Oracle® Fusion Applications

Production to Test Administrator's Guide

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Oracle Fusion Applications Production to Test Administrator's Guide, Release 12 (11.12.x.0.0)

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Preface

The *Oracle Fusion Applications Production to Test Administrator's Guide* is designed for on-premise installations of Oracle Fusion Applications. It describes how to copy just the data from one environment (such as production) to another (such as test).

Audience

The audience for this guide includes experienced Oracle Fusion Applications administrators who are familiar with their own enterprise-level installation of Fusion Applications. A variety of users and roles may be involved in creating a clone of a Fusion Applications instance, including: the database administrator, the LDAP/Identity Management administrator, users familiar with the specific products, such as the "General Accountant" user for the Financials product, and network administrators.

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Related Documentation

This User Guide includes a companion workbook: *The Oracle Fusion Applications Discovery Workbook for Cloning and Content Movement*. This is an Excel-based entry form that is required for creating the cloning response file used by the cloning tools.

Conventions

The following text conventions are used in this guide:

Convention	Meaning
boldface	Boldface type indicates graphical user interface elements associated with an action, or terms defined in text or the glossary.
italic	Italic type indicates book titles, emphasis, or placeholder variables for which you supply particular values.

Convention	Meaning
`monospace`	Monospace type indicates commands within a paragraph, URLs, code in examples, text that appears on the screen, or text that you enter.

What’s New in This Guide

The following topic introduces the new features of the Oracle Fusion Applications Production to Test (P2T) process.

New Features for Release 12 (11.12.x.0.0)

In this user guide, the nomenclature “11.12.x.0.0”, where “x” is a number, is used to indicate the release and patch releases for which the guide is applicable. When using this document be sure to replace ”x” with the number of the release that is being used.

1

Choosing the Right Content Movement Tool

Cloning and Production-to-Test content movement tools provide different functionality and have different use cases in Oracle Fusion Applications, on premises. This chapter compares the tools to assist you in choosing the correct one for your purposes.

Each tool has its respective user guide: the *Oracle Fusion Applications Cloning Administrator's Guide*, and the *Oracle Fusion Applications Production to Test Administrator's Guide*.

This chapter contains the following topics:

1.1 Understanding the Content Movement Options Available

Content Movement includes two official tools for duplicating and updating multiple Fusion Applications installations. These multiple environments are typically used for development, testing, production, and so on.

- **Cloning** means creating an **exact replica** of an entire Oracle Fusion Applications environment. The source is a complete, functioning installation which is replicated to a pristine, empty (OS-only) target environment. For more information about cloning, see Fusion Applications Cloning and Content Movement Administrator's Guide
- **Production-to-Test** content movement is essentially a **data refresh**. It copies the database contents only, between two already-installed, matched Fusion Applications installations. The most common scenario is to copy production data into a test environment so that testing activities won't impact a production system. However, despite the production-to-test naming convention, the process can be used to move data from any Fusion Applications source to any parallel Fusion Applications target.

> **Note:**
>
> **Standard database duplication** is another kind of content movement, which is a subsection of cloning (duplicating the database structure and contents), but does not include the rest of the Fusion Applications instance.

1.2 Uses and Benefits of Production to Test (P2T)

Remember that **Production-to-Test** content movement is essentially a **data refresh**. It copies the database contents only, between two already-installed, matched Fusion Applications installations. Also keep in mind that despite the production-to-test naming convention, the process can be used to move data from any Fusion Applications source to any parallel Fusion Applications target (with the exception of production-to-production).

Common use cases for production-to-test include:

- Testing functional or development tasks and integrations with production data, including identity data (users/roles/policies)
- Validating patches on a test environment with production data, before applying the patch to the production system
- Performing load testing with production data to size, plan for, and minimize load issues on the actual production environment.

Production-to-test functionality allows for test environments to have easily refreshed production data which can be used for testing development, testing patches, tuning, and sizing, without affecting the production system.

1.3 Comparison Chart and Best Practices

The table below summarizes the key points of each tool . Each area is explored in more depth in the relevant content movement Administrator's Guide.

Table 1-1 Quick Comparison Chart

Category	Production to Test	Cloning
Purpose	Replicate FA data quickly for other uses (eg. functional, development, performance tests, patch test, audit etc.). Periodically refresh production data to another environment	Replicate full Fusion Applications system including all security details to make a new environment. Clone a Fusion Applications system (typically once) and avoid fresh install – but allow for external URL change so they can run in parallel. Used for deploying new environments.

