjava command this way:

```
$>loadjava -force -resolve -user [username]/[password]@[database] stat_db.jar
```

After loading the Java® classes, you need to recompile invalid PL/SQL modules in the database by running the script, **utlrp.sql** located in the **<ORACLE\_HOME>\rdms\admin** directory.



**NOTE:** Each Stat Client that will use the object compare feature for developer objects must be properly configured. For more information, see [Oracle developer object compare support: Stat Client](#).

Also, for users who plan to compare form library files that have attached libraries, there are special configuration steps that must be performed. For more information, see [Object compare support for form library files](#).

## Running Stat with multiple Oracle versions

If you have more than one version of Oracle® installed on the same machine, Stat® connects by default to the client that is defined by ORACLE\_HOME.

However, you may select an alternative Oracle client by creating a batch file, for example:

```
set path=D:\oracle\non_default_oracle_client\BIN;%path% start stat.exe
```

This configures Stat to connect to the non-default Oracle client and allows other applications to connect to the version that is defined by ORACLE\_HOME, even if that version is not supported by Stat, such as Oracle 8.

# Stat on SQL Server (2008, 2012, 2014, and 2016)

- 1 Locate the necessary scripts.

SQL Server® install scripts are located in `<target directory>\scripts\MSSQLServer\Install`. Run the following scripts to create the Stat® database regardless of your change management module:

- NMSSv600-1.sql
- NMSSv600-2.sql
- NMSSv600-3.sql
- NMSSv600ps8x.sql

- 2 Check the SQL Server settings. See [SQL Server Settings](#).
- 3 Execute the appropriate scripts for your development environment using SQL Server Management Studio or Toad™ for MSS only (Do not use third-party tools).

**!** **CAUTION:** Each script should be run one-time only.

## SQL Server settings

Each script is divided into functions with a summary at the beginning of each individual script. To quickly go to the function in the script, do a find on Function xx where xx is the function number of interest.

Verify that the server is installed with BINARY collation.

Each new Stat database will require the tempdb to increase data by 75 MB and log by 25 MB (this is coded into the script by modifying the FILEGROWTH parameters).

## NMSSv600-1.sql

- 1 Locate the **NMSSv600-1.sql** script.
- 2 Find and replace the bracketed variables with the appropriate values.
  - Replace **[DATABASENAME]** with the name of the database (the name used on the system that connects to the database).
  - Replace **[DBdirectory]** with the entire path information for the database (Example: **D:\Mssql\data**).
  - Replace **[LOGdirectory]** with the entire path information for the log (Example: **E:\Mssql\log**)

**i** **NOTE:** If the Stat® database is being installed on SQL Server® and the script syntax is checked before running script #1 (before the database is created), error messages will appear that can be ignored. This is because the database is being created in the same script as the USE [DATABASENAME] statements.

## NMSSv600-2.sql

- 1 Locate the **NMSSv600-2.sql** script.
- 2 Find and replace the bracketed variables with the appropriate values.
  - Replace **[DATABASENAME]** with the name of the database (the name used on the system that connects to the database).

## NMSSv600-3.sql

- 1 Locate the **NMSSv600-3.sql** script.
- 2 Find and replace the bracketed variables with the appropriate values.
  - Replace **[DATABASENAME]** with the name of the database (the name used on the system that connects to the database).

## Execute the scripts

- 1 Using SQL Query Analyzer or Toad® for MSS, load and execute the scripts in order.
- 2 Copy the output of the script results to a file and save the file for review.
- 3 Execute NMSSv600-1.sql.
- 4 Execute NMSSv600-2.sql.
- 5 Execute NMSSv600-3.sql.
- 6 For PeopleSoft® users only, execute the appropriate archive table create scripts as documented below.
- 7 Review and save the script output to validate that the scripts ran without error.

## Execute required PeopleSoft scripts (PeopleSoft Only)

If running PeopleSoft®, execute the NMSSv600ps8x.sql archive table create script. Modify the bracketed variables in a similar manner to the prior mandatory scripts.

# Create a staging database (PeopleSoft Only)

Staging databases are used when migrating archive sets from your Stat® database to a PeopleSoft® database. A staging database is essentially a mini-PeopleSoft database with no application data and minimal tools data. Once created it should be maintained and tuned the same as other PeopleSoft databases in your environment.

Depending on the volume of objects moved or number of PeopleSoft tools versions you are supporting, you may decide to have multiple staging databases. This section describes how to create a staging database in Stat.

The staging database can either be a PeopleSoft demo (DEMO) or system (SYS) database. For detailed instructions on creating this database, please see your PeopleSoft Installation and Administration Guide. Financial databases in particular have a large number of tables used for sorting data. These tables can be dropped from the staging database.

Once you have created your AUD, Demo, or System database, execute the appropriate script.

- If running on Oracle®, execute **StageORA855.sql**.
- If running on SQL Server®, execute **StageMSS855.sql**.
- If running on DB2® execute **StageDB2-OS390-855.sql** (for mainframe), or **StageDB2-UNIX-855.sql** (for AIX®/UNIX®).

These scripts complete the creation of a staging database. It is recommended that you create at least two staging databases. You may need to alter this script to match your platform.

**i** **NOTE:** Be aware of the following:

- For each staging database you define in Stat, make sure the **Reload Last Project at Startup** option is deselected for that database in PeopleSoft App Designer. Stat may have difficulty auto-migrating objects from the staging database if this option is selected.
- When migrating archive sets, the base language of the staging database must be the same as the base language of the environment that the archive set came from (i.e., the source). The base language option is specified in the PeopleSoft Environment Connection Maintenance table. For more information, see *Stat 6.0.0: System Administration*, Chapter 4, *General Maintenance Tables*.

## PeopleSoft on Oracle

- 1 Locate the **StageORA855.sql** script.
- 2 Replace the following variables:
  - **[OWNER/PWD@DATABASENAME]** Replace with the correct values for the PeopleSoft® schema owner/password and staging database.

- **[SPOOLPT]** Replace with the directory for the session log.
  - **[PTAPP]** Replace with the tablespace for the staging table
  - **[PSINDEX]** Replace with the tablespace for the staging table indexes
- 3 Run the modified script via Sql\*Plus or Toad® in the PeopleSoft staging database as the PeopleSoft schema owner

## PeopleSoft on SQL Server

- 1 Locate the **StageMSS855.sql** script.
- 2 Find and replace the variable **[DATABASENAME]** with the name of the database.
- 3 Using Enterprise Manager, go into SQL Server® Analyzer from **Tools** on the menu bar.
- 4 Log in as **sa** or a login that is a member of the sysadmin fixed server role or the database owner.
- 5 Open the modified scripts.
- 6 After running each script, copy the output of the script results to a file, and save the file for review.

## PeopleSoft on DB2

Execute the script corresponding to your DB2® platform:

- [Mainframe](#)
- [AIX/UNIX](#)

### Mainframe

- 1 Locate the StageDB2-OS390-855.sql script.
- 2 Find and replace the following variables.

Table 1. Mainframe variables

Variable	Replacement
[DATABASENAME1]	Replace with the name of the database.
[TABLETSPC1]	<p>Replace with the name of the tablespace for the new table STAT_STAGE_CNTRL.</p> <p>Usually use an existing tablespace, so DB2 utilities that run at the tablespace level do not have to be modified for the new tablespace (example: image copy).</p>

Variable	Replacement
[DATABASENAME2]	Replace with the name of the database.
[CREATORID]	Replace with the creator/owner id. Requires the [USERID] to be able to set current sqlid to this [CREATORID] secondary authorization RACF group. Would need to connect [USERID] to the RACF group [CREATORID].
[STOGRPNAME]	Replace with the Stogroup name for the index. Requires the grant GRANT USE OF STOGROUP [STOGRPNAME] TO [CREATORID]

## AIX/UNIX

- 1 Locate the StageDB2-UNIX-855.sql script.
- 2 Find and replace the following variables:

Table 2. AIX®/UNIX® variables

Variable	Replacement
[DATABASENAME]	Replace with the name of the database.
[USERID]	Replace with the correct user access id.
[PASSWORD]	Replace with the correct access password.
[TABLETBSPEC]	Replace with tablespace for the table.
[CREATORID]	Replace with the creator/owner ID of the tables.

## Install the Stat Client

The user performing the installation or de-installation needs to have Administrator privileges due to enhanced security on the Windows® operating system.

- [Local installation](#)
- [Network installation](#)
- [Oracle developer object compare support: Stat Client](#)

# Local installation

1 Unpack the Stat® Installer. See [Unpack the 6.0.0 Installer](#).

2 Click **Install Stat Windows Client**.

**i** **NOTE:** Users installing on Windows Vista® or Windows® 7 may receive security warnings stating that the software publisher cannot be identified or verified. These warnings can be disregarded.

3 Click **Next**.

4 Read and accept the license agreement.

5 Click **Next**.

6 Specify where you want to install the application.

You can keep the default location (**C:\Program Files (x86)\Quest Software**), or if you want to install to a different location, click **Change** and specify the location.

**i** **NOTE:** FDCC regulations stipulate that only administrators be allowed to write to the **Program Files** folder. For this reason, the Stat installer creates an additional documents folder.

- On Windows 7 and higher, this is **C:\ProgramData\Quest Software\Stat\6.0.0**.

This folder is also where the user-editable file **stat.ini** is installed (unless you have additional security installed on your machine, in which case it is hidden), as well as the dictionary files **userdic.tlx** and **correct.tlx**.

7 Click **Next**.

8 Select the type of installation you want.

- **Complete** installs all of the Stat application components. **Complete** is recommended for the initial installation.
- **Custom** allows you to choose from a list of optional components the ones you want to install. **Custom** is recommended on individual workstations where certain components might not be needed.

9 Click **Next**.

If you selected **Custom**, the next window has the User Guide pre-selected. The following components are deselected by default in a custom installation:

- **Network Installation** (*network installations only*) – This option creates the folder under the Stat install directory that contains the setup program users must run for their workstations to connect to a network installation. For more information, see the section, [Network Installation](#) on page 13.
- **System Administrators Guide** – If the user should have access to the System Administration Guide, select this option.
- **PS Object Mover Instructions** (*PeopleSoft users only*) – The PS Object Mover instructions must be selected on at least one workstation in order to update the Stat object that archives PeopleSoft



objects. These instructions are required in order for this object to operate. The instructions are loaded using the Update PS Object Mover utility available under the General Maintenance menu. Deselect on workstations where the user will not have the security to run these instructions.

- 10 If performing a custom installation, select or deselect components, depending on the type of install you want, and click **Continue**.
- 11 In the next window, do one of the following:
  - Click **Next** to install the Stat shortcuts in the default Start menu folder, **Quest Software/Stat 6.0**.
  - Modify the folder name, and click **Next** to install the shortcuts into a different Start menu folder.
- 12 In the next window, click **Install** to begin the installation.
- 13 When prompted, click **Finish** to complete the installation.

