

# HP Test Data Management

Software version: 1.10

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## Installation Guide

Document release date: October 2010  
Software release date: October 2010



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# About this document

HP Test Data Management provides powerful tools to design a test data management solution that copies data out of your production database for upload into a test database.

This guide provides information about:

- meeting installation prerequisites
- installing HP Test Data Management
- creating installation scripts

## Intended audience

This guide is intended for:

- Test data developers installing HP Test Data Management

## Prerequisites

Prerequisites for installing this product include:

- Knowledge of operating systems
- Database knowledge
- Application knowledge

## Related documentation

In addition to this guide, please refer to other documents for this product:

- *HP Test Data Management Concepts Guide*

Explains the major concepts of test data management in general and HP Test Data Management in particular.

- *HP Test Data Management Tutorial*

Provides step-by-step instructions to build a sample project with business flows, deploy them, run them, and troubleshoot errors.

- *HP Test Data Management Designer User Guide*  
Explains how to use the Designer component to design, build, test, and deploy your test data management projects.
- *HP Test Data Management Web Console and Query Server User Guide*  
Explains how to use the Web Console component to run, monitor, and administer the business flows that copy data to and from the database. This guide also explains how to install, configure, and use the query server to access data that has been extracted from the database.
- *HP Test Data Management Troubleshooting Guide*  
Explains how to diagnose and resolve errors, and provides a list of common errors and solutions.
- *HP Test Data Management Release Notes*  
Lists any items of importance that were not captured in the regular documentation.

The latest documentation for the most recent HP Test Data Management release can be found on:

<http://support.openview.hp.com/selfsolve/manuals>

## Document conventions and symbols

Convention	Element
	Separates alternatives.
<parameter_name>	You must supply a value for a variable parameter.
Medium blue text: <a href="#">Figure 1</a>	Cross-reference links and e-mail addresses
Medium blue, underlined text ( <a href="http://www.hp.com">http://www.hp.com</a> )	Web site addresses
<b>Bold</b>	GUI elements that are clicked or selected, such as menu and list items, buttons, and check boxes
Monospace	<ul style="list-style-type: none"> <li>• File and directory names</li> <li>• Text displayed on the screen, such as system output and application messages</li> <li>• Code syntax</li> </ul>
△	<b>CAUTION</b> Indicates that failure to follow directions could result in damage to equipment or loss of data.

---

**NOTE** Provides additional information.

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**TIP** Provides helpful hints and shortcuts.

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**RECOMMENDATION** Provides guidance from HP for a best practice or for optimum performance.

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## Documentation updates

For documentation for of HP Test Data Management, you can go to:

<http://support.openview.hp.com/selfsolve/manuals>

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**NOTE** This documentation is written to the latest patch version. If you have not installed the latest patch, there may be items in this documentation that do not apply to your environment.

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## Subscription service

HP strongly recommends that customers sign up online using the Subscriber's choice web site:

<http://www.hp.com/go/e-updates>

- Subscribing to this service provides you with e-mail updates on the latest product enhancements, newest versions of drivers, and firmware documentation updates as well as instant access to numerous other product resources.
- After signing up, you can quickly locate your products under Product Category.

## Support

You can visit the HP Software Support web site at:

<http://www.hp.com/go/hpsoftwaresupport>

HP Software Support Online provides an efficient way to access interactive technical support tools. As a valued support customer, you can benefit by using the support site to:

- Search for knowledge documents of interest
- Submit and track support cases and enhancement requests

- Download software patches
- Manage support contracts
- Look up HP support contacts
- Review information about available services
- Enter into discussions with other software customers
- Research and register for software training

Most of the support areas require that you register as an HP Passport user and sign in. Many also require a support contract.

To find more information about access levels, go to:

[http://support.openview.hp.com/new\\_access\\_levels.jsp](http://support.openview.hp.com/new_access_levels.jsp)



# 1

## New and revised information

For HP Test Data Management 1.10, new feature information is available for the following:

- DB2 Support
- Generic JDBC/ODBC Support
- Non-Intrusive support for Oracle, SQLServer, Sybase, DB2
- Upload test data output to any database

[Table 1](#) describes the new and revised features for this guide.

**Table 1**      **New and changed features for Release 1.10 HP Test Data Management documentation**

<b>Feature</b>	<b>Description</b>	<b>Documented in</b>	<b>Chapter</b>
Generic JDBC drivers	You can use generic JDBC drivers in HP Test Data Management.	<i>HP Test Data Management Designer User Guide</i>	Chapter 10, Working with cartridges and Chapter 11, Working with business flows
DB2 support	HP Test Data Management now supports the DB2 database platform.	All HP Test Data Management software documents include updates that reflect support of the DB2 platform.	

