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TeamConnect® Data Warehouse 4.0

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Configuration & Installation Guide

Data Warehouse 4.0 Configuration & Installation Guide

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NOTE: Throughout Mitrtech product publications, in addition to using full product names where necessary, we also use familiar and shorter terms to increase your ease of reading. You may find the following aliases for our product names:

TeamConnect for TeamConnect Enterprise
Matter Management for TeamConnect Legal Matter Management
TeamConnect Legal for TeamConnect Legal Matter Management
CSM for TeamConnect Collaborati Spend Management
Collaborati Spend Management for TeamConnect Collaborati Spend Management
SOP or SOP Manager for TeamConnect SOP Manager
Legal Hold for TeamConnect Legal Hold
Legal Reports for TeamConnect Legal Reports
Deadlines for TeamConnect Deadlines
AP Link for TeamConnect AP Link
Office Suite for TeamConnect Office Suite
Financial Management for TeamConnect Financial Management
Screen Designer for TeamConnect Screen Designer
Upgrade Toolkit for TeamConnect Upgrade Toolkit

Acknowledgements

This product includes software developed by the following organizations:

Apache Software Foundation (<http://www.apache.org/>)

OpenSymphony Group (<http://www.opensymphony.com/>).

The license agreements for these and other supplemental software packages can be found in your installation media in subfolder Supplemental_Software_Licenses. That subfolder also contains Open Source Components.pdf, which lists the locations, license types, and specific versions of components that are available on the web.

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1 Data Warehouse Help

Welcome to the *Data Warehouse 4.0 Help*.

Data Warehouse Installation	Prerequisites
Initial Loading and Refreshing	Logging
Security	Structure Tables

1.1 Using Data Warehouse

TeamConnect provides a flexible platform for building highly customized matter management systems for managing your legal, compliance, and other business processes. TeamConnect stores and associates all relevant data with each instance of the business process, such as tasks, appointments, assignees, contact information, documents, and billing information. As with most transactional systems, the database schema is normalized to best meet the online usage and performance requirements.

Because TeamConnect provides a dynamic development environment which allows the creation of custom rules and fields, the resulting database schema is very complex, consisting of well over 200 tables. Due to the complexity of the TeamConnect operational database schema, it is not easy to extract information without a deep understanding of the interrelationships of the tables. This understanding typically requires a database administrator or an experienced business intelligence expert to extract meaningful information. Data Warehouse makes that information available to a wider range of users.

1.1.1 What is Data Warehouse?

Data Warehouse provides an Extract-Transform-Load (ETL) solution to extract TeamConnect operational data, transform it, and load it into a simplified database schema to use for your business intelligence tasks. This allows end users who are familiar with standard reporting or business intelligence tools, such as Business Objects, Cognos, WebFocus, etc., to extract information for decision making. Data Warehouse is also used by the built-in reporting features in TeamConnect. Data Warehouse contains a set of automated scripts that read your custom TeamConnect design, then create a secondary simplified, denormalized database schema, and move the data from the operational TeamConnect database to this secondary database. This process of simplification and denormalization of the operational data transforms it into database tables with more intuitive column names.

The ETL tools are set up to process on a pre-defined schedule, and they capture all data changes between the previous invocation of the tools and the current time of execution. These changes are migrated to the warehouse, keeping the two databases synchronized.

1.1.2 System Requirements

Data Warehouse uses Pentaho tools (Pan, Kitchen, and Spoon). Pentaho tools formerly were known by the collective name "Kettle". It has the following system requirements for installation and configuration:

- TeamConnect 4.0 as the source database
- A target database. Data Warehouse supports the same database servers that are supported for TeamConnect 4.2. Refer to the *TeamConnect 4.2 Release Notes* for details.
- Java Runtime Environment version 1.6.
- Ensure that the kettle.properties file has the WH_BATCH_SIZE=5000 field present. **Data Warehouse will not function without this field present.**

Note: Data Warehouse has been certified only with standard network authentication.

1.1.3 Prerequisites

TeamConnect Data Warehouse has the following prerequisites:

- Understanding of relational databases
- Knowledge of information systems
- Basic command line and shell scripting skills
- Basic knowledge of enterprise reporting
- SQL Query Analyzer for MS SQL server
- SQL*Plus for Oracle
- Administrative privileges for database access. The user who runs the Data Warehouse scripts and the routine refresh jobs must have the same database privileges as those mentioned in the Installation Requirements section. In addition, on Oracle, the user must have the privilege CREATE MATERIALIZED VIEW. For "target" databases in Oracle, your user ID must have DDL privileges assigned directly to that user ID, not through a role.
- If your TeamConnect database is Oracle, you need the TeamConnect schema name and user information.
- If your TeamConnect database is SQL Server, you need the TeamConnect database name and user information.
- During configuration you must specify a "source" database (the one which contains your existing TeamConnect data) and a "target" database, which will contain the transformed tables used by Data Warehouse. The "target" database, and an appropriate user ID, must exist before you run the Data Warehouse installation. Based on testing of Data Warehouse, you should expect the target database size to be between 80% and 150% of the size of the source database, excluding space occupied by documents in the source database. However, your actual size may vary due to the size and complexity of your TeamConnect design and your usage of custom fields and categories. To determine the approximate space used by documents, run the following query:

```
select round(sum(document_size)/(1024*1024),2) SIZE_MB from t_document
```

Subtract this number from the overall size of the source database, in megabytes. Then multiply the answer by a factor between 0.8 and 1.5 and use the result as the size of the target database.

- During execution of Data Warehouse scripts (both installation and routine refreshes) a large number of simultaneous database connections are required—approximately 60 connections to the source database and 150 connections to the target database during the most intensive portions of the job. You must insure that your database servers are able to accept these additional connections, in addition to performing whatever other tasks are running at the time.
- The source database must not contain custom field names that are considered reserved words by the database server. Examples of reserved words are TABLE, SELECT, DEFAULT, CHECK, etc. If such custom field names already exist in your source database, a workaround is to alter the custom field definitions and insure that the check box "Include in Data Warehouse" is not checked.
- The source database server and the target database server must use the same character set.

1.1.3.1 DataMart

TeamConnect Data Warehouse supersedes DataMart. Reports that were written for DataMart will need to be modified before they will run correctly with Data Warehouse.

1.1.4 Data Warehouse Initial Loading and Refreshing

TeamConnect Data Warehouse initial loading is invoked manually using a batch or shell file that is used only for the initial load. A refresh is done by scheduling the ETL job to execute at a desired refresh interval.

This section contains the following topics:

- [Initial Loading](#)
- [How the ETL Job Works](#)
- [Refreshing the Data Warehouse](#)

1.1.4.1 Initial Loading

The very first time this job runs it may require a long time to complete, because it will be loading a large volume of data from the source database to the target database. This first run should be done at a time when TeamConnect is stopped. Subsequent runs of this job will take much less time and it is not necessary to stop TeamConnect during the job. If stopping TeamConnect for a long time causes operational issues, see [Initial Loading Times](#) for a possible solution.

To perform the initial loading

1. Navigate to the **datawarehouse** directory.
2. Run one of the following files:
 - For Windows, run the following batch file:

TeamConnect_Warehouse_initial.bat

- For Linux, run the following shell file:

./TeamConnect_Warehouse_initial.sh

3. It is possible that initial loading may fail with a Java out-of-memory error message.

If so, for Windows, change the following line in the **kitchen.bat** file:

```
set OPT = Xmx1024m
```

For Linux, change this string in **kitchen.sh**:

```
javamaxmem=1024
```

4. Change 1024 to a higher number such as 1536 (megabytes). Your machine must have sufficient RAM to reserve this much memory for the job. Then rerun the initial loading job.

Note: *If you inadvertently run this job against an already-populated database, the custom field tables will be truncated and reloaded. This will increase the run time but will have no other harmful effects.*

1.1.4.2 How the ETL Job Works

Each transformation in the Data Warehouse ETL job utilizes the WH_LAST_REFRESH table to determine which records need to be part of the refresh. The transform reads the LAST_REFRESH_DATE from the WH_LAST_REFRESH table and compares this value to the MODIFIED_ON date of each row in the source tables. If the MODIFIED_ON date is greater than the LAST_REFRESH_DATE then the row will be refreshed in the Data Warehouse.

In the very first ETL run, there won't be any values in WH_LAST_REFRESH, so every source row will be refreshed in the Data Warehouse. Subsequent runs will have much less activity than the first run.

This job produces the **TeamConnect_Warehouse_date_time.log** log file in the **./TCWH_logs** subdirectory. For the **TeamConnect_Warehouse_date_time.log** file, where date and time are numbers representing the time when the job was started. This file contains process logging messages at a level of detail that you chose during configuration.

By default, **kettle.properties** parameter **WH_REFRESH_LOOKUPS=NO**. This means that during installation the Data Warehouse tables related to categories and currencies (WH_CATEGORIES and WH_CURRENCIES) will be populated with data from the source database. However, those tables will not be refreshed during any later ETL jobs.

If you have changed your TeamConnect design in ways that affect those tables, and you want your changes to be reflected in Data Warehouse, you must edit **kettle.properties** to change the parameter value to YES. Then the ETL jobs will pick up changes to those tables, and will continue to do so until you change the parameter value back to NO.

The ETL job also removes deleted records from Data Warehouse. These deletions occur after the changed rows are loaded into the warehouse. Each table in the source database has a trigger that captures the deleted record keys in a table called WH_REMOVED_RECORDS. WH_REMOVED_RECORDS is read and each corresponding key in the warehouse is removed in accordance with the relationships between the Data Warehouse tables (also referred to as cascade deletion).

The following table lists the triggers in the source database.

Source Database Triggers

Trigger Name	Table Name
WH_AUDIT_REMOVAL_ACCOUNT	T_ACCOUNT
WH_AUDIT_REMOVAL_APPOINTMENT	T_APPOINTMENT
WH_AUDIT_REMOVAL_CONTACT	T_CONTACT
WH_AUDIT_REMOVAL_DOCUMENT	T_DOCUMENT
WH_AUDIT_REMOVAL_EXPENSE	T_EXPENSE
WH_AUDIT_REMOVAL_HISTORY	T_HISTORY
WH_AUDIT_REMOVAL_INVOICE	T_INVOICE
WH_AUDIT_REMOVAL_INVOLVED	T_INVOLVED
WH_AUDIT_REMOVAL_LINE_ITEM	J_INVC_LINE_ITEM
WH_AUDIT_REMOVAL_MILESTONE	T_MILESTONE
WH_AUDIT_REMOVAL_PROJECT	T_PROJECT
WH_AUDIT_REMOVAL_TASK	T_TASK

1.1.4.3 Refreshing the Data Warehouse

First, determine whether the design of your TeamConnect source database has changed since the last refresh. This includes adding new custom objects or new custom fields. If such changes exist in the source database, you must run some extra jobs before running the actual refresh. For detailed information about what to do in this situation, see [Changes in Your TeamConnect Design](#).

To refresh Data Warehouse

1. Navigate to the **datawarehouse** directory and:
 - For Windows, run the following batch file:
TeamConnect_Warehouse.bat
 - For Linux, run the following shell file:

./TeamConnect_Warehouse.sh

2. For periodic refresh, use the Windows scheduler or UNIX cron to schedule the batch file or shell script named above to run. Verify that the job starts the **TeamConnect_Warehouse.bat** or **TeamConnect_Warehouse.sh** batch file from the **datawarehouse** directory.

1.1.5 Removing the Data Warehouse

Use the following procedure to remove Data Warehouse 4.0.

To remove a Data Warehouse

1. Navigate to the **datawarehouse** installation directory.
2. Run **WH_remove.bat** for Windows or **./WH_remove.sh** file for UNIX. This job will remove all tables and views related to Data Warehouse from both source and target databases.

This job produces a log file in the **./TCWH_logs** subdirectory. The format of the file name is **WH_remove_date_time.log**, where date and time are numbers representing the time when the job was started.

1.1.6 Logging

Logging is controlled by the **/level** setting in the batch files. By default, the setting is **/level:Basic**. You can edit the batch files to change the setting:

Logging Levels

Logging Level	Description
Error	Only show errors
Nothing	Don't show any output
Minimal	Only use minimal logging
Basic	This is the default basic logging level
Detailed	Give detailed logging output
Debug	For debugging purposes; very detailed output
Rowlevel	Logging at a row level; this may generate a lot of data

1.1.6.1 Individual Transformation Logs

Database table **WH_EXTRACT_LOG** contains an entry for each individual transformation that runs as part of the refresh job. This logging feature captures the number of rows processed for each object in TeamConnect for each run of the Data Warehouse. It also displays the current status of each ETL transformation as well as a date stamp for entries logged.

You can query this table, sorting by column **LOGDATE**, to retrieve transformation history. Currently there is no limit on the number of entries in the **WH_EXTRACT_LOG**. It is up to you to maintain the space used by this table. It is recommended that you delete rows periodically, based on **LOGDATE** value, to recover space.

WH_EXTRACT_LOG column definitions

Column Name	Usage
ID_BATCH	A number that is incremented by one for each transformation run.
CHANNEL_ID	Internal identifier used by the Kettle tool.
TRANSNAME	The name of the ETL transformation that generated the log entry. This corresponds to the Warehouse table name.
STATUS	Indicates the current status of a transformation. Possible values are: • start—indicates the transform has started • stopped—indicates the transform has stopped and not run to completion • end—indicates that the transform has run to completion
LINES_READ	Not used by Data Warehouse
LINES_WRITTEN	Not used by Data Warehouse
LINES_UPDATED	Not used by Data Warehouse
LINES_INPUT	The number of rows input from the TeamConnect source
LINES_OUTPUT	The number of rows output to the Warehouse
LINES_REJECTED	Not used by Data Warehouse
ERRORS	The number of errors logged by the transformation.
STARTDATE	Not used by Data Warehouse

ENDDATE	Not used by Data Warehouse
LOGDATE	Date the row was updated in WH_EXTRACT_LOG
DEPDATE	Not used by Data Warehouse
REPLAYDATE	Not used by Data Warehouse

1.1.7 Installing and Configuring Data Warehouse

If you are upgrading Data Warehouse, follow the following instructions, and disregard the rest of this section, which pertains to brand-new installations.

This section contains the following topics:

- [Upgrading from Earlier Versions](#)
- [New Installations](#)

1.1.7.1 Upgrading from Earlier Versions

The only direct upgrade path to version 4.0 is from Data Warehouse version 4.0. If you have a version of Data Warehouse earlier than 4.0, you have two choices:

- Upgrade your version to version 4.0, following the instructions in the Data Warehouse 4.0 *Installation & Configuration Guide*. Then return to this book and upgrade to 4.0.
- Remove your existing Data Warehouse (see [Removing the Data Warehouse](#)), then recreate it using the instructions in [New Installations](#).

Important: *Data Warehouse should not be upgraded until TeamConnect is already at version 4.2. Ensure that the TeamConnect version is correct before proceeding.*

To upgrade from version 4.0, from the installation media, open directory **TeamConnect_DataWarehouse** and copy the contents to a target directory on your hard drive. (For purposes of this documentation, we will presume that your target directory is named **datawarehouse** and it is a subdirectory of your hard drive's root directory.)

1. Insure that file **kettle.properties** contains the correct connection information for your Data Warehouse database. Details about connection properties are found in step 3.
2. Modify **shared.xml**, as described in step 4.
3. Run **WH_install.bat** or **WH_install.sh**, depending upon your operating system. These files are in the **datawarehouse** target directory.

1.1.7.2 New Installations

Important: [Upgrading from version 4.0](#) is supported.

Installation of Data Warehouse creates the Data Warehouse target database schema and makes a few schema changes to the source database.

Note: *Installation is primarily concerned with schema changes and does not populate the target database with data, except for tables `WH_CATEGORIES` and `WH_CURRENCIES`. For more information about these two tables, see [How the ETL Job Works](#). Data for all other Data Warehouse tables are populated in the separate task [Refreshing the Data Warehouse](#).*

The following tools are used for Data Warehouse:

- **Pentaho**—Enterprise reporting, analysis, dashboard, data mining, and workflow application with ETL capabilities for business intelligence needs. For details, see:

www.pentaho.com/products/data_integration

- **Spoon**—A GUI application that provides the design of transformations and jobs which can be run with other Kettle tools such as Pan (transformations) and Kitchen (jobs).

Prior to installing Pentaho tools and configuring Data Warehouse, it is recommended that you shut down TeamConnect.

Note: *TeamConnect Data Warehouse does not support customization of its scripts, functionality, or target database schema.*

To install TeamConnect Data Warehouse

1. From the installation media, open directory **TeamConnect_Datawarehouse** and copy the contents to a target directory on your hard drive. (For purposes of this documentation, we will presume that your target directory is named **datawarehouse** and it is a subdirectory of your hard drive's root directory.)

datawarehouse/.kettle contains several files, including two that must be edited:

- **kettle.properties**
 - **shared.xml**
2. **(Linux only)** Navigate to the **datawarehouse** directory and create the appropriate permissions on the files by running the `chmod +x *.sh` command. You must also edit the **javapath.sh** file to contain the correct path to your JRE, as described in [System Requirements](#).
 3. Open the **kettle.properties** file and verify the information that is shown in the listing below. You must edit that information and replace the existing values with those that are specific to your own databases.

```
jdbc.source_TC_hostname=10.0.2.23
jdbc.source_TC_dbname=QDB1209I
jdbc.source_TC_portnumber=1521
jdbc.source_TC_username=TeamConnect
```

```
jdbc.source_TC_userpassword=TeamConnect
jdbc.source_TC_dbtype=ORACLE
jdbc.target_TC_hostname=10.0.2.23
jdbc.target_TC_dbname=QDB1209I
jdbc.target_TC_portnumber=1521
jdbc.target_TC_username=DataWarehouse
jdbc.target_TC_userpassword=DataWarehouse
jdbc.target_TC_dbtype=ORACLE
```

The example above shows Oracle values. Here is an example of some Microsoft SQL Server values:

```
jdbc.target_TC_hostname=WEBISQL2002
jdbc.target_TC_dbname=TC24
jdbc.target_TC_portnumber=1433
jdbc.target_TC_username=sa
jdbc.target_TC_userpassword=password
jdbc.target_TC_dbtype=MSSQL
```

If your source and target databases run on SQL Server, and you wish to use NTLM authentication to connect to them, leave empty the values of `jdbc.source_TC_username`, `jdbc.source_TC_userpassword`, `jdbc.target_TC_username` and `jdbc.target_TC_userpassword`. You will also need to modify file **shared.xml**, as described in the next step.

The examples above show database passwords listed in plain text. Optionally, you can omit the password lines entirely, or leave the value after the = sign blank, and instead modify the **shared.xml** file to use an encrypted password as described in step 8.

If your Data Warehouse application is behind a firewall, you may need to add an SSL specification in the **TC_dbname** property, as in the example line below.

```
jdbc.target_TC_dbname=TC24;ssl=request
```

4. For SQL Server and NTLM authentication only, add two new attributes to each affected **connection** element in file **shared.xml**. See the highlighted text in the example below. This example deals with the source database connection, but NTLM can be used on source and/or target database connections.

```
<connection>
<name>Source_TeamConnect_data</name>
<server>${jdbc.source_TC_hostname}</server>
<type>MSSQL</type>
<access>Native</access>
<database>${jdbc.source_TC_dbname}</database>
<port>${jdbc.source_TC_portnumber}</port>
<username>${jdbc.source_TC_username}</username>
<password>${jdbc.source_TC_userpassword}</password>
<servername/>
<data_tablespace/>
<index_tablespace/>
```

```

<attributes>
<attribute><code>EXTRA_OPTION_MSSQL.domain</code>
<attribute>DOMAIN_NAME</attribute>
</attribute>
</attributes>
</connection>

```

For DOMAIN_NAME, substitute the actual Windows domain name that will be doing the authentication.

5. The **kettle.properties** file also has a parameter, **WH_LOOKUP_POPULATION**, that must be evaluated now, before installation. There are three possible parameter values. The parameter value affects what will be placed in Data Warehouse tables that relate to custom fields that contain lookup table values.

For example, let us presume that a particular custom field contains **LLC**, from a hierarchy of lookup table values: **Vendor**, then **Corporation**, then **LLC**.

- Parameter value **NAME** would cause this lookup table value to appear in Data Warehouse as **LLC**.
- Parameter value **FULL_NAME** would cause this lookup table value to appear in Data Warehouse as **Vendor:Corporation:LLC**.
- Parameter value **TREE_POSITION** would cause this lookup table value to appear in Data Warehouse as **VEND_CORP_LLC1**. In this case the report designer would then need to create a join to the lookup table to retrieve the text description.

Important: *If this parameter is changed after you have already begun using Data Warehouse, your data will be inconsistent. The only option, in that case, would be to remove and reinstall Data Warehouse. Therefore you must carefully evaluate which of the three possible values should be used for this parameter.*

6. The **kettle.properties** file also has a section that determines how you receive email notifications. If you want to receive email notifications when the job fails, set the value of **ENABLE_EMAIL_NOTIFICATION** to **YES**. If you want to receive email notifications when the job runs successfully, set the value of **ENABLE_SUCCESS_EMAIL_NOTIFICATION** to **YES**. Supply specific information about your email contact and server in the other properties if you set either of these to **YES**. If you do not want to use email notifications, edit this section to set both enable values to **NO**, and ignore the other properties.

```

#Email notification settings
ENABLE_EMAIL_NOTIFICATION=YES
ENABLE_SUCCESS_EMAIL_NOTIFICATION=YES
DESTINATION_ADDRESS=
SENDER_NAME=
SENDER_ADDRESS=
REPLY_TO_ADDRESS=
CONTACT_PERSON=
CONTACT_PHONE=
#Email server settings

```



```
SMTP_SERVER=
SMTP_PORT=
AUTHENTICATION_USER=
AUTHENTICATION_PASSWORD=
```

7. Open the **shared.xml** file and verify the contents that are shown in the listing below. Note that you cannot use **shared.xml** exactly as it appears. You must edit the `<type>` element inside the `<connection>` element to supply information specific to your own database servers ("MSSQLNATIVE" or "ORACLE"). **Note:** The default value listed below is for Oracle users.

```
<connection>
  <name>Target_TeamConnect_Warehouse</name>
  <server>${jdbc.target_TC_hostname}</server>
  <type>ORACLE</type>
  <access>Native</access>
  <database>${jdbc.target_TC_dbname}</database>
  <port>${jdbc.target_TC_portnumber}</port>
  <username>${jdbc.target_TC_username}</username>
  <password>${jdbc.target_TC_userpassword}</password>
  <servername/>
  <data_tablespace/>
  <index_tablespace/>
  <attributes>
    <attribute><code>PORT_NUMBER</code>
code><attribute>${jdbc.target_TC_portnumber}</attribute></attribute>
    <!-- ONLY INCLUDE THIS LINE IF USING SQL SERVER
    <attribute><code>MSSQLUseIntegratedSecurity</code><attribute>false</
attribute></attribute>
    -->
  </attributes>
</connection>

<connection>
  <name>Source_TeamConnect_data</name>
  <server>${jdbc.source_TC_hostname}</server>
  <type>ORACLE</type>
  <access>Native</access>
  <database>${jdbc.source_TC_dbname}</database>
  <port>${jdbc.source_TC_portnumber}</port>
  <username>${jdbc.source_TC_username}</username>
  <password>${jdbc.source_TC_userpassword}</password>
  <servername/>
  <data_tablespace/>
  <index_tablespace/>
  <attributes>
```

```

        <attribute><code>PORT_NUMBER</code>
code><attribute>${jdbc.source_TC_portnumber}</attribute></attribute>
        <attribute><code>SQL_CONNECT</code><attribute>SET TRANSACTION ISOLATION
LEVEL READ COMMITTED;</attribute></attribute>
        <!-- INCLUDE THIS LINE IF USING SQL SERVER
        <attribute><code>MSSQLUseIntegratedSecurity</code><attribute>false</
attribute></attribute>
        -->
    </attributes>
</connection>

```

8. The example in step 6 shows passwords that use variables. In addition to this method, passwords that are used in **shared.xml** and **kettle.properties** can be encrypted. To encrypt a password, run one of the following files from the main Data Warehouse directory:

- **Encr.bat** (for Windows)
- **./encr.sh** (for Linux)

When prompted, enter the plain text of your database password. The encrypted password string will be displayed, such as **Encrypted FFA50T6REL88P7SQ**.

Copy the entire string, including the word "Encrypted" and the space, to the clipboard. In **shared.xml**, in the password value that should be encrypted, paste the encrypted password string to replace the previous value.

Repeat these encryption instructions for each connection that you wish to encrypt. Save and close the file.

An example of using encrypted passwords is shown below:

```

<connection>
<name>Target_TeamConnect_data</name>
<server>${jdbc.source_TC_hostname}</server>
<type>ORACLE</type>
<access>Native</access>
<database>${jdbc.source_TC_dbname}</database>
<port>${jdbc.source_TC_portnumber}</port>
<username>${jdbc.source_TC_username}</password>
<password>Encrypted FFA50T6REL88P7SQ</password>
<servername/>
<data_tablespace/>
<index_tablespace/>
<attributes>
<attribute><code>PORT_NUMBER</code> <attribute>${
jdbc.source_TC_portnumber}</attribute>
<attributes>
</connection>
<connection>
<name>Target_TeamConnect_Warehouse</name>
<server>${jdbc.target_TC_hostname}</server>

```

```

<type>ORACLE</type>
<access>Native</access>
<database>${jdbc.target_TC_dbname}</database>
<port>${jdbc.target_portnumber}</database>
<username>${jdbc.target_TC_username}</username>
<password>Encrypted FFA50T6REL88P7SQ</password>
<servername/>
<data_tablespace/>
<index_tablespace/>
<attributes>
<attribute><code>PORT_NUMBER</code><attribute>${
jdbc.target_TC_portnumber}</attribute>
</attributes>
</connection>

```

9. Navigate to the **datawarehouse** installation directory and run one of the following files:

- For Windows: **WH_install.bat**
- For Linux: **./WH_install.sh**

Logs for the command output will be located in the **./TCWH_logs** subdirectory. The log file name has the format **WH_install_date_time.log**, where date and time are numbers representing the time when the job was started.

Your source and target databases must be each capable of opening at least 110 simultaneous connections while this command is running.

If the TeamConnect source database has a very large number of custom objects, the database script that creates the Data Warehouse schema may be quite large. If so, be sure to maximize the amount of Java heap space allocated to this job.

10. If you plan to use the Security and User Access feature (see [Security and User Access](#) for more information), you will need to run an additional script. Navigate to the **./TCWH/scripts** directory. For Oracle, run **ORACLE_WH_TC_SECURITY.SQL**. For SQL Server, run **MSSQL_WH_TC_SECURITY.SQL**.

1.1.8 Usage Example

The purpose of Data Warehouse is to simplify the queries that must be run by your reporting tools. Shown below are two queries that fetch the same data—the project type, main assignee, and default category for a specific Dispute project.

To fetch this information from the operational TeamConnect database:

```

SELECT
    Y_OBJECT_DEFINITION.OBJECT_TITLE,
    T_PROJECT.NUMBER_STRING ,
    T_PROJECT.NAME,
    T_CONTACT.NAME ,
    T_CONTACT.FIRST_NAME ,

```

```

Y_OBJ_CATEGORY.NAME
FROM
  Y_OBJECT_DEFINITION,
  T_PROJECT,
  J_PROJ_ASSIGNEE ,
  Y_USER ,
  T_CONTACT ,
  Y_OBJ_CATEGORY
WHERE  T_PROJECT.NUMBER_STRING='123'
      AND Y_OBJECT_DEFINITION.OBJECT_TITLE =  'Dispute'
      AND Y_OBJECT_DEFINITION.ENTITY_CODE='PROJ'
      AND Y_OBJECT_DEFINITION.APPLICATION_ID = T_PROJECT.APPLICATION_ID
      AND Y_OBJ_CATEGORY.PRIMARY_KEY=T_PROJECT.DEFAULT_CATEGORY_ID
      AND T_PROJECT.MAIN_ASSIGNEE_ID=J_PROJ_ASSIGNEE.PRIMARY_KEY
      AND J_PROJ_ASSIGNEE.USER_ID=Y_USER.PRIMARY_KEY
      AND Y_USER.CONTACT_ID=T_CONTACT.PRIMARY_KEY

```

To fetch this information from Data Warehouse:

```

SELECT
WH_PROJECT_DISP.OBJECT_TITLE,
WH_PROJECT_DISP.PROJECT_NUMBER,
WH_PROJECT_DISP.PROJECT_NAME,
WH_PROJECT_DISP.MAIN_ASSIGNEE_NAME,
WH_PROJECT_DISP.MAIN_ASSIGNEE_FIRST_NAME,
WH_PROJECT_DISP.DEFAULT_CATEGORY
FROM
WH_PROJECT_DISP
WHERE WH_PROJECT_DISP.PROJECT_NUMBER='123'

```

As you can see, Data Warehouse makes querying simpler and more intuitive.

1.1.9 Best Practices

Reviewing these tips will make your Data Warehouse deployment simpler and more reliable.

Initial Loading Times	Excluding Objects from Processing
Database Tuning	Adding New Custom Objects
Changes in Your TeamConnect Design	Troubleshooting

1.1.9.1 Initial Loading Times

If your source database is very large, the time required for the initial loading may be many hours, and it may be impractical to restrict use of the source database for this long. One possible workaround for this situation is to run the initial load against a backup copy of the source database by following these steps:

- Run the installation as described in [Installing and Configuring Data Warehouse](#). This process creates an entire warehouse schema in the target database and makes a few schema changes in the source database. It is fast and does not require exclusive use of the databases.
- Make a backup of the source database, and use it to load a separate, new database.
- Modify the **kettle.properties** configuration file, as described in step 3 of [New Installations](#), to temporarily point to the new database as the source.
- Run the initial load as described in Initial Loading.
- Again, modify the **kettle.properties** configuration file, this time pointing to the original source database.
- Run a refresh as described in [Refreshing the Data Warehouse](#).

1.1.9.2 Database Tuning

The run time of Data Warehouse jobs can be greatly affected by the values of certain database parameters. Check the logs for your jobs and experiment with parameter settings to see their effects on performance.

Here are some important database parameters for **Oracle**, including some example values for the "target" database.

db_block_size : large size is recommended (16K or higher depending on your operating system)	db_cache_size : 1824 MB
shared_pool_size : 256 MB	sga_max_size : 8 GB
undo_retention : 4 hours	undo tablespace size : 20 GB
sessions : 665	processes : 600
sort_area_size : 1048576	open_cursors : 800

These are examples only, not requirements.

For the "source" database, example parameter values include **sga_max_size** of 1 GB and **open_cursors** value of 300.

For **SQL Server**, be sure that the transaction log size is large enough, and that enough RAM is allocated to the "target" database server. For SQL Server target databases, the bulk-logged recovery model is recommended, to minimize log space and permit high-performance bulk copy operations.

Important: Data Warehouse, when first installed, contains no database indexes at all. You should manually create indexes where appropriate to speed up your most common queries.

1.1.9.3 Changes in Your TeamConnect Design

Whenever your object model changes, you must run extra jobs before you run the next Data Warehouse refresh job. If not, you risk having the refresh job crash with database errors, or having the Data Warehouse contain inconsistent or invalid data.

1.1.9.3.1 Adding New Custom Objects

If you have just added new custom objects to your object model, or just added new custom fields to existing objects, run **WH_install.bat** (for Windows) or **./WH_install.sh** (for Linux) before running refresh. This creates new custom field tables in the target database and/or creates new columns in existing custom field tables.

Important: When new custom fields are handled by running one of these files, it is possible that column names in some Data Warehouse views may change, and existing column names could now refer to different data than they did previously. This is caused by the way duplicate column names (in the source database) are handled by table `WH_CF_MAPPING` (see [Helper Table Definitions](#)). Check for this situation and, if necessary, revise your reports to use the changed column names.

1.1.9.4 Excluding Objects from Processing

If you have an object type that does not need to be processed in the Data Warehouse, you can suppress processing by manipulating table `WH_LAST_REFRESH` in the target database. In that table, find the row where column `ENTITY_CODE` matches the object type definition. (If such a row does not yet exist, add the row.) Then update column `LAST_REFRESH_DATE` in that row to a date value that is far in the future, for example, January 1, 3001.

1.1.9.5 Troubleshooting

You should always check the log of a Data Warehouse job after it completes. Only the log file will tell you whether an error occurred during the run. Search the log for error messages. If an error is found, search upward for the string "opening" to determine which transformation was running when the error occurred.

Caution: If an error occurs and it is not caught quickly, Data Warehouse will contain inaccurate information that will impact the quality of your reporting.

This is an excerpt of the text at the end of a log file after a successful run:

```
2007/12/20 13:27:02 - Kitchen - Finished!
2007/12/20 13:27:02 - Kitchen - Start=2007/12/20 12:44:12.184, Stop=2007/12/20
13:27:02.851
2007/12/20 13:27:02 - Kitchen - Processing ended after 2570 seconds.
```

This is an excerpt of text showing a failed run:

```
2007/11/03 07:19:04 - Kitchen - Finished!
2007/11/03 07:19:04 - Kitchen - ERROR (version 2.5.2, build 252005 from 2007/10/23
19:31:44) : Finished with errors
2007/11/03 07:19:04 - Kitchen - Start=2007/11/02 15:49:33.359, Stop=2007/11/03
07:19:04.125
2007/11/03 07:19:04 - Kitchen - Processing ended after 55770 seconds.
```

1.1.10 Security and User Access

TeamConnect has a comprehensive security feature that prevents unauthorized users from viewing certain objects types or viewing specific records. By default, reports that run against Data Warehouse will return all data that matches their filter criteria, without regard to the TeamConnect rights associated with a specific user. However, you can use an optional feature of Data Warehouse to restrict a report to just the data that would have been viewable in TeamConnect. To do this, your report must call a specific database function, passing a specific user name as a parameter. The report will use that user name to filter the results.

This section contains the following topics:

- [Security Functions](#)
- [Implementing Security in Business Objects](#)
- [Implementing Security in Other Reporting Tools](#)

1.1.10.1 Security Functions

In Oracle Data Warehouse databases, these functions will be present in package **WH_TC_SECURITY**:

- WH_TC_SECURITY.CHECK_USER_ACCESS_ACCOUNT
- WH_TC_SECURITY.CHECK_USER_ACCESS_APPOINTMENT
- WH_TC_SECURITY.CHECK_USER_ACCESS_CONTACT
- WH_TC_SECURITY.CHECK_USER_ACCESS_DOCUMENT
- WH_TC_SECURITY.CHECK_USER_ACCESS_EXPENSE
- WH_TC_SECURITY.CHECK_USER_ACCESS_HISTORY
- WH_TC_SECURITY.CHECK_USER_ACCESS_INVOICE
- WH_TC_SECURITY.CHECK_USER_ACCESS_INVOLVED
- WH_TC_SECURITY.CHECK_USER_ACCESS_LINEITEM
- WH_TC_SECURITY.CHECK_USER_ACCESS_MILESTONE
- WH_TC_SECURITY.CHECK_USER_ACCESS_PROJECT
- WH_TC_SECURITY.CHECK_USER_ACCESS_TASK

In SQL Server, the functions are:

- WH_CHECK_USER_ACCESS_ACCOUNT

- WH_CHECK_USER_ACCESS_APPOINTMENT
- WH_CHECK_USER_ACCESS_CONTACT
- WH_CHECK_USER_ACCESS_DOCUMENT
- WH_CHECK_USER_ACCESS_EXPENSE
- WH_CHECK_USER_ACCESS_HISTORY
- WH_CHECK_USER_ACCESS_INVOICE
- WH_CHECK_USER_ACCESS_INVOLVED
- WH_CHECK_USER_ACCESS_LINEITEM
- WH_CHECK_USER_ACCESS_MILESTONE
- WH_CHECK_USER_ACCESS_PROJECT
- WH_CHECK_USER_ACCESS_TASK

Two additional functions, WH_USER_ALLOWED and WH_USER_DENIED, are for internal use and should not be called by your reporting tools.

Note: All custom objects' rights are determined by the **WH_TC_SECURITY.CHECK_USER_ACCESS_PROJECT** function (Oracle) or **WH_CHECK_USER_ACCESS_PROJECT** function (SQL Server), regardless of the actual object type.

See [System Table Definitions](#) for details about the structure of the tables that implement this security feature.

1.1.10.2 Implementing Security in Business Objects

Data Warehouse provides some example files that ease the process of implementing security in Business Objects. There are files for both Oracle and SQL Server.

In your installation media, locate subfolder **bo-universe/oracle/03_Security**. In that folder, file **how_to_make_WH_secured_universe_oracle.txt** contains the necessary Oracle queries, plus some preceding comments that explain the other steps that are required to use the queries in a security strategy.

In installation media subfolder **bo-universe/mssql/03_Security** there is an equivalent file, **how_to_make_WH_secured_universe_mssql.txt**, with relevant instructions for SQL Server databases.

1.1.10.3 Implementing Security in Other Reporting Tools

If you have not already done so, run **ORACLE_WH_TC_SECURITY.SQL** (or **MSSQL_WH_TC_SECURITY.SQL**) in the Data Warehouse schema. This script builds several database functions (described in [Security Functions](#)) that can then be used in joins in queries. These functions always expect a user ID, and the primary key of a record, as arguments. Typically they require other arguments as well. Here is an example that could be used when querying Invoice records:

```
FUNCTION CHECK_USER_ACCESS_INVOICE (
```



```

    p_user varchar2
    ,p_primary_key number
    ,p_security varchar2
    ,p_created_by_contact_pk number
  ) return VARCHAR2 ;

```

p_security is a string containing "Public" or "Private" and **p_created_by_contact_pk** is the primary key of a Contact record.

This function returns a "Y" or an "N", indicating whether the **p_user** value passed to the function is permitted to access the record designated by **p_primary_key**.

Your database queries should include a WHERE clause that contains a call to this function and selects "Y" return values. For greatest ease of use, the reporting tool user ID should be the same as the value that you intend to pass to **p_user** when calling this function.

Here is an example of a WHERE clause in a query that uses the Project and Task views. The user ID is contained in variable **BOUSER** and calls to security functions are highlighted in **bold**.

```

WHERE
  (
    WH_PROJECTS_VW.PROJECT_PRIMARY_KEY=WH_TASK.PROJECT_PRIMARY_KEY(+)  )
AND ( WH_PROJECTS_VW.PROJECT_PRIMARY_KEY=WH_CF_TRAN.PROJECT_ID  )
AND ( WH_TC_SECURITY.CHECK_USER_ACCESS_PROJECT(@Variable('BOUSER'),
    WH_PROJECTS_VW.PROJECT_PRIMARY_KEY , WH_PROJECTS_VW.SECURITY,
    WH_PROJECTS_VW.CREATED_BY_CONTACT_PK,
    WH_PROJECTS_VW.OBJECT_UNIQUE_CODE,
    WH_PROJECTS_VW.OBJECT_IS_EMBEDDED)='Y'  )
AND ( WH_TC_SECURITY.CHECK_USER_ACCESS_TASK(@Variable('BOUSER'),
    WH_TASK.TASK_PRIMARY_KEY , WH_TASK.SECURITY,
    WH_TASK.CREATED_BY_CONTACT_PK)='Y'  )
AND . . .

```

1.2 Data Warehouse Structure

This appendix provides the system and custom object table definitions that reflect a de-normalization of the standard relational TeamConnect table structure. These denormalized tables will make it easier and faster to report TeamConnect data. Many of the tables contain pertinent information from other tables within the TeamConnect design, thus eliminating the need to join several tables together for reporting purposes.

Note: Every table described in this chapter exists in the "target" Data Warehouse database, with one exception: Table **WH_REMOVED_RECORDS** exists in the "source" database.

The Data Warehouse structure consists of the following types of tables and views:

- **System Object field tables**—Store system field information for system objects. See [System Object Table Definitions](#).
- **Custom Object field tables**—Store system field information for custom objects. See [Custom Object Table Definitions](#).

- **Consolidated tables**—Combine information from many separate object types. See [Consolidated Tables](#).
- **Custom field tables**—Store custom field information. See [Custom Field Tables and Views](#).
- **Helper tables in source and target**—Used by Kettle for the data loading process. See [Helper Table Definitions](#).
- **System tables**—Implement the optional security and user access feature. See [System Table Definitions](#).
- **Category tables**—Simplify the category "tree" relationships. See [Categories, Currencies, and Lookup Tables](#).

1.2.1 Using the Denormalized Design

Data Warehouse tables can be joined when reporting, but frequently joins are unnecessary because the information sought for reporting is already present in the main table being used for the report. This is best illustrated with an example.

In TeamConnect, every Invoice record must have a Vendor, and a Vendor's information is contained in a Contact record. In schema terms, that means that a row in table T_INVOICE contains a value in the VENDOR_ID column, and you would use that value as a foreign key to join to the PRIMARY_KEY column in T_CONTACT. The T_CONTACT row would contain much of the information about the vendor, but several important pieces of information, such as addresses and phone numbers, would be found in other tables that are also related to T_CONTACT. If your report needed to include the vendor address, you would need to join column T_CONTACT.DEFAULT_ADDRESS_ID to column J_CONT_ADDRESS.PRIMARY_KEY, then retrieve address information from J_CONT_ADDRESS.

Contrast this with Data Warehouse. If you are reporting on table WH_INVOICE, that table already contains several pieces of information about the vendor:

- VENDOR_PRIMARY_KEY
- VENDOR_CONTACT_TYPE
- VENDOR_NAME
- VENDOR_FIRST_NAME
- VENDOR_MIDDLE_NAME

If your report requires only vendor name, then you do not need any join at all. If you need more information about the vendor, such as vendor address, you would join WH_INVOICE.VENDOR_PRIMARY_KEY to WH_CONTACT.PRIMARY_KEY. You would then have access to not just the DEFAULT_ADDRESS_ID, but also to these columns:

- ADDRESS_TYPE
- STREET
- CITY
- STATE
- COUNTY

- COUNTRY
- ZIP_CODE

So to report on invoices with just vendor name requires one join in TeamConnect and none in Data Warehouse. To report on invoices with vendor name and address requires two joins in TeamConnect and one in Data Warehouse.

But the real benefit comes when reports increase in complexity. If this invoice report also displayed vendor phone and vendor email information, that would require two additional joins in TeamConnect, for a total of four. In Data Warehouse, that information is already present in WH_CONTACT, so no new joins are necessary - only one join is required.

When might you still need to do joins in Data Warehouse? When you are seeking uncommon information that is not part of the denormalized information found in most tables. For example, if you want a vendor address other than the default address, or the name of the user who approved adding the vendor originally, you will need to join to other tables.

1.2.2 System Object Table Definitions

The following tables display the standard system objects in TeamConnect. The design and number of system tables will be the same for every installation of the TeamConnect Data Warehouse. These tables reflect non-customizable objects within TeamConnect (i.e., Contacts, Accounts). If a system object has custom fields, a separate table will be created to store this information. For more information regarding custom field tables, see [Custom Field Tables and Views](#).

1.2.2.1 Account

The system object Account tables include:

- WH_ACCOUNT
- WH_ACCOUNT_CATEGORIES
- WH_ACCOUNT_TRANSACTIONS
- WH_ACCOUNT_GROUP_ACCESS*
- WH_ACCOUNT_USER_ACCESS*
- WH_ACCOUNT_SECURITY
- WH_ACCOUNT_WORKFLOW
- WH_ACCOUNT_WORKFLOW_HISTORY
- WH_ACCOUNT_WORKFLOW_RECIPIENT
- WH_ACCOUNT_WORKFLOW_REVIEW

* These tables support the user access and security feature and should not be queried directly.

WH_ACCOUNT

Column Name	Oracle Data Type	MSSQL Data Type
-------------	------------------	-----------------

ACCOUNT_ALLOCATION_LIMIT	NUMBER	DECIMAL(28, 12)
ACCOUNT_ALLOW_POSTING	VARCHAR2(20)	VARCHAR(20)
ACCOUNT_BALANCE	NUMBER	DECIMAL(28, 12)
ACCOUNT_DEFAULT_CATEGORY	VARCHAR2(50)	VARCHAR(50)
ACCOUNT_DEFAULT_CATEGORY_TREE	VARCHAR2(250)	VARCHAR(250)
ACCOUNT_NAME	VARCHAR2(250)	VARCHAR(250)
ACCOUNT_NONUS_TAX	NUMBER	DECIMAL(28, 12)
ACCOUNT_NONUS_TAX_TYPE	VARCHAR2(50)	VARCHAR(50)
ACCOUNT_NONUS_TAX_PCT	NUMBER	DECIMAL(28, 12)
ACCOUNT_OVERDRAFT_TYPE	VARCHAR2(40)	VARCHAR(40)
ACCOUNT_PERIOD_END_ON_DATE	DATE	DATETIME
ACCOUNT_PERIOD_START_ON_DATE	DATE	DATETIME
ACCOUNT_PRIMARY_KEY	NUMBER	INT
ACCOUNT_STATUS	VARCHAR2(20)	VARCHAR(20)
ACCOUNT_TOTAL_ACCRUAL	NUMBER	DECIMAL(28, 12)
ACCOUNT_TOTAL_ALLOCATED	NUMBER	DECIMAL(28, 12)
ACCOUNT_TOTAL_USED	NUMBER	DECIMAL(28, 12)
ACCOUNT_TREE_KEY	VARCHAR2(700)	VARCHAR(700)
ACCOUNT_TYPE	VARCHAR2(20)	VARCHAR(20)
CREATED_BY_CONTACT_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)
CREATED_BY_CONTACT_MIDDLE_NAME	VARCHAR2(50)	VARCHAR(50)

CREATED_BY_CONTACT_NAME	VARCHAR2(250)	VARCHAR(250)
CREATED_BY_CONTACT_PK	NUMBER	INT
CREATED_BY_CONTACT_TYPE	VARCHAR2(10)	VARCHAR(10)
CREATED_ON	DATE	DATETIME
DOCUMENT_FOLDER_PRIMARY_KEY	NUMBER	INT
MODIFIED_BY_CONTACT_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)
MODIFIED_BY_CONTACT_MID_NAME	VARCHAR2(50)	VARCHAR(50)
MODIFIED_BY_CONTACT_NAME	VARCHAR2(250)	VARCHAR(250)
MODIFIED_BY_CONTACT_PK	NUMBER	INT
MODIFIED_BY_CONTACT_TYPE	VARCHAR2(10)	VARCHAR(10)
BEHALF_OF_CONTACT_PRIMARY_KEY	NUMBER	INT
MODIFIED_ON	DATE	DATETIME
PARENT_ACCOUNT_NAME	VARCHAR2(250)	VARCHAR(250)
PARENT_ACCOUNT_PRIMARY_KEY	NUMBER	INT
POST_ACCOUNT_TO_INVOLVED	VARCHAR2(20)	VARCHAR(20)
POST_ACCOUNT_TO_VENDOR	VARCHAR2(20)	VARCHAR(20)
POST_EXPENSES_OF_CATEGORY	VARCHAR2(50)	VARCHAR(50)
POST_EXPENSES_TO_THIS_ACCOUNT	VARCHAR2(20)	VARCHAR(20)
POST_INVOICE_EXPENSE_OF_TYPE	VARCHAR2(50)	VARCHAR(50)
POST_INVOICE_EXPENSES_TO_THIS	VARCHAR2(20)	VARCHAR(20)
POST_INVOICE_TASK_OF_TYPE	VARCHAR2(50)	VARCHAR(50)

POST_INVOICE_TASKS_TO_THIS	VARCHAR2(20)	VARCHAR(20)
POST_PROJECT_TO_THIS_ACCOUNT	VARCHAR2(20)	VARCHAR(20)
POST_TASKS_OF_TYPE	VARCHAR2(50)	VARCHAR(50)
POST_TASKS_TO_THIS_ACCOUNT	VARCHAR2(20)	VARCHAR(20)
POSTED_EXPENSE_PERCENT	NUMBER	DECIMAL(28, 12)
POSTED_TASK_PERCENT	NUMBER	DECIMAL(28, 12)
POSTING_INVC_ACCRUAL	VARCHAR2(10)	VARCHAR(10)
POSTING_INVC_CREDIT_NOTE	VARCHAR2(10)	VARCHAR(10)
POSTING_INVC_STANDARD	VARCHAR2(10)	VARCHAR(10)
POSTING_INVOICE_EXPENSE_PERCNT	NUMBER	DECIMAL(28, 12)
POSTING_INVOICE_TASK_PERCENT	NUMBER	DECIMAL(28, 12)
POSTING_INVOLVED_CONTACT_FIRST	VARCHAR2(50)	VARCHAR(50)
POSTING_INVOLVED_CONTACT_MIDDL	VARCHAR2(50)	VARCHAR(50)
POSTING_INVOLVED_CONTACT_NAME	VARCHAR2(250)	VARCHAR(250)
POSTING_INVOLVED_CONTACT_PK	NUMBER	INT
POSTING_INVOLVED_CONTACT_TYPE	VARCHAR2(10)	VARCHAR(10)
POSTING_PROJECT_CATEGORY_NAME	VARCHAR2(50)	VARCHAR(50)
POSTING_PROJECT_CATEGORY_TREE	VARCHAR2(250)	VARCHAR(250)
POSTING_PROJECT_NAME	VARCHAR2(250)	VARCHAR(250)
POSTING_PROJECT_NUMBER	VARCHAR2(50)	VARCHAR(50)
POSTING_PROJECT_OBJECT_TITLE	VARCHAR2(250)	VARCHAR(250)

POSTING_PROJECT_PRIMARY_KEY	NUMBER	INT
POSTING_PROJECT_UNIQUE_CODE	VARCHAR2(4)	VARCHAR(4)
POSTING_VENDOR_CONTACT_FIRST	VARCHAR2(50)	VARCHAR(50)
POSTING_VENDOR_CONTACT_MIDDLE	VARCHAR2(50)	VARCHAR(50)
POSTING_VENDOR_CONTACT_NAME	VARCHAR2(250)	VARCHAR(250)
POSTING_VENDOR_CONTACT_PK	NUMBER	INT
POSTING_VENDOR_CONTACT_TYPE	VARCHAR2(10)	VARCHAR(10)
SECURITY	VARCHAR2(10)	VARCHAR(10)
WORKFLOW_CURRENT_STATUS	VARCHAR2(15)	VARCHAR(15)
WORKFLOW_CURRENT_ACTION	VARCHAR2(50)	VARCHAR(50)
NOTES	CLOB	NTEXT
CURRENT_APPROVER_CONTACT_PK	NUMBER	INT
CURRENT_APPROVER_NAME	VARCHAR2(250)	VARCHAR(250)
CURRENT_APPROVER_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)
CURRENT_APPROVER_MIDDLE_NAME	VARCHAR2(50)	VARCHAR(50)
CURRENT_APPROVER_TYPE	VARCHAR2(7)	VARCHAR(7)
LAST_PERFRMR_CONTACT_PK	NUMBER	INT
LAST_PERFRMR_NAME	VARCHAR2(250)	VARCHAR(250)
LAST_PERFRMR_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)
LAST_PERFRMR_MIDDLE_NAME	VARCHAR2(50)	VARCHAR(50)
LAST_PERFRMR_TYPE	VARCHAR2(7)	VARCHAR(7)

MULTIPLE_APPROVERS	VARCHAR2(3)	VARCHAR(3)
ACCOUNT_PERIOD_START_ON_DT_KEY	DATE	DATETIME
ACCOUNT_PERIOD_END_ON_DATE_KEY	DATE	DATETIME
CREATED_ON_DATE_KEY	DATE	DATETIME
MODIFIED_ON_DATE_KEY	DATE	DATETIME
ACCOUNT_TOTAL_MATTER_FEE_TAX	NVARCHAR2(3)	NVARCHAR(3)
ACCOUNT_TOTAL_MATTER_EXP_TAX	NVARCHAR2(3)	NVARCHAR(3)

WH_ACCOUNT_CATEGORIES

Column Name	Oracle Data Type	MSSQL Data Type
ACCOUNT_PRIMARY_KEY	NUMBER	INT
ACCOUNT_NAME	VARCHAR2(250)	VARCHAR(250)
ACCOUNT_TYPE	VARCHAR2(20)	VARCHAR(20)
ACCOUNT_OVERDRAFT_TYPE	VARCHAR2(40)	VARCHAR(40)
ACCOUNT_PERIOD_START_ON_DATE	DATE	DATETIME
ACCOUNT_PERIOD_END_ON_DATE	DATE	DATETIME
ACCOUNT_STATUS	VARCHAR2(20)	VARCHAR(20)
ACCOUNT_ALLOW_POSTING	VARCHAR2(20)	VARCHAR(20)
ACCOUNT_ALLOCATION_LIMIT	NUMBER	DECIMAL(28,12)
ACCOUNT_TOTAL_ALLOCATED	NUMBER	DECIMAL(28,12)
ACCOUNT_TOTAL_USED	NUMBER	DECIMAL(28,12)
ACCOUNT_BALANCE	NUMBER	DECIMAL(28,12)

PARENT_ACCOUNT_PRIMARY_KEY	NUMBER	INT
PARENT_ACCOUNT_NAME	VARCHAR2(250)	VARCHAR(250)
CATEGORY_NAME	VARCHAR2(50)	VARCHAR(50)
CATEGORY_TREE_POSITION	VARCHAR2(250)	VARCHAR(250)
IS_CATEGORY_MANUALLY_ADDED	VARCHAR2(1)	VARCHAR(1)
IS_DEFAULT_CATEGORY	VARCHAR2(5)	VARCHAR(5)
SECURITY	VARCHAR2(10)	VARCHAR(10)

WH_ACCOUNT_TRANSACTIONS

Column Name	Oracle Data Type	MSSQL Data Type
ACCOUNT_PRIMARY_KEY	NUMBER	INT
ACCOUNT_NAME	VARCHAR2(250)	VARCHAR(250)
ACCOUNT_TYPE	VARCHAR2(20)	VARCHAR(20)
ACCOUNT_OVERDRAFT_TYPE	VARCHAR2(40)	VARCHAR(40)
ACCOUNT_PERIOD_START_ON_DATE	DATE	DATETIME
ACCOUNT_PERIOD_END_ON_DATE	DATE	DATETIME
ACCOUNT_STATUS	VARCHAR2(20)	VARCHAR(20)
ACCOUNT_ALLOW_POSTING	VARCHAR2(20)	VARCHAR(20)
ACCOUNT_ALLOCATION_LIMIT	NUMBER	DECIMAL(28,12)
ACCOUNT_TOTAL_ALLOCATED	NUMBER	DECIMAL(28,12)
ACCOUNT_TOTAL_USED	NUMBER	DECIMAL(28,12)
ACCOUNT_BALANCE	NUMBER	DECIMAL(28,12)

ACCOUNT_DEFAULT_CATEGORY	VARCHAR2(50)	VARCHAR(50)
ACCOUNT_DEFAULT_CATEGORY_TREE	VARCHAR2(250)	VARCHAR(250)
TRANSACTION_PRIMARY_KEY	NUMBER	INT
TRANSACTION_DATE	DATE	DATETIME
TRANSACTION_DESCRIPTION	VARCHAR2(250)	VARCHAR(250)
TRANSACTION_TOTAL_AMOUNT	NUMBER	DECIMAL(28,12)
DETAIL_PRIMARY_KEY	NUMBER	INT
DETAIL_TOTAL_AMOUNT	NUMBER	DECIMAL(28,12)
DETAIL_DESCRIPTION	VARCHAR2(250)	VARCHAR(250)
DETAIL_STATUS	VARCHAR2(20)	VARCHAR(20)
TRANSACTION_CREATED_ON	DATE	DATETIME
TRANSACTION_MODIFIED_ON	DATE	DATETIME
CREATED_BY_CONTACT_PK	NUMBER	INT
CREATED_BY_CONTACT_TYPE	VARCHAR2(10)	VARCHAR(10)
CREATED_BY_CONTACT_NAME	VARCHAR2(250)	VARCHAR(250)
CREATED_BY_CONTACT_MIDDLE_NAME	VARCHAR2(50)	VARCHAR(50)
CREATED_BY_CONTACT_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)
MODIFIED_BY_CONTACT_PK	NUMBER	INT
MODIFIED_BY_CONTACT_TYPE	VARCHAR2(10)	VARCHAR(10)
MODIFIED_BY_CONTACT_NAME	VARCHAR2(250)	VARCHAR(250)
MODIFIED_BY_CONTACT_MID_NAME	VARCHAR2(50)	VARCHAR(50)

MODIFIED_BY_CONTACT_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)
EXPENSE_PRIMARY_KEY	NUMBER	INT
EXPENSE_DESCRIPTION	VARCHAR2(250)	VARCHAR(250)
EXPENSE_DATE	DATE	DATETIME
TASK_PRIMARY_KEY	NUMBER	INT
TASK_SUBJECT	VARCHAR2(250)	VARCHAR(250)
TASK_COMPLETED_ON	DATE	DATETIME
INVOICE_PRIMARY_KEY	NUMBER	INT
INVOICE_NUMBER	VARCHAR2(50)	VARCHAR(50)
INVOICE_DATE	DATE	DATETIME
TRANSFERED_ACCOUNT_PRIMARY_KEY	NUMBER	INT
TRANSFERRED_ACCOUNT_NAME	VARCHAR2(250)	VARCHAR(250)
TRANSFERRED_ACCOUNT_TYPE	VARCHAR2(20)	VARCHAR(20)
WITHDRAWAL	VARCHAR2(1)	VARCHAR(1)
SECURITY	VARCHAR2(10)	VARCHAR(10)

WH_ACCOUNT_GROUP_ACCESS

Column Name	Oracle Data Type	MSSQL Data Type
ACCOUNT_PRIMARY_KEY	NUMBER	INT
GROUP_PRIMARY_KEY	NUMBER	INT
ALLOW_DENY_IID	CHAR(1)	CHAR(1)
OPERATION_IID	NUMBER	INT

IS_MANUAL	NUMBER	INT
VERSION	NUMBER	INT

WH_ACCOUNT_USER_ACCESS

Column Name	Oracle Data Type	MSSQL Data Type
ACCOUNT_PRIMARY_KEY	NUMBER	INT
USER_PRIMARY_KEY	NUMBER	INT
ALLOW_DENY_IID	CHAR(1)	CHAR(1)
OPERATION_IID	NUMBER	INT
IS_MANUAL	NUMBER	INT
VERSION	NUMBER	INT

WH_ACCOUNT_SECURITY

Column Name	Oracle Data Type	MSSQL Data Type
ACCOUNT_PRIMARY_KEY	NUMBER	INT
CREATED_BY_CONTACT_PK	NUMBER	INT
SECURITY	NVARCHAR2(10)	NVARCHAR(10)

WH_ACCOUNT_WORKFLOW

Column Name	Oracle Data Type	MSSQL Data Type
ACCOUNT_PRIMARY_KEY	NUMBER	INT
ACCOUNT_NAME	VARCHAR2(250)	VARCHAR(250)
ACCOUNT_TYPE	VARCHAR2(7)	VARCHAR(7)

ACCOUNT_OVERDRAFT_TYPE	VARCHAR2(30)	VARCHAR(30)
ACCOUNT_PERIOD_START_ON_DATE	DATE	DATETIME
ACCOUNT_PERIOD_END_ON_DATE	DATE	DATETIME
ACCOUNT_STATUS	VARCHAR2(8)	VARCHAR(8)
ACCOUNT_ALLOW_POSTING	VARCHAR2(1)	VARCHAR(1)
ACCOUNT_ALLOCATION_LIMIT	NUMBER	DECIMAL(28,12)
ACCOUNT_TOTAL_ALLOCATED	NUMBER	DECIMAL(28,12)
ACCOUNT_TOTAL_USED	NUMBER	DECIMAL(28,12)
ACCOUNT_BALANCE	NUMBER	DECIMAL(28,12)
PARENT_ACCOUNT_PRIMARY_KEY	NUMBER	INT
PARENT_ACCOUNT_NAME	VARCHAR2(250)	VARCHAR(250)
WORKFLOW_PRIMARY_KEY	NUMBER	INT
REQUEST_NAME	VARCHAR2(50)	VARCHAR(50)
REQUESTED_BY_CONTACT_PK	NUMBER	INT
REQUESTED_BY_CONTACT_TYPE	VARCHAR2(7)	VARCHAR(7)
REQUESTED_BY_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)
REQUESTED_BY_MIDDLE_NAME	VARCHAR2(50)	VARCHAR(50)
REQUESTED_BY_NAME	VARCHAR2(250)	VARCHAR(250)
REQUESTED_ON	DATE	DATETIME
COMPLETED_ON	DATE	DATETIME
WORKFLOW_STATUS	VARCHAR2(30)	VARCHAR(30)

COMMENT_TO_REQUESTOR	VARCHAR2(2000)	VARCHAR(2000)
EXPIRES_ON	DATE	DATETIME
EXPIRE_ACTION	VARCHAR2(30)	VARCHAR(30)
TRANSACTION_STATUS	VARCHAR2(250)	VARCHAR(250)
CURRENT_STOP_NO	NUMBER	INT
REJECT_ACTION	VARCHAR2(30)	VARCHAR(30)
REJECT_REASON	VARCHAR2(50)	VARCHAR(50)
UPDATE_WHILE_PENDING	VARCHAR(105)	VARCHAR(105)
PROCESS_MANAGER_CONTACT_PK	NUMBER	INT
PROCESS_MANAGER_CONTACT_TYPE	VARCHAR2(7)	VARCHAR(7)
PROCESS_MANAGER_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)
PROCESS_MANAGER_MIDDLE_NAME	VARCHAR2(50)	VARCHAR(50)
PROCESS_MANAGER_NAME	VARCHAR2(250)	VARCHAR(250)
STOP_MEMBER_PRIMARY_KEY	NUMBER	INT
STOP_PRIMARY_KEY	NUMBER	INT
STOP	NUMBER	INT
PERFORMER_CONTACT_PK	NUMBER	INT
PERFORMER_CONTACT_TYPE	VARCHAR2(7)	VARCHAR(7)
PERFORMER_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)
PERFORMER_MIDDLE_NAME	VARCHAR2(50)	VARCHAR(50)
PERFORMER_NAME	VARCHAR2(250)	VARCHAR(250)