## Network installation

Stat® can be installed in one primary network location that users can access remotely. Remote users must install certain files on their individual workstations to run Stat from the primary location.



**NOTE:** Both the network installation of Stat and the installation of files on the workstations of remote users must be performed by an administrator.

### *To install Stat on a network:*

- 1 Run the Stat Client install program at the designated network location and select either the **Complete** installation option, or select the **Custom** install option with the **Network Installation** component.

After the Stat Client has been installed on the primary network location (referred to as <STAT\_HOME>), set up the workstations of each remote user.

### *To set up remote workstations:*

- 1 Map a drive to the primary location of Stat.

To Map Network Drive with UAC on Windows, you may need to start an administrative command prompt and map the drives there using `net use Z:\\server\path`.

- 2 Navigate to <STAT\_HOME>/netinstall on the primary location.
- 3 Run **Setup.exe**.

- Required third party OCX files are loaded to the user workstation with a shortcut to Stat on the primary location.
- The stat.ini file and spelling dictionaries are loaded to **C:\ProgramData\Quest Software\Stat6.x.x** on individual user workstations.
- A blank stat.ini is loaded to this location, or if Stat was previously installed on a lower version, a copy of that stat.ini is moved here.

# Oracle developer object compare support: Stat Client

If you plan to use the object compare feature for Oracle® developer objects (form, form libraries and reports), it is necessary to install Oracle Developer.

The CLASSPATH for the Stat® Client must include one of the following directories to compare forms and form libraries:

- For Oracle E-Business Suite 11i: **\$ORACLE\_HOME/forms60/java/f60jdapi.jar**
- For Oracle E-Business Suite R12: **\$ORACLE\_HOME/forms/java/frmjapi.jar**

The PATH must include **\$ORACLE\_HOME/bin** to compare reports. The version of Oracle Developer should be compatible with the version of objects being compared. For example, with Oracle E-Business Suite, Oracle Developer 6i should be used with at least patchset 15. Please note that the Forms Applet Jar Files component of the Oracle Forms product must be installed. This component is not included with the typical installation.

**i** **NOTE:** In addition to configuring the Stat Client, Oracle E-Business Suite users must set up the Stat database to support the compare feature for developer objects in patches. For more information, see [Oracle Object Compare Support: Stat Database \(Oracle E-Business Suite Only\)](#). Also, for users who plan to compare form library files that have attached libraries, there are special configuration steps that must be performed. For more information, see [Object Compare Support for Form Library Files](#).

## Configure the Stat database

The new Stat® database needs to be configured with basic data before the installation can be verified. For the purposes of an installation, Stat database configuration includes adding the new databases to the Stat INI file and updating the System table with client specific information including the license code. See [Edit the INI file](#).

## Edit the INI file

The Stat® INI Editor is a GUI application designed to create new INI files and edit existing ones. The INI Editor displays all the database profile records contained in the Stat.ini file in an easy-to-read format. For more detailed instructions, see the book, *Stat 6.0.0: System Administration Guide*, Chapter 2, Administrative Utilities.

The Stat.ini file contains the information Stat needs to connect to Stat databases. Stat.ini is located in the Stat version-specific documents folders.

- For Windows Vista® and higher, the location is **C:\ProgramData\Quest Software\Stat\**.

**i** **IMPORTANT:** The stat.ini file may be hidden depending on the file security settings on your computer.

The **Database** tab in the INI Editor lists the database(s) to which Stat can connect. From here you can edit an existing INI file entry or create a new one. The INI Editor helps edit a file by asking for the exact information it needs. For example, if the **DSN** field is not required for a particular database, that field is grayed out.

**To create an INI file entry:**

- 1 Select **File | New**.
- 2 Select **Edit | New Record**.
- 3 Enter the name of the database, and click **OK**.

The Stat INI Editor adds a new database profile to the record sheet.

- 4 In the **DBMS** field, select a DBMS.

The default is Microsoft® SQL Server®. Depending on the DBMS you select, the STAT INI Editor prompts you to define different values.

- 5 Enter the STATLOGIN password in the **Encrypted Login Password** field, either by entering an encrypted password from another stat.ini file or by clicking **Change Password** and entering the STATLOGIN password.
- 6 In the remaining fields, specify additional parameters as needed.
- 7 Select **File | Save as**, and specify a name for the INI file.
- 8 Click **Save**.

The following table contains general database connection settings for the Stat INI Editor. Each record in the Stat INI Editor represents a database in the INI file. For more general information on available DBMS settings, see any of the Environment Connection Maintenance sections in the book see the book, *Stat 6.0.0: System Administration*, Chapter 4, General Maintenance Tables.

**Table 3. General database connection settings for the Stat INI Editor**

<b>Value</b>	<b>Description</b>
DBMS	Database interface identifier. This identifier is DBMS and DBMS release specific.
Server Name (SQL Server) NET_SERVICE_NAME (Oracle®)	The name of the database server that houses the Stat Repository. Formatting for this entry is DBMS-specific.
LoginId	The login ID used for the Stat first-pass login. Not used by all DBMS. This entry should always be STATLOGIN.
Encrypted Login Password	The encrypted password of STATLOGIN. This value can be changed, as described below.
Connect Time Out Secs	Number of seconds to wait for a connection to the database before timing out. Not supported by all RDBMS.

Value	Description
OtherDbParm	Additional database connection parameters, if needed. For Oracle databases that use a comma rather than a period as a decimal separator, enter the value: DecimalSeparator=','.
Unicode	Type Y if you are running Stat on a Unicode database (in order to support PeopleSoft Unicode databases) and the DBMS is SQL Server. Otherwise leave blank.
Enable DB Trace	Configures Stat to write a trace log of all commands. Selecting this option impacts the client application's processing speed and should only be selected if directed to by Support.

## Update the System Maintenance table

After configuring the Stat® database, the next step is to login to Stat for the first time using the special SYSTEM user account and to update the System Maintenance table. The System Maintenance table is where you define global operating parameters for your installed copy of Stat and verify your license. For more information, see the book, *Stat 6.0.0: System Administration Guide*, Chapter 4, General Maintenance Tables.

### *To update the System Maintenance table:*

- 1 Log in to the Stat application with SYSTEM as the user name and no password.
- 2 When prompted, enter a password that is easily remembered.

**!** **CAUTION:** The SYSTEM account is the only way to log into the Stat Client until other users are defined. When prompted for the initial password, enter a password that is easily remembered. A more secure password can be defined later.

Full access to Stat 6.0.0 requires a license key. Until the license key is entered, you can only access the System Maintenance window in the client application.

- 3 Select **Maintenance | General | System Maintenance**.
- 4 In the **General** tab, enter the site name, address, phone number, etc.
- 5 In the **License** tab, do the following to enter the Stat license key:
  - a Enter the License Key and Site Message.
  - b Test the key by clicking **Verify**.

A valid key will include the following License Properties:

- The type of license. Options include Commercial (permanent), Trial (temporary) and Term (a temporary enhancement of licensing rights for commercial users)
- Number of Technical Licenses

- Number of Functional Licenses
- Licensed Modules - a check mark denotes the module is licensed; an X indicates the module is not licensed.

6 (Optional) Change the default Country on the **Other Options** tab. The default is USA.

7 When finished, click **OK**.

At this point, you should not perform any more configuration tasks within the Stat Client application until after you have installed the Stat Central Agent and (for users on Oracle® Applications) the Stat Oracle Agent. Later, once all the necessary components have been installed and configured, you will be instructed to log in again with the SYSTEM account and configure the client application, as described in the section, [Configure the SYSTEM user account](#).

8 Exit the Stat application.

## Install the Stat Central Agent

The Stat® Central Agent is a Java®-based application that contains the business logic for Stat and the UI for Stat Web client.

The following instructions apply to both Windows® and Unix® platforms. Be sure to adjust your path and environment settings to suit your platform. After installation, the startup may report errors. These are often caused by port conflicts. To resolve such conflicts, see [Resolving Port and Firewall Conflicts](#).

Before you install the Stat Central Agent, you may want to log in to the Stat Client and perform certain configuration tasks, such as setting up service domains, defining users, and establishing connections between Stat and your native application environments and ftp file servers. It is not necessary that you configure Stat before installing the Stat Central Agent, but if installing on Windows®, this will allow you to test connectivity parameters. For PeopleSoft® users running on any platform except DB2®, this entails specifying the appropriate values in the **Host Name**, **DB Listener Port**, and (if running PeopleSoft on Oracle®) **Service Name** fields in the PeopleSoft Environment Connection Maintenance table. For more information, see [Implement Stat](#) and the book, *Stat 6.0.0: System Administration*, Chapter 4, General Maintenance Tables.

**i** **NOTE:** If you are running PeopleSoft on a DB2 platform, see [Installing DB2 Support for the Stat Central Agent](#) for additional information.

## Installing the Stat Central Agent on the standalone platform

Stat® provides a platform on which you can install the Stat Central Agent, referred to as the standalone platform.

You need to have a Java® Development Kit (Java SDK) 7 or 8 installed and a system variable called **JAVA\_HOME** that points to the JDK installation root directory (e.g., **C:\Program Files (x86)\Java\jdk1.7.0\_25**).

If you are running Windows® or Solaris and Java® is not installed, or if you have an older version of Java installed, go to <http://www.oracle.com/technetwork/java/javase/downloads/index.html> and download the appropriate version. If running HPUX, go to <http://www.hp.com/go/java/>.

**!** **CAUTION:** If running on a 64-bit environment, make sure the JDK installation root directory does not include spaces. The Stat Central Agent cannot run if it does.

### ***To install the Stat Central Agent:***

- 1 Insert the Stat CD.

The Stat Autorun program launches automatically.

- 2 Click **Install Stat Central Agent**.

Autorun opens the **stat\_server** folder, which contains the subfolder, **standalone**.

- 3 Open the standalone folder, locate the file **stat\_standalone.zip**, and unzip to the desired location on the host computer where you want to install the Stat Central Agent.

An example for Windows® might be **c:\stat**; on Unix®, this might be **/usr/local**. The location you choose for the installation is referred to as <STAT\_HOME>. Use Winzip® to unpack the file on Windows or the unzip utility on Unix.

**i** **NOTE:** Do not unzip the file **stat\_standalone.zip** file to a directory that contains an exclamation point character (!). For Unix, use the **-a** modifier to unzip the file.

If copying the installation files to a Unix system, be sure the file transfer settings are set to **binary** as opposed to **ascii**.

- 4 Create a system environment variable called **STAT\_HOME** with a value of <STAT\_HOME> from the above step.

**i** **NOTE:** Do not add a backslash character (\) to the end of the **STAT\_HOME** variable.

To run the Stat Central Agent as a Windows Service instead, see [Configuring the Stat Central Agent as a Windows Service](#). We recommend that you first configure and test the agent before creating the service.

- 5 Configure the Stat Central Agent as required by your environment.

These issues are documented in [Configuring the Stat Central Agent on the Standalone Platform](#). Note that while you can address some configuration issues after you have completed installing the Stat Central Agent, you should address others before you proceed to the next step in the installation. These particular issues are documented in the subsection [Before Starting the Stat Central Agent](#).