**Table 1**      **New and changed features for Release 1.10 HP Test Data Management documentation**

<b>Feature</b>	<b>Description</b>	<b>Documented in</b>	<b>Chapter</b>
Non-intrusive environments	A non-intrusive environment eliminates the need for any interface schema in the source database and data is copied/moved without the use of selection tables. Data is copied/moved directly. Non-intrusive environments are available for database to file cartridges only.	<i>HP Test Data Management Designer User Guide</i>	Chapter 7, Working with models  Chapter 10, Working with cartridges
		<i>HP Test Data Management Concepts Guide</i>	Chapter 4, Repository, deployment environments, and Web Console
		<i>HP Test Data Management software Web Console and Query Server User Guide</i>	Chapter 4, Managing environments
Groovy data masking for non-intrusive environments	You can create and use Groovy scripts for data masking. Note this is only true for non-intrusive environments and for Sybase 12.5.	<i>HP Test Data Management Designer User Guide</i>	Chapter 3, Advanced data masking  Chapter 10, Working with cartridges
Data movement key required for selection	Oracle users may specify a Data Movement Key rather than having to use ROWID. While using the Data Movement Key is more reliable, users may also continue to use ROWID if necessary or preferred.	<i>HP Test Data Management Designer User Guide</i>	Chapter 7, Working with models
Upload activity in business flow	You can upload via business flow activities.	<i>HP Test Data Management Designer User Guide</i>	Chapter 4, Working with business flows

**Table 1**      **New and changed features for Release 1.10 HP Test Data Management documentation**

<b>Feature</b>	<b>Description</b>	<b>Documented in</b>	<b>Chapter</b>
Email settings	Email settings are now configurable from the Web Console	<i>HP Test Data Management Web Console and Query Server User Guide</i>	Chapter 5 Managing users
Port option	A port option was added to oaserver that shows the port that the query server is running on.	<i>HP Test Data Management Web Console and Query Server User Guide</i>	Chapter 4 Managing environments
JDBC certification testing	After installing HP Test Data Management, users can test generic JDBC drivers to make sure they are compatible with the application. The JDBC certification test tool detects whether or not methods of the java.sql.DatabaseMetaData class are supported by a the driver.	<i>HP Test Data Management Designer User Guide</i>	Appendix A, JDBC validation and configuration



## 2

# Prerequisites

Before installing HP Test Data Management you should make sure that you have the latest documentation, and that you understand the overall installation process.

*In this chapter*

- [Obtaining HP Test Data Management documentation](#) (page 13)
- [HP Test Data Management installation overview](#) (page 13)

## Obtaining HP Test Data Management documentation

For documentation of HP Test Data Management, you can go to:

<http://support.openview.hp.com/selfsolve/manuals>

## HP Test Data Management installation overview

Before you can use HP Test Data Management to copy the data from a source database to structured files, you need to install the software, create the repository, create your environments, set up the database components, and deploy the business flows that copy your data.

Installing HP Test Data Management consists of the following main steps:

- 1 Review the *HP Test Data Management Concepts Guide*.
- 2 Choose where to install your repository.

Your repository can be installed in the source database, the embedded Java database, or another database.

*See also*

[Repository preparation](#) (page 19)

- 3 Make sure that the necessary requirements for your servers, databases, and selected solution for test data management have been met.

*See also*

[Operating system and server requirements](#) (page 15)

[Database requirements](#) (page 16)

- 4 Install HP Test Data Management.

*See also*

[Installing HP Test Data Management](#) (page 25)

- 5 Start the Web Console to create the repository and the environment.

*Related information*

*HP Test Data Management Web Console and Query Server User Guide*

- 6 Use the *HP Test Data Management Developer's Guide* to design and develop or customize your test data solution.
- 7 Use Designer or the Web Console to deploy the business flows you have created.

*Related information*

*HP Test Data Management Designer User Guide*

*HP Test Data Management Web Console and Query Server User Guide*

- 8 To remove HP Test Data Management, see [Chapter 5, Removing HP Test Data Management](#).

# 3

## Requirements

Requirements vary depending on the database you are extracting from, and how you plan to copy your test data. HP Test Data Management has the following requirements for installation.

- In this chapter*
- [Operating system and server requirements](#) (page 15)
  - [Database requirements](#) (page 16)
  - [Repository preparation](#) (page 19)

*Related information* [HP Test Data Management Concepts Guide](#)

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**TIP** Verify that you have the most recent version of this manual before beginning the installation. See [Obtaining HP Test Data Management documentation](#) (page 13).

---

## Operating system and server requirements

Make sure that you meet the operating system and server requirements before installing HP Test Data Management.