STOP_STATUS	VARCHAR2(40)	VARCHAR(40)
ACTION_DATE	DATE	DATETIME
STOP_EXPIRATION_DATE	DATE	DATETIME
INTERNAL_COMMENT	VARCHAR2(2000)	VARCHAR(2000)
EMAIL_SENT	VARCHAR2(3)	VARCHAR(3)
CREATED_BY_CONTACT_PK	NUMBER	INT
CREATED_BY_CONTACT_TYPE	VARCHAR2(7)	VARCHAR(7)
CREATED_BY_CONTACT_NAME	VARCHAR2(250)	VARCHAR(250)
CREATED_BY_CONTACT_MIDDLE_NAME	VARCHAR2(50)	VARCHAR(50)
CREATED_BY_CONTACT_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)
CREATED_ON	DATE	DATETIME
MODIFIED_BY_CONTACT_PK	NUMBER	INT
MODIFIED_BY_CONTACT_NAME	VARCHAR2(250)	VARCHAR(250)
MODIFIED_BY_CONTACT_MID_NAME	VARCHAR2(50)	VARCHAR(50)
MODIFIED_BY_CONTACT_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)
MODIFIED_BY_CONTACT_TYPE	VARCHAR2(7)	VARCHAR(7)
MODIFIED_ON	DATE	DATETIME

WH_ACCOUNT_WORKFLOW_HISTORY

Column Name	Oracle Data Type	MSSQL Data Type
ACCOUNT_PRIMARY_KEY	NUMBER	INT
ACCOUNT_NAME	VARCHAR2(250)	VARCHAR(250)

ACCOUNT_TYPE	VARCHAR2(7)	VARCHAR(7)
ACCOUNT_OVERDRAFT_TYPE	VARCHAR2(30)	VARCHAR(30)
ACCOUNT_PERIOD_START_ON_DATE	DATE	DATETIME
ACCOUNT_PERIOD_END_ON_DATE	DATE	DATETIME
ACCOUNT_STATUS	VARCHAR2(8)	VARCHAR(8)
ACCOUNT_ALLOW_POSTING	VARCHAR2(1)	VARCHAR(1)
ACCOUNT_ALLOCATION_LIMIT	NUMBER	DECIMAL(28,12)
ACCOUNT_TOTAL_ALLOCATED	NUMBER	DECIMAL(28,12)
ACCOUNT_TOTAL_USED	NUMBER	DECIMAL(28,12)
ACCOUNT_BALANCE	NUMBER	DECIMAL(28,12)
PARENT_ACCOUNT_PRIMARY_KEY	NUMBER	INT
PARENT_ACCOUNT_NAME	VARCHAR2(250)	VARCHAR(250)
WORKFLOW_PRIMARY_KEY	NUMBER	INT
REQUEST_NAME	VARCHAR2(50)	VARCHAR(50)
REQUESTED_BY_CONTACT_PK	NUMBER	INT
REQUESTED_BY_CONTACT_TYPE	VARCHAR2(7)	VARCHAR(7)
REQUESTED_BY_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)
REQUESTED_BY_MIDDLE_NAME	VARCHAR2(50)	VARCHAR(50)
REQUESTED_BY_NAME	VARCHAR2(250)	VARCHAR(250)
REQUESTED_ON	DATE	DATETIME
COMPLETED_ON	DATE	DATETIME

WORKFLOW_STATUS	VARCHAR2(30)	VARCHAR(30)
COMMENT_TO_REQUESTOR	VARCHAR2(2000)	VARCHAR(2000)
EXPIRES_ON	DATE	DATETIME
EXPIRE_ACTION	VARCHAR2(30)	VARCHAR(30)
TRANSACTION_STATUS	VARCHAR2(250)	VARCHAR(250)
CURRENT_STOP_NO	NUMBER	INT
REJECT_ACTION	VARCHAR2(30)	VARCHAR(30)
REJECT_REASON	VARCHAR2(50)	VARCHAR(50)
UPDATE_WHILE_PENDING	VARCHAR2(105)	VARCHAR(105)
PROCESS_MANAGER_CONTACT_PK	NUMBER	INT
PROCESS_MANAGER_CONTACT_TYPE	VARCHAR2(7)	VARCHAR(7)
PROCESS_MANAGER_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)
PROCESS_MANAGER_MIDDLE_NAME	VARCHAR2(50)	VARCHAR(50)
PROCESS_MANAGER_NAME	VARCHAR2(250)	VARCHAR(250)
STOP	NUMBER	INT
PERFORMER_CONTACT_PK	NUMBER	INT
PERFORMER_CONTACT_TYPE	VARCHAR2(7)	VARCHAR(7)
PERFORMER_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)
PERFORMER_MIDDLE_NAME	VARCHAR2(50)	VARCHAR(50)
PERFORMER_NAME	VARCHAR2(250)	VARCHAR(250)
ACTIVITY	VARCHAR2(250)	VARCHAR(250)

ACTION_DATE	DATE	DATETIME
INTERNAL_COMMENT	VARCHAR2(2000)	VARCHAR(2000)
CREATED_BY_CONTACT_PK	NUMBER	INT
CREATED_BY_CONTACT_TYPE	VARCHAR2(7)	VARCHAR(7)
CREATED_BY_CONTACT_NAME	VARCHAR2(250)	VARCHAR(250)
CREATED_BY_CONTACT_MIDDLE_NAME	VARCHAR2(50)	VARCHAR(50)
CREATED_BY_CONTACT_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)
CREATED_ON	DATE	DATETIME
MODIFIED_BY_CONTACT_PK	NUMBER	INT
MODIFIED_BY_CONTACT_NAME	VARCHAR2(250)	VARCHAR(250)
MODIFIED_BY_CONTACT_MID_NAME	VARCHAR2(50)	VARCHAR(50)
MODIFIED_BY_CONTACT_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)
MODIFIED_BY_CONTACT_TYPE	VARCHAR2(7)	VARCHAR(7)
MODIFIED_ON	DATE	DATETIME

WH_ACCOUNT_WORKFLOW_RECIPIENT

Column Name	Oracle Data Type	MSSQL Data Type
ACCOUNT_PRIMARY_KEY	NUMBER	INT
ACCOUNT_NAME	VARCHAR2(250)	VARCHAR2(250)
ACCOUNT_TYPE	VARCHAR2(7)	VARCHAR2(7)
CCOUNT_OVERDRAFT_TYPE	VARCHAR2(30)	VARCHAR2(30)
ACCOUNT_PERIOD_START_ON_DATE	DATE	DATETIME

ACCOUNT_PERIOD_END_ON_DATE	DATE	DATETIME
ACCOUNT_STATUS	VARCHAR2(8)	VARCHAR2(8)
ACCOUNT_ALLOW_POSTING	VARCHAR2(1)	VARCHAR2(1)
ACCOUNT_ALLOCATION_LIMIT	NUMBER	DECIMAL(28,12)
ACCOUNT_TOTAL_ALLOCATED	NUMBER	DECIMAL(28,12)
ACCOUNT_TOTAL_USED	NUMBER	DECIMAL(28,12)
ACCOUNT_BALANCE	NUMBER	DECIMAL(28,12)
PARENT_ACCOUNT_PRIMARY_KEY	NUMBER	INT
PARENT_ACCOUNT_NAME	VARCHAR2(250)	VARCHAR2(250)
WORKFLOW_PRIMARY_KEY	NUMBER	INT
REQUEST_NAME	VARCHAR2(50)	VARCHAR2(50)
REQUESTED_BY_CONTACT_PK	NUMBER	INT
REQUESTED_BY_CONTACT_TYPE	VARCHAR2(7)	VARCHAR2(7)
REQUESTED_BY_FIRST_NAME	VARCHAR2(50)	VARCHAR2(50)
REQUESTED_BY_MIDDLE_NAME	VARCHAR2(50)	VARCHAR2(50)
REQUESTED_BY_NAME	VARCHAR2(250)	VARCHAR2(250)
REQUESTED_ON	DATE	DATETIME
COMPLETED_ON	DATE	DATETIME
WORKFLOW_STATUS	VARCHAR2(30)	VARCHAR2(30)
EXPIRES_ON	DATE	DATETIME
CURRENT_STOP_NO	NUMBER	INT

PROCESS_MANAGER_CONTACT_PK	NUMBER	INT
PROCESS_MANAGER_CONTACT_TYPE	VARCHAR2(7)	VARCHAR2(7)
PROCESS_MANAGER_FIRST_NAME	VARCHAR2(50)	VARCHAR2(50)
PROCESS_MANAGER_MIDDLE_NAME	VARCHAR2(50)	VARCHAR2(50)
PROCESS_MANAGER_NAME	VARCHAR2(250)	VARCHAR2(250)
EVENT	VARCHAR2(250)	VARCHAR2(250)
RECIPIENT_CONTACT_PK	NUMBER	INT
RECIPIENT_CONTACT_TYPE	VARCHAR2(7)	VARCHAR2(7)
RECIPIENT_FIRST_NAME	VARCHAR2(50)	VARCHAR2(50)
RECIPIENT_MIDDLE_NAME	VARCHAR2(50)	VARCHAR2(50)
RECIPIENT_NAME	VARCHAR2(250)	VARCHAR2(250)
VERSION	NUMBER	INT
CREATED_ON	DATE	DATETIME
CREATED_BY_CONTACT_PK	NUMBER	INT
CREATED_BY_CONTACT_TYPE	VARCHAR2(7)	VARCHAR2(7)
CREATED_BY_CONTACT_NAME	VARCHAR2(250)	VARCHAR2(250)
CREATED_BY_CONTACT_MIDDLE_NAME	VARCHAR2(50)	VARCHAR2(50)
CREATED_BY_CONTACT_FIRST_NAME	VARCHAR2(50)	VARCHAR2(50)
MODIFIED_ON	DATE	DATETIME
MODIFIED_BY_CONTACT_PK	NUMBER	INT
MODIFIED_BY_CONTACT_TYPE	VARCHAR2(7)	VARCHAR2(7)

MODIFIED_BY_CONTACT_NAME	VARCHAR2(250)	VARCHAR2(250)
MODIFIED_BY_CONTACT_MID_NAME	VARCHAR2(50)	VARCHAR2(50)

WH_ACCOUNT_WORKFLOW_REVIEW

Column Name	Oracle Data Type	MSSQL Data Type
ACCOUNT_PRIMARY_KEY	NUMBER	INT
ACCOUNT_NAME	VARCHAR2(250)	VARCHAR2(250)
ACCOUNT_TYPE	VARCHAR2(7)	VARCHAR2(7)
ACCOUNT_OVERDRAFT_TYPE	VARCHAR2(30)	VARCHAR2(30)
ACCOUNT_PERIOD_START_ON_DATE	DATE	DATETIME
ACCOUNT_PERIOD_END_ON_DATE	DATE	DATETIME
ACCOUNT_STATUS	VARCHAR2(8)	VARCHAR2(8)
ACCOUNT_ALLOW_POSTING	VARCHAR2(1)	VARCHAR2(1)
ACCOUNT_ALLOCATION_LIMIT	NUMBER	DECIMAL(28,12)
ACCOUNT_TOTAL_ALLOCATED	NUMBER	DECIMAL(28,12)
ACCOUNT_TOTAL_USED	NUMBER	DECIMAL(28,12)
ACCOUNT_BALANCE	NUMBER	DECIMAL(28,12)
PARENT_ACCOUNT_PRIMARY_KEY	NUMBER	INT
PARENT_ACCOUNT_NAME	VARCHAR2(250)	VARCHAR2(250)
WORKFLOW_PRIMARY_KEY	NUMBER	INT
REQUEST_NAME	VARCHAR2(50)	VARCHAR2(50)
REQUESTED_BY_CONTACT_PK	NUMBER	INT

REQUESTED_BY_CONTACT_TYPE	VARCHAR2(7)	VARCHAR2(7)
REQUESTED_BY_FIRST_NAME	VARCHAR2(50)	VARCHAR2(50)
REQUESTED_BY_MIDDLE_NAME	VARCHAR2(50)	VARCHAR2(50)
REQUESTED_BY_NAME	VARCHAR2(250)	VARCHAR2(250)
REQUESTED_ON	DATE	DATETIME
COMPLETED_ON	DATE	DATETIME
WORKFLOW_STATUS	VARCHAR2(30)	VARCHAR2(30)
EXPIRES_ON	DATE	DATETIME
CURRENT_STOP_NO	NUMBER	INT
PROCESS_MANAGER_CONTACT_PK	NUMBER	INT
PROCESS_MANAGER_CONTACT_TYPE	VARCHAR2(7)	VARCHAR2(7)
PROCESS_MANAGER_FIRST_NAME	VARCHAR2(50)	VARCHAR2(50)
PROCESS_MANAGER_MIDDLE_NAME	VARCHAR2(50)	VARCHAR2(50)
PROCESS_MANAGER_NAME	VARCHAR2(250)	VARCHAR2(250)
STOP_PRIMARY_KEY	NUMBER	INT
STOP	NUMBER	INT
STOP_MEMBER_PRIMARY_KEY	NUMBER	INT
STOP_STATUS	VARCHAR2(40)	VARCHAR2(40)
EMAIL_SENT	VARCHAR2(3)	VARCHAR2(3)
REVIEW_PRIMARY_KEY	NUMBER	INT
REVIEW_PERFORMER_CONTACT_PK	NUMBER	INT

REVIEW_PERFORMER_CONTACT_TYPE	VARCHAR2(7)	VARCHAR2(7)
REVIEW_PERFORMER_FIRST_NAME	VARCHAR2(50)	VARCHAR2(50)
REVIEW_PERFORMER_MIDDLE_NAME	VARCHAR2(50)	VARCHAR2(50)
REVIEW_PERFORMER_NAME	VARCHAR2(250)	VARCHAR2(250)
REVIEW_STATUS	VARCHAR2(20)	VARCHAR2(20)
REVIEW_ACTION_DATE	DATE	DATETIME
REVIEW_APPROVAL_COMMENT	VARCHAR2(250)	VARCHAR2(250)
REVIEW_REQUEST_COMMENT	VARCHAR2(250)	VARCHAR2(250)
CREATED_ON	DATE	DATETIME
CREATED_BY_CONTACT_PK	NUMBER	INT
CREATED_BY_CONTACT_TYPE	VARCHAR2(7)	VARCHAR2(7)
CREATED_BY_CONTACT_NAME	VARCHAR2(250)	VARCHAR2(250)
CREATED_BY_CONTACT_MIDDLE_NAME	VARCHAR2(50)	VARCHAR2(50)
CREATED_BY_CONTACT_FIRST_NAME	VARCHAR2(50)	VARCHAR2(50)
MODIFIED_ON	DATE	DATETIME
MODIFIED_BY_CONTACT_PK	NUMBER	INT
MODIFIED_BY_CONTACT_TYPE	VARCHAR2(7)	VARCHAR2(7)
MODIFIED_BY_CONTACT_NAME	VARCHAR2(250)	VARCHAR2(250)
MODIFIED_BY_CONTACT_MID_NAME	VARCHAR2(50)	VARCHAR2(50)

1.2.2.2 Appointment

The system object Appointment tables include:

- WH_APPOINTMENT
- WH_APPOINTMENT_ATTENDEES
- WH_APPOINTMENT_CATEGORIES
- WH_APPOINTMENT_RESOURCES
- WH_APPOINTMENT_GROUP_ACCESS*
- WH_APPOINTMENT_USER_ACCESS*
- WH_APPOINTMENT_SECURITY
- WH_APPOINTMENT_WORKFLOW
- WH_APPOINTMENT_WORKFLW_HISTORY
- WH_APPOINTMENT_WORKFLW_RECEPNT
- WH_APPOINTMENT_WORKFLOW_REVIEW

* These tables support the user access and security feature and should not be queried directly.

WH_APPOINTMENT

Column Name	Oracle Data Type	MSSQL Data Type
APPOINTMENT_PRIMARY_KEY	NUMBER	INT
APPOINTMENT_SUBJECT	VARCHAR2(250)	VARCHAR(250)
APPOINTMENT_LOCATION	VARCHAR2(250)	VARCHAR(250)
APPOINTMENT_AREA	VARCHAR2(50)	VARCHAR(50)
APPOINTMENT_START_ON	DATE	DATETIME
APPOINTMENT_END_ON	DATE	DATETIME
APPOINTMENT_IS_ALL_DAY	VARCHAR2(4)	VARCHAR(4)
APPOINTMENT_DEFAULT_CATEGORY	VARCHAR2(50)	VARCHAR(50)
APPOINTMENT_DEFAULT_CAT_TREE	VARCHAR2(250)	VARCHAR(250)
PROJECT_UNIQUE_CODE	VARCHAR2(4)	VARCHAR(4)

PROJECT_OBJECT_TITLE	VARCHAR2(250)	VARCHAR(250)
PROJECT_PRIMARY_KEY	NUMBER	INT
PROJECT_NAME	VARCHAR2(250)	VARCHAR(250)
PROJECT_NUMBER	VARCHAR2(50)	VARCHAR(50)
PROJECT_DEFAULT_CATEGORY	VARCHAR2(50)	VARCHAR(50)
MILESTONE_UNIQUE_CODE	VARCHAR2(4)	VARCHAR(4)
MILESTONE_OBJECT_TITLE	VARCHAR2(250)	VARCHAR(250)
MILESTONE_PRIMARY_KEY	NUMBER	INT
MILESTONE_SUBJECT	VARCHAR2(250)	VARCHAR(250)
MILESTONE_DATE	DATE	DATETIME
MILESTONE_DEFAULT_CATEGORY	VARCHAR2(50)	VARCHAR(50)
DOCUMENT_FOLDER_PRIMARY_KEY	NUMBER	INT
CREATED_ON	DATE	DATETIME
MODIFIED_ON	DATE	DATETIME
CREATED_BY_CONTACT_PK	NUMBER	INT
CREATED_BY_CONTACT_TYPE	VARCHAR2(10)	VARCHAR(10)
CREATED_BY_CONTACT_NAME	VARCHAR2(250)	VARCHAR(250)
CREATED_BY_CONTACT_MIDDLE_NAME	VARCHAR2(50)	VARCHAR(50)
CREATED_BY_CONTACT_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)
MODIFIED_BY_CONTACT_PK	NUMBER	INT
MODIFIED_BY_CONTACT_TYPE	VARCHAR2(10)	VARCHAR(10)

MODIFIED_BY_CONTACT_NAME	VARCHAR2(250)	VARCHAR(250)
MODIFIED_BY_CONTACT_MID_NAME	VARCHAR2(50)	VARCHAR(50)
MODIFIED_BY_CONTACT_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)
BEHALF_OF_CONTACT_PRIMARY_KEY	NUMBER	INT
SECURITY	VARCHAR2(10)	VARCHAR(10)
WORKFLOW_CURRENT_STATUS	VARCHAR2(15)	VARCHAR(15)
WORKFLOW_CURRENT_ACTION	VARCHAR2(50)	VARCHAR(50)
NOTES	CLOB	NTEXT
CURRENT_APPROVER_CONTACT_PK	NUMBER	INT
CURRENT_APPROVER_NAME	VARCHAR2(250)	VARCHAR(250)
CURRENT_APPROVER_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)
CURRENT_APPROVER_MIDDLE_NAME	VARCHAR2(50)	VARCHAR(50)
CURRENT_APPROVER_TYPE	VARCHAR2(7)	VARCHAR(7)
LAST_PERFRMR_CONTACT_PK	NUMBER	INT
LAST_PERFRMR_NAME	VARCHAR2(250)	VARCHAR(250)
LAST_PERFRMR_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)
LAST_PERFRMR_MIDDLE_NAME	VARCHAR2(50)	VARCHAR(50)
LAST_PERFRMR_TYPE	VARCHAR2(7)	VARCHAR(7)
MULTIPLE_APPROVERS	VARCHAR2(3)	VARCHAR(3)
APPOINTMENT_START_ON_DATE_KEY	DATE	DATETIME
APPOINTMENT_END_ON_DATE_KEY	DATE	DATETIME

CREATED_ON_DATE_KEY	DATE	DATETIME
MODIFIED_ON_DATE_KEY	DATE	DATETIME

WH_APPOINTMENT_ATTENDEES

Column Name	Oracle Data Type	MSSQL Data Type
APPOINTMENT_PRIMARY_KEY	NUMBER	INT
APPOINTMENT_SUBJECT	VARCHAR2(250)	VARCHAR(250)
APPOINTMENT_LOCATION	VARCHAR2(250)	VARCHAR(250)
APPOINTMENT_AREA	VARCHAR2(50)	VARCHAR(50)
APPOINTMENT_START_ON	DATE	DATETIME
APPOINTMENT_END_ON	DATE	DATETIME
APPOINTMENT_IS_ALL_DAY	VARCHAR2(4)	VARCHAR(4)
APPOINTMENT_DEFAULT_CATEGORY	VARCHAR2(50)	VARCHAR(50)
APPOINTMENT_DEFAULT_CAT_TREE	VARCHAR2(250)	VARCHAR(250)
PROJECT_UNIQUE_CODE	VARCHAR2(4)	VARCHAR(4)
PROJECT_OBJECT_TITLE	VARCHAR2(250)	VARCHAR(250)
PROJECT_PRIMARY_KEY	NUMBER	INT
PROJECT_NAME	VARCHAR2(250)	VARCHAR(250)
PROJECT_NUMBER	VARCHAR2(50)	VARCHAR(50)
PROJECT_DEFAULT_CATEGORY	VARCHAR2(50)	VARCHAR(50)
MILESTONE_UNIQUE_CODE	VARCHAR2(4)	VARCHAR(4)
MILESTONE_OBJECT_TITLE	VARCHAR2(250)	VARCHAR(250)

MILESTONE_PRIMARY_KEY	NUMBER	INT
MILESTONE_SUBJECT	VARCHAR2(250)	VARCHAR(250)
MILESTONE_DATE	DATE	DATETIME
MILESTONE_DEFAULT_CATEGORY	VARCHAR2(50)	VARCHAR(50)
ATTENDANCE	VARCHAR2(20)	VARCHAR(20)
ATTENDANCE_START_ON	DATE	DATETIME
ATTENDANCE_END_ON	DATE	DATETIME
ATTENDEE_CONTACT_PRIMARY_KEY	NUMBER	INT
ATTENDEE_CONTACT_TYPE	VARCHAR2(10)	VARCHAR(10)
ATTENDEE_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)
ATTENDEE_MIDDLE_NAME	VARCHAR2(50)	VARCHAR(50)
ATTENDEE_NAME	VARCHAR2(250)	VARCHAR(250)
SECURITY	VARCHAR2(10)	VARCHAR(10)
APPOINTMENT_START_ON_DATE_KEY	DATE	DATETIME
APPOINTMENT_END_ON_DATE_KEY	DATE	DATETIME
ATTENDANCE_START_ON_DATE_KEY	DATE	DATETIME
ATTENDANCE_END_ON_DATE_KEY	DATE	DATETIME

WH_APPOINTMENT_CATEGORIES

Column Name	Oracle Data Type	MSSQL Data Type
APPOINTMENT_PRIMARY_KEY	NUMBER	INT
APPOINTMENT_SUBJECT	VARCHAR2(250)	VARCHAR(250)

APPOINTMENT_AREA	VARCHAR2(50)	VARCHAR(50)
APPOINTMENT_START_ON	DATE	DATETIME
APPOINTMENT_END_ON	DATE	DATETIME
APPOINTMENT_IS_ALL_DAY	VARCHAR2(4)	VARCHAR(4)
APPOINTMENT_LOCATION	VARCHAR2(250)	VARCHAR(250)
PROJECT_UNIQUE_CODE	VARCHAR2(4)	VARCHAR(4)
PROJECT_OBJECT_TITLE	VARCHAR2(250)	VARCHAR(250)
PROJECT_PRIMARY_KEY	NUMBER	INT
PROJECT_NUMBER	VARCHAR2(50)	VARCHAR(50)
PROJECT_NAME	VARCHAR2(250)	VARCHAR(250)
PROJECT_DEFAULT_CATEGORY	VARCHAR2(50)	VARCHAR(50)
MILESTONE_UNIQUE_CODE	VARCHAR2(4)	VARCHAR(4)
MILESTONE_OBJECT_TITLE	VARCHAR2(250)	VARCHAR(250)
MILESTONE_PRIMARY_KEY	NUMBER	INT
MILESTONE_SUBJECT	VARCHAR2(250)	VARCHAR(250)
MILESTONE_DATE	DATE	DATETIME
MILESTONE_DEFAULT_CATEGORY	VARCHAR2(50)	VARCHAR(50)
APPOINTMENT_CATEGORY_NAME	VARCHAR2(50)	VARCHAR(50)
APPOINTMENT_CATEGORY_TREE	VARCHAR2(250)	VARCHAR(250)
IS_CATEGORY_MANUALLY_ADDED	VARCHAR2(1)	VARCHAR(1)
IS_DEFAULT_CATEGORY	VARCHAR2(5)	VARCHAR(5)

SECURITY	VARCHAR2(10)	VARCHAR(10)
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WH_APPOINTMENT_RESOURCES

Column Name	Oracle Data Type	MSSQL Data Type
APPOINTMENT_PRIMARY_KEY	NUMBER	INT
APPOINTMENT_SUBJECT	VARCHAR2(250)	VARCHAR(250)
APPOINTMENT_LOCATION	VARCHAR2(250)	VARCHAR(250)
APPOINTMENT_AREA	VARCHAR2(50)	VARCHAR(50)
APPOINTMENT_START_ON	DATE	DATETIME
APPOINTMENT_END_ON	DATE	DATETIME
APPOINTMENT_IS_ALL_DAY	VARCHAR2(4)	VARCHAR(4)
APPOINTMENT_DEFAULT_CATEGORY	VARCHAR2(50)	VARCHAR(50)
APPOINTMENT_DEFAULT_CAT_TREE	VARCHAR2(250)	VARCHAR(250)
PROJECT_UNIQUE_CODE	VARCHAR2(4)	VARCHAR(4)
PROJECT_OBJECT_TITLE	VARCHAR2(250)	VARCHAR(250)
PROJECT_PRIMARY_KEY	NUMBER	INT
PROJECT_NUMBER	VARCHAR2(50)	VARCHAR(50)
PROJECT_NAME	VARCHAR2(250)	VARCHAR(250)
PROJECT_DEFAULT_CATEGORY	VARCHAR2(50)	VARCHAR(50)
MILESTONE_UNIQUE_CODE	VARCHAR2(4)	VARCHAR(4)
MILESTONE_OBJECT_TITLE	VARCHAR2(250)	VARCHAR(250)
MILESTONE_PRIMARY_KEY	NUMBER	INT

MILESTONE_SUBJECT	VARCHAR2(250)	VARCHAR(250)
MILESTONE_DATE	DATE	DATETIME
MILESTONE_DEFAULT_CATEGORY	VARCHAR2(50)	VARCHAR(50)
RESOURCE_NAME	VARCHAR2(50)	VARCHAR(50)
RESOURCE_START_ON	DATE	DATETIME
RESOURCE_END_ON	DATE	DATETIME
SECURITY	VARCHAR2(10)	VARCHAR(10)

WH_APPOINTMENT_GROUP_ACCESS

Column Name	Oracle Data Type	MSSQL Data Type
APPOINTMENT_PRIMARY_KEY	NUMBER	INT
GROUP_PRIMARY_KEY	NUMBER	INT
ALLOW_DENY_IID	CHAR(1)	CHAR(1)
OPERATION_IID	NUMBER	INT
IS_MANUAL	NUMBER	INT
VERSION	NUMBER	INT

WH_APPOINTMENT_USER_ACCESS

Column Name	Oracle Data Type	MSSQL Data Type
APPOINTMENT_PRIMARY_KEY	NUMBER	INT
USER_PRIMARY_KEY	NUMBER	INT
ALLOW_DENY_IID	CHAR(1)	CHAR(1)
OPERATION_IID	NUMBER	INT

IS_MANUAL	NUMBER	INT
VERSION	NUMBER	INT

WH_APPOINTMENT_SECURITY

Column Name	Oracle Data Type	MSSQL Data Type
APPOINTMENT_PRIMARY_KEY	NUMBER	INT
CREATED_BY_CONTACT_PK	NUMBER	INT
SECURITY	NVARCHAR2(10)	NVARCHAR(10)

WH_APPOINTMENT_WORKFLOW

Column Name	Oracle Data Type	MSSQL Data Type
APPOINTMENT_PRIMARY_KEY	NUMBER	INT
APPOINTMENT_SUBJECT	VARCHAR2(250)	VARCHAR2(250)
APPOINTMENT_LOCATION	VARCHAR2(250)	VARCHAR2(250)
APPOINTMENT_AREA	VARCHAR2(50)	VARCHAR2(50)
APPOINTMENT_START_ON	DATE	DATETIME
APPOINTMENT_END_ON	DATE	DATETIME
APPOINTMENT_IS_ALL_DAY	VARCHAR2(1)	VARCHAR2(1)
APPOINTMENT_DEFAULT_CATEGORY	VARCHAR2(50)	VARCHAR2(50)
APPOINTMENT_DEFAULT_CAT_TREE	VARCHAR2(250)	VARCHAR(250)
PROJECT_UNIQUE_CODE	VARCHAR2(4)	VARCHAR(4)
PROJECT_OBJECT_TITLE	VARCHAR2(250)	VARCHAR(250)
PROJECT_PRIMARY_KEY	NUMBER	INT

PROJECT_NAME	VARCHAR2(250)	VARCHAR(250)
PROJECT_NUMBER	VARCHAR2(50)	VARCHAR(50)
PROJECT_DEFAULT_CATEGORY	VARCHAR2(50)	VARCHAR(50)
MILESTONE_UNIQUE_CODE	VARCHAR2(4)	VARCHAR(4)
MILESTONE_OBJECT_TITLE	VARCHAR2(250)	VARCHAR(250)
MILESTONE_PRIMARY_KEY	NUMBER	INT
MILESTONE_SUBJECT	VARCHAR2(250)	VARCHAR(250)
MILESTONE_DATE	DATE	DATETIME
MILESTONE_DEFAULT_CATEGORY	VARCHAR2(50)	VARCHAR(50)
WORKFLOW_PRIMARY_KEY	NUMBER	INT
REQUEST_NAME	VARCHAR2(50)	VARCHAR(50)
REQUESTED_BY_CONTACT_PK	NUMBER	INT
REQUESTED_BY_CONTACT_TYPE	VARCHAR2(7)	VARCHAR(7)
REQUESTED_BY_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)
REQUESTED_BY_MIDDLE_NAME	VARCHAR2(50)	VARCHAR(50)
REQUESTED_BY_NAME	VARCHAR2(250)	VARCHAR(250)
REQUESTED_ON	DATE	DATETIME
COMPLETED_ON	DATE	DATETIME
WORKFLOW_STATUS	VARCHAR2(30)	VARCHAR(30)
COMMENT_TO_REQUESTOR	VARCHAR2(2000)	VARCHAR(2000)
EXPIRES_ON	DATE	DATETIME

EXPIRE_ACTION	VARCHAR2(30)	VARCHAR(30)
TRANSACTION_STATUS	VARCHAR2(250)	VARCHAR(250)
CURRENT_STOP_NO	NUMBER	INT
REJECT_ACTION	VARCHAR2(30)	VARCHAR(30)
REJECT_REASON	VARCHAR2(50)	VARCHAR(50)
UPDATE_WHILE_PENDING	VARCHAR2(105)	VARCHAR(105)
PROCESS_MANAGER_CONTACT_PK	NUMBER	INT
PROCESS_MANAGER_CONTACT_TYPE	VARCHAR2(7)	VARCHAR(7)
PROCESS_MANAGER_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)
PROCESS_MANAGER_MIDDLE_NAME	VARCHAR2(50)	VARCHAR(50)
PROCESS_MANAGER_NAME	VARCHAR2(250)	VARCHAR(250)
STOP_MEMBER_PRIMARY_KEY	NUMBER	INT
STOP_PRIMARY_KEY	NUMBER	INT
STOP	NUMBER	INT
PERFORMER_CONTACT_PK	NUMBER	INT
PERFORMER_CONTACT_TYPE	VARCHAR2(7)	VARCHAR(7)
PERFORMER_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)
PERFORMER_MIDDLE_NAME	VARCHAR2(50)	VARCHAR(50)
PERFORMER_NAME	VARCHAR2(250)	VARCHAR(250)
STOP_STATUS	VARCHAR2(40)	VARCHAR(40)
ACTION_DATE	DATE	DATETIME

STOP_EXPIRATION_DATE	DATE	DATETIME
INTERNAL_COMMENT	VARCHAR2(2000)	VARCHAR(2000)
EMAIL_SENT	VARCHAR2(3)	VARCHAR(3)
CREATED_BY_CONTACT_PK	NUMBER	INT
CREATED_BY_CONTACT_TYPE	VARCHAR2(7)	VARCHAR(7)
CREATED_BY_CONTACT_NAME	VARCHAR2(250)	VARCHAR(250)
CREATED_BY_CONTACT_MIDDLE_NAME	VARCHAR2(50)	VARCHAR(50)
CREATED_BY_CONTACT_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)
CREATED_ON	DATE	DATETIME
MODIFIED_BY_CONTACT_PK	NUMBER	INT
MODIFIED_BY_CONTACT_NAME	VARCHAR2(250)	VARCHAR(250)
MODIFIED_BY_CONTACT_MIDDLE_NAME	VARCHAR2(50)	VARCHAR(50)
MODIFIED_BY_CONTACT_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)
MODIFIED_BY_CONTACT_TYPE	VARCHAR2(7)	VARCHAR(7)
MODIFIED_ON	DATE	DATETIME

WH_APPOINTMENT_WORKFLW_HISTORY

Column Name	Oracle Data Type	MSSQL Data Type
APPOINTMENT_PRIMARY_KEY	NUMBER	INT
APPOINTMENT_SUBJECT	VARCHAR2(250)	VARCHAR2(250)
APPOINTMENT_LOCATION	VARCHAR2(250)	VARCHAR2(250)
APPOINTMENT_AREA	VARCHAR2(50)	VARCHAR2(50)

APPOINTMENT_START_ON	DATE	DATETIME
APPOINTMENT_END_ON	DATE	DATETIME
APPOINTMENT_IS_ALL_DAY	VARCHAR2(1)	VARCHAR2(1)
APPOINTMENT_DEFAULT_CATEGORY	VARCHAR2(50)	VARCHAR2(50)
APPOINTMENT_DEFAULT_CAT_TREE	VARCHAR2(250)	VARCHAR(250)
PROJECT_UNIQUE_CODE	VARCHAR2(4)	VARCHAR(4)
PROJECT_OBJECT_TITLE	VARCHAR2(250)	VARCHAR(250)
PROJECT_PRIMARY_KEY	NUMBER	INT
PROJECT_NAME	VARCHAR2(250)	VARCHAR(250)
PROJECT_NUMBER	VARCHAR2(50)	VARCHAR(50)
PROJECT_DEFAULT_CATEGORY	VARCHAR2(50)	VARCHAR(50)
MILESTONE_UNIQUE_CODE	VARCHAR2(4)	VARCHAR(4)
MILESTONE_OBJECT_TITLE	VARCHAR2(250)	VARCHAR(250)
MILESTONE_PRIMARY_KEY	NUMBER	INT
MILESTONE_SUBJECT	VARCHAR2(250)	VARCHAR(250)
MILESTONE_DATE	DATE	DATETIME
MILESTONE_DEFAULT_CATEGORY	VARCHAR2(50)	VARCHAR(50)
WORKFLOW_PRIMARY_KEY	NUMBER	INT
REQUEST_NAME	VARCHAR2(50)	VARCHAR(50)
REQUESTED_BY_CONTACT_PK	NUMBER	INT
REQUESTED_BY_CONTACT_TYPE	VARCHAR2(7)	VARCHAR(7)

REQUESTED_BY_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)
REQUESTED_BY_MIDDLE_NAME	VARCHAR2(50)	VARCHAR(50)
REQUESTED_BY_NAME	VARCHAR2(250)	VARCHAR(250)
REQUESTED_ON	DATE	DATETIME
COMPLETED_ON	DATE	DATETIME
WORKFLOW_STATUS	VARCHAR2(30)	VARCHAR(30)
COMMENT_TO_REQUESTOR	VARCHAR2(2000)	VARCHAR(2000)
EXPIRES_ON	DATE	DATETIME
EXPIRE_ACTION	VARCHAR2(30)	VARCHAR(30)
TRANSACTION_STATUS	VARCHAR2(250)	VARCHAR(250)
CURRENT_STOP_NO	NUMBER	INT
REJECT_ACTION	VARCHAR2(30)	VARCHAR(30)
REJECT_REASON	VARCHAR2(50)	VARCHAR(50)
UPDATE_WHILE_PENDING	VARCHAR2(105)	VARCHAR(105)
PROCESS_MANAGER_CONTACT_PK	NUMBER	INT
PROCESS_MANAGER_CONTACT_TYPE	VARCHAR2(7)	VARCHAR(7)
PROCESS_MANAGER_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)
PROCESS_MANAGER_MIDDLE_NAME	VARCHAR2(50)	VARCHAR(50)
PROCESS_MANAGER_NAME	VARCHAR2(250)	VARCHAR(250)
ACTIVITY	VARCHAR2(250)	VARCHAR(250)
ACTION_DATE	DATE	DATETIME

INTERNAL_COMMENT	VARCHAR2(2000)	VARCHAR(2000)
CREATED_BY_CONTACT_PK	NUMBER	INT
CREATED_BY_CONTACT_TYPE	VARCHAR2(7)	VARCHAR(7)
CREATED_BY_CONTACT_NAME	VARCHAR2(250)	VARCHAR(250)
CREATED_BY_CONTACT_MIDDLE_NAME	VARCHAR2(50)	VARCHAR(50)
CREATED_BY_CONTACT_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)
CREATED_ON	DATE	DATETIME
MODIFIED_BY_CONTACT_PK	NUMBER	INT
MODIFIED_BY_CONTACT_NAME	VARCHAR2(250)	VARCHAR(250)
MODIFIED_BY_CONTACT_MID_NAME	VARCHAR2(50)	VARCHAR(50)
MODIFIED_BY_CONTACT_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)
MODIFIED_BY_CONTACT_TYPE	VARCHAR2(7)	VARCHAR(7)
MODIFIED_ON	DATE	DATETIME

WH_APPOINTMENT_WORKFLW_RECEPNT

Column Name	Oracle Data Type	MSSQL Data Type
APPOINTMENT_PRIMARY_KEY	NUMBER	INT
APPOINTMENT_SUBJECT	VARCHAR2(250)	VARCHAR(250)
APPOINTMENT_LOCATION	VARCHAR2(250)	VARCHAR(250)
APPOINTMENT_AREA	VARCHAR2(50)	VARCHAR(50)
APPOINTMENT_START_ON	DATE	DATETIME
APPOINTMENT_END_ON	DATE	DATETIME

APPOINTMENT_IS_ALL_DAY	VARCHAR2(1)	VARCHAR(1)
APPOINTMENT_DEFAULT_CATEGORY	VARCHAR2(50)	VARCHAR(50)
APPOINTMENT_DEFAULT_CAT_TREE	VARCHAR2(250)	VARCHAR(250)
PROJECT_UNIQUE_CODE	VARCHAR2(4)	VARCHAR(4)
PROJECT_OBJECT_TITLE	VARCHAR2(250)	VARCHAR(250)
PROJECT_PRIMARY_KEY	NUMBER	INT
PROJECT_NAME	VARCHAR2(250)	VARCHAR(250)
PROJECT_NUMBER	VARCHAR2(50)	VARCHAR(50)
PROJECT_DEFAULT_CATEGORY	VARCHAR2(50)	VARCHAR(50)
MILESTONE_UNIQUE_CODE	VARCHAR2(4)	VARCHAR(4)
MILESTONE_OBJECT_TITLE	VARCHAR2(250)	VARCHAR(250)
MILESTONE_PRIMARY_KEY	NUMBER	INT
MILESTONE_SUBJECT	VARCHAR2(250)	VARCHAR(250)
MILESTONE_DATE	DATE	DATETIME
MILESTONE_DEFAULT_CATEGORY	VARCHAR2(50)	VARCHAR(50)
WORKFLOW_PRIMARY_KEY	NUMBER	INT
REQUEST_NAME	VARCHAR2(50)	VARCHAR(50)
REQUESTED_BY_CONTACT_PK	NUMBER	INT
REQUESTED_BY_CONTACT_TYPE	VARCHAR2(7)	VARCHAR(7)
REQUESTED_BY_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)
REQUESTED_BY_MIDDLE_NAME	VARCHAR2(50)	VARCHAR(50)

REQUESTED_BY_NAME	VARCHAR2(250)	VARCHAR(250)
REQUESTED_ON	DATE	DATETIME
COMPLETED_ON	DATE	DATETIME
WORKFLOW_STATUS	VARCHAR2(30)	VARCHAR(30)
EXPIRES_ON	DATE	DATETIME
CURRENT_STOP_NO	NUMBER	INT
PROCESS_MANAGER_CONTACT_PK	NUMBER	INT
PROCESS_MANAGER_CONTACT_TYPE	VARCHAR2(7)	VARCHAR(7)
PROCESS_MANAGER_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)
PROCESS_MANAGER_MIDDLE_NAME	VARCHAR2(50)	VARCHAR(50)
PROCESS_MANAGER_NAME	VARCHAR2(250)	VARCHAR(250)
EVENT	VARCHAR2(250)	VARCHAR2(250)
RECIPIENT_CONTACT_PK	NUMBER	INT
RECIPIENT_CONTACT_TYPE	VARCHAR2(7)	VARCHAR2(7)
RECIPIENT_FIRST_NAME	VARCHAR2(50)	VARCHAR2(50)
RECIPIENT_MIDDLE_NAME	VARCHAR2(50)	VARCHAR2(50)
RECIPIENT_NAME	VARCHAR2(250)	VARCHAR2(250)
VERSION	NUMBER	INT
CREATED_ON	DATE	DATETIME
CREATED_BY_CONTACT_PK	NUMBER	INT
CREATED_BY_CONTACT_TYPE	VARCHAR2(7)	VARCHAR2(7)

CREATED_BY_CONTACT_NAME	VARCHAR2(250)	VARCHAR2(250)
CREATED_BY_CONTACT_MIDDLE_NAME	VARCHAR2(50)	VARCHAR2(50)
CREATED_BY_CONTACT_FIRST_NAME	VARCHAR2(50)	VARCHAR2(50)
MODIFIED_ON	DATE	DATETIME
MODIFIED_BY_CONTACT_PK	NUMBER	INT
MODIFIED_BY_CONTACT_TYPE	VARCHAR2(7)	VARCHAR2(7)
MODIFIED_BY_CONTACT_NAME	VARCHAR2(250)	VARCHAR2(250)
MODIFIED_BY_CONTACT_MIDDLE_NAME	VARCHAR2(50)	VARCHAR2(50)

WH_APPOINTMENT_WORKFLOW_REVIEW

Column Name	Oracle Data Type	MSSQL Data Type
APPOINTMENT_PRIMARY_KEY	NUMBER	INT
APPOINTMENT_SUBJECT	VARCHAR2(250)	VARCHAR(250)
APPOINTMENT_LOCATION	VARCHAR2(250)	VARCHAR(250)
APPOINTMENT_AREA	VARCHAR2(50)	VARCHAR(50)
APPOINTMENT_START_ON	DATE	DATETIME
APPOINTMENT_END_ON	DATE	DATETIME
APPOINTMENT_IS_ALL_DAY	VARCHAR2(1)	VARCHAR(1)
APPOINTMENT_DEFAULT_CATEGORY	VARCHAR2(50)	VARCHAR(50)
APPOINTMENT_DEFAULT_CAT_TREE	VARCHAR2(250)	VARCHAR(250)
PROJECT_UNIQUE_CODE	VARCHAR2(4)	VARCHAR(4)
PROJECT_OBJECT_TITLE	VARCHAR2(250)	VARCHAR(250)

PROJECT_PRIMARY_KEY	NUMBER	INT
PROJECT_NAME	VARCHAR2(250)	VARCHAR(250)
PROJECT_NUMBER	VARCHAR2(50)	VARCHAR(50)
PROJECT_DEFAULT_CATEGORY	VARCHAR2(50)	VARCHAR(50)
MILESTONE_UNIQUE_CODE	VARCHAR2(4)	VARCHAR(4)
MILESTONE_OBJECT_TITLE	VARCHAR2(250)	VARCHAR(250)
MILESTONE_PRIMARY_KEY	NUMBER	INT
MILESTONE_SUBJECT	VARCHAR2(250)	VARCHAR(250)
MILESTONE_DATE	DATE	DATETIME
MILESTONE_DEFAULT_CATEGORY	VARCHAR2(50)	VARCHAR(50)
WORKFLOW_PRIMARY_KEY	NUMBER	INT
REQUEST_NAME	VARCHAR2(50)	VARCHAR(50)
REQUESTED_BY_CONTACT_PK	NUMBER	INT
REQUESTED_BY_CONTACT_TYPE	VARCHAR2(7)	VARCHAR(7)
REQUESTED_BY_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)
REQUESTED_BY_MIDDLE_NAME	VARCHAR2(50)	VARCHAR(50)
REQUESTED_BY_NAME	VARCHAR2(250)	VARCHAR(250)
REQUESTED_ON	DATE	DATETIME
COMPLETED_ON	DATE	DATETIME
WORKFLOW_STATUS	VARCHAR2(30)	VARCHAR(30)
EXPIRES_ON	DATE	DATETIME

CURRENT_STOP_NO	NUMBER	INT
PROCESS_MANAGER_CONTACT_PK	NUMBER	INT
PROCESS_MANAGER_CONTACT_TYPE	VARCHAR2(7)	VARCHAR(7)
PROCESS_MANAGER_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)
PROCESS_MANAGER_MIDDLE_NAME	VARCHAR2(50)	VARCHAR(50)
PROCESS_MANAGER_NAME	VARCHAR2(250)	VARCHAR(250)
STOP_PRIMARY_KEY	NUMBER	INT
STOP	NUMBER	INT
STOP_MEMBER_PRIMARY_KEY	NUMBER	INT
STOP_STATUS	VARCHAR2(40)	VARCHAR(40)
EMAIL_SENT	VARCHAR2(3)	VARCHAR(3)
REVIEW_PRIMARY_KEY	NUMBER	INT
REVIEW_PERFORMER_CONTACT_PK	NUMBER	INT
REVIEW_PERFORMER_CONTACT_TYPE	VARCHAR2(7)	VARCHAR(7)
REVIEW_PERFORMER_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)
REVIEW_PERFORMER_MIDDLE_NAME	VARCHAR2(50)	VARCHAR(50)
REVIEW_PERFORMER_NAME	VARCHAR2(250)	VARCHAR(250)
REVIEW_STATUS	VARCHAR2(20)	VARCHAR(20)
REVIEW_ACTION_DATE	DATE	DATETIME
REVIEW_APPROVAL_COMMENT	VARCHAR2(250)	VARCHAR(250)
REVIEW_REQUEST_COMMENT	VARCHAR2(250)	VARCHAR(250)

CREATED_ON	DATE	DATETIME
CREATED_BY_CONTACT_PK	NUMBER	INT
CREATED_BY_CONTACT_TYPE	VARCHAR2(7)	VARCHAR(7)
CREATED_BY_CONTACT_NAME	VARCHAR2(250)	VARCHAR(250)
CREATED_BY_CONTACT_MIDDLE_NAME	VARCHAR2(50)	VARCHAR(50)
CREATED_BY_CONTACT_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)
MODIFIED_ON	DATE	DATETIME
MODIFIED_BY_CONTACT_PK	NUMBER	INT
MODIFIED_BY_CONTACT_TYPE	VARCHAR2(7)	VARCHAR(7)
MODIFIED_BY_CONTACT_NAME	VARCHAR2(250)	VARCHAR(250)
MODIFIED_BY_CONTACT_MIDDLE_NAME	VARCHAR2(50)	VARCHAR(50)
MODIFIED_BY_CONTACT_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)

1.2.2.3 Contact

The system object Contact tables include:

- WH_CONTACT
- WH_CONTACT_ADDRESSES
- WH_CONTACT_CATEGORIES
- WH_CONTACT_DEFAULT_RATES
- WH_CONTACT_EMAILS
- WH_CONTACT_FAXES
- WH_CONTACT_GROUP_MEMBERS
- WH_CONTACT_INTERNET_ADDRESSES
- WH_CONTACT_PHONES
- WH_CONTACT_RATES
- WH_CONTACT_RELATIONS

- WH_CONTACT_SKILLS
- WH_CONTACT_TERRITORIES
- WH_CONTACT_GROUP_ACCESS*
- WH_CONTACT_USER_ACCESS*
- WH_CONTACT_SECURITY
- WH_CONTACT_WORKFLOW
- WH_CONTACT_WORKFLOW_HISTORY
- WH_CONTACT_WORKFLOW_RECIPIENT
- WH_CONTACT_WORKFLOW_REVIEW

* These tables support the user access and security feature and should not be queried directly.

WH_CONTACT

Column Name	Oracle Data Type	MSSQL Data Type
CONTACT_PRIMARY_KEY	NUMBER	INT
PERSON_OR_COMPANY	VARCHAR2(10)	VARCHAR(10)
CONTACT_NAME	VARCHAR2(250)	VARCHAR(250)
CONTACT_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)
CONTACT_MIDDLE_NAME	VARCHAR2(50)	VARCHAR(50)
CONTACT_PREFIX	VARCHAR2(50)	VARCHAR(50)
CONTACT_SUFFIX	VARCHAR2(50)	VARCHAR(50)
CONTACT_NUMBER	VARCHAR2(50)	VARCHAR(50)
CONTACT_ALIAS	VARCHAR2(250)	VARCHAR(250)
CONTACT_JOB_TITLE	VARCHAR2(250)	VARCHAR(250)
SALUTATION	VARCHAR2(50)	VARCHAR(50)
DRIVER_LICENSE	VARCHAR2(50)	VARCHAR(50)
SOCIAL_SECURITY_OR_TAX_ID	VARCHAR2(50)	VARCHAR(50)

BIRTH_DATE	DATE	DATETIME
COMPANY_CONTACT_PK	NUMBER	INT
COMPANY	VARCHAR2(250)	VARCHAR(250)
ADDRESS_TYPE	VARCHAR2(50)	VARCHAR(50)
STREET	VARCHAR2(250)	VARCHAR(250)
CITY	VARCHAR2(50)	VARCHAR(50)
STATE	VARCHAR2(50)	VARCHAR(50)
ZIP_CODE	VARCHAR2(50)	VARCHAR(50)
COUNTY	VARCHAR2(50)	VARCHAR(50)
COUNTRY	VARCHAR2(50)	VARCHAR(50)
GUIDE_NO	VARCHAR2(50)	VARCHAR(50)
ADDRESS_CURRENT_AS_OF	DATE	DATETIME
PHONE_TYPE	VARCHAR2(50)	VARCHAR(50)
PHONE_NUMBER	VARCHAR2(50)	VARCHAR(50)
FAX_TYPE	VARCHAR2(50)	VARCHAR(50)
FAX_NUMBER	VARCHAR2(50)	VARCHAR(50)
EMAIL_TYPE	VARCHAR2(50)	VARCHAR(50)
EMAIL_ADDRESS	VARCHAR2(250)	VARCHAR(250)
INTERNET_ADDRESS_TYPE	VARCHAR2(50)	VARCHAR(50)
INTERNET_ADDRESS	VARCHAR2(50)	VARCHAR(50)
CONTACT_DEFAULT_CATEGORY	VARCHAR2(50)	VARCHAR(50)

CONTACT_DEFAULT_CATEGORY_TREE	VARCHAR2(250)	VARCHAR(250)
CONTACT_DEFAULT_RATE_VALUE	NUMBER	DECIMAL(28,12)
CURRENCY_NAME	VARCHAR2(50)	VARCHAR(50)
CURRENCY_CODE	VARCHAR2(3)	VARCHAR(3)
CURRENCY_SYMBOL	VARCHAR2(3)	VARCHAR(3)
DOCUMENT_FOLDER_PRIMARY_KEY	NUMBER	INT
CREATED_ON	DATE	DATETIME
MODIFIED_ON	DATE	DATETIME
CREATED_BY_CONTACT_PK	NUMBER	INT
CREATED_BY_CONTACT_TYPE	VARCHAR2(10)	VARCHAR(10)
CREATED_BY_CONTACT_NAME	VARCHAR2(250)	VARCHAR(250)
CREATED_BY_CONTACT_MIDDLE_NAME	VARCHAR2(50)	VARCHAR(50)
CREATED_BY_CONTACT_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)
MODIFIED_BY_CONTACT_PK	NUMBER	INT
MODIFIED_BY_CONTACT_TYPE	VARCHAR2(10)	VARCHAR(10)
MODIFIED_BY_CONTACT_NAME	VARCHAR2(250)	VARCHAR(250)
MODIFIED_BY_CONTACT_MID_NAME	VARCHAR2(50)	VARCHAR(50)
MODIFIED_BY_CONTACT_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)
BEHALF_OF_CONTACT_PRIMARY_KEY	NUMBER	INT
SECURITY	VARCHAR2(10)	VARCHAR(10)
WORKFLOW_CURRENT_STATUS	VARCHAR2(15)	VARCHAR(15)

WORKFLOW_CURRENT_ACTION	VARCHAR2(50)	VARCHAR(50)
NOTES	CLOB	NTEXT
ADDRESS_TYPE_TREE_POSITION	VARCHAR2(250)	VARCHAR(250)
EMAIL_TYPE_TREE_POSITION	VARCHAR2(250)	VARCHAR(250)
FAX_TYPE_TREE_POSITION	VARCHAR2(250)	VARCHAR(250)
INTERNET_ADDRESS_TYPE_TREE_POS	VARCHAR2(250)	VARCHAR(250)
PHONE_TYPE_TREE_POSITION	VARCHAR2(250)	VARCHAR(250)
COUNTRY_TREE_POSITION	VARCHAR2(250)	VARCHAR(250)
CURRENT_APPROVER_CONTACT_PK	NUMBER	INT
CURRENT_APPROVER_NAME	VARCHAR2(250)	VARCHAR(250)
CURRENT_APPROVER_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)
CURRENT_APPROVER_MIDDLE_NAME	VARCHAR2(50)	VARCHAR(50)
CURRENT_APPROVER_TYPE	VARCHAR2(7)	VARCHAR(7)
LAST_PERFRMR_CONTACT_PK	NUMBER	INT
LAST_PERFRMR_NAME	VARCHAR2(250)	VARCHAR(250)
LAST_PERFRMR_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)
LAST_PERFRMR_MIDDLE_NAME	VARCHAR2(50)	VARCHAR(50)
LAST_PERFRMR_TYPE	VARCHAR2(7)	VARCHAR(7)
MULTIPLE_APPROVERS	VARCHAR2(3)	VARCHAR(3)
CREATED_ON_DATE_KEY	DATE	DATETIME
MODIFIED_ON_DATE_KEY	DATE	DATETIME

WH_CONTACT_ADDRESSES

Column Name	Oracle Data Type	MSSQL Data Type
CONTACT_PRIMARY_KEY	NUMBER	INT
PERSON_OR_COMPANY	VARCHAR2(10)	VARCHAR(10)
CONTACT_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)
CONTACT_MIDDLE_NAME	VARCHAR2(50)	VARCHAR(50)
CONTACT_NAME	VARCHAR2(250)	VARCHAR(250)
IS_ADDRESS_CURRENT	NUMBER	INT
ADDRESS_TYPE	VARCHAR2(50)	VARCHAR(50)
STREET	VARCHAR2(250)	VARCHAR(250)
CITY	VARCHAR2(50)	VARCHAR(50)
STATE	VARCHAR2(50)	VARCHAR(50)
ZIP_CODE	VARCHAR2(50)	VARCHAR(50)
COUNTY	VARCHAR2(50)	VARCHAR(50)
COUNTRY	VARCHAR2(50)	VARCHAR(50)
GUIDE_NO	VARCHAR2(50)	VARCHAR(50)
ADDRESS_CURRENT_AS_OF	DATE	DATETIME
IS_DEFAULT_ADDRESS	VARCHAR2(5)	VARCHAR(5)
SECURITY	VARCHAR2(10)	VARCHAR(10)
ADDRESS_TYPE_TREE_POSITION	VARCHAR2(250)	VARCHAR(250)

WH_CONTACT_CATEGORIES

Column Name	Oracle Data Type	MSSQL Data Type
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CONTACT_PRIMARY_KEY	NUMBER	INT
PERSON_OR_COMPANY	VARCHAR2(10)	VARCHAR(10)
CONTACT_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)
CONTACT_MIDDLE_NAME	VARCHAR2(50)	VARCHAR(50)
CONTACT_NAME	VARCHAR2(250)	VARCHAR(250)
IS_CATEGORY_MANUALLY_ADDED	VARCHAR2(3)	VARCHAR(3)
CATEGORY_NAME	VARCHAR2(50)	VARCHAR(50)
CATEGORY_TREE_POSITION	VARCHAR2(250)	VARCHAR(250)
IS_DEFAULT_CATEGORY	VARCHAR2(5)	VARCHAR(5)
SECURITY	VARCHAR2(10)	VARCHAR(10)

WH_CONTACT_DEFAULT_RATES

Column Name	Oracle Data Type	MSSQL Data Type
CONTACT_PRIMARY_KEY	NUMBER	INT
PERSON_OR_COMPANY	VARCHAR2(10)	VARCHAR(10)
CONTACT_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)
CONTACT_MIDDLE_NAME	VARCHAR2(50)	VARCHAR(50)
CONTACT_NAME	VARCHAR2(250)	VARCHAR(250)
RATE_AMOUNT	NUMBER	DECIMAL(28,12)
EFFECTIVE_FROM	DATE	DATETIME
EFFECTIVE_TO	DATE	DATETIME
SECURITY	VARCHAR2(10)	VARCHAR(10)

WH_CONTACT_EMAILS

Column Name	Oracle Data Type	MSSQL Data Type
CONTACT_PRIMARY_KEY	NUMBER	INT
PERSON_OR_COMPANY	VARCHAR2(10)	VARCHAR(10)
CONTACT_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)
CONTACT_MIDDLE_NAME	VARCHAR2(50)	VARCHAR(50)
CONTACT_NAME	VARCHAR2(250)	VARCHAR(250)
EMAIL_TYPE	VARCHAR2(50)	VARCHAR(50)
EMAIL_ADDRESS	VARCHAR2(250)	VARCHAR(250)
IS_DEFAULT_EMAIL	VARCHAR2(5)	VARCHAR(5)
SECURITY	VARCHAR2(10)	VARCHAR(10)
EMAIL_TYPE_TREE_POSITION	VARCHAR2(250)	VARCHAR(250)

WH_CONTACT_FAXES

Column Name	Oracle Data Type	MSSQL Data Type
CONTACT_PRIMARY_KEY	NUMBER	INT
PERSON_OR_COMPANY	VARCHAR2(10)	VARCHAR(10)
CONTACT_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)
CONTACT_MIDDLE_NAME	VARCHAR2(50)	VARCHAR(50)
CONTACT_NAME	VARCHAR2(250)	VARCHAR(250)
FAX_TYPE	VARCHAR2(50)	VARCHAR(50)
FAX_NUMBER	VARCHAR2(50)	VARCHAR(50)

IS_DEFAULT_FAX	VARCHAR2(5)	VARCHAR(5)
SECURITY	VARCHAR2(10)	VARCHAR(10)
FAX_TYPE_TREE_POSITION	VARCHAR2(250)	VARCHAR(250)

WH_CONTACT_GROUP_MEMBERS

Column Name	Oracle Data Type	MSSQL Data Type
CONTACT_GROUP_PRIMARY_KEY	NUMBER	INT
CONTACT_GROUP_NAME	VARCHAR2(250)	VARCHAR(250)
CONTACT_GROUP_IS_PUBLIC	VARCHAR2(5)	VARCHAR(5)
CONTACT_GROUP_MEMBER_PK	NUMBER	INT
CONTACT_PRIMARY_KEY	NUMBER	INT
CONTACT_TYPE	VARCHAR2(10)	VARCHAR(10)
CONTACT_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)
CONTACT_MIDDLE_NAME	VARCHAR2(50)	VARCHAR(50)
CONTACT_NAME	VARCHAR2(250)	VARCHAR(250)
CREATED_ON	DATE	DATETIME
MODIFIED_ON	DATE	DATETIME
CREATED_BY_CONTACT_PK	NUMBER	INT
CREATED_BY_CONTACT_TYPE	VARCHAR2(10)	VARCHAR(10)
CREATED_BY_CONTACT_NAME	VARCHAR2(250)	VARCHAR(250)
CREATED_BY_CONTACT_MIDDLE_NAME	VARCHAR2(50)	VARCHAR(50)
CREATED_BY_CONTACT_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)

MODIFIED_BY_CONTACT_PK	NUMBER	INT
MODIFIED_BY_CONTACT_TYPE	VARCHAR2(10)	VARCHAR(10)
MODIFIED_BY_CONTACT_NAME	VARCHAR2(250)	VARCHAR(250)
MODIFIED_BY_CONTACT_MID_NAME	VARCHAR2(50)	VARCHAR(50)
MODIFIED_BY_CONTACT_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)