- 6 Use **run.bat** or **run.sh** to start the Stat Central Agent **NOT** as a service.

If you have configured the Stat Central Agent to run as a Windows service, use the Windows Service interface to start the agent. Otherwise, this is the typical command to start the server:

- Windows: `<STAT_HOME>\app\bin\run.bat`
- Unix: `<STAT_HOME>/app/bin/run.sh`

**i** **NOTE:** If you have port conflicts during startup, the server will display one or more error messages. For instructions on resolving port conflicts, see [Resolving Port and Firewall Conflicts](#).  
Optionally you may set the `STAT_HOME` and `JAVA_HOME` variables in `standalone.conf.bat` or `standalone.conf` file instead of defining system environment variables.

- 7 Wait for the Stat Central Agent startup process to complete

In the server console, you will see the line, **Stat Configuration Assistant is ready**.

- 8 Open your internet browser and go to `http://<stat_server_host_machine>:8080/stat-config`.

This opens the Configuration Assistant that guides you through the process of configuring the Stat database and the database type-mapping.

**!** **CAUTION:** If you are not running the agent from the local computer (i.e. Telnet session), you must add the IP address to `<STAT_HOME>/config/stat-config.properties` or you will not have access to the Configuration Assistant. See [Authorize Access to the Configuration Page](#).

- 9 In the **Type/Vendor** field, select the database platform you are using. Options include **Oracle** or **SQL Server**.

- 10 Enter appropriate information for the Stat database: **Host Name**, **Port**, **DB/Service Name**, **Login ID**, and **Password**.

- 11 For SQL Server users who have installed multiple instances of SQL Server, specify which instance the Stat Central Agent is running on in the **Properties** field. Also for users who have ssl enabled for SQL Server, include `ssl=require` in the Properties field. If you have more than one property, you can use semicolons between different properties. For example, if you are using an instance and also have ssl enabled, you can specify `ssl=require;instance=database_instance_name;` in the **Properties** field.

This field flexes to **TNS Entry** for Oracle users.

For RAC environments, paste the TNS entry for the Stat database in this field. Remove any spaces and any line feeds or carriage returns from the TNS string so that it is one long line.

- 12 Choose desired logging setting for the user interface and for the Stat Central Agent application. The default is **INFO**.

- 13 Optionally, specify a session timeout parameter.

The default value is 20 minutes. You can specify any value from 1 minute to 2880 minutes, but be aware that setting higher values may negatively affect performance.

14 Click **Save**.

Stat verifies that the Stat database parameters you entered are correct.

## Configuring the Stat Central Agent on the Standalone Platform

Refer to the following sections for information on the number of ways you can configure the Stat Central Agent on the standalone platform:

- [Before starting the Stat Central Agent](#)
- [Resolving port and firewall conflicts](#)
- [Stopping the Stat Central Agent](#)
- [Configuring the Stat Central Agent as a Windows service](#)
- [Installing DB2 Support for the Stat Central Agent](#)
- [Configure the Stat Central Agent character map](#)
- [Setting up support for AES256 Ciphers for SFTP](#)
- [Configure Web Client to use HTTPS](#)
- [Connection pool idle time](#)
- [Installing multiple servers on one host computer](#)



**NOTE:** Before making any configuration changes, be aware of the following:

- If customizations are needed (such as hard coding the location of JAVA\_HOME or <STAT\_HOME>), then the modifications should be made to standalone.conf or standalone.conf.bat
- <STAT\_HOME>/app/bin/service/service.bat is used to start the service. It calls run.bat. See section [Configuring the Stat Central Agent as a Windows Service](#) for more information. It is recommended that you validate that the agent will start without the service before invoking the service operation.

### Before starting the Stat Central Agent

The following are configuration issues you may need to address while installing the Stat® Central Agent but before starting it for the first time. After reviewing and addressing these issues, you can resume the installation as documented in the section [Install the Stat Oracle Agent \(Oracle E-Business Suite only\)](#).



## Restore custom reports

If you have custom report definitions to carry over to 6.0.0, copy the `<STAT_HOME>\report\custom\format` folder from its 5.8.x location, and paste it to the new 6.0.0 `<STAT_HOME>` directory. Then remove any files with a `.jasper` extension for the **Custom** folder.

## Authorize access to the Configuration page

To authorize access to the configuration page, you as a Stat administrator need to edit the `stat-config.properties` file in `<STAT_HOME>/config`. The privilege to modify the configuration is administered using the IP address of the computer. You can grant user permission to change the configuration by adding the computer IP address to the list of the **property auth.user.ip** (IPV4 and IPV6 formats are supported). For example, you can grant user John the permission by appending his computer IP address (e.g. 192.168.244.130) to the list. You can add multiple IPs to the list and use a comma to separate them. After you complete editing the `stat-config.properties` file, change its permission so no other users can view or edit it.

## Table or View Does Not Exist error

Generic applications and Oracle E-Business Suite users may see a **table or view does not exist** error message in the Stat Central Agent log file after migrating a database object. This error is due to a query against a test table that is normally present in PeopleSoft® installations, and while it does not affect the migration, to avoid receiving this message, open the `stat.properties` file in `<STAT_HOME>/config` and locate the following variable,

`TestTableName=PSOBJGROUP`. Set this variable to the name of a table in the database you are working in, for example, `TestTableName=DUAL`.

## Change the default timeout setting

The default timeout setting for connections between the Stat Central Agent and your environments is 15 minutes. If you want to increase or decrease the time amount, open the `stat.properties` file, locate the variable `CONNECTION_IDLE_TIME=15`, and change the setting to the number of minutes you want. For more information, see [Connection Pool Idle Time](#).

## Adjust the default Max\_thread\_proc setting

If you have installed the Stat Central Agent on a HPUX computer, you may need to adjust the default `max_thread_proc` setting to allow for Java® processing. For more information, go to: <http://www.hp.com/go/java/> or search the HP online documentation for `max_thread_proc`.

## Display graphical objects

If you have installed the Stat Central Agent on Unix®, you may experience problems displaying graphical objects (such as workflow diagrams, reports and email) in the Stat Web Client. These errors are generated because the graphics libraries installed with the Stat Central Agent on Unix are implemented using XWindows/Motif graphics libraries, which require access to an X server. To resolve this issue, you need to download and install the X Virtual Frame Buffer (Xvfb), a free virtual server that provides the same graphical resources as a X11 Windows Server®. Installing the Xvfb is platform-specific. For more information, please contact the Support Portal at <http://quest.com/support/>.

## Keep the telnet session open

If the Stat Central Agent was started on Unix with telnet, closing the telnet session may cause the Stat Central Agent to shut down. To keep the Stat Central Agent running after closing Telnet, go to `<STAT_HOME>/app/bin` and execute `nohup run.sh &` to run the process in the background.

## Resolving port and firewall conflicts

If the Stat® Central Agent will not run when started, the port assigned to it may already in use by a different program or there are firewalls that need to have ports opened for the Stat Central Agent to communicate with the database or with the Stat Client.

**i** **NOTE:** Starting with Stat 5.8.0, Stat Central Agent port settings are stored in the following location: `<STAT_HOME>/app/standalone/configuration/standalone-full.xml`. This is not the same location as previous versions of Stat.

Typical port and firewall conflicts include:

- Other applications are using the same port as the Stat Central Agent
- You are running multiple Stat Central Agents on the same host machine and the installations are trying to access the same ports
- The default timeout setting on a firewall prevents the Stat Central Agent from opening properly

If you have port conflicts, the server will display one or more error messages, such as:

```
java.net.BindException: Address already in use: Bind
```

The Stat Central Agent utilizes a set of ports as defined by the values in:

```
<STAT_HOME>/app/standalone/configuration/standalone-full.xml
```

These values are defined for a default port offset of zero which is set in a variable called `jboss.socket.binding.port-offset` in `standalone.conf.bat` or `standalone.conf` file. If there is a conflict situation or a second or third agent is necessary, you may change the `jboss.socket.binding.port-offset` in `standalone.conf.bat` or `standalone.conf` file. The value for offset is added to all the default values.

For example:

- if offset is zero, ports 8080, 8443, 9990, 9993, 4712, and 4713 are used.
- If offset is one, ports 8081, 8444, 9991, 9994, 4713, and 4714 are used.
- If offset is two, ports 8082, 8445, 9992, 9995, 4714, and 4715 are used.
- If offset is 100, ports 8180, 8543, 10090, 10093, 4812, and 4813 are used.

Table 4. Ports

Description	Ports
HTTP socket binding	8080

Description	Ports
HTTPS socket binding (See Note)	8443
Management socket binding	9990
Management socket binding https (See Note)	9993
Transaction sockets	4712 4713



**NOTE:** Be aware of the following:

- Stat invokes the DNS server to resolve the fully qualified server name when communicating between the client and the central agent. When server hostname is not registered on the DNS server, use etc/hosts file to map hostname and its IP address.
- HTTPS connector socket and Management socket — These ports are only necessary if the Stat Central Agent is configured to support HTTPS. See [Configure Web Client to Use HTTPS](#).

## Port configurations

When other applications are using the same port as the Stat Central Agent, you need to change the port offset in your standalone.conf.bat or standalone.conf file.

- 1 Review the port configurations described above and decide on a proper offset.
- 2 Open `<STAT_HOME>\app\bin\standalone.conf.bat` with Notepad or other text editor. For Stat Central Agent on Unix, you need to open the `<STAT_HOME>/app/bin/standalone.conf` file.
- 3 Search for the setting: `-Djboss.socket.binding.port-offset=0`
- 4 Change the setting to a proper offset. For example, `-Djboss.socket.binding.port-offset=10`

## Firewall configuration

The http port is the only port that needs to be opened on existing firewalls.

- Client to Central agent: 8080 (If port-offset has changed, add the value to 8080)
- Central Agent to Oracle agent: 8080 (If port-offset has changed, add the value to 8080)

Other ports used by the Stat Central Agent include the following (the actual port numbers will vary according to your site specifications):

- Stat database (Oracle® default=1521; MSS default = 1433)
- PeopleSoft® databases
- E-Business databases
- FTP/SFTP (default = 21/22)
- Email: SMTP/POP3/IMAP4 (default= 25/995/993)

The Stat Client will need the same ports opened if there is a firewall between the client and any of the above items.

## Natted firewall between the Stat Central Agent and Stat Oracle Agents

If there is a natted firewall between the Stat Central Agent and the Stat Oracle Agents, the following options must be configured in the stat.conf file for the Stat Oracle Agents. Older versions of Stat always required the fields to be filled in, but since 5.7.0, the Stat Oracle Agents query the Stat Central Agent for the secure Stat database information. You need only change the stat.db.server: value and indicate the natted ip address. For this scenario, they are not optional.

```
#####  
# Stat Repository  
#####  
stat.db.jdbc_driver:oracle.jdbc.driver.OracleDriver  
  
stat.db.server:<stat repository server name/ip> <-- Natted IP Address
```

## Stopping the Stat Central Agent

To stop the Stat Central Agent on either a Windows or a Unix platform, do one of the following:

- For Windows, go to <installation location>\app\bin and run shutdown.bat in a command line editor.
- For Unix, go to <installation location>/app/bin and run shutdown.sh in a command line editor.

