HP Performance Center

for the Windows® operating systems

Software Version: 9.10

Troubleshooting Guide

Document Number: T7331-90006
Document Release Date: April 2008
Software Release Date: April 2008

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Troubleshooting Performance Center Assets

This chapter provides information on troubleshooting problems related to managing Performance Center assets.

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➤ Cannot Download and Open Script on page 12

Cannot Create Monitor Profile

Error message: Monitor is not licensed or was not installed.

Troubleshooting

The problem is because of a misconfiguration of the host license on the utility server.

➤ Reset the system as follows:

a In the Administrator Site, select **System Configuration** > **Server Configuration**.

b Click **Reset**.

c Try to create the monitor profile again.

➤ If the problem persists, contact HP Software Support (http://www.hp.com/go/hpsoftwaresupport).

Cannot Save Measurements

Problem description: During configuration of a monitor, after you select the measurements that you want to monitor and you click **Save**, instead of saving the monitor, Performance Center goes back to the Choose Monitor page.

Troubleshooting

This problem usually occurs when you select a large number of measurements. To resolve this issue, you need to increase the value of the **AspMaxRequestEntityAllowed** property in the IIS metabase. This property specifies the maximum number of bytes allowed in the entity body of an ASP request.

Note: For more information about the **AspMaxRequestEntityAllowed** property, see the Microsoft Terminal Services documentation: http://www.microsoft.com/technet/prodtechnol/WindowsServer2003/Library/IIS/a 6401b5e-c902-4035-90aa-ee46c270d357.mspx?mfr=true, or http://support.microsoft.com/kb/327659

To increase the value of the AspMaxRequestEntityAllowed property:

1 Run the following command from the command line:

```
cd <IIS_installation_drive>:\inetpub\adminscripts.
```

where **<IIS_installation_drive>** is the hard disk where IIS is installed.

2 To view the current value of the **AspMaxRequestEntityAllowed** property, run the following command:

```
cscript adsutil.vbs get w3svc/ASPMaxRequestEntityAllowed.
```

3 To increase the value of the **AspMaxRequestEntityAllowed** property, run the following command:

```
cscript adsutil.vbs set w3svc/ASPMaxRequestEntityAllowed <maximum value>.
```

where **<maximum value>** is the maximum value, in bytes, that you want to set for the **AspMaxRequestEntityAllowed** property.

4 Run the following command:

```
iisreset.
```

5 To verify that the value of the **AspMaxRequestEntityAllowed** property has changed, run the following command again:

```
cscript adsutil.vbs get w3svc/ASPMaxRequestEntityAllowed.
```

Note: If you are still not able to save the measurements in the monitor profile, increase the value of the **AspMaxRequestEntityAllowed** property further.

For more information about this issue, see the Microsoft support Web site: http://support.microsoft.com/kb/327659

Cannot Import Monitor Profile/Vuser Script

Error message: Failed to import Monitor Profile/Vuser Script <asset name>. For more information, see the Event Log.

Troubleshooting

This problem might occur when, during the import process, another user has deleted the asset or modified its name.

Wait a few minutes and try again.

Cannot Download and Open Script

Error message: Windows cannot access the specified device, path, or file. You may not have the appropriate permissions to access the item.

Troubleshooting

The problem could be that the registry key associated with VuGen is corrupted or not defined.

1 Select **Start** > **Run** and type regedit to open the registry.

2 Locate the following keys:

- ➤ HKEY_CLASSES_ROOT\uszfile\shell\open\command.

- ➤ HKEY_CLASSES_ROOT\usrfile\shell\open\command.

3 Make sure that the correct files are associated with the keys.

- ➤ USZ key: <PC home>\bin\VugenLauncher.exe

- ➤ USR key: %systemroot%\mercuryTestLauncher.exe, or <PC home>\bin\Vugen.exe

4 Make sure that all backslashes are correct: \ and not /.

5 Make sure all inverted commas are correct (there should be four in total).

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Troubleshooting Installation and Upgrade

This chapter provides information on troubleshooting problems that occur during the Performance Center installation and configuration process.

This chapter includes:

Error: Method ~ of object ~ Failed During Installation

Error message: Operation terminated. Error description: Method '~' of object '~' failed.

Troubleshooting

1 Check the server's System Event log for **W3SVC** errors.

2 Verify the configured identity for the **IWAM_<SERVER NAME>** account.

3 Make sure that the password for the IWAM account is synchronized in all three locations:

➤ Internet Information Server (IIS) metabase

➤ Local Users and Groups (Windows 2000)

➤ Component Services (Windows 2000)

For more information on obtaining or setting the account password, see: http://support.microsoft.com/default.aspx?scid=kb;en-us;297989.

4 Verify that the COM+ service is running.

5 Verify that the COM+ service is correct:

a Select **Start** > **Run** and type dcomcnfg to open the COM+ manager.

b Expand **Component Services**.

c Expand **Computers**.

d Right click **My Computer** and select **Properties**. The My Computer Properties dialog box opens.

e Click the **MSDTS** tab.

f Click **Security Configuration**. The Security Configuration dialog box opens.

g Ensure that **Enable XA Transactions** is not selected.

h Click **OK** to close the Security Configuration dialog box.

i Click **OK** to close the My Computer Properties dialog box.

6 If the problem persists, follow the steps below depending on your version of Windows:

Windows 2003 SP2:

a If this fails, re-image the machine as follows:

> ➤ Reinstall Windows.

> ➤ Install IIS.

> ➤ Install SP1.

> ➤ Install SP2.

Windows 2000 SP4:

a Open the command line (**Start** > **Run** and type cmd).

b From the <**Drive**>**inetpub****AdminScripts** folder, enter the following command:

```
cscript.exe synciwam.vbs -v
```

7 If you receive an error message similar to the following:

```
Updating Applications:
Name: IIS Out-Of-Process Pooled Applications Key:
{3D14228D-FBE1-11D0-995D-00C04FD919C1}
Error: 80110414
```

This might occur because the password for the **IWAM_computer** account is mismatched between the Windows Active Directory and the **IIS metabase**. Therefore, **Synciwam.vbs** cannot synchronize the processes to the **IWAM_computer** account as needed. It might also occur if the **IWAM_computer** account is locked out or disabled.

You need to match the password that is used by the **IWAM_computer** account in the **IIS metabase** with the password that is used by the **IWAM_computer** account in Active Directory.

For more information see: http://support.microsoft.com/kb/269367

DllHost.exe – Application Error

Error message: Operation terminated. DllHost.exe – Application Error.

Troubleshooting

(**IIS 5 only**) Change the application protection level in the Internet Services Manager from **High (isolated)** to **Low (IIS Process)**.

1 Select **Start** > **Programs** > **Administrative Tools** > **Internet Services Manager** to open the Internet Information Services dialog box.
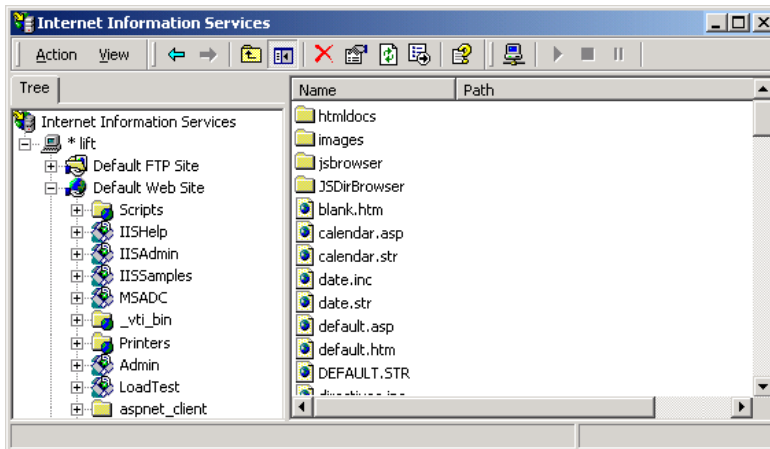
2 In the Tree directory, expand **Default Web Site** and right-click **Admin**. Click **Properties** to open the Admin Properties dialog box.

3 Select the **Virtual Directory** tab, and in the **Application Protection** list, select **Low (IIS Process)**.
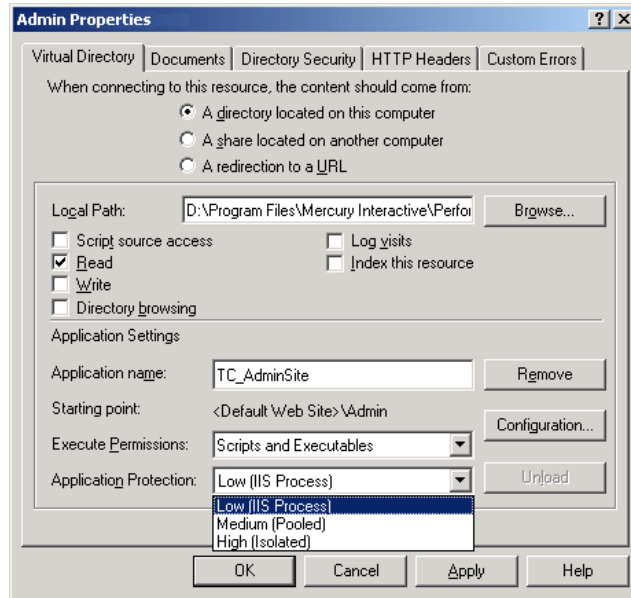
4 After installation, change the **Application Protection** back to **High (Isolated)** by repeating the above steps and clicking **High (Isolated)** in step 3.

Failure to Retrieve License Key

Problem description: Retrieve License Key fails. This may occur as a result of problems with the .NET Framework installation.

Troubleshooting

Repair the .NET Framework installation as follows:

1 Select **Start > Run**.

2 Enter the following command:

```
c:\WINDOWS\Microsoft.NET\Framework\v2.0.50727\aspnet_regiis.exe -i
```

PCWS Folder Not Installed Correctly

Problem description: You receive an error on the license page of the Administration Site, or the load test fails to run.

Troubleshooting

You may need to reinstall the **PCWS** folder. To install the **PCWS** folder and restore the IIS configuration, run the following command:

```
<Performance Center installation directory>\bin\ AdminInstaller.exe" WebService
IUSR_METRO MIOrchid#1
```

Performance Center Does Not Load - Error 500

Problem description: After upgrading the database client, Performance Center does not load the Web browser and returns Error 500.

Troubleshooting:

There might be a permissions problem between IIS and the Oracle home directory.

➤ Make sure oracle_home is well defined in the HKLM\Software\Oracle directory.

➤ Make sure the IWAM_<machine> user has execute and write permissions in the Oracle home directory.

➤ Make sure **tnsnames.ora** and **sqlnet.ora** are defined properly.

Error on Page During System Configuration

Problem description: After you save your initial system configuration settings in the Administration Site, you receive an error in the Log area of the Initial System Configuration page stating that the page cannot be displayed.

Troubleshooting

During system configuration, IIS is reset on the Administration Site Server. When the File Server is installed on the same machine as the Administration Site Server, **Error on Page** is sometimes displayed as a result of the IIS reset.

Even though this error is displayed, the system configuration is still saved successfully.

To continue configuring your system, log on to the Administration Site again and continue working.

Installation Does Not Recognize Prerequisite Software

Problem description: Before you can install Performance Center, specific prerequisite software (for example, .NET Framework 2.0) needs to be installed on your machine. Without this prerequisite software, Performance Center will not function properly. During installation, if the prerequisite software is not already installed on your machine, Performance Center lists the prerequisite software that you need to install and enables you to automatically install the software from the Performance Center disk.

If the prerequisite software has been installed on your machine in an irregular way, Performance Center may not detect the installation and will not allow you to proceed with the installation.

Troubleshooting

If you are certain that you have correctly installed all the prerequisite software, you can skip the prerequisite software check in the installation procedure.

Important: Skipping the prerequisite software check is not recommended practice, because Performance Center may not function properly as a result. The prerequisite software check should only be skipped under very limited circumstances, and after consultation with Customer Support.

To launch the Performance Center installation without the prerequisite software check, run the following command:

```
msiexec.exe /i HP_Performance_Center.msi SKIP_PREREQUISITE_CHECK=1
```

Performance Center Prerequisite Software

Before you can install Performance Center, specific prerequisite software (for example, .NET Framework 2.0) needs to be installed on your machine. During installation, Performance Center checks whether the prerequisite software is installed on your machine. If anything is not installed, Performance Center enables you to automatically install the software from the Performance Center disk.

The following table provides a list of the prerequisite software and how Performance Center detects whether the software is installed.

