



Optimal Trace

Enterprise Server User Guide

Release 5.2

Please direct questions about Optimal Trace Enterprise Server or comments on this document to:

Technology Customer Support

Compuware Corporation

Customer Support Hotline

1-800-538-7822

FrontLine Support Web Site:

<http://frontline.compuware.com>

For telephone numbers in other geographies, see the list of worldwide offices at <http://www.compuware.com>.

Access is limited to authorized users. Use of this product is subject to the terms and conditions of the user's License Agreement with Compuware Corporation. Documentation may be reproduced by Licensee for internal use only. All copies are subject to the terms of this License Agreement. Licensee agrees to provide technical or procedural methods to prevent use of the Software and its documentation by anyone other than Licensee.

Copyright © 2009 Compuware Corporation. All rights reserved. Unpublished rights reserved under the Copyright Laws of the United States.

U.S. GOVERNMENT RIGHTS—Use, duplication, or disclosure by the U.S. Government is subject to restrictions as set forth in Compuware Corporation license agreement and as provided in DFARS 227.7202-1(a) and 227.7202-3(a) (1995), DFARS 252.227-7013(c)(1)(ii) (OCT 1988), FAR 12.212(a) (1995), FAR 52.227-19, or FAR 52.227-14 (ALT III), as applicable. Compuware Corporation.

This product contains confidential information and trade secrets of Compuware Corporation. Use, disclosure, or reproduction is prohibited without the prior express written permission of Compuware Corporation. Access is limited to authorized users. Use of this product is subject to the terms and conditions of the user's License Agreement with Compuware Corporation.

Adobe® Reader® is a registered trademark of Adobe Systems Incorporated in the United States and/or other countries.

All other company and product names are trademarks or registered trademarks of their respective owners.

Local Build: April 3, 2009, 10:29

Contents

- Chapter 1 · Introducing Optimal Trace Enterprise Server** 5
- Who Should Read This Guide 5
- Customer Support 5

- Chapter 2 · Running Optimal Trace Enterprise Server** 7
- Running Optimal Trace Enterprise Server 7
- Checking the Connection 7
- Stopping the Server 8
- Configure as a Service 8
- Stopping the Service 8
- Email Configuration 8
- Example Email Configuration Using GMail 9
- Setting Up Windows Integrated Authentication 9
- About Migrating an Optimal Trace Database 11
 - Migrating Projects and Databases Created Prior to 5.0 11
 - Migrating Remote Projects from 5.0 11
 - Migrating Remote Projects from 5.1 to 5.2 12
- Advanced Configuration Options 12

- Index** 15

Introducing Optimal Trace Enterprise Server

Optimal Trace Enterprise Server provides access to a centralized repository of Optimal Trace projects and manages communication between multiple Optimal Trace Enterprise users. A computer that hosts the Optimal Trace Server software is referred to as a Repository Server.

Optimal Trace Server controls access to the database, manages concurrent editing of projects by multiple users and ensures the integrity of data being written to the database. If you wish to make use of the collaboration features in Optimal Trace, you will need at least one Repository Server on your network.

Optimal Trace Server requires a dedicated server machine on your network to act as the Optimal Trace Server repository server. This machine should be connected to the network in such a way as to be accessible from every workstation on which you will be running Optimal Trace. Optimal Trace Server connects to a database (Oracle, MS SQL Server, or MySQL) running locally on the Repository Server or on another machine available on the network.

Optimal Trace Enterprise Server is the repository server for use with Optimal Trace Enterprise. For installation and configuration of server, along with a detailed description of how to configure MySQL, Oracle, and Microsoft SQL Server, refer to the *Optimal Trace Installation Guide*.

Who Should Read This Guide

This document is intended for database administrators (DBAs) who are responsible for the installation and maintenance of Optimal Trace Enterprise Server.