- In this section*
- [Supported operating systems](#) (page 15)
  - [Server requirements](#) (page 16)
  - [Database to file supported storage adapters](#) (page 16)
  - [Supported web browsers](#) (page 16)

## Supported operating systems

The following platforms are supported:

- HP-UX 11x on PA-RISC
- HP-UX 11.x on Itanium/Integrity
- Solaris 9.5 (SPARC)
- Solaris 10 (SPARC) (64-bit)
- Microsoft Windows XP (x86)
- Microsoft Windows Server 2003 (x86)
- Microsoft Windows Server 2003 (x86-64)

- Microsoft Windows Server 2008 (x86-64)
- Microsoft Windows 7 (x86)
- Microsoft Windows 7 (x86-64)

## Server requirements

For all servers required for your HP Test Data Management solutions:

- Identify a directory with a required minimum of 800 MB of disk space to install HP Test Data Management.

Platform	Use
UNIX	/user/home/username
Windows	C:\Program Files\

- To run HP Test Data Management jobs on a server, the server needs:
  - An operating system user with database access from the command line.
  - Connectivity to the required databases, for example, the source database and repository.
  - For copying data from the database to structured files, the operating system user must have write permissions to the file system.

## Database to file supported storage adapters

HP Test Data Management supports the following storage adaptors for database to file copying:

- File system

## Supported web browsers

The HP Test Data Management Web Console has been tested against the following browsers:

- Internet Explorer 6.0 and above
- Mozilla Firefox 3.0 and above

## Database requirements

HP Test Data Management copies data from the following:

- Oracle
- Microsoft SQL Server



- Sybase
- DB2
- Generic JDBC/ODBC connections

To use the database to file method, you must have:

- a repository to store metadata
- a source database from which to extract eligible data (also referred to as the active database)

The repository can be located on an Oracle or SQL Server database or in an embedded Java database installed with HP Test Data Management.

*See also* [Repository preparation](#) (page 19)

[Embedded repository requirements](#) (page 20)

Make sure the appropriate database requirements are met before installing HP Test Data Management.

---

**NOTE** The source database and repository database must use the same character encoding. If the character encoding is not the same, a warning is displayed in the installation summary.

---

*In this section*

- [Oracle database requirements](#) (page 17)
- [Microsoft SQL Server requirements](#) (page 18)
- [Sybase requirements](#) (page 19)

## DB2 database requirements

- DB2(Windows/Linux/Solaris)

To connect to DB2 you must have permissions to create packages.

- DB2(z/os)

To connect to DB2 you must have permissions to create packages. You must also have privileges to create and execute on a collection named HPDARCH.

## Oracle database requirements

The repository and source databases require the following Oracle database versions:

- Oracle 11g (11.1.0.6 and above)
- Oracle 10g Release 2 (10.2.0.4 and above)
- Oracle 9i Release 2 (9.2.0.8 and above)— target database must be equal or same as source database
- Oracle 8i Release 2 (8.16.0.2)—can be used as a database to file source database only

An administrator account with the following privileges is required:

- Create User
- Grant permissions to non-owned tables

This document refers to this account as the system account, but it can have any name you assign to it.

*In this section*

- [Source database preparation for Oracle](#) (page 18)

## Source database preparation for Oracle

- 1 Make sure there is 1.5 GB available disk space to create tablespaces.

---

**TIP** When you calculate the space requirements, you need to consider how much space you need for rollback segments and temporary segments.

---

- 2 Create the following data and temporary tablespaces.

---

Tablespace	Size	Contains
INTF_DATA	1 GB	table data for the interface schema.
INTF_TEMP	1 GB	temporary data for the interface schema.

---

*Example*

```
create tablespace OBT_DATA datafile '<path>/OBT_DATA.dbf'  
size 1GB autoextend on;
```

where <path> is the directory location where you want to save the tablespace datafile.

The tablespaces that you create here are available for selection from the Web Console when you deploy the product and business flows.

- 3 Add the following entries to the source database init.ora file:

- `_PUSH_JOIN_UNION_VIEW = TRUE`
- `COMPATIBLE = <current_database_release>`

## Microsoft SQL Server requirements

The repository and source databases require the following SQL Server database versions:

- SQL Server Enterprise Edition 2005 with Service packs 1 and 2
- SQL Server Enterprise Edition 2008

An administrator account with the following privileges is required:

- Create Database
- Create Login
- Create User
- Grant permissions to non-owned tables

This document refers to this account as the sa account, but it can have any name you assign to it. This account is necessary to enable connections using JDBC.

## Sybase requirements

The following Sybase versions are supported for the source database:

- Sybase ASE 12.5
- Sybase ASE 15

An administrator account with the following privileges is required:

- Create Database
- Create Login
- Create User
- Grant permissions to non-owned tables

This document refers to this account as the sa account, but it can have any name you assign to it.

## Repository preparation

HP Test Data Management requires a repository to store extraction metadata. The repository can be located on one of the following locations:

- an Oracle database
- a SQL Server database
- in an embedded Java database installed with the software

The same repository is used for all database to file environments, regardless of the source database.

