IBM Tivoli® Monitoring V6.2.3, Historical data collection, data flow.

Assumptions

Before you proceed, the module designer assumes that you have the following skills and knowledge:
- Accessing the Tivoli Enterprise Portal console
- Able to work with the Tivoli Enterprise Portal

The module developer assumes that you can access the Tivoli Enterprise Portal and you are able to work with this console.

Objectives

When you complete this module, you can perform these tasks:

- Configure historical data settings in the Tivoli Enterprise Portal
- Select and see data in the historical data workspaces

When you complete this module, you can configure historical data collection in the Tivoli Enterprise Portal console. You can then also double-check the historical data in the specific workspaces.

Agenda

- Historical data collection
- Historical data collection, data flow
- How to turn on historical data collection
- Look at historical data

This module provides an overview of what historical data collection is and the data flow.

You see how to turn on a generic data collection.

Finally, you see how to view the collected historical data in the Tivoli Enterprise Portal.

Historical data collection

- Real time data versus historical data
- Historical data:
  - Short-term data
    - Collection at Tivoli Enterprise Monitoring Agent (suggested)
    - Collection at Tivoli Enterprise Monitoring Server
  - Long-term data
- User needs to be authorized to configure historical data from the Tivoli Enterprise Portal

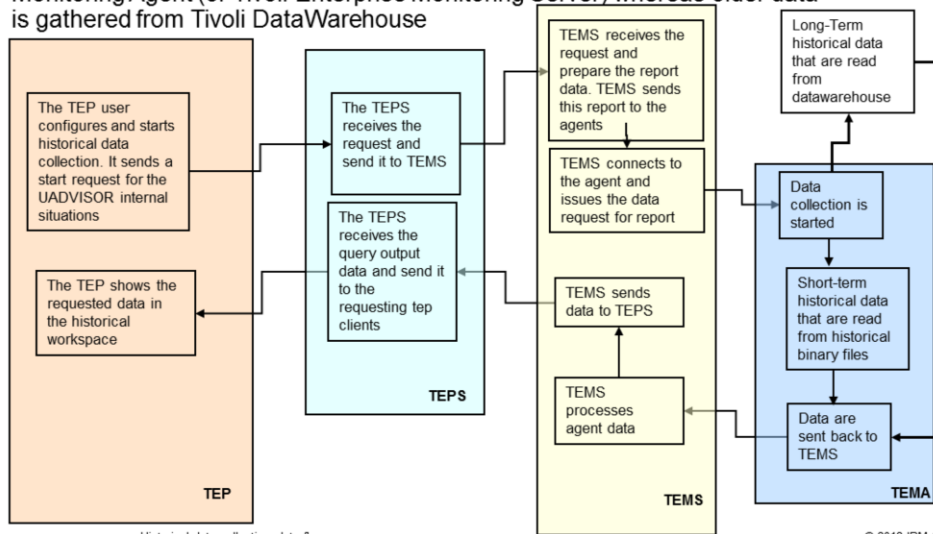5   Historical data collection, data flow   © 2012 IBM Corporation

Generally speaking, historical data collection is the collection of real-time data over a time frame.

Historical data can be short-term historical data stored into proper binary files on a selected location and long-term historical data stored in a data warehouse database, if warehousing is configured.

To be able to set up historical data collections, a user needs to be authorized from the Administer Users panel in the Tivoli Enterprise Portal.

On this slide, you can see the actual data flow when you want to display historical data on Tivoli Enterprise Portal.

First, the Tivoli Enterprise Portal user configures and starts historical data collection. It sends a start request for the UADVISOR internal situations.

The Tivoli Enterprise Portal Server receives the request and sends it to Tivoli Enterprise Management Server.

The Tivoli Enterprise Management Server receives the request and prepares the report data. Then, it sends this report to the agents. The Tivoli Enterprise Monitoring Server connects to the agent and issues the data request for report.

Data collection is started at the agent. If this collection is for long-term historical data, information is retrieved from a data warehouse. On the contrary, if the request is for short-term historical data, then the data is read from binary files.

Then, the data is sent back to the Tivoli Enterprise Monitoring Server, which processes the agent data and sends it to the Tivoli Enterprise Portal Server.

The Tivoli Enterprise Portal Server receives the query output data and sends it to the requesting Tivoli Enterprise Portal clients. Finally, the Tivoli Enterprise Portal shows the requested data in the historical workspace.