Table 1-1 (Cont.) Quick Comparison Chart

Category	Production to Test	Cloning
Usage	Source & target can run in parallel before and after P2T. Copies just source data (including security / customizations) to target. Reconciles IDM one-way from source to target with exceptions allowed. Does not change target system user passwords and also blanks out functional user passwords in target by default to not carry over prod passwords.	Source and target can run in parallel before and after cloning. Copies complete source environment (binaries and all data) to target. Copies complete IDM data from source to target with no exceptions allowed. Carries over all passwords from source to target as is, and then, resets system user passwords in target (for better safety and to preclude any end user errors). Normal functional user passwords remain as is.
Requirements	A working Fusion Applications target and source Fusion Applications DB backup must exist – often they already do and so additional resource need is rare. Source and target should be working and allow for IDM replication (ldap calls) between them. Source and target Fusion Applications must be same version/patch levels. A cold backup of source FA DB (not IDM DB) and export of some target schemas are needed. Source FA DB will be copied over target during the P2T followed by import of the few exported target schemas. The Fusion Applications deployment topologies and configuration of source and target must the same – eg. what Fusion Applications servers run on what hosts, the LDAP location of IDM and FA jpsroot entities, Fusion Applications file system directory etc. The hostnames used for Fusion Applications internal endpoints need to be identical in source and target (ie. internal Fusion Applications hostname entries need to be copied into target /etc/hosts files to not conflict with DNS).	Typically target infrastructure does not exist and provisioning hardware/network/ storage/OS needs cost/time resources. Target is an empty environment with just OS running and hardware setup and sized to mimic and host the source environment. Target starts without Fusion Applications and ends with same installation as source. A complete cold backup of entire Fusion Applications source environment (filesystems and DBs) is needed. It will be copied into the empty OS environment of the target. The Fusion Applications deployment topologies and configuration of source and target must the same – eg. what Fusion Applications servers run on what hosts, the LDAP location of IDM and FA jpsroot entities, Fusion Applications filesystem directory etc. The hostnames used for Fusion Applications internal endpoints need to be identical in source and target (ie. internal Fusion Applications hostname entries need to be copied into target /etc/hosts files to not conflict with DNS).

Table 1-1 (Cont.) Quick Comparison Chart

Category	Production to Test	Cloning
Process	Once initial process is streamlined, periodic refresh is quick (typically done within a day). Short downtime needed for target during P2T. P2T time taken is mainly for: – manual prerequisite work, especially to sync source/target patch levels. – copying FA DB into target and packing of source data. – IDM LDAP replication from source to target Needs admin access to FA, IDM, DBs, file systems and OS.	Once the prerequisites are ready (ie. FA source/target info and target hardware/OS/storage) the actual cloning process itself is relatively quick (about 2 days). No source downtime needed during Cloning work. Cloning time taken is mainly for : – manual prerequisite work especially to create target hardware/OS/storage. – copying source FA files and DBs into target – post-clone steps Needs admin access to FA, IDM, DBs, file systems, OS & storage.
Limitations	Best used to refresh production data into test environment. While periodic repeat of P2T is perfect usage, avoid any possibility of cycling data back to source (production) environment. Transaction data is copied from source to target but some historic logs and pending notifications that may conflict with source environment are left out. Check this for corner-case system audits. Source data is copied to target, so data issues may spill to target and functional validation is always good. However, P2T does allow exceptions to IDM reconciliation.	No limitations on how often to replicate (even cyclically) provided each target environment is self-contained by ensuring that FA internal hostnames do not conflict between environments. Complete data is replicated from source into target, but in-flight transactions are truncated to preclude any target transactions pointing to source and this needs to be minded for corner-case system audits. There are no exceptions in moving data from source to target – complete data comes through and only changes made are to delete pending transactions and change target system passwords.

2

Perform Production-to-Test Data Movement

This chapter contains the start-to-finish steps for transferring data from a source Oracle Fusion Applications instance onto an existing destination Fusion Applications instance. This chapter contains the following topics:

2.1 About Production-to-Test Data Movement

"Production-to-test" is the movement of application data from a source to a target Fusion Applications installation. Although a common use case is the refreshing of a test database with production data, the same tools could be used to move data between any two environments (production, staging, testing, etc.). Throughout this document, "production" is assumed to be source, and "test" is assumed to be the target.