Prerequisite Software	Machines	Means of detecting
.NET Framework 2.0	➤ All Performance Center machines ➤ VuGen Standalone ➤ Analysis Standalone	Searches the registry key: HKLM\\Software\\Microsoft\\NET Framework Setup\\NDP\\v2.0.50727
Microsoft Data Access Components (MDAC) 2.8 SP1	➤ All Performance Center machines ➤ VuGen Standalone ➤ Analysis Standalone	Searches the registry key: HKLM\\Software\\Microsoft\\Data Access
Microsoft Core XML Services (MSXML) 6.0	➤ All Performance Center machines ➤ VuGen Standalone ➤ Analysis Standalone	Queries the existence and version of: %systemroot%\system32\msxml6.dll
Microsoft Visual C++ 2005 Redistributable Package (x86)	➤ All Performance Center machines ➤ VuGen Standalone ➤ Analysis Standalone	Queries the MSI manager for one of the GUIDs below: {A49F249F-0C91-497F-86DF-B2585E8E76B7} {437AB8E0-FB69-4222-B280-A64F3DE22591}

Prerequisite Software	Machines	Means of detecting
Microsoft Windows Installer 3.1	➤ All Performance Center machines ➤ VuGen Standalone ➤ Analysis Standalone	Looks for one of the two: ➤ Registration of the WindowsInstaller. Installer.com object version 3 or higher ➤ MSI.dll version 3 or higher in the %systemroot%
Web Services Enhancements (WSE) 3.0 for Microsoft .NET Redistributable Runtime MSI	➤ All Performance Center machines ➤ VuGen Standalone	Queries the MSI manager for the GUID: {E3E71D07-CD27-46CB-8448-16D4FB29AA13}
Web Services Enhancements (WSE) 2.0 SP3 for Microsoft .NET Redistributable Runtime MSI	➤ All Performance Center machines ➤ VuGen Standalone	Runtime installation GUID {F3CA9611-CD42-4562-ADAB-A554CF8E17F1} Full installation GUID {6F 396FFB-CC3A-4335-BC0B-2AE F38F4492C}
Internet Information Services (IIS)	➤ All Performance Center machines (In a machine used as load generator the IIS can be uninstalled after installation)	HKLM\\SOFTWARE\\Microsoft\\InetStp Looks for both Major and Minor numbers. Supports versions 6.0, 5.1 and 5.0

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Troubleshooting Licenses

This chapter provides information on troubleshooting license-related problems.

This chapter includes:

Invalid License Detected

Error message: Cannot run a load test. Invalid license was detected.

Troubleshooting

1 Make sure that you entered the correct host license key in the Administration Site (**System Configuration** > **License**).

2 If the license is correct and there is still a problem, there may be an issue with Web services connectivity. For more information about troubleshooting Web services, refer to the relevant section in the *HP Performance Center Administrator's Guide*.

3 Make sure that LoadRunner is not installed on the system. If any versions of LoadRunner exist on the system, uninstall them and then reinstall the HP Performance Center host machine.

To uninstall LoadRunner, use the Windows **Add/Remove Programs** utility.

4 Make sure that the version of HP Performance Center installed on all servers and hosts are the same; otherwise communication between the hosts may fail. Check the registry entry under [**HKEY_LOCAL_MACHINE\SOFTWARE\Mercury Interactive\LoadRunner\CurrentVersion**] for the following variables:

➤ Major

➤ Minor

➤ ServicePack

License Issue – Concurrent Users (Error -2147219264)

Error message: Your HP Performance Center license does not support the number of concurrent users.

Troubleshooting

Since you have exceeded the overall number of concurrent users supported by your HP Performance Center license, you must do one of the following:

➤ Ask your administrator to rearrange the number of Vusers that are being used concurrently in all the projects so that some Vusers can be made available for your test.

➤ Reduce the number of Vusers for your test.

➤ Upgrade your HP Performance Center license to enable support of more Vusers.

License Issue -Concurrent Runs

Error message: Your HP Performance Center license does not support the number of concurrent runs.

Troubleshooting

Since you have exceeded the overall number of concurrent runs supported by your HP Performance Center license, you must do one of the following:

➤ Ask your administrator to rearrange the scheduling of the load tests to ensure that you are not exceeding the overall number of concurrent runs supported by your license.

➤ Upgrade your HP Performance Center license to enable support of more concurrent runs.

Failure to Retrieve License Key

Problem description: Retrieve License Key fails. This may occur as a result of problems with the .NET Framework installation.

Troubleshooting

Repair the .NET Framework installation as follows:

1 Select **Start** > **Run**.

2 Enter the following command:

```
c:\WINDOWS\Microsoft.NET\Framework\v2.0.50727\aspnet_regiis.exe -i
```

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Troubleshooting Load Test Design

This chapter provides information on troubleshooting problems related to designing load tests.

This chapter includes:

➤ Cannot Save Load Test (Error -ORA-03106) on page 27

Cannot Save Load Test (Error -ORA-03106)

Error message: Fatal two-task communication protocol error.

Troubleshooting

This error sometimes occurs after you change the run time settings when working with an Oracle database. The new details are not saved to the database, although a successful save was indicated.

The cause might be a mismatch between the character set of the Oracle client and the Oracle server.

➤ Make sure the NLS_LANG on the client and server match. They should be the same type or be of a type that can be converted.

➤ It is recommended that you consult with the database administrator on this issue.

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Troubleshooting Starting Load Tests

This chapter provides information on troubleshooting related to starting load tests.

This chapter includes:

Timeslot Issue - No Available Load Generators (Error -2147219273)

Error message: Could not reserve timeslot. There are no available load generators.

Troubleshooting

1 On the User Site Hosts page (**Project** > **Hosts**), check whether any load generator hosts appear and ensure that their status is operational.

If no load generators appear, or if they have a status other than operational, contact your administrator.

2 If operational load generators appear on the Hosts page, check on the User Site Timeslots page (**Project** > **Timeslots**) to see when the load generators are available.

If the load generators are not available during the desired timeslot, try to reorganize the timeslots so that the necessary resources are available for your load test.

Before you reorganize the timeslots, you should look at all the tests that you have scheduled in your system and consider the following factors:

➤ **timeslot utilization.** Some tests may have more timeslots reserved than is necessary, or there may be timeslots that have been reserved for no reason.

➤ **test importance.** Less important tests can be moved to different timeslots to make space available for the more important tests.

➤ **irrelevant tests.** Check whether there are tests scheduled that are no longer relevant and can be removed from the timeslot schedule.

Note: On the Administration Site Hosts page (**Resources** > **Hosts**), your administrator can enable the Controller host to also act as an additional load generator. In general, this is not recommended practice and is only appropriate for load tests that have a very small number of Vusers.

Timeslot Issue - No Available Controllers (Error -2147219274)

Error message: Could not reserve timeslot. There is no available Controller.

Troubleshooting

1 On the User Site Hosts page (**Project > Hosts**), check whether any Controller hosts appear and ensure that their status is operational.

If no Controllers appear, or if they have a status other than operational, contact your administrator.

2 If operational Controllers appear on the Hosts page, check on the User Site Timeslots page (**Project > Timeslots**) to see when the Controllers are available.

If the Controllers are not available during the desired timeslot, try to reorganize the timeslots so that you can make the necessary resources available for your load test.

Before you reorganize the timeslots, you should look at all the tests that you have scheduled in your system and consider the following factors:

➤ **timeslot utilization.** Some tests may have more timeslots reserved than is necessary, or there may be timeslots that have been reserved for no reason.

➤ **test importance.** Less important tests can be moved to different timeslots to make space available for the more important tests.

➤ **irrelevant tests.** Check whether there are tests scheduled that are no longer relevant and can be removed from the timeslot schedule.

3 If the Controller machine is also designated as a data processor, the Controller may not be available due to a failed analysis or publish operation in a previous test.

If an analysis/publish operation fails, the machine on which this action was performed remains allocated to the analysis/publish action, and the machine cannot be used as a Controller.

If this is the case, you need to cancel the allocation to the specified machine(s) as follows:

a In the Test Runs page (**Site Management** > **Test Runs**), check which runs are being analyzed or published. In the case of publishing, this might be a few runs.

b Click **Deallocate Hosts** in the Test Runs page. The Deallocate Hosts dialog box opens.

c Select **Deallocate Analysis host** and click **OK**. Repeat this procedure for each test run from which you want to deallocate hosts.

Failed to Launch Controller (Error -2147220032)

Error message: Failed to launch the Controller.

The above error message also includes more details about the specific problem with the Controller license.

Troubleshooting

Contact your administrator to verify why there is problem with the Controller license. You can view and update license information on the Administration Site License page (**System Configuration** > **License**).

For more information about licenses, see the section about configuring and viewing license information in the *HP Performance Center Administrator's Guide*.

Controller Cannot Connect to Database (Error -2147219979)

Error message: Controller cannot connect to database. Contact your administrator to remove the Controller from the host list and add it again to reset configuration.

Troubleshooting

When you receive this error, it usually means that something changed on the Controller host machine. This could be due to someone reformatting or reinstalling the Controller.

Your administrator needs to reset the Controller configuration by removing the Controller from the Administration Site Hosts page (**Resources** > **Hosts**) and then adding it again.

Not Enough Disk Space on Controller (Error -2147220152)

Error message: Not enough disk space left on Controller machine system disk 'C:\'.

Troubleshooting

You need to make disk space available on the Controller host machine. For more information about the host system requirements, refer to the section about system component requirements in the *HP Performance Center System Configuration and Installation Guide*.

Browser Stuck While Initializing Load Test

Problem description: During the initialization of a load test, the browser gets stuck.

Troubleshooting

1 Restart your test as follows:

   a Close your browser.

   b Open your browser again and log in to the HP Performance Center User Site.

   c Start the test again

2 If your browser gets stuck again, restart the relevant host machines as follows:

   a Close the HP Performance Center User Site.

   b Restart the host machines (load generators and Controllers) that you are using in this test.

   c Open the HP Performance Center User Site, log in, and start the test again.

3 If your browser gets stuck again, check with your administrator if there are any problems with the utility server that could be causing these issues.

4 If you are still experiencing problems, contact Customer Support (http://www.hp.com/go/hpsoftwaresupport) for assistance.

Failure to Initialize Load Test

Problem description: When trying to run a load test, the test fails to initialize.

Troubleshooting

1 Start the test again.

2 If initialization still fails, restart the relevant Controller host machines as follows:

a Close the HP Performance Center User Site.

b Restart the Controller host machines that you are using in this test.

c Open the HP Performance Center User Site, log in, and start the test again.

3 If initialization still fails, try to assign a different Controller host (if available) to your test.

If this solves the problem, contact Customer Support (http://www.hp.com/go/hpsoftwaresupport) to check why the test did not work with the original Controller host.

4 If you are still experiencing problems, contact Customer Support for assistance.

License Issue -Concurrent Runs

Error message: Your HP Performance Center license does not support the number of concurrent runs.

Troubleshooting

Since you have exceeded the overall number of concurrent runs supported by your HP Performance Center license, you must do one of the following:

➤ Ask your administrator to rearrange the scheduling of the load tests to ensure that you are not exceeding the overall number of concurrent runs supported by your license.

➤ Upgrade your HP Performance Center license to enable support of more concurrent runs.

License Issue – Concurrent Users (Error -2147219264)

Error message: Your HP Performance Center license does not support the number of concurrent users.

Troubleshooting

Since you have exceeded the overall number of concurrent users supported by your HP Performance Center license, you must do one of the following:

➤ Ask your administrator to rearrange the number of Vusers that are being used concurrently in all the projects so that some Vusers can be made available for your test.

➤ Reduce the number of Vusers for your test.

➤ Upgrade your HP Performance Center license to enable support of more Vusers.

Unable to Run Load Test that Is Already Active

Error message: Unable to create new load test run. There is already an identical active load test.

Troubleshooting

If a load test is running, you cannot run the same load test (with identical settings) concurrently. As a workaround, you can copy the settings of the test that you want to run and change the name.

If there are enough host resources to run both tests concurrently, you should be able to run the new test.

Note: You copy a test on the Load Tests configuration page (**Load Tests > Manage**) of the HP Performance Center User Site. For more information about copying load tests, see the section about copying a load test in the *HP Performance Center User's Guide*.

Cannot Initialize Load Test: Scripts Are Inaccessible

Error message: Cannot access the load test scripts. Please check load test definitions.

Troubleshooting

The script could be inaccessible for the following reasons:

➤ The script was deleted.

➤ The script was moved to a different directory.

➤ There is a network problem preventing access to the script.

➤ Security/permissions issues could be preventing access to the script directory.

Session Activation Fails

Error message: Session activation failed. Reported from method: 'SA:AllocResourcesAndStartSes'; Session ID: #; Reason:

Troubleshooting

1 Verify that there is network connectivity between the host and the Web server. The latency should be less than 20 ms to and from all HP Performance Center machines, excluding the load generators.

2 Check the Event Viewer administrative tool on both the Web server and Controller machines (**Start** > **Settings** > **Control Panel** > **Administrative Tools** > **Event Viewer**).

License Manager Component Cannot Be Instantiated

Error message: Cannot run the load test. Unable to instantiate License Manager component.

Troubleshooting

If you receive the above error, remove the **PCIMkipper** process and perform an IIS reset.

Cannot Run Load Test on Controller - Non-Admin System User

Problem description: When the system user is a non-administrative user, if you try to run load test on a Controller for the first time, the load test does not run.

Troubleshooting

Before running load tests on a Controller for the first time, you must log on to the host machine with a user that has administrator privileges, open the Controller manually, and then close the Controller. The next time you try to run a load test on the Controller, the load test should run successfully.

To open the Controller manually:

1 From the command line, run **wlrun**. The Controller opens.

2 Close the Controller.

Cannot Run Load Test on Controller with Windows XP – Non-Admin System User

Problem description: If the system user is a non-administrative user, you cannot run a load test on a Controller host in a Windows XP environment.

Troubleshooting

Workaround: Add the system user to the machine's COM security settings.

To add the system user to the COM security settings:

1 Select **Start** > **Run**, and type dcomcnfg. The Components Services window opens.

2 Under **Console Root\Component Services\Computers**, right-click **My Computer** and select **Properties**.

3 In the My Computer Properties dialog box, click the **COM Security** tab.

4 Under **Access Permissions**, click **Edit Default**, and add the system user with full access to the default security.

5 Under **Launch and Activation Permissions**, click **Edit Default**, and add the system user with full access to the default security.

6 In the My Computer Properties dialog box, click **OK**.

Cannot Run Load Test with Unix Load Generator

Error message: Failed to initialize load test.

Troubleshooting

If Performance Center cannot connect the load genrator to the Controller, manually change the **wlrun7.ini** file as follows:

1 Open the **wlrun7.ini** file in a text editor.

2 Change **HostUnixDontUseRSH** from **0** to **1**.

3 Try to rerun the test.

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Troubleshooting Running Load Tests

This chapter provides information on troubleshooting problems related to running load tests.