WH_CONTACT_INTERNET_ADDRESSES

Column Name	Oracle Data Type	MSSQL Data Type
CONTACT_PRIMARY_KEY	NUMBER	INT
PERSON_OR_COMPANY	VARCHAR2(10)	VARCHAR(10)
CONTACT_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)
CONTACT_MIDDLE_NAME	VARCHAR2(50)	VARCHAR(50)
CONTACT_NAME	VARCHAR2(250)	VARCHAR(250)
INTERNET_ADDRESS_TYPE	VARCHAR2(50)	VARCHAR(50)
INTERNET_ADDRESS	VARCHAR2(50)	VARCHAR(50)
IS_DEFAULT_INTERNET_ADDRESS	VARCHAR2(5)	VARCHAR(5)
SECURITY	VARCHAR2(10)	VARCHAR(10)
INTERNET_ADDRESS_TYPE_TREE_POS	VARCHAR2(250)	VARCHAR(250)

WH_CONTACT_PHONES

Column Name	Oracle Data Type	MSSQL Data Type
CONTACT_PRIMARY_KEY	NUMBER	INT
PERSON_OR_COMPANY	VARCHAR2(10)	VARCHAR(10)

CONTACT_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)
CONTACT_MIDDLE_NAME	VARCHAR2(50)	VARCHAR(50)
CONTACT_NAME	VARCHAR2(250)	VARCHAR(250)
CONTACT_PHONE	VARCHAR2(50)	VARCHAR(50)
CONTACT_PHONE_TYPE	VARCHAR2(50)	VARCHAR(50)
IS_DEFAULT_PHONE	VARCHAR2(5)	VARCHAR(5)
SECURITY	VARCHAR2(10)	VARCHAR(10)
CONTACT_PHONE_TYPE_TREE_POS	VARCHAR2(250)	VARCHAR(250)

WH_CONTACT_RATES

Column Name	Oracle Data Type	MSSQL Data Type
CONTACT_PRIMARY_KEY	NUMBER	INT
PERSON_OR_COMPANY	VARCHAR2(10)	VARCHAR(10)
CONTACT_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)
CONTACT_MIDDLE_NAME	VARCHAR2(50)	VARCHAR(50)
CONTACT_NAME	VARCHAR2(250)	VARCHAR(250)
RATE_AMOUNT	NUMBER	DECIMAL(28,12)
EFFECTIVE_FROM	DATE	DATETIME
EFFECTIVE_TO	DATE	DATETIME
TASK_CATEGORY_NAME	VARCHAR2(50)	VARCHAR(50)
TASK_CATEGORY_TREE_POSITION	VARCHAR2(250)	VARCHAR(250)
SECURITY	VARCHAR2(10)	VARCHAR(10)

WH_CONTACT_RELATIONS

Column Name	Oracle Data Type	MSSQL Data Type
LEFT_CONTACT_PRIMARY_KEY	NUMBER	INT
LEFT_CONTACT_TYPE	VARCHAR2(10)	VARCHAR(10)
LEFT_CONTACT_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)
LEFT_CONTACT_MIDDLE_NAME	VARCHAR2(50)	VARCHAR(50)
LEFT_CONTACT_NAME	VARCHAR2(250)	VARCHAR(250)
RELATION_NAME	VARCHAR2(50)	VARCHAR(50)
RELATION_TREE_POSITION	VARCHAR2(250)	VARCHAR(250)
RIGHT_CONTACT_PRIMARY_KEY	NUMBER	INT
RIGHT_CONTACT_TYPE	VARCHAR2(10)	VARCHAR(10)
RIGHT_CONTACT_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)
RIGHT_CONTACT_MIDDLE_NAME	VARCHAR2(50)	VARCHAR(50)
RIGHT_CONTACT_NAME	VARCHAR2(250)	VARCHAR(250)

WH_CONTACT_SKILLS

Column Name	Oracle Data Type	MSSQL Data Type
CONTACT_PRIMARY_KEY	NUMBER	INT
PERSON_OR_COMPANY	VARCHAR2(10)	VARCHAR(10)
CONTACT_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)
CONTACT_MIDDLE_NAME	VARCHAR2(50)	VARCHAR(50)
CONTACT_NAME	VARCHAR2(250)	VARCHAR(250)

LEVEL_OF_EXPERTISE	NUMBER	INT
SKILL_TYPE	VARCHAR2(50)	VARCHAR(50)
SECURITY	VARCHAR2(10)	VARCHAR(10)

WH_CONTACT_TERRITORIES

Column Name	Oracle Data Type	MSSQL Data Type
CONTACT_PRIMARY_KEY	NUMBER	INT
PERSON_OR_COMPANY	VARCHAR2(10)	VARCHAR(10)
CONTACT_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)
CONTACT_MIDDLE_NAME	VARCHAR2(50)	VARCHAR(50)
CONTACT_NAME	VARCHAR2(250)	VARCHAR(250)
TERRITORY	VARCHAR2(50)	VARCHAR(50)
SECURITY	VARCHAR2(10)	VARCHAR(10)

WH_CONTACT_GROUP_ACCESS

Column Name	Oracle Data Type	MSSQL Data Type
CONTACT_PRIMARY_KEY	NUMBER	INT
GROUP_PRIMARY_KEY	NUMBER	INT
ALLOW_DENY_IID	CHAR(1)	CHAR(1)
OPERATION_IID	NUMBER	INT
IS_MANUAL	NUMBER	INT
VERSION	NUMBER	INT

WH_CONTACT_USER_ACCESS

Column Name	Oracle Data Type	MSSQL Data Type
CONTACT_PRIMARY_KEY	NUMBER	INT
USER_PRIMARY_KEY	NUMBER	INT
ALLOW_DENY_IID	CHAR(1)	CHAR(1)
OPERATION_IID	NUMBER	INT
IS_MANUAL	NUMBER	INT
VERSION	NUMBER	INT

WH_CONTACT_SECURITY

Column Name	Oracle Data Type	MSSQL Data Type
CONTACT_PRIMARY_KEY	NUMBER	INT
CREATED_BY_CONTACT_PK	NUMBER	INT
SECURITY	NVARCHAR2(10)	NVARCHAR(10)

WH_CONTACT_WORKFLOW

Column Name	Oracle Data Type	MSSQL Data Type
CONTACT_PRIMARY_KEY	NUMBER	INT
CONTACT_TYPE	VARCHAR2(7)	VARCHAR(7)
CONTACT_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)
CONTACT_MIDDLE_NAME	VARCHAR2(50)	VARCHAR(50)
CONTACT_NAME	VARCHAR2(250)	VARCHAR(250)
WORKFLOW_PRIMARY_KEY	NUMBER	INT

REQUEST_NAME	VARCHAR2(50)	VARCHAR(50)
REQUESTED_BY_CONTACT_PK	NUMBER	INT
REQUESTED_BY_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)
REQUESTED_BY_MIDDLE_NAME	VARCHAR2(50)	VARCHAR(50)
REQUESTED_BY_NAME	VARCHAR2(250)	VARCHAR(250)
REQUESTED_BY_CONTACT_TYPE	VARCHAR2(7)	VARCHAR(7)
REQUESTED_ON	DATE	DATETIME
COMPLETED_ON	DATE	DATETIME
WORKFLOW_STATUS	VARCHAR2(30)	VARCHAR(30)
COMMENT_TO_REQUESTOR	VARCHAR2(2000)	VARCHAR(2000)
EXPIRES_ON	DATE	DATETIME
EXPIRE_ACTION	VARCHAR2(30)	VARCHAR(30)
TRANSACTION_STATUS	VARCHAR2(250)	VARCHAR(250)
CURRENT_STOP_NO	NUMBER	INT
REJECT_ACTION	VARCHAR2(30)	VARCHAR(30)
REJECT_REASON	VARCHAR2(50)	VARCHAR(50)
UPDATE_WHILE_PENDING	VARCHAR2(105)	VARCHAR(105)
PROCESS_MANAGER_CONTACT_PK	NUMBER	INT
PROCESS_MANAGER_CONTACT_TYPE	VARCHAR2(7)	VARCHAR(7)
PROCESS_MANAGER_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)
PROCESS_MANAGER_MIDDLE_NAME	VARCHAR2(50)	VARCHAR(50)

PROCESS_MANAGER_NAME	VARCHAR2(250)	VARCHAR(250)
STOP_MEMBER_PRIMARY_KEY	NUMBER	INT
STOP_PRIMARY_KEY	NUMBER	INT
STOP	NUMBER	INT
PERFORMER_CONTACT_PK	NUMBER	INT
PERFORMER_CONTACT_TYPE	VARCHAR2(7)	VARCHAR(7)
PERFORMER_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)
PERFORMER_MIDDLE_NAME	VARCHAR2(50)	VARCHAR(50)
PERFORMER_NAME	VARCHAR2(250)	VARCHAR(250)
STOP_STATUS	VARCHAR2(40)	VARCHAR(40)
ACTION_DATE	DATE	DATETIME
STOP_EXPIRATION_DATE	DATE	DATETIME
INTERNAL_COMMENT	VARCHAR2(2000)	VARCHAR(2000)
EMAIL_SENT	VARCHAR2(3)	VARCHAR(3)
CREATED_BY_CONTACT_PK	NUMBER	INT
CREATED_BY_CONTACT_TYPE	VARCHAR2(7)	VARCHAR(7)
CREATED_BY_CONTACT_NAME	VARCHAR2(250)	VARCHAR(250)
CREATED_BY_CONTACT_MIDDLE_NAME	VARCHAR2(50)	VARCHAR(50)
CREATED_BY_CONTACT_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)
CREATED_ON	DATE	DATETIME
MODIFIED_BY_CONTACT_PK	NUMBER	INT

MODIFIED_BY_CONTACT_NAME	VARCHAR2(250)	VARCHAR(250)
MODIFIED_BY_CONTACT_MIDDLE_NAME	VARCHAR2(50)	VARCHAR(50)
MODIFIED_BY_CONTACT_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)
MODIFIED_BY_CONTACT_TYPE	VARCHAR2(7)	VARCHAR(7)
MODIFIED_ON	DATE	DATETIME

WH_CONTACT_WORKFLOW_HISTORY

Column Name	Oracle Data Type	MSSQL Data Type
CONTACT_PRIMARY_KEY	NUMBER	INT
CONTACT_TYPE	VARCHAR2(7)	VARCHAR(7)
CONTACT_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)
CONTACT_MIDDLE_NAME	VARCHAR2(50)	VARCHAR(50)
CONTACT_NAME	VARCHAR2(250)	VARCHAR(250)
WORKFLOW_PRIMARY_KEY	NUMBER	INT
REQUEST_NAME	VARCHAR2(50)	VARCHAR(50)
REQUESTED_BY_CONTACT_PK	NUMBER	INT
REQUESTED_BY_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)
REQUESTED_BY_MIDDLE_NAME	VARCHAR2(50)	VARCHAR(50)
REQUESTED_BY_NAME	VARCHAR2(250)	VARCHAR(250)
REQUESTED_BY_CONTACT_TYPE	VARCHAR2(7)	VARCHAR(7)
REQUESTED_ON	DATE	DATETIME
COMPLETED_ON	DATE	DATETIME

WORKFLOW_STATUS	VARCHAR2(30)	VARCHAR(30)
COMMENT_TO_REQUESTOR	VARCHAR2(2000)	VARCHAR(2000)
EXPIRES_ON	DATE	DATETIME
EXPIRE_ACTION	VARCHAR2(30)	VARCHAR(30)
TRANSACTION_STATUS	VARCHAR2(250)	VARCHAR(250)
CURRENT_STOP_NO	NUMBER	INT
REJECT_ACTION	VARCHAR2(30)	VARCHAR(30)
REJECT_REASON	VARCHAR2(50)	VARCHAR(50)
UPDATE_WHILE_PENDING	VARCHAR2(105)	VARCHAR(105)
PROCESS_MANAGER_CONTACT_PK	NUMBER	INT
PROCESS_MANAGER_CONTACT_TYPE	VARCHAR2(7)	VARCHAR(7)
PROCESS_MANAGER_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)
PROCESS_MANAGER_MIDDLE_NAME	VARCHAR2(50)	VARCHAR(50)
PROCESS_MANAGER_NAME	VARCHAR2(250)	VARCHAR(250)
STOP_MEMBER_PRIMARY_KEY	NUMBER	INT
STOP_PRIMARY_KEY	NUMBER	INT
STOP	NUMBER	INT
PERFORMER_CONTACT_PK	NUMBER	INT
PERFORMER_CONTACT_TYPE	VARCHAR2(7)	VARCHAR(7)
PERFORMER_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)
PERFORMER_MIDDLE_NAME	VARCHAR2(50)	VARCHAR(50)

PERFORMER_NAME	VARCHAR2(250)	VARCHAR(250)
ACTIVITY	VARCHAR2(250)	VARCHAR(250)
ACTION_DATE	DATE	DATETIME
INTERNAL_COMMENT	VARCHAR2(2000)	VARCHAR(2000)
CREATED_BY_CONTACT_PK	NUMBER	INT
CREATED_BY_CONTACT_TYPE	VARCHAR2(7)	VARCHAR(7)
CREATED_BY_CONTACT_NAME	VARCHAR2(250)	VARCHAR(250)
CREATED_BY_CONTACT_MIDDLE_NAME	VARCHAR2(50)	VARCHAR(50)
CREATED_BY_CONTACT_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)
CREATED_ON	DATE	DATETIME
MODIFIED_BY_CONTACT_PK	NUMBER	INT
MODIFIED_BY_CONTACT_NAME	VARCHAR2(250)	VARCHAR(250)
MODIFIED_BY_CONTACT_MID_NAME	VARCHAR2(50)	VARCHAR(50)
MODIFIED_BY_CONTACT_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)
MODIFIED_BY_CONTACT_TYPE	VARCHAR2(7)	VARCHAR(7)
MODIFIED_ON	DATE	DATETIME

WH_CONTACT_WORKFLOW_RECIPIENT

Column Name	Oracle Data Type	MSSQL Data Type
CONTACT_PRIMARY_KEY	NUMBER	INT
CONTACT_TYPE	VARCHAR2(7)	VARCHAR(7)
CONTACT_MIDDLE_NAME	VARCHAR2(50)	VARCHAR(50)

CONTACT_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)
CONTACT_NAME	VARCHAR2(250)	VARCHAR(250)
WORKFLOW_PRIMARY_KEY	NUMBER	INT
REQUEST_NAME	VARCHAR2(50)	VARCHAR(50)
REQUESTED_BY_CONTACT_PK	NUMBER	INT
REQUESTED_BY_CONTACT_TYPE	VARCHAR2(7)	VARCHAR(7)
REQUESTED_BY_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)
REQUESTED_BY_MIDDLE_NAME	VARCHAR2(50)	VARCHAR(50)
REQUESTED_BY_NAME	VARCHAR2(250)	VARCHAR(250)
REQUESTED_ON	DATE	DATETIME
COMPLETED_ON	DATE	DATETIME
WORKFLOW_STATUS	VARCHAR2(30)	VARCHAR(30)
EXPIRES_ON	DATE	DATETIME
CURRENT_STOP_NO	NUMBER	INT
PROCESS_MANAGER_CONTACT_PK	NUMBER	INT
PROCESS_MANAGER_CONTACT_TYPE	VARCHAR2(7)	VARCHAR(7)
PROCESS_MANAGER_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)
PROCESS_MANAGER_MIDDLE_NAME	VARCHAR2(50)	VARCHAR(50)
PROCESS_MANAGER_NAME	VARCHAR2(250)	VARCHAR(250)
EVENT	VARCHAR2(250)	VARCHAR2(250)
RECIPIENT_CONTACT_PK	NUMBER	INT

RECIPIENT_CONTACT_TYPE	VARCHAR2(7)	VARCHAR2(7)
RECIPIENT_FIRST_NAME	VARCHAR2(50)	VARCHAR2(50)
RECIPIENT_MIDDLE_NAME	VARCHAR2(50)	VARCHAR2(50)
RECIPIENT_NAME	VARCHAR2(250)	VARCHAR2(250)
VERSION	NUMBER	INT
CREATED_ON	DATE	DATETIME
CREATED_BY_CONTACT_PK	NUMBER	INT
CREATED_BY_CONTACT_TYPE	VARCHAR2(7)	VARCHAR2(7)
CREATED_BY_CONTACT_NAME	VARCHAR2(250)	VARCHAR2(250)
CREATED_BY_CONTACT_MIDDLE_NAME	VARCHAR2(50)	VARCHAR2(50)
CREATED_BY_CONTACT_FIRST_NAME	VARCHAR2(50)	VARCHAR2(50)
MODIFIED_ON	DATE	DATETIME
MODIFIED_BY_CONTACT_PK	NUMBER	INT
MODIFIED_BY_CONTACT_TYPE	VARCHAR2(7)	VARCHAR2(7)
MODIFIED_BY_CONTACT_NAME	VARCHAR2(250)	VARCHAR2(250)
MODIFIED_BY_CONTACT_MID_NAME	VARCHAR2(50)	VARCHAR2(50)

WH_CONTACT_WORKFLOW_REVIEW

Column Name	Oracle Data Type	MSSQL Data Type
CONTACT_PRIMARY_KEY	NUMBER	INT
CONTACT_TYPE	VARCHAR2(7)	VARCHAR(7)
CONTACT_MIDDLE_NAME	VARCHAR2(50)	VARCHAR(50)

CONTACT_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)
CONTACT_NAME	VARCHAR2(250)	VARCHAR(250)
WORKFLOW_PRIMARY_KEY	NUMBER	INT
REQUEST_NAME	VARCHAR2(50)	VARCHAR(50)
REQUESTED_BY_CONTACT_PK	NUMBER	INT
REQUESTED_BY_CONTACT_TYPE	VARCHAR2(7)	VARCHAR(7)
REQUESTED_BY_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)
REQUESTED_BY_MIDDLE_NAME	VARCHAR2(50)	VARCHAR(50)
REQUESTED_BY_NAME	VARCHAR2(250)	VARCHAR(250)
REQUESTED_ON	DATE	DATETIME
COMPLETED_ON	DATE	DATETIME
WORKFLOW_STATUS	VARCHAR2(30)	VARCHAR(30)
EXPIRES_ON	DATE	DATETIME
CURRENT_STOP_NO	NUMBER	INT
PROCESS_MANAGER_CONTACT_PK	NUMBER	INT
PROCESS_MANAGER_CONTACT_TYPE	VARCHAR2(7)	VARCHAR(7)
PROCESS_MANAGER_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)
PROCESS_MANAGER_MIDDLE_NAME	VARCHAR2(50)	VARCHAR(50)
PROCESS_MANAGER_NAME	VARCHAR2(250)	VARCHAR(250)
STOP_PRIMARY_KEY	NUMBER	INT
STOP	NUMBER	INT

STOP_MEMBER_PRIMARY_KEY	NUMBER	INT
STOP_STATUS	VARCHAR2(40)	VARCHAR(40)
EMAIL_SENT	VARCHAR2(3)	VARCHAR(3)
REVIEW_PRIMARY_KEY	NUMBER	INT
REVIEW_PERFORMER_CONTACT_PK	NUMBER	INT
REVIEW_PERFORMER_CONTACT_TYPE	VARCHAR2(7)	VARCHAR(7)
REVIEW_PERFORMER_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)
REVIEW_PERFORMER_MIDDLE_NAME	VARCHAR2(50)	VARCHAR(50)
REVIEW_PERFORMER_NAME	VARCHAR2(250)	VARCHAR(250)
REVIEW_STATUS	VARCHAR2(20)	VARCHAR(20)
REVIEW_ACTION_DATE	DATE	DATETIME
REVIEW_APPROVAL_COMMENT	VARCHAR2(250)	VARCHAR(250)
REVIEW_REQUEST_COMMENT	VARCHAR2(250)	VARCHAR(250)
CREATED_ON	DATE	DATETIME
CREATED_BY_CONTACT_PK	NUMBER	INT
CREATED_BY_CONTACT_TYPE	VARCHAR2(7)	VARCHAR(7)
CREATED_BY_CONTACT_NAME	VARCHAR2(250)	VARCHAR(250)
CREATED_BY_CONTACT_MIDDLE_NAME	VARCHAR2(50)	VARCHAR(50)
CREATED_BY_CONTACT_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)
MODIFIED_ON	DATE	DATETIME
MODIFIED_BY_CONTACT_PK	NUMBER	INT

MODIFIED_BY_CONTACT_TYPE	VARCHAR2(7)	VARCHAR(7)
MODIFIED_BY_CONTACT_NAME	VARCHAR2(250)	VARCHAR(250)
MODIFIED_BY_CONTACT_MIDDLE_NAME	VARCHAR2(50)	VARCHAR(50)
MODIFIED_BY_CONTACT_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)

1.2.2.4 Document

The system object Documents tables include:

- WH_DOCUMENT
- WH_DOCUMENT_CATEGORIES
- WH_DOCUMENT_GROUP_ACCESS*
- WH_DOCUMENT_USER_ACCESS*
- WH_DOCUMENT_SECURITY
- WH_DOCUMENT_WORKFLOW
- WH_DOCUMENT_WORKFLOW_HISTORY
- WH_DOCUMENT_WORKFLOW_RECIPIENT
- WH_DOCUMENT_WORKFLOW_REVIEW

* These tables support the user access and security feature and should not be queried directly.

WH_DOCUMENT

Column Name	Oracle Data Type	MSSQL Data Type
DOCUMENT_PRIMARY_KEY	NUMBER	INT
DOCUMENT_SIZE	NUMBER	INT
DOCUMENT_NAME	VARCHAR2(250)	VARCHAR(250)
DOCUMENT_TREE_KEY	VARCHAR2(700)	VARCHAR(700)
DOCUMENT_CATEGORY	VARCHAR2(50)	VARCHAR(50)
DOCUMENT_CATEGORY_TREE	VARCHAR2(250)	VARCHAR(250)

DOCUMENT_URL_STRING	VARCHAR2(2000)	VARCHAR(2000)
DOCUMENT_TYPE	VARCHAR2(9)	VARCHAR(9)
DOCUMENT_FILE_TYPE	VARCHAR2(50)	VARCHAR(50)
DOCUMENT_IS_EMAIL_FOLDER	VARCHAR2(3)	VARCHAR(3)
DOCUMENT_AUTHOR_DATE	DATE	DATETIME
DOCUMENT_VERSION	VARCHAR2(250)	VARCHAR(250)
PARENT_FOLDER_ID	NUMBER	INT
DOCUMENT_LOCATION	VARCHAR2(4000)	VARCHAR(4000)
SHORTCUT_TO_DOCUMENT_ID	NUMBER	INT
SHORTCUT_TO_DOCUMENT	VARCHAR2(250)	VARCHAR(250)
AUTHOR_CONTACT_PK	NUMBER	INT
AUTHOR_CONTACT_TYPE	VARCHAR2(10)	VARCHAR(10)
AUTHOR_CONTACT_NAME	VARCHAR2(250)	VARCHAR(250)
AUTHOR_CONTACT_MIDDLE_NAME	VARCHAR2(50)	VARCHAR(50)
AUTHOR_CONTACT_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)
CHECKED_OUT_ON	DATE	DATETIME
CHECK_OUT_CONTACT_PK	NUMBER	INT
CHECK_OUT_CONTACT_TYPE	VARCHAR2(10)	VARCHAR(10)
CHECK_OUT_CONTACT_NAME	VARCHAR2(250)	VARCHAR(250)
CHECK_OUT_CONTACT_MIDDLE_NAME	VARCHAR2(50)	VARCHAR(50)
CHECK_OUT_CONTACT_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)

CHECKOUT_LOCATION	VARCHAR2(250)	VARCHAR(250)
CHECKED_IN_ON	DATE	DATETIME
CHECK_IN_CONTACT_PK	NUMBER	INT
CHECK_IN_CONTACT_TYPE	VARCHAR2(10)	VARCHAR(10)
CHECK_IN_CONTACT_NAME	VARCHAR2(250)	VARCHAR(250)
CHECK_IN_CONTACT_MIDDLE_NAME	VARCHAR2(50)	VARCHAR(50)
CHECK_IN_CONTACT_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)
CREATED_ON	DATE	DATETIME
CREATED_BY_CONTACT_PK	NUMBER	INT
CREATED_BY_CONTACT_TYPE	VARCHAR2(10)	VARCHAR(10)
CREATED_BY_CONTACT_NAME	VARCHAR2(250)	VARCHAR(250)
CREATED_BY_CONTACT_MIDDLE_NAME	VARCHAR2(50)	VARCHAR(50)
CREATED_BY_CONTACT_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)
MODIFIED_ON	DATE	DATETIME
MODIFIED_BY_CONTACT_PK	NUMBER	INT
MODIFIED_BY_CONTACT_TYPE	VARCHAR2(10)	VARCHAR(10)
MODIFIED_BY_CONTACT_NAME	VARCHAR2(250)	VARCHAR(250)
MODIFIED_BY_CONTACT_MID_NAME	VARCHAR2(50)	VARCHAR(50)
MODIFIED_BY_CONTACT_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)
BEHALF_OF_CONTACT_PRIMARY_KEY	NUMBER	INT
SECURITY	VARCHAR2(10)	VARCHAR(10)

WORKFLOW_CURRENT_STATUS	VARCHAR2(15)	VARCHAR(15)
WORKFLOW_CURRENT_ACTION	VARCHAR2(50)	VARCHAR(50)
NOTES	CLOB	NTEXT
CURRENT_APPROVER_CONTACT_PK	NUMBER	INT
CURRENT_APPROVER_NAME	VARCHAR2(250)	VARCHAR(250)
CURRENT_APPROVER_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)
CURRENT_APPROVER_MIDDLE_NAME	VARCHAR2(50)	VARCHAR(50)
CURRENT_APPROVER_TYPE	VARCHAR2(7)	VARCHAR(7)
LAST_PERFRMR_CONTACT_PK	NUMBER	INT
LAST_PERFRMR_NAME	VARCHAR2(250)	VARCHAR(250)
LAST_PERFRMR_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)
LAST_PERFRMR_MIDDLE_NAME	VARCHAR2(50)	VARCHAR(50)
LAST_PERFRMR_TYPE	VARCHAR2(7)	VARCHAR(7)
MULTIPLE_APPROVERS	VARCHAR2(3)	VARCHAR(3)
DOCUMENT_AUTHOR_DATE_KEY	DATE	DATETIME
CHECKED_OUT_ON_DATE_KEY	DATE	DATETIME
CHECKED_IN_ON_DATE_KEY	DATE	DATETIME
CREATED_ON_DATE_KEY	DATE	DATETIME
MODIFIED_ON_DATE_KEY	DATE	DATETIME

WH_DOCUMENT_CATEGORIES

Column Name	Oracle Data Type	MSSQL Data Type
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CATEGORY_NAME	VARCHAR2(50)	VARCHAR(50)
CATEGORY_TREE_POSITION	VARCHAR2(250)	VARCHAR(250)
DOCUMENT_FILE_TYPE	VARCHAR2(50)	VARCHAR(50)
DOCUMENT_LOCATION	VARCHAR2(4000)	VARCHAR(4000)
DOCUMENT_NAME	VARCHAR2(250)	VARCHAR(250)
DOCUMENT_PRIMARY_KEY	NUMBER	INT
DOCUMENT_TREE_KEY	VARCHAR2(700)	VARCHAR(700)
IS_CATEGORY_MANUALLY_ADDED	VARCHAR2(1)	VARCHAR(1)
IS_DEFAULT_CATEGORY	VARCHAR2(5)	VARCHAR(5)
SECURITY	VARCHAR2(10)	VARCHAR(10)

WH_DOCUMENT_GROUP_ACCESS

Column Name	Oracle Data Type	MSSQL Data Type
DOCUMENT_PRIMARY_KEY	NUMBER	INT
GROUP_PRIMARY_KEY	NUMBER	INT
ALLOW_DENY_IID	CHAR(1)	CHAR(1)
OPERATION_IID	NUMBER	INT
IS_MANUAL	NUMBER	INT
VERSION	NUMBER	INT

WH_DOCUMENT_USER_ACCESS

Column Name	Oracle Data Type	MSSQL Data Type
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DOCUMENT_PRIMARY_KEY	NUMBER	INT
USER_PRIMARY_KEY	NUMBER	INT
ALLOW_DENY_IID	CHAR(1)	CHAR(1)
OPERATION_IID	NUMBER	INT
IS_MANUAL	NUMBER	INT
VERSION	NUMBER	INT

WH_DOCUMENT_SECURITY

Column Name	Oracle Data Type	MSSQL Data Type
DOCUMENT_PRIMARY_KEY	NUMBER	INT
CREATED_BY_CONTACT_PK	NUMBER	INT
SECURITY	NVARCHAR2(10)	NVARCHAR(10)

WH_DOCUMENT_WORKFLOW

Column Name	Oracle Data Type	MSSQL Data Type
DOCUMENT_PRIMARY_KEY	NUMBER	INT
DOCUMENT_NAME	VARCHAR2(250)	VARCHAR(250)
DOCUMENT_TREE_KEY	VARCHAR2(700)	VARCHAR(700)
DOCUMENT_FILE_TYPE	VARCHAR2(50)	VARCHAR(50)
WORKFLOW_PRIMARY_KEY	NUMBER	INT
REQUEST_NAME	VARCHAR2(50)	VARCHAR(50)
REQUESTED_BY_CONTACT_PK	NUMBER	INT
REQUESTED_BY_CONTACT_TYPE	VARCHAR2(7)	VARCHAR(7)

REQUESTED_BY_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)
REQUESTED_BY_MIDDLE_NAME	VARCHAR2(50)	VARCHAR(50)
REQUESTED_BY_NAME	VARCHAR2(250)	VARCHAR(250)
REQUESTED_ON	DATE	DATETIME
COMPLETED_ON	DATE	DATETIME
WORKFLOW_STATUS	VARCHAR2(30)	VARCHAR(30)
COMMENT_TO_REQUESTOR	VARCHAR2(2000)	VARCHAR(2000)
EXPIRES_ON	DATE	DATETIME
EXPIRE_ACTION	VARCHAR2(30)	VARCHAR(30)
TRANSACTION_STATUS	VARCHAR2(250)	VARCHAR(250)
CURRENT_STOP_NO	NUMBER	INT
REJECT_ACTION	VARCHAR2(30)	VARCHAR(30)
REJECT_REASON	VARCHAR2(50)	VARCHAR(50)
UPDATE_WHILE_PENDING	VARCHAR2(105)	VARCHAR(105)
PROCESS_MANAGER_CONTACT_PK	NUMBER	INT
PROCESS_MANAGER_CONTACT_TYPE	VARCHAR2(7)	VARCHAR(7)
PROCESS_MANAGER_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)
PROCESS_MANAGER_MIDDLE_NAME	VARCHAR2(50)	VARCHAR(50)
PROCESS_MANAGER_NAME	VARCHAR2(250)	VARCHAR(250)
STOP_MEMBER_PRIMARY_KEY	NUMBER	INT
STOP_PRIMARY_KEY	NUMBER	INT

STOP	NUMBER	INT
PERFORMER_CONTACT_PK	NUMBER	INT
PERFORMER_CONTACT_TYPE	VARCHAR2(7)	VARCHAR(7)
PERFORMER_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)
PERFORMER_MIDDLE_NAME	VARCHAR2(50)	VARCHAR(50)
PERFORMER_NAME	VARCHAR2(250)	VARCHAR(250)
STOP_STATUS	VARCHAR2(40)	VARCHAR(40)
ACTION_DATE	DATE	DATETIME
STOP_EXPIRATION_DATE	DATE	DATETIME
INTERNAL_COMMENT	VARCHAR2(2000)	VARCHAR(2000)
EMAIL_SENT	VARCHAR2(3)	VARCHAR(3)
CREATED_BY_CONTACT_PK	NUMBER	INT
CREATED_BY_CONTACT_TYPE	VARCHAR2(7)	VARCHAR(7)
CREATED_BY_CONTACT_NAME	VARCHAR2(250)	VARCHAR(250)
CREATED_BY_CONTACT_MIDDLE_NAME	VARCHAR2(50)	VARCHAR(50)
CREATED_BY_CONTACT_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)
CREATED_ON	DATE	DATETIME
MODIFIED_BY_CONTACT_PK	NUMBER	INT
MODIFIED_BY_CONTACT_NAME	VARCHAR2(250)	VARCHAR(250)
MODIFIED_BY_CONTACT_MID_NAME	VARCHAR2(50)	VARCHAR(50)
MODIFIED_BY_CONTACT_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)

MODIFIED_BY_CONTACT_TYPE	VARCHAR2(7)	VARCHAR(7)
MODIFIED_ON	DATE	DATETIME

WH_DOCUMENT_WORKFLOW_HISTORY

Column Name	Oracle Data Type	MSSQL Data Type
DOCUMENT_PRIMARY_KEY	NUMBER	INT
DOCUMENT_NAME	VARCHAR2(250)	VARCHAR(250)
DOCUMENT_TREE_KEY	VARCHAR2(700)	VARCHAR(700)
DOCUMENT_FILE_TYPE	VARCHAR2(50)	VARCHAR(50)
WORKFLOW_PRIMARY_KEY	NUMBER	INT
REQUEST_NAME	VARCHAR2(50)	VARCHAR(50)
REQUESTED_BY_CONTACT_PK	NUMBER	INT
REQUESTED_BY_CONTACT_TYPE	VARCHAR2(7)	VARCHAR(7)
REQUESTED_BY_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)
REQUESTED_BY_MIDDLE_NAME	VARCHAR2(50)	VARCHAR(50)
REQUESTED_BY_NAME	VARCHAR2(250)	VARCHAR(250)
REQUESTED_ON	DATE	DATETIME
COMPLETED_ON	DATE	DATETIME
WORKFLOW_STATUS	VARCHAR2(30)	VARCHAR(30)
COMMENT_TO_REQUESTOR	VARCHAR2(2000)	VARCHAR(2000)
EXPIRES_ON	DATE	DATETIME
EXPIRE_ACTION	VARCHAR2(30)	VARCHAR(30)

TRANSACTION_STATUS	VARCHAR2(250)	VARCHAR(250)
CURRENT_STOP_NO	NUMBER	INT
REJECT_ACTION	VARCHAR2(30)	VARCHAR(30)
REJECT_REASON	VARCHAR2(50)	VARCHAR(50)
UPDATE_WHILE_PENDING	VARCHAR2(105)	VARCHAR(105)
PROCESS_MANAGER_CONTACT_PK	NUMBER	INT
PROCESS_MANAGER_CONTACT_TYPE	VARCHAR2(7)	VARCHAR(7)
PROCESS_MANAGER_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)
PROCESS_MANAGER_MIDDLE_NAME	VARCHAR2(50)	VARCHAR(50)
PROCESS_MANAGER_NAME	VARCHAR2(250)	VARCHAR(250)
ACTIVITY	VARCHAR2(250)	VARCHAR(250)
ACTION_DATE	DATE	DATETIME
INTERNAL_COMMENT	VARCHAR2(2000)	VARCHAR(2000)
CREATED_BY_CONTACT_PK	NUMBER	INT
CREATED_BY_CONTACT_TYPE	VARCHAR2(7)	VARCHAR(7)
CREATED_BY_CONTACT_NAME	VARCHAR2(250)	VARCHAR(250)
CREATED_BY_CONTACT_MIDDLE_NAME	VARCHAR2(50)	VARCHAR(50)
CREATED_BY_CONTACT_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)
CREATED_ON	DATE	DATETIME
MODIFIED_BY_CONTACT_PK	NUMBER	INT
MODIFIED_BY_CONTACT_NAME	VARCHAR2(250)	VARCHAR(250)

MODIFIED_BY_CONTACT_MID_NAME	VARCHAR2(50)	VARCHAR(50)
MODIFIED_BY_CONTACT_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)
MODIFIED_BY_CONTACT_TYPE	VARCHAR2(7)	VARCHAR(7)
MODIFIED_ON	DATE	DATETIME

WH_DOCUMENT_WORKFLOW_RECIPIENT

Column Name	Oracle Data Type	MSSQL Data Type
DOCUMENT_PRIMARY_KEY	NUMBER	INT
DOCUMENT_NAME	VARCHAR2(250)	VARCHAR(250)
DOCUMENT_TREE_KEY	VARCHAR2(700)	VARCHAR(700)
DOCUMENT_FILE_TYPE	VARCHAR2(50)	VARCHAR(50)
WORKFLOW_PRIMARY_KEY	NUMBER	INT
REQUEST_NAME	VARCHAR2(50)	VARCHAR(50)
REQUESTED_BY_CONTACT_PK	NUMBER	INT
REQUESTED_BY_CONTACT_TYPE	VARCHAR2(7)	VARCHAR(7)
REQUESTED_BY_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)
REQUESTED_BY_MIDDLE_NAME	VARCHAR2(50)	VARCHAR(50)
REQUESTED_BY_NAME	VARCHAR2(250)	VARCHAR(250)
REQUESTED_ON	DATE	DATETIME
COMPLETED_ON	DATE	DATETIME
WORKFLOW_STATUS	VARCHAR2(30)	VARCHAR(30)
EXPIRES_ON	DATE	DATETIME

CURRENT_STOP_NO	NUMBER	INT
PROCESS_MANAGER_CONTACT_PK	NUMBER	INT
PROCESS_MANAGER_CONTACT_TYPE	VARCHAR2(7)	VARCHAR(7)
PROCESS_MANAGER_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)
PROCESS_MANAGER_MIDDLE_NAME	VARCHAR2(50)	VARCHAR(50)
PROCESS_MANAGER_NAME	VARCHAR2(250)	VARCHAR(250)
EVENT	VARCHAR2(250)	VARCHAR2(250)
RECIPIENT_CONTACT_PK	NUMBER	INT
RECIPIENT_CONTACT_TYPE	VARCHAR2(7)	VARCHAR2(7)
RECIPIENT_FIRST_NAME	VARCHAR2(50)	VARCHAR2(50)
RECIPIENT_MIDDLE_NAME	VARCHAR2(50)	VARCHAR2(50)
RECIPIENT_NAME	VARCHAR2(250)	VARCHAR2(250)
VERSION	NUMBER	INT
CREATED_ON	DATE	DATETIME
CREATED_BY_CONTACT_PK	NUMBER	INT
CREATED_BY_CONTACT_TYPE	VARCHAR2(7)	VARCHAR2(7)
CREATED_BY_CONTACT_NAME	VARCHAR2(250)	VARCHAR2(250)
CREATED_BY_CONTACT_MIDDLE_NAME	VARCHAR2(50)	VARCHAR2(50)
CREATED_BY_CONTACT_FIRST_NAME	VARCHAR2(50)	VARCHAR2(50)
MODIFIED_ON	DATE	DATETIME
MODIFIED_BY_CONTACT_PK	NUMBER	INT

MODIFIED_BY_CONTACT_TYPE	VARCHAR2(7)	VARCHAR2(7)
MODIFIED_BY_CONTACT_NAME	VARCHAR2(250)	VARCHAR2(250)
MODIFIED_BY_CONTACT_MID_NAME	VARCHAR2(50)	VARCHAR2(50)

WH_DOCUMENT_WORKFLOW_REVIEW

Column Name	Oracle Data Type	MSSQL Data Type
DOCUMENT_PRIMARY_KEY	NUMBER	INT
DOCUMENT_NAME	VARCHAR2(250)	VARCHAR(250)
DOCUMENT_TREE_KEY	VARCHAR2(700)	VARCHAR(700)
DOCUMENT_FILE_TYPE	VARCHAR2(50)	VARCHAR(50)
WORKFLOW_PRIMARY_KEY	NUMBER	INT
REQUEST_NAME	VARCHAR2(50)	VARCHAR(50)
REQUESTED_BY_CONTACT_PK	NUMBER	INT
REQUESTED_BY_CONTACT_TYPE	VARCHAR2(7)	VARCHAR(7)
REQUESTED_BY_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)
REQUESTED_BY_MIDDLE_NAME	VARCHAR2(50)	VARCHAR(50)
REQUESTED_BY_NAME	VARCHAR2(250)	VARCHAR(250)
REQUESTED_ON	DATE	DATETIME
COMPLETED_ON	DATE	DATETIME
WORKFLOW_STATUS	VARCHAR2(30)	VARCHAR(30)
EXPIRES_ON	DATE	DATETIME
CURRENT_STOP_NO	NUMBER	INT

PROCESS_MANAGER_CONTACT_PK	NUMBER	INT
PROCESS_MANAGER_CONTACT_TYPE	VARCHAR2(7)	VARCHAR(7)
PROCESS_MANAGER_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)
PROCESS_MANAGER_MIDDLE_NAME	VARCHAR2(50)	VARCHAR(50)
PROCESS_MANAGER_NAME	VARCHAR2(250)	VARCHAR(250)
STOP_PRIMARY_KEY	NUMBER	INT
STOP	NUMBER	INT
STOP_MEMBER_PRIMARY_KEY	NUMBER	INT
STOP_STATUS	VARCHAR2(40)	VARCHAR(40)
EMAIL_SENT	VARCHAR2(3)	VARCHAR(3)
REVIEW_PRIMARY_KEY	NUMBER	INT
REVIEW_PERFORMER_CONTACT_PK	NUMBER	INT
REVIEW_PERFORMER_CONTACT_TYPE	VARCHAR2(7)	VARCHAR(7)
REVIEW_PERFORMER_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)
REVIEW_PERFORMER_MIDDLE_NAME	VARCHAR2(50)	VARCHAR(50)
REVIEW_PERFORMER_NAME	VARCHAR2(250)	VARCHAR(250)
REVIEW_STATUS	VARCHAR2(20)	VARCHAR(20)
REVIEW_ACTION_DATE	DATE	DATETIME
REVIEW_APPROVAL_COMMENT	VARCHAR2(250)	VARCHAR(250)
REVIEW_REQUEST_COMMENT	VARCHAR2(250)	VARCHAR(250)
CREATED_ON	DATE	DATETIME

CREATED_BY_CONTACT_PK	NUMBER	INT
CREATED_BY_CONTACT_TYPE	VARCHAR2(7)	VARCHAR(7)
CREATED_BY_CONTACT_NAME	VARCHAR2(250)	VARCHAR(250)
CREATED_BY_CONTACT_MIDDLE_NAME	VARCHAR2(50)	VARCHAR(50)
CREATED_BY_CONTACT_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)
MODIFIED_ON	DATE	DATETIME
MODIFIED_BY_CONTACT_PK	NUMBER	INT
MODIFIED_BY_CONTACT_TYPE	VARCHAR2(7)	VARCHAR(7)
MODIFIED_BY_CONTACT_NAME	VARCHAR2(250)	VARCHAR(250)
MODIFIED_BY_CONTACT_MID_NAME	VARCHAR2(50)	VARCHAR(50)
MODIFIED_BY_CONTACT_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)

1.2.2.5 Expense

The system object Expense tables include:

- WH_EXPENSE
- WH_EXPENSE_GROUP_ACCESS*
- WH_EXPENSE_USER_ACCESS*
- WH_EXPENSE_SECURITY
- WH_EXPENSE_WORKFLOW
- WH_EXPENSE_WORKFLOW_HISTORY
- WH_EXPENSE_WORKFLOW_RECIPIENT
- WH_EXPENSE_WORKFLOW_REVIEW

* These tables support the user access and security feature and should not be queried directly.

WH_EXPENSE

Column Name	Oracle Data Type	MSSQL Data Type
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EXPENSE_PRIMARY_KEY	NUMBER	INT
EXPENSE_DESCRIPTION	VARCHAR2(250)	VARCHAR(250)
EXPENSE_DATE	DATE	DATETIME
EXPENSE_QUANTITY	NUMBER	DECIMAL(28,12)
EXPENSE_UNIT_PRICE	NUMBER	DECIMAL(28,12)
EXPENSE_TOTAL_AMOUNT	NUMBER	DECIMAL(28,12)
EXPENSE_POSTING_STATUS	VARCHAR2(20)	VARCHAR(20)
EXPENSED_BY_CONTACT_PK	NUMBER	INT
EXPENSED_BY_CONTACT_TYPE	VARCHAR2(10)	VARCHAR(10)
EXPENSED_BY_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)
EXPENSED_BY_MIDDLE_NAME	VARCHAR2(50)	VARCHAR(50)
EXPENSED_BY_NAME	VARCHAR2(250)	VARCHAR(250)
EXPENSE_CATEGORY	VARCHAR2(50)	VARCHAR(50)
EXPENSE_CATEGORY_TREE_POSITION	VARCHAR2(250)	VARCHAR(250)
EXPENSE_CONTACT_PRIMARY_KEY	NUMBER	INT
EXPENSE_CONTACT_TYPE	VARCHAR2(10)	VARCHAR(10)
EXPENSE_CONTACT_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)
EXPENSE_CONTACT_MIDDLE_NAME	VARCHAR2(50)	VARCHAR(50)
EXPENSE_CONTACT_NAME	VARCHAR2(250)	VARCHAR(250)
PROJECT_UNIQUE_CODE	VARCHAR2(4)	VARCHAR(4)
PROJECT_OBJECT_TITLE	VARCHAR2(250)	VARCHAR(250)

PROJECT_PRIMARY_KEY	NUMBER	INT
PROJECT_NAME	VARCHAR2(250)	VARCHAR(250)
PROJECT_NUMBER	VARCHAR2(50)	VARCHAR(50)
PROJECT_DEFAULT_CATEGORY	VARCHAR2(50)	VARCHAR(50)
DOCUMENT_FOLDER_PRIMARY_KEY	NUMBER	INT
CREATED_ON	DATE	DATETIME
MODIFIED_ON	DATE	DATETIME
CREATED_BY_CONTACT_PK	NUMBER	INT
CREATED_BY_CONTACT_TYPE	VARCHAR2(10)	VARCHAR(10)
CREATED_BY_CONTACT_NAME	VARCHAR2(250)	VARCHAR(250)
CREATED_BY_CONTACT_MIDDLE_NAME	VARCHAR2(50)	VARCHAR(50)
CREATED_BY_CONTACT_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)
MODIFIED_BY_CONTACT_PK	NUMBER	INT
MODIFIED_BY_CONTACT_TYPE	VARCHAR2(10)	VARCHAR(10)
MODIFIED_BY_CONTACT_NAME	VARCHAR2(250)	VARCHAR(250)
MODIFIED_BY_CONTACT_MID_NAME	VARCHAR2(50)	VARCHAR(50)
MODIFIED_BY_CONTACT_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)
BEHALF_OF_CONTACT_PRIMARY_KEY	NUMBER	INT
SECURITY	VARCHAR2(10)	VARCHAR(10)
WORKFLOW_CURRENT_STATUS	VARCHAR2(15)	VARCHAR(15)
WORKFLOW_CURRENT_ACTION	VARCHAR2(50)	VARCHAR(50)

NOTES	CLOB	NTEXT
CURRENT_APPROVER_CONTACT_PK	NUMBER	INT
CURRENT_APPROVER_NAME	VARCHAR2(250)	VARCHAR(250)
CURRENT_APPROVER_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)
CURRENT_APPROVER_MIDDLE_NAME	VARCHAR2(50)	VARCHAR(50)
CURRENT_APPROVER_TYPE	VARCHAR2(7)	VARCHAR(7)
LAST_PERFRMR_CONTACT_PK	NUMBER	INT
LAST_PERFRMR_NAME	VARCHAR2(250)	VARCHAR(250)
LAST_PERFRMR_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)
LAST_PERFRMR_MIDDLE_NAME	VARCHAR2(50)	VARCHAR(50)
LAST_PERFRMR_TYPE	VARCHAR2(7)	VARCHAR(7)
MULTIPLE_APPROVERS	VARCHAR2(3)	VARCHAR(3)
EXPENSE_DATE_KEY	DATE	DATETIME
CREATED_ON_DATE_KEY	DATE	DATETIME
MODIFIED_ON_DATE_KEY	DATE	DATETIME

WH_EXPENSE_GROUP_ACCESS

Column Name	Oracle Data Type	MSSQL Data Type
EXPENSE_PRIMARY_KEY	NUMBER	INT
GROUP_PRIMARY_KEY	NUMBER	INT
ALLOW_DENY_IID	CHAR(1)	CHAR(1)
OPERATION_IID	NUMBER	INT

IS_MANUAL	NUMBER	INT
VERSION	NUMBER	INT

WH_EXPENSE_USER_ACCESS

Column Name	Oracle Data Type	MSSQL Data Type
EXPENSE_PRIMARY_KEY	NUMBER	INT
USER_PRIMARY_KEY	NUMBER	INT
ALLOW_DENY_IID	CHAR(1)	CHAR(1)
OPERATION_IID	NUMBER	INT
IS_MANUAL	NUMBER	INT
VERSION	NUMBER	INT

WH_EXPENSE_SECURITY

Column Name	Oracle Data Type	MSSQL Data Type
EXPENSE_PRIMARY_KEY	NUMBER	INT
CREATED_BY_CONTACT_PK	NUMBER	INT
SECURITY	NVARCHAR2(10)	NVARCHAR(10)

WH_EXPENSE_WORKFLOW

Column Name	Oracle Data Type	MSSQL Data Type
EXPENSE_PRIMARY_KEY	NUMBER	INT
EXPENSE_DATE	DATE	DATETIME
EXPENSE_DESCRIPTION	VARCHAR2(250)	VARCHAR(250)

EXPENSE_POSTING_STATUS	VARCHAR2(19)	VARCHAR(19)
EXPENSED_BY_CONTACT_PK	NUMBER	INT
EXPENSED_BY_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)
EXPENSED_BY_NAME	VARCHAR2(250)	VARCHAR(250)
EXPENSED_BY_MIDDLE_NAME	VARCHAR2(50)	VARCHAR(50)
EXPENSED_BY_TYPE	VARCHAR2(7)	VARCHAR(7)
EXPENSE_CATEGORY	VARCHAR2(50)	VARCHAR(50)
PROJECT_UNIQUE_CODE	VARCHAR2(4)	VARCHAR(4)
PROJECT_OBJECT_TITLE	VARCHAR2(250)	VARCHAR(250)
PROJECT_PRIMARY_KEY	NUMBER	INT
PROJECT_NUMBER	VARCHAR2(50)	VARCHAR(50)
PROJECT_NAME	VARCHAR2(250)	VARCHAR(250)
WORKFLOW_PRIMARY_KEY	NUMBER	INT
REQUEST_NAME	VARCHAR2(50)	VARCHAR(50)
REQUESTED_BY_CONTACT_PK	NUMBER	INT
REQUESTED_BY_CONTACT_TYPE	VARCHAR2(7)	VARCHAR(7)
REQUESTED_BY_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)
REQUESTED_BY_MIDDLE_NAME	VARCHAR2(50)	VARCHAR(50)
REQUESTED_BY_NAME	VARCHAR2(250)	VARCHAR(250)
REQUESTED_ON	DATE	DATETIME
COMPLETED_ON	DATE	DATETIME

WORKFLOW_STATUS	VARCHAR2(30)	VARCHAR(30)
COMMENT_TO_REQUESTOR	VARCHAR2(2000))	VARCHAR(2000)
EXPIRES_ON	DATE	DATETIME
EXPIRE_ACTION	VARCHAR2(30)	VARCHAR(30)
TRANSACTION_STATUS	VARCHAR2(250)	VARCHAR(250)
CURRENT_STOP_NO	NUMBER	INT
REJECT_ACTION	VARCHAR2(30)	VARCHAR(30)
REJECT_REASON	VARCHAR2(50)	VARCHAR(50)
UPDATE_WHILE_PENDING	VARCHAR2(105)	VARCHAR(105)
PROCESS_MANAGER_CONTACT_PK	NUMBER	INT
PROCESS_MANAGER_CONTACT_TYPE	VARCHAR2(7)	VARCHAR(7)
PROCESS_MANAGER_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)
PROCESS_MANAGER_MIDDLE_NAME	VARCHAR2(50)	VARCHAR(50)
PROCESS_MANAGER_NAME	VARCHAR2(250)	VARCHAR(250)
STOP_MEMBER_PRIMARY_KEY	NUMBER	INT
STOP_PRIMARY_KEY	NUMBER	INT
STOP	NUMBER	INT
PERFORMER_CONTACT_PK	NUMBER	INT
PERFORMER_CONTACT_TYPE	VARCHAR2(7)	VARCHAR(7)
PERFORMER_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)
PERFORMER_MIDDLE_NAME	VARCHAR2(50)	VARCHAR(50)

PERFORMER_NAME	VARCHAR2(250)	VARCHAR(250)
STOP_STATUS	VARCHAR2(40)	VARCHAR(40)
ACTION_DATE	DATE	DATETIME
STOP_EXPIRATION_DATE	DATE	DATETIME
INTERNAL_COMMENT	VARCHAR2(2000))	VARCHAR(2000)
EMAIL_SENT	VARCHAR2(3)	VARCHAR(3)
CREATED_BY_CONTACT_PK	NUMBER	INT
CREATED_BY_CONTACT_TYPE	VARCHAR2(7)	VARCHAR(7)
CREATED_BY_CONTACT_NAME	VARCHAR2(250)	VARCHAR(250)
CREATED_BY_CONTACT_MIDDLE_NAME	VARCHAR2(50)	VARCHAR(50)
CREATED_BY_CONTACT_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)
CREATED_ON	DATE	DATETIME
MODIFIED_BY_CONTACT_PK	NUMBER	INT
MODIFIED_BY_CONTACT_NAME	VARCHAR2(250)	VARCHAR(250)
MODIFIED_BY_CONTACT_MID_NAME	VARCHAR2(50)	VARCHAR(50)
MODIFIED_BY_CONTACT_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)
MODIFIED_BY_CONTACT_TYPE	VARCHAR2(7)	VARCHAR(7)
MODIFIED_ON	DATE	DATETIME

WH_EXPENSE_WORKFLOW_HISTORY

Column Name	Oracle Data Type	MSSQL Data Type
EXPENSE_PRIMARY_KEY	NUMBER	INT

EXPENSE_DATE	DATE	DATETIME
EXPENSE_DESCRIPTION	VARCHAR2(250)	VARCHAR(250)
EXPENSE_POSTING_STATUS	VARCHAR2(19)	VARCHAR(19)
EXPENSED_BY_CONTACT_PK	NUMBER	INT
EXPENSED_BY_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)
EXPENSED_BY_NAME	VARCHAR2(250)	VARCHAR(250)
EXPENSED_BY_MIDDLE_NAME	VARCHAR2(50)	VARCHAR(50)
EXPENSED_BY_TYPE	VARCHAR2(7)	VARCHAR(7)
EXPENSE_CATEGORY	VARCHAR2(50)	VARCHAR(50)
PROJECT_UNIQUE_CODE	VARCHAR2(4)	VARCHAR(4)
PROJECT_OBJECT_TITLE	VARCHAR2(250)	VARCHAR(250)
PROJECT_PRIMARY_KEY	NUMBER	INT
PROJECT_NUMBER	VARCHAR2(50)	VARCHAR(50)
PROJECT_NAME	VARCHAR2(250)	VARCHAR(250)
WORKFLOW_PRIMARY_KEY	NUMBER	INT
REQUEST_NAME	VARCHAR2(50)	VARCHAR(50)
REQUESTED_BY_CONTACT_PK	NUMBER	INT
REQUESTED_BY_CONTACT_TYPE	VARCHAR2(7)	VARCHAR(7)
REQUESTED_BY_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)
REQUESTED_BY_MIDDLE_NAME	VARCHAR2(50)	VARCHAR(50)
REQUESTED_BY_NAME	VARCHAR2(250)	VARCHAR(250)

REQUESTED_ON	DATE	DATETIME
COMPLETED_ON	DATE	DATETIME
WORKFLOW_STATUS	VARCHAR2(30)	VARCHAR(30)
COMMENT_TO_REQUESTOR	VARCHAR2(2000))	VARCHAR(2000)
EXPIRES_ON	DATE	DATETIME
EXPIRE_ACTION	VARCHAR2(30)	VARCHAR(30)
TRANSACTION_STATUS	VARCHAR2(250)	VARCHAR(250)
CURRENT_STOP_NO	NUMBER	INT
REJECT_ACTION	VARCHAR2(30)	VARCHAR(30)
REJECT_REASON	VARCHAR2(50)	VARCHAR(50)
UPDATE_WHILE_PENDING	VARCHAR2(105)	VARCHAR(105)
PROCESS_MANAGER_CONTACT_PK	NUMBER	INT
PROCESS_MANAGER_CONTACT_TYPE	VARCHAR2(7)	VARCHAR(7)
PROCESS_MANAGER_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)
PROCESS_MANAGER_MIDDLE_NAME	VARCHAR2(50)	VARCHAR(50)
PROCESS_MANAGER_NAME	VARCHAR2(250)	VARCHAR(250)
ACTIVITY	VARCHAR2(250)	VARCHAR(250)
ACTION_DATE	DATE	DATETIME
INTERNAL_COMMENT	VARCHAR2(2000))	VARCHAR(2000)
CREATED_BY_CONTACT_PK	NUMBER	INT

CREATED_BY_CONTACT_TYPE	VARCHAR2(7)	VARCHAR(7)
CREATED_BY_CONTACT_NAME	VARCHAR2(250)	VARCHAR(250)
CREATED_BY_CONTACT_MIDDLE_NAME	VARCHAR2(50)	VARCHAR(50)
CREATED_BY_CONTACT_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)
CREATED_ON	DATE	DATETIME
MODIFIED_BY_CONTACT_PK	NUMBER	INT
MODIFIED_BY_CONTACT_NAME	VARCHAR2(250)	VARCHAR(250)
MODIFIED_BY_CONTACT_MID_NAME	VARCHAR2(50)	VARCHAR(50)
MODIFIED_BY_CONTACT_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)
MODIFIED_BY_CONTACT_TYPE	VARCHAR2(7)	VARCHAR(7)
MODIFIED_ON	DATE	DATETIME

WH_EXPENSE_WORKFLOW_RECIPIENT

Column Name	Oracle Data Type	MSSQL Data Type
EXPENSE_PRIMARY_KEY	NUMBER	INT
EXPENSE_DATE	DATE	DATETIME
EXPENSE_DESCRIPTION	VARCHAR2(250)	VARCHAR(250)
EXPENSE_POSTING_STATUS	VARCHAR2(19)	VARCHAR(19)
EXPENSED_BY_CONTACT_PK	NUMBER	INT
EXPENSED_BY_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)
EXPENSED_BY_NAME	VARCHAR2(250)	VARCHAR(250)
EXPENSED_BY_MIDDLE_NAME	VARCHAR2(50)	VARCHAR(50)

EXPENSED_BY_TYPE	VARCHAR2(7)	VARCHAR(7)
EXPENSE_CATEGORY	VARCHAR2(50)	VARCHAR(50)
PROJECT_UNIQUE_CODE	VARCHAR2(4)	VARCHAR(4)
PROJECT_OBJECT_TITLE	VARCHAR2(250)	VARCHAR(250)
PROJECT_PRIMARY_KEY	NUMBER	INT
PROJECT_NUMBER	VARCHAR2(50)	VARCHAR(50)
PROJECT_NAME	VARCHAR2(250)	VARCHAR(250)
WORKFLOW_PRIMARY_KEY	NUMBER	INT
REQUEST_NAME	VARCHAR2(50)	VARCHAR(50)
REQUESTED_BY_CONTACT_PK	NUMBER	INT
REQUESTED_BY_CONTACT_TYPE	VARCHAR2(7)	VARCHAR(7)
REQUESTED_BY_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)
REQUESTED_BY_MIDDLE_NAME	VARCHAR2(50)	VARCHAR(50)
REQUESTED_BY_NAME	VARCHAR2(250)	VARCHAR(250)
REQUESTED_ON	DATE	DATETIME
COMPLETED_ON	DATE	DATETIME
WORKFLOW_STATUS	VARCHAR2(30)	VARCHAR(30)
EXPIRES_ON	DATE	DATETIME
CURRENT_STOP_NO	NUMBER	INT
PROCESS_MANAGER_CONTACT_PK	NUMBER	INT
PROCESS_MANAGER_CONTACT_TYPE	VARCHAR2(7)	VARCHAR(7)

PROCESS_MANAGER_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)
PROCESS_MANAGER_MIDDLE_NAME	VARCHAR2(50)	VARCHAR(50)
PROCESS_MANAGER_NAME	VARCHAR2(250)	VARCHAR(250)
EVENT	VARCHAR2(250)	VARCHAR2(250)
RECIPIENT_CONTACT_PK	NUMBER	INT
RECIPIENT_CONTACT_TYPE	VARCHAR2(7)	VARCHAR2(7)
RECIPIENT_FIRST_NAME	VARCHAR2(50)	VARCHAR2(50)
RECIPIENT_MIDDLE_NAME	VARCHAR2(50)	VARCHAR2(50)
RECIPIENT_NAME	VARCHAR2(250)	VARCHAR2(250)
VERSION	NUMBER	INT
CREATED_ON	DATE	DATETIME
CREATED_BY_CONTACT_PK	NUMBER	INT
CREATED_BY_CONTACT_TYPE	VARCHAR2(7)	VARCHAR2(7)
CREATED_BY_CONTACT_NAME	VARCHAR2(250)	VARCHAR2(250)
CREATED_BY_CONTACT_MIDDLE_NAME	VARCHAR2(50)	VARCHAR2(50)
CREATED_BY_CONTACT_FIRST_NAME	VARCHAR2(50)	VARCHAR2(50)
MODIFIED_ON	DATE	DATETIME
MODIFIED_BY_CONTACT_PK	NUMBER	INT
MODIFIED_BY_CONTACT_TYPE	VARCHAR2(7)	VARCHAR2(7)
MODIFIED_BY_CONTACT_NAME	VARCHAR2(250)	VARCHAR2(250)
MODIFIED_BY_CONTACT_MID_NAME	VARCHAR2(50)	VARCHAR2(50)

WH_EXPENSE_WORKFLOW_REVIEW

Column Name	Oracle Data Type	MSSQL Data Type
EXPENSE_PRIMARY_KEY	NUMBER	INT
EXPENSE_DATE	DATE	DATETIME
EXPENSE_DESCRIPTION	VARCHAR2(250)	VARCHAR(250)
EXPENSE_POSTING_STATUS	VARCHAR2(19)	VARCHAR(19)
EXPENSED_BY_CONTACT_PK	NUMBER	INT
EXPENSED_BY_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)
EXPENSED_BY_NAME	VARCHAR2(250)	VARCHAR(250)
EXPENSED_BY_MIDDLE_NAME	VARCHAR2(50)	VARCHAR(50)
EXPENSED_BY_TYPE	VARCHAR2(7)	VARCHAR(7)
EXPENSE_CATEGORY	VARCHAR2(50)	VARCHAR(50)
PROJECT_UNIQUE_CODE	VARCHAR2(4)	VARCHAR(4)
PROJECT_OBJECT_TITLE	VARCHAR2(250)	VARCHAR(250)
PROJECT_PRIMARY_KEY	NUMBER	INT
PROJECT_NUMBER	VARCHAR2(50)	VARCHAR(50)
PROJECT_NAME	VARCHAR2(250)	VARCHAR(250)
WORKFLOW_PRIMARY_KEY	NUMBER	INT
REQUEST_NAME	VARCHAR2(50)	VARCHAR(50)
REQUESTED_BY_CONTACT_PK	NUMBER	INT
REQUESTED_BY_CONTACT_TYPE	VARCHAR2(7)	VARCHAR(7)
REQUESTED_BY_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)

REQUESTED_BY_MIDDLE_NAME	VARCHAR2(50)	VARCHAR(50)
REQUESTED_BY_NAME	VARCHAR2(250)	VARCHAR(250)
REQUESTED_ON	DATE	DATETIME
COMPLETED_ON	DATE	DATETIME
WORKFLOW_STATUS	VARCHAR2(30)	VARCHAR(30)
EXPIRES_ON	DATE	DATETIME
CURRENT_STOP_NO	NUMBER	INT
PROCESS_MANAGER_CONTACT_PK	NUMBER	INT
PROCESS_MANAGER_CONTACT_TYPE	VARCHAR2(7)	VARCHAR(7)
PROCESS_MANAGER_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)
PROCESS_MANAGER_MIDDLE_NAME	VARCHAR2(50)	VARCHAR(50)
PROCESS_MANAGER_NAME	VARCHAR2(250)	VARCHAR(250)
STOP_PRIMARY_KEY	NUMBER	INT
STOP	NUMBER	INT
STOP_MEMBER_PRIMARY_KEY	NUMBER	INT
STOP_STATUS	VARCHAR2(40)	VARCHAR(40)
EMAIL_SENT	VARCHAR2(3)	VARCHAR(3)
REVIEW_PRIMARY_KEY	NUMBER	INT
REVIEW_PERFORMER_CONTACT_PK	NUMBER	INT
REVIEW_PERFORMER_CONTACT_TYPE	VARCHAR2(7)	VARCHAR(7)
REVIEW_PERFORMER_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)

REVIEW_PERFORMER_MIDDLE_NAME	VARCHAR2(50)	VARCHAR(50)
REVIEW_PERFORMER_NAME	VARCHAR2(250)	VARCHAR(250)
REVIEW_STATUS	VARCHAR2(20)	VARCHAR(20)
REVIEW_ACTION_DATE	DATE	DATETIME
REVIEW_APPROVAL_COMMENT	VARCHAR2(250)	VARCHAR(250)
REVIEW_REQUEST_COMMENT	VARCHAR2(250)	VARCHAR(250)
CREATED_ON	DATE	DATETIME
CREATED_BY_CONTACT_PK	NUMBER	INT
CREATED_BY_CONTACT_TYPE	VARCHAR2(7)	VARCHAR(7)
CREATED_BY_CONTACT_NAME	VARCHAR2(250)	VARCHAR(250)
CREATED_BY_CONTACT_MIDDLE_NAME	VARCHAR2(50)	VARCHAR(50)
CREATED_BY_CONTACT_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)
MODIFIED_ON	DATE	DATETIME
MODIFIED_BY_CONTACT_PK	NUMBER	INT
MODIFIED_BY_CONTACT_TYPE	VARCHAR2(7)	VARCHAR(7)
MODIFIED_BY_CONTACT_NAME	VARCHAR2(250)	VARCHAR(250)
MODIFIED_BY_CONTACT_MID_NAME	VARCHAR2(50)	VARCHAR(50)
MODIFIED_BY_CONTACT_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)

1.2.2.6 History

The system object History tables include:

- WH_HISTORY
- WH_HISTORY_CATEGORIES

- WH_HISTORY_GROUP_ACCESS*
- WH_HISTORY_USER_ACCESS*
- WH_HISTORY_SECURITY
- WH_HISTORY_WORKFLOW
- WH_HISTORY_WORKFLOW_HISTORY
- WH_HISTORY_WORKFLOW_RECIPIENT
- WH_HISTORY_WORKFLOW_REVIEW

* These tables support the user access and security feature and should not be queried directly.