You can also create a desktop shortcut which sends the appropriate command-line shut down argument to the Stat Central Agent.

If you have modified your port offset from the default value of zero due to conflicts with other systems, etc., then you must supply the modified port information to the shutdown command so that it can find the server to shut it down.

For example, if you modified the port offset to one, you need to edit **%STAT\_HOME%\app\bin\shutdown.bat** and modify it as below:

```
jboss-cli.bat --connect controller=localhost:9991 command=:shutdown
```

For Unix installations, you need to edit **\$STAT\_HOME/app/bin/shutdown.sh** and modify it as below.

```
./jboss-cli.sh --connect controller=localhost:9991 command=:shutdown
```

Also, if you running more than one Stat Central Agent on the same host machine, you must specify the port offset. In this case, you must also specify the port number when executing the shutdown command. The port numbers for a port offset of one is 9991 and for a port offset of 100 is 9990+100=10090. Again, these numbers may be modified if they conflict with other applications.

# Configuring the Stat Central Agent as a Windows service

If you previously used **Wrapper.conf** and other associated files to run the Stat® Central Agent functionality of the Stat Central Agent as a Windows® service, you must replace those files with the wrapper that is provided with the Stat standalone agent using the **service.bat** command located in the **<STAT\_HOME>/app/bin/service** folder.

## *To configure the Stat Central Agent as a Windows service:*

1 Set JAVA\_HOME and <STAT\_HOME> in **standalone.conf.bat** to the full physical path.

2 Edit **<STAT\_HOME>/app/bin/service/service.bat** and locate the following lines:

```
REM Uncomment and set your JAVA_HOME here
REM set JAVA_HOME=<>
REM set PATH=%JAVA_HOME%/bin;%PATH%
```

Enter the full path for your JAVA\_HOME variable.

3 (Optional) In **<STAT\_HOME>/app/bin/service/service.bat**, modify the following values if you want the service name to reflect Stat:

- Set SHORTNAME=**Wildfly**
- Set DISPLAYNAME="**Wildfly**"
- Set DESCRIPTION="**Wildfly Application Server**"

4 Specify one of the following parameters to run service.bat commands:

```
install|uninstall|start|stop|restart
```

5 Launch a command-line and from **<STAT\_HOME>\app\bin\service** directory run the following command:

```
service install /controller localhost:9990 /user jboss /password
irv200038stat+
```

This installs Wildfly AS as a Windows service by creating a manual service called Wildfly (unless you changed the name in step 2). Now JBoss AS should be enlisted in the Windows Service List, which is found in the Control Panel.

The install process creates 3 log files in the **<STAT\_HOME>\app\standalone\log** directory. Any subsequent service command calls will write to these 3 log files.

Now you can use either the Windows service applet or the service.bat command to start the service.

**i** **NOTE:** You may use the actual hostname instead of localhost above. Also note that port 9990 is used when your default port-offset is zero. If you have changed the port-offset, you need to use the corresponding management socket binding port.

6 To start Wildfly AS service, run **<STAT\_HOME>\app\bin\service>service start**.

**i** **NOTE:** The log files created in the **<STAT\_HOME>\app\standalone\log** directory by **service.bat** are persistent. You should monitor the size of this file while running as a service.

- 7 To modify the service.bat file, you need to stop the service, uninstall it, make the changes you want, and reinstall the service.

- To stop the service, run `<STAT_HOME>\app\bin\service>service stop`
- To remove the service, run `<STAT_HOME>\app\bin\service>service uninstall`

## Installing DB2 Support for the Stat Central Agent

The requirements have changed since 5.6.3. The DB2® Client connect does not need to be installed on the Stat® Central Agent machine, however the agent does need the jdbc drivers provided in DB2 connect.

The Stat Central Agent uses the IBM® JDBC type 4 driver. The required files can be found in **C:\Program Files\IBM\SQLLIB\java** of the DB2 client installation. Note that Stat requires a 32 bit version of these files.

### *To install DB2 support for the Stat Central Agent:*

- 1 Make sure Stat Central Agent is shut down.
- 2 Copy `db2jcc.jar` and `db2jcc_license_%.jar` from **C:\Program Files\IBM\SQLLIB\java** to `<STAT_HOME>\app\modules\com\ibm\db2\jcc\main directory`. The location of required drivers may vary on your site due to DB2 installation preferences.
- 3 Edit `<STAT_HOME>\app\modules\com\ibm\db2\jcc\main\module.xml` in a text editor and uncomment the 3 jar files in the resources section.

#### **Resources section before edit:**

```
<module xmlns="urn:jboss:module:1.1" name="com.ibm.db2.jcc">
  <resources>
    <!--
      <resource-root path="db2jcc.jar"/>
      <resource-root path="db2jcc_license_cisuz.jar"/>
      <resource-root path="db2jcc_license_cu.jar"/>
    -->
    <!-- Insert resources here -->
  </resources> ...
```

#### **Resources section after edit:**

```
<module xmlns="urn:jboss:module:1.1" name="com.ibm.db2.jcc">
  <resources>
    <resource-root path="db2jcc.jar"/>
    <resource-root path="db2jcc_license_cisuz.jar"/>
    <resource-root path="db2jcc_license_cu.jar"/>
    <!-- Insert resources here -->
  </resources> ...
```

- 4 Save the `module.xml` file.
- 5 Edit `<STAT_HOME>\app\standalone\configuration\standalone-full.xml` in a text editor and locate the `datasources:2.0` subsystem. You need to uncomment the driver for `ibmJDBCdriver`.

#### **Datasources subsystem section before edit:**

```
<subsystem xmlns="urn:jboss:domain:datasources:2.0">
  <datasources>
    <drivers>
```

```

        <driver name="OracleJDBCdriver" module="oracle.jdbc"/>
        <driver name="jtdsJDBCdriver" module="net.sourceforge.jtds">
            <driver-class>net.sourceforge.jtds.jdbc.Driver</driver-class>
        </driver>
        <!--
        <driver name="ibmJDBCdriver" module="com.ibm.db2.jcc">
            <driver-class>com.ibm.db2.jcc.DB2Driver</driver-class>
        </driver>
        -->
    </drivers>
</datasources>
</subsystem>

```

**Datasources subsystem section before edit:**

```

<subsystem xmlns="urn:jboss:domain:datasources:2.0">
    <datasources>
        <drivers>
            <driver name="OracleJDBCdriver" module="oracle.jdbc"/>
            <driver name="jtdsJDBCdriver" module="net.sourceforge.jtds">
                <driver-class>net.sourceforge.jtds.jdbc.Driver</driver-class>
            </driver>
            <driver name="ibmJDBCdriver" module="com.ibm.db2.jcc">
                <driver-class>com.ibm.db2.jcc.DB2Driver</driver-class>
            </driver>
        </drivers>
    </datasources>
</subsystem>

```

- 6 Save the **standalone-full.xml** file.

**i** **NOTE:** When you modify an .xml file, be sure that there is only one copy of it in the directory when you are finished. Do not rename the old copy and leave it in that directory.

- 7 Restart the Stat Central Agent.

Also note that in the PeopleSoft Environment Connection Maintenance table, the Stat Central agent needs 3 columns filled in for connection to a PeopleSoft database that were not required before.

- **Host Name** — The IP address or Server name where the database resides
- **Service Name** — The UDB/DB2 database name. This is database name as defined during installation, not an alias.
- **DB Listener Port** — The port that is listening for requests against the UDB/DB2 database.

Additionally, the **Other Database Parameters** field is now case sensitive for UDB/DB2 databases. The correct format is:

- currentSQLID=The implicit qualifier of all table, view, alias, and index names specified in dynamic SQL statements (Mainframe).
- or
- currentSchema=Specifies the default schema name that is used to qualify unqualified database objects in dynamically prepared SQL statements-also case sensitive (Aix).

## Configure the Stat Central Agent character map

The Stat® Central Agent defaults to a character map of ISO-8859-1, which is compatible with sites that are upgrading from older versions of Stat. If desirable, the agent can be configured to use UTF-8.

### *If the Stat Central Agent is running on Windows®:*

- 1 Open <STAT\_HOME>\app\bin\standalone.conf.bat.

- 2 Locate the following:

```
set "JAVA_OPTS=-Xms64M -Xmx512M -XX:MaxPermSize=256M -Dstat.home="%STAT_HOME%"  
-Djboss.socket.binding.port-offset=0 -Dmail.mime.charset=ISO-8859-1 -  
Duser.language=en -Duser.region=US -Dcom.microsoft.tfs.jni.native.base-  
directory="%STAT_HOME%/tfs-native-dlls" -Doracle.jdbc.V8Compatible=true"
```

- 3 At the end of the line and included inside the final quote mark, add:

```
-Dweb.charset=UTF-8
```

The final edit will look like this:

```
set "JAVA_OPTS=-Xms64M -Xmx512M -XX:MaxPermSize=256M -Dstat.home="%STAT_HOME%"  
-Djboss.socket.binding.port-offset=0 -Dmail.mime.charset=ISO-8859-1 -  
Duser.language=en -Duser.region=US -Dcom.microsoft.tfs.jni.native.base-  
directory="%STAT_HOME%/tfs-native-dlls" -Doracle.jdbc.V8Compatible=true -  
Dweb.charset=UTF-8"
```

- 4 Restart the Stat Central Agent.

### *If the Stat Central Agent is running on UNIX®:*

- 1 Open <STAT\_HOME>/app/bin/run.conf.

- 2 Locate the following:

```
JAVA_OPTS="-Xms64m -Xmx512m -XX:MaxPermSize=256m -  
Djava.net.preferIPv4Stack=true -Djava.net.preferIPv4Stack=true -  
Dstat.home=$STAT_HOME -Djboss.socket.binding.port-offset=0 -  
Dmail.mime.charset=ISO-8859-1 -Duser.language=en -Duser.region=US -  
Dcom.microsoft.tfs.jni.native.base-directory=$STAT_HOME/tfs-native-dlls -  
Doracle.jdbc.V8Compatible=true"
```

- 3 At the end of the line and included inside the final quote mark, add:

```
Add -Dweb.charset=UTF-8
```

The final edit will look like this:

```
JAVA_OPTS="-Xms64m -Xmx512m -XX:MaxPermSize=256m -  
Djava.net.preferIPv4Stack=true -Djava.net.preferIPv4Stack=true -  
Dstat.home=$STAT_HOME -Djboss.socket.binding.port-offset=0 -  
Dmail.mime.charset=ISO-8859-1 -Duser.language=en -Duser.region=US -  
Dcom.microsoft.tfs.jni.native.base-directory=$STAT_HOME/tfs-native-dlls -  
Doracle.jdbc.V8Compatible=true -Dweb.charset=UTF-8"
```

- 4 Restart the Stat Central Agent.