Turning on historical data collection (1 of 2)

1. Click the **Historical Collection Configuration** icon.

2. Locate and right-click the application.
Example, WebSphere® MQ.

3. Type a name for the collection.

4. Select the attribute group that you want to collect historical data from.

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The procedure to turn on historical data collection begins with the creation of a collection setting on the required application.

You must type a name for the historical data collection and select the attribute group from which you want to collect historical data.

Turning on historical data collection (2 of 2)
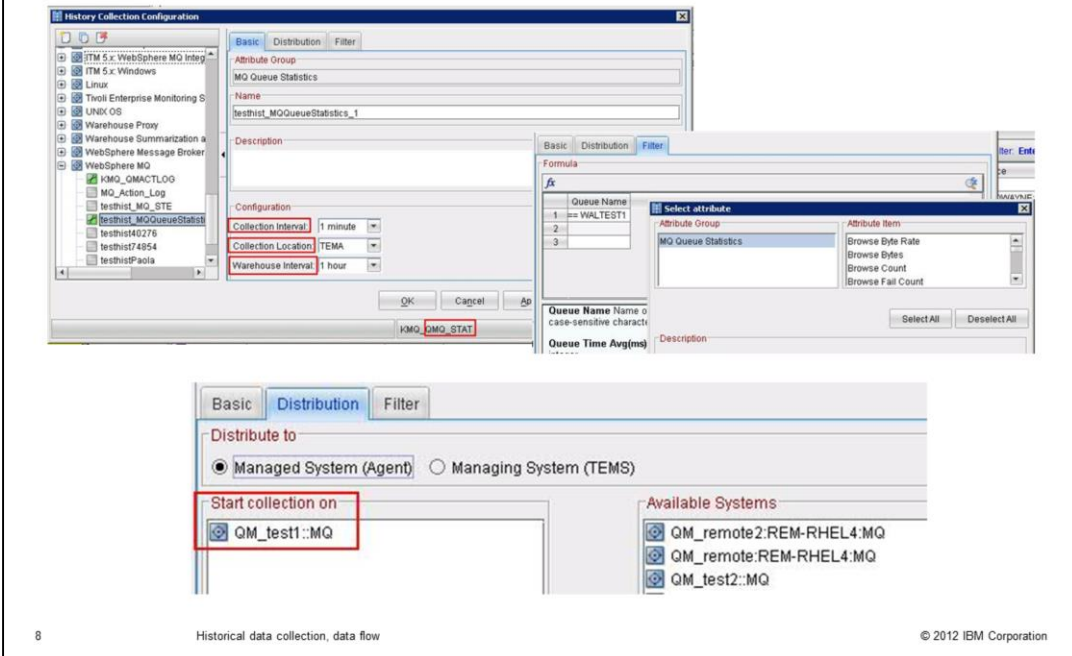
After the collection is created, from the **Basic** tab, you select the **Collection Interval**, **Collection Location**, and **Warehouse Interval**.

The **Collection Interval** defines how often the data is collected and stored.

The **Collection Location** is where to store the short term historical data.

The **Warehouse Interval** defines how often to send the historical data to the warehouse database.

The latter export requires a correct configuration of the data warehouse database and of the Tivoli Monitoring Warehouse Proxy Agent.

After the basic information is provided, from the **Distribution** tab, you can distribute the historical data collection settings to the required managed systems.

As soon as the settings are distributed and you click **OK** on the created collection, the software automatically starts historical data collection.

Optionally, from the **Filter** tab, you can filter the historical data that is collected and store only specific data.

Looking at the historical data on the Tivoli Enterprise Portal (1 of 3)

After the historical collection is started on a specific node, check whether data is available.

Access the workspace that is built by using the chosen attribute group. Verify that this workspace shows real-time data; otherwise, you do not have historical data either because there is no actual data to store.

Looking at the historical data on the Tivoli Enterprise Portal (2 of 3)
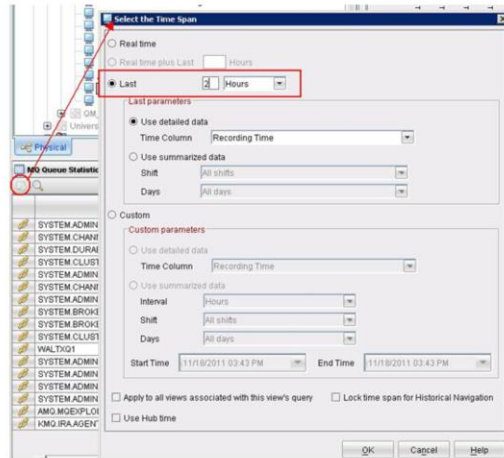
After you are certain that the real-time data is present, click the **Time Span** icon that displays in the upper left corner of the workspace view. This icon displays after you start the collection for the chosen attribute group.

