

Tivoli Monitoring V6.3

Use the ping monitor data source to create a ping agent

© 2014 IBM Corporation



In this module, you see the steps to create a ping agent by using the ping data source with the Tivoli Monitoring Agent Builder tool.

Assumptions

- Before you proceed, you must have these prerequisites in place:
 - Installed Tivoli Monitoring Agent Builder 6.3 on a Windows system
 - Installed and configured IBM Tivoli Monitoring agents
 - Knowledge of IBM Tivoli Monitoring infrastructure

For the purposes of this instruction, you must have version 6.3 of the Tivoli Monitoring Agent Builder installed on a Windows system. You need to have installation and configuration experience with IBM Tivoli Monitoring agents, and be familiar with the infrastructure of an IBM Tivoli Monitoring environment.

Objectives

- When you complete this module, you can perform these tasks:
 - Create an agent by using the ping monitor data source
 - That is Ping agent in this presentation
 - Use a ping configuration file, device list file to configure the Ping agent
 - Install the agent along with application support
 - Start monitoring data for the agent in Tivoli Enterprise Portal client

When you complete this module, you can create a new agent by using a Ping data source.

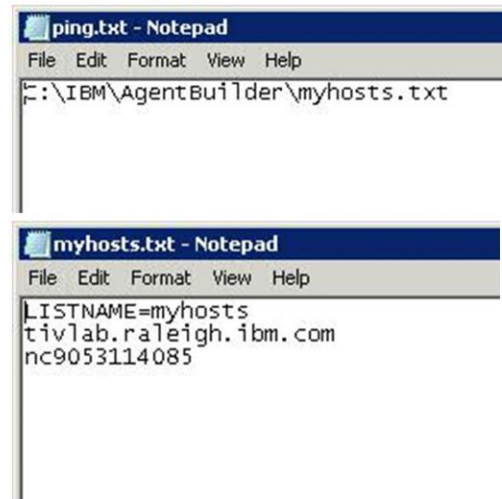
You learn how to add new attribute groups and test the agent in Agent Builder.

You can install the agent and the application support.

You can start monitoring data for the agent in Tivoli Enterprise Portal client.

Ping configuration file and device list file

- Ping agent monitors servers by using two files under **C:\IBM\AgentBuilder** (can be specified under a different location)
 - **Ping configuration file** = ping.txt
 - **Device list file** = myhosts.txt
- Any new hosts that need to be monitored are added in the **Device list file**

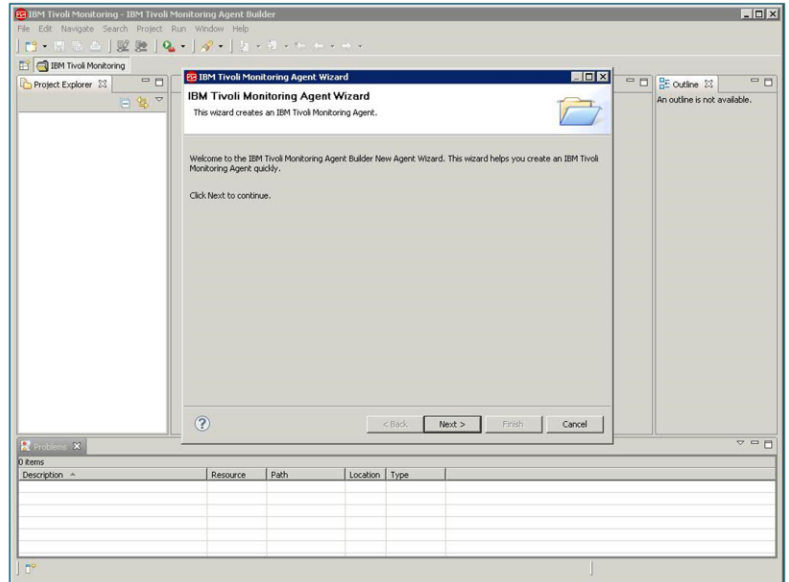


The image shows two Notepad windows. The top window, titled 'ping.txt - Notepad', contains the text: `\\.\IBM\AgentBuilder\myhosts.txt`. The bottom window, titled 'myhosts.txt - Notepad', contains the text: `LISTNAME=myhosts`, `tivlab.raleigh.ibm.com`, and `nc9053114085`.