There are two phases in moving data in a Fusion Applications installation: 1) moving the Identity Management Identity and Policy Store data, and 2) moving data from the Fusion Applications transaction database(s). At a high level, the following are moved:

- Identity Management Policy Store data (application and system policies, but not credentials and keys)
- Identity Management Identity Store data (not including AppID and user passwords)
- Fusion Applications transaction data and the crawl index stored in SES
- File attachments stored in UCM (such as orders, agreements)
- ADF Customizations (such as Flex Fields), SOA and ESS customizations stored in MDS
- Business Intelligence (BI) Web Catalog and RPD
- ODI repository
- WebCenter contents

Production-to-test movement replaces most of the target database with production data; a small category of data on the test/target system is preserved, as required by the system. When the content is moved, the target environment is reconfigured and rewired. All long-running processes on the target are stopped and purged, in order to

prevent the non-production system from sending emails and alerts to real users, as if it were the production system.

2.1.1 Terminology

Common terminology used in production-to-test data movement includes:

Source Environment - In data movement, the source environment is a fully provisioned Fusion Applications environment with data that will be replicated to another existing environment. The source environment may be used for production, thus the term "production-to-test."

Target Environment - The target environment (which may be used for testing) is a matching Fusion Applications instance to the source. It will have its transaction data overwritten by the source data.

Content Movement - A general term that refers to the task of moving Fusion Applications components and/or data from one environment to another environment.

Abstract Host Name - An abstract host name is an alias given to represent a physical node. It has a one-to-one relationship with a virtual host name. If your environment was installed before the release of cloning and done without the use of abstract host names, the virtual host names in your source environment will become abstract names in the destination environment. If your source environment did not make use of virtual host names, then physical host names will be used.

2.2 Roadmap: What Does Production to Test Data Movement Entail?

Production-to-test data movement requires the following high-level steps:

- **Fulfill Prerequisites** and download the production-to-test tools. See Prerequisites and Assumptions.
- **Complete Discovery**: Execute discovery phase.
- **Move Identity Management data** using a five-step process.
- **Move Fusion Applications data** from production to test, while also exporting and re-imported selected test data that must be preserved. See Import Application Data to the IDM and FA Target Systems.

2.3 Prerequisites and Assumptions

The following assumptions are made for production-to-test data movement:

- Source and target systems must be identical in terms of product version, initial patches, deployment topology, and configurations. The same applies to their respective databases. Note: There are required patches for production-to-test that need to be applied only to the target system. At that point, the patching for the two systems will no longer be identical.
- Both systems were set up following the same set of instructions.

> **Note:**
>
> The procedures in this book are NOT designed for Oracle Fusion Applications systems that were *installed* using OVM templates. If your source system was installed in this way, contact Oracle Support for the correct production-to-test documentation and procedures.
>
> If you used virtualization technology, such as Oracle Virtual Machines, to host an operating system, but performed full standard provisioning into that virtualization layer, then the procedures in this book CAN be used. Both source and target systems must match.

- The OS version and configurations are identical in both environments.
- Internal host names are identical in both environments.
- The directory paths and structures are identical in both environments.
- Both source and target environments are available for access over SSH.
- The host and port of both OID stores are accessible for data movement.
- The name values for "IDM_JPSROOT" and "FS_JPSROOT" values must be identical between source and target systems.

2.3.1 System Requirements

Versions: Both production and test installations must be on matching versions of **Oracle Fusion Applications.** Check the title page of this guide for the correct software version; to use this guide, the software and guide versions must match.

The starting versions of the two environments must be identical in terms of patching. The additional patches listed for production to test can be applied to the target system only.

2.3.1.1 Required Patches for Production-to-Test on Target Environment

There are patches specific to production-to-test that must be installed on the Identity Management and Fusion Applications servers. Check the Release Notes for the current list of patch numbers to be installed.

2.3.2 Directory Requirements for APPLTOP (Base), Product and Config Directories

The production-to-test tools assume that both product binary and instance (or config) directories are relatively based on APPLTOP. If that is not the case then, symbolic links must be created. For example: if `APPLTOP=/u01/oracle`, then create symbolic links as:

- dbclient -> `products/dbclient`
- instance -> `config`
- fusionapps -> `products/fusionapps`

2.3.3 Obtaining and Installing the Production-to-Test Tools

There are two steps to installing the production-to-test software: downloading the P2T .zip patch from Oracle Support and extracting it on the Oracle Fusion Applications system.