WH_HISTORY

Column Name	Oracle Data Type	MSSQL Data Type
HISTORY_PRIMARY_KEY	NUMBER	INT
HISTORY_DATE	DATE	DATETIME
HISTORY_DEFAULT_CATEGORY	VARCHAR2(50)	VARCHAR(50)
HISTORY_DEFAULT_CATEGORY_TREE	VARCHAR2(250)	VARCHAR(250)
HISTORY_ENTERBY_CONTACT_PK	NUMBER	INT
HISTORY_ENTERBY_CONTACT_TYPE	VARCHAR2(10)	VARCHAR(10)
HISTORY_ENTERBY_CONTACT_FIRST	VARCHAR2(50)	VARCHAR(50)
HISTORY_ENTERBY_CONTACT_MIDDLE	VARCHAR2(50)	VARCHAR(50)
HISTORY_ENTERBY_CONTACT_NAME	VARCHAR2(250)	VARCHAR(250)
HISTORY_DESCRIPTION	VARCHAR2(4000)	VARCHAR(4000)
PARENT_UNIQUE_CODE	VARCHAR2(4)	VARCHAR(4)
HISTORY_PARENT_TYPE	VARCHAR2(250)	VARCHAR(250)
HISTORY_OBJECT_ID	NUMBER	INT
DOCUMENT_FOLDER_PRIMARY_KEY	NUMBER	INT

CREATED_ON	DATE	DATETIME
CREATED_BY_CONTACT_PK	NUMBER	INT
CREATED_BY_CONTACT_TYPE	VARCHAR2(10)	VARCHAR(10)
CREATED_BY_CONTACT_NAME	VARCHAR2(250)	VARCHAR(250)
CREATED_BY_CONTACT_MIDDLE_NAME	VARCHAR2(50)	VARCHAR(50)
CREATED_BY_CONTACT_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)
MODIFIED_ON	DATE	DATETIME
MODIFIED_BY_CONTACT_PK	NUMBER	INT
MODIFIED_BY_CONTACT_TYPE	VARCHAR2(10)	VARCHAR(10)
MODIFIED_BY_CONTACT_NAME	VARCHAR2(250)	VARCHAR(250)
MODIFIED_BY_CONTACT_MID_NAME	VARCHAR2(50)	VARCHAR(50)
MODIFIED_BY_CONTACT_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)
BEHALF_OF_CONTACT_PRIMARY_KEY	NUMBER	INT
ACCOUNT_PRIMARY_KEY	NUMBER	INT
ACCOUNT_NAME	VARCHAR2(250)	VARCHAR(250)
APPOINTMENT_PRIMARY_KEY	NUMBER	INT
APPOINTMENT_SUBJECT	VARCHAR2(250)	VARCHAR(250)
CONTACT_PRIMARY_KEY	NUMBER	INT
CONTACT_TYPE	VARCHAR2(10)	VARCHAR(10)
CONTACT_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)
CONTACT_MIDDLE_NAME	VARCHAR2(50)	VARCHAR(50)

CONTACT_NAME	VARCHAR2(250)	VARCHAR(250)
CONTACT_GROUP_PRIMARY_KEY	NUMBER	INT
CONTACT_GROUP_NAME	VARCHAR2(250)	VARCHAR(250)
DOCUMENT_PRIMARY_KEY	NUMBER	INT
DOCUMENT_NAME	VARCHAR2(250)	VARCHAR(250)
EXPENSE_PRIMARY_KEY	NUMBER	INT
EXPENSE_DESCRIPTION	VARCHAR2(250)	VARCHAR(250)
GROUP_PRIMARY_KEY	NUMBER	INT
GROUP_NAME	VARCHAR2(50)	VARCHAR(50)
INVOICE_PRIMARY_KEY	NUMBER	INT
INVOICE_NUMBER	VARCHAR2(50)	VARCHAR(50)
INVOLVED_PRIMARY_KEY	NUMBER	INT
INVOLVED_UNIQUE_CODE	VARCHAR2(4)	VARCHAR(4)
INVOLVED_OBJECT_TITLE	VARCHAR2(50)	VARCHAR(50)
INVOLVED_PROJECT_UNIQUE_CODE	VARCHAR2(4)	VARCHAR(4)
INVOLVED_PROJECT_OBJECT_TITLE	VARCHAR2(250)	VARCHAR(250)
INVOLVED_PROJECT_PRIMARY_KEY	NUMBER	INT
INVOLVED_PROJECT_NUMBER	VARCHAR2(50)	VARCHAR(50)
INVOLVED_PROJECT_NAME	VARCHAR2(250)	VARCHAR(250)
INVOLVED_CONTACT_PRIMARY_KEY	NUMBER	INT
INVOLVED_CONTACT_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)

INVOLVED_CONTACT_MIDDLE_NAME	VARCHAR2(50)	VARCHAR(50)
INVOLVED_CONTACT_NAME	VARCHAR2(250)	VARCHAR(250)
INVOLVED_CONTACT_TYPE	VARCHAR2(10)	VARCHAR(10)
LINEITEM_PRIMARY_KEY	NUMBER	INT
LINEITEM_ITEM_NUMBER	NUMBER	INT
LINEITEM_INVOICE_PRIMARY_KEY	NUMBER	INT
LINEITEM_INVOICE_NUMBER	VARCHAR2(50)	VARCHAR(50)
MILESTONE_PRIMARY_KEY	NUMBER	INT
MILESTONE_UNIQUE_CODE	VARCHAR2(4)	VARCHAR(4)
MILESTONE_OBJECT_TITLE	VARCHAR2(250)	VARCHAR(250)
MILESTONE_SUBJECT	VARCHAR2(250)	VARCHAR(250)
MILESTONE_PROJECT_UNIQUE_CODE	VARCHAR2(4)	VARCHAR(4)
MILESTONE_PROJECT_OBJECT_TITLE	VARCHAR2(250)	VARCHAR(250)
MILESTONE_PROJECT_PRIMARY_KEY	NUMBER	INT
MILESTONE_PROJECT_NUMBER	VARCHAR2(50)	VARCHAR(50)
MILESTONE_PROJECT_NAME	VARCHAR2(250)	VARCHAR(250)
OBJECT_DEFINITION_PRIMARY_KEY	NUMBER	INT
OBJECT_DEFINITION_TITLE	VARCHAR2(250)	VARCHAR(250)
OBJECT_DEFINITION_ENTITY_CODE	VARCHAR2(9)	VARCHAR(9)
OBJECT_DEFINITION_UNIQUE_CODE	VARCHAR2(4)	VARCHAR(4)
PROJECT_UNIQUE_CODE	VARCHAR2(4)	VARCHAR(4)

PROJECT_OBJECT_TITLE	VARCHAR2(250)	VARCHAR(250)
PROJECT_PRIMARY_KEY	NUMBER	INT
PROJECT_NUMBER	VARCHAR2(50)	VARCHAR(50)
PROJECT_NAME	VARCHAR2(250)	VARCHAR(250)
TASK_PRIMARY_KEY	NUMBER	INT
TASK_DESCRIPTION	VARCHAR2(250)	VARCHAR(250)
USER_PRIMARY_KEY	NUMBER	INT
USERNAME	VARCHAR2(50)	VARCHAR(50)
SECURITY	VARCHAR2(10)	VARCHAR(10)
WORKFLOW_CURRENT_STATUS	VARCHAR2(15)	VARCHAR(15)
WORKFLOW_CURRENT_ACTION	VARCHAR2(50)	VARCHAR(50)
HISTORY_TEXT	CLOB	NTEXT
CURRENT_APPROVER_CONTACT_PK	NUMBER	INT
CURRENT_APPROVER_NAME	VARCHAR2(250)	VARCHAR(250)
CURRENT_APPROVER_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)
CURRENT_APPROVER_MIDDLE_NAME	VARCHAR2(50)	VARCHAR(50)
CURRENT_APPROVER_TYPE	VARCHAR2(7)	VARCHAR(7)
LAST_PERFRMR_CONTACT_PK	NUMBER	INT
LAST_PERFRMR_NAME	VARCHAR2(250)	VARCHAR(250)
LAST_PERFRMR_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)
LAST_PERFRMR_MIDDLE_NAME	VARCHAR2(50)	VARCHAR(50)

LAST_PERFRMR_TYPE	VARCHAR2(7)	VARCHAR(7)
MULTIPLE_APPROVERS	VARCHAR2(3)	VARCHAR(3)
HISTORY_DATE_KEY	DATE	DATETIME
MODIFIED_ON_DATE_KEY	DATE	DATETIME
CREATED_ON_DATE_KEY	DATE	DATETIME

WH_HISTORY_CATEGORIES

Column Name	Oracle Data Type	MSSQL Data Type
HISTORY_PRIMARY_KEY	NUMBER	INT
HISTORY_DATE	DATE	DATETIME
HISTORY_DESCRIPTION	VARCHAR2(250)	VARCHAR(250)
PARENT_UNIQUE_CODE	VARCHAR2(4)	VARCHAR(4)
HISTORY_PARENT_TYPE	VARCHAR2(250)	VARCHAR(250)
CATEGORY_NAME	VARCHAR2(50)	VARCHAR(50)
CATEGORY_TREE_POSITION	VARCHAR2(250)	VARCHAR(250)
IS_CATEGORY_MANUALLY_ADDED	VARCHAR2(1)	VARCHAR(1)
IS_DEFAULT_CATEGORY	VARCHAR2(5)	VARCHAR(5)
SECURITY	VARCHAR2(10)	VARCHAR(10)

WH_HISTORY_GROUP_ACCESS

Column Name	Oracle Data Type	MSSQL Data Type
HISTORY_PRIMARY_KEY	NUMBER	INT
GROUP_PRIMARY_KEY	NUMBER	INT

ALLOW_DENY_IID	CHAR(1)	CHAR(1)
OPERATION_IID	NUMBER	INT
IS_MANUAL	NUMBER	INT
VERSION	NUMBER	INT

WH_HISTORY_USER_ACCESS

Column Name	Oracle Data Type	MSSQL Data Type
HISTORY_PRIMARY_KEY	NUMBER	INT
USER_PRIMARY_KEY	NUMBER	INT
ALLOW_DENY_IID	CHAR(1)	CHAR(1)
OPERATION_IID	NUMBER	INT
IS_MANUAL	NUMBER	INT
VERSION	NUMBER	INT

WH_HISTORY_SECURITY

Column Name	Oracle Data Type	MSSQL Data Type
HISTORY_PRIMARY_KEY	NUMBER	INT
CREATED_BY_CONTACT_PK	NUMBER	INT
SECURITY	NVARCHAR2(10)	NVARCHAR(10)

WH_HISTORY_WORKFLOW

Column Name	Oracle Data Type	MSSQL Data Type
HISTORY_PRIMARY_KEY	NUMBER	INT

HISTORY_DATE	DATE	DATETIME
HISTORY_DESCRIPTION	VARCHAR2(250)	VARCHAR(250)
PARENT_UNIQUE_CODE	VARCHAR2(4)	VARCHAR(4)
HISTORY_PARENT_TYPE	VARCHAR2(17)	VARCHAR(17)
WORKFLOW_PRIMARY_KEY	NUMBER	INT
REQUEST_NAME	VARCHAR2(50)	VARCHAR(50)
REQUESTED_BY_CONTACT_PK	NUMBER	INT
REQUESTED_BY_CONTACT_TYPE	VARCHAR2(7)	VARCHAR(7)
REQUESTED_BY_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)
REQUESTED_BY_MIDDLE_NAME	VARCHAR2(50)	VARCHAR(50)
REQUESTED_BY_NAME	VARCHAR2(250)	VARCHAR(250)
REQUESTED_ON	DATE	DATETIME
COMPLETED_ON	DATE	DATETIME
WORKFLOW_STATUS	VARCHAR2(30)	VARCHAR(30)
COMMENT_TO_REQUESTOR	VARCHAR2(2000)	VARCHAR(2000)
EXPIRES_ON	DATE	DATETIME
EXPIRE_ACTION	VARCHAR2(30)	VARCHAR(30)
TRANSACTION_STATUS	VARCHAR2(250)	VARCHAR(250)
CURRENT_STOP_NO	NUMBER	INT
REJECT_ACTION	VARCHAR2(30)	VARCHAR(30)
REJECT_REASON	VARCHAR2(50)	VARCHAR(50)

UPDATE_WHILE_PENDING	VARCHAR2(105)	VARCHAR(105)
PROCESS_MANAGER_CONTACT_PK	NUMBER	INT
PROCESS_MANAGER_CONTACT_TYPE	VARCHAR2(7)	VARCHAR(7)
PROCESS_MANAGER_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)
PROCESS_MANAGER_MIDDLE_NAME	VARCHAR2(50)	VARCHAR(50)
PROCESS_MANAGER_NAME	VARCHAR2(250)	VARCHAR(250)
STOP_MEMBER_PRIMARY_KEY	NUMBER	INT
STOP_PRIMARY_KEY	NUMBER	INT
STOP	NUMBER	INT
PERFORMER_CONTACT_PK	NUMBER	INT
PERFORMER_CONTACT_TYPE	VARCHAR2(7)	VARCHAR(7)
PERFORMER_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)
PERFORMER_MIDDLE_NAME	VARCHAR2(50)	VARCHAR(50)
PERFORMER_NAME	VARCHAR2(250)	VARCHAR(250)
STOP_STATUS	VARCHAR2(40)	VARCHAR(40)
ACTION_DATE	DATE	DATETIME
STOP_EXPIRATION_DATE	DATE	DATETIME
INTERNAL_COMMENT	VARCHAR2(2000)	VARCHAR(2000)
EMAIL_SENT	VARCHAR2(3)	VARCHAR(3)
CREATED_BY_CONTACT_PK	NUMBER	INT
CREATED_BY_CONTACT_TYPE	VARCHAR2(7)	VARCHAR(7)

CREATED_BY_CONTACT_NAME	VARCHAR2(250)	VARCHAR(250)
CREATED_BY_CONTACT_MIDDLE_NAME	VARCHAR2(50)	VARCHAR(50)
CREATED_BY_CONTACT_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)
CREATED_ON	DATE	DATETIME
MODIFIED_BY_CONTACT_PK	NUMBER	INT
MODIFIED_BY_CONTACT_NAME	VARCHAR2(250)	VARCHAR(250)
MODIFIED_BY_CONTACT_MID_NAME	VARCHAR2(50)	VARCHAR(50)
MODIFIED_BY_CONTACT_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)
MODIFIED_BY_CONTACT_TYPE	VARCHAR2(7)	VARCHAR(7)
MODIFIED_ON	DATE	DATETIME

WH_HISTORY_WORKFLOW_HISTORY

Column Name	Oracle Data Type	MSSQL Data Type
HISTORY_PRIMARY_KEY	NUMBER	INT
HISTORY_DATE	DATE	DATETIME
HISTORY_DESCRIPTION	VARCHAR2(250)	VARCHAR(250)
PARENT_UNIQUE_CODE	VARCHAR2(4)	VARCHAR(4)
HISTORY_PARENT_TYPE	VARCHAR2(17)	VARCHAR(17)
WORKFLOW_PRIMARY_KEY	NUMBER	INT
REQUEST_NAME	VARCHAR2(50)	VARCHAR(50)
REQUESTED_BY_CONTACT_PK	NUMBER	INT
REQUESTED_BY_CONTACT_TYPE	VARCHAR2(7)	VARCHAR(7)

REQUESTED_BY_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)
REQUESTED_BY_MIDDLE_NAME	VARCHAR2(50)	VARCHAR(50)
REQUESTED_BY_NAME	VARCHAR2(250)	VARCHAR(250)
REQUESTED_ON	DATE	DATETIME
COMPLETED_ON	DATE	DATETIME
WORKFLOW_STATUS	VARCHAR2(30)	VARCHAR(30)
COMMENT_TO_REQUESTOR	VARCHAR2(2000)	VARCHAR(2000)
EXPIRES_ON	DATE	DATETIME
EXPIRE_ACTION	VARCHAR2(30)	VARCHAR(30)
TRANSACTION_STATUS	VARCHAR2(250)	VARCHAR(250)
CURRENT_STOP_NO	NUMBER	INT
REJECT_ACTION	VARCHAR2(30)	VARCHAR(30)
REJECT_REASON	VARCHAR2(50)	VARCHAR(50)
UPDATE_WHILE_PENDING	VARCHAR2(105)	VARCHAR(105)
PROCESS_MANAGER_CONTACT_PK	NUMBER	INT
PROCESS_MANAGER_CONTACT_TYPE	VARCHAR2(7)	VARCHAR(7)
PROCESS_MANAGER_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)
PROCESS_MANAGER_MIDDLE_NAME	VARCHAR2(50)	VARCHAR(50)
PROCESS_MANAGER_NAME	VARCHAR2(250)	VARCHAR(250)
STOP_MEMBER_PRIMARY_KEY	NUMBER	INT
STOP_PRIMARY_KEY	NUMBER	INT

STOP	NUMBER	INT
PERFORMER_CONTACT_PK	NUMBER	INT
PERFORMER_CONTACT_TYPE	VARCHAR2(7)	VARCHAR(7)
PERFORMER_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)
PERFORMER_MIDDLE_NAME	VARCHAR2(50)	VARCHAR(50)
PERFORMER_NAME	VARCHAR2(250)	VARCHAR(250)
ACTIVITY	VARCHAR2(250)	VARCHAR(250)
ACTION_DATE	DATE	DATETIME
INTERNAL_COMMENT	VARCHAR2(2000)	VARCHAR(2000)
CREATED_BY_CONTACT_PK	NUMBER	INT
CREATED_BY_CONTACT_TYPE	VARCHAR2(7)	VARCHAR(7)
CREATED_BY_CONTACT_NAME	VARCHAR2(250)	VARCHAR(250)
CREATED_BY_CONTACT_MIDDLE_NAME	VARCHAR2(50)	VARCHAR(50)
CREATED_BY_CONTACT_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)
CREATED_ON	DATE	DATETIME
MODIFIED_BY_CONTACT_PK	NUMBER	INT
MODIFIED_BY_CONTACT_NAME	VARCHAR2(250)	VARCHAR(250)
MODIFIED_BY_CONTACT_MID_NAME	VARCHAR2(50)	VARCHAR(50)
MODIFIED_BY_CONTACT_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)
MODIFIED_BY_CONTACT_TYPE	VARCHAR2(7)	VARCHAR(7)
MODIFIED_ON	DATE	DATETIME

WH_HISTORY_WORKFLOW_RECIPIENT

Column Name	Oracle Data Type	MSSQL Data Type
HISTORY_PRIMARY_KEY	NUMBER	INT
HISTORY_DATE	DATE	DATETIME
HISTORY_DESCRIPTION	VARCHAR2(250)	VARCHAR(250)
PARENT_UNIQUE_CODE	VARCHAR2(4)	VARCHAR(4)
HISTORY_PARENT_TYPE	VARCHAR2(17)	VARCHAR(17)
WORKFLOW_PRIMARY_KEY	NUMBER	INT
REQUEST_NAME	VARCHAR2(50)	VARCHAR(50)
REQUESTED_BY_CONTACT_PK	NUMBER	INT
REQUESTED_BY_CONTACT_TYPE	VARCHAR2(7)	VARCHAR(7)
REQUESTED_BY_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)
REQUESTED_BY_MIDDLE_NAME	VARCHAR2(50)	VARCHAR(50)
REQUESTED_BY_NAME	VARCHAR2(250)	VARCHAR(250)
REQUESTED_ON	DATE	DATETIME
COMPLETED_ON	DATE	DATETIME
WORKFLOW_STATUS	VARCHAR2(30)	VARCHAR(30)
EXPIRES_ON	DATE	DATETIME
CURRENT_STOP_NO	NUMBER	INT
PROCESS_MANAGER_CONTACT_PK	NUMBER	INT
PROCESS_MANAGER_CONTACT_TYPE	VARCHAR2(7)	VARCHAR(7)
PROCESS_MANAGER_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)

PROCESS_MANAGER_MIDDLE_NAME	VARCHAR2(50)	VARCHAR(50)
PROCESS_MANAGER_NAME	VARCHAR2(250)	VARCHAR(250)
EVENT	VARCHAR2(250)	VARCHAR2(250)
RECIPIENT_CONTACT_PK	NUMBER	INT
RECIPIENT_CONTACT_TYPE	VARCHAR2(7)	VARCHAR2(7)
RECIPIENT_FIRST_NAME	VARCHAR2(50)	VARCHAR2(50)
RECIPIENT_MIDDLE_NAME	VARCHAR2(50)	VARCHAR2(50)
RECIPIENT_NAME	VARCHAR2(250)	VARCHAR2(250)
VERSION	NUMBER	INT
CREATED_ON	DATE	DATETIME
CREATED_BY_CONTACT_PK	NUMBER	INT
CREATED_BY_CONTACT_TYPE	VARCHAR2(7)	VARCHAR2(7)
CREATED_BY_CONTACT_NAME	VARCHAR2(250)	VARCHAR2(250)
CREATED_BY_CONTACT_MIDDLE_NAME	VARCHAR2(50)	VARCHAR2(50)
CREATED_BY_CONTACT_FIRST_NAME	VARCHAR2(50)	VARCHAR2(50)
MODIFIED_ON	DATE	DATETIME
MODIFIED_BY_CONTACT_PK	NUMBER	INT
MODIFIED_BY_CONTACT_TYPE	VARCHAR2(7)	VARCHAR2(7)
MODIFIED_BY_CONTACT_NAME	VARCHAR2(250)	VARCHAR2(250)
MODIFIED_BY_CONTACT_MID_NAME	VARCHAR2(50)	VARCHAR2(50)

WH_HISTORY_WORKFLOW_REVIEW

Column Name	Oracle Data Type	MSSQL Data Type
HISTORY_PRIMARY_KEY	NUMBER	INT
HISTORY_DATE	DATE	DATETIME
HISTORY_DESCRIPTION	VARCHAR2(250)	VARCHAR(250)
PARENT_UNIQUE_CODE	VARCHAR2(4)	VARCHAR(4)
HISTORY_PARENT_TYPE	VARCHAR2(17)	VARCHAR(17)
WORKFLOW_PRIMARY_KEY	NUMBER	INT
REQUEST_NAME	VARCHAR2(50)	VARCHAR(50)
REQUESTED_BY_CONTACT_PK	NUMBER	INT
REQUESTED_BY_CONTACT_TYPE	VARCHAR2(7)	VARCHAR(7)
REQUESTED_BY_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)
REQUESTED_BY_MIDDLE_NAME	VARCHAR2(50)	VARCHAR(50)
REQUESTED_BY_NAME	VARCHAR2(250)	VARCHAR(250)
REQUESTED_ON	DATE	DATETIME
COMPLETED_ON	DATE	DATETIME
WORKFLOW_STATUS	VARCHAR2(30)	VARCHAR(30)
EXPIRES_ON	DATE	DATETIME
CURRENT_STOP_NO	NUMBER	INT
PROCESS_MANAGER_CONTACT_PK	NUMBER	INT
PROCESS_MANAGER_CONTACT_TYPE	VARCHAR2(7)	VARCHAR(7)
PROCESS_MANAGER_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)

PROCESS_MANAGER_MIDDLE_NAME	VARCHAR2(50)	VARCHAR(50)
PROCESS_MANAGER_NAME	VARCHAR2(250)	VARCHAR(250)
STOP_PRIMARY_KEY	NUMBER	INT
STOP	NUMBER	INT
STOP_MEMBER_PRIMARY_KEY	NUMBER	INT
STOP_STATUS	VARCHAR2(40)	VARCHAR(40)
EMAIL_SENT	VARCHAR2(3)	VARCHAR(3)
REVIEW_PRIMARY_KEY	NUMBER	INT
REVIEW_PERFORMER_CONTACT_PK	NUMBER	INT
REVIEW_PERFORMER_CONTACT_TYPE	VARCHAR2(7)	VARCHAR(7)
REVIEW_PERFORMER_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)
REVIEW_PERFORMER_MIDDLE_NAME	VARCHAR2(50)	VARCHAR(50)
REVIEW_PERFORMER_NAME	VARCHAR2(250)	VARCHAR(250)
REVIEW_STATUS	VARCHAR2(20)	VARCHAR(20)
REVIEW_ACTION_DATE	DATE	DATETIME
REVIEW_APPROVAL_COMMENT	VARCHAR2(250)	VARCHAR(250)
REVIEW_REQUEST_COMMENT	VARCHAR2(250)	VARCHAR(250)
CREATED_ON	DATE	DATETIME
CREATED_BY_CONTACT_PK	NUMBER	INT
CREATED_BY_CONTACT_TYPE	VARCHAR2(7)	VARCHAR(7)
CREATED_BY_CONTACT_NAME	VARCHAR2(250)	VARCHAR(250)

CREATED_BY_CONTACT_MIDDLE_NAME	VARCHAR2(50)	VARCHAR(50)
CREATED_BY_CONTACT_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)
MODIFIED_ON	DATE	DATETIME
MODIFIED_BY_CONTACT_PK	NUMBER	INT
MODIFIED_BY_CONTACT_TYPE	VARCHAR2(7)	VARCHAR(7)
MODIFIED_BY_CONTACT_NAME	VARCHAR2(250)	VARCHAR(250)
MODIFIED_BY_CONTACT_MID_NAME	VARCHAR2(50)	VARCHAR(50)
MODIFIED_BY_CONTACT_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)

1.2.2.7 Invoice

The system object Invoice tables include:

- WH_INVOICE
- WH_INVOICE_ADJUSTMENTS
- WH_INVOICE_CAT_ADJUSTMENTS
- WH_INVOICE_CATEGORIES
- WH_INVOICE_GROUP_ACCESS*
- WH_INVOICE_NONUS_TAX
- WH_INVOICE_NONUS_TAX_RATE
- WH_INVOICE_TIMEKPR_ADJUSTMENTS
- WH_INVOICE_USER_ACCESS*
- WH_INVOICE_SECURITY
- WH_INVOICE_WORKFLOW
- WH_INVOICE_WORKFLOW_HISTORY
- WH_INVOICE_WORKFLOW_RECIPIENT
- WH_INVOICE_WORKFLOW_REVIEW

* These tables support the user access and security feature and should not be queried directly.

WH_INVOICE

Column Name	Oracle Data Type	MSSQL Data Type
INVOICE_PRIMARY_KEY	NUMBER	INT
INVOICE_NUMBER	VARCHAR2(50)	VARCHAR(50)
INVOICE_DATE	DATE	DATETIME
INVOICE_RECEIVED_DATE	DATE	DATETIME
INVOICE_DEFAULT_CATEGORY	VARCHAR2(50)	VARCHAR(50)
INVOICE_DEFAULT_CATEGORY_TREE	VARCHAR2(250)	VARCHAR(250)
VENDOR_CONTACT_PRIMARY_KEY	NUMBER	INT
VENDOR_CONTACT_TYPE	VARCHAR2(10)	VARCHAR(10)
VENDOR_CONTACT_NAME	VARCHAR2(250)	VARCHAR(250)
VENDOR_CONTACT_MIDDLE_NAME	VARCHAR2(50)	VARCHAR(50)
VENDOR_CONTACT_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)
INVOICE_CURRECNY_CODE	VARCHAR2(3)	VARCHAR(3)
INVOICE_CURRENCY_NAME	VARCHAR2(50)	VARCHAR(50)
INVOICE_CURRENCY_SYMBOL	VARCHAR2(3)	VARCHAR(3)
INVOICE_MANUAL_AMOUNT	NUMBER	DECIMAL(28,12)
INVOICE_ORIGINAL_FEES	NUMBER	DECIMAL(28,12)
INVOICE_ORIGINAL_EXPENSES	NUMBER	DECIMAL(28,12)
INVOICE_ORIGINAL_LINEITEMS	NUMBER	DECIMAL(28,12)
INVOICE_DISCOUNTS_FEES	NUMBER	DECIMAL(28,12)
INVOICE_DISCOUNTS_EXPENSES	NUMBER	DECIMAL(28,12)

INVOICE_DISCOUNTS_LINEITEMS	NUMBER	DECIMAL(28,12)
INVOICE_ADJUSTMENTS_FEES	NUMBER	DECIMAL(28,12)
INVOICE_ADJUSTMENTS_EXPENSES	NUMBER	DECIMAL(28,12)
INVOICE_ADJUSTMENTS_LINEITEMS	NUMBER	DECIMAL(28,12)
INVOICE_TAXES_FEES	NUMBER	DECIMAL(28,12)
INVOICE_TAXES_EXPENSES	NUMBER	DECIMAL(28,12)
INVOICE_TAXES_LINEITEMS	NUMBER	DECIMAL(28,12)
INVOICE_TOTAL_FEES	NUMBER	DECIMAL(28,12)
INVOICE_TOTAL_EXPENSES	NUMBER	DECIMAL(28,12)
INVOICE_TOTAL_LINEITEMS	NUMBER	DECIMAL(28,12)
INVOICE_PERIOD_START_ON	DATE	DATETIME
INVOICE_PERIOD_END_ON	DATE	DATETIME
INVOICE_POSTING_STATUS	VARCHAR2(19)	VARCHAR(19)
INVOICE_COMMENTS	VARCHAR2(2000)	VARCHAR(2000)
INVOICE_EXCHANGE_RATE	NUMBER	DECIMAL(28,12)
INVOICE_TAX_RATE	NUMBER	DECIMAL(28,12)
INVOICE_WARNINGS	VARCHAR2(2000)	VARCHAR(2000)
INVOICE_IS_PERCENTAGE_DISCOUNT	VARCHAR2(3)	VARCHAR(3)
INVOICE_IS_ELECTRONIC	VARCHAR2(3)	VARCHAR(3)
INVOICE_TYPE	VARCHAR2(20)	VARCHAR(20)
DOCUMENT_FOLDER_PRIMARY_KEY	NUMBER	INT

CREATED_ON	DATE	DATETIME
CREATED_BY_CONTACT_PK	NUMBER	INT
CREATED_BY_CONTACT_TYPE	VARCHAR2(10)	VARCHAR(10)
CREATED_BY_CONTACT_NAME	VARCHAR2(250)	VARCHAR(250)
CREATED_BY_CONTACT_MIDDLE_NAME	VARCHAR2(50)	VARCHAR(50)
CREATED_BY_CONTACT_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)
MODIFIED_ON	DATE	DATETIME
MODIFIED_BY_CONTACT_PK	NUMBER	INT
MODIFIED_BY_CONTACT_TYPE	VARCHAR2(10)	VARCHAR(10)
MODIFIED_BY_CONTACT_NAME	VARCHAR2(250)	VARCHAR(250)
MODIFIED_BY_CONTACT_MID_NAME	VARCHAR2(50)	VARCHAR(50)
MODIFIED_BY_CONTACT_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)
BEHALF_OF_CONTACT_PRIMARY_KEY	NUMBER	INT
SECURITY	VARCHAR2(10)	VARCHAR(10)
WORKFLOW_CURRENT_STATUS	VARCHAR2(15)	VARCHAR(15)
WORKFLOW_CURRENT_ACTION	VARCHAR2(50)	VARCHAR(50)
INVOICE_NOTES	CLOB	NTEXT
CURRENT_APPROVER_CONTACT_PK	NUMBER	INT
CURRENT_APPROVER_NAME	VARCHAR2(250)	VARCHAR(250)
CURRENT_APPROVER_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)
CURRENT_APPROVER_MIDDLE_NAME	VARCHAR2(50)	VARCHAR(50)

CURRENT_APPROVER_TYPE	VARCHAR2(7)	VARCHAR(7)
LAST_PERFRMR_CONTACT_PK	NUMBER	INT
LAST_PERFRMR_NAME	VARCHAR2(250)	VARCHAR(250)
LAST_PERFRMR_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)
LAST_PERFRMR_MIDDLE_NAME	VARCHAR2(50)	VARCHAR(50)
LAST_PERFRMR_TYPE	VARCHAR2(7)	VARCHAR(7)
MULTIPLE_APPROVERS	VARCHAR2(3)	VARCHAR(3)
INVOICE_HAS_NON_US_TAX	NVARCHAR2(3)	NVARCHAR(3)
INVOICE_DATE_KEY	DATE	DATETIME
INVOICE_RECEIVED_DATE_KEY	DATE	DATETIME
INVOICE_PERIOD_START_ON_DT_KEY	DATE	DATETIME
INVOICE_PERIOD_END_ON_DATE_KEY	DATE	DATETIME
CREATED_ON_DATE_KEY	DATE	DATETIME
MODIFIED_ON_DATE_KEY	DATE	DATETIME
INVOICE_NONUSTAX_SUMMARY_LVL	NVARCHAR2(3)	NVARCHAR(3)

WH_INVOICE_ADJUSTMENTS

Column Name	Oracle Data Type	MSSQL DATA TYPE
INVOICE_PRIMARY_KEY	NUMBER	INT
INVOICE_NUMBER	VARCHAR2(50)	VARCHAR(50)
INVOICE_DATE	DATE	DATETIME
INVOICE_RECEIVED_DATE	DATE	DATETIME

INVOICE_PERIOD_END_ON	DATE	DATETIME
INVOICE_PERIOD_START_ON	DATE	DATETIME
ADJUSTMENT_PRIMARY_KEY	NUMBER	INT
ADJUSTMENT_DATE	DATE	DATETIME
ADJUSTED_BY_CONTACT_TYPE	VARCHAR2(10)	VARCHAR(10)
ADJUSTED_BY_CONTACT_PK	NUMBER	INT
ADJUSTED_BY_CONTACT_NAME	VARCHAR2(250)	VARCHAR(250)
ADJUSTED_BY_CONTACT_MID_NAME	VARCHAR2(50)	VARCHAR(50)
ADJUSTED_BY_CONTACT_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)
ADJUSTMENT_REASON	VARCHAR2(50)	VARCHAR(50)
ADJUSTMENT_TYPE	VARCHAR2(20)	VARCHAR(20)
ADJUSTMENT_TARGET	VARCHAR2(20)	VARCHAR(20)
ADJUSTMENT_TOTAL_EXPENSES	NUMBER	DECIMAL(28,12)
ADJUSTMENT_TOTAL_FEES	NUMBER	DECIMAL(28,12)
ADJUSTMENT_TOTAL_INVOICE	NUMBER	DECIMAL(28,12)
COMMENT_TO_VENDOR	VARCHAR2(250)	VARCHAR(250)
IN_HOUSE_COMMENT	VARCHAR2(250)	VARCHAR(250)
PREVIOUS_NET_TOTAL	NUMBER	DECIMAL(28,12)
SECURITY	VARCHAR2(10)	VARCHAR(10)

WH_INVOICE_CAT_ADJUSTMENTS

Column Name	Oracle Data Type	MSSQL DATA TYPE
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INVOICE_PRIMARY_KEY	NUMBER	INT
INVOICE_NUMBER	VARCHAR2(50)	VARCHAR(50)
INVOICE_DATE	DATE	DATETIME
INVOICE_RECEIVED_DATE	DATE	DATETIME
INVOICE_PERIOD_END_ON	DATE	DATETIME
INVOICE_PERIOD_START_ON	DATE	DATETIME
ADJUSTMENT_PRIMARY_KEY	NUMBER	INT
ADJUSTMENT_DATE	DATE	DATETIME
ADJUSTED_BY_CONTACT_TYPE	VARCHAR2(10)	VARCHAR(10)
ADJUSTED_BY_CONTACT_PK	NUMBER	INT
ADJUSTED_BY_CONTACT_NAME	VARCHAR2(250)	VARCHAR(250)
ADJUSTED_BY_CONTACT_MID_NAME	VARCHAR2(50)	VARCHAR(50)
ADJUSTED_BY_CONTACT_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)
ADJUSTMENT_REASON	VARCHAR2(50)	VARCHAR(50)
ADJUSTMENT_TYPE	VARCHAR2(20)	VARCHAR(20)
ADJUSTMENT_TARGET	VARCHAR2(20)	VARCHAR(20)
ADJUSTMENT_TOTAL_EXPENSES	NUMBER	DECIMAL(28,12)
ADJUSTMENT_TOTAL_FEES	NUMBER	DECIMAL(28,12)
ADJUSTMENT_TOTAL_INVOICE	NUMBER	DECIMAL(28,12)
ADJUSTMENT_CATEGORY	VARCHAR2(50)	VARCHAR(50)
ADJUSTMENT_CATEGORY_TREE	VARCHAR2(250)	VARCHAR(250)

COMMENT_TO_VENDOR	VARCHAR2(250)	VARCHAR(250)
IN_HOUSE_COMMENT	VARCHAR2(250)	VARCHAR(250)
PREVIOUS_NET_TOTAL	NUMBER	DECIMAL(28,12)
SECURITY	VARCHAR2(10)	VARCHAR(10)

WH_INVOICE_CATEGORIES

Column Name	Oracle Data Type	MSSQL Data Type
INVOICE_PRIMARY_KEY	NUMBER	INT
INVOICE_NUMBER	VARCHAR2(50)	VARCHAR(50)
INVOICE_DATE	DATE	DATETIME
INVOICE_RECEIVED_DATE	DATE	DATETIME
INVOICE_PERIOD_END_ON	DATE	DATETIME
INVOICE_PERIOD_START_ON	DATE	DATETIME
CATEGORY_NAME	VARCHAR2(50)	VARCHAR(50)
CATEGORY_TREE_POSITION	VARCHAR2(250)	VARCHAR(250)
IS_CATEGORY_MANUALLY_ADDED	VARCHAR2(1)	VARCHAR(1)
IS_DEFAULT_CATEGORY	VARCHAR2(5)	VARCHAR(5)
SECURITY	VARCHAR2(10)	VARCHAR(10)

WH_INVOICE_GROUP_ACCESS

Column Name	Oracle Data Type	MSSQL Data Type
INVOICE_PRIMARY_KEY	NUMBER	INT

GROUP_PRIMARY_KEY	NUMBER	INT
ALLOW_DENY_IID	CHAR(1)	CHAR(1)
OPERATION_IID	NUMBER	INT
IS_MANUAL	NUMBER	INT
VERSION	NUMBER	INT

WH_INVOICE_NONUS_TAX

Column Name	Oracle Data Type	MSSQL Data Type
INVOICE_PRIMARY_KEY	NUMBER	INT
INVOICE_NUMBER	VARCHAR2(50)	VARCHAR(50)
INVOICE_DATE	DATE	DATETIME
INVOICE_RECEIVED_DATE	DATE	DATETIME
PROJECT_PRIMARY_KEYS	NUMBER	DECIMAL(28,12)
PROJECT_NUMBER	VARCHAR2(50)	VARCHAR(50)
PROJECT_NAME	VARCHAR2(250)	VARCHAR(250)
PROJECT_UNIQUE_CODE	VARCHAR2(4)	VARCHAR(4)
NONUS_TAX_PRIMARY_KEY	NUMBER	DECIMAL(28,12)
NONUS_TAX_DEFAULT_AMOUNT	NUMBER	DECIMAL(28,12)
NONUS_TAX_AMOUNT	NUMBER	DECIMAL(28,12)
NONUS_TAX_TYPE	VARCHAR2(50)	VARCHAR(50)
SECURITY	VARCHAR2(10)	VARCHAR(10)

WH_INVOICE_NONUS_TAX_RATE

Column Name	Oracle Data Type	MSSQL Data Type
NONUS_TAX_RATE	NUMBER	DECIMAL(28,12)
NONUS_TAX_TYPE	NVARCHAR2(50)	NVARCHAR(50)
NONUS_TAX_RATE_PRIMARY_KEY	NUMBER	INT
INVOICE_NUMBER	NVARCHAR2(50)	NVARCHAR(50)
INVOICE_PRIMARY_KEY	NUMBER	INT
INVOICE_DATE	DATE	DATETIME
SECURITY	NVARCHAR2(10)	NVARCHAR(10)

WH_INVOICE_TIMEKPR_ADJUSTMENTS

Column Name	Oracle Data Type	MSSQL DATA TYPE
INVOICE_PRIMARY_KEY	NUMBER	INT
INVOICE_NUMBER	VARCHAR2(50)	VARCHAR(50)
INVOICE_DATE	DATE	DATETIME
INVOICE_RECEIVED_DATE	DATE	DATETIME
INVOICE_PERIOD_END_ON	DATE	DATETIME
INVOICE_PERIOD_START_ON	DATE	DATETIME
ADJUSTMENT_PRIMARY_KEY	NUMBER	INT
ADJUSTMENT_DATE	DATE	DATETIME
ADJUSTED_BY_CONTACT_TYPE	VARCHAR2(10)	VARCHAR(10)
ADJUSTED_BY_CONTACT_PK	NUMBER	INT
ADJUSTED_BY_CONTACT_NAME	VARCHAR2(250)	VARCHAR(250)

ADJUSTED_BY_CONTACT_MID_NAME	VARCHAR2(50)	VARCHAR(50)
ADJUSTED_BY_CONTACT_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)
ADJUSTMENT_REASON	VARCHAR2(50)	VARCHAR(50)
ADJUSTMENT_TYPE	VARCHAR2(20)	VARCHAR(20)
ADJUSTMENT_AMOUNT	NUMBER	DECIMAL(28,12)
TIMEKEEPER_CONTACT_TYPE	VARCHAR2(10)	VARCHAR(10)
TIMEKEEPER_CONTACT_PK	NUMBER	INT
TIMEKEEPER_CONTACT_NAME	VARCHAR2(250)	VARCHAR(250)
TIMEKEEPER_CONTACT_MID_NAME	VARCHAR2(50)	VARCHAR(50)
TIMEKEEPER_CONTACT_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)
COMMENT_TO_VENDOR	VARCHAR2(250)	VARCHAR(250)
IN_HOUSE_COMMENT	VARCHAR2(250)	VARCHAR(250)
PREVIOUS_NET_TOTAL	NUMBER	DECIMAL(28,12)
SECURITY	VARCHAR2(10)	VARCHAR(10)

WH_INVOICE_USER_ACCESS

Column Name	Oracle Data Type	MSSQL Data Type
INVOICE_PRIMARY_KEY	NUMBER	INT
USER_PRIMARY_KEY	NUMBER	INT
ALLOW_DENY_IID	CHAR(1)	CHAR(1)
OPERATION_IID	NUMBER	INT
IS_MANUAL	NUMBER	INT

VERSION	NUMBER	INT
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WH_INVOICE_SECURITY

Column Name	Oracle Data Type	MSSQL Data Type
INVOICE_PRIMARY_KEY	NUMBER	INT
CREATED_BY_CONTACT_PK	NUMBER	INT
SECURITY	NVARCHAR2(10)	NVARCHAR(10)

WH_INVOICE_WORKFLOW

Column Name	Oracle Data Type	MSSQL Data Type
INVOICE_PRIMARY_KEY	NUMBER	INT
INVOICE_NUMBER	VARCHAR2(50)	VARCHAR(50)
INVOICE_DATE	DATE	DATETIME
INVOICE_RECEIVED_DATE	DATE	DATETIME
INVOICE_PERIOD_END_ON	DATE	DATETIME
INVOICE_PERIOD_START_ON	DATE	DATETIME
WORKFLOW_PRIMARY_KEY	NUMBER	INT
REQUEST_NAME	VARCHAR2(50)	VARCHAR(50)
REQUESTED_BY_CONTACT_PK	NUMBER	INT
REQUESTED_BY_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)
REQUESTED_BY_MIDDLE_NAME	VARCHAR2(50)	VARCHAR(50)
REQUESTED_BY_NAME	VARCHAR2(250)	VARCHAR(250)
REQUESTED_BY_CONTACT_TYPE	VARCHAR2(7)	VARCHAR(7)

REQUESTED_ON	DATE	DATETIME
COMPLETED_ON	DATE	DATETIME
WORKFLOW_STATUS	VARCHAR2(30)	VARCHAR(30)
COMMENT_TO_REQUESTOR	VARCHAR2(2000))	VARCHAR(2000)
EXPIRES_ON	DATE	DATETIME
EXPIRE_ACTION	VARCHAR2(30)	VARCHAR(30)
TRANSACTION_STATUS	VARCHAR2(250)	VARCHAR(250)
CURRENT_STOP_NO	NUMBER	INT
REJECT_ACTION	VARCHAR2(30)	VARCHAR(30)
REJECT_REASON	VARCHAR2(50)	VARCHAR(50)
UPDATE_WHILE_PENDING	VARCHAR2(105)	VARCHAR(105)
PROCESS_MANAGER_CONTACT_PK	NUMBER	INT
PROCESS_MANAGER_CONTACT_TYPE	VARCHAR2(7)	VARCHAR(7)
PROCESS_MANAGER_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)
PROCESS_MANAGER_MIDDLE_NAME	VARCHAR2(50)	VARCHAR(50)
PROCESS_MANAGER_NAME	VARCHAR2(250)	VARCHAR(250)
STOP_MEMBER_PRIMARY_KEY	NUMBER	INT
STOP_PRIMARY_KEY	NUMBER	INT
STOP	NUMBER	INT
PERFORMER_CONTACT_PK	NUMBER	INT
PERFORMER_CONTACT_TYPE	VARCHAR2(7)	VARCHAR(7)

PERFORMER_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)
PERFORMER_MIDDLE_NAME	VARCHAR2(50)	VARCHAR(50)
PERFORMER_NAME	VARCHAR2(250)	VARCHAR(250)
STOP_STATUS	VARCHAR2(40)	VARCHAR(40)
ACTION_DATE	DATE	DATETIME
STOP_EXPIRATION_DATE	DATE	DATETIME
INTERNAL_COMMENT	VARCHAR2(2000)	VARCHAR(2000)
EMAIL_SENT	VARCHAR2(3)	VARCHAR(3)
CREATED_BY_CONTACT_PK	NUMBER	INT
CREATED_BY_CONTACT_TYPE	VARCHAR2(7)	VARCHAR(7)
CREATED_BY_CONTACT_NAME	VARCHAR2(250)	VARCHAR(250)
CREATED_BY_CONTACT_MIDDLE_NAME	VARCHAR2(50)	VARCHAR(50)
CREATED_BY_CONTACT_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)
CREATED_ON	DATE	DATETIME
MODIFIED_BY_CONTACT_PK	NUMBER	INT
MODIFIED_BY_CONTACT_NAME	VARCHAR2(250)	VARCHAR(250)
MODIFIED_BY_CONTACT_MID_NAME	VARCHAR2(50)	VARCHAR(50)
MODIFIED_BY_CONTACT_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)
MODIFIED_BY_CONTACT_TYPE	VARCHAR2(7)	VARCHAR(7)
MODIFIED_ON	DATE	DATETIME

WH_INVOICE_WORKFLOW_HISTORY

Column Name	Oracle Data Type	MSSQL Data Type
INVOICE_PRIMARY_KEY	NUMBER	INT
INVOICE_NUMBER	VARCHAR2(50)	VARCHAR(50)
INVOICE_DATE	DATE	DATETIME
INVOICE_RECEIVED_DATE	DATE	DATETIME
INVOICE_PERIOD_END_ON	DATE	DATETIME
INVOICE_PERIOD_START_ON	DATE	DATETIME
WORKFLOW_PRIMARY_KEY	NUMBER	INT
REQUEST_NAME	VARCHAR2(50)	VARCHAR(50)
REQUESTED_BY_CONTACT_PK	NUMBER	INT
REQUESTED_BY_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)
REQUESTED_BY_MIDDLE_NAME	VARCHAR2(50)	VARCHAR(50)
REQUESTED_BY_NAME	VARCHAR2(250)	VARCHAR(250)
REQUESTED_BY_CONTACT_TYPE	VARCHAR2(7)	VARCHAR(7)
REQUESTED_ON	DATE	DATETIME
COMPLETED_ON	DATE	DATETIME
WORKFLOW_STATUS	VARCHAR2(30)	VARCHAR(30)
COMMENT_TO_REQUESTOR	VARCHAR2(2000))	VARCHAR(2000)
EXPIRES_ON	DATE	DATETIME
EXPIRE_ACTION	VARCHAR2(30)	VARCHAR(30)

TRANSACTION_STATUS	VARCHAR2(250)	VARCHAR(250)
CURRENT_STOP_NO	NUMBER	INT
REJECT_ACTION	VARCHAR2(30)	VARCHAR(30)
REJECT_REASON	VARCHAR2(50)	VARCHAR(50)
UPDATE_WHILE_PENDING	VARCHAR2(105)	VARCHAR(105)
PROCESS_MANAGER_CONTACT_PK	NUMBER	INT
PROCESS_MANAGER_CONTACT_TYPE	VARCHAR2(7)	VARCHAR(7)
PROCESS_MANAGER_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)
PROCESS_MANAGER_MIDDLE_NAME	VARCHAR2(50)	VARCHAR(50)
PROCESS_MANAGER_NAME	VARCHAR2(250)	VARCHAR(250)
ACTIVITY	VARCHAR2(250)	VARCHAR(250)
ACTION_DATE	DATE	DATETIME
INTERNAL_COMMENT	VARCHAR2(2000)	VARCHAR(2000)
CREATED_BY_CONTACT_PK	NUMBER	INT
CREATED_BY_CONTACT_TYPE	VARCHAR2(7)	VARCHAR(7)
CREATED_BY_CONTACT_NAME	VARCHAR2(250)	VARCHAR(250)
CREATED_BY_CONTACT_MIDDLE_NAME	VARCHAR2(50)	VARCHAR(50)
CREATED_BY_CONTACT_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)
CREATED_ON	DATE	DATETIME
MODIFIED_BY_CONTACT_PK	NUMBER	INT
MODIFIED_BY_CONTACT_NAME	VARCHAR2(250)	VARCHAR(250)

MODIFIED_BY_CONTACT_MID_NAME	VARCHAR2(50)	VARCHAR(50)
MODIFIED_BY_CONTACT_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)
MODIFIED_BY_CONTACT_TYPE	VARCHAR2(7)	VARCHAR(7)
MODIFIED_ON	DATE	DATETIME

WH_INVOICE_WORKFLOW_RECIPIENT

Column Name	Oracle Data Type	MSSQL Data Type
INVOICE_PRIMARY_KEY	NUMBER	INT
INVOICE_NUMBER	VARCHAR2(50)	VARCHAR(50)
INVOICE_DATE	DATE	DATETIME
INVOICE_RECEIVED_DATE	DATE	DATETIME
INVOICE_PERIOD_END_ON	DATE	DATETIME
INVOICE_PERIOD_START_ON	DATE	DATETIME
WORKFLOW_PRIMARY_KEY	NUMBER	INT
REQUEST_NAME	VARCHAR2(50)	VARCHAR(50)
REQUESTED_BY_CONTACT_PK	NUMBER	INT
REQUESTED_BY_CONTACT_TYPE	VARCHAR2(7)	VARCHAR(7)
REQUESTED_BY_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)
REQUESTED_BY_MIDDLE_NAME	VARCHAR2(50)	VARCHAR(50)
REQUESTED_BY_NAME	VARCHAR2(250)	VARCHAR(250)
REQUESTED_ON	DATE	DATETIME
COMPLETED_ON	DATE	DATETIME

WORKFLOW_STATUS	VARCHAR2(30)	VARCHAR(30)
EXPIRES_ON	DATE	DATETIME
CURRENT_STOP_NO	NUMBER	INT
PROCESS_MANAGER_CONTACT_PK	NUMBER	INT
PROCESS_MANAGER_CONTACT_TYPE	VARCHAR2(7)	VARCHAR(7)
PROCESS_MANAGER_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)
PROCESS_MANAGER_MIDDLE_NAME	VARCHAR2(50)	VARCHAR(50)
PROCESS_MANAGER_NAME	VARCHAR2(250)	VARCHAR(250)
EVENT	VARCHAR2(250)	VARCHAR2(250)
RECIPIENT_CONTACT_PK	NUMBER	INT
RECIPIENT_CONTACT_TYPE	VARCHAR2(7)	VARCHAR2(7)
RECIPIENT_FIRST_NAME	VARCHAR2(50)	VARCHAR2(50)
RECIPIENT_MIDDLE_NAME	VARCHAR2(50)	VARCHAR2(50)
RECIPIENT_NAME	VARCHAR2(250)	VARCHAR2(250)
VERSION	NUMBER	INT
CREATED_ON	DATE	DATETIME
CREATED_BY_CONTACT_PK	NUMBER	INT
CREATED_BY_CONTACT_TYPE	VARCHAR2(7)	VARCHAR2(7)
CREATED_BY_CONTACT_NAME	VARCHAR2(250)	VARCHAR2(250)
CREATED_BY_CONTACT_MIDDLE_NAME	VARCHAR2(50)	VARCHAR2(50)
CREATED_BY_CONTACT_FIRST_NAME	VARCHAR2(50)	VARCHAR2(50)

MODIFIED_ON	DATE	DATETIME
MODIFIED_BY_CONTACT_PK	NUMBER	INT
MODIFIED_BY_CONTACT_TYPE	VARCHAR2(7)	VARCHAR2(7)
MODIFIED_BY_CONTACT_NAME	VARCHAR2(250)	VARCHAR2(250)
MODIFIED_BY_CONTACT_MID_NAME	VARCHAR2(50)	VARCHAR2(50)

WH_INVOICE_WORKFLOW_REVIEW

Column Name	Oracle Data Type	MSSQL Data Type
INVOICE_PRIMARY_KEY	NUMBER	INT
INVOICE_NUMBER	VARCHAR2(50)	VARCHAR(50)
INVOICE_DATE	DATE	DATETIME
INVOICE_RECEIVED_DATE	DATE	DATETIME
INVOICE_PERIOD_END_ON	DATE	DATETIME
INVOICE_PERIOD_START_ON	DATE	DATETIME
WORKFLOW_PRIMARY_KEY	NUMBER	INT
REQUEST_NAME	VARCHAR2(50)	VARCHAR(50)
REQUESTED_BY_CONTACT_PK	NUMBER	INT
REQUESTED_BY_CONTACT_TYPE	VARCHAR2(7)	VARCHAR(7)
REQUESTED_BY_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)
REQUESTED_BY_MIDDLE_NAME	VARCHAR2(50)	VARCHAR(50)
REQUESTED_BY_NAME	VARCHAR2(250)	VARCHAR(250)
REQUESTED_ON	DATE	DATETIME

COMPLETED_ON	DATE	DATETIME
WORKFLOW_STATUS	VARCHAR2(30)	VARCHAR(30)
EXPIRES_ON	DATE	DATETIME
CURRENT_STOP_NO	NUMBER	INT
PROCESS_MANAGER_CONTACT_PK	NUMBER	INT
PROCESS_MANAGER_CONTACT_TYPE	VARCHAR2(7)	VARCHAR(7)
PROCESS_MANAGER_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)
PROCESS_MANAGER_MIDDLE_NAME	VARCHAR2(50)	VARCHAR(50)
PROCESS_MANAGER_NAME	VARCHAR2(250)	VARCHAR(250)
STOP_PRIMARY_KEY	NUMBER	INT
STOP	NUMBER	INT
STOP_MEMBER_PRIMARY_KEY	NUMBER	INT
STOP_STATUS	VARCHAR2(40)	VARCHAR(40)
EMAIL_SENT	VARCHAR2(3)	VARCHAR(3)
REVIEW_PRIMARY_KEY	NUMBER	INT
REVIEW_PERFORMER_CONTACT_PK	NUMBER	INT
REVIEW_PERFORMER_CONTACT_TYPE	VARCHAR2(7)	VARCHAR(7)
REVIEW_PERFORMER_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)
REVIEW_PERFORMER_MIDDLE_NAME	VARCHAR2(50)	VARCHAR(50)
REVIEW_PERFORMER_NAME	VARCHAR2(250)	VARCHAR(250)
REVIEW_STATUS	VARCHAR2(20)	VARCHAR(20)

REVIEW_ACTION_DATE	DATE	DATETIME
REVIEW_APPROVAL_COMMENT	VARCHAR2(250)	VARCHAR(250)
REVIEW_REQUEST_COMMENT	VARCHAR2(250)	VARCHAR(250)
CREATED_ON	DATE	DATETIME
CREATED_BY_CONTACT_PK	NUMBER	INT
CREATED_BY_CONTACT_TYPE	VARCHAR2(7)	VARCHAR(7)
CREATED_BY_CONTACT_NAME	VARCHAR2(250)	VARCHAR(250)
CREATED_BY_CONTACT_MIDDLE_NAME	VARCHAR2(50)	VARCHAR(50)
CREATED_BY_CONTACT_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)
MODIFIED_ON	DATE	DATETIME
MODIFIED_BY_CONTACT_PK	NUMBER	INT
MODIFIED_BY_CONTACT_TYPE	VARCHAR2(7)	VARCHAR(7)
MODIFIED_BY_CONTACT_NAME	VARCHAR2(250)	VARCHAR(250)
MODIFIED_BY_CONTACT_MID_NAME	VARCHAR2(50)	VARCHAR(50)
MODIFIED_BY_CONTACT_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)

1.2.2.8 Line Item

The system object Line Item tables include:

- WH_LINEITEM
- WH_LINEITEM_ADJUSTMENTS
- WH_LINEITEM_GROUP_ACCESS*
- WH_LINEITEM_NONUS_TAX_CODE
- WH_LINEITEM_USER_ACCESS*
- WH_LINEITEM_SECURITY

* These tables support the user access and security feature and should not be queried directly.