A Ping configuration file and a Device list file are required to create a Ping agent. The Ping configuration file contains the path to one or more device list files. The Device list file contains the host name of the monitored systems.

Start the agent builder tool

- Choose **File > New > IBM Tivoli Monitoring Agent**, click **Next**



5

Use the ping monitor data source to create a ping agent

© 2014 IBM Corporation

Start the Agent Builder tool and select **File > New > IBM Tivoli Monitoring agent**. This opens the IBM Tivoli Monitoring agent wizard. Click **Next**.

New IBM Tivoli Monitoring agent project

- Enter a valid project name
 - For example, Ping
- Click Next

The screenshot shows the 'New IBM Tivoli Monitoring Agent Project' wizard. The title bar reads 'IBM Tivoli Monitoring Agent Wizard'. The main title is 'New IBM Tivoli Monitoring Agent Project'. Below the title, it says 'Provide a name for the project that will contain the IBM Tivoli Monitoring Agent files.' There is a folder icon in the top right corner. The 'Project name:' field contains 'Ping'. The 'Use default location' checkbox is checked. The 'Location:' field shows 'C:\Users\Administrator\workspace\Ping' with a 'Browse...' button to its right. Under the 'Working sets' section, the 'Add project to working sets' checkbox is unchecked. The 'Working sets:' field is empty with a dropdown arrow and a 'Select...' button to its right. At the bottom, there are four buttons: '< Back', 'Next >', 'Finish', and 'Cancel'. A help icon (?) is located at the bottom left of the dialog.

Enter the project name. The files for the project are stored under the default location or you can browse to specify another location. Click Next.

General information

- Enter the display name for the agent.
 - The display name shows in the Tivoli Enterprise Portal Client
 - For example, Ping
- Enter the copyright information
- Choose the platform information. Select the platforms on which the agent will be installed
- Click Next

IBM Tivoli Monitoring Agent Wizard

General Information

Enter the description of the agent you are creating.

Display name: Ping

Copyright: IBM

Default Operating Systems

<input type="checkbox"/> AIX (32-bit)	<input type="checkbox"/> Linux 2.4 (Intel)	<input type="checkbox"/> Linux 2.6 (64-bit zSeries)	<input type="checkbox"/> Solaris (64-bit SPARC)
<input type="checkbox"/> AIX (64-bit)	<input type="checkbox"/> Linux 2.6 (Intel)	<input type="checkbox"/> Linux (64-bit PowerPC)	<input type="checkbox"/> Solaris (64-bit x86)
<input type="checkbox"/> HP-UX (32-bit)	<input type="checkbox"/> Linux (31-bit zSeries)	<input type="checkbox"/> Linux (64-bit Itanium)	<input checked="" type="checkbox"/> Windows
<input type="checkbox"/> HP-UX (64-bit)	<input type="checkbox"/> Linux (64-bit zSeries)	<input type="checkbox"/> Linux (64-bit x86)	<input checked="" type="checkbox"/> Windows (64-bit)
<input type="checkbox"/> HP-UX (64-bit Itanium)	<input type="checkbox"/> Linux 2.6 (31-bit zSeries)	<input type="checkbox"/> Solaris (32-bit SPARC)	
<input type="checkbox"/> All operating systems	<input type="checkbox"/> All Linux	<input type="checkbox"/> All UNIX	<input checked="" type="checkbox"/> All Windows

< Back Next > Finish Cancel

Enter the display name on the general information page. This name is displayed in the Tivoli Enterprise Portal client. Enter the information in the copyright section as required by your company policies. Now select the platforms on which the agent is to be installed. After you make the selections, click Next.

