Common Property Tables

Software Version: 3.6

HP OpenView Performance Insight

User Guide

April 2007

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The following table provides a list of changes made to this document since the last update in December 2005.

Chapter	Changes
Chapter 1	Minor editorial enhancements.
Chapter 2	Minor editorial enhancements.
Chapter 4	Minor editorial enhancements.

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Contents

1 Overview

Common Property Tables makes it possible for the reporting solutions that run on OVPI to share the same customer, location, and node data. Sharing data eliminates duplication, allows the database to operate more efficiently, and simplifies the administration of report packs.

Installing Common Property Tables creates the following tables:

- K_Customer for customers
- K_Location for locations
- K_Node for nodes

The data in these tables comes from three sources:

- Report packs
- The batch-mode import utility bundled with Common Property Tables
- The create and update forms bundled with Common Property Tables

Enhancements and Fixes

The following table outlines recent enhancements to Common Property Tables.

Version	Release Date	Enhancements/Defect Fixes
2.1	May 2003	HOSTS file property import (for easier mapping of node name to IP address in K_node) 2.0 to 2.1 upgrade package
2.2	October 2003	OVPI Object Manager support; "create new" forms and "update" forms 2.0/2.1 to 2.2 upgrade package
3.0	April 2004	Oracle support *two new directories:* $DPIPE_HOME\data\ImportData $DPIPE_HOME\data\PropertyData *new nightly process:* CommonPropertyTables_delete_nodes.pro *upgrade package:* 2.2 to 3.0

Version	Release Date	Enhancements/Defect Fixes
3.5	August 2004	Modified TableAlias values *upgrade package:* 3.0 to 3.5
3.5	November 2004	No changes
3.5	June 2005	*upgrade package:* UPGRADE_CommonPropertyTables_to_3.5
3.5	March 2006	No changes
3.5	May 2006	No changes
3.6	April 2007	Partition maintenance *upgrade package:* UPGRADE_CommonPropertyTables_to_3.6 Defect fixes: • QXCR1000283035 — Increase max rows for drop-down queries on CPT Forms • QXCR1000323690 — Package Manager hangs due to TNS problem on Oracle • QXCR1000374418 — CPT delete nodes SQL scripts need to delete from K_CiscoVLAN_PortNonSt • QXCR1000382190 — nightly delete nodes process errors out • QXCR1000228205 — CPT delete node SQL script should delete from FRSCPE 1315 before K_IFEntry_Disc • QXCR1000382191 — sanconf: Unexpected message creating store. • QXCR1000225079 — Oracle Port of ppGetNode_fk omitted essential logic • QXCR1000385614 — Issues with create_ppReportPackProcLog.sql on Oracle • QXCR1000353616 — Warning message in delete_node_K_FRSCPE_FRSW_pvc.out • QXCR1000192006 — Sybase version of ppGetNode_fk.sql has some typos during logging calls

Nightly Delete Process

Common Property Tables includes a nightly delete process:

```
CommonPropertyTables_delete_nodes.pro
```

The nightly delete process performs the following tasks:

- Rebuilds stored procedures, one per property table
- Deletes nodes from individual property tables
- Deletes nodes from ksi_managed_node

Although there are two versions of this process, one for Sybase and one for Oracle, the process itself is database independent. The deletion of nodes from individual property tables takes place in response to the user marking nodes for deletion in Polling Policy Manager. Deleted nodes are listed in the log file maintained by Common Property Tables.

Sources for Additional Information

For information about the latest enhancements and any known problems affecting Common Property Tables 3.6, refer to the following document:

- *Common Property Tables 3.6 Release Statement*

Manuals for OVPI and the reporting solutions that run on OVPI can be downloaded from this site:

http://ovweb.external.hp.com/lpe/doc_serv/

The user guides for OVPI are listed under **Performance Insight**. The user guides for report packs and datapipes are listed under **Performance Insight Reporting Solutions**. The entry for each user guide indicates the month and year it was posted to the web. If a manual is revised and reposted, the date will change. Since revised manuals are reposted from time to time, be sure to compare your PDF to the web edition and download the web edition if it is newer.