WH_LINEITEM

Column Name	Oracle Data Type	MSSQL Data Type
INVOICE_PRIMARY_KEY	NUMBER	INT
INVOICE_NUMBER	VARCHAR2(50)	VARCHAR(50)
INVOICE_DATE	DATE	DATETIME
INVOICE_RECEIVED_DATE	DATE	DATETIME
INVOICE_PERIOD_START_ON	DATE	DATETIME
INVOICE_PERIOD_END_ON	DATE	DATETIME
INVOICE_POSTING_STATUS	VARCHAR2(20)	VARCHAR(20)
LINEITEM_PRIMARY_KEY	NUMBER	INT
LINEITEM_ITEM_NUMBER	NUMBER	INT
LINEITEM_SERVICE_DATE	DATE	DATETIME
PROJECT_UNIQUE_CODE	VARCHAR2(4)	VARCHAR(4)
PROJECT_OBJECT_TITLE	VARCHAR2(250)	VARCHAR(250)
PROJECT_PRIMARY_KEY	NUMBER	INT
PROJECT_NUMBER	VARCHAR2(50)	VARCHAR(50)
PROJECT_NAME	VARCHAR2(250)	VARCHAR(250)
LINEITEM_TASK_OR_EXPENSE	VARCHAR2(10)	VARCHAR(10)
LINEITEM_TASK_CATEGORY_NAME	VARCHAR2(50)	VARCHAR(50)
LINEITEM_TASK_CATEGORY_TREE	VARCHAR2(250)	VARCHAR(250)
LINEITEM_EXPENSE_CATEGORY_NAME	VARCHAR2(50)	VARCHAR(50)

LINEITEM_EXPENSE_CATEGORY_TREE	VARCHAR2(250)	VARCHAR(250)
LINEITEM_ACTIVITY_ITEM	VARCHAR2(2000)	VARCHAR(2000)
LINEITEM_DESCRIPTION	VARCHAR2(2000)	VARCHAR(2000)
TIMEKEEPER_CONTACT_PRIMARY_KEY	NUMBER	INT
TIMEKEEPER_CONTACT_NAME	VARCHAR2(250)	VARCHAR(250)
TIMEKEEPER_CONTACT_MIDDLE_NAME	VARCHAR2(50)	VARCHAR(50)
TIMEKEEPER_CONTACT_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)
TIMEKEEPER_CONTACT_TYPE	VARCHAR2(10)	VARCHAR(10)
LINEITEM_ORIGINAL_RATE	NUMBER	DECIMAL(28,12)
LINEITEM_ORIGINAL_QUANTITY	NUMBER	DECIMAL(28,12)
LINEITEM_ORIGINAL_DISCOUNT	NUMBER	DECIMAL(28,12)
LINEITEM_ORIGINAL_TOTAL	NUMBER	DECIMAL(28,12)
LINEITEM_ADJUSTMENT_RATE	NUMBER	DECIMAL(28,12)
LINEITEM_ADJUSTMENT_QUANTITY	NUMBER	DECIMAL(28,12)
LINEITEM_ADJUSTMENT_DISCOUNT	NUMBER	DECIMAL(28,12)
LINEITEM_ADJUSTMENT_TOTAL	NUMBER	DECIMAL(28,12)
LINEITEM_NET_RATE	NUMBER	DECIMAL(28,12)
LINEITEM_NET_QUANTITY	NUMBER	DECIMAL(28,12)
LINEITEM_NET_DISCOUNT	NUMBER	DECIMAL(28,12)
LINEITEM_NET_TOTAL	NUMBER	DECIMAL(28,12)
NETRATE_IN_DEFAULT_CURRENCY	NUMBER	DECIMAL(28,12)

NETDISCOUNT_IN_DEFAULT_CURRENCY	NUMBER	DECIMAL(28,12)
NETTOTAL_IN_DEFAULT_CURRENCY	NUMBER	DECIMAL(28,12)
LINEITEM_IS_TAXABLE	VARCHAR2(3)	VARCHAR(3)
LINEITEM_TOTAL_ADJUSTMENT	NUMBER	DECIMAL(28,12)
LINEITEM_HAS_WARNINGS	VARCHAR2(3)	VARCHAR(3)
LINEITEM_WARNINGS	VARCHAR2(2000)	VARCHAR(2000)
LINEITEM_DEFAULT_CATEGORY_NAME	VARCHAR2(50)	VARCHAR(50)
LINEITEM_DEFAULT_CATEGORY_TREE	VARCHAR2(250)	VARCHAR(250)
DOCUMENT_FOLDER_PRIMARY_KEY	NUMBER	INT
CREATED_ON	DATE	DATETIME
CREATED_BY_CONTACT_PK	NUMBER	INT
CREATED_BY_CONTACT_TYPE	VARCHAR2(10)	VARCHAR(10)
CREATED_BY_CONTACT_NAME	VARCHAR2(250)	VARCHAR(250)
CREATED_BY_CONTACT_MIDDLE_NAME	VARCHAR2(50)	VARCHAR(50)
CREATED_BY_CONTACT_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)
MODIFIED_ON	DATE	DATETIME
MODIFIED_BY_CONTACT_PK	NUMBER	INT
MODIFIED_BY_CONTACT_TYPE	VARCHAR2(10)	VARCHAR(10)
MODIFIED_BY_CONTACT_NAME	VARCHAR2(250)	VARCHAR(250)
MODIFIED_BY_CONTACT_MID_NAME	VARCHAR2(50)	VARCHAR(50)
MODIFIED_BY_CONTACT_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)

SECURITY	VARCHAR2(10)	VARCHAR(10)
INVOICE_DATE_KEY	DATE	DATETIME
INVOICE_RECEIVED_DATE_KEY	DATE	DATETIME
INVOICE_PERIOD_START_ON_DT_KEY	DATE	DATETIME
INVOICE_PERIOD_END_ON_DATE_KEY	DATE	DATETIME
LINEITEM_SERVICE_DATE_KEY	DATE	DATETIME
CREATED_ON_DATE_KEY	DATE	DATETIME
MODIFIED_ON_DATE_KEY	DATE	DATETIME

WH_LINEITEM_ADJUSTMENTS

Column Name	Oracle Data Type	MSSQL Data Type
INVOICE_PRIMARY_KEY	NUMBER	INT
INVOICE_NUMBER	VARCHAR2(50)	VARCHAR(50)
INVOICE_DATE	DATE	DATETIME
INVOICE_RECEIVED_DATE	DATE	DATETIME
INVOICE_PERIOD_START_ON	DATE	DATETIME
INVOICE_PERIOD_END_ON	DATE	DATETIME
INVOICE_POSTING_STATUS	VARCHAR2(20)	VARCHAR(20)
LINEITEM_PRIMARY_KEY	NUMBER	INT
LINEITEM_ITEM_NUMBER	NUMBER	INT
LINEITEM_SERVICE_DATE	DATE	DATETIME
LINEITEM_DESCRIPTION	VARCHAR2(2000)	VARCHAR(2000)

ADJUSTMENT_PRIMARY_KEY	NUMBER	INT
ADJUSTMENT_DATE	DATE	DATETIME
ADJUSTED_BY_CONTACT_PK	NUMBER	INT
ADJUSTED_BY_CONTACT_TYPE	VARCHAR2(10)	VARCHAR(10)
ADJUSTED_BY_CONTACT_NAME	VARCHAR2(250)	VARCHAR(250)
ADJUSTED_BY_CONTACT_MID_NAME	VARCHAR2(50)	VARCHAR(50)
ADJUSTED_BY_CONTACT_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)
ADJUSTMENT_REASON	VARCHAR2(50)	VARCHAR(50)
ADJUSTMENT_TYPE	VARCHAR2(20)	VARCHAR(20)
ADJUSTMENT_TARGET	VARCHAR2(20)	VARCHAR(20)
ADJUSTMENT_AMOUNT	NUMBER	DECIMAL(28,12)
ADJUSTMENT_QUANTITY	NUMBER	DECIMAL(28,12)
ADJUSTMENT_RATE	NUMBER	DECIMAL(28,12)
COMMENT_TO_VENDOR	VARCHAR2(2000)	VARCHAR(2000)
IN_HOUSE_COMMENT	VARCHAR2(250)	VARCHAR(250)
PREVIOUS_NET_TOTAL	NUMBER	DECIMAL(28,12)
SECURITY	VARCHAR2(10)	VARCHAR(10)

WH_LINEITEM_GROUP_ACCESS

Column Name	Oracle Data Type	MSSQL Data Type
LINEITEM_PRIMARY_KEY	NUMBER	INT
GROUP_PRIMARY_KEY	NUMBER	INT

ALLOW_DENY_IID	CHAR(1)	CHAR(1)
OPERATION_IID	NUMBER	INT
IS_MANUAL	NUMBER	INT
VERSION	NUMBER	INT

WH_INVOICE_NONUS_TAX_CODE

Column Name	Oracle Data Type	MSSQL Data Type
NONUS_TAX_CODE	NVARCHAR2(50)	NVARCHAR(50)
INVOICE_NUMBER	NVARCHAR2(50)	NVARCHAR(50)
INVOICE_PRIMARY_KEY	NUMBER	INT
INVOICE_DATE	DATE	DATETIME
NONUS_TAX_CODE_PRIMARY_KEY	NUMBER	INT
LINEITEM_PRIMARY_KEY	NUMBER	INT
LINEITEM_ITEM_NUMBER	NUMBER	INT
SECURITY	NVARCHAR2(10)	NVARCHAR(10)

WH_LINEITEM_USER_ACCESS

Column Name	Oracle Data Type	MSSQL Data Type
LINEITEM_PRIMARY_KEY	NUMBER	INT
USER_PRIMARY_KEY	NUMBER	INT
ALLOW_DENY_IID	CHAR(1)	CHAR(1)
OPERATION_IID	NUMBER	INT
IS_MANUAL	NUMBER	INT

VERSION	NUMBER	INT
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WH_LINEITEM_SECURITY

Column Name	Oracle Data Type	MSSQL Data Type
LINEITEM_PRIMARY_KEY	NUMBER	INT
CREATED_BY_CONTACT_PK	NUMBER	INT
SECURITY	NVARCHAR2(10)	NVARCHAR(10)

1.2.2.9 Task

The system object Task tables include:

- WH_TASK
- WH_TASK_ASSIGNEES
- WH_TASK_GROUP_ACCESS*
- WH_TASK_USER_ACCESS*
- WH_TASK_SECURITY
- WH_TASK_WORKFLOW
- WH_TASK_WORKFLOW_HISTORY
- WH_TASK_WORKFLOW_RECIPIENT
- WH_TASK_WORKFLOW_REVIEW

* These tables support the user access and security feature and should not be queried directly.

WH_TASK

Column Name	Oracle Data Type	MSSQL Data Type
TASK_PRIMARY_KEY	NUMBER	INT
TASK_SUBJECT	VARCHAR2(250)	VARCHAR(250)
TASK_START_ON	DATE	DATETIME
TASK_DUE_ON	DATE	DATETIME

TASK_ESTIMATED_HOURS	NUMBER	DECIMAL(28,12)
TASK_STATUS	VARCHAR2(20)	VARCHAR(20)
TASK_COMPLETED_PERCENT	NUMBER	DECIMAL(28,12)
TASK_COMPLETED_ON	DATE	DATETIME
TASK_PRIORITY	VARCHAR2(10)	VARCHAR(10)
TASK_CATEGORY	VARCHAR2(50)	VARCHAR(50)
TASK_CATEGORY_TREE_POSITION	VARCHAR2(250)	VARCHAR(250)
TASK_ACTIVITY	VARCHAR2(50)	VARCHAR(50)
TASK_RATE_AMOUNT	NUMBER	DECIMAL(28,12)
TASK_ACTUAL_HOURS	NUMBER	DECIMAL(28,12)
TASK_TOTAL_AMOUNT	NUMBER	DECIMAL(28,12)
TASK_POSTING_STATUS	VARCHAR2(20)	VARCHAR(20)
PROJECT_UNIQUE_CODE	VARCHAR2(4)	VARCHAR(4)
PROJECT_OBJECT_TITLE	VARCHAR2(250)	VARCHAR(250)
PROJECT_PRIMARY_KEY	NUMBER	INT
PROJECT_NAME	VARCHAR2(250)	VARCHAR(250)
PROJECT_NUMBER	VARCHAR2(50)	VARCHAR(50)
MILESTONE_UNIQUE_CODE	VARCHAR2(4)	VARCHAR(4)
MILESTONE_OBJECT_TITLE	VARCHAR2(250)	VARCHAR(250)
MILESTONE_PRIMARY_KEY	NUMBER	INT
MILESTONE_SUBJECT	VARCHAR2(250)	VARCHAR(250)

MILESTONE_DATE	DATE	DATETIME
CONTACT_PRIMARY_KEY	NUMBER	INT
CONTACT_TYPE	VARCHAR2(10)	VARCHAR(10)
CONTACT_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)
CONTACT_MIDDLE_NAME	VARCHAR2(50)	VARCHAR(50)
CONTACT_NAME	VARCHAR2(250)	VARCHAR(250)
ASSIGNEE_CONTACT_PK	NUMBER	INT
ASSIGNEE_CONTACT_TYPE	VARCHAR2(10)	VARCHAR(10)
ASSIGNEE_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)
ASSIGNEE_MIDDLE_NAME	VARCHAR2(50)	VARCHAR(50)
ASSIGNEE_NAME	VARCHAR2(250)	VARCHAR(250)
DOCUMENT_FOLDER_PRIMARY_KEY	NUMBER	INT
CREATED_ON	DATE	DATETIME
MODIFIED_ON	DATE	DATETIME
CREATED_BY_CONTACT_PK	NUMBER	INT
CREATED_BY_CONTACT_TYPE	VARCHAR2(10)	VARCHAR(10)
CREATED_BY_CONTACT_NAME	VARCHAR2(250)	VARCHAR(250)
CREATED_BY_CONTACT_MIDDLE_NAME	VARCHAR2(50)	VARCHAR(50)
CREATED_BY_CONTACT_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)
MODIFIED_BY_CONTACT_PK	NUMBER	INT
MODIFIED_BY_CONTACT_TYPE	VARCHAR2(10)	VARCHAR(10)

MODIFIED_BY_CONTACT_NAME	VARCHAR2(250)	VARCHAR(250)
MODIFIED_BY_CONTACT_MID_NAME	VARCHAR2(50)	VARCHAR(50)
MODIFIED_BY_CONTACT_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)
BEHALF_OF_CONTACT_PRIMARY_KEY	NUMBER	INT
SECURITY	VARCHAR2(10)	VARCHAR(10)
WORKFLOW_CURRENT_STATUS	VARCHAR2(15)	VARCHAR(15)
WORKFLOW_CURRENT_ACTION	VARCHAR2(50)	VARCHAR(50)
NOTES	CLOB	NTEXT
CURRENT_APPROVER_CONTACT_PK	NUMBER	INT
CURRENT_APPROVER_NAME	VARCHAR2(250)	VARCHAR(250)
CURRENT_APPROVER_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)
CURRENT_APPROVER_MIDDLE_NAME	VARCHAR2(50)	VARCHAR(50)
CURRENT_APPROVER_TYPE	VARCHAR2(7)	VARCHAR(7)
LAST_PERFRMR_CONTACT_PK	NUMBER	INT
LAST_PERFRMR_NAME	VARCHAR2(250)	VARCHAR(250)
LAST_PERFRMR_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)
LAST_PERFRMR_MIDDLE_NAME	VARCHAR2(50)	VARCHAR(50)
LAST_PERFRMR_TYPE	VARCHAR2(7)	VARCHAR(7)
MULTIPLE_APPROVERS	VARCHAR2(3)	VARCHAR(3)
TASK_START_ON_DATE_KEY	DATE	DATETIME
TASK_DUE_ON_DATE_KEY	DATE	DATETIME

TASK_COMPLETED_ON_DATE_KEY	DATE	DATETIME
CREATED_ON_DATE_KEY	DATE	DATETIME
MODIFIED_ON_DATE_KEY	DATE	DATETIME

WH_TASK_ASSIGNEES

Column Name	Oracle Data Type	MSSQL Data Type
TASK_PRIMARY_KEY	NUMBER	INT
TASK_SUBJECT	VARCHAR2(250)	VARCHAR(250)
TASK_CATEGORY	VARCHAR2(50)	VARCHAR(50)
PROJECT_UNIQUE_CODE	VARCHAR2(4)	VARCHAR(4)
PROJECT_OBJECT_TITLE	VARCHAR2(250)	VARCHAR(250)
PROJECT_PRIMARY_KEY	NUMBER	INT
PROJECT_NUMBER	VARCHAR2(50)	VARCHAR(50)
PROJECT_NAME	VARCHAR2(250)	VARCHAR(250)
MILESTONE_PRIMARY_KEY	NUMBER	INT
MILESTONE_UNIQUE_CODE	VARCHAR2(4)	VARCHAR(4)
MILESTONE_OBJECT_TITLE	VARCHAR2(250)	VARCHAR(250)
MILESTONE_SUBJECT	VARCHAR2(250)	VARCHAR(250)
MILESTONE_DATE	DATE	DATETIME
ASSIGNEE_CONTACT_PK	NUMBER	INT
ASSIGNEE_CONTACT_TYPE	VARCHAR2(10)	VARCHAR(10)
ASSIGNEE_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)

ASSIGNEE_MIDDLE_NAME	VARCHAR2(50)	VARCHAR(50)
ASSIGNEE_NAME	VARCHAR2(250)	VARCHAR(250)
ASSIGNEE_ASSIGNED_ON	DATE	DATETIME
IS_CURRENT_ASSIGNEE	VARCHAR2(5)	VARCHAR(5)
SECURITY	VARCHAR2(10)	VARCHAR(10)
ASSIGNEE_ASSIGNED_ON_DATE_KEY	DATE	DATETIME

WH_TASK_GROUP_ACCESS

Column Name	Oracle Data Type	MSSQL Data Type
TASK_PRIMARY_KEY	NUMBER	INT
GROUP_PRIMARY_KEY	NUMBER	INT
ALLOW_DENY_IID	CHAR(1)	CHAR(1)
OPERATION_IID	NUMBER	INT
IS_MANUAL	NUMBER	INT
VERSION	NUMBER	INT

WH_TASK_USER_ACCESS

Column Name	Oracle Data Type	MSSQL Data Type
TASK_PRIMARY_KEY	NUMBER	INT
USER_PRIMARY_KEY	NUMBER	INT
ALLOW_DENY_IID	CHAR(1)	CHAR(1)
OPERATION_IID	NUMBER	INT
IS_MANUAL	NUMBER	INT

VERSION	NUMBER	INT
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WH_TASK_SECURITY

Column Name	Oracle Data Type	MSSQL Data Type
TASK_PRIMARY_KEY	NUMBER	INT
CREATED_BY_CONTACT_PK	NUMBER	INT
SECURITY	NVARCHAR2(10)	NVARCHAR(10)

WH_TASK_WORKFLOW

Column Name	Oracle Data Type	MSSQL Data Type
TASK_PRIMARY_KEY	NUMBER	INT
TASK_SUBJECT	VARCHAR2(250)	VARCHAR(250)
TASK_CATEGORY	VARCHAR2(50)	VARCHAR(50)
PROJECT_UNIQUE_CODE	VARCHAR2(4)	VARCHAR(4)
PROJECT_OBJECT_TITLE	VARCHAR2(250)	VARCHAR(250)
PROJECT_PRIMARY_KEY	NUMBER	INT
PROJECT_NUMBER	VARCHAR2(50)	VARCHAR(50)
PROJECT_NAME	VARCHAR2(250)	VARCHAR(250)
MILESTONE_UNIQUE_CODE	VARCHAR2(4)	VARCHAR(4)
MILESTONE_OBJECT_TITLE	VARCHAR2(250)	VARCHAR(250)
MILESTONE_PRIMARY_KEY	NUMBER	INT
MILESTONE_SUBJECT	VARCHAR2(250)	VARCHAR(250)
MILESTONE_DATE	DATE	DATETIME

WORKFLOW_PRIMARY_KEY	NUMBER	INT
REQUEST_NAME	VARCHAR2(50)	VARCHAR(50)
REQUESTED_BY_CONTACT_PK	NUMBER	INT
REQUESTED_BY_CONTACT_TYPE	VARCHAR2(7)	VARCHAR(7)
REQUESTED_BY_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)
REQUESTED_BY_MIDDLE_NAME	VARCHAR2(50)	VARCHAR(50)
REQUESTED_BY_NAME	VARCHAR2(250)	VARCHAR(250)
REQUESTED_ON	DATE	DATETIME
COMPLETED_ON	DATE	DATETIME
WORKFLOW_STATUS	VARCHAR2(30)	VARCHAR(30)
COMMENT_TO_REQUESTOR	VARCHAR2(2000)	VARCHAR(2000)
EXPIRES_ON	DATE	DATETIME
EXPIRE_ACTION	VARCHAR2(30)	VARCHAR(30)
TRANSACTION_STATUS	VARCHAR2(250)	VARCHAR(250)
CURRENT_STOP_NO	NUMBER	INT
REJECT_ACTION	VARCHAR2(30)	VARCHAR(30)
REJECT_REASON	VARCHAR2(50)	VARCHAR(50)
UPDATE_WHILE_PENDING	VARCHAR2(105)	VARCHAR(105)
PROCESS_MANAGER_CONTACT_PK	NUMBER	INT
PROCESS_MANAGER_CONTACT_TYPE	VARCHAR2(7)	VARCHAR(7)
PROCESS_MANAGER_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)

PROCESS_MANAGER_MIDDLE_NAME	VARCHAR2(50)	VARCHAR(50)
PROCESS_MANAGER_NAME	VARCHAR2(250)	VARCHAR(250)
STOP_MEMBER_PRIMARY_KEY	NUMBER	INT
STOP_PRIMARY_KEY	NUMBER	INT
STOP	NUMBER	INT
PERFORMER_CONTACT_PK	NUMBER	INT
PERFORMER_CONTACT_TYPE	VARCHAR2(7)	VARCHAR(7)
PERFORMER_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)
PERFORMER_MIDDLE_NAME	VARCHAR2(50)	VARCHAR(50)
PERFORMER_NAME	VARCHAR2(250)	VARCHAR(250)
STOP_STATUS	VARCHAR2(40)	VARCHAR(40)
ACTION_DATE	DATE	DATETIME
STOP_EXPIRATION_DATE	DATE	DATETIME
INTERNAL_COMMENT	VARCHAR2(2000)	VARCHAR(2000)
EMAIL_SENT	VARCHAR2(3)	VARCHAR(3)
CREATED_BY_CONTACT_PK	NUMBER	INT
CREATED_BY_CONTACT_TYPE	VARCHAR2(7)	VARCHAR(7)
CREATED_BY_CONTACT_NAME	VARCHAR2(250)	VARCHAR(250)
CREATED_BY_CONTACT_MIDDLE_NAME	VARCHAR2(50)	VARCHAR(50)
CREATED_BY_CONTACT_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)
CREATED_ON	DATE	DATETIME

MODIFIED_BY_CONTACT_PK	NUMBER	INT
MODIFIED_BY_CONTACT_NAME	VARCHAR2(250)	VARCHAR(250)
MODIFIED_BY_CONTACT_MID_NAME	VARCHAR2(50)	VARCHAR(50)
MODIFIED_BY_CONTACT_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)
MODIFIED_BY_CONTACT_TYPE	VARCHAR2(7)	VARCHAR(7)
MODIFIED_ON	DATE	DATETIME

WH_TASK_WORKFLOW_HISTORY

Column Name	Oracle Data Type	MSSQL Data Type
TASK_PRIMARY_KEY	NUMBER	INT
TASK_SUBJECT	VARCHAR2(250)	VARCHAR(250)
TASK_CATEGORY	VARCHAR2(50)	VARCHAR(50)
PROJECT_UNIQUE_CODE	VARCHAR2(4)	VARCHAR(4)
PROJECT_OBJECT_TITLE	VARCHAR2(250)	VARCHAR(250)
PROJECT_PRIMARY_KEY	NUMBER	INT
PROJECT_NUMBER	VARCHAR2(50)	VARCHAR(50)
PROJECT_NAME	VARCHAR2(250)	VARCHAR(250)
MILESTONE_UNIQUE_CODE	VARCHAR2(4)	VARCHAR(4)
MILESTONE_OBJECT_TITLE	VARCHAR2(250)	VARCHAR(250)
MILESTONE_PRIMARY_KEY	NUMBER	INT
MILESTONE_SUBJECT	VARCHAR2(250)	VARCHAR(250)
MILESTONE_DATE	DATE	DATETIME

WORKFLOW_PRIMARY_KEY	NUMBER	INT
REQUEST_NAME	VARCHAR2(50)	VARCHAR(50)
REQUESTED_BY_CONTACT_PK	NUMBER	INT
REQUESTED_BY_CONTACT_TYPE	VARCHAR2(7)	VARCHAR(7)
REQUESTED_BY_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)
REQUESTED_BY_MIDDLE_NAME	VARCHAR2(50)	VARCHAR(50)
REQUESTED_BY_NAME	VARCHAR2(250)	VARCHAR(250)
REQUESTED_ON	DATE	DATETIME
COMPLETED_ON	DATE	DATETIME
WORKFLOW_STATUS	VARCHAR2(30)	VARCHAR(30)
COMMENT_TO_REQUESTOR	VARCHAR2(2000)	VARCHAR(2000)
EXPIRES_ON	DATE	DATETIME
EXPIRE_ACTION	VARCHAR2(30)	VARCHAR(30)
TRANSACTION_STATUS	VARCHAR2(250)	VARCHAR(250)
CURRENT_STOP_NO	NUMBER	INT
REJECT_ACTION	VARCHAR2(30)	VARCHAR(30)
REJECT_REASON	VARCHAR2(50)	VARCHAR(50)
UPDATE_WHILE_PENDING	VARCHAR2(105)	VARCHAR(105)
PROCESS_MANAGER_CONTACT_PK	NUMBER	INT
PROCESS_MANAGER_CONTACT_TYPE	VARCHAR2(7)	VARCHAR(7)
PROCESS_MANAGER_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)

PROCESS_MANAGER_MIDDLE_NAME	VARCHAR2(50)	VARCHAR(50)
PROCESS_MANAGER_NAME	VARCHAR2(250)	VARCHAR(250)
ACTIVITY	VARCHAR2(250)	VARCHAR(250)
ACTION_DATE	DATE	DATETIME
INTERNAL_COMMENT	VARCHAR2(2000)	VARCHAR(2000)
CREATED_BY_CONTACT_PK	NUMBER	INT
CREATED_BY_CONTACT_TYPE	VARCHAR2(7)	VARCHAR(7)
CREATED_BY_CONTACT_NAME	VARCHAR2(250)	VARCHAR(250)
CREATED_BY_CONTACT_MIDDLE_NAME	VARCHAR2(50)	VARCHAR(50)
CREATED_BY_CONTACT_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)
CREATED_ON	DATE	DATETIME
MODIFIED_BY_CONTACT_PK	NUMBER	INT
MODIFIED_BY_CONTACT_NAME	VARCHAR2(250)	VARCHAR(250)
MODIFIED_BY_CONTACT_MID_NAME	VARCHAR2(50)	VARCHAR(50)
MODIFIED_BY_CONTACT_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)
MODIFIED_BY_CONTACT_TYPE	VARCHAR2(7)	VARCHAR(7)
MODIFIED_ON	DATE	DATETIME

WH_TASK_WORKFLOW_RECIPIENT

Column Name	Oracle Data Type	MSSQL Data Type
TASK_PRIMARY_KEY	NUMBER	INT
TASK_SUBJECT	VARCHAR2(250)	VARCHAR(250)

TASK_CATEGORY	VARCHAR2(50)	VARCHAR(50)
PROJECT_UNIQUE_CODE	VARCHAR2(4)	VARCHAR(4)
PROJECT_OBJECT_TITLE	VARCHAR2(250)	VARCHAR(250)
PROJECT_PRIMARY_KEY	NUMBER	INT
PROJECT_NUMBER	VARCHAR2(50)	VARCHAR(50)
PROJECT_NAME	VARCHAR2(250)	VARCHAR(250)
MILESTONE_UNIQUE_CODE	VARCHAR2(4)	VARCHAR(4)
MILESTONE_OBJECT_TITLE	VARCHAR2(250)	VARCHAR(250)
MILESTONE_PRIMARY_KEY	NUMBER	INT
MILESTONE_SUBJECT	VARCHAR2(250)	VARCHAR(250)
MILESTONE_DATE	DATE	DATETIME
WORKFLOW_PRIMARY_KEY	NUMBER	INT
REQUEST_NAME	VARCHAR2(50)	VARCHAR(50)
REQUESTED_BY_CONTACT_PK	NUMBER	INT
REQUESTED_BY_CONTACT_TYPE	VARCHAR2(7)	VARCHAR(7)
REQUESTED_BY_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)
REQUESTED_BY_MIDDLE_NAME	VARCHAR2(50)	VARCHAR(50)
REQUESTED_BY_NAME	VARCHAR2(250)	VARCHAR(250)
REQUESTED_ON	DATE	DATETIME
COMPLETED_ON	DATE	DATETIME
WORKFLOW_STATUS	VARCHAR2(30)	VARCHAR(30)

EXPIRES_ON	DATE	DATETIME
CURRENT_STOP_NO	NUMBER	INT
PROCESS_MANAGER_CONTACT_PK	NUMBER	INT
PROCESS_MANAGER_CONTACT_TYPE	VARCHAR2(7)	VARCHAR(7)
PROCESS_MANAGER_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)
PROCESS_MANAGER_MIDDLE_NAME	VARCHAR2(50)	VARCHAR(50)
PROCESS_MANAGER_NAME	VARCHAR2(250)	VARCHAR(250)
EVENT	VARCHAR2(250)	VARCHAR2(250)
RECIPIENT_CONTACT_PK	NUMBER	INT
RECIPIENT_CONTACT_TYPE	VARCHAR2(7)	VARCHAR2(7)
RECIPIENT_FIRST_NAME	VARCHAR2(50)	VARCHAR2(50)
RECIPIENT_MIDDLE_NAME	VARCHAR2(50)	VARCHAR2(50)
RECIPIENT_NAME	VARCHAR2(250)	VARCHAR2(250)
VERSION	NUMBER	INT
CREATED_ON	DATE	DATETIME
CREATED_BY_CONTACT_PK	NUMBER	INT
CREATED_BY_CONTACT_TYPE	VARCHAR2(7)	VARCHAR2(7)
CREATED_BY_CONTACT_NAME	VARCHAR2(250)	VARCHAR2(250)
CREATED_BY_CONTACT_MIDDLE_NAME	VARCHAR2(50)	VARCHAR2(50)
CREATED_BY_CONTACT_FIRST_NAME	VARCHAR2(50)	VARCHAR2(50)
MODIFIED_ON	DATE	DATETIME

MODIFIED_BY_CONTACT_PK	NUMBER	INT
MODIFIED_BY_CONTACT_TYPE	VARCHAR2(7)	VARCHAR2(7)
MODIFIED_BY_CONTACT_NAME	VARCHAR2(250)	VARCHAR2(250)
MODIFIED_BY_CONTACT_MID_NAME	VARCHAR2(50)	VARCHAR2(50)

WH_TASK_WORKFLOW_REVIEW

Column Name	Oracle Data Type	MSSQL Data Type
TASK_PRIMARY_KEY	NUMBER	INT
TASK_SUBJECT	VARCHAR2(250)	VARCHAR(250)
TASK_CATEGORY	VARCHAR2(50)	VARCHAR(50)
PROJECT_UNIQUE_CODE	VARCHAR2(4)	VARCHAR(4)
PROJECT_OBJECT_TITLE	VARCHAR2(250)	VARCHAR(250)
PROJECT_PRIMARY_KEY	NUMBER	INT
PROJECT_NUMBER	VARCHAR2(50)	VARCHAR(50)
PROJECT_NAME	VARCHAR2(250)	VARCHAR(250)
MILESTONE_UNIQUE_CODE	VARCHAR2(4)	VARCHAR(4)
MILESTONE_OBJECT_TITLE	VARCHAR2(250)	VARCHAR(250)
MILESTONE_PRIMARY_KEY	NUMBER	INT
MILESTONE_SUBJECT	VARCHAR2(250)	VARCHAR(250)
MILESTONE_DATE	DATE	DATETIME
WORKFLOW_PRIMARY_KEY	NUMBER	INT
REQUEST_NAME	VARCHAR2(50)	VARCHAR(50)

REQUESTED_BY_CONTACT_PK	NUMBER	INT
REQUESTED_BY_CONTACT_TYPE	VARCHAR2(7)	VARCHAR(7)
REQUESTED_BY_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)
REQUESTED_BY_MIDDLE_NAME	VARCHAR2(50)	VARCHAR(50)
REQUESTED_BY_NAME	VARCHAR2(250)	VARCHAR(250)
REQUESTED_ON	DATE	DATETIME
COMPLETED_ON	DATE	DATETIME
WORKFLOW_STATUS	VARCHAR2(30)	VARCHAR(30)
EXPIRES_ON	DATE	DATETIME
CURRENT_STOP_NO	NUMBER	INT
PROCESS_MANAGER_CONTACT_PK	NUMBER	INT
PROCESS_MANAGER_CONTACT_TYPE	VARCHAR2(7)	VARCHAR(7)
PROCESS_MANAGER_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)
PROCESS_MANAGER_MIDDLE_NAME	VARCHAR2(50)	VARCHAR(50)
PROCESS_MANAGER_NAME	VARCHAR2(250)	VARCHAR(250)
STOP_PRIMARY_KEY	NUMBER	INT
STOP	NUMBER	INT
STOP_MEMBER_PRIMARY_KEY	NUMBER	INT
STOP_STATUS	VARCHAR2(40)	VARCHAR(40)
EMAIL_SENT	VARCHAR2(3)	VARCHAR(3)
REVIEW_PRIMARY_KEY	NUMBER	INT

REVIEW_PERFORMER_CONTACT_PK	NUMBER	INT
REVIEW_PERFORMER_CONTACT_TYPE	VARCHAR2(7)	VARCHAR(7)
REVIEW_PERFORMER_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)
REVIEW_PERFORMER_MIDDLE_NAME	VARCHAR2(50)	VARCHAR(50)
REVIEW_PERFORMER_NAME	VARCHAR2(250)	VARCHAR(250)
REVIEW_STATUS	VARCHAR2(20)	VARCHAR(20)
REVIEW_ACTION_DATE	DATE	DATETIME
REVIEW_APPROVAL_COMMENT	VARCHAR2(250)	VARCHAR(250)
REVIEW_REQUEST_COMMENT	VARCHAR2(250)	VARCHAR(250)
CREATED_ON	DATE	DATETIME
CREATED_BY_CONTACT_PK	NUMBER	INT
CREATED_BY_CONTACT_TYPE	VARCHAR2(7)	VARCHAR(7)
CREATED_BY_CONTACT_NAME	VARCHAR2(250)	VARCHAR(250)
CREATED_BY_CONTACT_MIDDLE_NAME	VARCHAR2(50)	VARCHAR(50)
CREATED_BY_CONTACT_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)
MODIFIED_ON	DATE	DATETIME
MODIFIED_BY_CONTACT_PK	NUMBER	INT
MODIFIED_BY_CONTACT_TYPE	VARCHAR2(7)	VARCHAR(7)
MODIFIED_BY_CONTACT_NAME	VARCHAR2(250)	VARCHAR(250)
MODIFIED_BY_CONTACT_MID_NAME	VARCHAR2(50)	VARCHAR(50)

1.2.3 Custom Object Table Definitions

This section displays the custom objects in the TeamConnect Data Warehouse. The names and numbers of tables will be different for each installation of TeamConnect, and will reflect the number of custom objects defined in a TeamConnect installation. The table naming convention uses the unique code of each custom object defined in TeamConnect. For example, a Project is defined with the unique code of ABCD. The name of the corresponding table will be WH_PROJECT_ABCD.

If a custom object has custom fields, a separate table will be created to hold this information. For more information regarding custom fields, see [Custom Field Tables and Views](#).

1.2.3.1 Project

The custom object Project tables include:

- WH_PROJECT_XXXX
- WH_PROJECT_INVOICE
- WH_PROJECT_ASSIGNEES
- WH_PROJECT_CATEGORIES
- WH_PROJECT_PHASES
- WH_PROJECTS_RELATIONS
- WH_PROJECTS_TREE
- WH_PROJECT_GROUP_ACCESS*
- WH_PROJECT_USER_ACCESS*
- WH_PROJECT_SECURITY
- WH_PROJECT_WORKFLOW
- WH_PROJECT_WORKFLOW_HISTORY
- WH_PROJECT_WORKFLOW_RECIPIENT
- WH_PROJECT_WORKFLOW_REVIEW

* These tables support the user access and security feature and should not be queried directly.

Shown below is the main table for a hypothetical custom object. Note that column **DISPLAY_NAME** can be helpful in reporting, since it contains an output-friendly name string that your report would otherwise have to create through concatenating other columns in this table. "XXXX" represents the unique entity code of this hypothetical custom object.

WH_PROJECT_XXXX

Column Name	Oracle Data Type	MSSQL Data Type
OBJECT_UNIQUE_CODE	VARCHAR2(4)	VARCHAR(4)

OBJECT_TITLE	VARCHAR2(250)	VARCHAR(250)
OBJECT_IS_EMBEDDED	VARCHAR2(5)	VARCHAR(5)
PROJECT_PRIMARY_KEY	NUMBER	INT
PROJECT_NUMBER	VARCHAR2(50)	VARCHAR(50)
PROJECT_NAME	VARCHAR2(250)	VARCHAR(250)
PROJECT_OPENED_ON_DATE	DATE	DATETIME
PROJECT_CLOSED_ON_DATE	DATE	DATETIME
DEFAULT_CATEGORY	VARCHAR2(50)	VARCHAR(50)
DEFAULT_CATEGORY_TREE_POSITION	VARCHAR2(250)	VARCHAR(250)
CURRENT_PHASE	VARCHAR2(250)	VARCHAR(250)
CURRENT_PHASE_UNIQUE_CODE	VARCHAR2(4)	VARCHAR(4)
CONTACT_PRIMARY_KEY	NUMBER	INT
CONTACT_TYPE	VARCHAR2(10)	VARCHAR(10)
CONTACT_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)
CONTACT_MIDDLE_NAME	VARCHAR2(50)	VARCHAR(50)
CONTACT_NAME	VARCHAR2(250)	VARCHAR(250)
CONTACT_ROLE	VARCHAR2(250)	VARCHAR(250)
MAIN_ASSIGNEE_CONTACT_PK	NUMBER	INT
MAIN_ASSIGNEE_CONTACT_TYPE	VARCHAR2(10)	VARCHAR(10)
MAIN_ASSIGNEE_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)
MAIN_ASSIGNEE_MIDDLE_NAME	VARCHAR2(50)	VARCHAR(50)

MAIN_ASSIGNEE_NAME	VARCHAR2(250)	VARCHAR(250)
MAIN_ASSIGNEE_ROLE	VARCHAR2(50)	VARCHAR(50)
MAIN_ASSIGNEE_ROLE_TREE_POSITI	VARCHAR2(250)	VARCHAR(250)
MAIN_ASSIGNEE_ASSIGNED_ON_DATE	DATE	DATETIME
PARENT_OBJECT_UNIQUE_CODE	VARCHAR2(4)	VARCHAR(4)
PARENT_OBJECT_TITLE	VARCHAR2(250)	VARCHAR(250)
PARENT_PROJECT_PRIMARY_KEY	NUMBER	INT
PARENT_PROJECT_NUMBER	VARCHAR2(50)	VARCHAR(50)
PARENT_PROJECT_NAME	VARCHAR2(250)	VARCHAR(250)
DOCUMENT_FOLDER_PRIMARY_KEY	NUMBER	INT
CREATED_ON	DATE	DATETIME
MODIFIED_ON	DATE	DATETIME
CREATED_BY_CONTACT_PK	NUMBER	INT
CREATED_BY_CONTACT_TYPE	VARCHAR2(10)	VARCHAR(10)
CREATED_BY_CONTACT_NAME	VARCHAR2(250)	VARCHAR(250)
CREATED_BY_CONTACT_MIDDLE_NAME	VARCHAR2(50)	VARCHAR(50)
CREATED_BY_CONTACT_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)
BEHALF_OF_CONTACT_PRIMARY_KEY	NUMBER	INT
MODIFIED_BY_CONTACT_PK	NUMBER	INT
MODIFIED_BY_CONTACT_TYPE	VARCHAR2(10)	VARCHAR(10)
MODIFIED_BY_CONTACT_NAME	VARCHAR2(250)	VARCHAR(250)

MODIFIED_BY_CONTACT_MID_NAME	VARCHAR2(50)	VARCHAR(50)
MODIFIED_BY_CONTACT_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)
SECURITY	VARCHAR2(10)	VARCHAR(10)
WORKFLOW_CURRENT_STATUS	VARCHAR2(15)	VARCHAR(15)
WORKFLOW_CURRENT_ACTION	VARCHAR2(50)	VARCHAR(50)
DISPLAY_NAME	VARCHAR2(305)	VARCHAR(305)
CURRENT_APPROVER_CONTACT_PK	NUMBER	INT
CURRENT_APPROVER_NAME	VARCHAR2(250)	VARCHAR(250)
CURRENT_APPROVER_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)
CURRENT_APPROVER_MIDDLE_NAME	VARCHAR2(50)	VARCHAR(50)
CURRENT_APPROVER_TYPE	VARCHAR2(7)	VARCHAR(7)
LAST_PERFRMR_CONTACT_PK	NUMBER	INT
LAST_PERFRMR_NAME	VARCHAR2(250)	VARCHAR(250)
LAST_PERFRMR_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)
LAST_PERFRMR_MIDDLE_NAME	VARCHAR2(50)	VARCHAR(50)
LAST_PERFRMR_TYPE	VARCHAR2(7)	VARCHAR(7)
MULTIPLE_APPROVERS	VARCHAR2(3)	VARCHAR(3)
PROJECT_CLOSED_ON_DATE_KEY	DATE	DATETIME
PROJECT_OPENED_ON_DATE_KEY	DATE	DATETIME
CREATED_ON_DATE_KEY	DATE	DATETIME
MODIFIED_ON_DATE_KEY	DATE	DATETIME

MAIN_ASSIGNEE_ASSIGN_ON_DT_KEY	DATE	DATETIME
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WH_PROJECT_INVOICES is useful in situations where users enter all invoice line items against a single project. In such a case, you can use this table, and bypass WH_LINEITEM, when determining which project an invoice belongs to.

WH_PROJECT_INVOICE

Column Name	Oracle Data Type	MSSQL Data Type
PROJECT_PRIMARY_KEY	NUMBER	INT
INVOICE_PRIMARY_KEY	NUMBER	INT

WH_PROJECT_ASSIGNEES

Column Name	Oracle Data Type	MSSQL Data Type
OBJECT_TITLE	VARCHAR2(250)	VARCHAR(250)
OBJECT_UNIQUE_CODE	VARCHAR2(4)	VARCHAR(4)
PROJECT_PRIMARY_KEY	NUMBER	INT
PROJECT_NUMBER	VARCHAR2(50)	VARCHAR(50)
PROJECT_NAME	VARCHAR2(250)	VARCHAR(250)
ASSIGNEE_ASSIGNED_ON_DATE	DATE	DATETIME
ASSIGNEE_UNASSIGNED_ON_DATE	DATE	DATETIME
ASSIGNEE_CONTACT_PK	NUMBER	INT
ASSIGNEE_CONTACT_TYPE	VARCHAR2(10)	VARCHAR(10)
ASSIGNEE_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)
ASSIGNEE_MIDDLE_NAME	VARCHAR2(50)	VARCHAR(50)
ASSIGNEE_NAME	VARCHAR2(250)	VARCHAR(250)

ASSIGNEE_ROLE	VARCHAR2(50)	VARCHAR(50)
ASSIGNEE_ROLE_TREE_POSITION	VARCHAR2(250)	VARCHAR(250)
ASSIGNEE_STATUS	VARCHAR2(10)	VARCHAR(10)
IS_MAIN_ASSIGNEE	VARCHAR2(5)	VARCHAR(5)
SECURITY	VARCHAR2(10)	VARCHAR(10)
ASSIGNEE_ASSIGNED_ON_DATE_KEY	DATE	DATETIME
ASSIGNEE_UNASSIGNED_ON_DT_KEY	DATE	DATETIME

WH_PROJECT_CATEGORIES

Column Name	Oracle Data Type	MSSQL Data Type
OBJECT_UNIQUE_CODE	VARCHAR2(4)	VARCHAR(4)
OBJECT_TITLE	VARCHAR2(250)	VARCHAR(250)
PROJECT_PRIMARY_KEY	NUMBER	INT
PROJECT_NUMBER	VARCHAR2(50)	VARCHAR(50)
PROJECT_NAME	VARCHAR2(250)	VARCHAR(250)
IS_CATEGORY_MANUALLY_ADDED	VARCHAR2(1)	VARCHAR(1)
CATEGORY_NAME	VARCHAR2(50)	VARCHAR(50)
CATEGORY_TREE_POSITION	VARCHAR2(250)	VARCHAR(250)
IS_DEFAULT_CATEGORY	VARCHAR2(5)	VARCHAR(5)
SECURITY	VARCHAR2(10)	VARCHAR(10)

WH_PROJECT_PHASES

Column Name	Oracle Data Type	MSSQL Data Type
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OBJECT_UNIQUE_CODE	VARCHAR2(4)	VARCHAR(4)
OBJECT_TITLE	VARCHAR2(250)	VARCHAR(250)
PROJECT_PRIMARY_KEY	NUMBER	INT
PROJECT_NUMBER	VARCHAR2(50)	VARCHAR(50)
PROJECT_NAME	VARCHAR2(250)	VARCHAR(250)
PHASE_DURATION	NUMBER	INT
PHASE_NAME	VARCHAR2(250)	VARCHAR(250)
PHASE_UNIQUE_CODE	VARCHAR2(4)	VARCHAR(4)
PHASE_SET_BY_CONTACT_PK	NUMBER	INT
PHASE_SET_BY_CONTACT_TYPE	VARCHAR2(10)	VARCHAR(10)
PHASE_SET_BY_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)
PHASE_SET_BY_MIDDLE_NAME	VARCHAR2(50)	VARCHAR(50)
PHASE_SET_BY_NAME	VARCHAR2(250)	VARCHAR(250)
PHASE_SET_ON_DATE	DATE	DATETIME
SECURITY	VARCHAR2(10)	VARCHAR(10)
PHASE_SET_ON_DATE_KEY	DATE	DATETIME

WH_PROJECTS_RELATIONS

Column Name	Oracle Data Type	MSSQL Data Type
LEFT_OBJECT_UNIQUE_CODE	VARCHAR2(4)	VARCHAR(4)
LEFT_OBJECT_TITLE	VARCHAR2(250)	VARCHAR(250)
LEFT_PROJECT_PRIMARY_KEY	NUMBER	INT

LEFT_PROJECT_NUMBER	VARCHAR2(50)	VARCHAR(50)
LEFT_PROJECT_NAME	VARCHAR2(250)	VARCHAR(250)
RELATION_NAME	VARCHAR2(50)	VARCHAR(50)
RELATION_TREE_POSITION	VARCHAR2(250)	VARCHAR(250)
RIGHT_OBJECT_UNIQUE_CODE	VARCHAR2(4)	VARCHAR(4)
RIGHT_OBJECT_TITLE	VARCHAR2(250)	VARCHAR(250)
RIGHT_PROJECT_PRIMARY_KEY	NUMBER	INT
RIGHT_PROJECT_NUMBER	VARCHAR2(50)	VARCHAR(50)
RIGHT_PROJECT_NAME	VARCHAR2(250)	VARCHAR(250)

The WH_PROJECTS_TREE table contains information about parent-child relationships among project records. Each project record will have at least one row in this table with the LEVEL1_* columns populated with information about that project record. If the project record has child records and grandchild records, then there will be additional rows where LEVEL2_* columns and LEVEL_3* columns will be populated.

WH_PROJECTS_TREE

Column Name	Oracle Data Type	MSSQL Data Type
TREE_KEY	VARCHAR2(700)	VARCHAR(700)
PROJECT_PRIMARY_KEY	NUMBER	INT
LEVEL1_OBJECT_UNIQUE_CODE	VARCHAR2(4)	VARCHAR(4)
LEVEL1_OBJECT_TITLE	VARCHAR2(250)	VARCHAR(250)
LEVEL1_PROJECT_PRIMARY_KEY	NUMBER	INT
LEVEL1_PROJECT_NUMBER	VARCHAR2(50)	VARCHAR(50)
LEVEL1_PROJECT_NAME	VARCHAR2(250)	VARCHAR(250)
LEVEL1_DEFAULT_CATEGORY_NAME	VARCHAR2(50)	VARCHAR(50)

LEVEL1_DEFAULT_CATEGORY_TREE	VARCHAR2(250)	VARCHAR(250)
LEVEL1_CURRENT_PHASE	VARCHAR2(250)	VARCHAR(250)
LEVEL1_CURRENT_PHASEUNIQUECODE	VARCHAR2(4)	VARCHAR(4)
LEVEL2_OBJECT_UNIQUE_CODE	VARCHAR2(4)	VARCHAR(4)
LEVEL2_OBJECT_TITLE	VARCHAR2(250)	VARCHAR(250)
LEVEL2_PROJECT_PRIMARY_KEY	NUMBER	INT
LEVEL2_PROJECT_NUMBER	VARCHAR2(50)	VARCHAR(50)
LEVEL2_PROJECT_NAME	VARCHAR2(250)	VARCHAR(250)
LEVEL2_DEFAULT_CATEGORY_NAME	VARCHAR2(50)	VARCHAR(50)
LEVEL2_DEFAULT_CATEGORY_TREE	VARCHAR2(250)	VARCHAR(250)
LEVEL2_CURRENT_PHASE	VARCHAR2(250)	VARCHAR(250)
LEVEL2_CURRENT_PHASEUNIQUECODE	VARCHAR2(4)	VARCHAR(4)
LEVEL3_OBJECT_UNIQUE_CODE	VARCHAR2(4)	VARCHAR(4)
LEVEL3_OBJECT_TITLE	VARCHAR2(250)	VARCHAR(250)
LEVEL3_PROJECT_PRIMARY_KEY	NUMBER	INT
LEVEL3_PROJECT_NUMBER	VARCHAR2(50)	VARCHAR(50)
LEVEL3_PROJECT_NAME	VARCHAR2(250)	VARCHAR(250)
LEVEL3_DEFAULT_CATEGORY_NAME	VARCHAR2(50)	VARCHAR(50)
LEVEL3_DEFAULT_CATEGORY_TREE	VARCHAR2(250)	VARCHAR(250)
LEVEL3_CURRENT_PHASE	VARCHAR2(250)	VARCHAR(250)
LEVEL3_CURRENT_PHASEUNIQUECODE	VARCHAR2(4)	VARCHAR(4)

LEVEL4_OBJECT_UNIQUE_CODE	VARCHAR2(4)	VARCHAR(4)
LEVEL4_OBJECT_TITLE	VARCHAR2(250)	VARCHAR(250)
LEVEL4_PROJECT_PRIMARY_KEY	NUMBER	INT
LEVEL4_PROJECT_NUMBER	VARCHAR2(50)	VARCHAR(50)
LEVEL4_PROJECT_NAME	VARCHAR2(250)	VARCHAR(250)
LEVEL4_DEFAULT_CATEGORY_NAME	VARCHAR2(50)	VARCHAR(50)
LEVEL4_DEFAULT_CATEGORY_TREE	VARCHAR2(250)	VARCHAR(250)
LEVEL4_CURRENT_PHASE	VARCHAR2(250)	VARCHAR(250)
LEVEL4_CURRENT_PHASEUNIQUECODE	VARCHAR2(4)	VARCHAR(4)
LEVEL5_OBJECT_UNIQUE_CODE	VARCHAR2(4)	VARCHAR(4)
LEVEL5_OBJECT_TITLE	VARCHAR2(250)	VARCHAR(250)
LEVEL5_PROJECT_PRIMARY_KEY	NUMBER	INT
LEVEL5_PROJECT_NUMBER	VARCHAR2(50)	VARCHAR(50)
LEVEL5_PROJECT_NAME	VARCHAR2(250)	VARCHAR(250)
LEVEL5_DEFAULT_CATEGORY_NAME	VARCHAR2(50)	VARCHAR(50)
LEVEL5_DEFAULT_CATEGORY_TREE	VARCHAR2(250)	VARCHAR(250)
LEVEL5_CURRENT_PHASE	VARCHAR2(250)	VARCHAR(250)
LEVEL5_CURRENT_PHASEUNIQUECODE	VARCHAR2(4)	VARCHAR(4)
LEVEL6_OBJECT_UNIQUE_CODE	VARCHAR2(4)	VARCHAR(4)
LEVEL6_OBJECT_TITLE	VARCHAR2(250)	VARCHAR(250)
LEVEL6_PROJECT_PRIMARY_KEY	NUMBER	INT

LEVEL6_PROJECT_NUMBER	VARCHAR2(50)	VARCHAR(50)
LEVEL6_PROJECT_NAME	VARCHAR2(250)	VARCHAR(250)
LEVEL6_DEFAULT_CATEGORY_NAME	VARCHAR2(50)	VARCHAR(50)
LEVEL6_DEFAULT_CATEGORY_TREE	VARCHAR2(250)	VARCHAR(250)
LEVEL6_CURRENT_PHASE	VARCHAR2(250)	VARCHAR(250)
LEVEL6_CURRENT_PHASEUNIQUECODE	VARCHAR2(4)	VARCHAR(4)
LEVEL7_OBJECT_UNIQUE_CODE	VARCHAR2(4)	VARCHAR(4)
LEVEL7_OBJECT_TITLE	VARCHAR2(250)	VARCHAR(250)
LEVEL7_PROJECT_PRIMARY_KEY	NUMBER	INT
LEVEL7_PROJECT_NUMBER	VARCHAR2(50)	VARCHAR(50)
LEVEL7_PROJECT_NAME	VARCHAR2(250)	VARCHAR(250)
LEVEL7_DEFAULT_CATEGORY_NAME	VARCHAR2(50)	VARCHAR(50)
LEVEL7_DEFAULT_CATEGORY_TREE	VARCHAR2(250)	VARCHAR(250)
LEVEL7_CURRENT_PHASE	VARCHAR2(250)	VARCHAR(250)
LEVEL7_CURRENT_PHASEUNIQUECODE	VARCHAR2(4)	VARCHAR(4)
LEVEL8_OBJECT_UNIQUE_CODE	VARCHAR2(4)	VARCHAR(4)
LEVEL8_OBJECT_TITLE	VARCHAR2(250)	VARCHAR(250)
LEVEL8_PROJECT_PRIMARY_KEY	NUMBER	INT
LEVEL8_PROJECT_NUMBER	VARCHAR2(50)	VARCHAR(50)
LEVEL8_PROJECT_NAME	VARCHAR2(250)	VARCHAR(250)
LEVEL8_DEFAULT_CATEGORY_NAME	VARCHAR2(50)	VARCHAR(50)

LEVEL8_DEFAULT_CATEGORY_TREE	VARCHAR2(250)	VARCHAR(250)
LEVEL8_CURRENT_PHASE	VARCHAR2(250)	VARCHAR(250)
LEVEL8_CURRENT_PHASEUNIQUECODE	VARCHAR2(4)	VARCHAR(4)
LEVEL9_OBJECT_UNIQUE_CODE	VARCHAR2(4)	VARCHAR(4)
LEVEL9_OBJECT_TITLE	VARCHAR2(250)	VARCHAR(250)
LEVEL9_PROJECT_PRIMARY_KEY	NUMBER	INT
LEVEL9_PROJECT_NUMBER	VARCHAR2(50)	VARCHAR(50)
LEVEL9_PROJECT_NAME	VARCHAR2(250)	VARCHAR(250)
LEVEL9_DEFAULT_CATEGORY_NAME	VARCHAR2(50)	VARCHAR(50)
LEVEL9_DEFAULT_CATEGORY_TREE	VARCHAR2(250)	VARCHAR(250)
LEVEL9_CURRENT_PHASE	VARCHAR2(250)	VARCHAR(250)
LEVEL9_CURRENT_PHASEUNIQUECODE	VARCHAR2(4)	VARCHAR(4)

WH_PROJECT_GROUP_ACCESS

Column Name	Oracle Data Type	MSSQL Data Type
PROJECT_PRIMARY_KEY	NUMBER	INT
GROUP_PRIMARY_KEY	NUMBER	INT
ALLOW_DENY_IID	CHAR(1)	CHAR(1)
OPERATION_IID	NUMBER	INT
IS_MANUAL	NUMBER	INT
VERSION	NUMBER	INT

WH_PROJECT_USER_ACCESS

Column Name	Oracle Data Type	MSSQL Data Type
PROJECT_PRIMARY_KEY	NUMBER	INT
USER_PRIMARY_KEY	NUMBER	INT
ALLOW_DENY_IID	CHAR(1)	CHAR(1)
OPERATION_IID	NUMBER	INT
IS_MANUAL	NUMBER	INT
VERSION	NUMBER	INT

WH_PROJECT_SECURITY

Column Name	Oracle Data Type	MSSQL Data Type
OBJECT_UNIQUE_CODE	NVARCHAR2(4)	NVARCHAR(4)
PROJECT_PRIMARY_KEY	NUMBER	INT
CREATED_BY_CONTACT_PK	NUMBER	INT
SECURITY	NVARCHAR2(10)	NVARCHAR(10)

WH_PROJECT_WORKFLOW

Column Name	Oracle Data Type	MSSQL Data Type
PROJECT_OBJECT_TITLE	VARCHAR2(250)	VARCHAR(250)
PROJECT_UNIQUE_CODE	VARCHAR2(4)	VARCHAR(4)
PROJECT_PRIMARY_KEY	NUMBER	INT
PROJECT_NUMBER	VARCHAR2(50)	VARCHAR(50)
PROJECT_NAME	VARCHAR2(250)	VARCHAR(250)

WORKFLOW_PRIMARY_KEY	NUMBER	INT
REQUEST_NAME	VARCHAR2(100)	VARCHAR(100)
REQUESTED_BY_CONTACT_PK	NUMBER	INT
REQUESTED_BY_CONTACT_TYPE	VARCHAR2(7)	VARCHAR(7)
REQUESTED_BY_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)
REQUESTED_BY_MIDDLE_NAME	VARCHAR2(50)	VARCHAR(50)
REQUESTED_BY_NAME	VARCHAR2(250)	VARCHAR(250)
REQUESTED_ON	DATE	DATETIME
COMPLETED_ON	DATE	DATETIME
WORKFLOW_STATUS	VARCHAR2(30)	VARCHAR(30)
COMMENT_TO_REQUESTOR	VARCHAR2(2000)	VARCHAR(2000)
EXPIRES_ON	DATE	DATETIME
EXPIRE_ACTION	VARCHAR2(30)	VARCHAR(30)
TRANSACTION_STATUS	VARCHAR2(250)	VARCHAR(250)
CURRENT_STOP_NO	NUMBER	INT
REJECT_ACTION	VARCHAR2(30)	VARCHAR(30)
REJECT_REASON	VARCHAR2(50)	VARCHAR(50)
UPDATE_WHILE_PENDING	VARCHAR2(105)	VARCHAR(105)
PROCESS_MANAGER_CONTACT_PK	NUMBER	INT
PROCESS_MANAGER_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)
PROCESS_MANAGER_MIDDLE_NAME	VARCHAR2(50)	VARCHAR(50)

PROCESS_MANAGER_NAME	VARCHAR2(250)	VARCHAR(250)
PROCESS_MANAGER_CONTACT_TYPE	VARCHAR2(7)	VARCHAR(7)
STOP_PRIMARY_KEY	NUMBER	INT
STOP	NUMBER	INT
STOP_MEMBER_PRIMARY_KEY	NUMBER	INT
PERFORMER_CONTACT_PK	NUMBER	INT
PERFORMER_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)
PERFORMER_MIDDLE_NAME	VARCHAR2(50)	VARCHAR(50)
PERFORMER_NAME	VARCHAR2(250)	VARCHAR(250)
PERFORMER_CONTACT_TYPE	VARCHAR2(7)	VARCHAR(7)
STOP_STATUS	VARCHAR2(40)	VARCHAR(40)
ACTION_DATE	DATE	DATETIME
STOP_EXPIRATION_DATE	DATE	DATETIME
INTERNAL_COMMENT	VARCHAR2(2000)	VARCHAR(2000)
EMAIL_SENT	VARCHAR2(3)	VARCHAR(3)
CREATED_BY_CONTACT_PK	NUMBER	INT
CREATED_BY_CONTACT_NAME	VARCHAR2(250)	VARCHAR(250)
CREATED_BY_CONTACT_MIDDLE_NAME	VARCHAR2(50)	VARCHAR(50)
CREATED_BY_CONTACT_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)
CREATED_BY_CONTACT_TYPE	VARCHAR2(7)	VARCHAR(7)
CREATED_ON	DATE	DATETIME

MODIFIED_BY_CONTACT_PK	NUMBER	INT
MODIFIED_BY_CONTACT_NAME	VARCHAR2(250)	VARCHAR(250)
MODIFIED_BY_CONTACT_MID_NAME	VARCHAR2(50)	VARCHAR(50)
MODIFIED_BY_CONTACT_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)
MODIFIED_BY_CONTACT_TYPE	VARCHAR2(7)	VARCHAR(7)
MODIFIED_ON	DATE	DATETIME