Customer Support

For all technical problems and support queries, please logon to Frontline at <http://frontline.compuware.com>. Frontline contains the Optimal Trace forum as well as an FAQ area. Additionally, current release information and contact numbers are provided. At Compuware, we strive to make our products and documentation the best in the industry. An important part of this effort is the feedback we receive from our customers. To report documentation issues, please click the link at the bottom of the page. For product issues, please be sure to have the following information accessible before calling Compuware's 24-hour Product Support Hotline:

- The version of Optimal Trace you are using, which is displayed in the **About** dialog box of Optimal Trace.
- The version of each operating system(s) in which each product component is installed.
- The place in the Optimal Trace software where the problem occurred and the steps taken before the problem occurred.
- The exact Optimal Trace error message, if any.
- System error messages, if any.

Please contact the appropriate Compuware office:

Compuware North America and Compuware International Operations

Compuware Corporate Headquarters

One Campus Martius

Detroit, MI 48226-5099 USA

Telephone: (313) 227-7300

Customer Support Hotline: (800) 538-7822

Running Optimal Trace Enterprise Server

This section describes how to run Optimal Trace Enterprise Server. For instructions regarding licensing and upgrading Optimal Trace Enterprise Server, refer to the *Optimal Trace Installation Guide*.

Running Optimal Trace Enterprise Server

To run Optimal Trace Enterprise Server:

1. Click **Start>Programs>Compuware>Optimal Trace Enterprise>Optimal Trace Server>Optimal Trace Server**.
The **Optimal Trace Server** dialog box appears.

2. Enter the database connection information.

NOTE

With Oracle, if you did not create a new Catalyze database, replace the 'Database Name' value with the name of your Oracle database.

3. Click **Start**.
The **Starting Server** dialog box appears and displays a message stating the server has started successfully.
4. Click **OK**.
The **Starting Server** dialog box closes and the **Optimal Trace Server** dialog box displays a **Stop** button. You must keep this dialog box open while the Optimal Trace Enterprise Server is running.

Checking the Connection

After the server is started, check that the Optimal Trace Enterprise client can connect to and use the Optimal Trace Enterprise Server. To check the connection:

1. Open Optimal Trace Enterprise Client.
2. Click **Tools>General Options**. The **General Options** dialog box appears.
3. Click the **Server Settings** tab.
4. Type the host name where your Optimal Trace Enterprise Server is installed.
5. Accept the default port and polling interval settings.
6. Click **Save**.
7. Create a new Project. Make sure you select **Create a new remote project in the repository**.
8. Add some data and save. There will be no error messages if everything is installed and configured correctly. If there are problems, click **Test Connection** to test the connection and send the results to your network administrator.

Stopping the Server

To stop the server, click **Stop**. This will kill all server processes started by the Optimal Trace Server.

Configure as a Service

Optimal Trace Server is automatically registered as a Windows service during installation. Before starting the service you must run through the steps in [Running Optimal Trace Enterprise Server](#) [p. 7] to ensure that the server can be started with the specified options. To start or stop the service from the Microsoft Management Console:

1. Ensure that Optimal Trace Server is not already running.
2. Click **Start>Settings>Control Panel>Administrative Tools>Services**.
3. Right-click Optimal Trace Server and choose **Start** or **Stop**.

Stopping the Service

To stop the Optimal Trace Windows service:

1. Navigate to the Control Panel and click **Administrative Tools>Services**.
2. Navigate to Optimal Trace Server.
3. Right-click and choose **Properties**.
4. Click **Stop** to stop the service if it is running.
5. Change the **Startup type** to *Manual*.

Email Configuration

The Optimal Trace Email Settings are used to configure access to an SMTP server. Optimal Trace notification emails are sent to registered users by the Optimal Trace Server using the SMTP server details you provide. Your mail server administrator should ensure that the Optimal Trace Email Settings that you use will allow sending mail to all of your Optimal Trace users' email addresses. It is best to discuss the Email Settings that Optimal Trace Server uses with your company email Administrator. It is best practice to create a dedicated email account for

use by Optimal Trace Server. See the Optimal Trace Enterprise Help for more information on the Notifications feature.