2 Package Installation

This chapter covers the following topics:

- Guidelines for a smooth installation
- Installing Common Property Tables 3.6
- Package removal

Guidelines for a Smooth Install

The December 2005 report pack CD contains the latest report packs, datapipes, and shared packages. When you insert the CD and launch the package extraction interface, the install script extracts every package from the CD and copies the results to the Packages directory on your system. After the extract finishes, the install script prompts you to launch Performance Insight and start Package Manager. Before using Package Manager, review the following guidelines.

Software Prerequisites

Common Property Tables 3.6 requires:

- OVPI 5.2 or higher
- All service packs available for OVPI 5.2

Upgrading to Version 3.6

If you are running an earlier version of Common Property Tables, you can upgrade to Common Property Tables 3.6 by installing one upgrade package. When upgrading Common Property Tables, keep these rules in mind:

- Do not install other packages (a report pack or a datapipe) when you upgrade Common Property Tables. Install the upgrade package for Common Property Tables and *only* the upgrade package for Common Property Tables.

- When you install the upgrade package, you will be prompted to accept or disable the Deploy Reports option. The forms that come with Common Property Tables will not deploy to the Application Server unless you accept the default for Deploy Reports.

- If you are running OVPI on multiple servers, install the upgrade package on every server that is running Common Property Tables.

Directory Structure

When OVPI was installed, the installation program created the following:

- A directory for OVPI; the directory name is OVPI
- A directory for packages available for installation
- An environment variable that points to the OVPI directory

On a UNIX system, the directory for OVPI defaults to /OVPI. On Windows, the directory for OVPI defaults to C:\OVPI.

The Packages directory is where Package Manager looks for packages awaiting installation. This directory contains one sub-folder for each package copied from the report pack CD. When you run Package Manager, any package currently in the Packages directory will show up as install option in the Package Selection window.
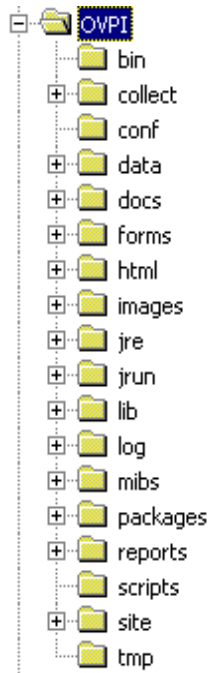
The environment variable is {DPIPE_HOME}.

The ImportData and PropertyData Directories

Installing Common Property Tables creates two directories:

- `$DPIPE_HOME\data\ImportData`
- `$DPIPE_HOME\data\PropertyData`

All report packs that rely on Common Property Tables use the `PropertyData` directory. They import flat files from the `PropertyData` directory and they export flat files to the `PropertyData` directory.

Installing Common Property Tables 3.6

If the packages on the report pack CD have not been extracted yet, insert the CD and follow the instructions for extracting packages. On Windows, the instructions appear in a menu that opens automatically; on UNIX, mount the CD, navigate to the top level directory for the CD drive, and run the **setup** command.

After the install script copies packages to your system, you will be prompted to start Package Manager. If the packages on the report pack CD were extracted, but Performance Insight is not running, begin at step 1. If you just extracted packages from the report pack CD and Package Manager is running, begin this procedure at step 4.

1   Log in to the system. On UNIX systems, log in as root.

2   Stop OVPI Timer and wait for processes to terminate.

   Windows: Select **Settings > Control Panel** > **Administrative Tools > Services.**

   UNIX: As root, type one of the following:

   HP-UX: **sh /sbin/init.d/ovpi_timer stop**

   Sun: **sh /etc/init.d/ovpi_timer stop**

3   Open the Management Console and start Package Manager. The Package Manager welcome window opens.

4   Click **Next.** The Package Location window opens.

5   Click **Install.** Approve the default installation directory or select a different directory if necessary.

6   Click **Next.** The Report Deployment window opens. Accept the default to deploy reports. Type your username and password for the OVPI Application Server and click **Next.** The Package Selection window opens.

7   If this is a new install, click the check box next to:

   CommonPropertyTables

   If you are upgrading, click the check box next to:

   UPGRADE_CommonPropertyTables_to_3.6

8   Click **Okay.**

9   Click **Next.** The Type Discovery window opens.

10 To run Type Discovery immediately after package installation, accept the default and click **Next.** The Selection Summary window opens.