This chapter includes:

Data Processor Error When Publishing Load Test

Problem description: When trying to publish a load test from a pool with no data processor, an error link appears by the test run in the Load Tests page.

Troubleshooting:

1 In the Administrator Site, add a data processor to the pool assigned to the project.

2 In the Run Results tab of the Load Test Results page in the User Site, click **Publish**. This cancels the publishing process.

3 Republish the results. The error message disappears.

Load Test Seems to Run, But Is Not Actually Running

Problem description: You are unable to run a load test. The HP Performance Center error message states that a test is currently running, but no tests are actually being run.

Troubleshooting

1 Verify whether a load test is actually running on the target HP Performance Center Controller host.

2 If no test is actively running, reset the host state using the HP Performance Center Administration Site, as follows:

   a From the Performance Center left menu, select **Site Management > Test Runs**. The Test Runs page opens.

   b Select the relevant run from the test runs table.

   c In the test runs toolbar, click the **Fast Recovery** button.

   This cleans the state of hosts in the database, and makes the problematic host available for future load tests. If the host is in **Resource Failure** state and cannot be used in your load test, see "Troubleshooting Hosts and Servers" on page 71.

Load Test Does Not Run All Vuser Groups

Problem description: Performance Center did not run all the Vuser groups defined in the load test.

Troubleshooting

Performance Center supports running up to 47 Vuser groups in a load test run.

Vuser Group Does Not Start Running

Problem description: The Vuser group in the load test does not start running.

Troubleshooting

This problem occurs if a Vuser group is scheduled to run after a Vuser group that is set to run indefinitely.

If Group A is set to run indefinitely, and Group B is scheduled to run after Group A, then Group B will run only if you do one of the following:

➤ Stop Group A manually

➤ Add a Stop Vusers action to Group A's schedule

➤ Modify Group B's Start Group action to start running after a specified amount of time

Load Test Does Not Stop Running

Problem description: Vusers in the load test do not stop running.

Troubleshooting

If a load test schedule does not have a Stop Vusers action, the load test does not stop running.

Possible causes:

➤ The Stop Vusers action was deleted

➤ With load tests scheduled to run indefinitely in Performance Center versions 8.1 or earlier, during migration no Stop Vusers action is created, since the Vusers are not meant to stop running

Solution: Check the Actions defined in the Actions grid of the load test's schedule. If no Stop Vusers action is defined, the schedule continues to run indefinitely. To stop running the load test, define a Stop Vusers action in the load test schedule.

User Site is Sluggish During a Load Test

Problem description: The Controller machine may be over-utilized.

Troubleshooting

See "New Vusers Stop Initiating During a Load Test" below.

Online Graphs Stop Displaying During a Load Test

Problem description: The Controller machine may be over-utilized.

Troubleshooting

See "New Vusers Stop Initiating During a Load Test" below.

New Vusers Stop Initiating During a Load Test

Problem description: During a load test, new Vusers stop initiating.

Troubleshooting

The Controller machine may be over-utilized.

1 Make sure you are not running any Vusers on the Controller machine.

2 Check that the machine is responsive and CPU utilization on the Controller machine during a load test is below 100%.

3 Disable any software that may interfere with the HP Performance Center Controller, file server, or Web server. This includes any auditing or virus scanning software.

4 If CPU utilization is high, check whether:

➤ the **online.exe** process is consuming excessive CPU. If it is, this means that you might have too many active remote viewing sessions (for example, many people are watching the load test from different browsers). To fix this problem, either decrease the frequency at which the load test viewing sessions are refreshed (from each individual client browser), or decrease the number of concurrent viewing sessions for the current or problematic load test.

➤ the **wlrun.exe** process is consuming excessive CPU. If it is, check whether your load test is:

➤ producing many error messages. If it is, reduce the number of error messages by resolving the reasons for the error messages.

➤ producing many logging messages (for the Controller). If it is, disable or reduce the logging level, or avoid using log statements (such as **lr_message**) that send messages to the Controller's output window.

➤ running scripts without any think times, and thus producing a lot of data that is sent back to the Controller.

If CPU consumption cannot be reduced for the load test, consider upgrading your Controller hardware.

Vusers Are Stuck in Initialization

Problem description: Vusers are stuck in initialization, or never run at all. This can occur if you made modifications to a script and overwrote the existing script in HP Performance Center. Although you uploaded the script, the new run-time logic of the script is not updated for the load tests that refer to the script.

When the load test is run with the updated script, a pop-up window is displayed in **wlrun.exe** on the Controller. To verify this, run **wlrun.exe** on the Controller as an **interactive user** (see "Option 3: Launch wlrun.exe manually from the Controller host machine" on page 74 for configuration details).

Example: A load test named **TestLoadTest** refers to a script named **Test** that contains four sections: **vuser_init**, **action1**, **action2**, and **vuser_end**. If you modify the **Test** script so that it includes only three sections—**vuser_init**, **action3**, and **vuser_end**—and overwrite the previous **Test** script by uploading the modified script to HP Performance Center, the Vusers will not run when you run **TestLoadTest**. This is due to the fact that the old script's run-time logic remains and the load test still "thinks" that there are two actions sections, **action1** and **action2**, as opposed to the one action section in the updated script, **action3**.

Troubleshooting

Option 1:

1 When modifications are made to a script, change the name of the script by adding a version number to it. For example, **TestScript_1** can be changed to **TestScript_2**. This way, when you upload the updated script, the current script remains, and the load test will still run.

2 Create a new load test, and add the new version of the script to it.

Option 2:

When modifications are made to a script, remove the script from the load test, then add it to the load test again.

Note: It is recommended that you use Option 1, as it enables you to keep track of your script and load test configuration changes.

Vuser Replay Fails

Problem description: Vusers are not picking up the correct environment settings and replay fails.

Troubleshooting

Option 1: Check the environment settings and software installation

The load generator machines on which the test is running must have the correct software installed and the proper environment variables set for the user.

For Microsoft Media Player:

1 Log in to the load generator as the HP Performance Center system user and run **Windows Media Player Install for Windows Media**.

2 Check the System environment variable **Path** to ensure that the Windows Media Player path is set correctly. Reboot, if necessary, for the correct settings to take effect.

3 On the load generator machine, use VuGen to run the script and test it.

For Java:

1 Log in to the load generator machine as the HP Performance Center system user.

2 Make sure that the **Path** environment variable for both **User** and **System** do not have an instance of Java Virtual Machine. HP Performance Center retrieves the JVM information from the registry.

3 If the script replays on the VuGen machine on which the script was created, copy the machine's **CLASSPATH** environment variable and place it in the **System** environment variable area of the load generator machine.

4 On the load generator machine, run a simple script using VuGen to get the environment variable settings. Add the following lines to verify that the environment variables are set correctly:

```
char *env;
env = getenv("PATH");
lr_output_message("%s",env);
```

Note: Ensure that you add the protocol definition char* getenv(char*); at the top of the script file.

For Citrix:

1 Make sure that the Citrix client is installed on the load generator machine.

2 Run the script through VuGen on the load generator machine.

For Databases:

Make sure that you have the appropriate database client installed on the load generator machine, and the appropriate settings in the System **Path** environment variable.

For Tuxedo:

1 Make sure that the Tuxedo client is installed on the load generator machine.

2 Verify that the following environment variables are set under **System**:

➤ **Path.** Add the **tuxedo\bin** directory to this variable.

➤ **TUXDIR.** The root directory of the TUXEDO installation. It is called **ROOTDIR** in TUXEDO 4.2 and earlier versions of TUXEDO. This environment variable is mandatory on the NT platform (For example: **TUXDIR=D:\PSHr755\tuxedo**).

➤ **NLSPATH.** Contains sub-directories to support the localization of system messages, along with message catalogs for the default locale (U.S. English). This environment variable is also mandatory on the NT platform (For example: **NLSPATH=$TUXDIR\locale\c**).

➤ **WSNADDR.** The address of the TUXEDO server (may need to be set). In pre-TUXEDO 6.3 versions this is in hex—for example, **0x0002ffffc7cb4ebd**. The **0002** indicates the IP, **ffff** indicates the port number, and **cbcb4ebd** indicates the IP address of the machine that contains the server. TUXEDO 6.3 also allows a more mnemonic way of indicating the server's address. This environment variable is mandatory on the NT platform (For example: **WSNADDR=199.35.108.119:7000**).

➤ **ULOGPFX.** Prefix for the **TUXEDO** log file (may need to be set). The name of the log file includes the current date represented as a six-digit number—for example, **081797** for **August 17, 1997**. The **ULOGPFX** can contain a directory name as well as part of the file name itself (For example: **ULOGPFX=/u/markn/ul**).

Note: Ensure that you add the protocol definition **char* getenv(char*);** at the top of the script file.

Option 2: Configure the Controller to work as an interactive user

Running a GUI script in HP Performance Center may cause WinRunner or QuickTest Professional to crash due to the configuration of **Wlrun.Engine**. To rectify this situation, configure the Controller to work as an interactive user.

To configure the Controller to work as an interactive user:

1 Make sure the **wlrun** process is not running on the machine.

2 Select **Start > Run** and type dcomcnfg.

3 Press ENTER to display the list of DCOM applications.

4 In the displayed application list perform the following:
For Windows 2000 machines, click **wlrun.LrEngine**, and then click **Properties**.
For Windows 2003/XP machines, right-click **wlrun.LrEngine** and select **Properties**.

5 In the **Identity** tab, select **The interactive user**.

6 Click **OK** twice to close both dialog boxes.

7 Log in to the machine in the HP Performance Center environment as the system user. This user, which is installed with HP Performance Center, is displayed in the General Settings page of the Administration Site.

Connection to Database Timed Out

Error Message: The connection to database timed out.

Problem description: The load test cannot run. HP Performance Center runs slowly when configured with Oracle 9i or 10g server/client and an error may be displayed in the Administration Site stating that the connection to database timed out.

Troubleshooting

1 Make sure that you are accessing the database through **TNSNAMES** and not **ONAMES**, which can lead to a noticeable and ever-increasing time delay connecting to the database. This time delay does not exist if **TNSNAMES** is used.

To use **TNSNAMES**, change its priority within the **SQLNET.ORA** file by editing the **<Oracle installation directory>\network\admin\sqlnet.ora** file and setting the **NAMES.DIRECTORY_PATH** as follows:

```
NAMES.DIRECTORY_PATH = (TNSNAMES,ONAMES)
```

Note that **TNSNAMES** must be the first entry in the **DIRECTORY_PATH**.

2 Comment out the line **SQLNET.AUTHENTICATION_SERVICES= (NTS)** within the **<Oracle installation directory>\network\admin\sqlnet.ora** file located on the database server machine.

3 Validate connection performance to the HP Performance Center database. Run the **TcQA_CheckDatabaseConnection.vbs** script (available as a download from the Customer Support Web site Knowledge Base, ID39475) to quantify the performance of the connection to the HP Performance Center database. Make sure that the connect times are constant and low.

The following is an example of a sample output:

```
Database Connection String: Provider=SQLOLEDB.1;User
ID=OrchidUser;PWD=orchid;Initial Catalog=MI_LRDB;Data
Source=samurai\mssqla;QuotedID=No Statistics:
Attempt #1: Connect= 1 secs,  Query= 2 secs
Attempt #2: Connect= 1 secs,  Query= 1 secs
Attempt #3: Connect= 2 secs,  Query= 1 secs
Attempt #4: Connect= 2 secs,  Query= 1 secs
Attempt #5: Connect= 2 secs,  Query= 1 secs
```

Problems in Load Test Design During Run

Problem description: During the load test, could not configure Design Groups window or Scheduler settings.

Troubleshooting

This may be related to the Apache Tomcat application server.

1 Make sure the Apache Tomcat service is installed and running as follows:

a Select **Start** > **Run** and type services.msc to open the Service console.

b Search for the Apache Tomcat service.

If the service is not installed, install it as follows:

➤ Open the command line (**Start** > **Run** and type cmd)

➤ Change the directory to <**Installation Folder**>**java****tomcat****bin**

➤ Execute the following command:

service.bat install

c Make sure the service's status is **Started** and is set to **Automatic**.

2 If using IIS6, make sure the IIS's ISAPI Filter table contains the **jakartaFilter** as follows:

  a Select **Start** > **Run** and type Inetmgr to open the IIS manager.

  b On the default Website, select **Properties** > **ISAPI Filters**.

  c Make sure the jakartFilter exists and points to:

    <PC_home>\java\tomcat\bin\iis6\isapi_redirector2.dll

  If the filter is not installed, install it as follows:

  ➤ Open the command line (**Start** > **Run** and type cmd).

  ➤ Execute the following command:

    IISVirDirlsape.exe addServerFilter jakartaFilter "<Performance Center Installation Directory>\java\tomcat\bin\iis6\isapi_redirector2.dll" "jakartatomcat"O

3 Make sure the following environment variables exist:

  ➤ CATALINA_HOME = <PC_home_dir>\java\tomcat

  ➤ JINTEGRA_HOME = <PC_home_dir>\java\J-INTE~1\com

  ➤ JAVA_HOME = <PC_home_dir>HP\Performance Center\java

  ➤ Make sure the CLASSPATH Variable is updated with:

    <PC_home_dir\java\J-INTE~1\comlib\integra.jar

4 Try to run the apache Tomcat service under the IUSR_METRO as follows:

  a Select **Start** > **Run** and type services.msc to open the Service console.

  b Search for the Apache Tomcat service.

  c Double click the logon tab.

  d Select **This Account.**

  e Insert: IUSR_METRO with MIOrchid#1.

  f Restart the service.

Orchid Monitor Error

Problem description: Error from Orchid monitor in Error Window during the run.