WH_PROJECT_WORKFLOW_HISTORY

Column Name	Oracle Data Type	MSSQL Data Type
PROJECT_OBJECT_TITLE	VARCHAR2(250)	VARCHAR(250)
PROJECT_UNIQUE_CODE	VARCHAR2(4)	VARCHAR(4)
PROJECT_PRIMARY_KEY	NUMBER	INT
PROJECT_NUMBER	VARCHAR2(50)	VARCHAR(50)
PROJECT_NAME	VARCHAR2(250)	VARCHAR(250)
WORKFLOW_PRIMARY_KEY	NUMBER	INT
REQUEST_NAME	VARCHAR2(100)	VARCHAR(100)
REQUESTED_BY_CONTACT_PK	NUMBER	INT
REQUESTED_BY_CONTACT_TYPE	VARCHAR2(7)	VARCHAR(7)
REQUESTED_BY_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)
REQUESTED_BY_MIDDLE_NAME	VARCHAR2(50)	VARCHAR(50)
REQUESTED_BY_NAME	VARCHAR2(250)	VARCHAR(250)
REQUESTED_ON	DATE	DATETIME

COMPLETED_ON	DATE	DATETIME
WORKFLOW_STATUS	VARCHAR2(30)	VARCHAR(30)
COMMENT_TO_REQUESTOR	VARCHAR2(2000))	VARCHAR(2000)
EXPIRES_ON	DATE	DATETIME
EXPIRE_ACTION	VARCHAR2(30)	VARCHAR(30)
TRANSACTION_STATUS	VARCHAR2(250)	VARCHAR(250)
CURRENT_STOP_NO	NUMBER	INT
REJECT_ACTION	VARCHAR2(30)	VARCHAR(30)
REJECT_REASON	VARCHAR2(50)	VARCHAR(50)
UPDATE_WHILE_PENDING	VARCHAR2(105)	VARCHAR(105)
PROCESS_MANAGER_CONTACT_PK	NUMBER	INT
PROCESS_MANAGER_CONTACT_TYPE	VARCHAR2(7)	VARCHAR(7)
PROCESS_MANAGER_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)
PROCESS_MANAGER_MIDDLE_NAME	VARCHAR2(50)	VARCHAR(50)
PROCESS_MANAGER_NAME	VARCHAR2(250)	VARCHAR(250)
ACTIVITY	VARCHAR2(250)	VARCHAR(250)
ACTION_DATE	DATE	DATETIME
INTERNAL_COMMENT	VARCHAR2(2000))	VARCHAR(2000)
CREATED_BY_CONTACT_PK	NUMBER	INT
CREATED_BY_CONTACT_TYPE	VARCHAR2(7)	VARCHAR(7)

CREATED_BY_CONTACT_NAME	VARCHAR2(250)	VARCHAR(250)
CREATED_BY_CONTACT_MIDDLE_NAME	VARCHAR2(50)	VARCHAR(50)
CREATED_BY_CONTACT_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)
CREATED_ON	DATE	DATETIME
MODIFIED_BY_CONTACT_PK	NUMBER	INT
MODIFIED_BY_CONTACT_NAME	VARCHAR2(250)	VARCHAR(250)
MODIFIED_BY_CONTACT_MID_NAME	VARCHAR2(50)	VARCHAR(50)
MODIFIED_BY_CONTACT_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)
MODIFIED_BY_CONTACT_TYPE	VARCHAR2(7)	VARCHAR(7)
MODIFIED_ON	DATE	DATETIME

WH_PROJECT_WORKFLOW_RECIPIENT

Column Name	Oracle Data Type	MSSQL Data Type
PROJECT_OBJECT_TITLE	VARCHAR2(250)	VARCHAR(250)
PROJECT_UNIQUE_CODE	VARCHAR2(4)	VARCHAR(4)
PROJECT_PRIMARY_KEY	NUMBER	INT
PROJECT_NUMBER	VARCHAR2(50)	VARCHAR(50)
PROJECT_NAME	VARCHAR2(250)	VARCHAR(250)
WORKFLOW_PRIMARY_KEY	NUMBER	INT
REQUEST_NAME	VARCHAR2(100)	VARCHAR(100)
REQUESTED_BY_CONTACT_PK	NUMBER	INT
REQUESTED_BY_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)

REQUESTED_BY_MIDDLE_NAME	VARCHAR2(50)	VARCHAR(50)
REQUESTED_BY_NAME	VARCHAR2(250)	VARCHAR(250)
REQUESTED_BY_CONTACT_TYPE	VARCHAR2(7)	VARCHAR(7)
REQUESTED_ON	DATE	DATETIME
COMPLETED_ON	DATE	DATETIME
WORKFLOW_STATUS	VARCHAR2(30)	VARCHAR(30)
EXPIRES_ON	DATE	DATETIME
CURRENT_STOP_NO	NUMBER	INT
PROCESS_MANAGER_CONTACT_PK	NUMBER	INT
PROCESS_MANAGER_CONTACT_TYPE	VARCHAR2(7)	VARCHAR(7)
PROCESS_MANAGER_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)
PROCESS_MANAGER_MIDDLE_NAME	VARCHAR2(50)	VARCHAR(50)
PROCESS_MANAGER_NAME	VARCHAR2(250)	VARCHAR(250)
EVENT	VARCHAR2(250)	VARCHAR2(250)
RECIPIENT_CONTACT_PK	NUMBER	INT
RECIPIENT_CONTACT_TYPE	VARCHAR2(7)	VARCHAR2(7)
RECIPIENT_FIRST_NAME	VARCHAR2(50)	VARCHAR2(50)
RECIPIENT_MIDDLE_NAME	VARCHAR2(50)	VARCHAR2(50)
RECIPIENT_NAME	VARCHAR2(250)	VARCHAR2(250)
VERSION	NUMBER	INT
CREATED_ON	DATE	DATETIME

CREATED_BY_CONTACT_PK	NUMBER	INT
CREATED_BY_CONTACT_TYPE	VARCHAR2(7)	VARCHAR2(7)
CREATED_BY_CONTACT_NAME	VARCHAR2(250)	VARCHAR2(250)
CREATED_BY_CONTACT_MIDDLE_NAME	VARCHAR2(50)	VARCHAR2(50)
CREATED_BY_CONTACT_FIRST_NAME	VARCHAR2(50)	VARCHAR2(50)
MODIFIED_ON	DATE	DATETIME
MODIFIED_BY_CONTACT_PK	NUMBER	INT
MODIFIED_BY_CONTACT_TYPE	VARCHAR2(7)	VARCHAR2(7)
MODIFIED_BY_CONTACT_NAME	VARCHAR2(250)	VARCHAR2(250)
MODIFIED_BY_CONTACT_MID_NAME	VARCHAR2(50)	VARCHAR2(50)

WH_PROJECT_WORKFLOW_REVIEW

Column Name	Oracle Data Type	MSSQL Data Type
PROJECT_OBJECT_TITLE	VARCHAR2(250)	VARCHAR(250)
PROJECT_UNIQUE_CODE	VARCHAR2(4)	VARCHAR(4)
PROJECT_PRIMARY_KEY	NUMBER	INT
PROJECT_NUMBER	VARCHAR2(50)	VARCHAR(50)
PROJECT_NAME	VARCHAR2(250)	VARCHAR(250)
WORKFLOW_PRIMARY_KEY	NUMBER	INT
REQUEST_NAME	VARCHAR2(100)	VARCHAR(100)
REQUESTED_BY_CONTACT_PK	NUMBER	INT
REQUESTED_BY_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)

REQUESTED_BY_MIDDLE_NAME	VARCHAR2(50)	VARCHAR(50)
REQUESTED_BY_NAME	VARCHAR2(250)	VARCHAR(250)
REQUESTED_BY_CONTACT_TYPE	VARCHAR2(7)	VARCHAR(7)
REQUESTED_ON	DATE	DATETIME
COMPLETED_ON	DATE	DATETIME
WORKFLOW_STATUS	VARCHAR2(30)	VARCHAR(30)
EXPIRES_ON	DATE	DATETIME
CURRENT_STOP_NO	NUMBER	INT
PROCESS_MANAGER_CONTACT_PK	NUMBER	INT
PROCESS_MANAGER_CONTACT_TYPE	VARCHAR2(7)	VARCHAR(7)
PROCESS_MANAGER_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)
PROCESS_MANAGER_MIDDLE_NAME	VARCHAR2(50)	VARCHAR(50)
PROCESS_MANAGER_NAME	VARCHAR2(250)	VARCHAR(250)
STOP_PRIMARY_KEY	NUMBER	INT
STOP	NUMBER	INT
STOP_MEMBER_PRIMARY_KEY	NUMBER	INT
STOP_STATUS	VARCHAR2(40)	VARCHAR(40)
EMAIL_SENT	VARCHAR2(3)	VARCHAR(3)
REVIEW_PRIMARY_KEY	NUMBER	INT
REVIEW_PERFORMER_CONTACT_PK	NUMBER	INT
REVIEW_PERFORMER_CONTACT_TYPE	VARCHAR2(7)	VARCHAR(7)

REVIEW_PERFORMER_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)
REVIEW_PERFORMER_MIDDLE_NAME	VARCHAR2(50)	VARCHAR(50)
REVIEW_PERFORMER_NAME	VARCHAR2(250)	VARCHAR(250)
REVIEW_STATUS	VARCHAR2(30)	VARCHAR(30)
REVIEW_ACTION_DATE	DATE	DATETIME
REVIEW_APPROVAL_COMMENT	VARCHAR2(250)	VARCHAR(250)
REVIEW_REQUEST_COMMENT	VARCHAR2(250)	VARCHAR(250)
CREATED_ON	DATE	DATETIME
CREATED_BY_CONTACT_PK	NUMBER	INT
CREATED_BY_CONTACT_TYPE	VARCHAR2(7)	VARCHAR(7)
CREATED_BY_CONTACT_NAME	VARCHAR2(250)	VARCHAR(250)
CREATED_BY_CONTACT_MIDDLE_NAME	VARCHAR2(50)	VARCHAR(50)
CREATED_BY_CONTACT_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)
MODIFIED_ON	DATE	DATETIME
MODIFIED_BY_CONTACT_PK	NUMBER	INT
MODIFIED_BY_CONTACT_TYPE	VARCHAR2(7)	VARCHAR(7)
MODIFIED_BY_CONTACT_NAME	VARCHAR2(250)	VARCHAR(250)
MODIFIED_BY_CONTACT_MID_NAME	VARCHAR2(50)	VARCHAR(50)
MODIFIED_BY_CONTACT_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)

1.2.3.2 Involved

The custom object Involved tables include:

- WH_INVOLVED_XXXX (where XXXX is the unique entity code for a custom object type)
- WH_INVOLVED_RELATIONS
- WH_INVOLVED_ROLES
- WH_INVOLVED_GROUP_ACCESS*
- WH_INVOLVED_USER_ACCESS*
- WH_INVOLVED_SECURITY
- WH_INVOLVED_WORKFLOW
- WH_INVOLVED_WORKFLOW_HISTORY
- WH_INVOLVED_WORKFLOW_RECIPIENT
- WH_INVOLVED_WORKFLOW_REVIEW

* These tables support the user access and security feature and should not be queried directly.

WH_INVOLVED_XXXX

Column Name	Oracle Data Type	MSSQL Data Type
INVOLVED_UNIQUE_CODE	VARCHAR2(4)	VARCHAR(4)
INVOLVED_OBJECT_TITLE	VARCHAR2(250)	VARCHAR(250)
INVOLVED_PRIMARY_KEY	NUMBER	INT
INVOLVED_ROLE	VARCHAR2(50)	VARCHAR(50)
INVOLVED_ROLE_TREE_POSITION	VARCHAR2(250)	VARCHAR(250)
INVOLVED_CONTACT_PK	NUMBER	INT
CONTACT_TYPE	VARCHAR2(10)	VARCHAR(10)
INVOLVED_ACTIVE_DATE	DATE	DATETIME
INVOLVED_INACTIVE_DATE	DATE	DATETIME
INVOLVED_IS_ACTIVE	VARCHAR2(10)	VARCHAR(10)
CONTACT_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)

CONTACT_MIDDLE_NAME	VARCHAR2(50)	VARCHAR(50)
CONTACT_NAME	VARCHAR2(250)	VARCHAR(250)
CONTACT_DEFAULT_CATEGORY	VARCHAR2(50)	VARCHAR(50)
CONTACT_CATEGORY_TREE_POSITION	VARCHAR2(250)	VARCHAR(250)
PROJECT_UNIQUE_CODE	VARCHAR2(4)	VARCHAR(4)
PROJECT_OBJECT_TITLE	VARCHAR2(250)	VARCHAR(250)
PROJECT_PRIMARY_KEY	NUMBER	INT
PROJECT_NUMBER	VARCHAR2(50)	VARCHAR(50)
PROJECT_CATEGORY	VARCHAR2(50)	VARCHAR(50)
PROJECT_CATEGORY_TREE_POSITION	VARCHAR2(250)	VARCHAR(250)
PROJECT_NAME	VARCHAR2(250)	VARCHAR(250)
DOCUMENT_FOLDER_PRIMARY_KEY	NUMBER	INT
CREATED_ON	DATE	DATETIME
CREATED_BY_CONTACT_PK	NUMBER	INT
CREATED_BY_CONTACT_TYPE	VARCHAR2(10)	VARCHAR(10)
CREATED_BY_CONTACT_NAME	VARCHAR2(250)	VARCHAR(250)
CREATED_BY_CONTACT_MIDDLE_NAME	VARCHAR2(50)	VARCHAR(50)
CREATED_BY_CONTACT_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)
BEHALF_OF_CONTACT_PRIMARY_KEY	NUMBER	INT
MODIFIED_ON	DATE	DATETIME
MODIFIED_BY_CONTACT_PK	NUMBER	INT

MODIFIED_BY_CONTACT_TYPE	VARCHAR2(10)	VARCHAR(10)
MODIFIED_BY_CONTACT_NAME	VARCHAR2(250)	VARCHAR(250)
MODIFIED_BY_CONTACT_MID_NAME	VARCHAR2(50)	VARCHAR(50)
MODIFIED_BY_CONTACT_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)
SECURITY	VARCHAR2(10)	VARCHAR(10)
WORKFLOW_CURRENT_STATUS	VARCHAR2(15)	VARCHAR(15)
WORKFLOW_CURRENT_ACTION	VARCHAR2(50)	VARCHAR(50)
NOTES	CLOB	NTEXT
CURRENT_APPROVER_CONTACT_PK	NUMBER	INT
CURRENT_APPROVER_NAME	VARCHAR2(250)	VARCHAR(250)
CURRENT_APPROVER_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)
CURRENT_APPROVER_MIDDLE_NAME	VARCHAR2(50)	VARCHAR(50)
CURRENT_APPROVER_TYPE	VARCHAR2(7)	VARCHAR(7)
LAST_PERFRMR_CONTACT_PK	NUMBER	INT
LAST_PERFRMR_NAME	VARCHAR2(250)	VARCHAR(250)
LAST_PERFRMR_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)
LAST_PERFRMR_MIDDLE_NAME	VARCHAR2(50)	VARCHAR(50)
LAST_PERFRMR_TYPE	VARCHAR2(7)	VARCHAR(7)
MULTIPLE_APPROVERS	VARCHAR2(3)	VARCHAR(3)
INVOLVED_ACTIVE_DATE_KEY	DATE	DATETIME
INVOLVED_INACTIVE_DATE_KEY	DATE	DATETIME

CREATED_ON_DATE_KEY	DATE	DATETIME
MODIFIED_ON_DATE_KEY	DATE	DATETIME

WH_INVOLVED_RELATIONS

Column Name	Oracle Data Type	MSSQL Data Type
LEFT_INVOLVED_UNIQUE_CODE	VARCHAR2(4)	VARCHAR(4)
LEFT_INVOLVED_TITLE	VARCHAR2(250)	VARCHAR(250)
LEFT_INVOLVED_PRIMARY_KEY	NUMBER	INT
LEFT_INVOLVED_DEFAULT_ROLE	VARCHAR2(50)	VARCHAR(50)
LEFT_INVOLVED_ROLE_TREE	VARCHAR2(250)	VARCHAR(250)
LEFT_PROJECT_UNIQUE_CODE	VARCHAR2(4)	VARCHAR(4)
LEFT_PROJECT_TITLE	VARCHAR2(250)	VARCHAR(250)
LEFT_PROJECT_PRIMARY_KEY	NUMBER	INT
LEFT_PROJECT_NUMBER	VARCHAR2(50)	VARCHAR(50)
LEFT_PROJECT_NAME	VARCHAR2(250)	VARCHAR(250)
LEFT_CONTACT_PRIMARY_KEY	NUMBER	INT
LEFT_CONTACT_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)
LEFT_CONTACT_MIDDLE_NAME	VARCHAR2(50)	VARCHAR(50)
LEFT_CONTACT_NAME	VARCHAR2(250)	VARCHAR(250)
LEFT_CONTACT_TYPE	VARCHAR2(10)	VARCHAR(10)
RELATION_NAME	VARCHAR2(50)	VARCHAR(50)
RELATION_TREE_POSITION	VARCHAR2(250)	VARCHAR(250)

RIGHT_INVOLVED_UNIQUE_CODE	VARCHAR2(4)	VARCHAR(4)
RIGHT_INVOLVED_TITLE	VARCHAR2(250)	VARCHAR(250)
RIGHT_INVOLVED_PRIMARY_KEY	NUMBER	INT
RIGHT_INVOLVED_DEFAULT_ROLE	VARCHAR2(50)	VARCHAR(50)
RIGHT_INVOLVED_ROLE_TREE	VARCHAR2(250)	VARCHAR(250)
RIGHT_PROJECT_UNIQUE_CODE	VARCHAR2(4)	VARCHAR(4)
RIGHT_PROJECT_TITLE	VARCHAR2(250)	VARCHAR(250)
RIGHT_PROJECT_PRIMARY_KEY	NUMBER	INT
RIGHT_PROJECT_NUMBER	VARCHAR2(50)	VARCHAR(50)
RIGHT_PROJECT_NAME	VARCHAR2(250)	VARCHAR(250)
RIGHT_CONTACT_PRIMARY_KEY	NUMBER	INT
RIGHT_CONTACT_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)
RIGHT_CONTACT_MIDDLE_NAME	VARCHAR2(50)	VARCHAR(50)
RIGHT_CONTACT_NAME	VARCHAR2(250)	VARCHAR(250)
RIGHT_CONTACT_TYPE	VARCHAR2(10)	VARCHAR(10)

WH_INVOLVED_ROLES

Column Name	Oracle Data Type	MSSQL Data Type
INVOLVED_UNIQUE_CODE	VARCHAR2(4)	VARCHAR(4)
INVOLVED_OBJECT_TITLE	VARCHAR2(250)	VARCHAR(250)
INVOLVED_PRIMARY_KEY	NUMBER	INT
INVOLVED_CONTACT_PK	NUMBER	INT

CONTACT_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)
CONTACT_MIDDLE_NAME	VARCHAR2(50)	VARCHAR(50)
CONTACT_NAME	VARCHAR2(250)	VARCHAR(250)
CONTACT_TYPE	VARCHAR2(10)	VARCHAR(10)
CONTACT_DEFAULT_CATEGORY	VARCHAR2(50)	VARCHAR(50)
PROJECT_UNIQUE_CODE	VARCHAR2(4)	VARCHAR(4)
PROJECT_OBJECT_TITLE	VARCHAR2(250)	VARCHAR(250)
PROJECT_PRIMARY_KEY	NUMBER	INT
PROJECT_NUMBER	VARCHAR2(50)	VARCHAR(50)
PROJECT_NAME	VARCHAR2(250)	VARCHAR(250)
ROLE_NAME	VARCHAR2(50)	VARCHAR(50)
ROLE_TREE_POSITION	VARCHAR2(250)	VARCHAR(250)
IS_ROLE_MANUALLY_ADDED	VARCHAR2(1)	VARCHAR(1)
IS_DEFAULT_ROLE	VARCHAR2(5)	VARCHAR(5)
SECURITY	VARCHAR2(10)	VARCHAR(10)

WH_INVOLVED_GROUP_ACCESS

Column Name	Oracle Data Type	MSSQL Data Type
INVOLVED_PRIMARY_KEY	NUMBER	INT
GROUP_PRIMARY_KEY	NUMBER	INT
ALLOW_DENY_IID	CHAR(1)	CHAR(1)
OPERATION_IID	NUMBER	INT

IS_MANUAL	NUMBER	INT
VERSION	NUMBER	INT

WH_INVOLVED_USER_ACCESS

Column Name	Oracle Data Type	MSSQL Data Type
INVOLVED_PRIMARY_KEY	NUMBER	INT
USER_PRIMARY_KEY	NUMBER	INT
ALLOW_DENY_IID	CHAR(1)	CHAR(1)
OPERATION_IID	NUMBER	INT
IS_MANUAL	NUMBER	INT
VERSION	NUMBER	INT

WH_INVOLVED_SECURITY

Column Name	Oracle Data Type	MSSQL Data Type
INVOLVED_UNIQUE_CODE	NVARCHAR2(4)	NVARCHAR(4)
INVOLVED_PRIMARY_KEY	NUMBER	INT
CREATED_BY_CONTACT_PK	NUMBER	INT
SECURITY	NVARCHAR2(10)	NVARCHAR(10)

WH_INVOLVED_WORKFLOW

Column Name	Oracle Data Type	MSSQL Data Type
INVOLVED_UNIQUE_CODE	VARCHAR2(4)	VARCHAR(4)
INVOLVED_OBJECT_TITLE	VARCHAR2(250)	VARCHAR(250)

INVOLVED_PRIMARY_KEY	NUMBER	INT
INVOLVED_CONTACT_PK	NUMBER	INT
PROJECT_PRIMARY_KEY	NUMBER	INT
PROJECT_NUMBER	VARCHAR2(50)	VARCHAR(50)
PROJECT_NAME	VARCHAR2(250)	VARCHAR(250)
PROJECT_UNIQUE_CODE	VARCHAR2(4)	VARCHAR(4)
PROJECT_OBJECT_TITLE	VARCHAR2(250)	VARCHAR(250)
CONTACT_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)
CONTACT_MIDDLE_NAME	VARCHAR2(50)	VARCHAR(50)
CONTACT_NAME	VARCHAR2(250)	VARCHAR(250)
CONTACT_TYPE	VARCHAR2(7)	VARCHAR(7)
CONTACT_DEFAULT_CATEGORY	VARCHAR2(50)	VARCHAR(50)
WORKFLOW_PRIMARY_KEY	NUMBER	INT
REQUEST_NAME	VARCHAR2(50)	VARCHAR(50)
REQUESTED_BY_CONTACT_PK	NUMBER	INT
REQUESTED_BY_CONTACT_TYPE	VARCHAR2(7)	VARCHAR(7)
REQUESTED_BY_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)
REQUESTED_BY_MIDDLE_NAME	VARCHAR2(50)	VARCHAR(50)
REQUESTED_BY_NAME	VARCHAR2(250)	VARCHAR(250)
REQUESTED_ON	DATE	DATETIME
COMPLETED_ON	DATE	DATETIME

WORKFLOW_STATUS	VARCHAR2(20)	VARCHAR(20)
COMMENT_TO_REQUESTOR	VARCHAR2(2000))	VARCHAR(2000)
EXPIRES_ON	DATE	DATETIME
EXPIRE_ACTION	VARCHAR2(30)	VARCHAR(30)
TRANSACTION_STATUS	VARCHAR2(250)	VARCHAR(250)
CURRENT_STOP_NO	NUMBER	INT
REJECT_ACTION	VARCHAR2(30)	VARCHAR(30)
REJECT_REASON	VARCHAR2(50)	VARCHAR(50)
UPDATE_WHILE_PENDING	VARCHAR2(105)	VARCHAR(105)
PROCESS_MANAGER_CONTACT_PK	NUMBER	INT
PROCESS_MANAGER_CONTACT_TYPE	VARCHAR2(7)	VARCHAR(7)
PROCESS_MANAGER_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)
PROCESS_MANAGER_MIDDLE_NAME	VARCHAR2(50)	VARCHAR(50)
PROCESS_MANAGER_NAME	VARCHAR2(250)	VARCHAR(250)
STOP_MEMBER_PRIMARY_KEY	NUMBER	INT
STOP_PRIMARY_KEY	NUMBER	INT
STOP	NUMBER	INT
PERFORMER_CONTACT_PK	NUMBER	INT
PERFORMER_CONTACT_TYPE	VARCHAR2(7)	VARCHAR(7)
PERFORMER_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)
PERFORMER_MIDDLE_NAME	VARCHAR2(50)	VARCHAR(50)

PERFORMER_NAME	VARCHAR2(250)	VARCHAR(250)
STOP_STATUS	VARCHAR2(40)	VARCHAR(40)
ACTION_DATE	DATE	DATETIME
STOP_EXPIRATION_DATE	DATE	DATETIME
INTERNAL_COMMENT	VARCHAR2(2000)	VARCHAR(2000)
EMAIL_SENT	VARCHAR2(3)	VARCHAR(3)
CREATED_BY_CONTACT_PK	NUMBER	INT
CREATED_BY_CONTACT_TYPE	VARCHAR2(7)	VARCHAR(7)
CREATED_BY_CONTACT_NAME	VARCHAR2(250)	VARCHAR(250)
CREATED_BY_CONTACT_MIDDLE_NAME	VARCHAR2(50)	VARCHAR(50)
CREATED_BY_CONTACT_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)
CREATED_ON	DATE	DATETIME
MODIFIED_BY_CONTACT_PK	NUMBER	INT
MODIFIED_BY_CONTACT_NAME	VARCHAR2(250)	VARCHAR(250)
MODIFIED_BY_CONTACT_MID_NAME	VARCHAR2(50)	VARCHAR(50)
MODIFIED_BY_CONTACT_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)
MODIFIED_BY_CONTACT_TYPE	VARCHAR2(7)	VARCHAR(7)
MODIFIED_ON	DATE	DATETIME

WH_INVOLVED_WORKFLOW_HISTORY

Column Name	Oracle Data Type	MSSQL Data Type
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INVOLVED_UNIQUE_CODE	VARCHAR2(4)	VARCHAR(4)
INVOLVED_OBJECT_TITLE	VARCHAR2(250)	VARCHAR(250)
INVOLVED_PRIMARY_KEY	NUMBER	INT
INVOLVED_CONTACT_PK	NUMBER	INT
PROJECT_PRIMARY_KEY	NUMBER	INT
PROJECT_NUMBER	VARCHAR2(50)	VARCHAR(50)
PROJECT_NAME	VARCHAR2(250)	VARCHAR(250)
PROJECT_UNIQUE_CODE	VARCHAR2(4)	VARCHAR(4)
PROJECT_OBJECT_TITLE	VARCHAR2(250)	VARCHAR(250)
CONTACT_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)
CONTACT_MIDDLE_NAME	VARCHAR2(50)	VARCHAR(50)
CONTACT_NAME	VARCHAR2(250)	VARCHAR(250)
CONTACT_TYPE	VARCHAR2(7)	VARCHAR(7)
CONTACT_DEFAULT_CATEGORY	VARCHAR2(50)	VARCHAR(50)
WORKFLOW_PRIMARY_KEY	NUMBER	INT
REQUEST_NAME	VARCHAR2(50)	VARCHAR(50)
REQUESTED_BY_CONTACT_PK	NUMBER	INT
REQUESTED_BY_CONTACT_TYPE	VARCHAR2(7)	VARCHAR(7)
REQUESTED_BY_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)
REQUESTED_BY_MIDDLE_NAME	VARCHAR2(50)	VARCHAR(50)
REQUESTED_BY_NAME	VARCHAR2(250)	VARCHAR(250)

REQUESTED_ON	DATE	DATETIME
COMPLETED_ON	DATE	DATETIME
WORKFLOW_STATUS	VARCHAR2(20)	VARCHAR(20)
COMMENT_TO_REQUESTOR	VARCHAR2(2000)	VARCHAR(2000)
EXPIRES_ON	DATE	DATETIME
EXPIRE_ACTION	VARCHAR2(30)	VARCHAR(30)
TRANSACTION_STATUS	VARCHAR2(250)	VARCHAR(250)
CURRENT_STOP_NO	NUMBER	INT
REJECT_ACTION	VARCHAR2(30)	VARCHAR(30)
REJECT_REASON	VARCHAR2(50)	VARCHAR(50)
UPDATE_WHILE_PENDING	VARCHAR2(105)	VARCHAR(105)
PROCESS_MANAGER_CONTACT_PK	NUMBER	INT
PROCESS_MANAGER_CONTACT_TYPE	VARCHAR2(7)	VARCHAR(7)
PROCESS_MANAGER_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)
PROCESS_MANAGER_MIDDLE_NAME	VARCHAR2(50)	VARCHAR(50)
PROCESS_MANAGER_NAME	VARCHAR2(250)	VARCHAR(250)
ACTIVITY	VARCHAR2(250)	VARCHAR(250)
ACTION_DATE	DATE	DATETIME
INTERNAL_COMMENT	VARCHAR2(2000)	VARCHAR(2000)
CREATED_BY_CONTACT_PK	NUMBER	INT

CREATED_BY_CONTACT_TYPE	VARCHAR2(7)	VARCHAR(7)
CREATED_BY_CONTACT_NAME	VARCHAR2(250)	VARCHAR(250)
CREATED_BY_CONTACT_MIDDLE_NAME	VARCHAR2(50)	VARCHAR(50)
CREATED_BY_CONTACT_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)
CREATED_ON	DATE	DATETIME
MODIFIED_BY_CONTACT_PK	NUMBER	INT
MODIFIED_BY_CONTACT_NAME	VARCHAR2(250)	VARCHAR(250)
MODIFIED_BY_CONTACT_MID_NAME	VARCHAR2(50)	VARCHAR(50)
MODIFIED_BY_CONTACT_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)
MODIFIED_BY_CONTACT_TYPE	VARCHAR2(7)	VARCHAR(7)
MODIFIED_ON	DATE	DATETIME

WH_INVOLVED_WORKFLOW_RECIPIENT

Column Name	Oracle Data Type	MSSQL Data Type
INVOLVED_UNIQUE_CODE	VARCHAR2(4)	VARCHAR(4)
INVOLVED_OBJECT_TITLE	VARCHAR2(250)	VARCHAR(250)
INVOLVED_PRIMARY_KEY	NUMBER	INT
INVOLVED_CONTACT_PK	NUMBER	INT
PROJECT_UNIQUE_CODE	VARCHAR2(4)	VARCHAR(4)
PROJECT_OBJECT_TITLE	VARCHAR2(250)	VARCHAR(250)
PROJECT_PRIMARY_KEY	NUMBER	INT
PROJECT_NUMBER	VARCHAR2(50)	VARCHAR(50)

PROJECT_NAME	VARCHAR2(250)	VARCHAR(250)
CONTACT_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)
CONTACT_MIDDLE_NAME	VARCHAR2(50)	VARCHAR(50)
CONTACT_NAME	VARCHAR2(250)	VARCHAR(250)
CONTACT_TYPE	VARCHAR2(7)	VARCHAR(7)
CONTACT_DEFAULT_CATEGORY	VARCHAR2(50)	VARCHAR(50)
WORKFLOW_PRIMARY_KEY	NUMBER	INT
REQUEST_NAME	VARCHAR2(50)	VARCHAR(50)
REQUESTED_BY_CONTACT_PK	NUMBER	INT
REQUESTED_BY_CONTACT_TYPE	VARCHAR2(7)	VARCHAR(7)
REQUESTED_BY_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)
REQUESTED_BY_MIDDLE_NAME	VARCHAR2(50)	VARCHAR(50)
REQUESTED_BY_NAME	VARCHAR2(250)	VARCHAR(250)
REQUESTED_ON	DATE	DATETIME
COMPLETED_ON	DATE	DATETIME
WORKFLOW_STATUS	VARCHAR2(20)	VARCHAR(20)
EXPIRES_ON	DATE	DATETIME
CURRENT_STOP_NO	NUMBER	INT
PROCESS_MANAGER_CONTACT_PK	NUMBER	INT
PROCESS_MANAGER_CONTACT_TYPE	VARCHAR2(7)	VARCHAR(7)
PROCESS_MANAGER_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)

PROCESS_MANAGER_MIDDLE_NAME	VARCHAR2(50)	VARCHAR(50)
PROCESS_MANAGER_NAME	VARCHAR2(250)	VARCHAR(250)
EVENT	VARCHAR2(250)	VARCHAR2(250)
RECIPIENT_CONTACT_PK	NUMBER	INT
RECIPIENT_CONTACT_TYPE	VARCHAR2(7)	VARCHAR2(7)
RECIPIENT_FIRST_NAME	VARCHAR2(50)	VARCHAR2(50)
RECIPIENT_MIDDLE_NAME	VARCHAR2(50)	VARCHAR2(50)
RECIPIENT_NAME	VARCHAR2(250)	VARCHAR2(250)
VERSION	NUMBER	INT
CREATED_ON	DATE	DATETIME
CREATED_BY_CONTACT_PK	NUMBER	INT
CREATED_BY_CONTACT_TYPE	VARCHAR2(7)	VARCHAR2(7)
CREATED_BY_CONTACT_NAME	VARCHAR2(250)	VARCHAR2(250)
CREATED_BY_CONTACT_MIDDLE_NAME	VARCHAR2(50)	VARCHAR2(50)
CREATED_BY_CONTACT_FIRST_NAME	VARCHAR2(50)	VARCHAR2(50)
MODIFIED_ON	DATE	DATETIME
MODIFIED_BY_CONTACT_PK	NUMBER	INT
MODIFIED_BY_CONTACT_TYPE	VARCHAR2(7)	VARCHAR2(7)
MODIFIED_BY_CONTACT_NAME	VARCHAR2(250)	VARCHAR2(250)
MODIFIED_BY_CONTACT_MID_NAME	VARCHAR2(50)	VARCHAR2(50)

WH_INVOLVED_WORKFLOW_REVIEW

Column Name	Oracle Data Type	MSSQL Data Type
INVOLVED_UNIQUE_CODE	VARCHAR2(4)	VARCHAR(4)
INVOLVED_OBJECT_TITLE	VARCHAR2(250)	VARCHAR(250)
INVOLVED_PRIMARY_KEY	NUMBER	INT
INVOLVED_CONTACT_PK	NUMBER	INT
PROJECT_UNIQUE_CODE	VARCHAR2(4)	VARCHAR(4)
PROJECT_OBJECT_TITLE	VARCHAR2(250)	VARCHAR(250)
PROJECT_PRIMARY_KEY	NUMBER	INT
PROJECT_NUMBER	VARCHAR2(50)	VARCHAR(50)
PROJECT_NAME	VARCHAR2(250)	VARCHAR(250)
CONTACT_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)
CONTACT_MIDDLE_NAME	VARCHAR2(50)	VARCHAR(50)
CONTACT_NAME	VARCHAR2(250)	VARCHAR(250)
CONTACT_TYPE	VARCHAR2(7)	VARCHAR(7)
CONTACT_DEFAULT_CATEGORY	VARCHAR2(50)	VARCHAR(50)
WORKFLOW_PRIMARY_KEY	NUMBER	INT
REQUEST_NAME	VARCHAR2(50)	VARCHAR(50)
REQUESTED_BY_CONTACT_PK	NUMBER	INT
REQUESTED_BY_CONTACT_TYPE	VARCHAR2(7)	VARCHAR(7)
REQUESTED_BY_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)
REQUESTED_BY_MIDDLE_NAME	VARCHAR2(50)	VARCHAR(50)

REQUESTED_BY_NAME	VARCHAR2(250)	VARCHAR(250)
REQUESTED_ON	DATE	DATETIME
COMPLETED_ON	DATE	DATETIME
WORKFLOW_STATUS	VARCHAR2(20)	VARCHAR(20)
EXPIRES_ON	DATE	DATETIME
CURRENT_STOP_NO	NUMBER	INT
PROCESS_MANAGER_CONTACT_PK	NUMBER	INT
PROCESS_MANAGER_CONTACT_TYPE	VARCHAR2(7)	VARCHAR(7)
PROCESS_MANAGER_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)
PROCESS_MANAGER_MIDDLE_NAME	VARCHAR2(50)	VARCHAR(50)
PROCESS_MANAGER_NAME	VARCHAR2(250)	VARCHAR(250)
STOP_PRIMARY_KEY	NUMBER	INT
STOP	NUMBER	INT
STOP_MEMBER_PRIMARY_KEY	NUMBER	INT
STOP_STATUS	VARCHAR2(40)	VARCHAR(40)
EMAIL_SENT	VARCHAR2(3)	VARCHAR(3)
REVIEW_PRIMARY_KEY	NUMBER	INT
REVIEW_PERFORMER_CONTACT_PK	NUMBER	INT
REVIEW_PERFORMER_CONTACT_TYPE	VARCHAR2(7)	VARCHAR(7)
REVIEW_PERFORMER_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)
REVIEW_PERFORMER_MIDDLE_NAME	VARCHAR2(50)	VARCHAR(50)

REVIEW_PERFORMER_NAME	VARCHAR2(250)	VARCHAR(250)
REVIEW_STATUS	VARCHAR2(20)	VARCHAR(20)
REVIEW_ACTION_DATE	DATE	DATETIME
REVIEW_APPROVAL_COMMENT	VARCHAR2(250)	VARCHAR(250)
REVIEW_REQUEST_COMMENT	VARCHAR2(250)	VARCHAR(250)
CREATED_ON	DATE	DATETIME
CREATED_BY_CONTACT_PK	NUMBER	INT
CREATED_BY_CONTACT_TYPE	VARCHAR2(7)	VARCHAR(7)
CREATED_BY_CONTACT_NAME	VARCHAR2(250)	VARCHAR(250)
CREATED_BY_CONTACT_MIDDLE_NAME	VARCHAR2(50)	VARCHAR(50)
CREATED_BY_CONTACT_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)
MODIFIED_ON	DATE	DATETIME
MODIFIED_BY_CONTACT_PK	NUMBER	INT
MODIFIED_BY_CONTACT_TYPE	VARCHAR2(7)	VARCHAR(7)
MODIFIED_BY_CONTACT_NAME	VARCHAR2(250)	VARCHAR(250)
MODIFIED_BY_CONTACT_MID_NAME	VARCHAR2(50)	VARCHAR(50)
MODIFIED_BY_CONTACT_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)

1.2.3.3 Milestone

Note: Although there are several database tables related to Milestone, both in the TeamConnect database and in the Data Warehouse database, the Milestone feature itself has been removed from TeamConnect version 3.0. Thus these tables may contain data from earlier versions, but they will not be refreshed with ongoing data from version 3.0.

The custom object Milestone tables include:

- WH_MILESTONE_XXXX
- WH_MILESTONE_CATEGORIES
- WH_MILESTONE_GROUP_ACCESS*
- WH_MILESTONE_USER_ACCESS*
- WH_MILESTONE_SECURITY
- WH_MILESTONE_WORKFLOW
- WH_MILESTONE_WORKFLOW_HISTORY
- WH_MILESTONE_WORKFLOW_RECEIPT
- WH_MILESTONE_WORKFLOW_REVIEW

* These tables support the user access and security feature and should not be queried directly.

WH_MILESTONE_XXXX

Column Name	Oracle Data Type	MSSQL Data Type
MILESTONE_UNIQUE_CODE	VARCHAR2(4)	VARCHAR(4)
MILESTONE_OBJECT_TITLE	VARCHAR2(250)	VARCHAR(250)
MILESTONE_PRIMARY_KEY	NUMBER	INT
MILESTONE_SUBJECT	VARCHAR2(250)	VARCHAR(250)
MILESTONE_COMPLETION_DATE	DATE	DATETIME
MILESTONE_EXTENSION_DATE	DATE	DATETIME
MILESTONE_MILESTONE_DATE	DATE	DATETIME
MILESTONE_PROJECTED_DATE	DATE	DATETIME
MILESTONE_STATUS	VARCHAR2(10)	VARCHAR(10)
MILESTONE_MARK_COMPLETE	VARCHAR2(3)	VARCHAR(3)
MILESTONE_COMPLETION_STATUS	VARCHAR2(3)	VARCHAR(3)
MILESTONE_COMPLETION_PHASE	VARCHAR2(250)	VARCHAR(250)
MILESTONE_IS_UNKNOWN	VARCHAR2(3)	VARCHAR(3)

MILESTONE_DEFAULT_CATEGORY	VARCHAR2(50)	VARCHAR(50)
MILESTONE_DEFAULT_CAT_TREE	VARCHAR2(250)	VARCHAR(250)
PROJECT_UNIQUE_CODE	VARCHAR2(4)	VARCHAR(4)
PROJECT_OBJECT_TITLE	VARCHAR2(250)	VARCHAR(250)
PROJECT_PRIMARY_KEY	NUMBER	INT
PROJECT_NUMBER	VARCHAR2(50)	VARCHAR(50)
PROJECT_NAME	VARCHAR2(250)	VARCHAR(250)
PROJECT_CATEGORY	VARCHAR2(50)	VARCHAR(50)
PROJECT_CATEGORY_TREE_POSITION	VARCHAR2(250)	VARCHAR(250)
DOCUMENT_FOLDER_PRIMARY_KEY	NUMBER	INT
CREATED_ON	DATE	DATETIME
CREATED_BY_CONTACT_PK	NUMBER	INT
CREATED_BY_CONTACT_TYPE	VARCHAR2(10)	VARCHAR(10)
CREATED_BY_CONTACT_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)
CREATED_BY_CONTACT_MIDDLE_NAME	VARCHAR2(50)	VARCHAR(50)
CREATED_BY_CONTACT_NAME	VARCHAR2(250)	VARCHAR(250)
BEHALF_OF_CONTACT_PRIMARY_KEY	NUMBER	INT
MODIFIED_ON	DATE	DATETIME
MODIFIED_BY_CONTACT_PK	NUMBER	INT
MODIFIED_BY_CONTACT_TYPE	VARCHAR2(10)	VARCHAR(10)
MODIFIED_BY_CONTACT_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)

MODIFIED_BY_CONTACT_MID_NAME	VARCHAR2(50)	VARCHAR(50)
MODIFIED_BY_CONTACT_NAME	VARCHAR2(250)	VARCHAR(250)
SECURITY	VARCHAR2(10)	VARCHAR(10)
WORKFLOW_CURRENT_STATUS	VARCHAR2(15)	VARCHAR(15)
WORKFLOW_CURRENT_ACTION	VARCHAR2(50)	VARCHAR(50)
NOTES	CLOB	NTEXT
MILESTONE_COMPLETION_DATE_KEY	DATE	DATETIME
MILESTONE_EXTENSION_DATE_KEY	DATE	DATETIME
MILESTONE_MILESTONE_DATE_KEY	DATE	DATETIME
MILESTONE_PROJECTED_DATE_KEY	DATE	DATETIME
CREATED_ON_DATE_KEY	DATE	DATETIME
MODIFIED_ON_DATE_KEY	DATE	DATETIME

WH_MILESTONE_CATEGORIES

Column Name	Oracle Data Type	MSSQL Data Type
MILESTONE_UNIQUE_CODE	VARCHAR2(4)	VARCHAR(4)
MILESTONE_OBJECT_TITLE	VARCHAR2(250)	VARCHAR(250)
MILESTONE_PRIMARY_KEY	NUMBER	INT
MILESTONE_SUBJECT	VARCHAR2(250)	VARCHAR(250)
MILESTONE_MILESTONE_DATE	DATE	DATETIME
MILESTONE_STATUS	VARCHAR2(10)	VARCHAR(10)
MILESTONE_COMPLETION_STATUS	VARCHAR2(3)	VARCHAR(3)

PROJECT_UNIQUE_CODE	VARCHAR2(4)	VARCHAR(4)
PROJECT_OBJECT_TITLE	VARCHAR2(250)	VARCHAR(250)
PROJECT_PRIMARY_KEY	NUMBER	INT
PROJECT_NUMBER	VARCHAR2(50)	VARCHAR(50)
PROJECT_NAME	VARCHAR2(250)	VARCHAR(250)
CATEGORY_NAME	VARCHAR2(50)	VARCHAR(50)
CATEGORY_TREE_POSITION	VARCHAR2(250)	VARCHAR(250)
IS_CATEGORY_MANUALLY_ADDED	VARCHAR2(1)	VARCHAR(1)
IS_DEFAULT_CATEGORY	VARCHAR2(5)	VARCHAR(5)
SECURITY	VARCHAR2(10)	VARCHAR(10)

WH_MILESTONE_GROUP_ACCESS

Column Name	Oracle Data Type	MSSQL Data Type
MILESTONE_PRIMARY_KEY	NUMBER	INT
GROUP_PRIMARY_KEY	NUMBER	INT
ALLOW_DENY_IID	CHAR(1)	CHAR(1)
OPERATION_IID	NUMBER	INT
IS_MANUAL	NUMBER	INT
VERSION	NUMBER	INT

WH_MILESTONE_USER_ACCESS

Column Name	Oracle Data Type	MSSQL Data Type
MILESTONE_PRIMARY_KEY	NUMBER	INT

USER_PRIMARY_KEY	NUMBER	INT
ALLOW_DENY_IID	CHAR(1)	CHAR(1)
OPERATION_IID	NUMBER	INT
IS_MANUAL	NUMBER	INT
VERSION	NUMBER	INT

WH_MILESTONE_SECURITY

Column Name	Oracle Data Type	MSSQL Data Type
MILESTONE_UNIQUE_CODE	NVARCHAR2(4)	NVARCHAR(4)
MILESTONE_PRIMARY_KEY	NUMBER	INT
CREATED_BY_CONTACT_PK	NUMBER	INT
SECURITY	NVARCHAR2(10)	NVARCHAR(10)

WH_MILESTONE_WORKFLOW

Column Name	Oracle Data Type	MSSQL Data Type
MILESTONE_UNIQUE_CODE	VARCHAR2(4)	VARCHAR(4)
MILESTONE_OBJECT_TITLE	VARCHAR2(250)	VARCHAR(250)
MILESTONE_PRIMARY_KEY	NUMBER	INT
MILESTONE_SUBJECT	VARCHAR2(250)	VARCHAR(250)
MILESTONE_MILESTONE_DATE	DATE	DATETIME
MILESTONE_STATUS	VARCHAR2(10)	VARCHAR(10)
MILESTONE_COMPLETION_STATUS	VARCHAR2(3)	VARCHAR(3)
PROJECT_UNIQUE_CODE	VARCHAR2(4)	VARCHAR(4)

PROJECT_OBJECT_TITLE	VARCHAR2(250)	VARCHAR(250)
PROJECT_PRIMARY_KEY	NUMBER	INT
PROJECT_NUMBER	VARCHAR2(50)	VARCHAR(50)
PROJECT_NAME	VARCHAR2(250)	VARCHAR(250)
WORKFLOW_PRIMARY_KEY	NUMBER	INT
REQUEST_NAME	VARCHAR2(50)	VARCHAR(50)
REQUESTED_BY_CONTACT_PK	NUMBER	INT
REQUESTED_BY_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)
REQUESTED_BY_MIDDLE_NAME	VARCHAR2(50)	VARCHAR(50)
REQUESTED_BY_NAME	VARCHAR2(250)	VARCHAR(250)
REQUESTED_BY_CONTACT_TYPE	VARCHAR2(7)	VARCHAR(7)
REQUESTED_ON	DATE	DATETIME
COMPLETED_ON	DATE	DATETIME
WORKFLOW_STATUS	VARCHAR2(30)	VARCHAR(30)
COMMENT_TO_REQUESTOR	VARCHAR2(2000)	VARCHAR(2000)
EXPIRES_ON	DATE	DATETIME
EXPIRE_ACTION	VARCHAR2(30)	VARCHAR(30)
TRANSACTION_STATUS	VARCHAR2(250)	VARCHAR(250)
CURRENT_STOP_NO	NUMBER	INT
REJECT_ACTION	VARCHAR2(30)	VARCHAR(30)
REJECT_REASON	VARCHAR2(50)	VARCHAR(50)

UPDATE_WHILE_PENDING	VARCHAR2(105)	VARCHAR(105)
PROCESS_MANAGER_CONTACT_PK	NUMBER	INT
PROCESS_MANAGER_CONTACT_TYPE	VARCHAR2(7)	VARCHAR(7)
PROCESS_MANAGER_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)
PROCESS_MANAGER_MIDDLE_NAME	VARCHAR2(50)	VARCHAR(50)
PROCESS_MANAGER_NAME	VARCHAR2(250)	VARCHAR(250)
STOP_MEMBER_PRIMARY_KEY	NUMBER	INT
STOP_PRIMARY_KEY	NUMBER	INT
STOP	NUMBER	INT
PERFORMER_CONTACT_PK	NUMBER	INT
PERFORMER_CONTACT_TYPE	VARCHAR2(7)	VARCHAR(7)
PERFORMER_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)
PERFORMER_MIDDLE_NAME	VARCHAR2(50)	VARCHAR(50)
PERFORMER_NAME	VARCHAR2(250)	VARCHAR(250)
STOP_STATUS	VARCHAR2(40)	VARCHAR(40)
ACTION_DATE	DATE	DATETIME
STOP_EXPIRATION_DATE	DATE	DATETIME
INTERNAL_COMMENT	VARCHAR2(2000)	VARCHAR(2000)
EMAIL_SENT	VARCHAR2(3)	VARCHAR(3)
CREATED_BY_CONTACT_PK	NUMBER	INT
CREATED_BY_CONTACT_TYPE	VARCHAR2(7)	VARCHAR(7)

CREATED_BY_CONTACT_NAME	VARCHAR2(250)	VARCHAR(250)
CREATED_BY_CONTACT_MIDDLE_NAME	VARCHAR2(50)	VARCHAR(50)
CREATED_BY_CONTACT_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)
CREATED_ON	DATE	DATETIME
MODIFIED_BY_CONTACT_PK	NUMBER	INT
MODIFIED_BY_CONTACT_NAME	VARCHAR2(250)	VARCHAR(250)
MODIFIED_BY_CONTACT_MID_NAME	VARCHAR2(50)	VARCHAR(50)
MODIFIED_BY_CONTACT_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)
MODIFIED_BY_CONTACT_TYPE	VARCHAR2(7)	VARCHAR(7)
MODIFIED_ON	DATE	DATETIME

WH_MILESTONE_WORKFLOW_HISTORY

Column Name	Oracle Data Type	MSSQL Data Type
MILESTONE_UNIQUE_CODE	VARCHAR2(4)	VARCHAR(4)
MILESTONE_OBJECT_TITLE	VARCHAR2(250)	VARCHAR(250)
MILESTONE_PRIMARY_KEY	NUMBER	INT
MILESTONE_SUBJECT	VARCHAR2(250)	VARCHAR(250)
MILESTONE_MILESTONE_DATE	DATE	DATETIME
MILESTONE_STATUS	VARCHAR2(10)	VARCHAR(10)
MILESTONE_COMPLETION_STATUS	VARCHAR2(3)	VARCHAR(3)
PROJECT_UNIQUE_CODE	VARCHAR2(4)	VARCHAR(4)
PROJECT_OBJECT_TITLE	VARCHAR2(250)	VARCHAR(250)

PROJECT_PRIMARY_KEY	NUMBER	INT
PROJECT_NUMBER	VARCHAR2(50)	VARCHAR(50)
PROJECT_NAME	VARCHAR2(250)	VARCHAR(250)
WORKFLOW_PRIMARY_KEY	NUMBER	INT
REQUEST_NAME	VARCHAR2(50)	VARCHAR(50)
REQUESTED_BY_CONTACT_PK	NUMBER	INT
REQUESTED_BY_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)
REQUESTED_BY_MIDDLE_NAME	VARCHAR2(50)	VARCHAR(50)
REQUESTED_BY_NAME	VARCHAR2(250)	VARCHAR(250)
REQUESTED_BY_CONTACT_TYPE	VARCHAR2(7)	VARCHAR(7)
REQUESTED_ON	DATE	DATETIME
COMPLETED_ON	DATE	DATETIME
WORKFLOW_STATUS	VARCHAR2(30)	VARCHAR(30)
COMMENT_TO_REQUESTOR	VARCHAR2(2000)	VARCHAR(2000)
EXPIRES_ON	DATE	DATETIME
EXPIRE_ACTION	VARCHAR2(30)	VARCHAR(30)
TRANSACTION_STATUS	VARCHAR2(250)	VARCHAR(250)
CURRENT_STOP_NO	NUMBER	INT
REJECT_ACTION	VARCHAR2(30)	VARCHAR(30)
REJECT_REASON	VARCHAR2(50)	VARCHAR(50)
UPDATE_WHILE_PENDING	VARCHAR2(105)	VARCHAR(105)

PROCESS_MANAGER_CONTACT_PK	NUMBER	INT
PROCESS_MANAGER_CONTACT_TYPE	VARCHAR2(7)	VARCHAR(7)
PROCESS_MANAGER_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)
PROCESS_MANAGER_MIDDLE_NAME	VARCHAR2(50)	VARCHAR(50)
PROCESS_MANAGER_NAME	VARCHAR2(250)	VARCHAR(250)
ACTIVITY	VARCHAR2(250)	VARCHAR(250)
ACTION_DATE	DATE	DATETIME
INTERNAL_COMMENT	VARCHAR2(2000)	VARCHAR(2000)
CREATED_BY_CONTACT_PK	NUMBER	INT
CREATED_BY_CONTACT_TYPE	VARCHAR2(7)	VARCHAR(7)
CREATED_BY_CONTACT_NAME	VARCHAR2(250)	VARCHAR(250)
CREATED_BY_CONTACT_MIDDLE_NAME	VARCHAR2(50)	VARCHAR(50)
CREATED_BY_CONTACT_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)
CREATED_ON	DATE	DATETIME
MODIFIED_BY_CONTACT_PK	NUMBER	INT
MODIFIED_BY_CONTACT_NAME	VARCHAR2(250)	VARCHAR(250)
MODIFIED_BY_CONTACT_MID_NAME	VARCHAR2(50)	VARCHAR(50)
MODIFIED_BY_CONTACT_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)
MODIFIED_BY_CONTACT_TYPE	VARCHAR2(7)	VARCHAR(7)
MODIFIED_ON	DATE	DATETIME

WH_MILESTONE_WORKFLOW_RECEIPT

Column Name	Oracle Data Type	MSSQL Data Type
MILESTONE_UNIQUE_CODE	VARCHAR2(4)	VARCHAR(4)
MILESTONE_OBJECT_TITLE	VARCHAR2(250)	VARCHAR(250)
MILESTONE_PRIMARY_KEY	NUMBER	INT
MILESTONE_SUBJECT	VARCHAR2(250)	VARCHAR(250)
MILESTONE_MILESTONE_DATE	DATE	DATETIME
MILESTONE_STATUS	VARCHAR2(10)	VARCHAR(10)
MILESTONE_COMPLETION_STATUS	VARCHAR2(3)	VARCHAR(3)
PROJECT_UNIQUE_CODE	VARCHAR2(4)	VARCHAR(4)
PROJECT_OBJECT_TITLE	VARCHAR2(250)	VARCHAR(250)
PROJECT_PRIMARY_KEY	NUMBER	INT
PROJECT_NUMBER	VARCHAR2(50)	VARCHAR(50)
PROJECT_NAME	VARCHAR2(250)	VARCHAR(250)
WORKFLOW_PRIMARY_KEY	NUMBER	INT
REQUEST_NAME	VARCHAR2(50)	VARCHAR(50)
REQUESTED_BY_CONTACT_PK	NUMBER	INT
REQUESTED_BY_CONTACT_TYPE	VARCHAR2(7)	VARCHAR(7)
REQUESTED_BY_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)
REQUESTED_BY_MIDDLE_NAME	VARCHAR2(50)	VARCHAR(50)
REQUESTED_BY_NAME	VARCHAR2(250)	VARCHAR(250)
REQUESTED_ON	DATE	DATETIME

COMPLETED_ON	DATE	DATETIME
WORKFLOW_STATUS	VARCHAR2(30)	VARCHAR(30)
EXPIRES_ON	DATE	DATETIME
CURRENT_STOP_NO	NUMBER	INT
PROCESS_MANAGER_CONTACT_PK	NUMBER	INT
PROCESS_MANAGER_CONTACT_TYPE	VARCHAR2(7)	VARCHAR(7)
PROCESS_MANAGER_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)
PROCESS_MANAGER_MIDDLE_NAME	VARCHAR2(50)	VARCHAR(50)
PROCESS_MANAGER_NAME	VARCHAR2(250)	VARCHAR(250)
EVENT	VARCHAR2(250)	VARCHAR2(250)
RECIPIENT_CONTACT_PK	NUMBER	INT
RECIPIENT_CONTACT_TYPE	VARCHAR2(7)	VARCHAR2(7)
RECIPIENT_FIRST_NAME	VARCHAR2(50)	VARCHAR2(50)
RECIPIENT_MIDDLE_NAME	VARCHAR2(50)	VARCHAR2(50)
RECIPIENT_NAME	VARCHAR2(250)	VARCHAR2(250)
VERSION	NUMBER	INT
CREATED_ON	DATE	DATETIME
CREATED_BY_CONTACT_PK	NUMBER	INT
CREATED_BY_CONTACT_TYPE	VARCHAR2(7)	VARCHAR2(7)
CREATED_BY_CONTACT_NAME	VARCHAR2(250)	VARCHAR2(250)
CREATED_BY_CONTACT_MIDDLE_NAME	VARCHAR2(50)	VARCHAR2(50)

CREATED_BY_CONTACT_FIRST_NAME	VARCHAR2(50)	VARCHAR2(50)
MODIFIED_ON	DATE	DATETIME
MODIFIED_BY_CONTACT_PK	NUMBER	INT
MODIFIED_BY_CONTACT_TYPE	VARCHAR2(7)	VARCHAR2(7)
MODIFIED_BY_CONTACT_NAME	VARCHAR2(250)	VARCHAR2(250)
MODIFIED_BY_CONTACT_MID_NAME	VARCHAR2(50)	VARCHAR2(50)

WH_MILESTONE_WORKFLOW_REVIEW

Column Name	Oracle Data Type	MSSQL Data Type
MILESTONE_UNIQUE_CODE	VARCHAR2(4)	VARCHAR(4)
MILESTONE_OBJECT_TITLE	VARCHAR2(250)	VARCHAR(250)
MILESTONE_PRIMARY_KEY	NUMBER	INT
MILESTONE_SUBJECT	VARCHAR2(250)	VARCHAR(250)
MILESTONE_MILESTONE_DATE	DATE	DATETIME
MILESTONE_STATUS	VARCHAR2(10)	VARCHAR(10)
MILESTONE_COMPLETION_STATUS	VARCHAR2(3)	VARCHAR(3)
PROJECT_UNIQUE_CODE	VARCHAR2(4)	VARCHAR(4)
PROJECT_OBJECT_TITLE	VARCHAR2(250)	VARCHAR(250)
PROJECT_PRIMARY_KEY	NUMBER	INT
PROJECT_NUMBER	VARCHAR2(50)	VARCHAR(50)
PROJECT_NAME	VARCHAR2(250)	VARCHAR(250)
WORKFLOW_PRIMARY_KEY	NUMBER	INT

REQUEST_NAME	VARCHAR2(50)	VARCHAR(50)
REQUESTED_BY_CONTACT_PK	NUMBER	INT
REQUESTED_BY_CONTACT_TYPE	VARCHAR2(7)	VARCHAR(7)
REQUESTED_BY_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)
REQUESTED_BY_MIDDLE_NAME	VARCHAR2(50)	VARCHAR(50)
REQUESTED_BY_NAME	VARCHAR2(250)	VARCHAR(250)
REQUESTED_ON	DATE	DATETIME
COMPLETED_ON	DATE	DATETIME
WORKFLOW_STATUS	VARCHAR2(30)	VARCHAR(30)
EXPIRES_ON	DATE	DATETIME
CURRENT_STOP_NO	NUMBER	INT
PROCESS_MANAGER_CONTACT_PK	NUMBER	INT
PROCESS_MANAGER_CONTACT_TYPE	VARCHAR2(7)	VARCHAR(7)
PROCESS_MANAGER_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)
PROCESS_MANAGER_MIDDLE_NAME	VARCHAR2(50)	VARCHAR(50)
PROCESS_MANAGER_NAME	VARCHAR2(250)	VARCHAR(250)
STOP_PRIMARY_KEY	NUMBER	INT
STOP	NUMBER	INT
STOP_MEMBER_PRIMARY_KEY	NUMBER	INT
STOP_STATUS	VARCHAR2(40)	VARCHAR(40)
EMAIL_SENT	VARCHAR2(3)	VARCHAR(3)

REVIEW_PRIMARY_KEY	NUMBER	INT
REVIEW_PERFORMER_CONTACT_PK	NUMBER	INT
REVIEW_PERFORMER_CONTACT_TYPE	VARCHAR2(7)	VARCHAR(7)
REVIEW_PERFORMER_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)
REVIEW_PERFORMER_MIDDLE_NAME	VARCHAR2(50)	VARCHAR(50)
REVIEW_PERFORMER_NAME	VARCHAR2(250)	VARCHAR(250)
REVIEW_STATUS	VARCHAR2(20)	VARCHAR(20)
REVIEW_ACTION_DATE	DATE	DATETIME
REVIEW_APPROVAL_COMMENT	VARCHAR2(250)	VARCHAR(250)
REVIEW_REQUEST_COMMENT	VARCHAR2(250)	VARCHAR(250)
CREATED_ON	DATE	DATETIME
CREATED_BY_CONTACT_PK	NUMBER	INT
CREATED_BY_CONTACT_TYPE	VARCHAR2(7)	VARCHAR(7)
CREATED_BY_CONTACT_NAME	VARCHAR2(250)	VARCHAR(250)
CREATED_BY_CONTACT_MIDDLE_NAME	VARCHAR2(50)	VARCHAR(50)
CREATED_BY_CONTACT_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)
MODIFIED_ON	DATE	DATETIME
MODIFIED_BY_CONTACT_PK	NUMBER	INT
MODIFIED_BY_CONTACT_TYPE	VARCHAR2(7)	VARCHAR(7)
MODIFIED_BY_CONTACT_NAME	VARCHAR2(250)	VARCHAR(250)
MODIFIED_BY_CONTACT_MID_NAME	VARCHAR2(50)	VARCHAR(50)

1.2.4 Consolidated Tables

Three significant consolidated tables exist in the Data Warehouse dictionary:

- WH_INVOLVEDS_VW
- WH_MILESTONES_VW
- WH_PROJECTS_VW

These consolidated tables have the following corresponding column definitions as related tables:

- WH_INVOLVED_XXXX
- WH_MILESTONE_XXXX
- WH_PROJECT_XXXX

...where XXXX is the unique entity code for a custom object type.