11 Click **Install.** The Package Installation window opens and the install begins. When the install finishes, a package installation complete message appears.

12 Click **Done** to return to the Management Console.

13 Restart OVPI Timer.

   Windows: Select **Settings > Control Panel** > **Administrative Tools > Services.**

   UNIX: As root, type one of the following:

   HP-UX: **sh /sbin/init.d/ovpi_timer start**

   Sun: **sh /etc/init.d/ovpi_timer start**

Package Removal

If you just installed Common Property Tables for the first time, you may uninstall it. However, since Common Property Tables is a prerequisite for lots of report packs, you will also uninstall any report pack that depends on Common Property Tables as a prerequisite.

If you just installed the upgrade package, you cannot return to the previous version of Common Property Tables by removing the upgrade package. Instead, to return to the previous version, uninstall the new version and then re-install the version you were running.

Follow these steps to uninstall Common Property Tables.

1   Log in to the system. On UNIX systems, log in as root.

2   Stop OVPI Timer and wait for processes to terminate.

    Windows: Do the following:

    a   Select **Control Panel > Administrative Tools > Services**.

    b   Select OVPI Timer from the list of services.

    c   From the Action menu, select **Stop**.

    UNIX: As root, do one of the following:

    —   HP-UX: `sh /sbin/ovpi_timer stop`

    —   Sun: `sh /etc/init.d/ovpi_timer stop`

3   Start Package Manager. The Package Manager welcome window opens.

4   Click **Next.** The Package Location window opens.

5   Click **Uninstall**.

6   Click **Next.** The Report Undeployment window opens.

7   Click **Next**. The Package Selection window opens.

8   Click the check box next to *Common Property Tables* and click **Next.** The Selection Summary window opens.

9   Click **Uninstall**. The Progress window opens and the removal begins. When the removal finishes, a package removal complete message appears.

10 Click **Done**.

11 Restart OVPI Timer.

    Windows: Select **Settings > Control Panel** > **Administrative Tools > Services.**

    UNIX: As root, type one of the following:

    HP-UX: `sh /sbin/ovpi_timer start`

    Sun: `sh /etc/init.d/ovpi_timer start`

3 Import and Export Utilities

The user input forms described in the previous chapter are suitable when you are dealing with a small number of customer, location, or node objects. For a large number of objects, entering data using a batch process is more efficient. The Common Property Tables package includes import and export utilities for this purpose.

The import utility imports the four property data files described in Chapter 5, Property Import Files. The import utility runs once a day, automatically. The default run time is midnight, but you can change it to any hour of the day. You can also run the import utility manually, ahead of schedule. Run the export utility as needed.

The Import Utility

The import utility performs three tasks:

- Reads property data files containing records for the elements to be updated
- Stores the data in temporary tables in the database
- Uses imported data to update the following tables:
  - K_Node
  - K_Customer
  - K_Location

If the data in the property data file is for an element (node, customer, or location) that already exists in the property table, the data in the property table is overwritten by the imported data. If an element does not exist, a new row is inserted in the appropriate property table.

The default directory for property import and export files is:

```
{DPIPE_HOME}/OVPI/data/PropertyData
```

You never need to have all four property files in this directory. This directory can be empty, or it can contain just one or two files. When you want to update just one property table, edit just one file and store just one file.

To run the import utility manually, before the utility is scheduled to run, do the following:

1 Open a command prompt at the system level.

2 Navigate to the `{DPIPE_HOME}/scripts` directory.

3 Type the following command:

   trend_proc -f CommonPropertyTables_importdata.pro

The Export Utility

The export utility exports the contents of property tables as tab-delimited flat files and stores these files in the default property export directory or in a directory that you specify. The export utility is based on a process known as trend_export. This process determines which columns to export from the database and generates tab-delimited files in the proper directory, appending each file name with a timestamp, as follows:

- `CommonPropertyTables_Customer.dat.<timestamp>`
- `CommonPropertyTables_Location.dat.<timestamp>`
- `CommonPropertyTables_Node.dat.<timestamp>`

To run the export utility:

1 Open a command prompt at the system level.

2 Navigate to the `{DPIPE_HOME}/scripts` directory.

3 Type the following command:

   `trend_proc -f CommonPropertyTables_exportdata.pro`

Changing Default Directories

Common Property Tables creates a default directory reserved for property import and property export files. The import utility looks for files in this directory, and the export utility stores files in this directory. You are **not** required to establish a different directory. However, if changing the default directory is necessary, these are the tasks you would need to perform:

- Task 1: Create a new directory for import and export files
- Task 2: Provide the import utility with the path to the new directory
- Task 3: Provide the export utility with the path to the new directory

You can use the same directory for import and export files, or you can set up separate directories for import and export files.