Agent information

- Enter the Service name for the monitoring agent.
 - This name displays in the Manage Tivoli Enterprise Monitoring Services window
 - For example, Ping
- Enter the company identifier
- The remaining fields will be populated automatically.
- Make any required changes
- Click Next

IBM Tivoli Monitoring Agent Wizard

Agent Information

Specify the general information for the agent.

Service name: *Monitoring Agent for* Ping

Product code: K01

Company identifier: IBM

Agent identifier: K01

Version: 630

Support multiple instances of this agent

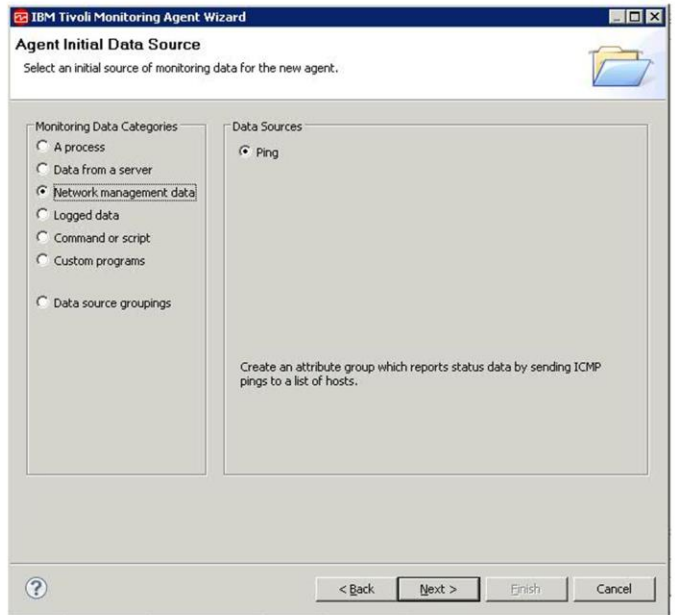
Minimum ITM version: 6.2.1

< Back Next > Finish Cancel

Enter the service name for the monitoring agent. This name is displayed in the Manage Tivoli Enterprise Monitoring Services window. Enter the information in the company identifier section. The remaining fields will be populated automatically. Make the necessary changes as required. Click Next.

Data source

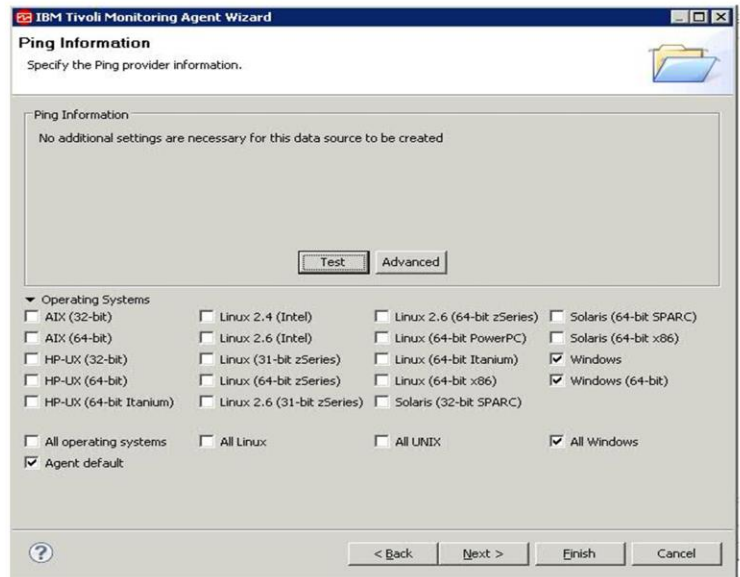
- In the **Monitoring Data Categories** panel, select **Network management data**
- In the **Data Sources** panel, select **Ping**
- Click **Next**



On the agent initial data source page, select “Data from a Server” under Monitoring Data Categories. Then, select “Ping” under Data Sources. Click Next.