1. **Download P2T Patch:**

   Go to My Oracle Support (MOS) and download the P2T Patch, for example p19816982_111800_Linux-x86-64.zip. It is recommended to download and install on the folder where Fusion Applications was installed, such as /u01/{app}. But any location should work if it has direct access to the installation point of FA.

2. **Unzip the File:**

   If Fusion Applications is installed on multiple servers, you can install the production-to-test kit in shared storage with identical mapping from all the servers in the Fusion Applications environment. (This includes the Identity Management environment).

3. Navigate to the downloaded .zip file and extract it using the unzip command, for example: unzip $??/p19816982_111800_Linux-x86-64.zip. This will create the P2T home folder, with the bin and Utils subdirectories, containing all the logs, output information, and binary code needed to run the production-to-test processes.

> **Note:**
>
> If the $P2T_HOME is not shared among all hosts, then repeat the process to install FAP2T_11.1.10.0.0.zip on the FA Source Host and FA Target Host.

2.3.4 Prerequisites for Executing P2T

Before executing P2T, ensure you meet the following prerequisites:

- Administrator servers from all domain and Fusion Applications and IDM databases must be online.
- The System Administrators responsible for Oracle Fusion Applications must know the values of the properties in the following sections.

2.4 Discovery

The discovery phase may be the most important part of the data movement process. Here you determine all the relevant details of your source and destination environments, and record them. Note that the details required for production-to-test data movement are different than those for Cloning.

Refer to the following section to help validate the response files:

- Generating the P2T Response Files

2.4.1 Generating the P2T Response Files

The P2T response file (p2t.rsp) contains answers to P2T execution questions. Each answer is stored as a value for a variable identified in the response file. To generate this response file, perform the following steps:

1. Set the environment variables as follows:
   - JAVA_HOME on FA Nodes:

     ```
     export JAVA_HOME=<APPL_TOP>/fusionapps/jdk
     ```

     For example:

     ```
     /u01/app/fa/fusionapps/jdk
     ```
   - JAVA_HOME on IDM Nodes:

     ```
     export JAVA_HOME=<IDM_BASE>/products/app/jdk
     ```

     For example:

     ```
     /u01/app/idm/products/app/jdk
     ```
   - P2T_HOME on FA and IDM Nodes:

     ```
     export P2T_HOME=<P2T_HOME location>
     ```
2. Move into the `/bin` directory:

   ```
   cd $P2T_HOME/bin
   ```
3. Ensure that the FA and IDM environments are up and running before performing Steps 4 and 5.
4. Generate the response (rsp) file for the source server by running the following command on the FA node only once:

   ```
   $P2T_HOME/bin/p2tcli.sh discover fa source
   ```

   This step will prompt you for your password if the security option was enabled in the `Config` file located at `Utils/app/discover/config/DiscoverConfig.xml`.
5. Generate the response (rsp) file for the target server by running the following command on the FA node only once:

   ```
   $P2T_HOME/bin/p2tcli.sh discover fa target
   ```

   After you generate both rsp files, they are located at `$P2T_HOME/Utils`.
6. Manually generate the final response file as follows:
   a. Merge the `p2t.source.rsp` and `p2t.target.rsp` files generated in Steps 3 and 4 into the `p2t.rsp` file.
   b. Copy the final `p2t.rsp` to `$P2T_HOME/bin/`.

> **Note:**
>
> The response file template for the execution of P2T can now be found at `$P2T_HOME/bin/p2t.rsp`.

2.5 Back Up the Source and Target FA and IDM Databases

Perform a backup of the source and target databases, using whatever method you prefer: RMAN backup, file system copy, storage replication, VM snapshot, etc. To keep source IDM and FA data synchronized, you must ensure that the system is suspended with no incoming transactions, and all transactions are completed, aborted or suspended. If possible, it is preferred to run a cold backup to completely ensure synchronization.

