IBM

IBM Tivoli Monitoring V6.3

Agent builder - Test agent feature

This presentation covers the new feature in the IBM Tivoli® Monitoring V6.3 agent builder that allows you to test an agent.

Assumptions

Before you proceed, the module designer assumes that you have these skills and knowledge:

–Familiarity with the agent builder tool and its data sources

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The module developer assumes that you are familiar with the agent builder tool and its data sources that allow you to gather the monitoring data.

Objectives

When you complete this module, you can test your new agent before you install it in your Tivoli Monitoring environment.

Test agent feature

This module describes the steps to test an agent that was defined in the agent builder tool. When you complete this module, you can test the new agent in the agent builder workspace and be sure your agent works correctly before you install it in your IBM Tivoli Monitoring environment.
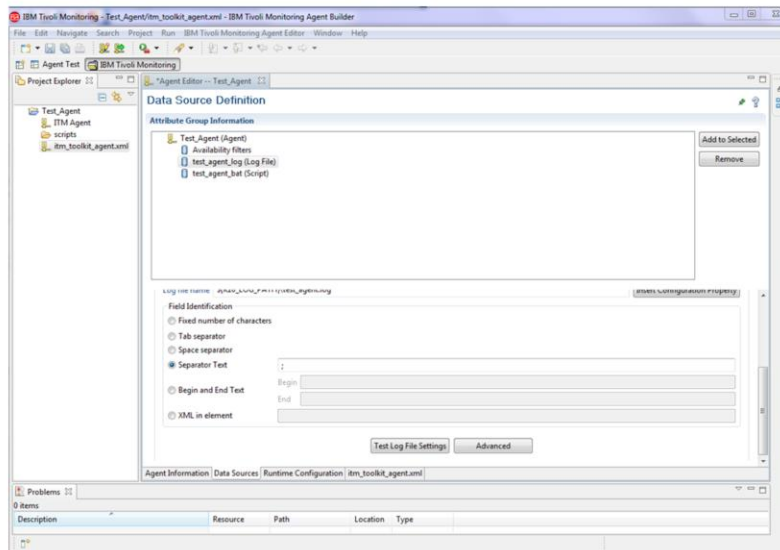
Test agent feature (1 of 7)

- You can run the agent in the agent builder tool without installing IBM Tivoli Monitoring components: Tivoli Enterprise Monitoring Server, Tivoli Enterprise Portal Server, and Tivoli Enterprise Monitoring agents
- You can verify that your agent is collecting the data correctly before you install it in your IBM Tivoli Monitoring environment
- The agent is installed into a temporary location.
- The installation includes enough of the IBM Tivoli Monitoring runtime libraries for the agent to function correctly

Test agent feature

The agent builder in version 6.3 adds the test agent feature. With this feature, you can test the code of the agent that is created with the agent builder tool without installing the agent in your IBM Tivoli Monitoring environment.

You can display the data that is retrieved by the agent in tables as in Tivoli Enterprise Portal workspaces but without having a Tivoli Enterprise Portal Server console and a Tivoli Enterprise Monitoring Server to connect to.

The agent is installed in a temporary directory and this installation includes the runtime libraries that are required by the agent to work correctly. With the test feature, the agent will not connect to the Tivoli Enterprise Monitoring Server. The agent uses a custom interface that will send the requests to the agent and receive the retrieved data.
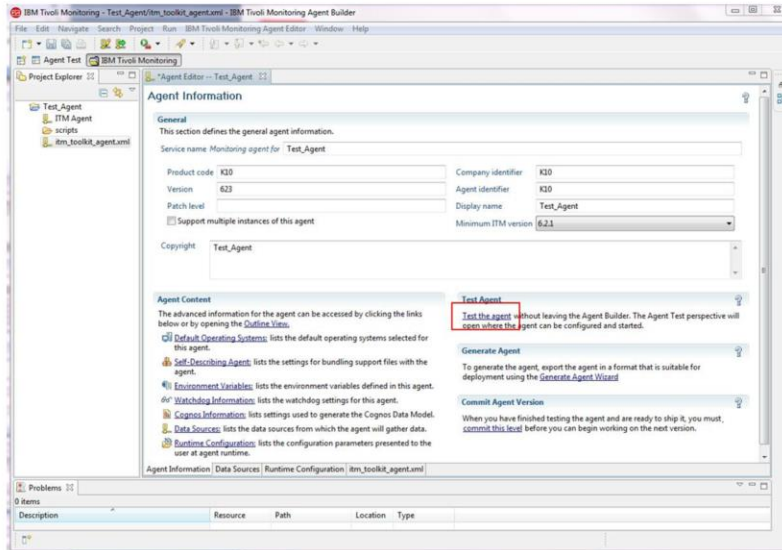
Here is an example of an agent builder agent. As you can see from the screen capture, the agent will retrieve the data from three different data sources: availability, log file, and script. With the first one, the agent will monitor the availability of specific window services; with the second one the agent will show the entries that are logged in the monitored log file. The last data source is to monitor the output of a specific script.

Once you complete the definition of your custom agent, as the one in this slide, you can go ahead and verify that the agent is able to collect all the monitored data.