Troubleshooting

The Windows Remore Registry Service should be running on the host machine.

1 Select **Start** > **Programs** > **Administrator Tools** > **Services** to open the services window.

2 Search for the Remote Registry Service

3 Make sure the service's status is **Started** and is set to **Automatic**.

Cannot Run Load Test with Non-Admin User

Problem description: You cannot run a load test with a non-administrative system user, or after a user is changed.

Troubleshooting

1 Verify that all the required services are running.

2 Try to run **alagentservice** and **magentservice** using the following commands:

➤ **alagentservice**

```
%installation folder%\al_agent\bin\alagentservice.exe -remove

%installation folder%\al_agent\bin\alagentservice.exe -install username password
```

where **username** and **password** are those of the HP Performance Center system user.

➤ **magentservice**

```
%installation folder%\launch_service\bin\magentservice.exe -remove

%installation folder%\launch_service\bin\magentservice.exe -install username
password
```

where **username** and **password** are those of the HP Performance Center system user.

3 If the load test fails in the first step, check the **LRFS** folder. If there is a problem configuring the **LRFS** folder, try restarting the machine.

4 Check the identity of the COM objects, especially **OrchidActiveSession** and **wlrun.lrengine**. The identity should be the HP Performance Center system user.

SiteScope Server Fails to Retrieve Data from Hosts/Servers

Problem description: If you change the system user to a non-administrative user and then enable SiteScope on any of the HP Performance Center servers or hosts, SiteScope cannot retrieve all required data.

Troubleshooting

Manually configure an administrative user on the SiteScope server so that it has permissions to monitor the server/hosts machines and retrieve all the required data.

To configure an administrative user on the SiteScope server:

1 In your browser, enter the URL for SiteScope as follows:

```
http://<sitescope_server>:8888/sitescope
```

where **sitescope_server** is the name of your SiteScope server.

2 At the top of the SiteScope page, click **SiteScope**.

3 Click **Remote Windows**.

4 From the list, select the relevant machine and click **Edit**.

5 In the **Login** and **Password** fields, enter the login name and password of a system user with administrative privileges.

6 Click **Update**.

Failure to Run Load Test

Problem description: The load test fails to run. This may occur as a result of problems with the .NET Framework installation.

Troubleshooting

Repair the .NET Framework installation as follows:

1 Select **Start** > **Run**.

2 Enter the following command:

```
c:\WINDOWS\Microsoft.NET\Framework\v2.0.50727\aspnet_regiis.exe -i
```

7

Troubleshooting Autostart Viewer

This chapter provides information on troubleshooting errors related to autostarting load tests.

This chapter includes:

License Validation Failed

Error Message: License Validation Failed.

Troubleshooting

Each load test's activation is validated against the Performance Center license limitations for the number of Vusers, machines, and concurrent runs, as well as project limitations and the license's expiration date.

➤ Check if the Performance Center license or the project settings were modified. If they have been modified, reschedule the load test according to the new settings.

➤ Check if the Performance Center license has expired.

Timeslot Validation Failed

Error message: Timeslot validation failed. Please make sure that timeslot duration is at least 20 minutes.

Troubleshooting

Reserve a new timeslot for the load test that has at least 20 minutes available.

Load Test is Already Active

Error Message: There is already a run executing for this load test.

Troubleshooting

A load test can have one of the following states: Ready, Running, Stopping, Collating Results, or Creating Analysis Data. Each of these states is considered an Active state. A load test can only have one Active state at any one time. If you try to run a load test that already has an Active state, you will receive the above message.

➤ If the current state is Ready, Running, or Stopping, reset the load test using the HP Performance Center Administration site as follows:

   a From the Performance Center left menu, select **Site Management** > **Test Runs**. The Test Runs page opens.

   b Select the relevant run from the test runs table.

   c In the test runs toolbar, click the **Fast Recovery** button.

   This cleans the state of the load test and makes the host available for future load tests.

➤ If the current state is Collating Results, use the fast recovery feature as described above, and then deactivate the collator process as follows:

   a On the Administrator Site, select **Site Management** > **Test Runs**. The Test Runs page opens.

   b Select the relevant run from the test runs table.

   c In the test runs toolbar, click the **Deactivate collator process** button. The Deactivate Collator dialog box opens.

   d Click **OK** to confirm that you want to deactivate the collator process. A dialog box opens confirming that the process was deactivated.

   e Click **Close** to close the dialog box.

➤ If the current Active state is Creating Analysis Data, use the fast recovery feature as described above, and then kill the process to free up more resources as follows:

   f On the User site, select **Project** > **Hosts**. The Hosts page opens.

g In the Hosts table, click the relevant host. The Host Details page opens.

h In the Host Details page, select the processes tab.

i In the relevant process's **Kill** column, click **Kill Process**.

Note: The Creating Analysis Data process is very CPU and I/O intensive. Killing this process should be considered only in the event you have not been able to resolve the problem in any other way.

Load Test Exceeded Timeslot

Error Message: Load test <test name> exceeded it's timeslot. Executing run failed to stop in a timely manner.

Troubleshooting

This usually occurs when you reserve consecutive autostart timeslots that share resources, or where the first defined load test is very CPU and/or I/O intensive and/or has a large number of Vusers scheduled to run at the same time. This can cause the first load test to overrun it's timeslot and as a result the second load test will not run.

➤ When reserving consecutive autostart timeslots:

  ➤ Ensure that you leave a suitable time interval between the timeslots.

  ➤ Do not select the **Collate and Analyze Results** or **Collate Only** post run analysis options for the first timeslot.

Cannot Instantiate Session Activator Component

Error Message: Unable to instantiate Session Activator Component.

Troubleshooting

This is an indication of an internal error.

➤ Reset the User Site and/or the Utility and/or the Host Machine.

➤ If that does not resolve the problem, contact HP Support.

Cannot Activate Load Test Run

Error Message: Unable to activate and start load test run.

Troubleshooting

➤ Check Session Activator Errors:

  ➤ Run the load test manually to try resolve issues that arise.

  ➤ When reserving the timeslot, do not select **Manual** machine selection. Select **Automatic** instead.

  ➤ Check the load test for run time settings errors.

8

Troubleshooting Post Load Test

This chapter provides information on troubleshooting issues that may arise after running a load test.

This chapter includes:

➤ Cannot Find Data Processor to Publish Load Test Results on page 63

➤ Failure to Launch Online Analysis on page 64

Cannot Find Data Processor to Publish Load Test Results

Problem description: When trying to publish load test results to the Dashboard, you get an error that Performance Center cannot find a data processor.

Troubleshooting

1 Log on to the Performance Center Administration Site and edit the host so that it also functions as a data processor. (For more information, see the *HP Performance Center Administrator's Guide*.)

2 In the User Site, refresh the Dashboard page.

3 If Performance Center still cannot find the data processor, unpublish the results and republish them.

Failure to Launch Online Analysis

Problem description: Performance Center cannot launch online Analysis when the Controller does not have access to the Utility Server. The run initialization fails.

Troubleshooting

➤ Check the DNS settings to make sure you can ping the Utility Server from the Controller.

➤ In the case of an Oracle database, make sure the **tnsnames.ora** is defined properly.

9

Troubleshooting Terminal Sessions

This chapter provides information on troubleshooting problems related to terminal sessions.

This chapter includes:

➤ Unable to Create Terminal Sessions on the Load Generator on page 66

➤ Controller and Load Generator Cannot Communicate on page 67

➤ Running a GUI Script in HP Performance Center Causes WinRunner or QuickTest Professional to Crash on page 68

➤ Unable to Set Terminal Services for a Machine Name Added as an IP Address/ Domain Name on page 69

Unable to Create Terminal Sessions on the Load Generator

Error message: Cannot create terminal sessions on the load generator. There might be a problem with logon credentials.

Troubleshooting

1 Verify that the correct terminal server login settings are selected. For information about verifying the settings, see "Configuring Terminal Services Logon Settings" on page 199.

2 If you encounter a network connection error stating that the user is not mapped to the drive on the terminal server machine (see graphic below), create a separate terminal services profile for each user that is used to log in to a terminal server session. For more information, see the Microsoft Terminal Services documentation (http://technet2.microsoft.com/ windowsserver/en/technologies/featured/termserv/default.mspx).

3 Verify that the correct Client Settings are selected:

a Choose **Start** > **Programs** > **Administrative Tools** > **Terminal Services Configuration** > **RDP-TCP**. Right-click **RDP-TCP**, and select **Properties** to open the RDP-TCP Properties dialog box.

b In the RDP-TCP Properties dialog box, select the **Client Settings** tab.

   c Make sure that **Use connection settings from user settings** is disabled.
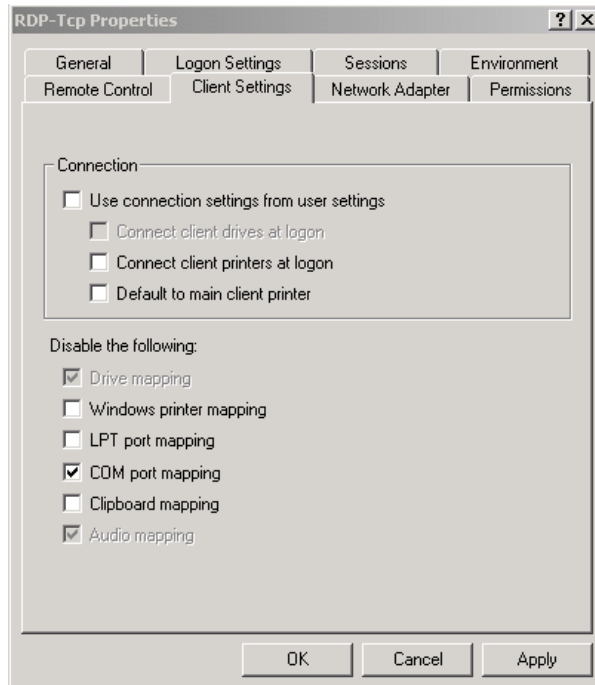
4 If the run fails to create terminal services, open the terminal services from a specific host and make sure there are no pop-up messages when you log in as the HP Performance Center user. By default, the HP Performance Center user is a local user, **MI_LRDB**, unless the system user was changed from the General Settings page of the Administration site (**System Configuration** > **General Settings** > **Change User**).

Controller and Load Generator Cannot Communicate

Problem description: There is no connection between the Controller and the load generator on the terminal server.

Troubleshooting

1 Verify that the terminal server is installed correctly.

2 Verify that there are active sessions on the Terminal Services Manager (**Start** > **Programs** > **Administrative Tools** > **Terminal Services Manager**).

3 If you are using an existing terminal session, verify that the HP Performance Center agent icon appears in the terminal server's system tray. This indicates that the agent is running.

4 Make sure that the HP Performance Center user has **Create Global Object** privileges when running a terminal server session on a Windows Server 2003, Windows XP SP2, or Windows 2000 Server SP4 machine. Add the HP Performance Center Administrators group (or the group to which the HP Performance Center user belongs) to the **Create Global Object** privilege, under **Local Security Policies\Users Rights** on the terminal server machine.

Running a GUI Script in HP Performance Center Causes WinRunner or QuickTest Professional to Crash

Problem description: The DCOM configuration of **Wlrun.Engine** causes WinRunner or QuickTest Professional to crash while running a GUI script in HP Performance Center.

Troubleshooting

Workaround: Configure the Controller to work as an interactive user.

1 Make sure that the **wlrun** process is not running on the machine.

2 Select **Run** from the Windows Start menu and type dcomcnfg.

3 Press ENTER to display the list of DCOM applications.

4 In the displayed application list perform the following:

➤ For Windows 2000 machines, click **wlrun.LrEngine**, then click **Properties.**

➤ For Windows 2003/XP machines, right-click **wlrun.LrEngine** and select **Properties**.

5 In the **Identity** tab of the dialog box, select **The interactive user.**

6 Click **OK** twice to close both dialog boxes.

7 Log in to the machine in the HP Performance Center environment as the system user. This user, which is installed with HP Performance Center, is displayed in the General Settings page of the Administration Site.

Unable to Set Terminal Services for a Machine Name Added as an IP Address/Domain Name

Problem description: When your environment is configured with a local user (in the General Settings page of the Administration Site), you cannot set terminal services for a machine name that was added as an IP address or a domain name (for example, **127.0.0.1, localhost.mercury.co.il**).

Troubleshooting

Workaround: Delete the host from the Hosts page of the Administration Site, and add the host machine again using the host name only.

10

Troubleshooting Hosts and Servers

This chapter provides information on troubleshooting host-related problems.

This chapter includes:

Host in Resource Failure

Problem description: The host is in Resource Failure status.