2.6 Export Application Data from Source and Target

In this section, you export the source application data and also export selected target data that needs to be preserved and reused. This following topics are discussed:

- Generate Encrypted Passwords for P2T
- Export from the IDM and FA Source Systems
- Copy Exported Source IDM and FA Files to Target Server
- Export from the FA Target System

2.6.1 Generate Encrypted Passwords for P2T

To generate the encrypted passwords for P2T on the source server, run the following command only once:

```
$P2T_HOME/bin/p2tcli.sh generatePasswords
```

2.6.2 Export from the IDM and FA Source Systems

In production-to-test for Identity Management, the application users and roles are migrated from source to target, but the passwords are not. Therefore, the system administrator must set new passwords on the target system for each newly migrated user who did not already exist on the target. Using the Generated P2T Response File tab in the Workbook, you also modify the `p2t.rsp` file, located in `$P2T_HOME/bin/p2t.rsp`. This file will be used throughout the production-to-test process on both Identity Management and Fusion Applications. While exporting, ensure that source transactions are suspended or have minimal activity.

To pack the IDM source files, run the following scripts:

```
$P2T_HOME/bin/p2tcli.sh packData preverify idm
$P2T_HOME/bin/p2tcli.sh packData run idm
```

To pack the FA source files, run the following scripts:

```
$P2T_HOME/bin/p2tcli.sh packData preverify fa
$P2T_HOME/bin/p2tcli.sh packData run fa
```

2.6.3 Copy Exported Source IDM and FA Files to Target Server

Copy over the files that were previously packed as follows:

1. Copy the folder `$P2T_HOME/Utils/p2tCore/utilhome/P2TSourcePackedFiles` to the target server. Use the exactly same path (`$P2T_HOME/Utils/p2tCore/utilhome/P2TSourcePackedFiles`).
2. Ensure you have read/write/update access to the folder.

2.6.4 Export from the FA Target System

This step preserves some of the data on the target system which will be automatically re-imported when the production data is migrated. To export from the FA target system, perform the following steps:

1. Ensure that the folder `$P2T_HOME/Utils/p2tcore/utilhome/P2TSourcePackedFiles` is available on the target server before executing the target commands.
2. Run the following commands for Core Data:

```
$P2T_HOME/bin/p2tcli.sh generateMoveData preverify fa
$P2T_HOME/bin/p2tcli.sh generateMoveData run fa
```

3. Run the following commands for BI Data:

```
$P2T_HOME/bin/p2tcli.sh generateMoveDataBI preverify fa
$P2T_HOME/bin/p2tcli.sh  generateMoveDataBI run fa
```

4. Export the Security Store from the target IDM server by running the following commands:

```
$P2T_HOME/bin/p2tcli.sh migrateSecurityStore preverify idm
$P2T_HOME/bin/p2tcli.sh migrateSecurityStore runsource idm
```

Once you complete the steps above, the copied folder contains the following information:

- `diskspacecheck.txt`
- `idmlcm_data.zip`
- `obirpd.tgz`
- `opss_cloning_work.zip`
- `preverifyReportDir`
- `fadbhost.mycompany.com.preverifyreport.txt`
- `vault.tgz`
- `wallets`
- `birpdcwallet.sso`
- `webcatalog.tgz`
- `weblayout.tgz`

2.7 Import Application Data to the IDM and FA Target Systems

Production-to-test movement for the transaction data includes the following steps. For each command, run `preverify` and correct any errors until `preverify` passes, then execute run.

2.7.1 Import IDM Data into Target

To import IDM data into the target server, run the following commands on the IDM server:

```
$P2T_HOME/bin/p2tcli.sh migrateOid preverify idm
$P2T_HOME/bin/p2tcli.sh migrateOid run idm
$P2T_HOME/bin/p2tcli.sh migrateOid postvalidate idm
```

2.7.2 Duplicate FA Database from Source to Target

The Fusion Applications (FA) Database duplication is done in the method your enterprise uses, for example, RMAN, Expdp/Impdp, Cold Backup/Restore, and the like.

Ensure you meet the following requirements when replacing the target database with the source database:

- Before duplicating, shut down the target Fusion Applications Web tier and application tier, as well as the Identity Management Web tier and application tier, and ensure that all in-flight transactions have been completed.
- The topology and operating systems must be identical between source and destination.
- When replacing the target database from the source, the schema passwords come over from the source and you must reset them with the original target passwords.