*In this section*

- [Oracle repository requirements](#) (page 19)
- [SQL Server repository requirements](#) (page 20)
- [Embedded repository requirements](#) (page 20)

## Oracle repository requirements

The repository should reside on an existing database where backups are regularly performed.

- 1 Identify a persistent database meeting the following requirements:
  - **Available tablespace**—3200 MB
  - **Available diskpace**—100 MB

2 Create the following tablespaces:

Tablespace	Size	Contains
REP_DATA	800 MB	Table data for the repository schema.
REP_TEMP	800 MB	Temporary data for the repository schema.

*Example*

```
create tablespace OBT_DATA datafile '<path>/OBT_DATA.dbf'  
size 1GB autoextend on;
```

where <path> is the directory location where you want to save the tablespace datafile.

The tablespaces that you create here are available for selection from the Web Console when you create the repository.

## SQL Server repository requirements

The SQL Server repository must meet the requirements in [Microsoft SQL Server requirements](#) (page 18).

## Embedded repository requirements

You may optionally install the HP TDM repository on an embedded Java database. HP Test Data Management 1.10 comes with Java DB 10.3. Java DB is an open source database that uses ANSI-standard SQL. If you choose to deploy the repository on the embedded Java database, you should be aware of the following considerations:

- The embedded repository reduces the amount of space required on your production servers.
- The embedded repository must be running before you create the repository user.
- The embedded repository runs slower than a repository installed on your production database.
- The embedded repository must be manually started and stopped before and after using HP Test Data Management.
- The Java DB database must be maintained, and requires different administrative skills for backup and recovery than your source database.

### Starting the embedded repository

Use the launch\_repository script to start the embedded repository.

1 Navigate to the directory containing the startup script.

*Example*

```
cd <install_directory>/obt/bin
```

where <install\_directory> is the location where you installed the software.

- 2 Start the embedded repository using the appropriate syntax:

Platform	Syntax
UNIX	<code>./launch_repository.sh &lt;port&gt;</code>
DOS	<code>launch_repository.bat &lt;port&gt;</code>

where <port> is the is the port number you are using for the repository. The port number is not required if you are using the default value of 1527.

### Stopping the embedded repository

Use the `shutdown_repository` script to stop the embedded repository.

- 1 Navigate to the directory containing the shutdown script.

*Example*

```
cd <install_directory>/obt/bin/
```

where <install\_directory> is the location where you installed the software.

- 2 Stop the embedded repository using the appropriate syntax:

Platform	Syntax
UNIX	<code>./shutdown_repository.sh</code>
DOS	<code>shutdown_repository.bat</code>

### Viewing the embedded repository configuration information

After you finish deploying a database to file extraction using the embedded repository, you can view the configuration information.

- 1 Navigate to the directory that contains the embedded repository information:

*Example*

```
cd <install_directory>/obt/dbrep/
```

where <install\_directory> is the location where you installed the software.

- 2 Open the `access.cfg` file with a text editor to view the login information.

The `access.cfg` file is created after you select Embedded Repository as your repository location. The password is encoded using one-way encryption.

*Example*

```
#Repository Account
#Wed Nov 12 13:27:06 PST 2008
user=obt_rep
value=soYkPfWJ20VeePpcCZ3mt0iw4jHTjOi5itdW9amuShlFg\=
```

- 3 Open the `server.properties` file with a text file to view the stored connection information.

```
#storing server properties
#Wed Nov 12 13:23:23 PST 2008
port=1527
host=myhost.myhost.net
dbname=obt_rep
```

## Accessing the embedded repository using SQL

You can access the embedded repository using your favorite JDBC tool or the Interactive JDBC client (ij) that is installed with HP Test Data Management.

To use your favorite JDBC tool, use the following connection information:

---

### Connection information Location

---

JDBC driver	<install_directory>/obt/lib/derbyclient.jar
JDBC URL	jdbc:derby://<host>:<port>/obt_rep;

---

#### Where

#### Is

---

<install_directory>	the location where you installed the software.
<host>	the name of the host machine or IP address on which the embedded repository is running.
<port>	the port number for the host machine. The default value is 1527.

---

To connect using ij:

- 1 Start Interactive JDBC (ij).

---

#### Platform

#### Use

---

UNIX	./<install_directory>/obt/bin/dbarch_sql.sh
Windows	<install_directory>/obt/bin/dbarch_sql.bat

---

where <install\_directory> is the location where the software was installed.

- 2 Connect to the driver using the following syntax:

```
driver 'org.apache.derby.jdbc.ClientDriver';
```

- 3 Connect to the server using the following syntax:

```
connect 'jdbc:derby://<host>:<port>/  
obt_rep;user=<user_name>;password=<password>';
```

---

#### Platform

#### Is

---

host	the name of the host machine or IP address on which the embedded repository is running.
port	the port number for the host machine. The default value is 1527.
username	the name of the repository user.
password	the password for the repository user.