Your email administrator will provide:

- The name of your company's mail server (SMTP server)
- The email user name that Optimal Trace Server will use (Username)
- The password for the Optimal Trace Server user name (Password)
- Whether or not the email server requires a Secure Connection (SSL).

When you have finished entering the email configuration, you can test that it's working by clicking **Test Email Settings**(and enter your own email address to receive the test message). Note also that some spam filters may block this message, so you will need to work through this process with your email Administrator. Sample values would be something as follows:

SMTP Server: WidgetCoSMTPMailServer

Username: <Optimal Trace server user>@widgetcodomain.widgetco.com

Password: <password>

The test email that you receive will simply contain *Optimal Trace Email Settings Test* in the subject line. If you do not receive a mail, you may need to check your email servers spam filter as the message may have been blocked (e.g. if you do not specify a domain in your user name, some spam filters may block the message).

NOTE

Optimal Trace™ supports SMTP authentication (RFC 2554 - <http://www.ietf.org/rfc/rfc2554.txt>) mechanisms LOGIN and PLAIN.

Example Email Configuration Using GMail

Google's GMail can be configured to be used by Optimal Trace Server as the mail notifier. This can be useful if you are evaluating Optimal Trace Server and don't want to set up a dedicated Optimal Trace user on your company's email system. Enter the following settings if you want Optimal Trace Server to use your GMail mail account to send notifications from:

- SMTP Server: smtp.gmail.com
- Username: <you>@gmail.com
- Password: <your gmail password>
- Use Secure Connection: checked

Setting Up Windows Integrated Authentication

Optimal Trace supports two types of authentication modes:

Basic Authentication

User authentication for accessing Optimal Trace projects is managed at the product-level by Optimal Trace. When using basic authentication, user credentials are manually created, saved, and managed using Optimal Trace Administrator.

Windows Integrated Authentication

User authentication for accessing Optimal Trace projects is delegated to using existing user credentials stored on a domain controller on a network. Using Windows Integrated Authentication allows you to suppress a login prompt when accessing Optimal Trace projects provided users have a valid Windows user account name and password and are currently logged into the domain controller.

NOTE

When using either type of authentication mode, you must configure user permissions in Optimal Trace Administrator to open, modify, and delete Optimal Trace projects. For more information, refer to the *Optimal Trace Administrator User Guide*.

This topic describes the steps required to set up Windows Integrated Authentication using NTLM or Kerberos authentication protocols.

NOTE

Optimal Trace supports other types of authentication protocols, however, only the configuration files for NTLM and Kerberos are installed with Optimal Trace.

1. On the **Advanced** tab of the **Optimal Trace Server** dialog box, select **Use Windows Integrated Authentication**, and then restart the server.

Selecting this option applies Windows Integrated Authentication to all security enabled projects in the Optimal Trace repository being accessed from this server.

2. Configure the Kerberos initialization file (`krb5.ini`).

This file specifies the default realm and key distribution center. This file is installed with Optimal Trace Enterprise in the following location:

<OS_DIR>\krb5.ini (for example: C:\WINXP\krb5.ini)

Configure the file to use the desired realm and key distribution center as in the following example:

```
[libdefaults]
default_realm = EXAMPLE.COM

[realms]
EXAMPLE.COM = {
kdc = dc-01.example.com:88
}
```

NOTE

This file must be installed on every Optimal Trace Enterprise client computer.