2.7.3 Import Security Store

Once the Duplication of FA database is completed, import the Security Store to the target IDM server by running the following commands:

```
$P2T_HOME/bin/p2tcli.sh migratesecuritystore rundestination idm
$P2T_HOME/bin/p2tcli.sh migratesecuritystore postvalidate idm
```

2.7.4 Import FA Application Data

This step imports the FA application data from Copy Exported IDM and FA Files to Target Server in to the target (test) database. All long-running processes will be stopped and purged, to prevent the non-production system from sending emails or notifications to real users as if it were a production system.

Move packed data and clean up In-Flight transactions for FA as follows:

1. Ensure the servers are down.
2. While the servers are down, run the following commands:

```
$P2T_HOME/bin/p2tcli.sh  applyMoveDataOffline preverify fa
$P2T_HOME/bin/p2tcli.sh  applyMoveDataOffline run fa
```

3. Bring the servers back up.
4. While the servers are up, run the following commands:

```
$P2T_HOME/bin/p2tcli.sh applyMoveDataOnline preverify fa
$P2T_HOME/bin/p2tcli.sh applyMoveDataOnline run fa
```

Move packed data and clean up In-Flight transactions for BI as follows:

1. Ensure the servers are down.
2. While the servers are down, run the following commands:

```
$P2T_HOME/bin/p2tcli.sh applyMoveDataBIOffline preverify fa
$P2T_HOME/bin/p2tcli.sh applyMoveDataBIOffline run fa
```

3. Bring the servers back up.
4. While the servers are up, run the following commands:

```
$P2T_HOME/bin/p2tcli.sh applyMoveDataBIOnline preverify fa
$P2T_HOME/bin/p2tcli.sh applyMoveDataBIOnline run fa
```

5. Bring the servers are down again.
6. While the servers are down, run the following offline commands:

```
$P2T_HOME/bin/p2tcli.sh applyMoveDataBIViaBIFacadeOffline preverify fa
$P2T_HOME/bin/p2tcli.sh applyMoveDataBIViaBIFacadeOffline run fa
```

7. Bring the servers back up again.
8. While the servers are up, run the following online commands:

```
$P2T_HOME/bin/p2tcli.sh applyMoveDataBIViaBIFacadeOnline preverify fa
$P2T_HOME/bin/p2tcli.sh applyMoveDataBIViaBIFacadeOnline run fa
```

2.7.4.1 Validate

After completing the Fusion Applications production-to-test steps, restart the Fusion Applications stack again. All domains and managed servers must restart successfully. The system is ready for functional testing.

3
Troubleshoot P2T

This chapter describes failure scenarios and troubleshooting steps that are specific to On-Premise environments. This section contains the following topics:

- Troubleshooting Identity Management (IDM) Issues

3.1 Troubleshooting Identity Management (IDM) Issues

Use this section to resolve errors in production-to-test content movement for Identity Management. Topics include:

- Failed to Bind to Source or Destination Directory Error in OID Step

3.1.1 Failed to Bind to Source or Destination Directory Error in OID Step

To resolve this, verify the `orclreplicaid` (Replication DN) and replication password as follows:

1. Retrieve `orclrepilicaid` using the command `<OID_HOME>/bin/ldapsearch -p 3060 -D cn=orcladmin -w <password> -b "" -s base "(objectclass=*)" orclreplicaid` This should return the [replication DN]. For example:

   ```
   orclreplicaid=oidfa_oiddb
   ```

2. The default replication password is the password of the ODS schema. Use the following command to verify the password:

   ```
   <OID_HOME>/bin/ldapbind -p 3060 -D "cn=replication dn,
   orclreplicaid=oidfa_oiddb,cn=replication configuration"  -w
   <replication_password>
   ```

A

Validating Source and Target Information

After generating the P2T files with Discover, validate the information that was generated on the file. The following sections provide information about finding the values to validate the Source Environment.

A.1 Finding the provisioning.rsp and provisioning.plan Files

You can find the `provisioning.rsp` file on the source and the target. For some data, it is also necessary to refer to `provisioning.plan`.

Both files may be located in the same directory: (`APPLICATIONS_BASE/provisioning/plan/`). If the `.rsp` file is not in the `/plan` directory, search for `provisioning.setup.core.provisionplan.install` within `provisioning.plan`, to see where the `.rsp` file is located.