Changing the Default Import Directory

The default directory for data property files, the location where the import utility will look for your edited files, is specified by the SourceDirectory path. This path appears in the following TEEL files:

- `CommonPropTablesCustomer.teel`
- `CommonPropTablesHosts.teel`
- `CommonPropTablesLocation.teel`
- `CommonPropTablesNode.teel`

If you are changing the default directory before you install the Common Property Tables package, you can locate the TEEL files in the `CommonPropertyTables.ap` directory. If you want to change the default directory after running Package Manager, you must change the path information in two directories:

- `CommonPropertyTables.ap`

- `{DPIPE_HOME}/lib`

To change the SourceDirectory, do the following:

1 Create the new source directory.

2 Navigate to the appropriate directory and open the directory. (See the discussion in the preceding section about which directories are involved.) You will see the following files:

   - `CommonPropTablesCustomer.teel`

   - `CommonPropTablesHosts.teel`

   - `CommonPropTablesLocation.teel`

   - `CommonPropTablesNode.teel`

3 Double-click the `CommonPropTablesCustomer.teel` file.

4 Locate the line beginning with: `SourceDirectory =`

5 Change the path, replacing the existing path with the complete path to the new directory; begin the new path name just after the equals sign (=).

6 Make the same change in these files:

   - `CommonPropTablesHosts.teel`

   - `CommonPropTablesLocation.teel`

   - `CommonPropTablesNode.teel`

   ▶ Leave the file filters as specified in the original SourceDirectory.

Changing the Default Export Directory

To change the default export directory, modify the export data process file. If you are making this change before you install the package, you must make this modification only once, in the `CommonPropertyTables.ap` directory. If you are making this change after you run Package Manager, make this modification in two places:

- `CommonPropertyTables.ap`

- `{DPIPE_HOME}/scripts`

Follow these steps to change the default export directory:

1 In the `CommonPropertyTables.ap` directory, edit the `CommonPropertyTables_exportdata.pro` file. See sample file below.

2 Locate the three trend_export statements and, beginning at the bracket after the **-o**, replace the existing path with the complete path to the new directory.

3 Only if necessary—only if you have already installed this package—navigate to the `{DPIPE_HOME}/scripts` directory and make the same changes you made to `CommonPropertyTables_exportdata.pro`.

```
#  Package: Common Property Tables
#  Purpose: Exports property data for Customers, Regions and Nodes
#   into tab delimited files to allow the user to modify existing
#  property values.  Then using the CommonPropertyTables_importdata.pro
#  file to update the existing property values with the modified values.
#
################################################################
begin: exportdata nowait|
{DPIPE_HOME}/bin/trend_export -c y -p 10000 -a n -o {DPIPE_HOME}/packages/CommonProperty
{DPIPE_HOME}/bin/trend_export -c y -p 10000 -a n -o {DPIPE_HOME}/packages/CommonProperty
{DPIPE_HOME}/bin/trend_export -c y -p 10000 -a n -o {DPIPE_HOME}/packages/CommonProperty

end: exportdata
```

Changing the Default Run Time

The default run time for the automatic import process is 12:00 midnight. Follow these steps to change the default:

1 In the `{DPIPE_HOME}/lib` directory, edit the `trendtimer.sched` file.

2 Scroll down the file and locate the line that defines the interval and offset for the trend_proc that executes the CommonPropertyTables_importdata.pro command.

3 Modify the offset indicator. The offset indicator is the number after the plus (+) sign. For example, if you change 24:00 to 18:00, the import utility will run at 18 hours after midnight, or 6:00 p.m.