## Setting up support for AES256 Ciphers for SFTP

The configuration of your SSH server determines which ciphers are used when connecting to the Stat® Central Agent. The Stat Central Agent currently supports the following cipher configurations:

- Blowfish
- Triple DES
- AES128
- AES192
- AES256

To configure J2SE 1.7 or 1.8 to support AES256, you need to download and apply the Java® Cryptography Extension (JCE). To do this:

- 1 Go to the following url: <http://www.oracle.com/technetwork/java/javase/downloads/index.html>
- 2 Download the Java Cryptography Extension (JCE), which is contained in the appropriate zip file (**jce\_policy-7.zip** or **jce\_policy-8.zip**) to a temp folder and unzip the file.
- 3 Browse to the **JAVA\_HOME/jre/lib/security** directory under your installation of JAVA\_HOME.
- 4 Rename **local\_policy.jar** to **local\_policy.jar.strong**.
- 5 Rename **US\_export\_policy.jar** to **US\_export\_policy.jar.strong**.
- 6 Go to the temp folder where you unzipped the jce\_policy file and copy **local\_policy.jar** and **US\_export\_policy.jar**.
- 7 Paste both files into the **JAVA\_HOME/jre/lib/security** folder.

## Configure Web Client to use HTTPS

This functionality is supported for the Standalone platform only.

It is recommended that you first configure the Stat® Central Agent without https and validate that it can be started and is functional before switching to https.

### *To configure Web Client to use HTTPS:*

- 1 Shut down the agent.
- 2 Delete **<STAT\_HOME>/app/standalone/tmp**.
- 3 Obtain a keystore with a self-signed certificate from your security group or build it yourself, if authorized.  
You need to know the keystore file name and the password that opens it.
- 4 Once you have the keystore, move it to **<STAT\_HOME>/app/standalone**.
- 5 Do the following to turn on SSL:

a Go to `<STAT_HOME>/app/ standalone/standalone-full.xml` and turn on SSL.

b Look for this block in the file:

```
<!--
<security-realm name="SslRealm">
  <server-identities>
    <ssl>
      <keystore path="keystore.jks"
                relative-to="jboss.server.config.dir"
                keystore-password="changeme"/>
    </ssl>
  </server-identities>
</security-realm>
-->
```

c Uncomment the block by moving the trailing `-->` to the end of this line:

```
<!--
```

d Modify the `keystore-password` to equal the password written in the keystore.

e Modify the path to match the keystore file name (in the example above, change only the `keystore.jks` to the appropriate name).

The edits will now look like this:

```
<!-- -->
<security-realm name="SslRealm">
  <server-identities>
    <ssl>
      <keystore path="statagent.keystore"
                relative-to="jboss.server.config.dir"
                keystore-password="password"/>
    </ssl>
  </server-identities>
</security-realm>
```

f Look for this block in the file:

```
<!--
<https-listener name="default-ssl" socket-binding="https" security-
realm="SslRealm" max-post-size="999999999"/>
-->
```

g Uncomment the block by moving the trailing `-->` to the end of this line:

```
<!--
```

The edits will now look like this:

```
<!-- -->
<https-listener name="default-ssl" socket-binding="https" security-
realm="SslRealm" max-post-size="999999999"/>
```

At this point users can log in as `http:servername:8080/stat` or as `https:servername:8443`.

6 Do the following to have the port location automatically change from 8080 to 8443 when logging into the Stat Web Client:

a Stop the agent

- b Move `<STAT_HOME>/app/standalone/deployments/stat-agent.ear` to a location outside of the `<STAT_HOME>` folder for backup purposes
  - c Locate the `stat-agent.ear` file in `stat-agent-https.zip` from this distribution package and copy it into `<STAT_HOME>/app/standalone/deployments`.
- 7 Restart your agent.
- 8 Access the Stat Web Client as before.

If you input `http://<servername>:8080/stat`, you will automatically be directed to the secure location of `https://<servername>:8443/stat`.
- 9 If you have a firewall, make sure that port 8443 is open on the firewall.

## Connection pool idle time

This feature allows the site to define the length of time before the Stat® Central Agent connection pool times out database connections. The default is 15 minutes. However, Java® could take up to 2x as long to actually disconnect from the environment.

- 1 Open `<STAT_HOME>/conf/stat.properties`.
- 2 Locate the parameter `CONNECTION_IDLE_TIME=15` and modify the time.
- 3 Stop and restart the agent.

**!** **CAUTION:** Shorter times could adversely affect agent performance.

## Installing multiple servers on one host computer

Stat® currently supports installing up to four Stat Central Agents on the same host computer (provided there are no port conflicts). Additional Stat Central Agents are installed basically the same way as the first server, except you will need to install the additional servers to separate directories, define separate system variables, modify the startup files, and assign the servers to different port profiles.

If you need to install more than four servers on the same server, contact Technical Support.

**i** **NOTE:** You can install only one Stat Central Agent per Stat Repository.

### *To install an additional Stat Central Agent on the same computer:*

- 1 Unzip the contents of `stat_standalone.zip` to a location on the host computer that is different from the location where the first Stat Central Agent is installed. This location on the host computer will be referred to as `<STAT_HOME2>`.
- 2 Create an environment system variable called `STAT_HOME2` with a value of `<STAT_HOME2>` from the above step.

3 Do one of the following, depending on your platform:

- For Windows®, go to `<STAT_HOME2>\app\bin` and open the `standalone.conf.bat` file in a text editor. Locate the line:

```
set "JAVA_OPTS=-Xms64M -Xmx512M -XX:MaxPermSize=256M -
Dstat.home="%STAT_HOME%" -Djboss.socket.binding.port-offset=0 -
Dmail.mime.charset=ISO-8859-1 -Duser.language=en -Duser.region=US -
Dcom.microsoft.tfs.jni.native.base-directory="%STAT_HOME%/tfs-native-
dlls" -Doracle.jdbc.V8Compatible=true"
```

- Change the value `"%STAT_HOME%"` to `"%STAT_HOME2%"`.
  - Change the value for `-Djboss.socket.binding.port-offset` from zero to a proper value.
- For Unix®, go to `<STAT_HOME2>/app/bin` and open the `standalone.conf` file in a text editor. Locate the line:

```
JAVA_OPTS="-Xms64m -Xmx512m -XX:MaxPermSize=256m -
Djava.net.preferIPv4Stack=true -Djava.net.preferIPv4Stack=true -
Dstat.home=$STAT_HOME -Djboss.socket.binding.port-offset=0 -
Dmail.mime.charset=ISO-8859-1 -Duser.language=en -Duser.region=US -
Dcom.microsoft.tfs.jni.native.base-directory=$STAT_HOME/tfs-native-dlls
-Doracle.jdbc.V8Compatible=true"
```

- Change the value `$STAT_HOME` to `$STAT_HOME2`.
- Change the value for `-Djboss.socket.binding.port-offset` from zero to a proper value.

The value for `port-offset` assigns a new offset of ports to the second Stat Central Agent. See [Resolving Port and Firewall Conflicts](#) for information on choosing the proper value for `port-offset` and resolving port conflicts.

4 Continue installing the second Stat Central Agent the same way you did the first using the Configuration Assistant.

Remember that the URL address for the Configuration Assistant will be different for the second Stat Central Agent. After changing the `port-offset`, the default URL for the second Stat Central Agent is calculated by adding the `port-offset` to 8080. For example, if `port-offset` is set to 1, then the URL is `http://localhost:8081/stat-config`.

## Installing the Stat Central Agent on Oracle WebLogic 11g/12c

As an alternative to the recommended Stat® Standalone platform, the Stat Central Agent can be installed on Weblogic 11g (WebLogic v10.3.3-10.3.6) or Weblogic 12c (v12.1.x-v12.2.x).

*To install the Stat Central Agent on Oracle® WebLogic 11g/12c:*

- 1 If you have not already done so, install Oracle WebLogic 11g/12c.

The directory where you install Oracle WebLogic 11g/12c will be referred to in this document as **<WL\_HOME>**. You do not need to set this variable.

- 2 Create a directory for Stat 6.0.0 in **<WL\_HOME>/user\_projects/domains/**.

For a second Stat Central Agent, against a test repository you may create a new folder called **<WL\_HOME>/user\_projects/domains/stat2**.

**i** | **NOTE:** If you have port conflicts, see [Resolving Port Conflicts \(WebLogic\)](#).

- 3 Create a variable named `$STAT_HOME` and set it to **<WL\_HOME>/user\_projects/domains/stat**.
- 4 Create a variable named `$STAT_HOME2` and set it to **<WL\_HOME>/user\_projects/domains/stat2**.
- 5 On the installation media, go to the `\stat_server\weblogic` folder and unzip the file `stat_weblogic.zip` to **<WL\_HOME>/user\_projects/domains/stat**.

**i** | **NOTE:** For Unix®, use the `-a` modifier to unzip the file.

- 6 Edit the startup script, `startWebLogic.cmd` located in **<STAT\_HOME>** so that it references the correct **wlserver** folder name and (optionally) a different JDK version.

You will need to modify **<WL\_HOME>/user\_projects/domains/stat/startweblogic.cmd** (or `startweblogic.sh` for Unix) to point **<STAT\_HOME>** to this new location or to the variable described in step 4.

- 7 Edit `startWebLogic.cmd` as follows:

- a Locate the **wlserver\_10x** or **wlserver\_12x** folder under **<WL\_HOME>**, and edit the line:

```
set WL_HOME=%STAT_HOME%\..\..\..\wlserver_10 so that it specifies the exact folder name (e.g., wlserver_10.3).
```

**i** | **NOTE:** WebLogic names its `wlserver` folder based on the minor release installed.

- b (Optional) If you want to use a different 1.7.x JDK version, replace the line  
`JAVA_HOME=..\..\..\jdk160_45` with the path for the new version (e.g.,  
`JAVA_HOME=C:\j2sdk170_25`).

- 8 If you are using WebLogic 12.2.x and on Windows®, edit **<WL\_HOME>/user\_projects/domains/stat/bin/setDomainEnv.bat**.

Locate the lines:

```
call "%WL_HOME%\common\bin\commEnv.cmd"  
@REM For 12.2.x  
@REM call "%WL_HOME%\..\oracle_common\common\bin\commEnv.cmd"
```

and change to:

```
@REM call "%WL_HOME%\common\bin\commEnv.cmd"  
@REM For 12.2.x  
call "%WL_HOME%\..\oracle_common\common\bin\commEnv.cmd"
```

- 9 If you are using WebLogic 12.2.x and on Unix, edit

<WL\_HOME>/user\_projects/domains/stat/bin/setDomainEnv.sh.