Troubleshooting

Option 1: Check the host connections

Check the connections between your project's hosts and the machines within your system using the Check Hosts operation in the Hosts page of the Administration Site (**Resources** > **Hosts** > **Check Hosts**) or User Site (**Project** > **Hosts** > **Check Hosts**).
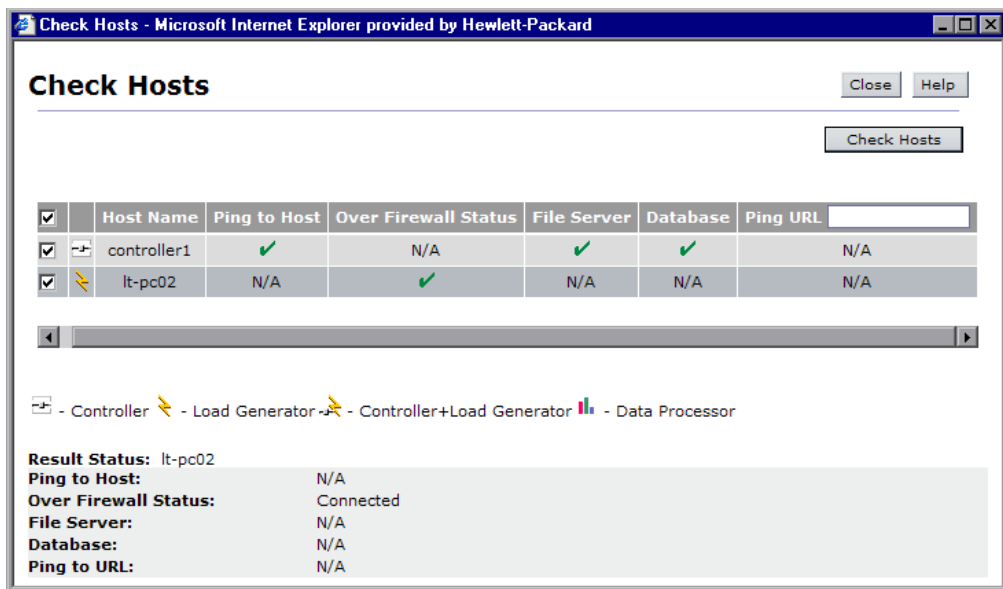
➤ **If Ping to Host fails:**

   ➤ Make sure the host is up and running, and is connected to the network. Check the routing table (**netstat –r**) and make sure that requests to this host are properly routed.

   ➤ Make sure that the host's IP address can be properly resolved.

   ➤ Verify that the ping to the target host from the HP Performance Center Web server, utility server, and database is below 20 ms.

➤ If your firewalls or hosts ignore ICMP requests (pings), use HTTP requests to validate response times from the host to the Web server (a simple LoadRunner **web_url(…)** request to http://<server>/loadtest/). Alternatively, open a browser and type http://<server>/loadtest in the address field.

➤ **If the file server fails:**

➤ Make sure that the host can ping the file server.

➤ Make sure that the HP Performance Center system user has access to **LRFS share** on the file server. You can verify this in any of the following ways:

➤ In the command line, execute the following:

```
net use \\fileserver\LRFS / user:
<Performance_Center_user><Performance_Center_user_password>
```

➤ Log in to the host machine as the HP Performance Center system user, and in the command line, execute the following:

```
% net use \\fileserver\LRFS
```

If the above operation fails, check the error message and resolve the problem. Contact your Windows administrator for assistance.

➤ Make sure that the security settings on **LRFS share** allow the HP Performance Center system user full control.

➤ Make sure that the HP Performance Center system user can create, update, and delete files from **LRFS share**.

➤ Make sure that the HP Performance Center Web server can launch applications on the host. For more information, see "Troubleshooting Web Service Connectivity" on page 93.

➤ **If the database fails:**

➤ Check the **<HP Performance Center>/bin/globals.ini** file and make sure that the connection string is correct for the database you are using.

➤ See the troubleshooting for "Login to Oracle Database Server Hangs" on page 105.

➤ Verify ADODB connectivity to the database as described in "Login to Database Server Fails" on page 108.

Option 2: Check the HP Performance Center version

Make sure that you are using the same version of HP Performance Center on all your host and server machines.

Check the registry entry under [**HKEY_LOCAL_MACHINE\SOFTWARE\Mercury Interactive\LoadRunner\CurrentVersion**] for the following variables:

➤ Major

➤ Minor

➤ ServicePack

Note: Any patches applied to one machine must be applied to all machines if and when applicable.

Option 3: Launch wlrun.exe manually from the Controller host machine

If the host check succeeds, but the host is still not operational, launch the Controller manually from the Controller host machine as follows:

 1 Log in to the host machine.

 2 Configure the **wlrun.LrEngine** application to run as an interactive user:

➤ Launch **dcomcnfg.exe**.

➤ In the **Application** tab, select **wlrun.LrEngine** from the list of DCOM applications.

➤ Click **Properties** to view the properties for **wlrun.LrEngine**.

➤ In the **Identity** tab, set the user account to **The interactive user**.

➤ Click **OK** and close the **DCOMCNFG** window.

Note: When you are finished with this step, set **wlrun.LrEngine** back to its original identity. By default, this is **This User** with the HP Performance Center user name and password. If you used a different identity, restore it.

---

3 Launch the Controller (**wlrun.exe**) from the **<HP Performance Center>/bin** directory (on the Controller host).

4 If an error message is displayed during the startup of the Controller, resolve the error message before continuing. For HP Performance Center to utilize the Controller properly, no error messages should be displayed during startup.

5 Create a new, simple load test and reference the scripts from the **LRFS share** (on the HP Performance Center file server). Run the load test with one or two users to verify that the Controller works.

Note: Scripts uploaded to the Performance Center LRFS reside in the **fileserver\LRFS\<ProjectID>\Scripts** directory. To obtain the **<ProjectID>**, select **User Management** > **Projects**.

The following is an example path to the **USR** file for a script named **MyTest**: **myserver\LRFS\2\Scripts\MyTest\MyTest.usr**

6 Close the Controller (**wlrun.exe**).

7 From the HP Performance Center User Site, launch a simple load test.

➤ Check whether the following processes are displayed in the Task Manager on the Controller host:

  ➤ **OrchidActiveSession.exe OR ORCHID~1.exe**

  ➤ **WLRUN.EXE**

➤ Check whether the Controller is displaying a dialog box that requires user input before the Controller can proceed with the load test. Address the reasons for the dialog box being displayed, and make sure that no dialog boxes are displayed when re-running the load test from HP Performance Center.

Examples of dialog boxes that may be displayed include **License Has Expired**, **Monitor Not Licensed**, and **Host is Over-Utilized**.

If you are unsure how to resolve the problem indicated in the dialog box, contact the Customer Support Web site (http://www.hp.com/go/hpsoftwaresupport) for assistance.

Note: When you are finished with this step, set **wlrun.LrEngine** back to its original identity. By default, this is **This User** with the HP Performance Center user name and password. If you used a different identity, restore it.

Option 4: Reinstall HP Performance Center host on the host machine

If all of the above steps fail to resolve the problem, reinstall the Performance Center host on the host machine.

1 Uninstall HP Performance Center (**Start** > **Settings** > **Control Panel** > **Add/Remove Programs**). (This is really the HP Performance Center host.)

2 Delete **HKEY_LOCAL_MACHINE\SOFTWARE\Mercury Interactive** from the registry**.**

3 Re-install the HP Performance Center host. For more information, see the *HP Performance Center System Configuration and Installation Guide*. Make sure that you install the same version of HP Performance Center as is installed on your Web server.

Note: Do not install an HP Performance Center server (such as a Utility Server, Web Server, or File Server) on the same machine as the HP Performance Center host (such as a data processor, Controller, or load generator).

Cannot Add Host as an HP Performance Center Host

Problem description: When trying to add a host, you receive an error stating that HP Performance Center cannot identify the host as an HP Performance Center host.

Troubleshooting

Verify that the **ManagmentUtil.exe COM** object is defined as the HP Performance Center system user.

Unable to Add a Load Generator Due to High Latency

Problem description: You are unable to add a load generator host due to high network latency or the network policy.

You may have a problem adding a host to the Performance Center Administration Site as a load generator if the host has a ping time greater than 50 ms. This applies only to hosts added as load generators.

Troubleshooting

1 Create a temporary host location over a firewall.

a On the Host Locations page, click **Add Host Location**.

b In the **Host Location** field, type TempOverFirewall.

c Set **Located over Firewall** to **Yes**. (By using the **Located over Firewall** option, many checks that are performed on host machines will not be performed.)

d Click **OK**.

2 Add a new host to the temporary location.

a On the Hosts page, click **Add Host**.

b In the **Name** field, type add.

c In the **Purpose** field, select **Load Generator**.

d From the **Location** list, select **TempOverFirewall**.

e From the **Host Pool** list, select the correct host pool.

f Click **Save**, and then click **OK** to confirm.

g Select the host that was added from the host list.

h Change the location to the correct location. (Placing the host in the over firewall location was done just to bypass some checking that HP Performance Center does when adding host machines.)

i Click **OK**. In the next two message boxes that are displayed, click **OK**.

3 Repeat Step 2 for all load generators that have high network latency.

Problems Changing SiteScope Server in Administration Site

Problem description: You are unable to change the SiteScope server details on the Server Configuration page in the Administration Site (**System Configuration > Server Configuration**). When you enter a new SiteScope server in the **SiteScope Server** box and click **Save**, you receive one of the following error messages:

➤ Service unavailable

➤ An unspecified error occurred while processing your request. Try to refresh your browser or to open another browser instance.

Troubleshooting

1 On the Server Configuration page (**System Configuration** > **Server Configuration**), clear the contents of the **SiteScope Server** box and click **Save**.

2 In the **SiteScope Server** box, enter the name of the new SiteScope server and click **Save**.

Note: As a result of this action, Performance Center host or server groups may have been created on the new SiteScope server. It is recommended to remove these groups from the SiteScope server.

---

3 Re-enable SiteScope monitoring on the relevant Performance Center hosts and servers.

➤ To enable SiteScope monitoring for a host, open the Hosts page (**Resources** > **Hosts**), and click the relevant host. In the **Properties** tab, click **Edit** and select **Enable SiteScope Monitoring**.

➤ To enable SiteScope monitoring for a server, open the Servers page (**Resources** > **Servers**), and click the relevant server. In the **Properties** tab, click **Edit** and select **Enable SiteScope Monitoring**.

4 Reconfigure the SiteScope alert settings on the Alerts Configuration page (**System Configuration** > **Alerts Configuration**).

Failure to Add Host

Problem description: Add host fails.

Troubleshooting

This may occur as a result of any of the following problems:

➤ **System User Passwords Do Not Match**

The Performance Center system user credentials on the new host machine must be the same as those of the Performance Center system user on the rest of the Performance Center system.

If the system user exists on the host with a different password, Performance Center will not add the host to the system. Before attempting to add a host, ensure that the credentials match.

➤ **. NET Framework**

There may be a problem with the .NET Framework installation.

Repair the .NET Framework installation as follows:

1 Select **Start** > **Run**.

2 Enter the following command:

```
c:\WINDOWS\Microsoft.NET\Framework\v2.0.50727\aspnet_regiis.exe -i
```

➤ **IIS Configuration (Performance Center requests administrator credentials)**

There may be a problem with the IIS configuration. In some cases, when you try add a host, the Administrator Authentication dialog box opens, requesting the administrator credentials. This may also be caused by incorrect configuration of IIS.

On the relevant host, the Administration Site server, and the Utility server, check the following:

1 Verify the PCWS folder configuration for the host machine, as follows:

a Navigate to the following URL: http://<host_address>/PCWS/ServerManagerWS.asmx

b Supply the Performance Center system user credentials (by default **IUSR_METRO**)

c Click **IsAvailable** and then click **Invoke**

d If the value **true** is displayed, IIS is configured correctly.
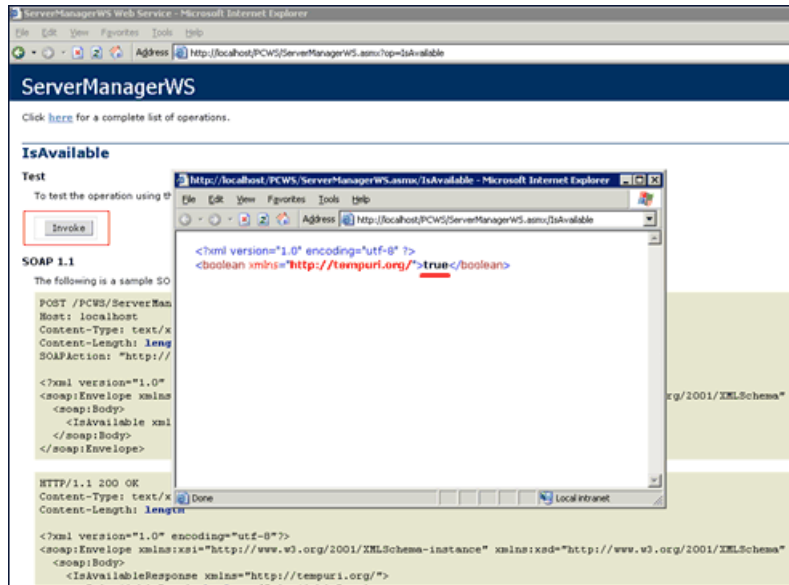
e if you could not reach this point, ensure that for the Default Web Site virtual directory, **TCP Port** is set to **80** and **IP Address** is set to **(All Unassigned)**.

2 If you are using IIS 6.x, check the following:

➤ Ensure that the virtual directory **Application Pools** > **PCWSAppPool** exists. If not, create it with the default options.

➤ In the properties of the **Default Web Site** > **PCWS** virtual directory, ensure that the **Application Pool** selected is **PCWSAppPool**.

➤ Ensure that the following Web Service Extensions are allowed: **Active Server Pages**, **ASP.NET v2.0.50727**, and **Server Side Includes**. If they are not, allow them and restart IIS.

3 If you are using IIS 5.x, ensure that in the properties of the **Default Web Site** > **PCWS** virtual directory, the **Application Protection** is set to **High**.

Failure to Reboot Host from Administration Site

Problem description: When a host is rebooted from the Hosts page of the Administration Site, the host has been rebooted, but the host state is not updated accordingly.

Troubleshooting

Reset IIS as follows:

➤ Select **Start** > **Run**.

➤ Type iisreset.

➤ Press **Enter**.

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Troubleshooting Monitors

This chapter provides information on troubleshooting problems related to HP Performance Center monitors.

This chapter includes:

Cannot Create a Monitor

Problem description: You are unable to create a specific monitor.