4 User Input Forms

The node, customer, and location objects maintained by Common Property Tables can be modified in two ways:

- By using the input forms discussed in this chapter

- By using the import and export utilities discussed in the next chapter

The input forms allow you to create new objects for customers, locations, and nodes and modify existing objects. Using the forms is appropriate when you are adding or updating just a few objects. The batch-oriented utilities are more efficient when many entries are involved.

The "Create New" Forms

The Create-New forms allow you add new objects to the database. Follow these steps to launch a create-new form.

1   Click the **Objects** icon in the panel on the left side of the Management Console window. The Object/Property Management view opens.

2   Click the **New** icon in the tool bar, or select **File** > **New...** from the menu. The Create Managed Object window opens.
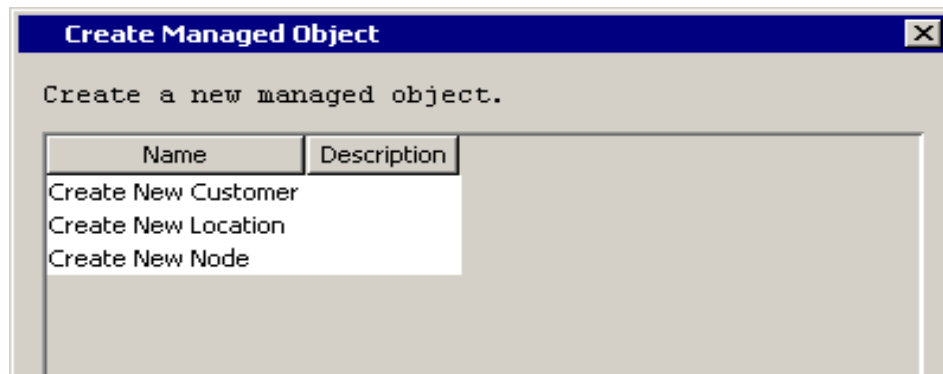
3   Select an option and click **Create** at the bottom of the window.

Create New Customer

To add a new customer, type a customer name and a description. If you are entering only one customer, click **OK.** The customer will be added and the window will close. If you have more customers to add, click **Apply**. The customer will be added, the form will be cleared, and the form will remain open for the next customer.

Keep the following rules in mind when using the Create New Customer form:

- You must supply a name to create a new customer object.

- The customer name must be unique; you cannot have two customer objects with the same name.

- If a description is not specified, it will be set to the customer name.

Create New Location

To add a new location, enter a location name and a description. If you are entering only one location, click **OK**. The location will be added and the window will close. If you have more locations to add, click **Apply**. The location will be added, the form will be cleared, and the form will remain open for the next location.

Keep the following rules in mind when using the Create New Location form:

- You must supply a name to create a new location object.

- The location name must be unique; having two location objects with the same name is not permitted.

- If a description is not specified, it will be set to the location name.

Create New Node

To add a new node, enter a node name and any other information you may have. To assign a node to a customer or a location, click the customer or location drop box and select the desired entry. If you are entering only one node, click **OK**. The node will be added and the window will close. If you have more nodes to add, click **Apply**. The node will be added, the form will clear, and the form will remain open for the next node.

Keep the following rules in mind when using the Create New Node form:

- You must supply a name for the node to create a new node object. The name can be its DNS name or its IP address.

- The name you supply must be unique; you cannot create a new node with the same name as an existing node.

- A node can only be assigned to pre-existing customers and locations. If you want to assign a node to a customer or location that does not exist, you must first add the customer or location using the New Customer or New Location form.

- If a description is not specified, it will be set to the node name.

▶ Creating a new node via this form will not automatically result in data collection. To initiate SNMP collections, the same node must be defined in Polling Policy Manager and added to a polling group. See the *OVPI Administration Guide* for more information on Polling Policy Manager.

/admin/CommonPropForms/create_node.frep

Common Property

Create New Node

This form allows a new node to be created. The node name is mandatory, while the other fields are optional. Click the OK button to create the node and close the window. Click the Apply button to create the node and leave the window open to create additional nodes. Click the Cancel button to cancel.