---

4 After connecting, use SQL commands to query the database.

Command	Description
<code>help;</code>	displays a list of all supported ij commands.
<code>show tables;</code>	displays a list of all tables and schemas.
<code>select tablename, tabletype from sys.systables;</code>	displays a list of all tables and views, and labels each one appropriately.
<code>describe &lt;table_name&gt;;</code>	displays the table columns. For tables not owned by the <code>obt_rep</code> user, type the fully qualified table name.

## Backing up and restoring your embedded repository

To backup your repository:

- 1 Make sure that the repository is stopped.

*See also*

[Stopping the embedded repository](#) (page 21)

- 2 Copy the following directory to a backup location:

`<install_directory>/obt/dbrep/`

where `<install_directory>` is the location where you installed the software.

To restore your repository from a copy:

- 1 Make sure that the repository is stopped.

*See also*

[Stopping the embedded repository](#) (page 21)

- 2 Copy the backup directory you made to the following location:

`<install_directory>/obt/dbrep`

where `<install_directory>` is the location where you installed the software.

For information on performing an online backup, see the Apache Derby documentation at <http://db.apache.org/derby/manuals/index.html>.





# 4

# Installation

The HP Test Data Management installation software installs Designer and the Web Console server.

*In this chapter*

- [Installing HP Test Data Management](#) (page 25)
- [Installing the software using scripted installation](#) (page 27)
- [Using log files](#) (page 27)

## Installing HP Test Data Management

Make sure you have installed the latest patches with HP Test Data Management.

- 1 Obtain the Test Data Management installation software, and copy the appropriate file for your platform to a location accessible by all the servers and clients in the configuration.
- 2 Use the appropriate command to start the installation software:

For	Use
UNIX	sh <part_number>.bin (console mode) sh <part_number>.bin -i gui (GUI mode)
Windows	double-click <part_number>.exe

where <part\_number> is the installation software for your platform.

- 3 Click **Next** when the introduction page opens.
- 4 Select the default location, or type the location where you want the software installed.

Mode	Use
UNIX	/user/home/HPTDM
Windows	C:/Program Files/HPTDM

**NOTE** For Windows, the character length of this directory path cannot exceed 38 characters. If you need to use a path with more than 38 characters, use the SUBST command to create a substitute drive.

In the documentation, this directory is referred to as the <install\_directory>. The <install\_directory> is the location where you installed the software.

- 5 Select the location to create product icons.
- 6 Click **Next**.
- 7 Select Install QS.  
This will install the Query Server and configure network ports.
- 8 Review the Pre-Installation Summary.
- 9 Click **Next**.
- 10 Query Server Launch options:
  - Do not start the Query Server
  - Start Query Server and Agent as services
  - Start Query Server as a console process (only on Windows).
- 11 Select **Start Query Server as a console proces**.
- 12 Click **Install**.  
After the software is installed, the Launch Options page displays.
- 13 Select the checkbox to start the Web Console server using the default port 8090, or manually start the Web Console server from the command line.

---

**NOTE** For Windows Server 2008, you must start the Web Console server from the command line or the Windows Start menu to make sure the process is launched with the correct permissions.

---

*Related information*

*HP Test Data Management Web Console and Query Server User Guide*

---

**NOTE** You can only launch the Web Console URL if the Web Console server is running.

---

- 14 Click **Done** to close the installation software.
- 15 Proceed to the *HP Test Data Management Web Console and Query Server User Guide* for instructions about using the Web Console to:
  - install and configure the repository
  - create environments
  - deploy the software and business flows

---

**NOTE** If you are installing on HP-UX, the temporary files used for installation are not deleted after the software is installed. The files are located in a directory that uses the naming convention install.dir.xxxxx, where x is a random integer. The install.dir.xxxxx directory is usually located in the /tmp directory, but may be placed in the home directory if temporary space is limited.

---

# Installing the software using scripted installation

If you plan to install Test Data Management multiple times, you can use scripted installation. Scripted installation uses the `install.properties` properties file.

**NOTE** On Windows Vista or Windows 7, and Windows Server 2008 platforms with UAC (User Account Control) turned on, turn UAC off before installing or running scripts.

- 1 Create a text file called `install.properties`.

The `install.properties` file requires the following two lines:

```
INSTALLER_UI=<mode>
USER_INSTALL_DIR=<location>
```

Where	Is
<mode>	The type of installation. For a scripted installation, the mode should be SILENT.
<location>	The location where you want to install the software.

*Example*

```
INSTALLER_UI=SILENT
USER_INSTALL_DIR=C:/HPTDM
```

- 2 Save the `install.properties` file.
- 3 Use the appropriate command to start the installation software:

For	Use
UNIX	<part_number>.bin -f install.properties
DOS	<part_number>.exe -f install.properties

where <part\_number> is the installation software for your platform.