Troubleshooting

1 Make sure that the user trying to access the machine to monitor exists on this machine and has proper privileges. Usually **IUSR_METRO** will be the user attempting to monitor.

For example, if you add the **Windows Resources** monitor, the user **IUSR_METRO** must exist on the machine to be monitored and must have proper access rights.

2 Some monitors require certain clients to reside on the Utility Server and the Controller.

➤ For BroadVision, JDK must be installed.

➤ For WebLogic, JDK and the **weblogic.jar** file must be present.

➤ For Oracle, the Oracle Client must be installed.

➤ For DB2, the DB2 administrative client must be installed. (OS390 is not supported.)

3 Make sure the agent required for a particular monitor is running on the machine that you want to monitor.

4 For COM+, make sure that the COM+ probe is running on the machine that you want to monitor.

5 Some monitors require access to a particular URL, from both the HP Performance Center utility server and the Controller, for monitoring purposes.

➤ For Apache, this URL is: http://<server>:<port>/server-status:auto

➤ For Websphere 4.x & 5.x, this URL is: http://<server>:<port>/wasPerftool/ervlet/perfservlet

Port Required for J2EE Monitor Is Already Taken

Problem description: The J2EE monitor communicates with HP Performance Center, by default, using port 2004 and this port is already taken.

Troubleshooting

Select another port as follows:

1 On the application server machine, open the **<J2EE Monitor installation directory>\dat\monitor.properties** file and change the port number specified for the **webserver.monitor.port** property.

2 On the HP Performance Center host machine, open the **<HP Performance Center installation directory>\dat\monitors\xmlmonitorshared.ini** file and change the port number specified in **mon_j2ee** section under the **DefaultPort** key.

J2EE Monitor Initialization Errors

Problem description: You are receiving application server initialization errors, such as **UnsupportedClassVersionError**, **NoSuchMethodError**, or **NoClassDefFoundError**.

Troubleshooting

There might be a conflict between the JDK version specified using the J2EE Monitor Initializer, and the actual JDK version used in the application server launch.

Make sure that you selected the correct JDK that is currently being used by the application server. Note that if you switched the application server to work with a different JDK, you must run the J2EE Monitor Initializer again.

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Troubleshooting Web Problems

This chapter provides information on troubleshooting Web-related problems.

This chapter includes:

HTTP 500.x – Internal Server Error

Error message: The page cannot be displayed (HTTP 500.x Internal Server Error).

Troubleshooting

1 Reset IIS by choosing **Start** > **Programs** > **Administrative Tools** > **Services**, locating **IIS Admin Service**, and clicking **Restart Service**.

2 (**IIS 5 only**) If you cannot restart IIS, reboot the machine.

Make sure that both the Administrator Site and the User Site are set to **Application Protection** level **High (isolated)** in the Internet Services Manager. To set the protection level, see "Option 1 (IIS 5 only): Set the Application Protection level to High (isolated)" on page 105.

3 Reset the Tomcat service on the User Site server.

4 Make sure that the anti-virus software is not checking the HP Performance Center installation directory and sub-directories and thereby causing the error. In addition, make sure that the anti-virus program is not checking the file server directory (generally **LRFS**).

5 If you are still receiving an error, perform the following steps to see a more detailed error:

On the client machine:

a Open Internet Explorer.

b Select **Tools** > **Internet Options**.

c Click the **Advanced** tab.

d Under the **Browsing** section, deselect **Show Friendly HTTP Error Messages**.

On the server machine:

a select **Start** > **Programs** > **Administrative Tools** > **Internet Information Services Manager** to open the IIS manager.

b Expand **Web Sites**.

c Select **Default Web Site**.

d Select the virtual directory relevant to the server's purpose: **Admin** for Administration Site Server, **Loadtest** for User Site Server.

e Right click the selected directory and click **Properties**. The <directory> Properties dialog box opens.

f Click **Configuration**. The Application Configuration dialog box opens.

g Click the **Debugging** tab.

h Select **Send detailed ASP error messages to client**.

i Click **OK** to close the Application Configuration dialog box.

j Click **OK** to close the <directory> Properties dialog box.

k Restart IIS by right clicking the server's name in the tree. Select **All tasks > Restart IIS**.

At this point you should have a different, more detailed error message. Try to address the problem indicated in the message, or contact HP Customer Support with this message and all information related to the problem.

Cannot Find Server or DNS Error

Error message: The page cannot be displayed (Cannot find server or DNS Error).

> **i** The page cannot be displayed
>
> The page you are looking for is currently unavailable. The Web site might be experiencing technical difficulties, or you may need to adjust your browser settings.
>
> ---
>
> Please try the following:
>
> - Click the [ ] Refresh button, or try again later.
> - If you typed the page address in the Address bar, make sure that it is spelled correctly.
> - To check your connection settings, click the **Tools** menu, and then click **Internet Options**. On the **Connections** tab, click **Settings**. The settings should match those provided by your local area network (LAN) administrator or Internet service provider (ISP).
> - If your Network Administrator has enabled it, Microsoft Windows can examine your network and automatically discover network connection settings. If you would like Windows to try and discover them, click ⊚ Detect Network Settings
> - Some sites require 128-bit connection security. Click the **Help** menu and then click **About Internet Explorer** to determine what strength security you have installed.
> - If you are trying to reach a secure site, make sure your Security settings can support it. Click the **Tools** menu, and then click **Internet Options**. On the Advanced tab, scroll to the Security section and check settings for SSL 2.0, SSL 3.0, TLS 1.0, PCT 1.0.
> - Click the ⇐ Back button to try another link.
>
> Cannot find server or DNS Error
> Internet Explorer

Troubleshooting

1 Make sure that you entered the correct URL address.

2 Verify that you have access to the Web server.

➤ Use the ping command if you do not have a firewall blocking ICMP requests to your Web servers.

➤ From a command prompt, execute: **ping <Web server>**

➤ From a command prompt, execute: **ping <IP Address of Web server>**

3 On the Web server, verify that IIS is up and running:

   a Choose **Start** > **Programs** > **Administrative Tools** > **Services**.

   b Make sure that **IIS Admin Service** is **Started** and that **Startup type** is set to **Automatic**.

   c Make sure that **World Wide Web Publishing Service** is **Started** and that **Startup type** is set to **Automatic**.

4 Reset IIS by choosing **Start** > **Programs** > **Administrative Tools** > **Services**, locating **IIS Admin Service**, and clicking **Restart Service**.

Maintenance Service Causes IIS Resets

Problem description: IIS is reset every 10 minutes by the maintenance service. The maintenance service log shows that the HTTP call to **MemorySize.asp** had a timeout (60 sec.) and after three retries, the service reset IIS (as it was designed to do).

Troubleshooting

Make sure that the Utility Server is not configured to work through a proxy that might block the HTTP call. To disable the proxy setting, search the registry for the key **ProxyEnable** in the Internet Setting folders and set this key to zero.

HTTP/1.1 100 Continue Randomly Appears

Problem description: The message **HTTP/1.1 100 Continue** randomly appears in the middle of a response stream.

Troubleshooting

If you installed the User Site server or Administration Site server on a Windows Server 2003 SP1 machine, download the Microsoft patch from the the Microsoft Support site (http://support.microsoft.com/kb/898708). This patch addresses a known Microsoft issue, when running IIS 6.0 on a Windows Server 2003 machine.

Internet Explorer Closes When Selecting Script For Vuser Group

Problem description: When trying to select a script for a new Vuser group, Internet Explorer closes.

Troubleshooting

When you are designing Vuser groups, there must always be at least one available script in the Scripts list. If you try to select a script and the list is empty, it triggers a known defect in IE7 [version 0.5730.13CO], causing the browser to close.

Ensure that at least one Vuser script has been uploaded to the current project.

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Troubleshooting Web Services

This chapter provides information on troubleshooting Web service-related issues.

This chapter includes:

Troubleshooting Web Service Connectivity

This section provides troubleshooting for Web service connectivity issues.

Important: The following troubleshooting tips apply to the Web service requester agent machine.

After each troubleshooting attempt described below, you can test your Web service connectivity using the test described in "Testing Web Service Connectivity" on page 94.

To troubleshoot Web service connectivity:

1 Verify that the PCWS virtual directory exists in IIS.

2 If you are using IIS 6, verify that the **ASP.NET V2.0** extension was installed and allowed in IIS.

3 If you are using IIS 6, verify that the **PCWSAppPool** application pool is not locked. If it is locked, you can consult the event viewer for an explanation.

4 If you are using IIS 5, grant full access permission for **IWAM_<Machine_name>** in the **<Windows directory>\temp** directory.

5 Verify that the HP Performance Center system user exists on the machine.

6 Verify that the following policies are defined for the HP Performance Center system user:

➤ Batch logon rights

➤ Service logon rights

➤ Access this computer from the network

Testing Web Service Connectivity

After you troubleshoot Web service connectivity, you can test your Web service connectivity by trying to access the HP Performance Center **ConfigWS** Web services on the requester agent machine.

To test Web service connectivity:

1 On the requester agent machine, enter the following URL:

http://<provider agent machine>/PCWS/ConfigWS.asmx

2 In the **Enter Network Password** box, enter your HP Performance Center system user login details.

The ConfigWS Web service page opens.

Note: If this page does not open, there is still a problem with the Web service connectivity and you should continue to troubleshoot this issue.

3 Click the **IsAvailable** operation.

4 On the IsAvailable operation page, click **Invoke**.

If this action returns a value of **True**, the Web service connectivity is operational.

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Troubleshooting System Identity

This chapter provides information on troubleshooting system identity-related issues.

This chapter includes:

Administrator Account Requested

Problem description: An administrator account is requested even if the HP Performance Center system user is an administrator.

Troubleshooting

1 Verify that you can access the Web service using the browser.

2 Verify that the system user exists on the machine.

3 Check whether the **ASP.NET V2.0** extension was installed and allowed in IIS.

4 Verify that you have the **PCWS** virtual directory.

Error in Adding Permissions to Folder/Registry

Problem description: You receive an error when adding permissions to one of the file/folders or registry keys.

Troubleshooting

1 Try to reconfigure the use case again (by clicking the **Reconfigure** button in the System Identity utility).

2 Reboot the machine and click the **Reconfigure** button in the System Identity utility.

3 Clean out all the unrecognized users from the folder/registry.

Identity References Cannot Be Translated

Error message: Some or all identity references could not be translated.

Problem description: You receive the above error in trying to configure the system.

Troubleshooting

1 Verify that the configuration user is not the same user with which you are logged in to the system. If you are logged in to the system with the configuration user, log off and then log in again with a different user.

2 Reset IIS on the machine on which you received the error.

Server/Host Configuration Problems

Error message: System.Web.Services.Protocols.SoapException: Server was unable to process request. Unable to generate a temporary class.

Problem description: This error can occur when trying to configure a server or host using the System Identity utililty.

Troubleshooting

Grant full access permission for the **IWAM_<Machine_name>** user in the **<Windows directory>\temp** directory.

Admin Tasks Take a Long Time/Time-Out/ ThreadAbortException

Problem description: When the system user is a non-administration user (lock down mode), changing the system user or adding a host takes a long time, or a time-out event or ThreadAbort exception occurs.

Troubleshooting

Try to configure the system user again (click **Reconfigure**).

If the problem persists:
In "lock-down mode," permissions are granted to specific directories, files, and registry keys that HP Performance Center requires in order to run. Check the **Security** tab of these resources for deleted users/groups (SIDs). These deleted SIDs increase the time it takes to perform tasks such as granting permissions to a resource. To reduce the performance time for these tasks, clean out all the deleted SIDs.

Conflicting Credentials when Changing Users

Error message: The credentials supplied conflict with an existing set of credentials.

Problem description: This error can occur when using the System Identity utility to change the system user.

Troubleshooting

Verify that the configuration user is not the same user with which you are logged in to the system. If you are logged on to the system with the configuration user, log off and then log on again with a different user.

Note: This problem may be caused due to a Microsoft limitation. For more information, see the Microsoft TechNet Web site (http://www.microsoft.com/technet/prodtechnol/windows2000serv/reskit/w2000Msgs/3860.mspx?mfr=true).

Oracle Database – Cannot Change System User to Non-Admin User

Problem description: When working with an Oracle database, you cannot change the system user to a non-administrative system user.

Troubleshooting

Before changing the system user to a non-administrative user, you need to disable the Oracle Client's **SQLNET Authentication Services** option on each of the HP Performance Center servers and hosts.

To disable the SQLNET Authentication Services option:

1 Open the **<Oracle installation directory>\network\admin\sqlnet.ora** file and locate the following line:

```
SQLNET.AUTHENTICATION_SERVICES = (NTS)
```

2 At the beginning of this line, insert a **#** symbol.

3 Save the file.

Remote Management Agent Service Disabled After Changing System User

Problem description: After you change the system user to a non-administrative system user, the Remote Management Agent service is disabled.

Troubleshooting

You need to remove the service and restart it with the new Performance Center system user's credentials.

1 Restart the machine.

2 Run the Remote Management Agent service using the following command:

```
%installation folder%\al_agent\bin\alagentservice.exe -remove

%installation folder%\al_agent\bin\alagentservice.exe -install username password
```

where **username** and **password** are those of the Performance Center system user.

Load Generator Standalone Limitations

This section specifies a number of scenarios of changing the system user, and the load generator standalone limitations associated with each scenario.

Scenario 1

➤ You changed the system user for all servers and hosts in the Performance Center environment.

➤ You did not add the changed user manually to Load Generator machine.

➤ The default Performance Center system user, **IUSR_METRO**, exists on the Load Generator machine.

Feature	Availibilty
Sitescope monitoring	Works with IUSR_METRO credentials
Default load test monitoring	Does not work
Remote management (reboot and install patch)	Works with IUSR_METRO credentials (enter username and password upon request)

Scenario 2

➤ You changed the system user for all servers and hosts in the Performance Center environment.

