SupportPac – MP08 Version 1.0
Performance Monitor for WebSphere MQ
Readme

General Information:

Performance Monitor for WebSphere MQ SupportPac V1.0 contains the following two components:

1) Performance Monitor Agent for WebSphere MQ for Windows

This component collects monitoring data from a queue manager, and provides the monitoring data for Performance Monitor Plug-in for WebSphere MQ. This component must be installed on the computer where the queue manager that you want to monitor runs.

2) Performance Monitor Plug-in for WebSphere MQ for Windows and Linux

This component retrieves monitoring data from the Performance Monitor Agent for WebSphere MQ, and displays the monitoring data in WebSphere MQ Explorer for short-term trend analysis. This component must be installed on the computer where WebSphere MQ Explorer is installed.

The SupportPac provides short-term trend analysis in WebSphere MQ Explorer for:

    1) Recent Application Accounting   (for queue managers)
    2) Recent MQI Statistics   (for queue managers)
    3) Recent Queue Statistics   (for queues)
    4) Recent Queue Accounting   (for queues)
    5) Recent MQI Queue Statistics   (for queues)
    6) Recent Channel Performance   (for channels)
    7) Recent MQI Channel Statistics   (for channels)

1. Prerequisites

WebSphere MQ v7.0 or later, with MQ Explorer installed.

MQ Explorer is included with an MQ server installation and is also available for download as SupportPac MS0T.

You must install this separately (if it is not already installed) before installing Performance Monitor for WebSphere MQ SupportPac.

See the sections below for more details.

2. Installation

2.1. Installing Performance Monitor Agent for WebSphere MQ on Windows

   1. Create a directory on the computer where the queue manager that you want to monitor is installed.
   2. Download MP08.zip as a binary file to the directory that you created in the previous step.
   3. Uncompress the zip file, using the option to re-create stored directories.
   4. Double-click the Setup.exe file in the directory and follow the onscreen instructions to install Performance Monitor Agent for WebSphere MQ.
   5. When you are prompted whether to run the following commands on queue managers, select Yes.
                 alter qmgr statq(on) statmqi(on) statchl(high) statint(300)
                 alter qmgr acctq(on) acctmqi(on) acctint(300)
      These commands enable the collection of statistics and application accounting for queue managers in an interval of 300 seconds.
      If you select No, you must run the following command after installation:
         [Install Dir]/bin/mqconfig.bat [interval]

         Where [Install Dir] is the installation directory of Performance Monitor Agent for WebSphere MQ.
         Where [interval] is the interval (in seconds) in which statistics and application accounting for queue managers are collected.

         Note: If you create a new queue manager after the agent installation, you must run the command above to enable the collection of statistics and application accounting for it. You can also change the settings for statistics and accounting monitoring in the properties window of queue managers in WebSphere MQ Explorer.

2.2. Installing Performance Monitor Plug-in for WebSphere MQ on Windows or Linux

   2.2.1. Change the startup mode of WebSphere MQ Explorer

   1. Start WebSphere MQ Explorer.
   2. Click Window > Preferences.
   3. On the WebSphere MQ Explorer page of the Preferences dialog window, select "in an Eclipse Workbench" in the Startup section.
   4. Restart WebSphere MQ Explorer.

   2.2.2. Install Performance Monitor Plug-in for WebSphere MQ from the Update Site

   1. Create a directory on the computer where the WebSphere MQ Explorer is installed.

2. Download MP08.zip as a binary file to the directory that you created in the previous step.

3. Uncompress the zip file, using the option to re-create stored directories.

4. In WebSphere MQ Explorer, click Help > Software Updates > Find and Install.

5. Click Search for New Features to Install and then click Next.

6. Click New Local Site.

7. Navigate to the working directory that you unzipped the package into, select Update Site, and click OK.

8. Ensure that the Local Update Site that you just created is selected, and click Next.

9. Click the Configuration and Display Feature.

10. Read and accept the license terms, and click OK to confirm the installation.

11. Restart WebSphere MQ Explorer.

2.2.3. Reset the startup mode of WebSphere MQ Explorer

1. Start WebSphere MQ Explorer

2. Click Window > Preferences.

3. On the WebSphere MQ Explorer page of the Preferences dialog window, select "as a standalone application" in the Startup section.

4. Restart WebSphere MQ Explorer.

2.3. Create, start, and stop the monitoring agent instance

2.3.1 Create a monitoring agent instance

1. Open the Manage Tivoli Monitoring Services window by clicking Start > Programs > IBM WebSphere MQ > Manage Tivoli Monitoring Services.
    You can also open the window by running the following command:
        [Install Dir]\INSTALLITM\startKinconfg.bat
    where [Install Dir] is the installation directory of Performance Monitor Agent for WebSphere MQ.