Locate the lines:

```
. ${WL_HOME}/common/bin/commEnv.sh
# For 12.2.x
# . ${WL_HOME}/../oracle_common/common/bin/commEnv.sh
```

and change to:

```
# . ${WL_HOME}/common/bin/commEnv.sh
# For 12.2.x
. ${WL_HOME}/../oracle_common/common/bin/commEnv.sh
```

- 10 Locate the files **wlclient.jar**, **wjmsclient.jar**, and **wlthint3client.jar** and copy them to the Stat install folder on each workstation where Stat is installed.

These files are located in <WL\_HOME>/wlserver\_10.x/server/lib.



**NOTE:** For Oracle Applications only, **wlclient.jar** and **wjmsclient.jar** must also be copied to each Stat Oracle Agent. For more information, see [Install the Stat Oracle Agent \(Oracle E-Business Suite only\)](#).

- 11 Do one of the following:

- If on Windows, run the script **startWebLogic.cmd**.
- If on Unix, run the script, **startweblogic.sh**.

The first time you start the WebLogic server, the Stat Connection is not properly defined; therefore the server will start with errors.

- 12 Configure Oracle WebLogic as follows:

- a Start the WebLogic console from the following url: <http://hostname:8081/console>
- b Login with the following credentials:
  - Username = weblogic
  - Password = irv200038stat
- c Click **Services**, and then **Data Sources** on the Domain Structure tree on the left side of the screen.
- d Click **StatDataSource** on the **Configuration** tab.
- e Click the **Connection Pool** tab.
- f Click **Lock & Edit** on the upper left portion of the screen.
- g Depending on whether your Stat Database is on Oracle or SQL Server®, update the DriverName, Properties and URL.

For Oracle:

- Update the URL with your Stat Database information :@hostname:port:sid
- DriverName="oracle.jdbc.driver.OracleDriver"
- Properties=v\$session.program=STAT

- Set the user name to STAT and set the password for Stat user.

For SQL Server:

- Update the URL with your Stat Repository information: //hostname:port/databasename.
- DriverName="net.sourceforge.jtds.jdbc.Driver"
- Properties="user=STAT"
- appName="Stat Central Agent on WebLogic"
- URL="jdbc:jtds:sqlserver://hostname:port/databasename"

- h If your connection needs more properties, such as instance or ssl, append those properties to the Properties value. For example if you are running the Stat Database as an instance, append the instance name to the Properties value:

```
Properties="appName=Stat Central Agent on WebLogic;instance=instance name"
```

If you enabled ssl on Stat Database server running SQL Server, append the ssl name to the Properties value:

```
Properties="appName=Stat Central Agent on WebLogic;ssl=require"
```

- i Click **Save** on the **Connection Pool** tab.



**NOTE:** If you do not receive a green check mark with the message "Settings Updated Successfully", edit your savings and try again.

- j Click **Activate Changes under Lock & Edit**.

You should receive a green check mark with the message "All Changes have been activated. No restarts are necessary".

- k Log out of the console.

13 Restart the Stat Central Agent.

14 Open a browser and go to **http://hostname:8081/stat** (host name is the name of the machine where weblogic is installed).

# Configuring the Stat Central Agent on Oracle WebLogic 11g/12c

Refer to the following sections for information on the number of ways you can configure the Stat® Central Agent on Oracle® WebLogic 11g:

- [Configuring the Stat Central Agent as a Windows Service \(WebLogic\)](#)
- [Installing DB2 Support for the Stat Central Agent \(WebLogic\)](#)
- [Resolving Port Conflicts \(WebLogic\)](#)
- [Deleting Data Sources and Connection Pools \(WebLogic\)](#)
- [Support IMAP via TLS](#)

## Configuring the Stat Central Agent as a Windows Service (WebLogic)

Optionally, you can configure the Stat® Central Agent as a Windows® service. For more information, see the section, “Setting Up a WebLogic Server Instance as a Windows Service,” currently located at the following URL:

[http://download.oracle.com/docs/cd/E14571\\_01/web.1111/e13708/winservice.htm#i1186180](http://download.oracle.com/docs/cd/E14571_01/web.1111/e13708/winservice.htm#i1186180)

## Installing DB2 Support for the Stat Central Agent (WebLogic)

The requirements have changed since 5.6.3. The DB2® Client connect does not need to be installed on the Stat® Central Agent machine, however the agent does need the jdbc drivers provided in DB2 connect.

The Stat Central agent will now use the IBM JDBC type 4 driver. The required files can be found in **C:\Program Files\IBM\SQLLIB\java** of the DB2 client installation. Note that Stat requires a 32 bit version of these files.

Copy **db2jcc.jar** and **db2jcc\_license\_%.jar** from **C:\Program Files\IBM\SQLLIB\java** to **<STAT\_HOME>\lib**. The location of required drivers may vary on your site due to DB2 installation preferences.

Also note that the Stat Central Agent needs 3 columns filled in to connect to a PeopleSoft® database that were not required before:

- **Host** — The IP address or Server name where the database resides
- **Service** — The UDB/DB2 database Name. This is database name as defined during installation, not an alias.
- **Port** — The port that is listening for requests against the UDB/DB2 database.

Additionally, the **Other Database Parameters** field is now case sensitive for UDB/DB2 databases. The correct format is:



- `currentSQLID`=The implicit qualifier of all table, view, alias, and index names specified in dynamic SQL statements (Mainframe).

Or

- `currentSchema`=Specifies the default schema name that is used to qualify unqualified database objects in dynamically prepared SQL statements-also case sensitive (Aix).

## Resolving Port Conflicts (WebLogic)

On many server installations, standard ports are often already occupied by various systems. By default, the Stat® Central Agent uses port number 8081. If you have port conflicts, the server will display one or more error messages, such as:

```
java.net.BindException: Address already in use:
```

To resolve this conflict you may need to change the default service port, 8081.

- 1 Change this port setting as follows:

```
- cd <WL_HOME>/user_projects/domains/stat/config
```

- 2 Open the file *config.xml*.

- 3 Locate the line with this structure:

```
<server>
  <name>myserver</name>
  <listen-port>8081</listen-port>
  <listen-address></listen-address>
</server>
```

- 4 Modify the `ListenPort="8081"` setting to a suitable port for your system.

## Deleting Data Sources and Connection Pools (WebLogic)

Data sources and connection pools are automatically deleted from your environments by default each time you first access the datasource upon a new re-start. This allows the agent to re-connect to an environment even if its connection configuration (such as usernames, encrypted passwords, and port numbers) has been changed, or if the environment has been moved to a new location.

Clearing connection information is controlled by a parameter in the **stat.properties** file. If for any reason you want to persist connection information after re-starting the agent, open the **stat.properties** file in

`<STAT_HOME>/config` and change the value of the parameter `ClearDatasource` to `No`.

If you change this setting, it is your responsibility to manually delete the datasources if you make any configuration changes (such as usernames, encrypted passwords, and port numbers). To resolve this issue you need to log in to the WebLogic web console interface and manually remove the unwanted data source and its corresponding connection pool from the WebLogic configuration file. After deleting the unwanted data source and connection pool, the Stat® Central Agent will re-create the data source and connection pool with the updated connection information the next time the data source is accessed.

### *To delete Oracle WebLogic data sources and connection pools:*

- 1 Go to <http://localhost:8081/console>, where local host is the name of the machine the agent is running on and login using the same username and password used to start WebLogic.
- 2 Click **Services** and then **Data Sources** on the Domain Structure tree on the left side of the screen.
- 3 Click **Lock and Edit** on the **Change Center** box in the upper left of the screen.
- 4 Select the Data Source to be deleted.

**i** | **NOTE:** Do not remove StatDataSource. This is the Stat Repository configuration.

- 5 Click Delete.
- 6 You will be prompted to validate the datasource you have selected for deletion. Click **Yes**.
- 7 Click **Activate Changes** on the **Change Center** box in the upper left of the screen.
- 8 Validate that you receive a message with a green check mark: **All changes have been activated. No restarts are necessary.**

## Support IMAP via TLS

In order to support Imap via TLS, the Stat® Central Agent needs at least version 1.4.5 of Java Mail.jar, which you can obtain from Oracle at: <http://www.oracle.com/technetwork/java/javamail/index-138643.html>.

- 9 Extract **mail.jar** from the .zip file and place it at **WL\_Home\jdk160\_21\jre\lib\ext** (jdk162\_21 may be different on your site).
- 10 Restart the Stat Central Agent if it is running.

## Testing Database and Server Connections

If you have already defined any database and server connections in the Stat® Repository, you can test the connections in the Stat Web Client after installing the Stat Central Agent.

**i** | **TIP:** You can also test connections in the Stat Windows Client. For more information, see the book, *Stat 6.0.0: System Administration*, Chapter 4, General Maintenance Tables.

You can validate the connections between the Stat Central Agent and all the databases, ftp file servers, email servers, and VCM repositories currently defined in the Stat Repository.

**i** | **NOTE:** To test connections in Stat Web, you must be assigned the user class right, Agent Test Connect.

### *To test database and server connections:*

- 1 Open your internet browser and go to the URL address for Stat Web.

- On the standalone platform: <http://localhost:8080/stat>
  - On Weblogic: <http://localhost:8081/stat>
- 2 Enter your assigned user name and password, and click **Login** or press Enter.
  - 3 Click **Menu** in the Stat Web Console menu bar.
  - 4 Click Test Connect.
  - 5 Select the tab for the type of database or server you want to test.
  - 6 Select the checkbox for each database or server you want to test.
  - 7 Click **Test Connect**.

The Stat Central Agent attempts to connect to each database or server you selected and then reports the results in the Status column. Connection errors are reported with a brief description of the problem.

## Install the Stat Oracle Agent (Oracle E-Business Suite only)

The following installation must be performed on each Oracle® E-business Suite server that will be managed by Stat®. The Stat Oracle Agent must run as the owner of the APPL\_TOP, however only a single installation is needed for each server.

To use the Oracle E-Business Suite functionality supported by Stat, install and run the Stat Oracle Agent after you have installed and run the Stat Central Agent. If the Stat Central Agent is not installed or is shut down for any reason, the Stat Agent for Ora Apps will not process any commands.

### *To Install the Stat Oracle Agent:*

- 1 Create a user to own the Stat Oracle Agent files. All Oracle E-Business Suite OS accounts on the server must have read and execute permissions for these files.

The new Stat user account should exist in the same group as the Oracle E-Business Suite accounts (e.g. "dba").

- 2 Locate the stat installation directory: <stat installation cd>/stat\_agent\_ora\_apps/
- 3 Copy the stat\_ora.zip from the Stat installation CD to the Oracle E-Business Suite server.
- 4 Unzip stat\_ora.zip in the home directory of the new user created for the Stat Oracle Agent files. This directory is referred to below as STAT\_HOME.
- 5 Set the <STAT\_HOME> and PATH in the profile of each Oracle E-Business Suite user (e.g. applmgr) on the server.

Example:

```
$>STAT_HOME=/home/stat
$>export STAT_HOME
$>PATH=$PATH:$STAT_HOME/bin
```

- 6 Set the STAT\_JAVA\_HOME to the JVM on the Stat Central Agent that should be used by the Stat Oracle Agent.