A.2 P2T Identity Management

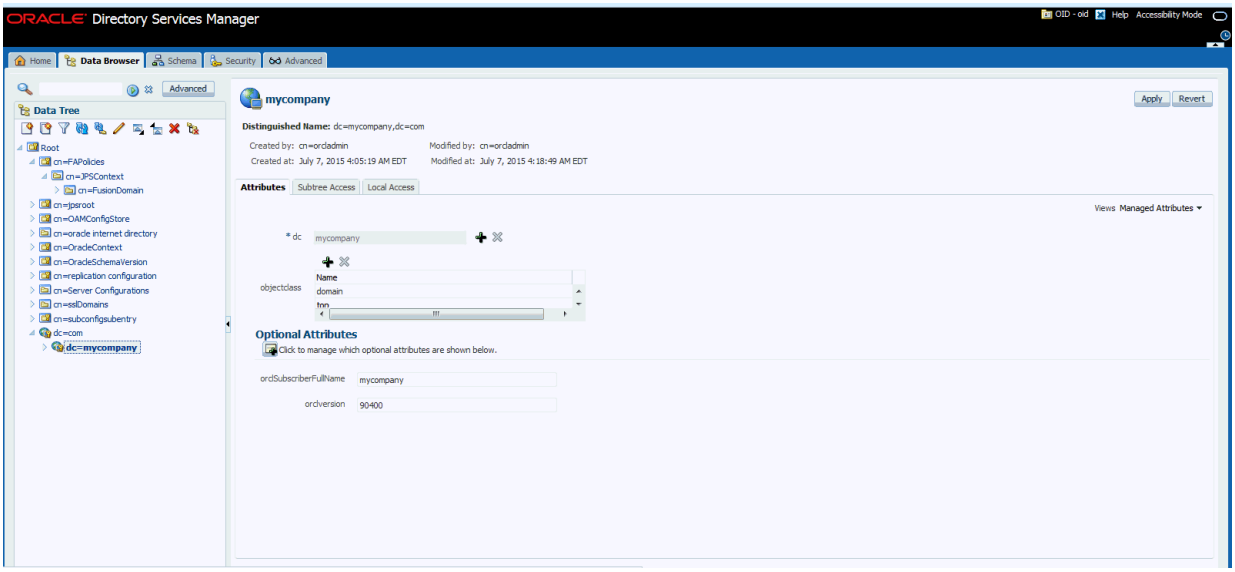
There are three tables in the P2T Identity Management tab. The following sections give tips on finding the correct values for each row in the tables.

A.2.1 IDM Database Information (Source and Target)

The IDM database administrator should know the host names, Service names, port numbers, and schema names for the OID and OIM on the target and source environments. Enter in the appropriate tabs. When a field is marked N/A, this entry will not be needed by the P2T script, and can be omitted.

A.2.2 IDM Midtier Information (Source and Target)

Some of the values in this section require logging on to the Oracle Directory Services Manager (ODSM). Use the following image for reference:



- **OID Hostname:** Enter the physical host name for the server where the OID resides on both source and target.
- **OID Port:** If you need to locate this information, perform a file system search for the `ports.properties` file: `$OID_INSTANCE/config/OPMN/opmn/ports.prop`. Search for `/oid1/oid1_nonSSLPort=` to find the number.
- **FA JPSROOT** and **IDM_JPSROOT:** To find the JPS root values, log on to the ODSM. Usually, the provisioning process assigns the name`fa_jpsroot`, or `jpsroot_fa`, or `FAPolicies` (depending on the version you've installed), but it could be given a unique name by your company.

  FUSION_DOMAIN: When you've located the FA JPSROOT in ODSM, expand the tree to find the FA Domain.
- **DC**: Look in the ODSM Data Browser data tree and expand the `dc=` to find the full value. The Base DN is everything above the `cn=Users`.
- **IDM_POLICYRWUSER_USERNAME** and **IDM_POLICYROUSER_USERNAME**

  Usually orcladmin OID user (if your environment was installed manually following the EDG) or the IDMPolicyRWUser if your environment was installed using the IDM provisioning tool.
- **TEST_IDM_DIRECTORY**: The APPLTOP directory for IDM, usually `/u01/app/idm/`
- **TEST_OID_USER_NAME** and **PROD_OID_USER_NAME:** `IDMPolicyRWUser` if your environment was installed using the IDM Provisioning tool.
- **PROD_JPS_CONFIG_SRC:** To find the JPS root values, log on to the ODSM.
  - **FA JPSROOT:** Usually, the provisioning process assigns the name `fa_jpsroot` or `jpsroot_fa`, or `FAPolicies` (depending on the version you've installed), but it could be given a unique name by your company. To check this value: in ODSM, select the Data Browser tab, and check the listed values.
  - **FA Domain under JPSRoot:** When you've located the `FA JPSROOT` in ODSM, expand the tree to find the FA Domain.
- **PROD_WEBLOGIC_IDM_DOMAIN_DIRECTORY:**The path to this domain home can be found from Fusion Middleware Control, if needed.