2. Right-click the Primary WebSphere MQ Monitoring Agent, and from the context menu click Create Multi-instance.

3. From the Create Multi-instance dialog window, select the queue manager that you want to monitor and click Add.

4. After you finish adding queue managers in the Create Multi-instance dialog window, click OK. Agent instances for monitoring the selected queue managers are created.

2.3.2 Start a monitoring agent instance

To start an agent instance, right-click the agent instance, and then click Start from the context menu.

2.3.3 Stop a monitoring agent instance

To stop an agent instance, right-click the agent instance, and then click Stop from

the context menu.

2.4. Start to use trend analysis

1. In WebSphere MQ Explorer, configure the agent connection by right-clicking a queue manager that is running and click Properties.
2. In the Properties dialog, click Tivoli Agent properties tab.
   There is a default agent connection URL. Normally you do not need to modify it.
   Enter the user ID and password of the computer where the queue manager is located.
3. Use the Trend Analysis by doing one of the following:
   For a selected queue manager
      a) Recent Application Accounting: right-click a queue manager and click Trend Analysis -> Recent Application Accounting
      b) Recent MQI Statistics: right-click a queue manager and click Trend Analysis -> Recent MQI Statistics

   For a selected queue
      c) Recent Queue Statistics: right-click a queue and click Trend Analysis -> Recent Queue Statistics
      d) Recent Queue Accounting: right-click a queue and click Trend Analysis -> Recent Queue Accounting
      e) Recent MQI Queue Statistics: right-click a queue and click Trend Analysis -> Recent MQI Queue Statistics

   For a selected channel
      f) Recent Channel Performance: right-click a channel and click Trend Analysis -> Recent Channel Performance
      g) Recent MQI Channel Statistics: right-click a Channel and click Trend Analysis -> Recent MQI Channel Statistics

   The Performance Monitor Plug-in for WebSphere MQ provides a chart view and a tablet view for monitoring the service level performance of a queue manager.

   To filter the monitoring data that are displayed in trend analysis chart view, click "Change Filter" from the tool bar of the Trend Analysis chart view, select the monitoring attributes that you want to display, then click OK.

4. Save the trend analysis data
   Click Save as from the tool bar of the Accounting and Statistics tablet view and save the trend analysis data as a csv file.

3. Uninstallation

3.1. Uninstalling Performance Monitor Agent for WebSphere MQ from Windows

1. Ensure that you logged on as a system administrator.
2. Ensure that all agents are stopped.
3. Click Control Panel.
4. Double-click Add/Remove Programs in the Control Panel window.
5. Select the item that is associated with Performance Monitor Agent for WebSphere MQ.
4. Click Remove to start uninstallation.

3.2 Uninstalling Performance Monitor Plug-in for WebSphere MQ from Windows or Linux

3.2.1. Ensure that you logged on as a system administrator.

3.2.2. Ensure that all opened trend analysis views in WebSphere MQ Explorer are closed

3.2.3. Change the startup mode of WebSphere MQ Explorer to running in an Eclipse Workbench
    Refer to 2.2.1 for information about how to change the startup mode on Windows or Linux.

3.2.4. Remove Performance Monitor Plug-in for WebSphere MQ

1. In WebSphere MQ Explorer, click Help > Software Updates > Manage Configuration.
2. Select Performance Monitor Plug-in for WebSphere MQ in the left tree view.
3. Right-click it and click Uninstall.
4. Click Yes in the confirmation dialog.

Note that you might need to restart WebSphere MQ Explorer after uninstallation for the changes to take effect.

4. Restrictions

Note that the Performance Monitor Agent for WebSphere MQ for Windows has the following restrictions:

1. It only provides a subset of the functionalities of IBM Tivoli OMEGAMON for Messaging. If you want to monitor WebSphere MQ in an enterprise environment or if you want to use other monitoring functionalities, consider installing IBM Tivoli OMEGAMON for Messaging. To learn more about IBM Tivoli OMEGAMON for Messaging, visit
http://publib.boulder.ibm.com/infocenter/tivihelp/v24r1/index.jsp?topic=/

com.ibm.itcama.doc_6.2.3/welcome.htm

2. The Performance Monitor Agent for WebSphere MQ for Windows accesses the accounting and statistics data that is produced by the queue manager in browse mode, which means it does not remove messages from the SYSTEM.ADMIN.ACCOUNTING.QUEUE and SYSTEM.ADMIN.STATISTICS.QUEUE systems queues. To prevent these two queues from becoming full, you must manually remove messages from these queues, or increase the queue depth for them.