## Using log files

Use the procedures in this section to view the installation log files and determine what information you want captured.

- In this section*
- [Viewing the installation software log file](#) (page 27)
  - [Editing the logging properties](#) (page 28)

## Viewing the installation software log file

The installation software captures logging events and appends them to a log file.

By default, the log files are saved to the `<install_directory>/obt/log/` directory and the logging level is set to INFO.

- 1 Navigate to the directory containing the log file.

*Example*

```
cd <install_directory>/obt/log/
```

where `<install_directory>` is the location where you installed the software.

- 2 Open one of the following log files using a text editor:

File name	Description
<code>*_InstallLog.log</code>	The <code>*_InstallLog.log</code> file is generated by the installation software, and includes information on the overall installation.
<code>obt.log</code>	The <code>obt.log</code> file captures all logging information for the Test Database Management software.  To change the types of information captured in the log, see <a href="#">Editing the logging properties</a> (page 28).  Multiple log files are numbered in sequence. For example, <code>obt.log1</code> .

## Editing the logging properties

After you have installed the product, you can edit the `log4j.properties` file to change the logging properties. For example, you can change:

- where the log files are kept.
- what information is logged.
- the maximum size of the log file.
- how much logging information is kept.

By default, the `obt.log` file is limited to 10 MB. When it exceeds the default limit, the `obt.log` file is renamed to a backup file, and a new `obt.log` file is created. By default, a total of nine backup files are kept, limiting the log files to a 100 MB maximum size.

- 1 Navigate to the directory that contains the `log4j.properties` file.

*Example*

```
cd <install_directory>/obt/config/
```

where `install_directory` is the location where you installed the software.

- 2 Open the `log4j.properties` file by using a text editor and edit appropriately.
- 3 Save the `log4j.properties` file.

The changes are applied automatically.

# 5

## Removing HP Test Data Management

- In this chapter*
- [Removing HP Test Data Management](#) (page 29)
  - [Reinstalling HP Test Data Management](#) (page 29)

### Removing HP Test Data Management

Database objects installed with the HP Test Data Management, and files and folders created after the installation, are not removed by the uninstall software.

Before uninstalling the software:

- 1 Make sure that you have stopped the Web Console.

*Related information*

*HP Test Data Management Web Console and Query Server User Guide*

- 2 If you are using the embedded repository, make sure that you have stopped the embedded repository.

*See also*

[Stopping the embedded repository](#) (page 21)

To uninstall the HP Test Data Management in Windows:

- 1 Select Uninstall from the Test Data Management program group in the Start menu.

To uninstall the Test Data Management in Unix:

- 1 Navigate to the directory containing the uninstallation software.

*Example*

```
cd <install_directory>/obt/bin
```

where <install\_directory> is the location where you installed the software.

- 2 Type the following command at the prompt:

```
sh ./Uninstall -i console
```

### Reinstalling HP Test Data Management

If you plan to reinstall the HP Test Data Management, you need to perform the following tasks.

- 1 Delete the environments you created.

*Related information*

*HP Test Data Management Web Console and Query Server User Guide*

- For Oracle, remove the repository user that was created during the installation process.

The default value for the repository user is `obt_rep`, and the user is located where you installed the repository.

- For SQL Server, remove the repository database, login, and master database user from the source databases:

Type of object	Default value
databases	<ul style="list-style-type: none"> <li><code>obt_rep</code></li> </ul>
logins	<ul style="list-style-type: none"> <li><code>obt_rep</code></li> </ul>
Master database user	<ul style="list-style-type: none"> <li><code>obt_rep</code></li> </ul>

- Make a backup copy of the `connection-sources.xml` and `hpdbackiving.auth` files from the following directory:

`<install_directory>/obt/config/connection-sources.xml`

where `<install_directory>` is the location where you installed the software.

- Delete the `connection-sources.xml` and `hpdbackiving.auth` files.

**NOTE** Do not remove the template file, `connection-sources.xml.sample`.

- If you are using the embedded repository, back up the directory that contains the embedded repository.

*Example*

```
cd <install_directory>/obt/dbrep
```

where `<install_directory>` is the location where you installed the software.

*See also*

[Backing up and restoring your embedded repository](#) (page 23)

- Delete the embedded repository directory.

- Use the Web Console or scripted deployment to install the repository, create your environments, and deploy your business flows.