3. Optionally, configure the Java Authentication and Authorization Service (JAAS) file (`ot_jaas.config`).

This file specifies the type of authentication protocol login module and sets parameter values for the module. This file is installed in the following location of the Optimal Trace Enterprise client installation folder:

```
<PRODUCT_INSTALL_DIR>\Program Files\Compuware\Optimal Trace\Optimal Trace  
Enterprise Edition\ot_jaas.config
```

By default, the JAAS file specifies NTLM and Kerberos login modules and their parameters as follows:

```
OTAuthentication{  
  com.sun.security.auth.module.NTLoginModule required debug=false debugNative=false;  
  
  com.sun.security.auth.module.Krb5LoginModule required client=true debug=false  
  useTicketCache=true tryFirstPass=true;}
```

NOTE

You can add additional login modules in this file. The login module specification must appear between the brackets after OTAuthentication and be terminated with a semi-colon. This file must be installed on every Optimal Trace Enterprise client computer.

About Migrating an Optimal Trace Database

When upgrading to a current release of Optimal Trace, you must also migrate any existing Optimal Trace databases created prior to the current release. If your database was created two releases earlier than the current release (for example, 5.0 to 5.2), you must use the **Migration** utility. For more information, see [Migrating Remote Projects from 5.0](#) [p. 11]. If your database was created in the release immediately preceding the current release (for example, 5.1 to 5.2), you are prompted to migrate the database when you start Optimal Trace Enterprise Server. For more information, see [Migrating Remote Projects from 5.1 to 5.2](#) [p. 12].

Migrating Projects and Databases Created Prior to 5.0

When migrating local projects or databases created in an Optimal Trace release prior to 5.0, you must perform an incremental migration. First, you must migrate the projects or databases to 5.0, and then proceed with the migration from 5.0 to the current release of Optimal Trace. For more information, see [Migrating Remote Projects from 5.0](#) [p. 11], [Migrating Remote Projects from 5.1 to 5.2](#) [p. 12], and *Migrating Local Projects* in the *Optimal Trace – Installation Guide*.

Migrating Remote Projects from 5.0

To migrate remote projects stored in an Optimal Trace 5.0 database to work with the current release of Optimal Trace, you must use the **Migration** utility. Prior to migrating your existing database, you must create a new database in which to migrate data.

NOTE

Depending on the size of your database, it may take several hours to migrate your data from 5.0. Additionally, the database transaction log may grow significantly. Make sure you allocate enough space for the database transaction log.

This topic describes how to use the **Migration** utility to migrate a 5.0 database to work with the current release of Optimal Trace.

1. Stop your Optimal Trace server. For more information, see *Stopping the Server* in the *Optimal Trace – Installation Guide*.
2. Back up your database. For more information, see *Backing Up an Optimal Trace Database* in the *Optimal Trace – Installation Guide*.
3. Create a database in which to create
4. Click **Start>Programs>Compuware>Optimal Trace Enterprise>Optimal Trace Server>Optimal Trace Migration Utility**. The **Optimal Trace Migration Utility** appears.
5. In the **Database Host Name** box, type the database host name.
6. Select the database type (MySQL, SQLSERVER, or Oracle) from the **Database Type** list.
7. Type the database port number if not using the default port in the **Database Port** box.
8. Under **Source Database**, type the name of the database to migrate and specify the user name and password in the appropriate boxes.
9. Under **Destination Database**, type the new name of the database and specify the user name and password in the appropriate boxes.
10. Click **Migrate**.

The **Migration** utility runs and migrates remote projects stored in the database to work with the current release.