➤ You added the changed user manually to the Load Generator machine.

➤ The default Performance Center system user, **IUSR_METRO**, exists on the Load Generator machine.

Feature	Availibilty
Sitescope monitoring	Works with IUSR_METRO credentials
Default load test monitoring	Works with changed user credentials
Remote management (reboot and install patch)	Works with IUSR_METRO credentials (enter username and password upon request)

Scenario 3

➤ You changed the system user for all servers and hosts in the Performance Center environment.

➤ You added the changed user manually to Load Generator machine.

➤ You removed the default Performance Center system user, **IUSR_METRO**, from the Load Generator machine.

Feature	Availibilty
Sitescope monitoring	Does not work
Default load test monitoring	Works with changed user credentials
Remote management (reboot and install patch)	Does not work **Workaround**: Remove service and reinstall service with changed user credentials. For details, see "Remote Management Agent Service Disabled After Changing System User" on page 101.

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Troubleshooting Databases

This chapter provides information on troubleshooting problems that occur with database in the Performance Center system.

This chapter includes:

Login to Oracle Database Server Hangs

Error message: Trying to log on to database server.

Troubleshooting

➤ **Option 1 (IIS 5 only): Set the Application Protection level to High (isolated)**

Make sure that the **Application Protection** level is set to **High (isolated)** in the Internet Services Manager in both the Administration Site and User Site.

To set the application protection level:

1 Select **Start > Programs > Administrative Tools > Internet Services Manager**. The Internet Information Services dialog box opens.
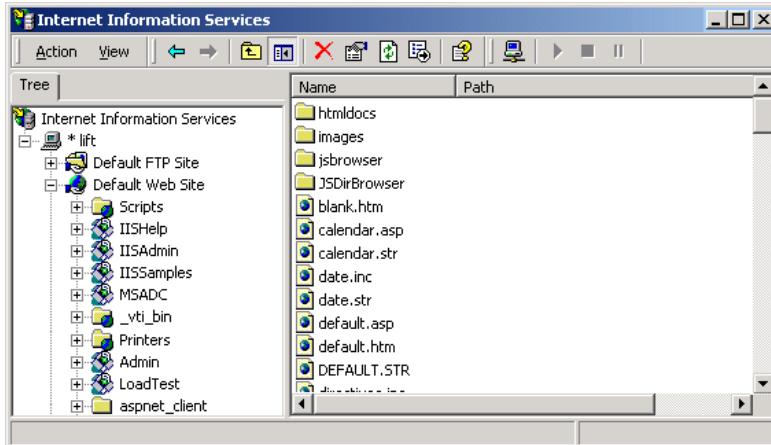
2 In the Tree directory, expand **Default Web Site** and right-click **Admin**. Click **Properties** to open the Admin Properties dialog box.

3 Click the **Virtual Directory** tab.

4 In the **Application Protection** box, select **High (Isolated)**.
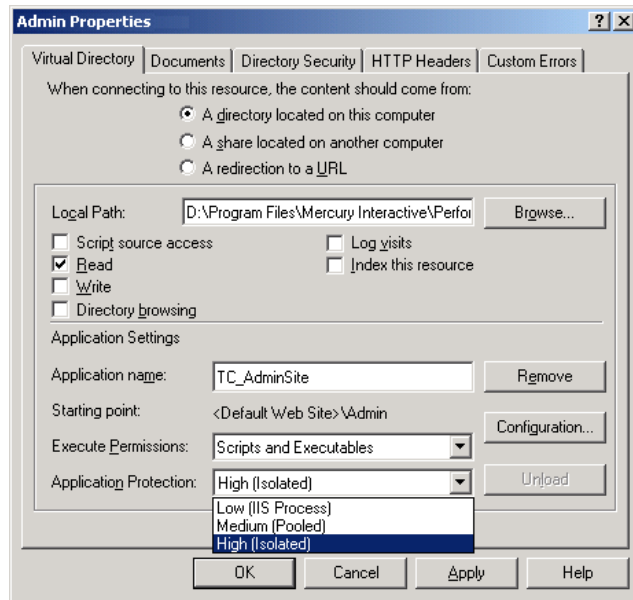
5 Repeat steps 2 through 4 for the User Site. In step 2, right-click **LoadTest** instead of **Admin**.

Option 2: Set the Correct Permissions Level for the IWAM_<SERVER> user

Problems with loggin on might be caused by a permissions level problem with the **IWAM_<SERVER>** user. By default, this account is set to the **Guest** permissions level. However, the **IWAM_<SERVER>** user must have read/ execute privileges on the Oracle home directory and all of its sub-directories.

To set the correct permissions level:

1 In Windows Explorer, right-click the Oracle home directory and select **Properties**.

2 Click the **Security** tab.

3 Click **Add** and add the **IWAM_<SERVER>** user.

4 Check **Read & Execute**.

5 Click **OK**.

Login to Database Server Fails

Error message: Operation terminated. Error description: Login to the database server failed. Check if user name and password are correct.

Troubleshooting

1 Verify that the database server host name, type, user name, and password are correct. Consult your database administrator if you are unsure.

2 Check whether you can connect to the database server from the Administration Site server using the command line SQL client:

➤ **For MS SQL Server**:

```
% osql –U <username> -P <password> -S <serverID>
```

For example:

```
% osql –U sa –P manager –S DBSERVER\LRTCDB
```

If your Microsoft SQL Server is configured with integrated security, make sure that the Microsoft SQL Server has an operating system account for **IUSR_METRO** (password: **MIOrchid#1**), and is allowed access to the database. **IUSR_METRO** is the default account under which the HP Performance Center Web server runs.

➤ **For Oracle Server**:

```
% sqlplus <username>/<password>@<connect_string>
```

For example:

```
% sqlplus system/manager@LRTCORA
```

If the above command fails, check your TNS entry in the **<Oracle installation directory>\network\admin\tnsnames.ora** file.

An example of a TNS entry is shown below:

```
LRTCORA =
(DESCRIPTION =
    (ADDRESS_LIST =
    (ADDRESS = (PROTOCOL = TCP)(HOST = TCDBSERVER)(PORT 1521))
    )
(CONNECT_DATA =
        (SERVICE_NAME =LRTCORA)
 )
 )
```

3 Test the ADODB connectivity to the database by downloading the
TcIN_AdoDBTester.exe utility from the HP Software Support site. After you
log in to the support site, click **Knowledge Base**, select **LoadRunner
TestCenter**, and search for **ID39475**.

   a Update the **username**, **password**, and **server** fields in the connection
   string:

   ➤ For MS SQL Server, use the Provider=SQLOLEDB.1;… connection
   string.

   ➤ For Oracle Server, use the Provider=MSAORA.1;… connection string.

   b Set a valid SQL statement (based on current database tables).

   c Execute the statement and check the response. If an error occurs, address
   the error message appropriately.

4 If you are working with Oracle Server, check that Oracle Client is installed
properly:

   a Check whether the **ORACLE_HOME** registry entry under
   [**HKEY_LOCAL_MACHINE\Software\Oracle**] is correct. It should be
   pointing to the Oracle Client installation.

   b Remove **SQLPLUS.EXE** from the <**HP Performance Center installation
   directory**>**DB** directory.

5 Verify that the MDAC version is 2.8 SP1.

6 Verify that the database or user schema was actually created by checking whether the **db_results.txt** file exists in the **%temp%** directory of the Administration Site server. Note that this file is available only after system configuration. In addition, you can check whether the **MI_LRDB** database or user schema exists by logging in to the database/user schema.

Note: If you are able to log on to the User Site after system configuration, the database or user schema was most likely created properly.

Database/User Schema Creation Fails

Problem description: You cannot create an HP Performance Center database or user schema.

Troubleshooting

Try to create the database or user schema by running the SQL files located in the **DbSetup** directory of the Administration Site server.

➤ For MS SQL Server, run **TestCenter.sql** to create the database and **InitDefinitions.sql** to initialize the tables.

➤ For Oracle Server, run **TC_oracle.sql** to create the user schema and **InitDataOracle.sql** to initialize the tables.

Warning Message Received During MS-QL Database Migration

Problem description: The following warning message appears in the log file **<DB_Migration_directory>\PC_V9_1.log** when performing an MS-QL database migration:

> Warning: The table 'Companies' has been created but its maximum row size (8227) exceeds the maximum number of bytes per row (8060). INSERT or UPDATE of a row in this table will fail if the resulting row length exceeds 8060 bytes.

Troubleshooting

This message is related to a size limit that is related to the Project Options. Since this size limit will not be utilized, you can disregard this message.

Conflict Warnings Received During Database Migration

Problem description: The following messages might appear in the log file **<DB_Migration_directory>\PC_V9_0.log** when performing a database migration:

> DELETE statement conflicted with COLUMN REFERENCE constraint 'FK_ResultTransactions_RunPublishedResults'.
> The conflict occurred in database 'MI_LRDB', table 'DashboardResultTransactions', column 'RunResultId'.

> DELETE statement conflicted with COLUMN REFERENCE constraint 'FK_GoalTransactions_TestGoals'.
> The conflict occurred in database 'MI_LRDB', table 'DashboardGoalTransactions', column 'TestGoalId'.

Troubleshooting

These messages appear when performing database migration of Performance Center 8.14 and earlier. These warnings relate to features that are no longer relevant in the current version of Performance Center. You can disregard these messages.

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Troubleshooting Accessing the Performance Center Sites

This chapter provides information on troubleshooting Web-related problems.

This chapter includes:

➤ Login Fails on page 113

➤ User Site Does Not Exist After Initial Configuration on page 114

➤ Uploading a Script from VuGen Fails on page 115

➤ Unable to Log In to the Administration/User Site on page 116

➤ Administration Site Page Cannot Be Displayed on page 116

➤ Cannot Connect to Administration or User Site on page 117

Login Fails

Problem description: You cannot log in to HP Performance Center with any user or administrator account.

Troubleshooting

1 Make sure that you type the correct user name and password. The password is case-sensitive. The default administrator account is **Admin**, **Admin**.

  2 There may be a problem with the encryption and decryption of the password.

   ➤ Open **Documents And Settings\All Users\Application Data\Microsoft\Crypto\RSA\MachineKeys** and delete the entry that begins with **f9416f003254e610da1f9bad8e4c383_**.

   ➤ Restart IIS. Choose **Start** > **Programs** > **Administrative Tools** > **Services**. Select **IIS Admin Service** and click **Restart Service**.

  3 Make sure that both the Administration Site and the User Site are configured to run with the same account credentials as the HP Performance Center Web services virtual directories. For more information about troubleshooting Web services, refer to the relevant section in the *HP Performance Center Administrator's Guide*.

  4 Check that you are able to connect to the database server from the Utility Server and the Web Server. Download the **TcIN_AdoDBTester.exe** utility from the Support Web site (http://www.hp.com/go/hpsoftwaresupport). After you log in to the support site, click **Self-solve knowledge search**, select **Performance Center**, and search for **ID39475**.

  5 Make sure that the maximum number of connections to the database server has not been exceeded. Run **Perfmon.exe** or the database server's management tool to verify the number of connections. You should contact your database administrator if you need further assistance.

User Site Does Not Exist After Initial Configuration

Error message: 'Page Not Found' (displayed in browser).

Problem description: After the initial configuration of HP Performance Center (using http://<servername>/admin/initialfs.htm), the HP Performance Center User Site is created through the Server Configuration page in the Administration Site (**System Configuration** > **Server Configuration**). In this case, after the User Site (http://<servername>/LoadTest) has been created, it does not exist on the HP Performance Center server.

Troubleshooting

If the HP Performance Center Web server was corrupted or reinstalled, launch Internet Service Manager and check if the **LoadTest** virtual directory is defined.

1 If **LoadTest** is defined, but points to the wrong directory, delete the **LoadTest** virtual directory and continue with the following step.

If **LoadTest** is not defined, log in to the HP Performance Center Administration Site and check if an entry exists for **User Site Servers** on the Server Configuration page (under **System Configuration** > **Server Configuration**). If the name of the server is not displayed under **User Site Servers**, add it and save your changes. Try to log in to the User Site (http://<servername>/loadtest).

2 From the User Site machine, connect to the database or user schema using Microsoft SQL, Oracle Enterprise Manager, or any SQL client and check the **Web Server** entry in the **GlobalData** table of the **MI_LRDB tablespace/database**. If the **Web Server** entry contains the name of the server on which you want to install the HP Performance Center User Site, remove the server name.

3 Log in to the HP Performance Center Administration Site and define **User Site Servers** on the Server Configuration page (under **System Configuration** > **Server Configuration**).

Uploading a Script from VuGen Fails

Problem description: Uploading a script from VuGen fails. An error message is provided.

Troubleshooting

1 Make sure the machine is not configured to use a proxy server. If it is, disable the proxy server by searching the registry for the **ProxyEnable** key in the **Internet Settings** folders and setting this key to zero.

2 Check whether there are upload timeouts due to a slow network connection. In the **<HP Performance Center installation>\dat** directory, there is a configuration file called **OrchidCommUtils.dat** that holds the integration communication settings. To change the default timeout (60 sec.), you must enable the **http_timeout_secs** key and change its value.

3 If neither of the above troubleshooting options helps, you can create a log file that provides more information and send it to Customer Support (http://www.hp.com/go/hpsoftwaresupport). To create the log file, enable the **log_file** key.

Unable to Log In to the Administration/User Site

Problem description: You are unable to log in to the Administration Site or the User Site. The system appears to "spin."

Troubleshooting

1 (**IIS 5 only**) Make sure that both the Administration Site and the User Site are set to **Application Protection** level **High (isolated)** in the Internet Services Manager. For more information, see "Option 1 (IIS 5 only): Set the Application Protection level to High (isolated)" on page 105.