Example:

```
$>STAT_JAVA_HOME=/opt/java/17
```

The Stat Oracle Agent requires Java® 7 or 8. It will be necessary to install a suitable version on the Stat Central Agent if one is not already available.

**i** **NOTE:** You can also use the Java version supplied in your E-Business environment. The version used by Stat should be equal to or greater than the one in the E-Business environment.

- 7 For users migrating file and schema objects that include diacritic marks (umlauts, tildes, breves, etc.), do the following to change the character set to ISO-8859-1:

- a Open **statctl.sh**.

- b Locate the line:

```
-Dfile.encoding=UTF-8 \
```

- c Modify it to:

```
-Dfile.encoding=ISO8859-1 \
```

- 8 For users that have installed the Stat Central Agent on WebLogic, locate the files **wlclient.jar**, **wljmsclient.jar**, and **wlhint3client.jar** in **<WL\_HOME>/wls\_server\_10.x/server/lib** and copy them to the **~/lib/weblogic** directory for each Oracle Agent that you have set up.
- 9 If the Oracle E-Business database is configured with Oracle NDE (Network Data Encryption), include the encryption type of RC4\_256 in the database server's sqlnet.ora.
- 10 If you are running a Release 12 Oracle E-Business Suite environment, do the following:
  - a Open the **stat.conf** file located in **<STAT\_HOME>/conf** and add the parameter,

```
<env>.env.CONTEXT_NAME:
```

The following parameters are no longer required in the stat.conf file for 12.x and are automatically read from the Context File. If they are present in stat.conf, they will override the values read from the Context File.

```
<env>.env.APPL_TOP
```

```
<env>.env.ORACLE_HOME
```

```
<env>.env.TWO_TASK
```

```
<env>.env.APPLFENV
```

```
<env>.env.CONTEXT_FILE
```

```
<env>.env.APPLTMP
```

```
<env>.env.APPLREP
```

```
<env>.env.LD_LIBRARY_PATH
```

**i** | **NOTE:** The <env>.CONTEXT\_NAME parameter is required for Release 12 support.

b (Optionally) If you experience issues with compiling RDF Report File, you may need to patch the **reports.sh** file located in **\$ORACLE\_HOME/bin** directory:

- Open the **reports.sh** file located in **\$ORACLE\_HOME/bin/** and locate the following:

```
TNS_ADMIN=$ORACLE_HOME/network/admin
export TNS_ADMIN
```

- Replace with the following:

```
#TNS_ADMIN=$ORACLE_HOME/network/admin
#export TNS_ADMIN
TNS_ADMIN=${TNS_ADMIN:-$ORACLE_HOME/network/admin}
export TNS_ADMIN
```

c (Optionally) If you experience issues with compiling Form File, you may need to patch the **frmcmp\_batch.sh** file located in **\$ORACLE\_HOME/bin** directory:

- Open the **frmcmp\_batch.sh** file located in **\$ORACLE\_HOME/bin/** and locate the following:

```
TNS_ADMIN=$ORACLE_HOME/network/admin
export TNS_ADMIN
```

- Replace with the following:

```
#TNS_ADMIN=$ORACLE_HOME/network/admin
#export TNS_ADMIN
TNS_ADMIN=${TNS_ADMIN:-$ORACLE_HOME/network/admin}
export TNS_ADMIN
```

**i** | **NOTE:** For R12.2, make sure to change these values on both Run and Patch Editions.

d Remove **xmlparserv2.jar** from **<STAT\_HOME>/lib/oracle** directory.

## Configuration

The **stat\_ora.zip** file includes a default **stat.conf** file, which after installation is located in the user home directory under **<STAT\_HOME>/conf**. All the mandatory parameters and most commonly used parameters are included in this default configuration file. The values for some of these parameters will need to be updated. Additional parameters listed in this section may not be included in the **default stat.conf** file and, if applicable, will need to be defined by the user. The syntax for all parameters is **name:value pair**. Comments begin with a **#** character and end with the end of the line.

Some parameters apply to all instances of an agent (e.g. parameters to identify the Stat® Repository), while others apply to each instances of an agent (e.g. parameters specific for an Oracle® E-Business Suite environment).

- Parameters prefixed with **stat** apply to all instances of an agent and should only be defined once in the configuration file.
- Parameters prefixed with **<ENV>** refer to an instance of the Stat Oracle Agent for a particular Oracle E-Business Suite environment. The **<ENV>** must be replaced with the environment code used to define that Oracle E-Business Suite environment in Stat.

When the Stat Oracle Agent is started, the **stat.conf** configuration parameters are cached in memory. You need to restart the agent before a parameter change can take effect.

Modify **stat.conf** with the correct value for the following configuration parameters:

```
stat.central_agent.server:<stat agent server name/ip>
stat.central_agent.name_port:8080
java.naming.factory.initial=org.jboss.naming.remote.client.InitialContextFactory
#java.naming.factory.initial=weblogic.jndi.WLInitialContextFactory
```

If your Stat Central agent is on WebLogic, modify the last two lines above to the following:

```
#java.naming.factory.initial=org.jboss.naming.remote.client.InitialContextFactory
java.naming.factory.initial=weblogic.jndi.WLInitialContextFactory
```

All R12 (not required for 11i) Oracle E-Business suite versions must have the **CONTEXT\_NAME** parameter defined in the **stat.conf** file. The usual configuration for this value is **sid\_hostname**.

```
<env>.env.CONTEXT_NAME:<sid_hostname>
```

For a complete list of **stat.conf** configuration, refer to *Stat 6.0.0: System Administration*, Appendix, **stat.conf** configuration.

## Administration

A separate instance of the agent must be started on the server for each Oracle® E-Business Suite environment. The Stat® Oracle Agent must be started as the Oracle E-Business Suite user (e.g. applmgr) for the environment (not the user created during the installation). Set the **<STAT\_HOME>**, **STAT\_JAVA\_HOME**, and **PATH** in the profile of the Oracle E-Business Suite user on each server. The **<STAT\_HOME>/bin/statctl.sh** utility should be used to control the Stat Oracle Agent.

```
$>statctl.sh -e env -a action [-s STAT_HOME] [-f config-file] [-j STAT_JAVA_HOME]
Where
-e env Environment code used to define an Oracle E-Business Suite environment in
Stat.
-a action Requested action (start, stop, status, abort, ping)
-s directory The STAT_HOME directory. Default is STAT_HOME.
-f file Stat configuration file. Default is $STAT_HOME/conf/stat.conf.
-j directory JVM used by the agent. Default is STAT_JAVA_HOME.
```

**i** **NOTE:** The **statctl.sh** is a UNIX based utility. MKS is required on Windows platforms to administer the Stat Oracle Agent.

A log of the agent can be found in **<STAT\_HOME>/log**. A separate log file is created for each instance of the agent.

## Start Stat Oracle Agent

The following command can be used to start an instance of the Stat Oracle Agent for the Dev Oracle E-Business Suite environment

```
$>statctl.sh -e Dev -a start
```

## Stop Stat Agent for Ora Apps

The following command can be used to stop the instance of the Stat® Agent for Ora Apps for the Test Oracle E-Business Suite environment. This command will send a shutdown request to the administration port on the local server. The agent will terminate after all queued events are processed.

```
$>statctl.sh -e Test -a stop
```

If the Stat Central Agent is shut down or disabled, the Stat Agents for Ora Apps are unable to execute any commands or processes. Before re-starting the Stat Central Agent, shut down each Stat Agent for Ora Apps. Then re-start the Stat Central Agent, wait for the startup process to complete (in the server console, you will see the line, "Stat Central Agent is started"), and re-start each Stat Agent for Ora Apps.

## Status of Stat Agent for Ora Apps

The following command can be used to display the status of the Stat Agent for Ora Apps for the Production Oracle E-Business Suite environment.

```
$>statctl.sh -e Prod -a status
```

## Abort Stat Agent for Ora Apps

The following command can be used to abort the Stat Oracle Agent for the Test Oracle E-Business Suite environment. The agent will be terminated immediately. Caution: This could potentially leave events in an unstable state. It may be necessary to re-processes events in-progress or pending when the agent process was aborted. This option should only be used as a last measure for terminating the agent.

```
$>statctl.sh -e Test -a abort
```

## Ping Stat Agent for Ora Apps

The following command can be used to show the Stat Oracle Agent is alive along with the number of queued and in process messages.

```
$>statctl.sh -e Prod -a ping
```

## Dynamically changing log level

The default logging level for an instance of the Stat® Oracle Agent is determined by the `<ENV>.log.level` parameter. You can change the logging level for a running agent using the `<STAT_HOME>/app/bin/setLogLevel.sh` utility.

```
$>setLogLevel.sh -e env -l [off|fatal|error|warn|info|detail|verbose|trace] [-s STAT_HOME] [-f config file] [-j STAT JAVA_HOME]
```

Where

- e env Environment code used to define an Oracle E-Business Suite environment in Stat.
- l level Logging level (off, fatal, error, warn, info, detail, verbose, trace)
- s directory The STAT\_HOME directory. Default is STAT\_HOME.
- f file The Stat configuration file. Default is \$STAT\_HOME/conf/stat.conf.
- j directory JVM used by the agent. Default is STAT\_JAVA\_HOME.

## Stat Oracle Agent version

The build (i.e., version) for the Stat Oracle Agent is included with header block in the log file when starting an instance of the agent. A listing of the build is displayed with the `<STAT_HOME>/app/bin/getversion.sh` utility.

```
$>getVersion.sh -e env [-s STAT_HOME] [-f config-file] [-j STAT_JAVA_HOME] [-v]
```

Where

- e env Environment code used to define an Oracle E-Business Suite environment in Stat.
- s directory The STAT\_HOME directory. Default is STAT\_HOME.
- f file The Stat configuration file. Default is \$STAT\_HOME/conf/stat.conf.
- j directory JVM used by the agent. Default is STAT\_JAVA\_HOME.
- v verbose

## Custom products and file locations

Stat® Agents for Oracle® Apps use the `stat.conf` file and the Oracle E-Business Suite environment file to resolve the top-level directory for each product. In the case of custom products, you may need to add an entry in the `stat.conf` file for each Agent. For example, if you created an application named **XXXGL** for customizations to `GL`, you would add the following entry to utilize Stat functionality for these custom objects:

```
Prod.env.XXXGL_TOP:/apps/appl/xxxgl/11.
```

For R12.2 environments, if these base directories are under the Edition-based File System, then the value for each Base Directory must come from the Context File. In that case, you do not need to add an entry to the `stat.conf` file anymore.

Also Note that in general if a value is defined for any parameter in `stat.conf`, it always overrides the value read from the Context File.



When you define a custom product, Oracle requires that you create certain directories and sub-directories for the form and report files to work properly with the application. The rules for other file types (e.g. SQL) are not strictly enforced by Oracle. But if you want to use Stat to maintain all file types, you must adhere to the Oracle file storage conventions.