In the Time Span panel, you select the time window from which you want to receive data. Choose either the binary files or the data warehouse database. Click **OK**.

Looking at the historical data on the Tivoli Enterprise Portal (3 of 3)

Visualize the collected historical data

	Recording Time	Queue Name	Interval Start	Interval End	Create Date & Time	Queue Type	Queue Def Type	Qu Min
	11/18/11 16:17:00	SYSTEM.ADMIN.QMGR.EVENT	11 Date and time of the start of the monitoring period.		10 15:10:31	Local	Predefined	0
	11/18/11 16:17:00	SYSTEM.CHANNEL.SYNCQ			10 15:10:31	Local	Predefined	1
	11/18/11 16:17:00	SYSTEM.DURABLE.SUBSCRIBER.QUEUE	11/18/11 15:45:42	11/18/11 16:15:42	09/01/10 15:10:34	Local	Predefined	1
	11/18/11 16:17:00	SYSTEM.CLUSTER.COMMAND.QUEUE	11/18/11 15:45:42	11/18/11 16:15:42	09/01/10 15:10:32	Local	Predefined	0
	11/18/11 16:17:00	SYSTEM.ADMIN.COMMAND.QUEUE	11/18/11 15:45:42	11/18/11 16:15:42	09/01/10 15:10:31	Local	Predefined	0
	11/18/11 16:17:00	SYSTEM.CHANNEL.INITQ	11/18/11 15:45:42	11/18/11 16:15:42	09/01/10 15:10:31	Local	Predefined	0
	11/18/11 16:17:00	SYSTEM.ADMIN.CONFIG.EVENT	11/18/11 15:45:42	11/18/11 16:15:42	09/01/10 15:10:37	Local	Predefined	0
	11/18/11 16:17:00	SYSTEM.BROKER.ADMIN.STREAM	11/18/11 15:45:42	11/18/11 16:15:42	09/01/10 15:10:35	Local	Predefined	0
	11/18/11 16:17:00	SYSTEM.BROKER.DEFAULT.STREAM	11/18/11 15:45:42	11/18/11 16:15:42	09/01/10 15:10:35	Local	Predefined	0
	11/18/11 16:17:00	SYSTEM.CLUSTER.HISTORY.QUEUE	11/18/11 15:45:42	11/18/11 16:15:42	09/01/10 15:10:36	Local	Predefined	0
	11/18/11 16:17:00	WALTXQ1	11/18/11 15:45:42	11/18/11 16:15:42	12/29/10 14:37:30	Local	Predefined	0
	11/18/11 16:17:00	SYSTEM.ADMIN.PERFM.EVENT	11/18/11 15:45:42	11/18/11 16:15:42	09/01/10 15:10:32	Local	Predefined	0
	11/18/11 16:17:00	SYSTEM.ADMIN.CHANNEL.EVENT	11/18/11 15:45:42	11/18/11 16:15:42	09/01/10 15:10:32	Local	Predefined	0
	11/18/11 16:17:00	SYSTEM.ADMIN.LOGGER.EVENT	11/18/11 15:45:42	11/18/11 16:15:42	09/01/10 15:10:34	Local	Predefined	0
	11/18/11 16:17:00	SYSTEM.ADMIN.COMMAND.EVENT	11/18/11 15:45:42	11/18/11 16:15:42	09/01/10 15:10:37	Local	Predefined	1
	11/18/11 16:17:00	WALTEST1	11/18/11 15:45:42	11/18/11 16:15:42	02/07/11 18:47:41	Local	Predefined	1
	11/18/11 16:17:00	AMQ.MQEXPLORER.722742036	11/18/11 15:45:42	11/18/11 16:15:42	09/19/11 18:40:46	Local	TemporaryDynamic	0
	11/18/11 16:17:00	KMQ.IRA.AGENT.QUEUE.4E5B9ED6E2A2C821	11/18/11 15:45:42	11/18/11 16:15:42	10/17/11 14:22:29	Local	TemporaryDynamic	0

QM_test1::MQ

Last 2 Hours.

After you have selected the time span and confirmed it by clicking **OK**, the historical data for the chosen attribute group and for the chosen period is shown as expected.

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Summary

Now you have completed this module, you can perform these tasks:

- Configure historical data settings in the Tivoli Enterprise Portal
- Select and see data in the historical data workspaces

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Now that you completed this module, you can configure the historical data collection and see the historical data in the specific workspaces in the Tivoli Enterprise Portal.

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