Node Name

IP Address

Type

Make

Model

Serial Number

Operating System

Department

Description

Customer Name   Customer Unassigned ▼

Location   Location Unassigned ▼

Last Created Node
Central.ACME.com

[OK]   [Apply]   [Cancel]
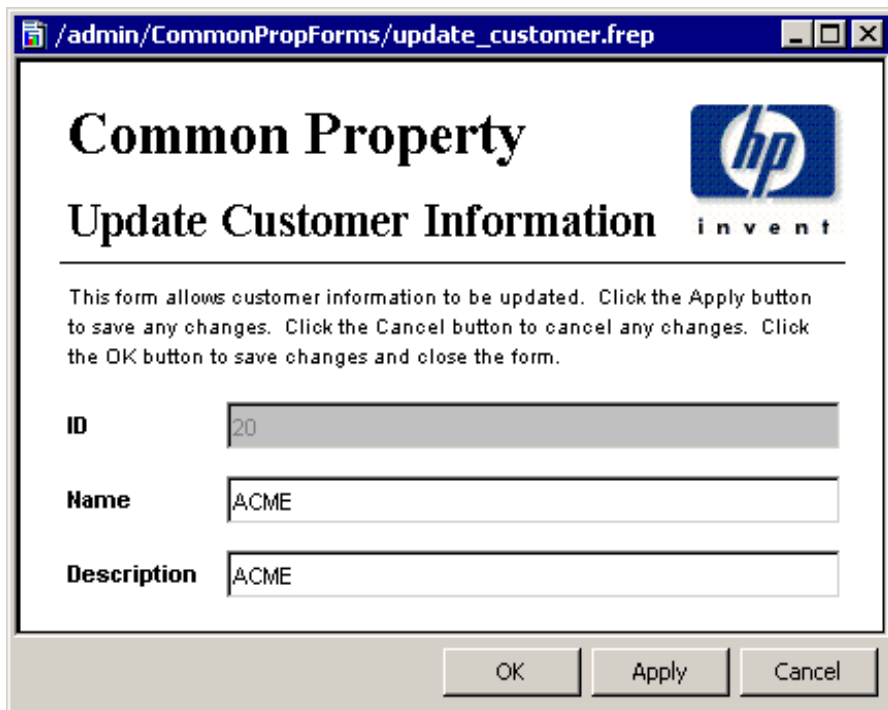
The "Update" Forms

The update forms modify properties for customer, location, and node objects that already exist in the database. To launch an update form, click the **Objects** icon in the panel on the left side of the Management Console window. The Object/Property Management view opens.

Object Manager will present you with a list of objects. The type of object presented depends on which Object Manager view is open. The default view is the Device view, showing a list of devices. The Customer view shows a list of customers, and the Location view shows a list of locations. To change the view, select **View** > **Change View** and use the pop-up window to select a different view.

When the type of object you are interested in updating displays, select the particular object you would like to update. When you select the object, **Update <Object Type> Information** will appear under **Object Specific Tasks**. Double-click the update task to open the appropriate update form.

Update Customer

To update customer information, type the changes in the fields provided. The ID is a reference number and cannot be changed. When changing the customer name, do not change it to another existing customer name. Having two customer objects with the same name is not allowed. To save your changes, click **Apply**. When you finish making changes, click **OK**. Your changes will be saved and the window will close.

Update Location

To update location information, type the changes in the fields provided. The ID is a reference number and cannot be changed. When changing the location name, do not change it to another existing location name. Having two location objects with the same name is not allowed. To save your changes, click **Apply**. When you finish making changes, click **OK**. Your changes will be saved and the window will close.

Update Node

To update node information, type the changes in the fields provided. The node name cannot be changed. To assign a node to a different customer or location, click the customer or location drop box and select the desired entry. To save your changes, click **Apply**. When you finish making changes, click **OK**. Your changes will be saved and the window will close.

5 Property Import Files

The import utility reads the following tab-delimited flat files:

- Customer data file
- Location data file
- Hosts data file
- Node data file

If the data that needs to be in these files already exists in a provisioning system, you can probably generate each flat file automatically by writing a script and exporting the data directly from the provisioning system database. If you cannot generate the file automatically, you must create it yourself. You may create it using a spreadsheet program such as Excel, or a text editor such as Notepad.

You can also generate customer, location, and node property import files by running the property export utility that comes with the Common Property Tables package. However, this approach to updating property information works only if the property tables were populated by a datapipe. If you run the export utility and notice that the export file is empty, the property tables are empty.