*Related information*

*HP Test Data Management Web Console and Query Server User Guide*

**NOTE** If you decide to uninstall the entire product, see [Removing HP Test Data Management](#) (page 29).

# Glossary

<b>active database</b>	The database from which you plan to extract data. Typically, this database is your online transaction processing (OLTP) or production database. In a two-tiered configuration, the active database resides on tier one and is the source for data movement operations.
<b>active environment</b>	The Web Console views and acts upon only one environment at a time, the active environment. To switch the active environment, you use the Change Active option in the Web Console.
<b>activity</b>	In Designer, a component of a business flow, which is added by using the toolbar. Note, activities in a business flow are different from what you see at runtime and therefore do not necessarily map directly to what you see in Console.
<b>advanced selection</b>	A method of data selection that discovers all of the interrelated rows from multiple tables and conceptually places them in the same application partition for extraction.
<b>annotation</b>	In Designer, a comment associated with the project, or one of its objects or components. These comments are collected and published in a PDF file when you right click a project or business flow and select Generate Documentation.
<b>application partitioning</b>	The concept of partitioning related rows together during data selection, regardless of whether they are in one or more tables. Application partitioning is unique to HP Test Data Management and contrasts with the more common table partitioning offered by the database management software, which only groups related rows from one table.
<b>business flow</b>	A series of activities, such as extraction operations and scripts, that run in sequence. You build business flows in Designer.
<b>business flow status</b>	The Web Console shows the last run of each business flow. The states are Complete/Error/Running.
<b>cartridge</b>	An instance of model- or schema-based eligibility criteria used to copy data from one location to another. Cartridges capture the application and business rules to ensure referential integrity of the data. For any one model in your project, you may have many cartridges that use it.
<b>chaining table</b>	The lower level table in a many-to-one or a many-to-many relationship between higher level and lower level tables in the model hierarchy.
<b>collection</b>	The configuration of a directory location and file pattern to match a set of extracted XML files, thus allowing SQL access to the extracted data.

<b>comma separated values (CSV)</b>	A database to file output format that stores the data as values separated by commas and a metadata file. Each line in the CSV file corresponds to a row in a table. Within a line, fields are separated by commas, each field belonging to one table column. CSV files provide a simple format that many applications can import.
<b>command</b>	Command files or JavaScript files launched by the Web Console on your behalf with status displays.
<b>condition</b>	In Designer, the way you branch your business flow to run or skip an activity based on some criteria.
<b>configuration parameter</b>	A type of parameter that has its values set by an administrator (someone who has repository privileges from Console) through the administrator interface. Typically, this type of parameter represents values that should be changed very infrequently, perhaps only at deployment time.
<b>console user</b>	The Web Console identifies individual users, who are distinct from database users. The properties for a Console user are User Name, Full Name, Password, Enabled, Description, Email, Phone, and Privileges.
<b>console user name</b>	The login name associated with a Console user.
<b>constraint</b>	A column or a list of columns that enables you to identify rows in the database and relate them to one another.
<b>customization</b>	A change that an administrator or DBA makes to a project provided by a third party, typically for a packaged application like Oracle PeopleSoft or Oracle E-Business Suite. As long as the customization is allowable by the project, the user can merge the customization into newer revisions of the third party project.
<b>customization mode</b>	A Designer mode that provides visual cues to indicate customizations in the model. In a project with locked files, customization mode is on by default, but you can toggle it on and off from the toolbar in the model editor.
<b>data masking</b>	The process of replacing private or confidential data during movement with a specified mask. You can choose from pre-defined masks that are part of HP Test Data Management or create your own mask.
<b>data movement</b>	The method used by HP Test Data Management to actually copy data.
<b>database constraint</b>	A constraint that exists in the database and can be discovered and referenced from Designer.
<b>database to file</b>	A movement in which data goes from an active database to a file (XML or CSV format).
<b>Deployment Assistant</b>	The user interface component used to deploy or generate business flows. You invoke Deployment Assistant from within Designer.



<b>description</b>	A technical description created by the developer for her own reference. These descriptions do not appear in the generated PDF file for the cartridge or business flow.
<b>Designer</b>	The user interface component used to develop, test, and deploy your extraction solution. Designer is a powerful graphical development environment for extraction solutions.
<b>driving table</b>	A driving object is a root of a model hierarchy. Its relationship to the child tables drives the selection of transactions.
<b>dynamic list of values</b>	A list of values for a parameter that obtains its members from a SELECT statement that returns identifiers and labels.
<b>dynamic parameter</b>	A type of parameter that has its value set by a Groovy script that runs at deployment time to obtain a value. For example, this type of parameter can supply the type or version of a database or application, which can be obtained programmatically at deployment time.
<b>embedded repository</b>	A Java database, installed with HP Test Data Management, that can act as your repository database, where you store your HP Test Data Management metadata. Alternatively, your source database or another database can act as the repository database.
<b>environment</b>	The source and (optional) target credentials against which you plan to run commands. You can define multiple environments within your installation to identify various source databases.
<b>error</b>	One of the ways in which you can interrupt a business flow. Error indicates that the business flow failed for some reason.
<b>exclusive rules</b>	One of the ways in which HP Test Data Management determines whether to include or exclude rows from the extract operation. Exclusive rules require all rows in the constraint table to match for inclusion. Exclusive rules exclude the instance if the condition on any child is false, like STATUS='CLOSED'.
<b>exit</b>	One of the ways in which you can interrupt a business flow. You can exit successfully or with a warning.
<b>export</b>	The way that you save an HP Test Data Management project to an exchange format (.hdp) from the File menu. See also <i>import</i> .
<b>export data</b>	The way that a user can send data to CSV format from Preview using the toolbar item.
<b>extract data store</b>	The location where the data is to be copied. Can be an XML or CVS file.
<b>generate documentation</b>	The process of collecting and grouping all annotations into a PDF file that also describes the business flow or cartridge structure.