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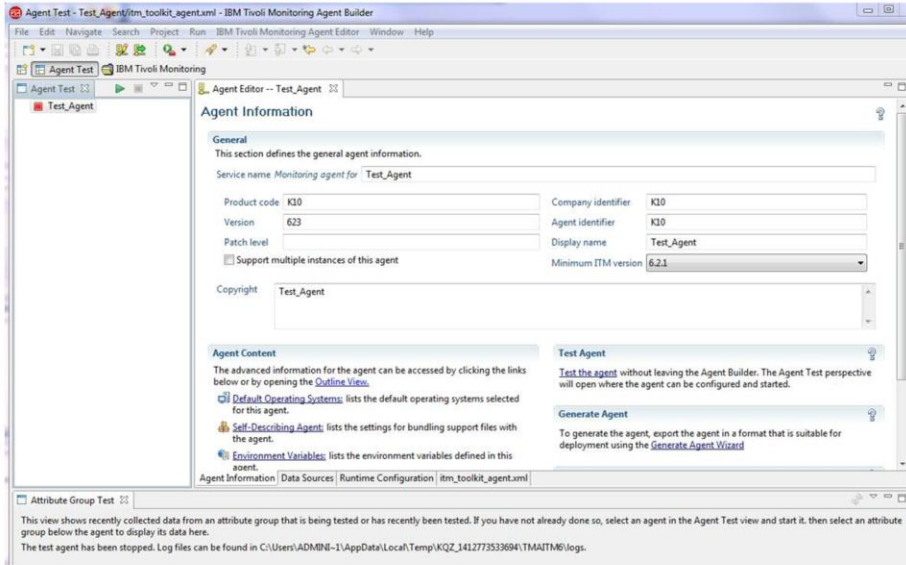

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Open the agent definition and select the Agent Information tab. Click "Test the agent" in the red rectangle to start the test of your agent.
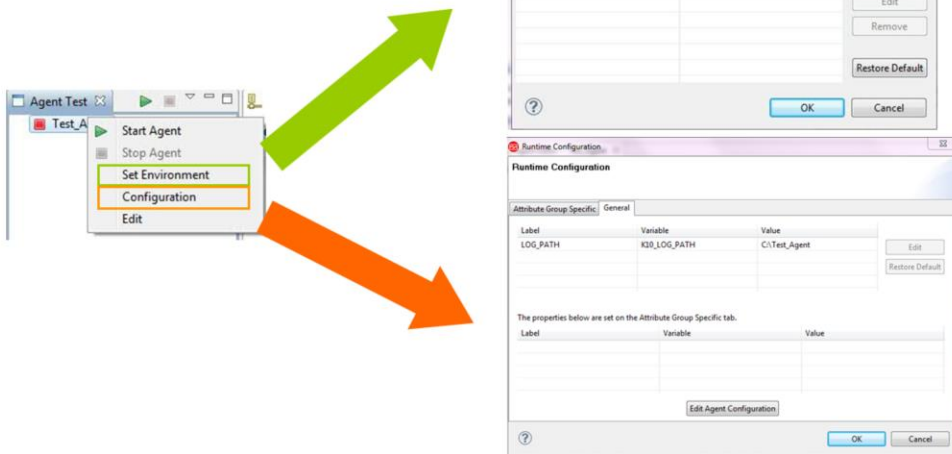
Test agent feature (4 of 7)

Test agent feature
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When you start the test of your agent, the window on the left is shown. At the bottom of the window, you can verify the path where the agent will be installed and where you can find the log files for troubleshooting purposes.

From the Test agent tree, if you right-click the name of your agent (in this case Test_Agent) you have several options as shown in this slide: start agent, set environment, and configuration. The first one is to start the agent, but the most interesting ones are the second two menu options. If you click "Set Environment", the window pointed to by the top green arrow, is displayed. In this window, you can specify specific environment variables as the ones specified in the configuration file of your agent once installed. For example, you can set the KBB_RAS1 variable. If you click "Configuration", then you can set the variable that is defined for your agent. In this case, the variable LOG_PATH represents the path of the log the agent will monitor. Once you install the agent in your IBM Tivoli Monitoring environment, when you start the configuration, it will prompt you to set the value for the LOG_PATH variable.

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You can start the agent after you configure it. As soon as you start it, you see a tree as shown in this slide that will list all the data sources that you defined. If you click one data source, you can see the collected data. In this slide, "test_agent_bat" was clicked, and in the bottom you can see the output of the launched script.

Since the whole agent is running, you also have access to all of the self-monitoring features that are available in the installed agent. These include the PerformanceObjectStatus, ThreadPoolStatus, Log_File_Status, and Log_File_RegEx_Statistics attribute groups.

The builder test navigation tree displays "data" attribute groups with an icon and "status" attribute groups with the letter "i".

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- RAS1 log files are created in the temporary directory:

    – %TEMP%\KQZ_<date number>\TMAITM6\logs on Windows®
    – $TEMP/KQZ_<date number>/logs on AIX/Linux

- Log file names:

    – <host name>_<pc>_k<pc>agent.inv
    – <host name>_<pc>_k<pc>agent_<timestamp>-<nn>.log

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If you have to investigate a problem with the agent data collection, see the agent trace logs that are created in the temporary directory that is shown in this slide. The path is also shown in the agent builder tool once you start the Test feature.

These trace log files will show the requests that the agent receives, the responses that it returns, and the operation of the data providers that are used in the agent that is being tested. You can increase the trace level with the KBB_RAS1 variable as for a traditional monitoring agent.

Summary

- Now that you completed this module, you can test your new agent before you install it in your Tivoli Monitoring environment.

Now you can test an agent before you install it in your IBM Tivoli Monitoring environment.

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Test agent feature