The difference between the tables and the consolidated tables is that any specific table (i.e. WH_PROJECT_XXXX) only contains information for one object type, but the consolidated table contains information for all object types combined. For example, suppose that your Data Warehouse contains tables WH_INVOLVED_CHDL and WH_INVOLVED_AUDT. In the first table, column INVOLVED_UNIQUE_CODE always contains the value "CHDL", and in the second table that column always contains "AUDT". However, in consolidated table WH_INVOLVEDS_VW, rows represent the rows from both of the two tables and, in the consolidated table, column INVOLVED_UNIQUE_CODE sometimes contains "CHDL" and sometimes contains "AUDT".

1.2.5 Custom Field Tables and Views

System and Custom objects can have custom fields associated with them. In order to support these custom fields, categories are created in TeamConnect. Each of these categories have an associated table in the warehouse to store custom field data. The table is identified by WHCF_XXXX and WHCC_XXXX, which work together to build the WH_CF_XXXX view.

Note: XXXX represents the tree position of the category in the database. For example, a custom field is created for an Account under a category called Settlement. The Settlement category has a tree position of ACCT_SETT, so any custom fields associated with Settlement will be in a view called WH_CF_ACCT_SETT.

WHCF_XXXX tables consist of custom fields of all types. However, List type holds the actual value, and Involved type hold the involved_id.

WHCC_XXXX tables consist of custom fields of Involved, List, and Date. Involved type holds the contact_id, List type holds the primary key of the lookup item, and Date type holds the date key.

The first column in each custom field table will be an identification column. This column will contain the primary key of the object that is associated with the data in the custom fields. It will be named based on the object type that the custom field is related to. The following table describes the identity column names.

Field Table Identify Column Names

Object Type	ID Column Name
-------------	----------------

ACCOUNT	ACCOUNT_ID
APPOINTMENT	APPOINTMENT_ID
CONTACT	CONTACT_ID
DOCUMENT	DOCUMENT_ID
EXPENSE	EXPENSE_ID
HISTORY	HISTORY_ID
INVOICE	INVOICE_ID
INVOLVED	INVOLVED_ID
LINEITEM	LINEITEM_ID
MILESTONE	MILESTONE_ID
PROJECT	PROJECT_ID
TASK	TASK_ID

Each custom field is included in the warehouse when the **Include in Data Warehouse** box is checked in TeamConnect. Each custom field becomes a column in the custom field Data Warehouse table created for the respective category. These columns are added after the first identification column and are named after the custom field names (not labels). For example, if a custom field is named HowReported, the corresponding column in the Data Warehouse table is called HowReported.

Important: Data Warehouse has very strict requirements for custom field names.

The views that are associated with custom fields are:

- WH_INVOLVED_XXXX_CF_VW
- WH_MILESTONE_XXXX_CF_VW
- WH_PROJECT_XXXX_CF_VW

...where XXXX represents the unique code of the underlying object definition.

Note: There may be other views present in the target database, with naming patterns such as WH_INVOLVED_XXXX_1_CF_VW, WH_INVOLVED_XXXX_2_CF_VW, etc. These are "building blocks" whose information is consolidated into one of the three main views named

above (in this example, WH_INVOLVED_XXXX_CF_VW.) These building block views should not ordinarily be used for analysis and reporting.

1.2.6 Helper Table Definitions

Helper tables are used by the Data Warehouse transformations to aid in the population process. These tables are used for refresh and delete, as well as for data conversions. Normally you would not query these tables directly, but would instead query the views.

WHCC_MAPPINGS and WHCF_MAPPINGS resolve cases where two custom fields, associated with different categories, may have the same field name. In a view that combines information from multiple categories, there is the possibility that the two identical field names would cause identical column names, an error. Instead, these tables make sure that column names are always unique. The name used by the view is contained in column FIELD_NAME_MAP and the original name for the field is in column FIELD_NAME. Use WH_CC_MAPPINGS for WH_CC_XXXX, and use WH_CF_MAPPINGS for WH_CF_XXXX.

WH_CUSTOM_NUMB, WH_CUSTOM_DATE, WH_CUSTOM_MEMO, WH_CUSTOM_TEXT, WH_CUSTOM_OBJE, and WH_CUSTOM_OBJF contain values for custom fields. The six tables correspond to the six kinds of datatypes that can be used by custom fields.

In addition to the other helper tables described above, there are many workflow-related helper tables, two for each system object (for example, WH_HELPER_ACCOUNT_WORKFLOW and WH_HELPER_ACCOUNT_WORKFLOW_RVW, for the Account object.)

WH_CC_MAPPINGS

Column Name	Oracle Data Type	MSSQL Data Type
UNIQUE_CODE	VARCHAR2(4)	VARCHAR(4)
ENTITY_CODE	VARCHAR2(9)	VARCHAR(9)
OBJECT_TITLE	VARCHAR2(250)	VARCHAR(250)
OBJECT_IS_EMBEDDED	VARCHAR2(5)	VARCHAR(5)
CATEGORY_NAME	VARCHAR2(50)	VARCHAR(50)
TREE_POSITION	VARCHAR2(250)	VARCHAR(250)
DETAIL_FIELD_TYPE	VARCHAR2(20)	VARCHAR(20)
ORIGINAL_FIELD_NAME	VARCHAR2(30)	VARCHAR(30)
TABLE_NAME	VARCHAR2(30)	VARCHAR(30)

TABLE_SEQ	NUMBER	INT
ID_COLUMN	VARCHAR2(30)	VARCHAR(30)
FIELD_NAME	VARCHAR2(30)	VARCHAR(30)
FIELD_LABEL	VARCHAR2(50)	VARCHAR(50)
COLUMN_TYPE	VARCHAR2(40)	VARCHAR(40)
FIELD_NAME_MAP	VARCHAR2(30)	VARCHAR(30)
LOOKUP_TABLE_PRIMARY_KEY	NUMBER	INT
LOOKUP_TABLE_UNIQUE_CODE	VARCHAR2(4)	VARCHAR(4)
LOOKUP_TABLE_NAME	VARCHAR2(50)	VARCHAR(50)

WH_CF_MAPPINGS

Column Name	Oracle Data Type	MSSQL Data Type
UNIQUE_CODE	VARCHAR2(4)	VARCHAR(4)
ENTITY_CODE	VARCHAR2(9)	VARCHAR(9)
OBJECT_TITLE	VARCHAR2(250)	VARCHAR(250)
OBJECT_IS_EMBEDDED	VARCHAR2(5)	VARCHAR(5)
CATEGORY_NAME	VARCHAR2(50)	VARCHAR(50)
TREE_POSITION	VARCHAR2(250)	VARCHAR(250)
DETAIL_FIELD_TYPE	VARCHAR2(20)	VARCHAR(20)
ORIGINAL_FIELD_NAME	VARCHAR2(30)	VARCHAR(30)
TABLE_NAME	VARCHAR2(30)	VARCHAR(30)
TABLE_SEQ	NUMBER	INT

ID_COLUMN	VARCHAR2(30)	VARCHAR(30)
FIELD_NAME	VARCHAR2(30)	VARCHAR(30)
FIELD_LABEL	VARCHAR2(50)	VARCHAR(50)
COLUMN_TYPE	VARCHAR2(40)	VARCHAR(40)
FIELD_NAME_MAP	VARCHAR2(30)	VARCHAR(30)
LOOKUP_TABLE_PRIMARY_KEY	NUMBER	INT
LOOKUP_TABLE_UNIQUE_CODE	VARCHAR2(4)	VARCHAR(4)
LOOKUP_TABLE_NAME	VARCHAR2(50)	VARCHAR(50)

WH_CUSTOM_DATE

Column Name	Oracle Data Type	MSSQL Data Type
VALUE_PK	NUMBER	INT
ENTITY_CODE	VARCHAR2(9)	VARCHAR(9)
DETAIL_VALUE	DATE	DATETIME
TABLE_NAME	VARCHAR2(30)	VARCHAR(30)
COLUMN_NAME	VARCHAR2(30)	VARCHAR(30)
OBJECT_ID	NUMBER	INT
OBJECT_ID_NAME	VARCHAR2(30)	VARCHAR(30)

WH_CUSTOM_MEMO

Column Name	Oracle Data Type	MSSQL Data Type
VALUE_PK	NUMBER	INT
ENTITY_CODE	VARCHAR2(9)	VARCHAR(9)

DETAIL_VALUE	CLOB	NTEXT
TABLE_NAME	VARCHAR2(30)	VARCHAR(30)
COLUMN_NAME	VARCHAR2(30)	VARCHAR(30)
OBJECT_ID	NUMBER	INT
OBJECT_ID_NAME	VARCHAR2(30)	VARCHAR(30)

WH_CUSTOM_NUMB

Column Name	Oracle Data Type	MSSQL Data Type
VALUE_PK	NUMBER	INT
ENTITY_CODE	VARCHAR2(9)	VARCHAR(9)
DETAIL_VALUE	NUMBER	INT
TABLE_NAME	VARCHAR2(30)	VARCHAR(30)
COLUMN_NAME	VARCHAR2(30)	VARCHAR(30)
OBJECT_ID	NUMBER	INT
OBJECT_ID_NAME	VARCHAR2(30)	VARCHAR(30)

WH_CUSTOM_OBJE

Column Name	Oracle Data Type	MSSQL Data Type
VALUE_PK	NUMBER	INT
ENTITY_CODE	VARCHAR2(9)	VARCHAR(9)
DETAIL_VALUE	VARCHAR2(700)	VARCHAR(700)
TABLE_NAME	VARCHAR2(30)	VARCHAR(30)
COLUMN_NAME	VARCHAR2(30)	VARCHAR(30)

OBJECT_ID	NUMBER	INT
OBJECT_ID_NAME	VARCHAR2(30)	VARCHAR(30)

WH_CUSTOM_OBJF

Column Name	Oracle Data Type	MSSQL Data Type
VALUE_PK	NUMBER	INT
ENTITY_CODE	VARCHAR2(9)	VARCHAR(9)
DETAIL_VALUE_FID	NUMBER	INT
TABLE_NAME	VARCHAR2(30)	VARCHAR(30)
COLUMN_NAME	VARCHAR2(30)	VARCHAR(30)
OBJECT_ID	NUMBER	INT
OBJECT_ID_NAME	VARCHAR2(30)	VARCHAR(30)

WH_CUSTOM_TEXT

Column Name	Oracle Data Type	MSSQL Data Type
VALUE_PK	NUMBER	INT
ENTITY_CODE	VARCHAR2(9)	VARCHAR(9)
DETAIL_VALUE	VARCHAR2(2000))	VARCHAR(2000)
TABLE_NAME	VARCHAR2(30)	VARCHAR(30)
COLUMN_NAME	VARCHAR2(30)	VARCHAR(30)
OBJECT_ID	NUMBER	INT
OBJECT_ID_NAME	VARCHAR2(30)	VARCHAR(30)

WH_HELPER_CONTACT

Column Name	Oracle Data Type	MSSQL Data Type
CONTACT_PK	NUMBER	INT
CONTACT_NAME	VARCHAR2(250)	VARCHAR(250)
CONTACT_MIDDLE_NAME	VARCHAR2(50)	VARCHAR(50)
CONTACT_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)
CONTACT_TYPE	VARCHAR2(10)	VARCHAR(10)
CONTACT_DEFAULT_CATEGORY	VARCHAR2(50)	VARCHAR(50)
CONTACT_DEFAULT_CATEGORY_TREE	VARCHAR2(250)	VARCHAR(250)

WH_HELPER_CONTACT_RELATIONS

Column Name	Oracle Data Type	MSSQL Data Type
LEFT_CONTACT_PRIMARY_KEY	NUMBER	INT
LEFT_CONTACT_TYPE	VARCHAR2(10)	VARCHAR(10)
LEFT_CONTACT_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)
LEFT_CONTACT_MIDDLE_NAME	VARCHAR2(50)	VARCHAR(50)
LEFT_CONTACT_NAME	VARCHAR2(250)	VARCHAR(250)
RELATION_NAME	VARCHAR2(50)	VARCHAR(50)
RELATION_TREE_POSITION	VARCHAR2(250)	VARCHAR(250)
RIGHT_CONTACT_PRIMARY_KEY	NUMBER	INT
RIGHT_CONTACT_TYPE	VARCHAR2(10)	VARCHAR(10)
RIGHT_CONTACT_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)
RIGHT_CONTACT_MIDDLE_NAME	VARCHAR2(50)	VARCHAR(50)

RIGHT_CONTACT_NAME	VARCHAR2(250)	VARCHAR(250)
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WH_HELPER_PROJECT

Column Name	Oracle Data Type	MSSQL Data Type
PROJECT_PK	NUMBER	INT
OBJECT_UNIQUE_CODE	VARCHAR2(4)	VARCHAR(4)
OBJECT_TITLE	VARCHAR2(250)	VARCHAR(250)
PROJECT_NUMBER	VARCHAR2(50)	VARCHAR(50)
PROJECT_NAME	VARCHAR2(250)	VARCHAR(250)
DEFAULT_CATEGORY	VARCHAR2(50)	VARCHAR(50)
DEFAULT_CATEGORY_TREE	VARCHAR2(250)	VARCHAR(250)
CURRENT_PHASE	VARCHAR2(250)	VARCHAR(250)
CURRENT_PHASE_UNIQUE_CODE	VARCHAR2(4)	VARCHAR(4)

WH_HELPER_PROJECTS_RELATIONS

Column Name	Oracle Data Type	MSSQL Data Type
LEFT_OBJECT_UNIQUE_CODE	VARCHAR2(10)	VARCHAR(10)
LEFT_OBJECT_TITLE	VARCHAR2(250)	VARCHAR(250)
LEFT_PROJECT_PRIMARY_KEY	NUMBER	INT
LEFT_PROJECT_NUMBER	VARCHAR2(50)	VARCHAR(50)
LEFT_PROJECT_NAME	VARCHAR2(250)	VARCHAR(250)
RELATION_NAME	VARCHAR2(50)	VARCHAR(50)
RELATION_TREE_POSITION	VARCHAR2(250)	VARCHAR(250)

RIGHT_OBJECT_UNIQUE_CODE	VARCHAR2(10)	VARCHAR(10)
RIGHT_OBJECT_TITLE	VARCHAR2(250)	VARCHAR(250)
RIGHT_PROJECT_PRIMARY_KEY	NUMBER	INT
RIGHT_PROJECT_NUMBER	VARCHAR2(50)	VARCHAR(50)
RIGHT_PROJECT_NAME	VARCHAR2(250)	VARCHAR(250)

WH_LAST_REFRESH

Column Name	Oracle Data Type	MSSQL Data Type
ENTITY_CODE	VARCHAR2(9)	VARCHAR(9)
LAST_REFRESH_DATE	DATE	DATETIME
LAST_REFRESH_SYSTEM_DATE	DATE	DATETIME

Note: Unlike all the other tables described in this chapter which exist in the "target" database, table **WH_REMOVED_RECORDS** exists in the "source database".

WH_REMOVED_RECORDS

Column Name	Oracle Data Type	MSSQL Data Type
ENTITY_CODE	VARCHAR2(4)	VARCHAR(4)
APPLICATION_ID	NUMBER	INT
PRIMARY_KEY	NUMBER	INT
MODIFIED_ON	DATE	DATETIME
REMOVED_ON	DATE	DATETIME

WH_VERSION

Column Name	Oracle Data Type	MSSQL Data Type
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VERSION_PRIMARY_KEY	NUMBER	INT
UPGRADE_DATE	DATE	DATETIME
VERSION	VARCHAR2(50)	VARCHAR(50)
PRODUCT_NAME	VARCHAR2(250)	VARCHAR(250)
DESCRIPTION	VARCHAR2(250)	VARCHAR(250)

WH_HELPER_ACCOUNT_WORKFLOW

Column Name	Oracle Data Type	MSSQL Data Type
ACCOUNT_PRIMARY_KEY	NUMBER	INT
ACCOUNT_NAME	VARCHAR2(250)	VARCHAR2(250)
ACCOUNT_TYPE	VARCHAR2(7)	VARCHAR2(7)
ACCOUNT_OVERDRAFT_TYPE	VARCHAR2(30)	VARCHAR2(30)
ACCOUNT_PERIOD_START_ON_DATE	DATE	DATETIME
ACCOUNT_PERIOD_END_ON_DATE	DATE	DATETIME
ACCOUNT_STATUS	VARCHAR2(8)	VARCHAR2(8)
ACCOUNT_ALLOW_POSTING	VARCHAR2(1)	VARCHAR2(1)
ACCOUNT_ALLOCATION_LIMIT	NUMBER	DECIMAL(28,12)
ACCOUNT_TOTAL_ALLOCATED	NUMBER	DECIMAL(28,12)
ACCOUNT_TOTAL_USED	NUMBER	DECIMAL(28,12)
ACCOUNT_BALANCE	NUMBER	DECIMAL(28,12)
PARENT_ACCOUNT_PRIMARY_KEY	NUMBER	INT
PARENT_ACCOUNT_NAME	VARCHAR2(250)	VARCHAR2(250)

WORKFLOW_PRIMARY_KEY	NUMBER	INT
REQUEST_NAME	VARCHAR2(50)	VARCHAR2(50)
REQUESTED_BY_CONTACT_PK	NUMBER	INT
REQUESTED_BY_CONTACT_TYPE	VARCHAR2(7)	VARCHAR2(7)
REQUESTED_BY_FIRST_NAME	VARCHAR2(50)	VARCHAR2(50)
REQUESTED_BY_MIDDLE_NAME	VARCHAR2(50)	VARCHAR2(50)
REQUESTED_BY_NAME	VARCHAR2(250)	VARCHAR2(250)
REQUESTED_ON	DATE	DATETIME
COMPLETED_ON	DATE	DATETIME
WORKFLOW_STATUS	VARCHAR2(30)	VARCHAR2(30)
COMMENT_TO_REQUESTOR	VARCHAR2(2000)	VARCHAR(2000)
EXPIRES_ON	DATE	DATETIME
EXPIRE_ACTION	VARCHAR2(30)	VARCHAR2(30)
TRANSACTION_STATUS	VARCHAR2(250)	VARCHAR2(250)
CURRENT_STOP_NO	NUMBER	INT
REJECT_ACTION	VARCHAR2(30)	VARCHAR2(30)
REJECT_REASON	VARCHAR2(50)	VARCHAR2(50)
UPDATE_WHILE_PENDING	VARCHAR2(105)	VARCHAR2(105)
PROCESS_MANAGER_CONTACT_PK	NUMBER	INT
PROCESS_MANAGER_CONTACT_TYPE	VARCHAR2(7)	VARCHAR2(7)
PROCESS_MANAGER_FIRST_NAME	VARCHAR2(50)	VARCHAR2(50)

PROCESS_MANAGER_MIDDLE_NAME	VARCHAR2(50)	VARCHAR2(50)
PROCESS_MANAGER_NAME	VARCHAR2(250)	VARCHAR2(250)
STOP_MEMBER_PRIMARY_KEY	NUMBER	INT
STOP_PRIMARY_KEY	NUMBER	INT
STOP	NUMBER	INT
PERFORMER_CONTACT_PK	NUMBER	INT
PERFORMER_CONTACT_TYPE	VARCHAR2(7)	VARCHAR2(7)
PERFORMER_FIRST_NAME	VARCHAR2(50)	VARCHAR2(50)
PERFORMER_MIDDLE_NAME	VARCHAR2(50)	VARCHAR2(50)
PERFORMER_NAME	VARCHAR2(250)	VARCHAR2(250)
STOP_STATUS	VARCHAR2(40)	VARCHAR2(40)
ACTION_DATE	DATE	DATETIME
STOP_EXPIRATION_DATE	DATE	DATETIME
INTERNAL_COMMENT	VARCHAR2(2000)	VARCHAR2(2000)
EMAIL_SENT	VARCHAR2(3)	VARCHAR(3)
CREATED_BY_CONTACT_PK	NUMBER	INT
CREATED_BY_CONTACT_TYPE	VARCHAR2(7)	VARCHAR(7)
CREATED_BY_CONTACT_NAME	VARCHAR2(250)	VARCHAR(250)
CREATED_BY_CONTACT_MIDDLE_NAME	VARCHAR2(50)	VARCHAR(50)
CREATED_BY_CONTACT_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)
CREATED_ON	DATE	DATETIME

MODIFIED_BY_CONTACT_PK	NUMBER	INT
MODIFIED_BY_CONTACT_NAME	VARCHAR2(250)	VARCHAR(250)
MODIFIED_BY_CONTACT_MID_NAME	VARCHAR2(50)	VARCHAR(50)
MODIFIED_BY_CONTACT_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)
MODIFIED_BY_CONTACT_TYPE	VARCHAR2(7)	VARCHAR(7)
MODIFIED_ON	DATE	DATETIME
STOP_PRIMARY_KEY_EXTRA	NUMBER	INT
STOP_MEMBER_PRIMARY_KEY_EXTRA	NUMBER	INT

WH_HELPER_ACCOUNT_WORKFLOW_RVW

Column Name	Oracle Data Type	MSSQL Data Type
ACCOUNT_PRIMARY_KEY	NUMBER	INT
ACCOUNT_NAME	VARCHAR2(250)	VARCHAR(250)
ACCOUNT_TYPE	VARCHAR2(7)	VARCHAR(7)
ACCOUNT_OVERDRAFT_TYPE	VARCHAR2(30)	VARCHAR(30)
ACCOUNT_PERIOD_START_ON_DATE	DATE	DATETIME
ACCOUNT_PERIOD_END_ON_DATE	DATE	DATETIME
ACCOUNT_STATUS	VARCHAR2(8)	VARCHAR(8)
ACCOUNT_ALLOW_POSTING	VARCHAR2(1)	VARCHAR(1)
ACCOUNT_ALLOCATION_LIMIT	NUMBER	DECIMAL(28,12)
ACCOUNT_TOTAL_ALLOCATED	NUMBER	DECIMAL(28,12)
ACCOUNT_TOTAL_USED	NUMBER	DECIMAL(28,12)

ACCOUNT_BALANCE	NUMBER	DECIMAL(28,12)
PARENT_ACCOUNT_PRIMARY_KEY	NUMBER	INT
PARENT_ACCOUNT_NAME	VARCHAR2(250)	VARCHAR(250)
WORKFLOW_PRIMARY_KEY	NUMBER	INT
REQUEST_NAME	VARCHAR2(50)	VARCHAR(50)
REQUESTED_BY_CONTACT_PK	NUMBER	INT
REQUESTED_BY_CONTACT_TYPE	VARCHAR2(7)	VARCHAR(7)
REQUESTED_BY_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)
REQUESTED_BY_MIDDLE_NAME	VARCHAR2(50)	VARCHAR(50)
REQUESTED_BY_NAME	VARCHAR2(250)	VARCHAR(250)
REQUESTED_ON	DATE	DATETIME
COMPLETED_ON	DATE	DATETIME
WORKFLOW_STATUS	VARCHAR2(30)	VARCHAR(30)
EXPIRES_ON	DATE	DATETIME
CURRENT_STOP_NO	NUMBER	INT
PROCESS_MANAGER_CONTACT_PK	NUMBER	INT
PROCESS_MANAGER_CONTACT_TYPE	VARCHAR2(7)	VARCHAR(7)
PROCESS_MANAGER_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)
PROCESS_MANAGER_MIDDLE_NAME	VARCHAR2(50)	VARCHAR(50)
PROCESS_MANAGER_NAME	VARCHAR2(250)	VARCHAR(250)
STOP_PRIMARY_KEY	NUMBER	INT

STOP	NUMBER	INT
STOP_MEMBER_PRIMARY_KEY	NUMBER	INT
STOP_STATUS	VARCHAR2(40)	VARCHAR(40)
EMAIL_SENT	VARCHAR2(3)	VARCHAR(3)
REVIEW_PRIMARY_KEY	NUMBER	INT
REVIEW_PERFORMER_CONTACT_PK	NUMBER	INT
REVIEW_PERFORMER_CONTACT_TYPE	VARCHAR2(7)	VARCHAR(7)
REVIEW_PERFORMER_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)
REVIEW_PERFORMER_MIDDLE_NAME	VARCHAR2(50)	VARCHAR(50)
REVIEW_PERFORMER_NAME	VARCHAR2(250)	VARCHAR(250)
REVIEW_STATUS	VARCHAR2(20)	VARCHAR(20)
REVIEW_ACTION_DATE	DATE	DATETIME
REVIEW_APPROVAL_COMMENT	VARCHAR2(250)	VARCHAR(250)
REVIEW_REQUEST_COMMENT	VARCHAR2(250)	VARCHAR(250)
CREATED_ON	DATE	DATETIME
CREATED_BY_CONTACT_PK	NUMBER	INT
CREATED_BY_CONTACT_TYPE	VARCHAR2(7)	VARCHAR(7)
CREATED_BY_CONTACT_NAME	VARCHAR2(250)	VARCHAR(250)
CREATED_BY_CONTACT_MIDDLE_NAME	VARCHAR2(50)	VARCHAR(50)
CREATED_BY_CONTACT_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)
MODIFIED_ON	DATE	DATETIME

MODIFIED_BY_CONTACT_PK	NUMBER	INT
MODIFIED_BY_CONTACT_TYPE	VARCHAR2(7)	VARCHAR(7)
MODIFIED_BY_CONTACT_NAME	VARCHAR2(250)	VARCHAR(250)
MODIFIED_BY_CONTACT_MID_NAME	VARCHAR2(50)	VARCHAR(50)
MODIFIED_BY_CONTACT_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)

WH_HELPER_APPOINTMENT_WORKFLOW

Column Name	Oracle Data Type	MSSQL Data Type
APPOINTMENT_PRIMARY_KEY	NUMBER	INT
APPOINTMENT_SUBJECT	VARCHAR2(250)	VARCHAR2(250)
APPOINTMENT_LOCATION	VARCHAR2(250)	VARCHAR2(250)
APPOINTMENT_AREA	VARCHAR2(50)	VARCHAR2(50)
APPOINTMENT_START_ON	DATE	DATETIME
APPOINTMENT_END_ON	DATE	DATETIME
APPOINTMENT_IS_ALL_DAY	VARCHAR2(1)	VARCHAR2(1)
APPOINTMENT_DEFAULT_CATEGORY	VARCHAR2(50)	VARCHAR2(50)
APPOINTMENT_DEFAULT_CAT_TREE	VARCHAR2(250)	VARCHAR(250)
PROJECT_UNIQUE_CODE	VARCHAR2(4)	VARCHAR(4)
PROJECT_OBJECT_TITLE	VARCHAR2(250)	VARCHAR(250)
PROJECT_PRIMARY_KEY	NUMBER	INT
PROJECT_NAME	VARCHAR2(250)	VARCHAR(250)
PROJECT_NUMBER	VARCHAR2(50)	VARCHAR(50)

PROJECT_DEFAULT_CATEGORY	VARCHAR2(50)	VARCHAR(50)
MILESTONE_UNIQUE_CODE	VARCHAR2(4)	VARCHAR(4)
MILESTONE_OBJECT_TITLE	VARCHAR2(250)	VARCHAR(250)
MILESTONE_PRIMARY_KEY	NUMBER	INT
MILESTONE_SUBJECT	VARCHAR2(250)	VARCHAR(250)
MILESTONE_DATE	DATE	DATETIME
MILESTONE_DEFAULT_CATEGORY	VARCHAR2(50)	VARCHAR(50)
WORKFLOW_PRIMARY_KEY	NUMBER	INT
REQUEST_NAME	VARCHAR2(50)	VARCHAR(50)
REQUESTED_BY_CONTACT_PK	NUMBER	INT
REQUESTED_BY_CONTACT_TYPE	VARCHAR2(7)	VARCHAR(7)
REQUESTED_BY_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)
REQUESTED_BY_MIDDLE_NAME	VARCHAR2(50)	VARCHAR(50)
REQUESTED_BY_NAME	VARCHAR2(250)	VARCHAR(250)
REQUESTED_ON	DATE	DATETIME
COMPLETED_ON	DATE	DATETIME
WORKFLOW_STATUS	VARCHAR2(30)	VARCHAR(30)
COMMENT_TO_REQUESTOR	VARCHAR2(2000))	VARCHAR(2000)
EXPIRES_ON	DATE	DATETIME
EXPIRE_ACTION	VARCHAR2(30)	VARCHAR(30)
TRANSACTION_STATUS	VARCHAR2(250)	VARCHAR(250)

CURRENT_STOP_NO	NUMBER	INT
REJECT_ACTION	VARCHAR2(30)	VARCHAR(30)
REJECT_REASON	VARCHAR2(50)	VARCHAR(50)
UPDATE_WHILE_PENDING	VARCHAR2(105)	VARCHAR(105)
PROCESS_MANAGER_CONTACT_PK	NUMBER	INT
PROCESS_MANAGER_CONTACT_TYPE	VARCHAR2(7)	VARCHAR(7)
PROCESS_MANAGER_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)
PROCESS_MANAGER_MIDDLE_NAME	VARCHAR2(50)	VARCHAR(50)
PROCESS_MANAGER_NAME	VARCHAR2(250)	VARCHAR(250)
STOP_MEMBER_PRIMARY_KEY	NUMBER	INT
STOP_PRIMARY_KEY	NUMBER	INT
STOP	NUMBER	INT
PERFORMER_CONTACT_PK	NUMBER	INT
PERFORMER_CONTACT_TYPE	VARCHAR2(7)	VARCHAR(7)
PERFORMER_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)
PERFORMER_MIDDLE_NAME	VARCHAR2(50)	VARCHAR(50)
PERFORMER_NAME	VARCHAR2(250)	VARCHAR(250)
STOP_STATUS	VARCHAR2(40)	VARCHAR(40)
ACTION_DATE	DATE	DATETIME
STOP_EXPIRATION_DATE	DATE	DATETIME
INTERNAL_COMMENT	VARCHAR2(2000))	VARCHAR(2000)

EMAIL_SENT	VARCHAR2(3)	VARCHAR(3)
CREATED_BY_CONTACT_PK	NUMBER	INT
CREATED_BY_CONTACT_TYPE	VARCHAR2(7)	VARCHAR(7)
CREATED_BY_CONTACT_NAME	VARCHAR2(250)	VARCHAR(250)
CREATED_BY_CONTACT_MIDDLE_NAME	VARCHAR2(50)	VARCHAR(50)
CREATED_BY_CONTACT_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)
CREATED_ON	DATE	DATETIME
MODIFIED_BY_CONTACT_PK	NUMBER	INT
MODIFIED_BY_CONTACT_NAME	VARCHAR2(250)	VARCHAR(250)
MODIFIED_BY_CONTACT_MID_NAME	VARCHAR2(50)	VARCHAR(50)
MODIFIED_BY_CONTACT_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)
MODIFIED_BY_CONTACT_TYPE	VARCHAR2(7)	VARCHAR(7)
MODIFIED_ON	DATE	DATETIME
STOP_PRIMARY_KEY_EXTRA	NUMBER	INT
STOP_MEMBER_PRIMARY_KEY_EXTRA	NUMBER	INT

WH_HELPER_APPOINTMENT_WKFL_RVW

Column Name	Oracle Data Type	MSSQL Data Type
APPOINTMENT_PRIMARY_KEY	NUMBER	INT
APPOINTMENT_SUBJECT	VARCHAR2(250)	VARCHAR(250)
APPOINTMENT_LOCATION	VARCHAR2(250)	VARCHAR(250)
APPOINTMENT_AREA	VARCHAR2(50)	VARCHAR(50)

APPOINTMENT_START_ON	DATE	DATETIME
APPOINTMENT_END_ON	DATE	DATETIME
APPOINTMENT_IS_ALL_DAY	VARCHAR2(1)	VARCHAR(1)
APPOINTMENT_DEFAULT_CATEGORY	VARCHAR2(50)	VARCHAR(50)
APPOINTMENT_DEFAULT_CAT_TREE	VARCHAR2(250)	VARCHAR(250)
PROJECT_UNIQUE_CODE	VARCHAR2(4)	VARCHAR(4)
PROJECT_OBJECT_TITLE	VARCHAR2(250)	VARCHAR(250)
PROJECT_PRIMARY_KEY	NUMBER	INT
PROJECT_NAME	VARCHAR2(250)	VARCHAR(250)
PROJECT_NUMBER	VARCHAR2(50)	VARCHAR(50)
PROJECT_DEFAULT_CATEGORY	VARCHAR2(50)	VARCHAR(50)
MILESTONE_UNIQUE_CODE	VARCHAR2(4)	VARCHAR(4)
MILESTONE_OBJECT_TITLE	VARCHAR2(250)	VARCHAR(250)
MILESTONE_PRIMARY_KEY	NUMBER	INT
MILESTONE_SUBJECT	VARCHAR2(250)	VARCHAR(250)
MILESTONE_DATE	DATE	DATETIME
MILESTONE_DEFAULT_CATEGORY	VARCHAR2(50)	VARCHAR(50)
WORKFLOW_PRIMARY_KEY	NUMBER	INT
REQUEST_NAME	VARCHAR2(50)	VARCHAR(50)
REQUESTED_BY_CONTACT_PK	NUMBER	INT
REQUESTED_BY_CONTACT_TYPE	VARCHAR2(7)	VARCHAR(7)

REQUESTED_BY_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)
REQUESTED_BY_MIDDLE_NAME	VARCHAR2(50)	VARCHAR(50)
REQUESTED_BY_NAME	VARCHAR2(250)	VARCHAR(250)
REQUESTED_ON	DATE	DATETIME
COMPLETED_ON	DATE	DATETIME
WORKFLOW_STATUS	VARCHAR2(30)	VARCHAR(30)
EXPIRES_ON	DATE	DATETIME
CURRENT_STOP_NO	NUMBER	INT
PROCESS_MANAGER_CONTACT_PK	NUMBER	INT
PROCESS_MANAGER_CONTACT_TYPE	VARCHAR2(7)	VARCHAR(7)
PROCESS_MANAGER_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)
PROCESS_MANAGER_MIDDLE_NAME	VARCHAR2(50)	VARCHAR(50)
PROCESS_MANAGER_NAME	VARCHAR2(250)	VARCHAR(250)
STOP_PRIMARY_KEY	NUMBER	INT
STOP	NUMBER	INT
STOP_MEMBER_PRIMARY_KEY	NUMBER	INT
STOP_STATUS	VARCHAR2(40)	VARCHAR(40)
EMAIL_SENT	VARCHAR2(3)	VARCHAR(3)
REVIEW_PRIMARY_KEY	NUMBER	INT
REVIEW_PERFORMER_CONTACT_PK	NUMBER	INT
REVIEW_PERFORMER_CONTACT_TYPE	VARCHAR2(7)	VARCHAR(7)

REVIEW_PERFORMER_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)
REVIEW_PERFORMER_MIDDLE_NAME	VARCHAR2(50)	VARCHAR(50)
REVIEW_PERFORMER_NAME	VARCHAR2(250)	VARCHAR(250)
REVIEW_STATUS	VARCHAR2(20)	VARCHAR(20)
REVIEW_ACTION_DATE	DATE	DATETIME
REVIEW_APPROVAL_COMMENT	VARCHAR2(250)	VARCHAR(250)
REVIEW_REQUEST_COMMENT	VARCHAR2(250)	VARCHAR(250)
CREATED_ON	DATE	DATETIME
CREATED_BY_CONTACT_PK	NUMBER	INT
CREATED_BY_CONTACT_TYPE	VARCHAR2(7)	VARCHAR(7)
CREATED_BY_CONTACT_NAME	VARCHAR2(250)	VARCHAR(250)
CREATED_BY_CONTACT_MIDDLE_NAME	VARCHAR2(50)	VARCHAR(50)
CREATED_BY_CONTACT_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)
MODIFIED_ON	DATE	DATETIME
MODIFIED_BY_CONTACT_PK	NUMBER	INT
MODIFIED_BY_CONTACT_TYPE	VARCHAR2(7)	VARCHAR(7)
MODIFIED_BY_CONTACT_NAME	VARCHAR2(250)	VARCHAR(250)
MODIFIED_BY_CONTACT_MID_NAME	VARCHAR2(50)	VARCHAR(50)
MODIFIED_BY_CONTACT_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)

WH_HELPER_CONTACT_WORKFLOW

Column Name	Oracle Data Type	MSSQL Data Type
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CONTACT_PRIMARY_KEY	NUMBER	INT
CONTACT_TYPE	VARCHAR2(7)	VARCHAR(7)
CONTACT_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)
CONTACT_MIDDLE_NAME	VARCHAR2(50)	VARCHAR(50)
CONTACT_NAME	VARCHAR2(250)	VARCHAR(250)
WORKFLOW_PRIMARY_KEY	NUMBER	INT
REQUEST_NAME	VARCHAR2(50)	VARCHAR(50)
REQUESTED_BY_CONTACT_PK	NUMBER	INT
REQUESTED_BY_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)
REQUESTED_BY_MIDDLE_NAME	VARCHAR2(50)	VARCHAR(50)
REQUESTED_BY_NAME	VARCHAR2(250)	VARCHAR(250)
REQUESTED_BY_CONTACT_TYPE	VARCHAR2(7)	VARCHAR(7)
REQUESTED_ON	DATE	DATETIME
COMPLETED_ON	DATE	DATETIME
WORKFLOW_STATUS	VARCHAR2(30)	VARCHAR(30)
COMMENT_TO_REQUESTOR	VARCHAR2(2000))	VARCHAR(2000)
EXPIRES_ON	DATE	DATETIME
EXPIRE_ACTION	VARCHAR2(30)	VARCHAR(30)
TRANSACTION_STATUS	VARCHAR2(250)	VARCHAR(250)
CURRENT_STOP_NO	NUMBER	INT
REJECT_ACTION	VARCHAR2(30)	VARCHAR(30)

REJECT_REASON	VARCHAR2(50)	VARCHAR(50)
UPDATE_WHILE_PENDING	VARCHAR2(105)	VARCHAR(105)
PROCESS_MANAGER_CONTACT_PK	NUMBER	INT
PROCESS_MANAGER_CONTACT_TYPE	VARCHAR2(7)	VARCHAR(7)
PROCESS_MANAGER_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)
PROCESS_MANAGER_MIDDLE_NAME	VARCHAR2(50)	VARCHAR(50)
PROCESS_MANAGER_NAME	VARCHAR2(250)	VARCHAR(250)
STOP_MEMBER_PRIMARY_KEY	NUMBER	INT
STOP_PRIMARY_KEY	NUMBER	INT
STOP	NUMBER	INT
PERFORMER_CONTACT_PK	NUMBER	INT
PERFORMER_CONTACT_TYPE	VARCHAR2(7)	VARCHAR(7)
PERFORMER_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)
PERFORMER_MIDDLE_NAME	VARCHAR2(50)	VARCHAR(50)
PERFORMER_NAME	VARCHAR2(250)	VARCHAR(250)
STOP_STATUS	VARCHAR2(40)	VARCHAR(40)
ACTION_DATE	DATE	DATETIME
STOP_EXPIRATION_DATE	DATE	DATETIME
INTERNAL_COMMENT	VARCHAR2(2000))	VARCHAR(2000)
EMAIL_SENT	VARCHAR2(3)	VARCHAR(3)
CREATED_BY_CONTACT_PK	NUMBER	INT

CREATED_BY_CONTACT_TYPE	VARCHAR2(7)	VARCHAR(7)
CREATED_BY_CONTACT_NAME	VARCHAR2(250)	VARCHAR(250)
CREATED_BY_CONTACT_MIDDLE_NAME	VARCHAR2(50)	VARCHAR(50)
CREATED_BY_CONTACT_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)
CREATED_ON	DATE	DATETIME
MODIFIED_BY_CONTACT_PK	NUMBER	INT
MODIFIED_BY_CONTACT_NAME	VARCHAR2(250)	VARCHAR(250)
MODIFIED_BY_CONTACT_MID_NAME	VARCHAR2(50)	VARCHAR(50)
MODIFIED_BY_CONTACT_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)
MODIFIED_BY_CONTACT_TYPE	VARCHAR2(7)	VARCHAR(7)
MODIFIED_ON	DATE	DATETIME
STOP_PRIMARY_KEY_EXTRA	NUMBER	INT
STOP_MEMBER_PRIMARY_KEY_EXTRA	NUMBER	INT

WH_HELPER_CONTACT_WORKFLOW_RVW

Column Name	Oracle Data Type	MSSQL Data Type
CONTACT_PRIMARY_KEY	NUMBER	INT
CONTACT_TYPE	VARCHAR2(7)	VARCHAR(7)
CONTACT_MIDDLE_NAME	VARCHAR2(50)	VARCHAR(50)
CONTACT_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)
CONTACT_NAME	VARCHAR2(250)	VARCHAR(250)
WORKFLOW_PRIMARY_KEY	NUMBER	INT

REQUEST_NAME	VARCHAR2(50)	VARCHAR(50)
REQUESTED_BY_CONTACT_PK	NUMBER	INT
REQUESTED_BY_CONTACT_TYPE	VARCHAR2(7)	VARCHAR(7)
REQUESTED_BY_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)
REQUESTED_BY_MIDDLE_NAME	VARCHAR2(50)	VARCHAR(50)
REQUESTED_BY_NAME	VARCHAR2(250)	VARCHAR(250)
REQUESTED_ON	DATE	DATETIME
COMPLETED_ON	DATE	DATETIME
WORKFLOW_STATUS	VARCHAR2(30)	VARCHAR(30)
EXPIRES_ON	DATE	DATETIME
CURRENT_STOP_NO	NUMBER	INT
PROCESS_MANAGER_CONTACT_PK	NUMBER	INT
PROCESS_MANAGER_CONTACT_TYPE	VARCHAR2(7)	VARCHAR(7)
PROCESS_MANAGER_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)
PROCESS_MANAGER_MIDDLE_NAME	VARCHAR2(50)	VARCHAR(50)
PROCESS_MANAGER_NAME	VARCHAR2(250)	VARCHAR(250)
STOP_PRIMARY_KEY	NUMBER	INT
STOP	NUMBER	INT
STOP_MEMBER_PRIMARY_KEY	NUMBER	INT
STOP_STATUS	VARCHAR2(40)	VARCHAR(40)
EMAIL_SENT	VARCHAR2(3)	VARCHAR(3)

REVIEW_PRIMARY_KEY	NUMBER	INT
REVIEW_PERFORMER_CONTACT_PK	NUMBER	INT
REVIEW_PERFORMER_CONTACT_TYPE	VARCHAR2(7)	VARCHAR(7)
REVIEW_PERFORMER_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)
REVIEW_PERFORMER_MIDDLE_NAME	VARCHAR2(50)	VARCHAR(50)
REVIEW_PERFORMER_NAME	VARCHAR2(250)	VARCHAR(250)
REVIEW_STATUS	VARCHAR2(20)	VARCHAR(20)
REVIEW_ACTION_DATE	DATE	DATETIME
REVIEW_APPROVAL_COMMENT	VARCHAR2(250)	VARCHAR(250)
REVIEW_REQUEST_COMMENT	VARCHAR2(250)	VARCHAR(250)
CREATED_ON	DATE	DATETIME
CREATED_BY_CONTACT_PK	NUMBER	INT
CREATED_BY_CONTACT_TYPE	VARCHAR2(7)	VARCHAR(7)
CREATED_BY_CONTACT_NAME	VARCHAR2(250)	VARCHAR(250)
CREATED_BY_CONTACT_MIDDLE_NAME	VARCHAR2(50)	VARCHAR(50)
CREATED_BY_CONTACT_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)
MODIFIED_ON	DATE	DATETIME
MODIFIED_BY_CONTACT_PK	NUMBER	INT
MODIFIED_BY_CONTACT_TYPE	VARCHAR2(7)	VARCHAR(7)
MODIFIED_BY_CONTACT_NAME	VARCHAR2(250)	VARCHAR(250)
MODIFIED_BY_CONTACT_MID_NAME	VARCHAR2(50)	VARCHAR(50)

MODIFIED_BY_CONTACT_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)
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WH_HELPER_DOCUMENT_WORKFLOW

Column Name	Oracle Data Type	MSSQL Data Type
DOCUMENT_PRIMARY_KEY	NUMBER	INT
DOCUMENT_NAME	VARCHAR2(250)	VARCHAR(250)
DOCUMENT_TREE_KEY	VARCHAR2(700)	VARCHAR(700)
DOCUMENT_FILE_TYPE	VARCHAR2(50)	VARCHAR(50)
WORKFLOW_PRIMARY_KEY	NUMBER	INT
REQUEST_NAME	VARCHAR2(50)	VARCHAR(50)
REQUESTED_BY_CONTACT_PK	NUMBER	INT
REQUESTED_BY_CONTACT_TYPE	VARCHAR2(7)	VARCHAR(7)
REQUESTED_BY_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)
REQUESTED_BY_MIDDLE_NAME	VARCHAR2(50)	VARCHAR(50)
REQUESTED_BY_NAME	VARCHAR2(250)	VARCHAR(250)
REQUESTED_ON	DATE	DATETIME
COMPLETED_ON	DATE	DATETIME
WORKFLOW_STATUS	VARCHAR2(30)	VARCHAR(30)
COMMENT_TO_REQUESTOR	VARCHAR2(2000)	VARCHAR(2000)
EXPIRES_ON	DATE	DATETIME
EXPIRE_ACTION	VARCHAR2(30)	VARCHAR(30)
TRANSACTION_STATUS	VARCHAR2(250)	VARCHAR(250)

CURRENT_STOP_NO	NUMBER	INT
REJECT_ACTION	VARCHAR2(30)	VARCHAR(30)
REJECT_REASON	VARCHAR2(50)	VARCHAR(50)
UPDATE_WHILE_PENDING	VARCHAR2(105)	VARCHAR(105)
PROCESS_MANAGER_CONTACT_PK	NUMBER	INT
PROCESS_MANAGER_CONTACT_TYPE	VARCHAR2(7)	VARCHAR(7)
PROCESS_MANAGER_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)
PROCESS_MANAGER_MIDDLE_NAME	VARCHAR2(50)	VARCHAR(50)
PROCESS_MANAGER_NAME	VARCHAR2(250)	VARCHAR(250)
STOP_MEMBER_PRIMARY_KEY	NUMBER	INT
STOP_PRIMARY_KEY	NUMBER	INT
STOP	NUMBER	INT
PERFORMER_CONTACT_PK	NUMBER	INT
PERFORMER_CONTACT_TYPE	VARCHAR2(7)	VARCHAR(7)
PERFORMER_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)
PERFORMER_MIDDLE_NAME	VARCHAR2(50)	VARCHAR(50)
PERFORMER_NAME	VARCHAR2(250)	VARCHAR(250)
STOP_STATUS	VARCHAR2(40)	VARCHAR(40)
ACTION_DATE	DATE	DATETIME
STOP_EXPIRATION_DATE	DATE	DATETIME
INTERNAL_COMMENT	VARCHAR2(2000)	VARCHAR(2000)

EMAIL_SENT	VARCHAR2(3)	VARCHAR(3)
CREATED_BY_CONTACT_PK	NUMBER	INT
CREATED_BY_CONTACT_TYPE	VARCHAR2(7)	VARCHAR(7)
CREATED_BY_CONTACT_NAME	VARCHAR2(250)	VARCHAR(250)
CREATED_BY_CONTACT_MIDDLE_NAME	VARCHAR2(50)	VARCHAR(50)
CREATED_BY_CONTACT_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)
CREATED_ON	DATE	DATETIME
MODIFIED_BY_CONTACT_PK	NUMBER	INT
MODIFIED_BY_CONTACT_NAME	VARCHAR2(250)	VARCHAR(250)
MODIFIED_BY_CONTACT_MID_NAME	VARCHAR2(50)	VARCHAR(50)
MODIFIED_BY_CONTACT_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)
MODIFIED_BY_CONTACT_TYPE	VARCHAR2(7)	VARCHAR(7)
MODIFIED_ON	DATE	DATETIME
STOP_PRIMARY_KEY_EXTRA	NUMBER	INT
STOP_MEMBER_PRIMARY_KEY_EXTRA	NUMBER	INT

WH_HELPER_DOCUMENT_WKFL_RVW

Column Name	Oracle Data Type	MSSQL Data Type
DOCUMENT_PRIMARY_KEY	NUMBER	INT
DOCUMENT_NAME	VARCHAR2(250)	VARCHAR(250)
DOCUMENT_TREE_KEY	VARCHAR2(700)	VARCHAR(700)
DOCUMENT_FILE_TYPE	VARCHAR2(50)	VARCHAR(50)

WORKFLOW_PRIMARY_KEY	NUMBER	INT
REQUEST_NAME	VARCHAR2(50)	VARCHAR(50)
REQUESTED_BY_CONTACT_PK	NUMBER	INT
REQUESTED_BY_CONTACT_TYPE	VARCHAR2(7)	VARCHAR(7)
REQUESTED_BY_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)
REQUESTED_BY_MIDDLE_NAME	VARCHAR2(50)	VARCHAR(50)
REQUESTED_BY_NAME	VARCHAR2(250)	VARCHAR(250)
REQUESTED_ON	DATE	DATETIME
COMPLETED_ON	DATE	DATETIME
WORKFLOW_STATUS	VARCHAR2(30)	VARCHAR(30)
EXPIRES_ON	DATE	DATETIME
CURRENT_STOP_NO	NUMBER	INT
PROCESS_MANAGER_CONTACT_PK	NUMBER	INT
PROCESS_MANAGER_CONTACT_TYPE	VARCHAR2(7)	VARCHAR(7)
PROCESS_MANAGER_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)
PROCESS_MANAGER_MIDDLE_NAME	VARCHAR2(50)	VARCHAR(50)
PROCESS_MANAGER_NAME	VARCHAR2(250)	VARCHAR(250)
STOP_PRIMARY_KEY	NUMBER	INT
STOP	NUMBER	INT
STOP_MEMBER_PRIMARY_KEY	NUMBER	INT
STOP_STATUS	VARCHAR2(40)	VARCHAR(40)

EMAIL_SENT	VARCHAR2(3)	VARCHAR(3)
REVIEW_PRIMARY_KEY	NUMBER	INT
REVIEW_PERFORMER_CONTACT_PK	NUMBER	INT
REVIEW_PERFORMER_CONTACT_TYPE	VARCHAR2(7)	VARCHAR(7)
REVIEW_PERFORMER_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)
REVIEW_PERFORMER_MIDDLE_NAME	VARCHAR2(50)	VARCHAR(50)
REVIEW_PERFORMER_NAME	VARCHAR2(250)	VARCHAR(250)
REVIEW_STATUS	VARCHAR2(20)	VARCHAR(20)
REVIEW_ACTION_DATE	DATE	DATETIME
REVIEW_APPROVAL_COMMENT	VARCHAR2(250)	VARCHAR(250)
REVIEW_REQUEST_COMMENT	VARCHAR2(250)	VARCHAR(250)
CREATED_ON	DATE	DATETIME
CREATED_BY_CONTACT_PK	NUMBER	INT
CREATED_BY_CONTACT_TYPE	VARCHAR2(7)	VARCHAR(7)
CREATED_BY_CONTACT_NAME	VARCHAR2(250)	VARCHAR(250)
CREATED_BY_CONTACT_MIDDLE_NAME	VARCHAR2(50)	VARCHAR(50)
CREATED_BY_CONTACT_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)
MODIFIED_ON	DATE	DATETIME
MODIFIED_BY_CONTACT_PK	NUMBER	INT
MODIFIED_BY_CONTACT_TYPE	VARCHAR2(7)	VARCHAR(7)
MODIFIED_BY_CONTACT_NAME	VARCHAR2(250)	VARCHAR(250)

MODIFIED_BY_CONTACT_MID_NAME	VARCHAR2(50)	VARCHAR(50)
MODIFIED_BY_CONTACT_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)

WH_HELPER_EXPENSE_WORKFLOW

Column Name	Oracle Data Type	MSSQL Data Type
EXPENSE_PRIMARY_KEY	NUMBER	INT
EXPENSE_DATE	DATE	DATETIME
EXPENSE_DESCRIPTION	VARCHAR2(250)	VARCHAR(250)
EXPENSE_POSTING_STATUS	VARCHAR2(19)	VARCHAR(19)
EXPENSED_BY_CONTACT_PK	NUMBER	INT
EXPENSED_BY_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)
EXPENSED_BY_NAME	VARCHAR2(250)	VARCHAR(250)
EXPENSED_BY_MIDDLE_NAME	VARCHAR2(50)	VARCHAR(50)
EXPENSED_BY_TYPE	VARCHAR2(7)	VARCHAR(7)
EXPENSE_CATEGORY	VARCHAR2(50)	VARCHAR(50)
PROJECT_UNIQUE_CODE	VARCHAR2(4)	VARCHAR(4)
PROJECT_OBJECT_TITLE	VARCHAR2(250)	VARCHAR(250)
PROJECT_PRIMARY_KEY	NUMBER	INT
PROJECT_NUMBER	VARCHAR2(50)	VARCHAR(50)
PROJECT_NAME	VARCHAR2(250)	VARCHAR(250)
WORKFLOW_PRIMARY_KEY	NUMBER	INT
REQUEST_NAME	VARCHAR2(50)	VARCHAR(50)

REQUESTED_BY_CONTACT_PK	NUMBER	INT
REQUESTED_BY_CONTACT_TYPE	VARCHAR2(7)	VARCHAR(7)
REQUESTED_BY_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)
REQUESTED_BY_MIDDLE_NAME	VARCHAR2(50)	VARCHAR(50)
REQUESTED_BY_NAME	VARCHAR2(250)	VARCHAR(250)
REQUESTED_ON	DATE	DATETIME
COMPLETED_ON	DATE	DATETIME
WORKFLOW_STATUS	VARCHAR2(30)	VARCHAR(30)
COMMENT_TO_REQUESTOR	VARCHAR2(2000)	VARCHAR(2000)
EXPIRES_ON	DATE	DATETIME
EXPIRE_ACTION	VARCHAR2(30)	VARCHAR(30)
TRANSACTION_STATUS	VARCHAR2(250)	VARCHAR(250)
CURRENT_STOP_NO	NUMBER	INT
REJECT_ACTION	VARCHAR2(30)	VARCHAR(30)
REJECT_REASON	VARCHAR2(50)	VARCHAR(50)
UPDATE_WHILE_PENDING	VARCHAR2(105)	VARCHAR(105)
PROCESS_MANAGER_CONTACT_PK	NUMBER	INT
PROCESS_MANAGER_CONTACT_TYPE	VARCHAR2(7)	VARCHAR(7)
PROCESS_MANAGER_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)
PROCESS_MANAGER_MIDDLE_NAME	VARCHAR2(50)	VARCHAR(50)
PROCESS_MANAGER_NAME	VARCHAR2(250)	VARCHAR(250)

STOP_MEMBER_PRIMARY_KEY	NUMBER	INT
STOP_PRIMARY_KEY	NUMBER	INT
STOP	NUMBER	INT
PERFORMER_CONTACT_PK	NUMBER	INT
PERFORMER_CONTACT_TYPE	VARCHAR2(7)	VARCHAR(7)
PERFORMER_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)
PERFORMER_MIDDLE_NAME	VARCHAR2(50)	VARCHAR(50)
PERFORMER_NAME	VARCHAR2(250)	VARCHAR(250)
STOP_STATUS	VARCHAR2(40)	VARCHAR(40)
ACTION_DATE	DATE	DATETIME
STOP_EXPIRATION_DATE	DATE	DATETIME
INTERNAL_COMMENT	VARCHAR2(2000)	VARCHAR(2000)
EMAIL_SENT	VARCHAR2(3)	VARCHAR(3)
CREATED_BY_CONTACT_PK	NUMBER	INT
CREATED_BY_CONTACT_TYPE	VARCHAR2(7)	VARCHAR(7)
CREATED_BY_CONTACT_NAME	VARCHAR2(250)	VARCHAR(250)
CREATED_BY_CONTACT_MIDDLE_NAME	VARCHAR2(50)	VARCHAR(50)
CREATED_BY_CONTACT_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)
CREATED_ON	DATE	DATETIME
MODIFIED_BY_CONTACT_PK	NUMBER	INT
MODIFIED_BY_CONTACT_NAME	VARCHAR2(250)	VARCHAR(250)

MODIFIED_BY_CONTACT_MID_NAME	VARCHAR2(50)	VARCHAR(50)
MODIFIED_BY_CONTACT_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)
MODIFIED_BY_CONTACT_TYPE	VARCHAR2(7)	VARCHAR(7)
MODIFIED_ON	DATE	DATETIME
STOP_PRIMARY_KEY_EXTRA	NUMBER	INT
STOP_MEMBER_PRIMARY_KEY_EXTRA	NUMBER	INT

WH_HELPER_EXPENSE_WORKFLOW_RVW

Column Name	Oracle Data Type	MSSQL Data Type
EXPENSE_PRIMARY_KEY	NUMBER	INT
EXPENSE_DATE	DATE	DATETIME
EXPENSE_DESCRIPTION	VARCHAR2(250)	VARCHAR(250)
EXPENSE_POSTING_STATUS	VARCHAR2(19)	VARCHAR(19)
EXPENSED_BY_CONTACT_PK	NUMBER	INT
EXPENSED_BY_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)
EXPENSED_BY_NAME	VARCHAR2(250)	VARCHAR(250)
EXPENSED_BY_MIDDLE_NAME	VARCHAR2(50)	VARCHAR(50)
EXPENSED_BY_TYPE	VARCHAR2(7)	VARCHAR(7)
EXPENSE_CATEGORY	VARCHAR2(50)	VARCHAR(50)
PROJECT_UNIQUE_CODE	VARCHAR2(4)	VARCHAR(4)
PROJECT_OBJECT_TITLE	VARCHAR2(250)	VARCHAR(250)
PROJECT_PRIMARY_KEY	NUMBER	INT

PROJECT_NUMBER	VARCHAR2(50)	VARCHAR(50)
PROJECT_NAME	VARCHAR2(250)	VARCHAR(250)
WORKFLOW_PRIMARY_KEY	NUMBER	INT
REQUEST_NAME	VARCHAR2(50)	VARCHAR(50)
REQUESTED_BY_CONTACT_PK	NUMBER	INT
REQUESTED_BY_CONTACT_TYPE	VARCHAR2(7)	VARCHAR(7)
REQUESTED_BY_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)
REQUESTED_BY_MIDDLE_NAME	VARCHAR2(50)	VARCHAR(50)
REQUESTED_BY_NAME	VARCHAR2(250)	VARCHAR(250)
REQUESTED_ON	DATE	DATETIME
COMPLETED_ON	DATE	DATETIME
WORKFLOW_STATUS	VARCHAR2(30)	VARCHAR(30)
EXPIRES_ON	DATE	DATETIME
CURRENT_STOP_NO	NUMBER	INT
PROCESS_MANAGER_CONTACT_PK	NUMBER	INT
PROCESS_MANAGER_CONTACT_TYPE	VARCHAR2(7)	VARCHAR(7)
PROCESS_MANAGER_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)
PROCESS_MANAGER_MIDDLE_NAME	VARCHAR2(50)	VARCHAR(50)
PROCESS_MANAGER_NAME	VARCHAR2(250)	VARCHAR(250)
STOP_PRIMARY_KEY	NUMBER	INT
STOP	NUMBER	INT

STOP_MEMBER_PRIMARY_KEY	NUMBER	INT
STOP_STATUS	VARCHAR2(40)	VARCHAR(40)
EMAIL_SENT	VARCHAR2(3)	VARCHAR(3)
REVIEW_PRIMARY_KEY	NUMBER	INT
REVIEW_PERFORMER_CONTACT_PK	NUMBER	INT
REVIEW_PERFORMER_CONTACT_TYPE	VARCHAR2(7)	VARCHAR(7)
REVIEW_PERFORMER_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)
REVIEW_PERFORMER_MIDDLE_NAME	VARCHAR2(50)	VARCHAR(50)
REVIEW_PERFORMER_NAME	VARCHAR2(250)	VARCHAR(250)
REVIEW_STATUS	VARCHAR2(20)	VARCHAR(20)
REVIEW_ACTION_DATE	DATE	DATETIME
REVIEW_APPROVAL_COMMENT	VARCHAR2(250)	VARCHAR(250)
REVIEW_REQUEST_COMMENT	VARCHAR2(250)	VARCHAR(250)
CREATED_ON	DATE	DATETIME
CREATED_BY_CONTACT_PK	NUMBER	INT
CREATED_BY_CONTACT_TYPE	VARCHAR2(7)	VARCHAR(7)
CREATED_BY_CONTACT_NAME	VARCHAR2(250)	VARCHAR(250)
CREATED_BY_CONTACT_MIDDLE_NAME	VARCHAR2(50)	VARCHAR(50)
CREATED_BY_CONTACT_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)
MODIFIED_ON	DATE	DATETIME
MODIFIED_BY_CONTACT_PK	NUMBER	INT

MODIFIED_BY_CONTACT_TYPE	VARCHAR2(7)	VARCHAR(7)
MODIFIED_BY_CONTACT_NAME	VARCHAR2(250)	VARCHAR(250)
MODIFIED_BY_CONTACT_MID_NAME	VARCHAR2(50)	VARCHAR(50)
MODIFIED_BY_CONTACT_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)