<b>import</b>	The way that you transfer projects from exchange format (.hdp) into the Project Navigator.
<b>inclusive rules</b>	One of the ways in which HP Test Data Management determines whether to include or exclude rows from the extract operation. Inclusive rules require only one row in the constraint table to match the rule and be included. Inclusive rules include the instance if the condition on any child is true, like <code>PRODUCT_RECALLED='Y'</code> .
<b>interrupt</b>	The way to stop or pause a business flow (pause, error, exit with warning, exit successfully).
<b>local cache</b>	A capture of the metadata for your databases, schemas, and tables used when working offline in Designer.
<b>local deployment</b>	The generation and deployment of your cartridge or business flow to an environment on your local, Designer client. Deployment files are generated locally and then deployed to the designated, local environment.
<b>lookup table</b>	A table that contains helpful non-transactional information. For example, non-transactional information could be status definitions, or the name of the sales representative.
<b>model</b>	A model identifies the tables and table relationships representing a business entity or related business entities. A project can have multiple models. Each model contains a driving table and all of its child and descendent tables.
<b>model compatibility</b>	Each model in your project can have one or more dynamic parameters associated with it to verify the compatibility with the target environment. If the compatibility parameter returns false, then the cartridge referencing the model will not deploy or run and throw an error. For example, the script could return false for Oracle 10.2 and true for Oracle 11.1 to indicate that a cartridge referencing the model can only deploy and run against Oracle 11.1.
<b>model-based cartridge</b>	A cartridge that moves data based upon a defined data model with relationships. This type of cartridge is typically used for ongoing extract operations.
<b>OLTP database</b>	The online transaction processing database that typically is your active or source database.
<b>pause</b>	One of the ways in which you can interrupt a business flow. Pausing suspends the business flow while awaiting operator intervention.
<b>query server</b>	The component that provides SQL access to XML or CSV files.
<b>remote deployment</b>	The generation and deployment of your cartridge or business flow to an environment on a system that is remote from your Designer client. Deployment files are generated locally and then deployed to the designated, remote environment.

<b>repository</b>	The location that holds business flow metadata, product configuration data, and data collected during runtime. The repository can be located on your active database, another logical database, or can be embedded database.
<b>rule</b>	Qualifications added to the model in order to include or exclude data based on certain criteria. For example, you might add a rule to exclude from extracting any orders that are not yet closed.
<b>runtime parameter</b>	A type of parameter that has its values set by the operator executing the job in Console or on the command line. Typically, this type of parameter represents operational values that tend to change frequently and therefore need to be set each time the job is run.
<b>schema-based cartridge</b>	A cartridge that moves data based upon the database schema rather than a defined data model with relationships. This type of cartridge is typically used for database retirement or the cleanup of orphan tables.
<b>selection</b>	The form of data selection to use (standard or advanced) for choosing data. When creating a cartridge or adding it to a business flow, you must specify the selection method.
<b>source</b>	The location (database) from which you are copying or moving data.
<b>standard selection</b>	A method of data selection that restricts itself to the rows identified by the model. Unlike advanced selection, it does not attempt to traverse related rows across multiple tables.
<b>table use</b>	A database table, view, or synonym that is referenced in Designer, for example, in the model. The same table can be used multiple times in a model. For example, a table could be appear as a transactional table and a lookup table in the same model.
<b>target</b>	The location (XML) to which you are copying data.
<b>transactional data movement</b>	Transactional movement uses set-based data movement and is the default method of movement.
<b>transactional table</b>	A table that contains information about the business transaction. For example, a transactional table might contain detailed tax or payment information related to each business transaction.
<b>unique identifiers (UIDs)</b>	A 16 hexadecimal identifier calculated based on the content of a Designer file. This value is used to determine if the user has customized key pieces of a project.
<b>virtual constraint</b>	A constraint that you define in Designer that only exists within HP Test Data Management as opposed to a database constraint, which exists within the database.
<b>Web Console</b>	A browser-based interface where you can create and manage your deployment environments, and deploy, run, administer, and monitor your business flows.



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