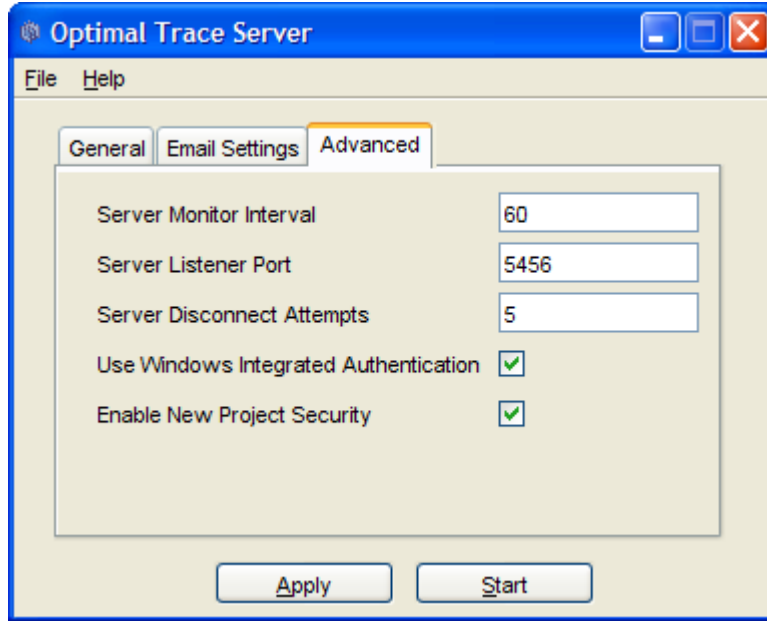
Migrating Remote Projects from 5.1 to 5.2

To migrate remote projects stored in an Optimal Trace 5.1 database to work with the current release of Optimal Trace, perform the following steps:

1. Back up your database. For more information, see *Backing Up an Optimal Trace Database* in the *Optimal Trace – Installation Guide*.
2. Install the current release of Optimal Trace Enterprise Server.
3. Start Optimal Trace Enterprise Server and open your existing Optimal Trace 5.1 database. A message box appears prompting you to migrate your database.
4. Click **Yes** to migrate the database.

Advanced Configuration Options

The **Advanced** tab of the **Optimal Trace Server** dialog box contains options from which you can modify the behavior of Optimal Trace Enterprise Server.

Figure 1. Advanced Tab of the Optimal Trace Server Dialog Box**Table 1.** Optimal Trace Server Advanced Configuration Options

Option	Description
Server Monitor Interval	Optimal Trace Server maintains a connection to its Optimal Trace clients so that it can monitor these client processes to ensure that the connection between them is valid. The interval specified here is the number of seconds between each message. This message is a ping that is sent from the Optimal Trace™ clients to the Optimal Trace™ Server. This interval specifies how often this message should be sent, specified in seconds.
Server Listener Port	This is the TCP/IP port that Optimal Trace Server runs on. If you are running a firewall on your machine, ensure that this port is left open for inbound connections to Optimal Trace Server.
Server Disconnect Attempts	The Optimal Trace Server will disconnect any Optimal Trace clients that have not 'pinged' it after this specified number of attempts. As part of this disconnect process, all locks held by the client will be released and other clients will be free to work on the Projects that may have been locked by the client. By default, if Optimal Trace Server does not get any pings from a client after 5 minutes (60 seconds * 5 attempts), the client will be disconnected and any locks on any projects it may have held will be released.
Use Windows Integrated Authentication	Sets the type of user authentication used by Optimal Trace Enterprise Server to Windows Integrated Authentication. This option is not set by default. For more information, see Setting Up Windows Integrated Authentication [p. 9].
Enable New Project Security	Enables project security as the default security setting for all new projects created in Optimal Trace. This option is not set by default.

Index

A

- advanced configuration 12
- authentication mode 9

C

- Check Connection 7
- Configuration, Example Email 9
- Configure as Service 8
- Customer Support 5

E

- Email Configuration 8
- Example Email Configuration 9

M

- migrating
 - 5.0 remote projects 11
 - 5.1 remote projects 12
 - databases created prior to 5.0 11
 - overview 11
 - projects created prior to 5.0 11
- migration utility 11

O

- Optimal Trace Enterprise Server
 - overview 7

- overview
 - Optimal Trace Enterprise Server 5, 7

P

- project security 12

R

- Running in Windows 7

S

- security
 - enabling project 12
- Server, Stopping 8
- Service, Configure 8
- Service, Stop 8
- setting up
 - Windows Integrated Authentication 9
- Stopping the Server 8
- Stopping the Service 8

W

- Windows Integrated Authentication 9
- Windows, Running in 7