2 Make sure that the permissions level for the **IWAM_<SERVER>** user is set correctly. For more information, see "Option 2: Set the Correct Permissions Level for the IWAM_<SERVER> user" on page 107.

Administration Site Page Cannot Be Displayed

Problem description: You receive an error message indicating that the Administration Site page cannot be displayed, or the Administration Site is not displayed correctly.

Troubleshooting

➤ If the Administration Site is not displaying correctly, recreate the Administration Site by running **<HP Performance Center installation directory>\bin\AdminInstaller.exe1**

➤ If you receive an error that the page cannot be displayed:

a Close the current browser. Relaunch the browser and try to open the Administration Site again.

b Choose **Tools** > **Internet Options** from the menu. In the **General** tab, click **Settings**. In the **Check for newer versions of stored pages** section, make sure that the **Every visit to the page** option is selected.

c Clear the browser cache and cookies.

d If the problem is still not resolved, try to open the Administration Site from a different machine.

e Reset IIS by choosing **Start** > **Programs** > **Administrative Tools** > **Services**, locating **IIS Admin Service**, and clicking **Restart Service**.

Cannot Connect to Administration or User Site

Problem description: When trying to connect to the Administration or User Site Web servers, you receive a **Service unavailable** or **You are not authorized to view this page** error message.

Troubleshooting

1 Verify that the Administration Site virtual directory user exists.

2 Verify that the user has all the required policies.

3 Verify that the application pool is not locked. If it is, consult the event viewer for an explanation.

4 Verify that the security policy configuration of the customer domain is compatible with the the configuration of your HP Performance Center environment.

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General Troubleshooting

This chapter provides information on general troubleshooting problems.

This chapter includes:

➤ Problem Related to Data Execution Prevention (DEP) on page 119

Problem Related to Data Execution Prevention (DEP)

Problem description: When rebooting a Windows XP SP2 or Windows 2003 machine, you might receive an error message related to Data Execution Prevention (DEP).

Troubleshooting

Modify the Windows DEP settings as follows:

1 Open **Start** > **Control Panel** > **System**.

2 In the Advanced tab, click **Performance settings**.

3 In the Performance Options Data Execution Prevention tab, select the first option, **DEP for essential services only**.

If you cannot change this option, click **Add**. Browse to the client program, for example IEXPLORE.EXE.

If neither of these options are possible, try to disable DEP completely.

   a In the Control Panel, click the **Advanced** tab under **System** section.

   b Under **Startup and Recovery**, click **Edit**.

   c Replace **NoExecute=OptOut** with **NoExecute=AlwaysOff**.

4 Click **OK** to save the settings.

5 Reboot the machine.

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Performance Center Processes and Services

Each server runs various components or services based on its particular function within the Performance Center system. This chapter provides information about these processes and services.

This chapter includes:

Processes and Services Diagram

The following diagram contains a list of processes on each Performance Center component.

User Site Server

IIS
ASP
ASP.NET
COM
Tomcat

SessionActivator
ManagmentUtil
Alagentservic
PCIMKeeper
ActiveSessionProxy
launch_runlogicview

Administration Site Server

IIS
ASP
ASP.NET
COM

ALWrapperServer
ManagmentUtil
OrchidStautsMonitor
PCIMKeeper

File Server

IIS
ASP.NET
COM

SmartDiskCleaner
ManagmentUtil
Alagentservic
PCIMKeeper

Utility Server

IIS
ASP.NET
COM

OrchidScheduler
ManagmentUtil
Alagentservic
TaskManager
MEApplication
PCIMKeeper
MESyncApplication

Host

IIS
ASP.NET
COM

OrchidActiveSession
ManagmentUtil
Alagentservice
DCA
wlrun
Online
MESyncApplication
Collator
AnalysisOperator
PCIMKeeper
magentservice

Database

Database

Performance Center Processes

The following table provides basic information about Performance Center processes and their purpose within the Performance Center system.

Name	Runs on	Purpose
ActiveSessionProxy	User Site	Module used by the tomcat to access the OrchidActiveSession during run
ALWrapperServer	Administration Site	Used by Performance Center as a container and manager of all tasks related to: ➤ Patch installation ➤ Reboot remote machines ➤ Retrieve installed HP products from remote machines
AnalysisOperator	Host (Controller)	Invokes the AnalysisManager (that retrieves the data from the Controller and builds the graphs), zips the data and saves it in the File Server
Collator(1)	Host (Controller)	Invokes the component that collates the results from the load generator machines
launch_runlogicview	User Site	Used by the run-time setings (RTS) run logic feature
ManagementUtil	All machines	Responsible for the entire system configuration
MEApplication	Utility Server	Used for offline monitors configuration
MESyncApplication	Utility Server and Host	Used for offline monitors configuration
online	Host (Controller)	responsible for run-time information collection

Name	Runs on	Purpose
OrchidActiveSession	Host (Controller)	Retrieves all the required run details from the database, launches the Controller and provides it with run details, and passes the run data to the Web Server
OrchidInstallationUtil. PdhChecker	All machines	Running on all machines during installation, it checks the PDH version on the machine
PCImkeeper	All machines	Saves references to COM objects that are running on each machine
SessionObject Activator	User Site	Writes all run details to the database, and invokes the OrchidActiveSession
wlrun	Host (Controller)	The Controller

Performance Center Services

The following table provides basic information about Performance Center services and their purpose within the Performance Center system.

Name	Process Name	Runs on	Purpose
Apache Tomcat	tomcat5	User Site	Serves as a Web server for supporting JSP pages. Currently handles the load test design options during run time. Runs under system account.
DataCollection Agent (DCA)	datacollection agent	Host	Collects system resources utilization to avoid over utilization during load tests execution. Also used for updating the routing table in the IP target feature. Runs under system account.
Performance Center Agent Service	magentservice	Host	Enables connection from Controller machines to load generators in order to execute Vusers on the load generators
Performance Center Disk Cleaner	SmartDiskClea ner	File Server	Cleans the File Server of unnecessary files. Runs under system account.
Performance Center Scheduler	OrchidSchedul er	Utility Server	Initiates auto run load test. Runs under system account.
Performance Center Status Monitor	OrchidStatusM onitor	Admin Site	Retrieves machine status from SiteScope and updates the database. Runs under system account.

Name	Process Name	Runs on	Purpose
Performance Center Task Manager Service	TaskManager	Utility Server	Provides a monitoring service that checks memory usage and IIS server status and validates the status of hosts and runs. Whenever one of these problems are detected, this service activates a task to resolve it.
RemoteManage-ment Agent	alagentservice	All machines except Admin Site	Responsible for rebooting and installing patches on remote machines, remotely configuring over firewall settings, and providing information about the installed Performance Center components (in the Hosts > Properties tab). Runs under system account.

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Performance Center Communication Flow

When running a load test, the Performance Center system components share information via a distinct system of communication. Understanding which components communicate with one another and the method of communication is essential for configuring your system.

This chapter includes detailed information about the communication paths and protocols of the Performance Center system.
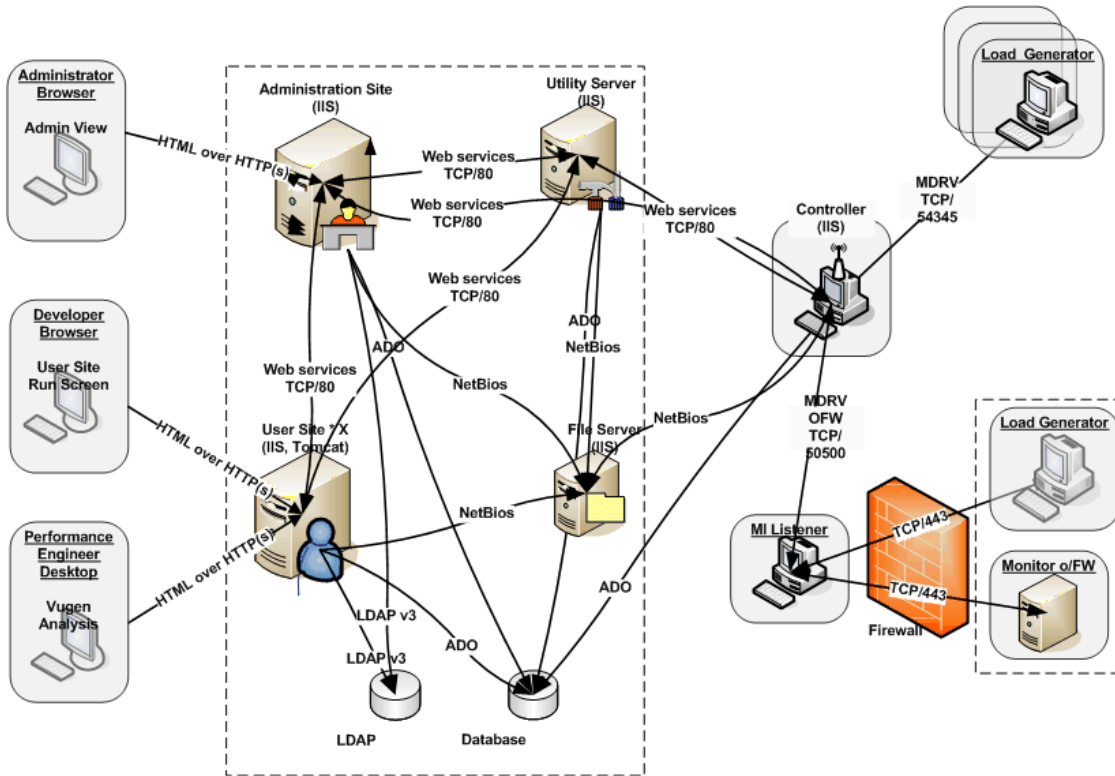
This chapter includes:

➤ Advanced Communication Diagrams on page 128
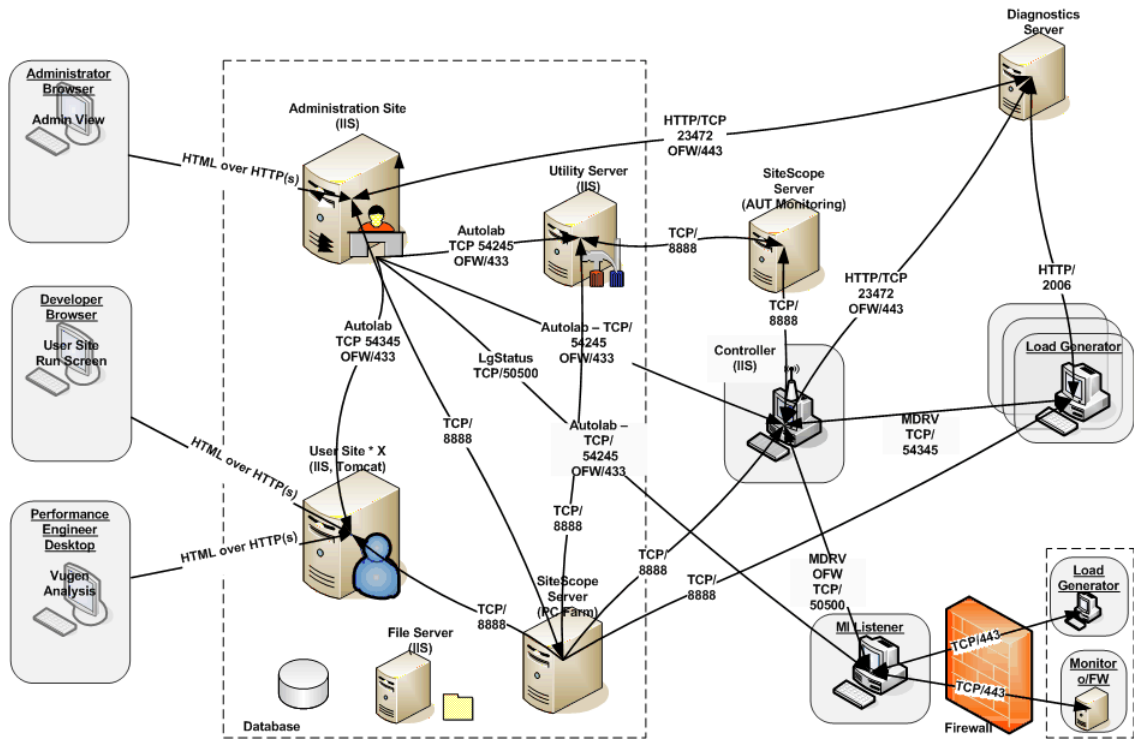➤ Ports and Protocols on page 130

Advanced Communication Diagrams

This section includes detailed communication diagrams that illustrate the communication flow of the Performance Center system components.

Performance Center Components: Basic Communication Flow

Performance Center Components: Advanced Communication Flow

Ports and Protocols

The following table describes the communication protocols and ports used in the Performance Center system.

Protocol	Ports	Comments
NetBIOS	UDP/137 UDP/138 TCP/139	(NetBIOS Name Service) (NetBIOS datagram service) (NetBIOS session service)
HTTPS	TCP/443	OFW connection between MIListner and LG/Autolab
HTTP	TCP/80	Web Services
ADO - SQL	TCP/1433 or user-defined TCP/1521 or user-defined	The database server opens a connection back to the client via a dynamic port (1024 and above)
TCP	50500	OFW connection between PC/Controller and MIListner
TCP	50500	LGstatus between Admin and MIListner
TCP	54245	Autolab agent. Connection between Admin Server and PC components
TCP	54345	LoadGenerator - Controller connection
HTTP/HTTPS	TCP/8888	SiteScope
HTTP	TCP/23472 (443)	Host, Admin Site - Diagnostic Server
	2006	LoadGenerator - Diagnostic Server