Stat provides support for other file types not listed (e.g. ODF and DRV) that are unique for Oracle's patching process. Stat inactivates these object types since they are unlikely to be used for custom Oracle E-Business Suite development.

## Form files

The FMB files for forms defined for a custom product can exist in AU\_TOP/forms/<lang>, <custom top>/forms/<lang>, or <custom top>/forms. When migrating a FMB file for a custom product, the FMB file will be updated if it already exists in one of these directories. If the file does not exist, Stat creates the FMB file in either <custom top>/forms/<lang> (preferred) or <custom top>/forms. The form FMX file is generated in either <custom top>/forms/<lang> (preferred) or <custom top>/forms.

## Form library files

The PLL files for form libraries for a custom product can exist in AU\_TOP/resource or <custom top>/resource. When listing all PLL objects, the PLL files from the resource sub-directory of the selected product are displayed. PLL files are always migrated to the AU\_TOP/resource directory. The form library PLX file is always generated in <product top>/resource.

**i** **NOTE:** For users that plan to compare form library files that have attached libraries, there are special configuration steps that must be performed. For more information, see [Object Compare Support for Form Library Files](#).

## Report files

The RDF files for reports for a custom product must exist in either <custom top>/reports/<lang> (preferred) or <custom top>/reports. The RDF file is generated in the same directory.

## PL/SQL files

All PL/SQL File objects for custom products must be maintained in <custom top>/admin/sql (preferred) or <custom top>/sql. If directory <custom top>/admin/sql exists, Stat only processes SQL and PLS files in this directory. Otherwise, Stat processes SQL and PLS files in the <custom top>/sql directory.

Stat executes PL/SQL files against the database using SQL\*Plus during migration. These files must not contain any parameters. If a substitution parameter is included, SQL\*Plus will prompt the Stat Oracle Agent. However, the Stat Oracle Agent will not reply and timeout after a few minutes and fail the migration.

## SQL Script

All SQL Script objects for custom products must be maintained in <custom top>/admin/sql. These files are executed against the database using SQL\*Plus during migration. These files must not contain any parameters. If a substitution parameter is included, SQL\*Plus will prompt the Stat Oracle Agent. However, the Stat Oracle Agent will not reply and timeout after a few minutes and fail the migration.

## SQL Report Files

All SQL Report files for custom products must be maintained in <custom top>/sql. These files are not executed against the database.

## Executable files

Any file contained in the <custom top>/bin directory is classified as an executable. Executable files can be archived and migrated. No additional post-processing is performed on these files.

## Object and archive library files

Oracle maintains object files (\*.o) and product archive files (\*.a). Stat supports archiving and migrating object files (not archive files). No post-processing is performed on these files. You can also use Stat to support custom object files that are maintained in a product archive file.

The product archive file exists in <product top>/lib and must be defined as "lib<product code>.a" (e.g.

\$GL\_TOP/lib/libgl.a). The archive file serves as a container for all object files for a product. Although object files may exist in <product top>/lib, Stat uses the object files contained in the archive file when archiving and migrating these files. A generic object type can be created to support change management of the source code files for custom object files.

**i** **NOTE:** A typical installation of Stat comes with a number of Setup objects. These objects are referred to as AOL objects. These objects support archiving and migration of data from the FND (Application Object Library) product top. In addition, Stat provides Oracle Apps Resource Kit, which gives customers the option of adding support for object types from 10 other product tops, including ALR, AP, AR, BOM, FA, FF, GL, INV, ONT, and PA.

## Object compare support for form library files

Users that plan to compare form library files that have attached libraries must perform these additional steps. These steps apply only to users that may compare form libraries.

- 1 All form libraries should be staged in a directory accessible by the workstation. You may stage them in a network file system shared by Stat users. Note these files will only be used when comparing form

libraries to resolve attached library references. It is not necessary to maintain the latest PLLs in this staging directory.

- 2 For each Stat user, set the FORMS60\_PATH environment variable to reference the staging directory (Note that for Forms 10 installations, this environment variable is called FORMS\_PATH).

## Base directory codes

After defining a new base directory or editing an existing one in the File Object Maintenance table, you need to update the configuration file of the Stat® Oracle® Agent. The Stat Oracle Agent must be able to resolve the base directory codes when processing generic file objects. For example, if in the File Object Maintenance table you defined a base directory code COMMON\_TOP, you must add the following parameter to all the Oracle Agents that will process the generic objects using this base directory code:

```
Dev.env.COMMON_TOP=/apps/dev/common
```

The syntax for the parameter is <EnvCode>.env.<BaseDirectory>=<value>. The parameter in this example is added to the Oracle Agent for the "Dev" environment. The parameter can be set to a different directory for each agent.

For R12.2 environments, if these base directories are under the Edition-based File System, then the value for each Base Directory must come from the Context File. An example of these types of Base Directories would be OA\_HTML. This parameter is defined in the Context file with a value for both the fs1 and fs2 file system. To retrieve values from the Context File, you always need an XPath expression. A new column called **Context Pattern** is defined in Stat which stores the XPath expression for retrieving the value from the Context File. (You may need to consult with your DBA and refer to documentation for EXTRACTVALUE command). For example the expression for retrieving OA\_HTML from the Context file is:

```
//OA_HTML[@oa_var="s_oahtml"]
```

Note that if these Base Directories are not under the Edition-based File System, then the value for the Base Directory is defined in stat.conf as before.

Also Note that in general if a value is defined for any parameter in stat.conf, it always overrides the value read from the Context File.

## Verifying the Stat Oracle Agent

The Stat® Oracle® Agent performs a series of validations when it's started. The log, by default, is stored in <STAT\_HOME>/log. Parameters in the stat.conf specify the log filename and optionally the log directory. With info level logging enabled, the last line of the log file should be read **Main processor started** if the agent started. For example:

```
2004-09-17 13:15:27 INFO - Main processor started
```

The last line indicates the agent passed all validations and started successfully.

# Configure the SYSTEM user account

In the section [Update the System Maintenance Table](#) , you were instructed to log into the application for the first time using the special SYSTEM user account. This account is the only way to log into Stat® until you define additional users. However, you cannot define additional Stat users until you have configured Stat to process outbound email and have defined a service domain and associated it with the SYSTEM account.

New users in Stat receive an auto-generated email containing a temporary password, allowing them to log in to the application. When processing the outbound email, Stat uses the SMTP settings configured for the default service domain of the administrator that defined the new user. The SYSTEM account is delivered without a default service domain, however, as none yet exist. This means that after configuring Stat to process outbound email, your next task is to define a service domain and associate it with the SYSTEM user account.

Also, the SYSTEM account is delivered without an email address. After defining a default service domain for the SYSTEM account, you should assign it an email address. This way, if you want to reset the SYSTEM account password for any reason, Stat can deliver a temporary password to the specified email address.

For more information about the SYSTEM account, see the book, *Stat 6.0.0: System Administration*, Chapter 1, Overview of Stat Administration.

## ***To configure the SYSTEM user account:***

- 1 Login to Stat with the “SYSTEM” user name and the password you created when you first logged in, as described in the section [Update the System Maintenance Table](#) on page 16.
- 2 Go to **Maintenance | Stat Central Agent| Email Settings** and configure the Stat Central Agent to process outbound email.

For detailed instructions, see the section “Outbound Mail Configuration” in the book, *Stat 6.0.0: System Administration*, Chapter 7, Email Configuration.

- 3 Go to **Maintenance | General | Service Domain Maintenance** and define a default service domain for the SYSTEM account.

Each service domain must be configured to process outbound email via SMTP. For more information on defining a service domain, see the section “Service Domain Maintenance” in the book, *Stat 6.0.0: System Administration*, Chapter 4, General Maintenance Tables.

After defining the service domain, you must assign it to the SYSTEM user account as its default service domain.

- 4 Go to **Maintenance | Security Settings| User Maintenance**.
- 5 Select the **SYSTEM** user, click **Access Information** and select the service domain you just created as its default.

For more information, see the section Defining Stat Users in the book, *Stat 6.0.0: System Administration*, Chapter 3, Stat Security Settings.

- 6 Assign the SYSTEM user account an email address.

7 When finished, click **OK**.

# Update the PS Object Mover Instructions (PeopleSoft Only)

Stat® requires a set of instructions in order to archive PeopleSoft® objects. These instructions must be loaded using a utility available under the Maintenance menu in Stat. The instructions are contained in the file, *psominst.ps*, which is installed to the Stat home directory. For more information on the PeopleSoft Object Mover Utility, see the book, *Stat 6.0.0: System Administration*, Chapter 2, Administrative Utilities.

## Implement Stat

After you have successfully installed each Stat® component, there remain a number of tasks you need to perform before you can begin to create CSRs and take full advantage of Stat's change management and version control functionality. These tasks are performed by system administrators and entail specifying values in Stat maintenance tables.

A maintenance table serves as a kind of template that defines certain operational parameters. For example, the options available on CSR drop down lists are defined in maintenance tables. The following subsections briefly summarize the most top level parameters that system administrators need to define when implementing Stat. For more information on these and other maintenance tables, see the book, *Stat 6.0.0: System Administration*.

- **Service Domains** — Service domains allow you to divide your business into logical units. CSRs can only belong to one service domain and cannot be reassigned. The Service Domain table defines all the service domains in the Stat Repository. When first installed, there are no service domains in Stat. You must log into Stat initially with the "System" user ID. Then you can open the maintenance table and define your service domains.
- **Environment Connections and Object Types** — Stat provides change management and version control support for PeopleSoft, Oracle Applications, and generic application environments. System Administrators configure and maintain the connections between Stat and the environments defined in whichever platform you are using. In general terms, this is done by specifying in Stat maintenance tables the various database login IDs and passwords, the connection pathways and source directories of the application servers or databases, as well as the types of objects that Stat will support. Stat features a separate maintenance table for establishing connections to PeopleSoft, Oracle Applications, and generic application environments. It also features another table, Object Type Maintenance, where system administrators define the types of objects for which Stat will provide change management and version control support.

- **Migration Paths** — Migration paths define sets of environments that objects will be locked across and control the migration of objects from one environment to another. Migration paths must be defined before users can add objects to CSRs or perform any other version control or object migration operation.
- **Users and User Classes** — Individuals authorized to use Stat must be defined in the Stat User Maintenance table. This includes assigning them a unique User ID that identifies them in the system and allows them to log in. User classes are logical groupings of security rights based on the functional roles of users. For example, Stat system administrators would typically belong to a user class that allows them to define and edit service domains, whereas most other Stat users would not belong to that class.
- **CSR Types and Statuses** — CSR types divide CSRs into categories. They help identify what kind of problem or request the CSR represents. CSR statuses, on the other hand, represent the states a CSR goes through in its lifecycle. CSR types are associated with a set of CSR statuses. This way, when a user creates a CSR of a particular type, the drop down list in the Status field displays only the statuses defined for that type.
- **Customers** — The Customer Maintenance table defines all of the customers in the Stat Repository. Customers report the problems or initiate the requests that result in the opening of CSRs. They can be members of client companies or internal employees.

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