File Generation Guidelines

Whether you are exporting the data from a database or creating your own property import files, produce a separate file for customer, location, hosts, and node information and follow these guidelines:

- The sequence of columns, shown in the format tables below, is important. Adhere to this sequence.
- Do not use values reserved for use by OVPI.
- Do not embed tabs in quoted text strings.
- If you are using a spreadsheet program, save each file as a tab-delimited file. If you are using a different method, be sure to enter a tab between columns.
- Give each input file the proper file name and save files to the directory where the import utility expects to find them.

The required file names are listed in the following table.

Property File	File Name
Customer	CommonPropertyTables_Customer.dat
Location	`CommonPropertyTables_Location.dat`
Host	`CommonPropertyTables_Hosts.dat`
Node	CommonPropertyTables_Node.dat

If you are using the default SourceDirectory path, save your property data files to:

`{DPIPE_HOME}/data/PropertyData`

If you changed the SourceDirectory path, copy the files to the new directory.

Format of the Import Files

This section describes the format of the customer, location, hosts, and node data files. Make sure the sequence of columns in your files is correct—the same exact sequence shown here—and make sure you do not use values that are reserved by OVPI. If you were able to export data from a provisioning system database and specify the proper column sequence, most of your work is already done and your only task is to verify that reserved values are used correctly.

Customer Data File

The customer data file contains three columns separated by tabs. Each row represents one customer. See below for a description of each column.

Column No.	Description
1	Unique integer value for each customer. This value is known as "cust_id."
2	The name associated with the customer ID.
3	A description of the customer.

Restrictions

Follow these rules when you prepare the customer data file:

- Do not include column headers in your file. The first entry in your file should be an actual customer ID, not "cust_id."
- Reserved values for column 1 (cust_id) are: -2, -1, 0.
- If the cust_id string was exported from the K_Customer property table, do not change it.

- If you are adding a new customer to K_Customer, the value in column 1 (cust_id) must be different from all existing cust_id values.

- If you use an existing cust_id value (a value that matches the cust_id value of an existing customer), you will overwrite that cust_id's data.

- Since conflict with cust_ids that were automatically assigned by a report pack or datapipe is possible, try to use high numbers in column 1. For example, you could begin with 10,000 and go up from there.

Location Data File

The location data file contains three columns separated by tabs. Each row represents one location. See below for a description of each column.

Column No.	Description
1	Unique integer value for each location. This value is known as "location_id."
2	The name associated with the location ID.
3	A description of the location.

Restrictions

Follow these rules when you prepare the location data file:

- Do not include column headers in your file. The first entry in your file should be an integer value for a location ID, not "location_id."

- Reserved values for column 1 (location_id) are: -2, -1, and 0.

- If the location_id string was exported from the K_Location property table, do not change it.

- If you are adding a new location to K_Location, the value in column 1 (location_id) must be unique; that is, it must be different from all existing location_id values.

- Since conflict with location_ids that were automatically assigned by a report pack or datapipe is possible, try to use high numbers in column 1. For example, you could begin with 10,000 and go up from there.

Hosts Data File

The hosts data file contains a one-to-one mapping of IP address to host name. This can be the system HOSTS file or a file with the same format as a system HOSTS file. The file contains two columns separated by a tab. Each row represents one device. See below for a description of each column.

Column No.	Description
1	IP address
2	Host name

Restrictions

Follow these rules when you prepare the hosts data file:

- Do not include column headers in your file. The first entry in your file should be an integer value for a location ID, not "IP address."

- Each IP address and host name should be listed only once. Only the first occurrence of an IP address or host name will be imported; subsequent occurrences will be ignored.

- If an IP address had previously been mapped to a host name, importing it mapped to a different host name will make the previous mapping invalid. Only the latest mapping will be considered valid.

Node Data File

The node data file contains 15 columns separated by tabs. Each row represents one node. See below for a description of each column.

Column No.	Description
1	A unique text string that matches the node name or the node IP address. **Note:** The node name, if the name is resolvable, or the node IP address.
2	The node reference number specified by the user. **Note:** This number is known as "node_id."
3	**Note:** This column is not used; it is preserved to maintain compatibility with earlier versions.
4	The node IP address.
5	The node type. Initially, this should be set to host. Other node types will be added in the future.
6	A description of the node composed by the user.
7	The manufacturer of the node.
8	Node model type.
9	Node serial number.
10	Node operating system.
11	A name defined by the customer for the department where the node resides.
12	The ID number for the customer who owns the node; in other words, cust_id. This value establishes a link between the node and a customer in the K_Customer property table. **Note:** Default cust_id = -2.