WH_HELPER_HISTORY_WORKFLOW

Column Name	Oracle Data Type	MSSQL Data Type
HISTORY_PRIMARY_KEY	NUMBER	INT
HISTORY_DATE	DATE	DATETIME
HISTORY_DESCRIPTION	VARCHAR2(250)	VARCHAR(250)
PARENT_UNIQUE_CODE	VARCHAR2(4)	VARCHAR(4)
HISTORY_PARENT_TYPE	VARCHAR2(17)	VARCHAR(17)
WORKFLOW_PRIMARY_KEY	NUMBER	INT
REQUEST_NAME	VARCHAR2(50)	VARCHAR(50)
REQUESTED_BY_CONTACT_PK	NUMBER	INT
REQUESTED_BY_CONTACT_TYPE	VARCHAR2(7)	VARCHAR(7)
REQUESTED_BY_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)
REQUESTED_BY_MIDDLE_NAME	VARCHAR2(50)	VARCHAR(50)
REQUESTED_BY_NAME	VARCHAR2(250)	VARCHAR(250)
REQUESTED_ON	DATE	DATETIME
COMPLETED_ON	DATE	DATETIME
WORKFLOW_STATUS	VARCHAR2(30)	VARCHAR(30)

COMMENT_TO_REQUESTOR	VARCHAR2(2000)	VARCHAR(2000)
EXPIRES_ON	DATE	DATETIME
EXPIRE_ACTION	VARCHAR2(30)	VARCHAR(30)
TRANSACTION_STATUS	VARCHAR2(250)	VARCHAR(250)
CURRENT_STOP_NO	NUMBER	INT
REJECT_ACTION	VARCHAR2(30)	VARCHAR(30)
REJECT_REASON	VARCHAR2(50)	VARCHAR(50)
UPDATE_WHILE_PENDING	VARCHAR2(105)	VARCHAR(105)
PROCESS_MANAGER_CONTACT_PK	NUMBER	INT
PROCESS_MANAGER_CONTACT_TYPE	VARCHAR2(7)	VARCHAR(7)
PROCESS_MANAGER_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)
PROCESS_MANAGER_MIDDLE_NAME	VARCHAR2(50)	VARCHAR(50)
PROCESS_MANAGER_NAME	VARCHAR2(250)	VARCHAR(250)
STOP_MEMBER_PRIMARY_KEY	NUMBER	INT
STOP_PRIMARY_KEY	NUMBER	INT
STOP	NUMBER	INT
PERFORMER_CONTACT_PK	NUMBER	INT
PERFORMER_CONTACT_TYPE	VARCHAR2(7)	VARCHAR(7)
PERFORMER_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)
PERFORMER_MIDDLE_NAME	VARCHAR2(50)	VARCHAR(50)
PERFORMER_NAME	VARCHAR2(250)	VARCHAR(250)

STOP_STATUS	VARCHAR2(40)	VARCHAR(40)
ACTION_DATE	DATE	DATETIME
STOP_EXPIRATION_DATE	DATE	DATETIME
INTERNAL_COMMENT	VARCHAR2(2000)	VARCHAR(2000)
EMAIL_SENT	VARCHAR2(3)	VARCHAR(3)
CREATED_BY_CONTACT_PK	NUMBER	INT
CREATED_BY_CONTACT_TYPE	VARCHAR2(7)	VARCHAR(7)
CREATED_BY_CONTACT_NAME	VARCHAR2(250)	VARCHAR(250)
CREATED_BY_CONTACT_MIDDLE_NAME	VARCHAR2(50)	VARCHAR(50)
CREATED_BY_CONTACT_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)
CREATED_ON	DATE	DATETIME
MODIFIED_BY_CONTACT_PK	NUMBER	INT
MODIFIED_BY_CONTACT_NAME	VARCHAR2(250)	VARCHAR(250)
MODIFIED_BY_CONTACT_MID_NAME	VARCHAR2(50)	VARCHAR(50)
MODIFIED_BY_CONTACT_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)
MODIFIED_BY_CONTACT_TYPE	VARCHAR2(7)	VARCHAR(7)
MODIFIED_ON	DATE	DATETIME
STOP_PRIMARY_KEY_EXTRA	NUMBER	INT
STOP_MEMBER_PRIMARY_KEY_EXTRA	NUMBER	INT

WH_HELPER_HISTORY_WORKFLOW_RVW

Column Name	Oracle Data Type	MSSQL Data Type
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HISTORY_PRIMARY_KEY	NUMBER	INT
HISTORY_DATE	DATE	DATETIME
HISTORY_DESCRIPTION	VARCHAR2(250)	VARCHAR(250)
PARENT_UNIQUE_CODE	VARCHAR2(4)	VARCHAR(4)
HISTORY_PARENT_TYPE	VARCHAR2(17)	VARCHAR(17)
WORKFLOW_PRIMARY_KEY	NUMBER	INT
REQUEST_NAME	VARCHAR2(50)	VARCHAR(50)
REQUESTED_BY_CONTACT_PK	NUMBER	INT
REQUESTED_BY_CONTACT_TYPE	VARCHAR2(7)	VARCHAR(7)
REQUESTED_BY_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)
REQUESTED_BY_MIDDLE_NAME	VARCHAR2(50)	VARCHAR(50)
REQUESTED_BY_NAME	VARCHAR2(250)	VARCHAR(250)
REQUESTED_ON	DATE	DATETIME
COMPLETED_ON	DATE	DATETIME
WORKFLOW_STATUS	VARCHAR2(30)	VARCHAR(30)
EXPIRES_ON	DATE	DATETIME
CURRENT_STOP_NO	NUMBER	INT
PROCESS_MANAGER_CONTACT_PK	NUMBER	INT
PROCESS_MANAGER_CONTACT_TYPE	VARCHAR2(7)	VARCHAR(7)
PROCESS_MANAGER_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)
PROCESS_MANAGER_MIDDLE_NAME	VARCHAR2(50)	VARCHAR(50)

PROCESS_MANAGER_NAME	VARCHAR2(250)	VARCHAR(250)
STOP_PRIMARY_KEY	NUMBER	INT
STOP	NUMBER	INT
STOP_MEMBER_PRIMARY_KEY	NUMBER	INT
STOP_STATUS	VARCHAR2(40)	VARCHAR(40)
EMAIL_SENT	VARCHAR2(3)	VARCHAR(3)
REVIEW_PRIMARY_KEY	NUMBER	INT
REVIEW_PERFORMER_CONTACT_PK	NUMBER	INT
REVIEW_PERFORMER_CONTACT_TYPE	VARCHAR2(7)	VARCHAR(7)
REVIEW_PERFORMER_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)
REVIEW_PERFORMER_MIDDLE_NAME	VARCHAR2(50)	VARCHAR(50)
REVIEW_PERFORMER_NAME	VARCHAR2(250)	VARCHAR(250)
REVIEW_STATUS	VARCHAR2(20)	VARCHAR(20)
REVIEW_ACTION_DATE	DATE	DATETIME
REVIEW_APPROVAL_COMMENT	VARCHAR2(250)	VARCHAR(250)
REVIEW_REQUEST_COMMENT	VARCHAR2(250)	VARCHAR(250)
CREATED_ON	DATE	DATETIME
CREATED_BY_CONTACT_PK	NUMBER	INT
CREATED_BY_CONTACT_TYPE	VARCHAR2(7)	VARCHAR(7)
CREATED_BY_CONTACT_NAME	VARCHAR2(250)	VARCHAR(250)
CREATED_BY_CONTACT_MIDDLE_NAME	VARCHAR2(50)	VARCHAR(50)

CREATED_BY_CONTACT_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)
MODIFIED_ON	DATE	DATETIME
MODIFIED_BY_CONTACT_PK	NUMBER	INT
MODIFIED_BY_CONTACT_TYPE	VARCHAR2(7)	VARCHAR(7)
MODIFIED_BY_CONTACT_NAME	VARCHAR2(250)	VARCHAR(250)
MODIFIED_BY_CONTACT_MID_NAME	VARCHAR2(50)	VARCHAR(50)
MODIFIED_BY_CONTACT_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)

WH_HELPER_INVOICE_WORKFLOW

Column Name	Oracle Data Type	MSSQL Data Type
INVOICE_PRIMARY_KEY	NUMBER	INT
INVOICE_NUMBER	VARCHAR2(50)	VARCHAR(50)
INVOICE_DATE	DATE	DATETIME
INVOICE_RECEIVED_DATE	DATE	DATETIME
INVOICE_PERIOD_END_ON	DATE	DATETIME
INVOICE_PERIOD_START_ON	DATE	DATETIME
WORKFLOW_PRIMARY_KEY	NUMBER	INT
REQUEST_NAME	VARCHAR2(50)	VARCHAR(50)
REQUESTED_BY_CONTACT_PK	NUMBER	INT
REQUESTED_BY_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)
REQUESTED_BY_MIDDLE_NAME	VARCHAR2(50)	VARCHAR(50)
REQUESTED_BY_NAME	VARCHAR2(250)	VARCHAR(250)

REQUESTED_BY_CONTACT_TYPE	VARCHAR2(7)	VARCHAR(7)
REQUESTED_ON	DATE	DATETIME
COMPLETED_ON	DATE	DATETIME
WORKFLOW_STATUS	VARCHAR2(30)	VARCHAR(30)
COMMENT_TO_REQUESTOR	VARCHAR2(2000)	VARCHAR(2000)
EXPIRES_ON	DATE	DATETIME
EXPIRE_ACTION	VARCHAR2(30)	VARCHAR(30)
TRANSACTION_STATUS	VARCHAR2(250)	VARCHAR(250)
CURRENT_STOP_NO	NUMBER	INT
REJECT_ACTION	VARCHAR2(30)	VARCHAR(30)
REJECT_REASON	VARCHAR2(50)	VARCHAR(50)
UPDATE_WHILE_PENDING	VARCHAR2(105)	VARCHAR(105)
PROCESS_MANAGER_CONTACT_PK	NUMBER	INT
PROCESS_MANAGER_CONTACT_TYPE	VARCHAR2(7)	VARCHAR(7)
PROCESS_MANAGER_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)
PROCESS_MANAGER_MIDDLE_NAME	VARCHAR2(50)	VARCHAR(50)
PROCESS_MANAGER_NAME	VARCHAR2(250)	VARCHAR(250)
STOP_MEMBER_PRIMARY_KEY	NUMBER	INT
STOP_PRIMARY_KEY	NUMBER	INT
STOP	NUMBER	INT
PERFORMER_CONTACT_PK	NUMBER	INT

PERFORMER_CONTACT_TYPE	VARCHAR2(7)	VARCHAR(7)
PERFORMER_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)
PERFORMER_MIDDLE_NAME	VARCHAR2(50)	VARCHAR(50)
PERFORMER_NAME	VARCHAR2(250)	VARCHAR(250)
STOP_STATUS	VARCHAR2(40)	VARCHAR(40)
ACTION_DATE	DATE	DATETIME
STOP_EXPIRATION_DATE	DATE	DATETIME
INTERNAL_COMMENT	VARCHAR2(2000)	VARCHAR(2000)
EMAIL_SENT	VARCHAR2(3)	VARCHAR(3)
CREATED_BY_CONTACT_PK	NUMBER	INT
CREATED_BY_CONTACT_TYPE	VARCHAR2(7)	VARCHAR(7)
CREATED_BY_CONTACT_NAME	VARCHAR2(250)	VARCHAR(250)
CREATED_BY_CONTACT_MIDDLE_NAME	VARCHAR2(50)	VARCHAR(50)
CREATED_BY_CONTACT_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)
CREATED_ON	DATE	DATETIME
MODIFIED_BY_CONTACT_PK	NUMBER	INT
MODIFIED_BY_CONTACT_NAME	VARCHAR2(250)	VARCHAR(250)
MODIFIED_BY_CONTACT_MID_NAME	VARCHAR2(50)	VARCHAR(50)
MODIFIED_BY_CONTACT_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)
MODIFIED_BY_CONTACT_TYPE	VARCHAR2(7)	VARCHAR(7)
MODIFIED_ON	DATE	DATETIME

STOP_PRIMARY_KEY_EXTRA	NUMBER	INT
STOP_MEMBER_PRIMARY_KEY_EXTRA	NUMBER	INT

WH_HELPER_INVOICE_WORKFLOW_RVW

Column Name	Oracle Data Type	MSSQL Data Type
INVOICE_PRIMARY_KEY	NUMBER	INT
INVOICE_NUMBER	VARCHAR2(50)	VARCHAR(50)
INVOICE_DATE	DATE	DATETIME
INVOICE_RECEIVED_DATE	DATE	DATETIME
INVOICE_PERIOD_END_ON	DATE	DATETIME
INVOICE_PERIOD_START_ON	DATE	DATETIME
WORKFLOW_PRIMARY_KEY	NUMBER	INT
REQUEST_NAME	VARCHAR2(50)	VARCHAR(50)
REQUESTED_BY_CONTACT_PK	NUMBER	INT
REQUESTED_BY_CONTACT_TYPE	VARCHAR2(7)	VARCHAR(7)
REQUESTED_BY_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)
REQUESTED_BY_MIDDLE_NAME	VARCHAR2(50)	VARCHAR(50)
REQUESTED_BY_NAME	VARCHAR2(250)	VARCHAR(250)
REQUESTED_ON	DATE	DATETIME
COMPLETED_ON	DATE	DATETIME
WORKFLOW_STATUS	VARCHAR2(30)	VARCHAR(30)
EXPIRES_ON	DATE	DATETIME

CURRENT_STOP_NO	NUMBER	INT
PROCESS_MANAGER_CONTACT_PK	NUMBER	INT
PROCESS_MANAGER_CONTACT_TYPE	VARCHAR2(7)	VARCHAR(7)
PROCESS_MANAGER_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)
PROCESS_MANAGER_MIDDLE_NAME	VARCHAR2(50)	VARCHAR(50)
PROCESS_MANAGER_NAME	VARCHAR2(250)	VARCHAR(250)
STOP_PRIMARY_KEY	NUMBER	INT
STOP	NUMBER	INT
STOP_MEMBER_PRIMARY_KEY	NUMBER	INT
STOP_STATUS	VARCHAR2(40)	VARCHAR(40)
EMAIL_SENT	VARCHAR2(3)	VARCHAR(3)
REVIEW_PRIMARY_KEY	NUMBER	INT
REVIEW_PERFORMER_CONTACT_PK	NUMBER	INT
REVIEW_PERFORMER_CONTACT_TYPE	VARCHAR2(7)	VARCHAR(7)
REVIEW_PERFORMER_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)
REVIEW_PERFORMER_MIDDLE_NAME	VARCHAR2(50)	VARCHAR(50)
REVIEW_PERFORMER_NAME	VARCHAR2(250)	VARCHAR(250)
REVIEW_STATUS	VARCHAR2(20)	VARCHAR(20)
REVIEW_ACTION_DATE	DATE	DATETIME
REVIEW_APPROVAL_COMMENT	VARCHAR2(250)	VARCHAR(250)
REVIEW_REQUEST_COMMENT	VARCHAR2(250)	VARCHAR(250)

CREATED_ON	DATE	DATETIME
CREATED_BY_CONTACT_PK	NUMBER	INT
CREATED_BY_CONTACT_TYPE	VARCHAR2(7)	VARCHAR(7)
CREATED_BY_CONTACT_NAME	VARCHAR2(250)	VARCHAR(250)
CREATED_BY_CONTACT_MIDDLE_NAME	VARCHAR2(50)	VARCHAR(50)
CREATED_BY_CONTACT_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)
MODIFIED_ON	DATE	DATETIME
MODIFIED_BY_CONTACT_PK	NUMBER	INT
MODIFIED_BY_CONTACT_TYPE	VARCHAR2(7)	VARCHAR(7)
MODIFIED_BY_CONTACT_NAME	VARCHAR2(250)	VARCHAR(250)
MODIFIED_BY_CONTACT_MID_NAME	VARCHAR2(50)	VARCHAR(50)
MODIFIED_BY_CONTACT_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)

WH_HELPER_INVOLVED_WORKFLOW

Column Name	Oracle Data Type	MSSQL Data Type
INVOICE_PRIMARY_KEY	NUMBER	INT
INVOLVED_UNIQUE_CODE	VARCHAR2(4)	VARCHAR(4)
INVOLVED_OBJECT_TITLE	VARCHAR2(250)	VARCHAR(250)
INVOLVED_PRIMARY_KEY	NUMBER	INT
INVOLVED_CONTACT_PK	NUMBER	INT
PROJECT_PRIMARY_KEY	NUMBER	INT
PROJECT_NUMBER	VARCHAR2(50)	VARCHAR(50)

PROJECT_NAME	VARCHAR2(250)	VARCHAR(250)
PROJECT_UNIQUE_CODE	VARCHAR2(4)	VARCHAR(4)
PROJECT_OBJECT_TITLE	VARCHAR2(250)	VARCHAR(250)
CONTACT_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)
CONTACT_MIDDLE_NAME	VARCHAR2(50)	VARCHAR(50)
CONTACT_NAME	VARCHAR2(250)	VARCHAR(250)
CONTACT_TYPE	VARCHAR2(7)	VARCHAR(7)
CONTACT_DEFAULT_CATEGORY	VARCHAR2(50)	VARCHAR(50)
WORKFLOW_PRIMARY_KEY	NUMBER	INT
REQUEST_NAME	VARCHAR2(50)	VARCHAR(50)
REQUESTED_BY_CONTACT_PK	NUMBER	INT
REQUESTED_BY_CONTACT_TYPE	VARCHAR2(7)	VARCHAR(7)
REQUESTED_BY_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)
REQUESTED_BY_MIDDLE_NAME	VARCHAR2(50)	VARCHAR(50)
REQUESTED_BY_NAME	VARCHAR2(250)	VARCHAR(250)
REQUESTED_ON	DATE	DATETIME
COMPLETED_ON	DATE	DATETIME
WORKFLOW_STATUS	VARCHAR2(20)	VARCHAR(20)
COMMENT_TO_REQUESTOR	VARCHAR2(2000)	VARCHAR(2000)
EXPIRES_ON	DATE	DATETIME
EXPIRE_ACTION	VARCHAR2(30)	VARCHAR(30)

TRANSACTION_STATUS	VARCHAR2(250)	VARCHAR(250)
CURRENT_STOP_NO	NUMBER	INT
REJECT_ACTION	VARCHAR2(30)	VARCHAR(30)
REJECT_REASON	VARCHAR2(50)	VARCHAR(50)
UPDATE_WHILE_PENDING	VARCHAR2(105)	VARCHAR(105)
PROCESS_MANAGER_CONTACT_PK	NUMBER	INT
PROCESS_MANAGER_CONTACT_TYPE	VARCHAR2(7)	VARCHAR(7)
PROCESS_MANAGER_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)
PROCESS_MANAGER_MIDDLE_NAME	VARCHAR2(50)	VARCHAR(50)
PROCESS_MANAGER_NAME	VARCHAR2(250)	VARCHAR(250)
STOP_MEMBER_PRIMARY_KEY	NUMBER	INT
STOP_PRIMARY_KEY	NUMBER	INT
STOP	NUMBER	INT
PERFORMER_CONTACT_PK	NUMBER	INT
PERFORMER_CONTACT_TYPE	VARCHAR2(7)	VARCHAR(7)
PERFORMER_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)
PERFORMER_MIDDLE_NAME	VARCHAR2(50)	VARCHAR(50)
PERFORMER_NAME	VARCHAR2(250)	VARCHAR(250)
STOP_STATUS	VARCHAR2(40)	VARCHAR(40)
ACTION_DATE	DATE	DATETIME
STOP_EXPIRATION_DATE	DATE	DATETIME

INTERNAL_COMMENT	VARCHAR2(2000)	VARCHAR(2000)
EMAIL_SENT	VARCHAR2(3)	VARCHAR(3)
CREATED_BY_CONTACT_PK	NUMBER	INT
CREATED_BY_CONTACT_TYPE	VARCHAR2(7)	VARCHAR(7)
CREATED_BY_CONTACT_NAME	VARCHAR2(250)	VARCHAR(250)
CREATED_BY_CONTACT_MIDDLE_NAME	VARCHAR2(50)	VARCHAR(50)
CREATED_BY_CONTACT_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)
CREATED_ON	DATE	DATETIME
MODIFIED_BY_CONTACT_PK	NUMBER	INT
MODIFIED_BY_CONTACT_NAME	VARCHAR2(250)	VARCHAR(250)
MODIFIED_BY_CONTACT_MID_NAME	VARCHAR2(50)	VARCHAR(50)
MODIFIED_BY_CONTACT_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)
MODIFIED_BY_CONTACT_TYPE	VARCHAR2(7)	VARCHAR(7)
MODIFIED_ON	DATE	DATETIME
STOP_PRIMARY_KEY_EXTRA	NUMBER	INT
STOP_MEMBER_PRIMARY_KEY_EXTRA	NUMBER	INT

WH_HELPER_INVOLVED_WKFL_RVW

Column Name	Oracle Data Type	MSSQL Data Type
INVOLVED_UNIQUE_CODE	VARCHAR2(4)	VARCHAR(4)
INVOLVED_OBJECT_TITLE	VARCHAR2(250)	VARCHAR(250)
INVOLVED_PRIMARY_KEY	NUMBER	INT

INVOLVED_CONTACT_PK	NUMBER	INT
PROJECT_UNIQUE_CODE	VARCHAR2(4)	VARCHAR(4)
PROJECT_OBJECT_TITLE	VARCHAR2(250)	VARCHAR(250)
PROJECT_PRIMARY_KEY	NUMBER	INT
PROJECT_NUMBER	VARCHAR2(50)	VARCHAR(50)
PROJECT_NAME	VARCHAR2(250)	VARCHAR(250)
CONTACT_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)
CONTACT_MIDDLE_NAME	VARCHAR2(50)	VARCHAR(50)
CONTACT_NAME	VARCHAR2(250)	VARCHAR(250)
CONTACT_TYPE	VARCHAR2(7)	VARCHAR(7)
CONTACT_DEFAULT_CATEGORY	VARCHAR2(50)	VARCHAR(50)
WORKFLOW_PRIMARY_KEY	NUMBER	INT
REQUEST_NAME	VARCHAR2(50)	VARCHAR(50)
REQUESTED_BY_CONTACT_PK	NUMBER	INT
REQUESTED_BY_CONTACT_TYPE	VARCHAR2(7)	VARCHAR(7)
REQUESTED_BY_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)
REQUESTED_BY_MIDDLE_NAME	VARCHAR2(50)	VARCHAR(50)
REQUESTED_BY_NAME	VARCHAR2(250)	VARCHAR(250)
REQUESTED_ON	DATE	DATE TIME
COMPLETED_ON	DATE	DATE TIME
WORKFLOW_STATUS	VARCHAR2(20)	VARCHAR(20)

EXPIRES_ON	DATE	DATETIME
CURRENT_STOP_NO	NUMBER	INT
PROCESS_MANAGER_CONTACT_PK	NUMBER	INT
PROCESS_MANAGER_CONTACT_TYPE	VARCHAR2(7)	VARCHAR(7)
PROCESS_MANAGER_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)
PROCESS_MANAGER_MIDDLE_NAME	VARCHAR2(50)	VARCHAR(50)
PROCESS_MANAGER_NAME	VARCHAR2(250)	VARCHAR(250)
STOP_PRIMARY_KEY	NUMBER	INT
STOP	NUMBER	INT
STOP_MEMBER_PRIMARY_KEY	NUMBER	INT
STOP_STATUS	VARCHAR2(40)	VARCHAR(40)
EMAIL_SENT	VARCHAR2(3)	VARCHAR(3)
REVIEW_PRIMARY_KEY	NUMBER	INT
REVIEW_PERFORMER_CONTACT_PK	NUMBER	INT
REVIEW_PERFORMER_CONTACT_TYPE	VARCHAR2(7)	VARCHAR(7)
REVIEW_PERFORMER_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)
REVIEW_PERFORMER_MIDDLE_NAME	VARCHAR2(50)	VARCHAR(50)
REVIEW_PERFORMER_NAME	VARCHAR2(250)	VARCHAR(250)
REVIEW_STATUS	VARCHAR2(20)	VARCHAR(20)
REVIEW_ACTION_DATE	DATE	DATETIME
REVIEW_APPROVAL_COMMENT	VARCHAR2(250)	VARCHAR(250)

REVIEW_REQUEST_COMMENT	VARCHAR2(250)	VARCHAR(250)
CREATED_ON	DATE	DATETIME
CREATED_BY_CONTACT_PK	NUMBER	INT
CREATED_BY_CONTACT_TYPE	VARCHAR2(7)	VARCHAR(7)
CREATED_BY_CONTACT_NAME	VARCHAR2(250)	VARCHAR(250)
CREATED_BY_CONTACT_MIDDLE_NAME	VARCHAR2(50)	VARCHAR(50)
CREATED_BY_CONTACT_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)
MODIFIED_ON	DATE	DATETIME
MODIFIED_BY_CONTACT_PK	NUMBER	INT
MODIFIED_BY_CONTACT_TYPE	VARCHAR2(7)	VARCHAR(7)
MODIFIED_BY_CONTACT_NAME	VARCHAR2(250)	VARCHAR(250)
MODIFIED_BY_CONTACT_MID_NAME	VARCHAR2(50)	VARCHAR(50)
MODIFIED_BY_CONTACT_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)

WH_HELPER_MILESTONE_WORKFLOW

Column Name	Oracle Data Type	MSSQL Data Type
MILESTONE_UNIQUE_CODE	VARCHAR2(4)	VARCHAR(4)
MILESTONE_OBJECT_TITLE	VARCHAR2(250)	VARCHAR(250)
MILESTONE_PRIMARY_KEY	NUMBER	INT
MILESTONE_SUBJECT	VARCHAR2(250)	VARCHAR(250)
MILESTONE_MILESTONE_DATE	DATE	DATETIME
MILESTONE_STATUS	VARCHAR2(10)	VARCHAR(10)

MILESTONE_COMPLETION_STATUS	VARCHAR2(3)	VARCHAR(3)
PROJECT_UNIQUE_CODE	VARCHAR2(4)	VARCHAR(4)
PROJECT_OBJECT_TITLE	VARCHAR2(250)	VARCHAR(250)
PROJECT_PRIMARY_KEY	NUMBER	INT
PROJECT_NUMBER	VARCHAR2(50)	VARCHAR(50)
PROJECT_NAME	VARCHAR2(250)	VARCHAR(250)
WORKFLOW_PRIMARY_KEY	NUMBER	INT
REQUEST_NAME	VARCHAR2(50)	VARCHAR(50)
REQUESTED_BY_CONTACT_PK	NUMBER	INT
REQUESTED_BY_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)
REQUESTED_BY_MIDDLE_NAME	VARCHAR2(50)	VARCHAR(50)
REQUESTED_BY_NAME	VARCHAR2(250)	VARCHAR(250)
REQUESTED_BY_CONTACT_TYPE	VARCHAR2(7)	VARCHAR(7)
REQUESTED_ON	DATE	DATETIME
COMPLETED_ON	DATE	DATETIME
WORKFLOW_STATUS	VARCHAR2(30)	VARCHAR(30)
COMMENT_TO_REQUESTOR	VARCHAR2(2000)	VARCHAR(2000)
EXPIRES_ON	DATE	DATETIME
EXPIRE_ACTION	VARCHAR2(30)	VARCHAR(30)
TRANSACTION_STATUS	VARCHAR2(250)	VARCHAR(250)
CURRENT_STOP_NO	NUMBER	INT

REJECT_ACTION	VARCHAR2(30)	VARCHAR(30)
REJECT_REASON	VARCHAR2(50)	VARCHAR(50)
UPDATE_WHILE_PENDING	VARCHAR2(105)	VARCHAR(105)
PROCESS_MANAGER_CONTACT_PK	NUMBER	INT
PROCESS_MANAGER_CONTACT_TYPE	VARCHAR2(7)	VARCHAR(7)
PROCESS_MANAGER_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)
PROCESS_MANAGER_MIDDLE_NAME	VARCHAR2(50)	VARCHAR(50)
PROCESS_MANAGER_NAME	VARCHAR2(250)	VARCHAR(250)
STOP_MEMBER_PRIMARY_KEY	NUMBER	INT
STOP_PRIMARY_KEY	NUMBER	INT
STOP	NUMBER	INT
PERFORMER_CONTACT_PK	NUMBER	INT
PERFORMER_CONTACT_TYPE	VARCHAR2(7)	VARCHAR(7)
PERFORMER_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)
PERFORMER_MIDDLE_NAME	VARCHAR2(50)	VARCHAR(50)
PERFORMER_NAME	VARCHAR2(250)	VARCHAR(250)
STOP_STATUS	VARCHAR2(40)	VARCHAR(40)
ACTION_DATE	DATE	DATETIME
STOP_EXPIRATION_DATE	DATE	DATETIME
INTERNAL_COMMENT	VARCHAR2(2000)	VARCHAR(2000)
EMAIL_SENT	VARCHAR2(3)	VARCHAR(3)

CREATED_BY_CONTACT_PK	NUMBER	INT
CREATED_BY_CONTACT_TYPE	VARCHAR2(7)	VARCHAR(7)
CREATED_BY_CONTACT_NAME	VARCHAR2(250)	VARCHAR(250)
CREATED_BY_CONTACT_MIDDLE_NAME	VARCHAR2(50)	VARCHAR(50)
CREATED_BY_CONTACT_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)
CREATED_ON	DATE	DATETIME
MODIFIED_BY_CONTACT_PK	NUMBER	INT
MODIFIED_BY_CONTACT_NAME	VARCHAR2(250)	VARCHAR(250)
MODIFIED_BY_CONTACT_MID_NAME	VARCHAR2(50)	VARCHAR(50)
MODIFIED_BY_CONTACT_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)
MODIFIED_BY_CONTACT_TYPE	VARCHAR2(7)	VARCHAR(7)
MODIFIED_ON	DATE	DATETIME
STOP_PRIMARY_KEY_EXTRA	NUMBER	INT
STOP_MEMBER_PRIMARY_KEY_EXTRA	NUMBER	INT

WH_HELPER_MILESTONE_WKFL_RVW

Column Name	Oracle Data Type	MSSQL Data Type
MILESTONE_UNIQUE_CODE	VARCHAR2(4)	VARCHAR(4)
MILESTONE_OBJECT_TITLE	VARCHAR2(250)	VARCHAR(250)
MILESTONE_PRIMARY_KEY	NUMBER	INT
MILESTONE_SUBJECT	VARCHAR2(250)	VARCHAR(250)
MILESTONE_MILESTONE_DATE	DATE	DATETIME

MILESTONE_STATUS	VARCHAR2(10)	VARCHAR(10)
MILESTONE_COMPLETION_STATUS	VARCHAR2(3)	VARCHAR(3)
PROJECT_UNIQUE_CODE	VARCHAR2(4)	VARCHAR(4)
PROJECT_OBJECT_TITLE	VARCHAR2(250)	VARCHAR(250)
PROJECT_PRIMARY_KEY	NUMBER	INT
PROJECT_NUMBER	VARCHAR2(50)	VARCHAR(50)
PROJECT_NAME	VARCHAR2(250)	VARCHAR(250)
WORKFLOW_PRIMARY_KEY	NUMBER	INT
REQUEST_NAME	VARCHAR2(50)	VARCHAR(50)
REQUESTED_BY_CONTACT_PK	NUMBER	INT
REQUESTED_BY_CONTACT_TYPE	VARCHAR2(7)	VARCHAR(7)
REQUESTED_BY_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)
REQUESTED_BY_MIDDLE_NAME	VARCHAR2(50)	VARCHAR(50)
REQUESTED_BY_NAME	VARCHAR2(250)	VARCHAR(250)
REQUESTED_ON	DATE	DATETIME
COMPLETED_ON	DATE	DATETIME
WORKFLOW_STATUS	VARCHAR2(30)	VARCHAR(30)
EXPIRES_ON	DATE	DATETIME
CURRENT_STOP_NO	NUMBER	INT
PROCESS_MANAGER_CONTACT_PK	NUMBER	INT
PROCESS_MANAGER_CONTACT_TYPE	VARCHAR2(7)	VARCHAR(7)

PROCESS_MANAGER_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)
PROCESS_MANAGER_MIDDLE_NAME	VARCHAR2(50)	VARCHAR(50)
PROCESS_MANAGER_NAME	VARCHAR2(250)	VARCHAR(250)
STOP_PRIMARY_KEY	NUMBER	INT
STOP	NUMBER	INT
STOP_MEMBER_PRIMARY_KEY	NUMBER	INT
STOP_STATUS	VARCHAR2(40)	VARCHAR(40)
EMAIL_SENT	VARCHAR2(3)	VARCHAR(3)
REVIEW_PRIMARY_KEY	NUMBER	INT
REVIEW_PERFORMER_CONTACT_PK	NUMBER	INT
REVIEW_PERFORMER_CONTACT_TYPE	VARCHAR2(7)	VARCHAR(7)
REVIEW_PERFORMER_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)
REVIEW_PERFORMER_MIDDLE_NAME	VARCHAR2(50)	VARCHAR(50)
REVIEW_PERFORMER_NAME	VARCHAR2(250)	VARCHAR(250)
REVIEW_STATUS	VARCHAR2(20)	VARCHAR(20)
REVIEW_ACTION_DATE	DATE	DATETIME
REVIEW_APPROVAL_COMMENT	VARCHAR2(250)	VARCHAR(250)
REVIEW_REQUEST_COMMENT	VARCHAR2(250)	VARCHAR(250)
CREATED_ON	DATE	DATETIME
CREATED_BY_CONTACT_PK	NUMBER	INT
CREATED_BY_CONTACT_TYPE	VARCHAR2(7)	VARCHAR(7)

CREATED_BY_CONTACT_NAME	VARCHAR2(250)	VARCHAR(250)
CREATED_BY_CONTACT_MIDDLE_NAME	VARCHAR2(50)	VARCHAR(50)
CREATED_BY_CONTACT_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)
MODIFIED_ON	DATE	DATETIME
MODIFIED_BY_CONTACT_PK	NUMBER	INT
MODIFIED_BY_CONTACT_TYPE	VARCHAR2(7)	VARCHAR(7)
MODIFIED_BY_CONTACT_NAME	VARCHAR2(250)	VARCHAR(250)
MODIFIED_BY_CONTACT_MID_NAME	VARCHAR2(50)	VARCHAR(50)

WH_HELPER_PROJECT_WORKFLOW

Column Name	Oracle Data Type	MSSQL Data Type
PROJECT_OBJECT_TITLE	VARCHAR2(250)	VARCHAR(250)
PROJECT_UNIQUE_CODE	VARCHAR2(4)	VARCHAR(4)
PROJECT_PRIMARY_KEY	NUMBER	INT
PROJECT_NUMBER	VARCHAR2(50)	VARCHAR(50)
PROJECT_NAME	VARCHAR2(250)	VARCHAR(250)
WORKFLOW_PRIMARY_KEY	NUMBER	INT
REQUEST_NAME	VARCHAR2(100)	VARCHAR(100)
REQUESTED_BY_CONTACT_PK	NUMBER	INT
REQUESTED_BY_CONTACT_TYPE	VARCHAR2(7)	VARCHAR(7)
REQUESTED_BY_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)
REQUESTED_BY_MIDDLE_NAME	VARCHAR2(50)	VARCHAR(50)

REQUESTED_BY_NAME	VARCHAR2(250)	VARCHAR(250)
REQUESTED_ON	DATE	DATETIME
COMPLETED_ON	DATE	DATETIME
WORKFLOW_STATUS	VARCHAR2(30)	VARCHAR(30)
COMMENT_TO_REQUESTOR	VARCHAR2(2000)	VARCHAR(2000)
EXPIRES_ON	DATE	DATETIME
EXPIRE_ACTION	VARCHAR2(30)	VARCHAR(30)
TRANSACTION_STATUS	VARCHAR2(250)	VARCHAR(250)
CURRENT_STOP_NO	NUMBER	INT
REJECT_ACTION	VARCHAR2(30)	VARCHAR(30)
REJECT_REASON	VARCHAR2(50)	VARCHAR(50)
UPDATE_WHILE_PENDING	VARCHAR2(105)	VARCHAR(105)
PROCESS_MANAGER_CONTACT_PK	NUMBER	INT
PROCESS_MANAGER_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)
PROCESS_MANAGER_MIDDLE_NAME	VARCHAR2(50)	VARCHAR(50)
PROCESS_MANAGER_NAME	VARCHAR2(250)	VARCHAR(250)
PROCESS_MANAGER_CONTACT_TYPE	VARCHAR2(7)	VARCHAR(7)
STOP_PRIMARY_KEY	NUMBER	INT
STOP	NUMBER	INT
STOP_MEMBER_PRIMARY_KEY	NUMBER	INT
PERFORMER_CONTACT_PK	NUMBER	INT

PERFORMER_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)
PERFORMER_MIDDLE_NAME	VARCHAR2(50)	VARCHAR(50)
PERFORMER_NAME	VARCHAR2(250)	VARCHAR(250)
PERFORMER_CONTACT_TYPE	VARCHAR2(7)	VARCHAR(7)
STOP_STATUS	VARCHAR2(40)	VARCHAR(40)
ACTION_DATE	DATE	DATETIME
STOP_EXPIRATION_DATE	DATE	DATETIME
INTERNAL_COMMENT	VARCHAR2(2000)	VARCHAR(2000)
EMAIL_SENT	VARCHAR2(3)	VARCHAR(3)
CREATED_BY_CONTACT_PK	NUMBER	INT
CREATED_BY_CONTACT_NAME	VARCHAR2(250)	VARCHAR(250)
CREATED_BY_CONTACT_MIDDLE_NAME	VARCHAR2(50)	VARCHAR(50)
CREATED_BY_CONTACT_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)
CREATED_BY_CONTACT_TYPE	VARCHAR2(7)	VARCHAR(7)
CREATED_ON	DATE	DATETIME
MODIFIED_BY_CONTACT_PK	NUMBER	INT
MODIFIED_BY_CONTACT_NAME	VARCHAR2(250)	VARCHAR(250)
MODIFIED_BY_CONTACT_MID_NAME	VARCHAR2(50)	VARCHAR(50)
MODIFIED_BY_CONTACT_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)
MODIFIED_BY_CONTACT_TYPE	VARCHAR2(7)	VARCHAR(7)
MODIFIED_ON	DATE	DATETIME

STOP_PRIMARY_KEY_EXTRA	NUMBER	INT
STOP_MEMBER_PRIMARY_KEY_EXTRA	NUMBER	INT

WH_HELPER_PROJECT_WORKFLOW_RVW

Column Name	Oracle Data Type	MSSQL Data Type
PROJECT_OBJECT_TITLE	VARCHAR2(250)	VARCHAR(250)
PROJECT_UNIQUE_CODE	VARCHAR2(4)	VARCHAR(4)
PROJECT_PRIMARY_KEY	NUMBER	INT
PROJECT_NUMBER	VARCHAR2(50)	VARCHAR(50)
PROJECT_NAME	VARCHAR2(250)	VARCHAR(250)
WORKFLOW_PRIMARY_KEY	NUMBER	INT
REQUEST_NAME	VARCHAR2(100)	VARCHAR(100)
REQUESTED_BY_CONTACT_PK	NUMBER	INT
REQUESTED_BY_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)
REQUESTED_BY_MIDDLE_NAME	VARCHAR2(50)	VARCHAR(50)
REQUESTED_BY_NAME	VARCHAR2(250)	VARCHAR(250)
REQUESTED_BY_CONTACT_TYPE	VARCHAR2(7)	VARCHAR(7)
REQUESTED_ON	DATE	DATETIME
COMPLETED_ON	DATE	DATETIME
WORKFLOW_STATUS	VARCHAR2(30)	VARCHAR(30)
EXPIRES_ON	DATE	DATETIME
CURRENT_STOP_NO	NUMBER	INT

PROCESS_MANAGER_CONTACT_PK	NUMBER	INT
PROCESS_MANAGER_CONTACT_TYPE	VARCHAR2(7)	VARCHAR(7)
PROCESS_MANAGER_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)
PROCESS_MANAGER_MIDDLE_NAME	VARCHAR2(50)	VARCHAR(50)
PROCESS_MANAGER_NAME	VARCHAR2(250)	VARCHAR(250)
STOP_PRIMARY_KEY	NUMBER	INT
STOP	NUMBER	INT
STOP_MEMBER_PRIMARY_KEY	NUMBER	INT
STOP_STATUS	VARCHAR2(40)	VARCHAR(40)
EMAIL_SENT	VARCHAR2(3)	VARCHAR(3)
REVIEW_PRIMARY_KEY	NUMBER	INT
REVIEW_PERFORMER_CONTACT_PK	NUMBER	INT
REVIEW_PERFORMER_CONTACT_TY PE	VARCHAR2(7)	VARCHAR(7)
REVIEW_PERFORMER_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)
REVIEW_PERFORMER_MIDDLE_NAME	VARCHAR2(50)	VARCHAR(50)
REVIEW_PERFORMER_NAME	VARCHAR2(250)	VARCHAR(250)
REVIEW_STATUS	VARCHAR2(30)	VARCHAR(30)
REVIEW_ACTION_DATE	DATE	DATETIME
REVIEW_APPROVAL_COMMENT	VARCHAR2(250)	VARCHAR(250)
REVIEW_REQUEST_COMMENT	VARCHAR2(250)	VARCHAR(250)
CREATED_ON	DATE	DATETIME

CREATED_BY_CONTACT_PK	NUMBER	INT
CREATED_BY_CONTACT_TYPE	VARCHAR2(7)	VARCHAR(7)
CREATED_BY_CONTACT_NAME	VARCHAR2(250)	VARCHAR(250)
CREATED_BY_CONTACT_MIDDLE_NAME	VARCHAR2(50)	VARCHAR(50)
CREATED_BY_CONTACT_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)
MODIFIED_ON	DATE	DATETIME
MODIFIED_BY_CONTACT_PK	NUMBER	INT
MODIFIED_BY_CONTACT_TYPE	VARCHAR2(7)	VARCHAR(7)
MODIFIED_BY_CONTACT_NAME	VARCHAR2(250)	VARCHAR(250)
MODIFIED_BY_CONTACT_MID_NAME	VARCHAR2(50)	VARCHAR(50)
MODIFIED_BY_CONTACT_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)

WH_HELPER_TASK_WORKFLOW

Column Name	Oracle Data Type	MSSQL Data Type
TASK_PRIMARY_KEY	NUMBER	INT
TASK_SUBJECT	VARCHAR2(250)	VARCHAR(250)
TASK_CATEGORY	VARCHAR2(50)	VARCHAR(50)
PROJECT_UNIQUE_CODE	VARCHAR2(4)	VARCHAR(4)
PROJECT_OBJECT_TITLE	VARCHAR2(250)	VARCHAR(250)
PROJECT_PRIMARY_KEY	NUMBER	INT
PROJECT_NUMBER	VARCHAR2(50)	VARCHAR(50)
PROJECT_NAME	VARCHAR2(250)	VARCHAR(250)

MILESTONE_UNIQUE_CODE	VARCHAR2(4)	VARCHAR(4)
MILESTONE_OBJECT_TITLE	VARCHAR2(250)	VARCHAR(250)
MILESTONE_PRIMARY_KEY	NUMBER	INT
MILESTONE_SUBJECT	VARCHAR2(250)	VARCHAR(250)
MILESTONE_DATE	DATE	DATETIME
WORKFLOW_PRIMARY_KEY	NUMBER	INT
REQUEST_NAME	VARCHAR2(50)	VARCHAR(50)
REQUESTED_BY_CONTACT_PK	NUMBER	INT
REQUESTED_BY_CONTACT_TYPE	VARCHAR2(7)	VARCHAR(7)
REQUESTED_BY_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)
REQUESTED_BY_MIDDLE_NAME	VARCHAR2(50)	VARCHAR(50)
REQUESTED_BY_NAME	VARCHAR2(250)	VARCHAR(250)
REQUESTED_ON	DATE	DATETIME
COMPLETED_ON	DATE	DATETIME
WORKFLOW_STATUS	VARCHAR2(30)	VARCHAR(30)
COMMENT_TO_REQUESTOR	VARCHAR2(2000)	VARCHAR(2000)
EXPIRES_ON	DATE	DATETIME
EXPIRE_ACTION	VARCHAR2(30)	VARCHAR(30)
TRANSACTION_STATUS	VARCHAR2(250)	VARCHAR(250)
CURRENT_STOP_NO	NUMBER	INT
REJECT_ACTION	VARCHAR2(30)	VARCHAR(30)

REJECT_REASON	VARCHAR2(50)	VARCHAR(50)
UPDATE_WHILE_PENDING	VARCHAR2(105)	VARCHAR(105)
PROCESS_MANAGER_CONTACT_PK	NUMBER	INT
PROCESS_MANAGER_CONTACT_TYPE	VARCHAR2(7)	VARCHAR(7)
PROCESS_MANAGER_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)
PROCESS_MANAGER_MIDDLE_NAME	VARCHAR2(50)	VARCHAR(50)
PROCESS_MANAGER_NAME	VARCHAR2(250)	VARCHAR(250)
STOP_MEMBER_PRIMARY_KEY	NUMBER	INT
STOP_PRIMARY_KEY	NUMBER	INT
STOP	NUMBER	INT
PERFORMER_CONTACT_PK	NUMBER	INT
PERFORMER_CONTACT_TYPE	VARCHAR2(7)	VARCHAR(7)
PERFORMER_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)
PERFORMER_MIDDLE_NAME	VARCHAR2(50)	VARCHAR(50)
PERFORMER_NAME	VARCHAR2(250)	VARCHAR(250)
STOP_STATUS	VARCHAR2(40)	VARCHAR(40)
ACTION_DATE	DATE	DATETIME
STOP_EXPIRATION_DATE	DATE	DATETIME
INTERNAL_COMMENT	VARCHAR2(2000)	VARCHAR(2000)
EMAIL_SENT	VARCHAR2(3)	VARCHAR(3)
CREATED_BY_CONTACT_PK	NUMBER	INT

CREATED_BY_CONTACT_TYPE	VARCHAR2(7)	VARCHAR(7)
CREATED_BY_CONTACT_NAME	VARCHAR2(250)	VARCHAR(250)
CREATED_BY_CONTACT_MIDDLE_NAME	VARCHAR2(50)	VARCHAR(50)
CREATED_BY_CONTACT_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)
CREATED_ON	DATE	DATETIME
MODIFIED_BY_CONTACT_PK	NUMBER	INT
MODIFIED_BY_CONTACT_NAME	VARCHAR2(250)	VARCHAR(250)
MODIFIED_BY_CONTACT_MIDDLE_NAME	VARCHAR2(50)	VARCHAR(50)
MODIFIED_BY_CONTACT_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)
MODIFIED_BY_CONTACT_TYPE	VARCHAR2(7)	VARCHAR(7)
MODIFIED_ON	DATE	DATETIME
STOP_PRIMARY_KEY_EXTRA	NUMBER	INT
STOP_MEMBER_PRIMARY_KEY_EXTRA	NUMBER	INT

WH_HELPER_TASK_WORKFLOW_RVW

Column Name	Oracle Data Type	MSSQL Data Type
TASK_PRIMARY_KEY	NUMBER	INT
TASK_SUBJECT	VARCHAR2(250)	VARCHAR(250)
TASK_CATEGORY	VARCHAR2(50)	VARCHAR(50)
PROJECT_UNIQUE_CODE	VARCHAR2(4)	VARCHAR(4)
PROJECT_OBJECT_TITLE	VARCHAR2(250)	VARCHAR(250)
PROJECT_PRIMARY_KEY	NUMBER	INT

PROJECT_NUMBER	VARCHAR2(50)	VARCHAR(50)
PROJECT_NAME	VARCHAR2(250)	VARCHAR(250)
MILESTONE_UNIQUE_CODE	VARCHAR2(4)	VARCHAR(4)
MILESTONE_OBJECT_TITLE	VARCHAR2(250)	VARCHAR(250)
MILESTONE_PRIMARY_KEY	NUMBER	INT
MILESTONE_SUBJECT	VARCHAR2(250)	VARCHAR(250)
MILESTONE_DATE	DATE	DATETIME
WORKFLOW_PRIMARY_KEY	NUMBER	INT
REQUEST_NAME	VARCHAR2(50)	VARCHAR(50)
REQUESTED_BY_CONTACT_PK	NUMBER	INT
REQUESTED_BY_CONTACT_TYPE	VARCHAR2(7)	VARCHAR(7)
REQUESTED_BY_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)
REQUESTED_BY_MIDDLE_NAME	VARCHAR2(50)	VARCHAR(50)
REQUESTED_BY_NAME	VARCHAR2(250)	VARCHAR(250)
REQUESTED_ON	DATE	DATETIME
COMPLETED_ON	DATE	DATETIME
WORKFLOW_STATUS	VARCHAR2(30)	VARCHAR(30)
EXPIRES_ON	DATE	DATETIME
CURRENT_STOP_NO	NUMBER	INT
PROCESS_MANAGER_CONTACT_PK	NUMBER	INT
PROCESS_MANAGER_CONTACT_TYPE	VARCHAR2(7)	VARCHAR(7)

PROCESS_MANAGER_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)
PROCESS_MANAGER_MIDDLE_NAME	VARCHAR2(50)	VARCHAR(50)
PROCESS_MANAGER_NAME	VARCHAR2(250)	VARCHAR(250)
STOP_PRIMARY_KEY	NUMBER	INT
STOP	NUMBER	INT
STOP_MEMBER_PRIMARY_KEY	NUMBER	INT
STOP_STATUS	VARCHAR2(40)	VARCHAR(40)
EMAIL_SENT	VARCHAR2(3)	VARCHAR(3)
REVIEW_PRIMARY_KEY	NUMBER	INT
REVIEW_PERFORMER_CONTACT_PK	NUMBER	INT
REVIEW_PERFORMER_CONTACT_TYPE	VARCHAR2(7)	VARCHAR(7)
REVIEW_PERFORMER_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)
REVIEW_PERFORMER_MIDDLE_NAME	VARCHAR2(50)	VARCHAR(50)
REVIEW_PERFORMER_NAME	VARCHAR2(250)	VARCHAR(250)
REVIEW_STATUS	VARCHAR2(20)	VARCHAR(20)
REVIEW_ACTION_DATE	DATE	DATETIME
REVIEW_APPROVAL_COMMENT	VARCHAR2(250)	VARCHAR(250)
REVIEW_REQUEST_COMMENT	VARCHAR2(250)	VARCHAR(250)
CREATED_ON	DATE	DATETIME
CREATED_BY_CONTACT_PK	NUMBER	INT
CREATED_BY_CONTACT_TYPE	VARCHAR2(7)	VARCHAR(7)

CREATED_BY_CONTACT_NAME	VARCHAR2(250)	VARCHAR(250)
CREATED_BY_CONTACT_MIDDLE_NAME	VARCHAR2(50)	VARCHAR(50)
CREATED_BY_CONTACT_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)
MODIFIED_ON	DATE	DATETIME
MODIFIED_BY_CONTACT_PK	NUMBER	INT
MODIFIED_BY_CONTACT_TYPE	VARCHAR2(7)	VARCHAR(7)
MODIFIED_BY_CONTACT_NAME	VARCHAR2(250)	VARCHAR(250)
MODIFIED_BY_CONTACT_MID_NAME	VARCHAR2(50)	VARCHAR(50)

1.2.7 System Table Definitions

System tables support the record security features of Data Warehouse. Normally your report will not query these tables directly, but will instead call database functions that use these tables. For more information, see [Security and User Access](#).

Other tables that are related to security and are also related to a particular object type are grouped with the object type's tables. For example, the descriptions of WH_ACCOUNT_GROUP_ACCESS and WH_ACCOUNT_USER_ACCESS can be found with the other Account tables, in the Account section.

The system tables include:

- WH_GROUP
- WH_GROUP_FUNCTIONAL_ACCESS
- WH_GROUP_MEMBER
- WH_SYSTEM
- WH_USER
- WH_USER_FUNCTIONAL_ACCESS

WH_GROUP

Column Name	Oracle Data Type	MSSQL Data Type
GROUP_PRIMARY_KEY	NUMBER	INT
GROUP_NAME	VARCHAR2(50)	VARCHAR(50)

GROUP_UNIQUE_KEY	VARCHAR2(50)	VARCHAR(50)
DESCRIPTION	VARCHAR2(250)	VARCHAR(250)
VERSION	NUMBER	INT
CREATED_ON	DATE	DATETIME
MODIFIED_ON	DATE	DATETIME
CREATED_BY_USER_PK	NUMBER	INT
MODIFIED_BY_USER_PK	NUMBER	INT

WH_GROUP_FUNCTIONAL_ACCESS

Column Name	Oracle Data Type	MSSQL Data Type
GROUP_PRIMARY_KEY	NUMBER	INT
FUNCTIONAL_OPERATION_IID	NUMBER	INT
VERSION	NUMBER	INT
APPLICATION_ID	NUMBER	INT
CATEGORY_ID	NUMBER	INT
OBJECT_ENTITY_CODE	VARCHAR2(10)	VARCHAR(10)
OBJECT_UNIQUE_CODE	VARCHAR2(10)	VARCHAR(10)
OBJECT_IS_EMBEDDED	VARCHAR2(5)	VARCHAR(5)

WH_GROUP_MEMBER

Column Name	Oracle Data Type	MSSQL Data Type
GROUP_PRIMARY_KEY	NUMBER	INT
GROUP_NAME	VARCHAR2(50)	VARCHAR(50)

USER_PRIMARY_KEY	NUMBER	INT
USER_NAME	VARCHAR2(50)	VARCHAR(50)
VERSION	NUMBER	INT

WH_SYSTEM

Column Name	Oracle Data Type	MSSQL Data Type
SYSTEM_PRIMARY_KEY	NUMBER	INT
CREATED_ON	DATE	DATETIME
MODIFIED_ON	DATE	DATETIME
VERSION	NUMBER	INT
CREATED_BY_USER_PK	NUMBER	INT
MODIFIED_BY_USER_PK	NUMBER	INT
WEBIPASSWORD	VARCHAR2(250)	VARCHAR(250)

WH_USER

Column Name	Oracle Data Type	MSSQL Data Type
USER_PRIMARY_KEY	NUMBER	INT
USER_NAME	VARCHAR2(50)	VARCHAR(50)
CONTACT_PRIMARY_KEY	NUMBER	INT
CONTACT_TYPE	VARCHAR2(10)	VARCHAR(10)
CONTACT_FIRST_NAME	VARCHAR2(50)	VARCHAR(50)
CONTACT_MIDDLE_NAME	VARCHAR2(50)	VARCHAR(50)
CONTACT_NAME	VARCHAR2(250)	VARCHAR(250)

USER_TYPE	VARCHAR2(20)	VARCHAR(20)
IS_USER_ACTIVE	VARCHAR2(5)	VARCHAR(5)
IS_USER_LOCKED	VARCHAR2(5)	VARCHAR(5)
DEFAULT_GROUP_PRIMARY_KEY	NUMBER	INT
DEFAULT_GROUP_NAME	VARCHAR2(50)	VARCHAR(50)
DESCRIPTION	VARCHAR2(250)	VARCHAR(250)
VERSION	NUMBER	INT
WEBI_USERNAME	VARCHAR2(250)	VARCHAR(250)
CREATED_ON	DATE	DATETIME
MODIFIED_ON	DATE	DATETIME
CREATED_BY_USER_PK	NUMBER	INT
MODIFIED_BY_USER_PK	NUMBER	INT

WH_USER_FUNCTIONAL_ACCESS

Column Name	Oracle Data Type	MSSQL Data Type
USER_PRIMARY_KEY	NUMBER	INT
FUNCTIONAL_OPERATION_IID	NUMBER	INT
VERSION	NUMBER	INT
APPLICATION_ID	NUMBER	INT
CATEGORY_ID	NUMBER	INT
OBJECT_ENTITY_CODE	VARCHAR2(10)	VARCHAR(10)
OBJECT_UNIQUE_CODE	VARCHAR2(10)	VARCHAR(10)

OBJECT_IS_EMBEDDED	VARCHAR2(5)	VARCHAR(5)
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1.2.8 Categories, Currencies, and Lookup Tables

Many of the standard object definitions have a category table associated with them - for example, WH_CONTACT_CATEGORIES. These tables are documented together with the other tables related to the object definition.

Similarly, the design categories that are applicable to a specific custom object definition are found in table WH_PROJECT_CATEGORIES, documented with the other Project tables.

The category values that are actually assigned to specific records are found in table WH_CATEGORIES, shown below. That table "flattens" the category tree structure by providing a single row containing up to 10 levels of nesting for a given category.

WH_CATEGORIES

Column Name	Oracle Data Type	MSSQL Data Type
OBJECT_PRIMARY_KEY	NUMBER	INT
OBJECT_ENTITY_CODE	VARCHAR2(4)	VARCHAR(4)
OBJECT_IS_EMBEDDED	VARCHAR2(5)	VARCHAR(5)
OBJECT_UNIQUE_CODE	VARCHAR2(4)	VARCHAR(4)
OBJECT_TITLE	VARCHAR2(250)	VARCHAR(250)
CATEGORY_PRIMARY_KEY	NUMBER	INT
CATEGORY_NAME	VARCHAR2(50)	VARCHAR(50)
CATEGORY_DISPLAY_ORDER	NUMBER)	INT
CATEGORY_TREE_POSITION	VARCHAR2(250)	VARCHAR(250)
CATEGORY_IS_ACTIVE	NUMBER	INT
CATEGORY_FULL_NAME	VARCHAR2(1000)	VARCHAR(1000)
CATEGORY_LEVEL_01	VARCHAR2(50)	VARCHAR(50)
CATEGORY_LEVEL_02	VARCHAR2(50)	VARCHAR(50)

CATEGORY_LEVEL_03	VARCHAR2(50)	VARCHAR(50)
CATEGORY_LEVEL_04	VARCHAR2(50)	VARCHAR(50)
CATEGORY_LEVEL_05	VARCHAR2(50)	VARCHAR(50)
CATEGORY_LEVEL_06	VARCHAR2(50)	VARCHAR(50)
CATEGORY_LEVEL_07	VARCHAR2(50)	VARCHAR(50)
CATEGORY_LEVEL_08	VARCHAR2(50)	VARCHAR(50)
CATEGORY_LEVEL_09	VARCHAR2(50)	VARCHAR(50)
CATEGORY_LEVEL_10	VARCHAR2(50)	VARCHAR(50)

WH_CURRENCIES

Column Name	Oracle Data Type	MSSQL Data Type
CURRENCY_CODE	VARCHAR2(3)	VARCHAR(3)
CURRENCY_EXCHANGE_RATE	NUMBER	INT
CURRENCY_NAME	VARCHAR2(50)	VARCHAR(50)
CURRENCY_SYMBOL	VARCHAR2(2)	VARCHAR(2)
LAST_MODIFIED_ON	DATE	DATETIME

WH_LOOKUP_TABLE_ITEMS

Column Name	Oracle Data Type	MSSQL Data Type
TABLE_PRIMARY_KEY	NUMBER	INT
TABLE_NAME	VARCHAR2(50)	VARCHAR(50)
TABLE_UNIQUE_CODE	VARCHAR2(4)	VARCHAR(4)
TABLE_VERSION	NUMBER	INT

ITEM_PRIMARY_KEY	NUMBER	INT
ITEM_NAME	VARCHAR2(50)	VARCHAR(50)
ITEM_DISPLAY_ORDER	NUMBER	INT
ITEM_TREE_POSITION	VARCHAR2(250)	VARCHAR(250)
ITEM_IS_ACTIVE	VARCHAR2(10)	VARCHAR(10)
ITEM_PARENT_PRIMARY_KEY	NUMBER	INT
ITEM_NAME_FULL	VARCHAR2(700)	VARCHAR(700)
ITEM_LEVEL_01	VARCHAR2(50)	VARCHAR(50)
ITEM_LEVEL_02	VARCHAR2(50)	VARCHAR(50)
ITEM_LEVEL_03	VARCHAR2(50)	VARCHAR(50)
ITEM_LEVEL_04	VARCHAR2(50)	VARCHAR(50)
ITEM_LEVEL_05	VARCHAR2(50)	VARCHAR(50)
ITEM_LEVEL_06	VARCHAR2(50)	VARCHAR(50)
ITEM_LEVEL_07	VARCHAR2(50)	VARCHAR(50)
ITEM_LEVEL_08	VARCHAR2(50)	VARCHAR(50)
ITEM_LEVEL_09	VARCHAR2(50)	VARCHAR(50)
ITEM_LEVEL_10	VARCHAR2(50)	VARCHAR(50)

1.2.9 Mapping

Data Warehouse contains optional scripts that build the WH_MAPPING table, which acts as a data dictionary that explains the source of data used in each Data Warehouse column. The source is expressed as a TeamConnect table name and column name. In addition, WH_MAPPING contains column MAPPING, which contains a value of either "EXACT" or "MAPPED":

- EXACT means that the Data Warehouse column contains exactly the same value as the equivalent TeamConnect column.

- MAPPED means that the TeamConnect column value is not identical to the Data Warehouse column. This is usually the case when the TeamConnect column value is a numeric key to a lookup table, and the Data Warehouse column contains the actual text found in the lookup table. For example, WH_INVOICE.INVOICE_TYPE is derived from T_INVOICE.INVOICE_TYPE. But for a T_INVOICE row where INVOICE_TYPE contains the number 1, the equivalent WH_INVOICE row will have INVOICE_TYPE equal to "Accrual", which is the text equivalent of 1.

WH_MAPPING only covers data that comes from TeamConnect system objects, not custom objects and custom fields.

Creating WH_MAPPING

WH_MAPPING does not exist when Data Warehouse is first installed. You must create it manually by running a script found in the **add-ons** subfolder of your installation media. There is one script for Oracle and one for SQL Server; run the one that is appropriate for your Data Warehouse database. If you are upgrading from an older version of Data Warehouse to this version, first manually drop table WH_MAPPING before running the script.

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