For IDM Midtier information on the Target, log in to the FMW Control for IDM and go through the Topology for each component to find the **OIM SOA Server Name**, and the **OIM Admin Server Hostname** and **Port**.

A.3 Fusion Applications P2T Information

This section describes the following topics:

- Fusion Applications Database
- Fusion Applications Common Information
- Fusion Applications Information (Source and Target)
- Fusion Applications Business Intelligence Information (Target Only)

A.3.1 Fusion Applications Database

The database administrator should be able to enter correct values for the source target environments in the Fusion Applications Database (FA DB) table. Note that if no data pump directories exist, they must be created on the database server of the target system.

A.3.2 Fusion Applications Common Information

The following is some Fusion Applications common details:

- **FA Base Directory (APPLTOP):** If you need to find this value, search the `provisioning.rsp` for `INSTALL_ APPHOME_DIR`.
- **FA Java Home:** Check the Fusion Applications installation directory to find/verify the `jdk` directory.
- **Common Domain Home Directory:** This is the path to the domain directory, in the format `<FA Instance home>/domains/<abstract host name of the topology component>/<Domain name>`.

  For example, if the instance home is `/u01/app/fa/instance`, and the abstract host name for COMMON Admin is `fusionapps.example.com`, then the Admin Server path for Common Domain would be: `/u01/app/fa/instance/domains/fusionapps.example.com/CommonDomain`
- **Common Domain Host Name:** Search the source and target `provisioning.rsp` files for the `#Domain Topology` to get the respective `CommonDomain` hostnames.
- **FA Super User Name:** If you need to find this value, search the `provisioning.rsp` file for `IDENTITY_SUPERUSER`.
- **PROD_FA_INSTALL_APPCONFIG_DIR:** The Fusion Applications instance home. This is the directory where FA instance was installed, usually `</u01/app/fa/instance/>`.

A.3.3 Fusion Applications Information (Source and Target)

The following is some Fusion Applications information that applies to source and target:

- **T3 URL Entries:** For all the T3 URL entries, search the `provisioning.rsp` file for the `#Domain Topology`. This will list each host name and port; concatenate them to create the full entry, using the format: `t3://<hostname>:<port>`.

  > **Note:**
  >
  > If you do not have all products installed, and therefore domain does not exist, use NONE as a value. Do NOT delete or leave empty.
  >
  > This applies to *Common Domain T3 URL, CRM Domain T3 URL, HCM Domain T3 URL, SCM Domain T3 URL, FIN Domain T3 URL, Project Domain T3 URL, Procurement Domain T3 URL, and IC Domain T3 URL*

- **SES and ESS Entries:** Log in to the Common Domain Admin Console. Then, go to **Servers** to find the SES and ESS information. This applies to *Common Domain SES (Secure Search Server) Hostname, Common Domain SES (Secure Search Server) Port Number, and Common Domain ESS Server Name.*

A.3.4 Fusion Applications Business Intelligence Information (Target Only)

The following is some Fusion Applications (FA) Business Intelligence (BI) that apples to target only:

- **BI Machine OS User Name:** This is the user that installed the BI domain on the BI server.
- **BI Domain Home Directory:** This is the path to the domain directory, in the format `<FA Instance home>/domains/<abstract host name of the topology component>/<Domain name>`.
- **BI Admin Server Host Name** and **BI Admin Server Port:** go to OHS `moduleconf` directory, and then view `FusionVirutalHost_bi.conf`. The BI Admin Server hostname and port can be found under **Connect** roots for `BI Weblogic: <Location /Console>`.
- **FA DB Host Names** and **Ports:** For single-instance environments, the database administrator can fill this in. In the case of a RAC installation, you must enter all instances of the database in an escape semi-colon-separated list. For example: `1521\;1522`.