Column No.	Description
13	The ID number for the location of the node; in other words, location_id. This value establishes a link between the node and a location in the K_Location property table. **Note:** Default location_id = -2.
14	Customer name associated with cust_id.
15	Location name associated with location_id.

The customer name and location name columns are not necessary and are supported as a convenience for the user when specifying cust_ids and location _ids that are not defined in the K_Customer and K_Location common property tables.

If a new customer_id or location_id is specified for a given node, that cust_id/location_id will be inserted into the K-Customer or K-Location table along with the specified customer name or location name. If the customer name or location name is not specified, the name will be set to *Undefined Customer* or *Undefined Location*, as appropriate.

Restrictions

Follow these rules when you prepare the node data file:

- Do not include column headers in your file.

- If a node name was exported from the K_Node Common Property Table, do not change it.

- If you want to add a new node to the node property table, the text string in column 1 must be unique and it should be set to the node name (if available) or the node IP address.

- If the text string in column 1 is not unique—that is, if the text string matches an existing value for node name—the other columns of your data file will overwrite the corresponding row in the common property table.

Import Files and Property Tables

The import file on the left updates the table on the right.

Property File	Common Property Table
CommonPropertyTables_Customer.dat	K_Customer
CommonPropertyTables_Location.dat	K_Location
CommonPropertyTables_Node.dat	K_Node
CommonPropertyTables_Hosts.dat	K_Node

When you want to modify existing information in a property table, values must match exactly. If you are modifying a row in the K_Customer table, the cust_id values in the property file and the property table must match. Similarly, if you are modifying a row in the K_Location table, location_id values must match, and if you are modifying values in the K_Node table, node name values must match.

If the property import file introduces an existing value—that is, an existing cust_id, location_id, or node name value—the other values in the row from the property data file will overwrite the corresponding row in the common property table. If the property data file introduces a new value, a new row and keyid value will be inserted in the property table.

6 Columns in Property Tables

The Common Property Tables package creates the following property tables:

- K_Customer
- K_Location
- K_Node

Each table is described below.

K_Customer

The K_Customer property table contains customer-specific information. This table maintains customer ID, name, and description only. However, it can be expanded to support additional customer information (for example, address) if needed.

Column	Description
dsi_key_id	Unique value automatically assigned
dsi_target_name	Always set to "0" for customer information
dsi_table_key	Set equal to cust_id
dsi_descr	Customer definable
cust_id	Unique reference number for each customer
cust_name	Customer name associated with cust_id

K_Location

The K_Location property table contains location-specific information. This table maintains location id, name, and description only. However, it can be expanded to support additional location information if needed.

Column	Description
dsi_key_id	Unique value automatically assigned
dsi_target_name	Always set to "0" for location information
dsi_table_key	Set equal to location_id; if the location information is not pre-provisioned, dsi_table_key will equal dsi_key_id
dsi_descr	Customer definable
location_id	Unique reference number for each location; if the location information is not pre-provisioned, location_id will equal dsi_key_id
location_name	Location name associated with location_id

K_Node

The K_Node property table contains node-specific information. A node is any network device (computer, router, switch) capable of being polled for performance data.

Column	Description
dsi_key_id	Unique value automatically assigned
dsi_target_name	Always set to "0"
dsi_table_key	Set equal to node_name.
dsi_descr	Customer definable
node_id	Customer-assigned reference number for each node
node_name	Name of node; the DNS name or the IP address
node_type	Type of node; only valid type = Host
IP_address	Node IP address
make	Node manufacturer
model	Node model type
serial_num	Node serial number
operating_sys	Node operating system
department	Customer-defined name for node department

Column	Description
sysObjectID	MIB II system object ID — not currently used
cust_fk	Foreign key pointing to table K_Customer; default value points to default K_Customer row
location_fk	Foreign key pointing to table K_Location; default value points to default K_Location row
IP_state	Flag indicating if the IP address node name mapping is the most recent mapping for the IP address

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