Ping information

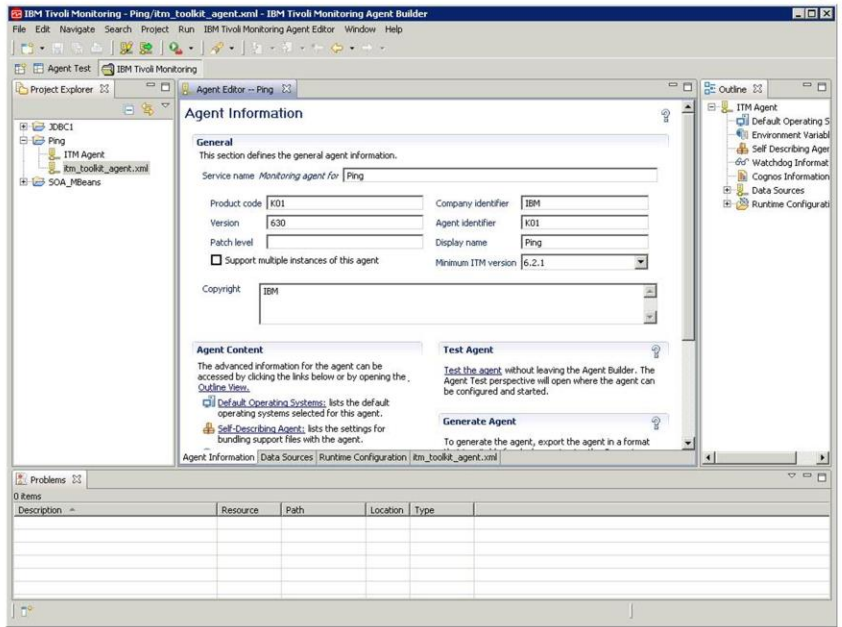
- At this point, you can test the agent to ensure that it works as expected
- In Operating Systems, ensure that the correct selections are made
- Click Finish



Select the operating systems applicable for this agent in the Operating Systems section.

Click Finish.

Agent editor - Complete



11

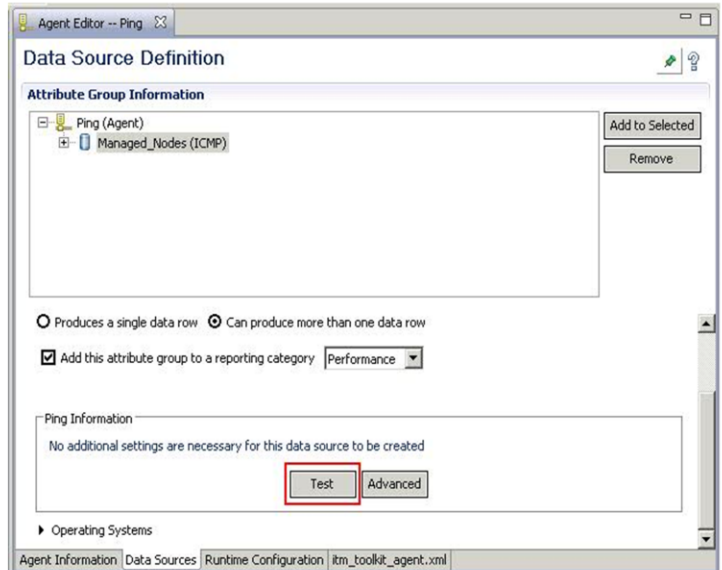
Use the ping monitor data source to create a ping agent

© 2014 IBM Corporation

Type the name of the object in the Object Name field or hit the Browse button. All the performance objects on the system are listed.

Testing procedure – Data Source Definition tab

- Testing can be done in two ways:
 - During agent creation, click Test on the Ping information page
 - After agent creation, select an attribute group on the Agent Editor Data Source tab and click Test
- This module covers the second method
- Click Test



12

Use the ping monitor data source to create a ping agent

© 2014 IBM Corporation

The agent can be tested in two ways.

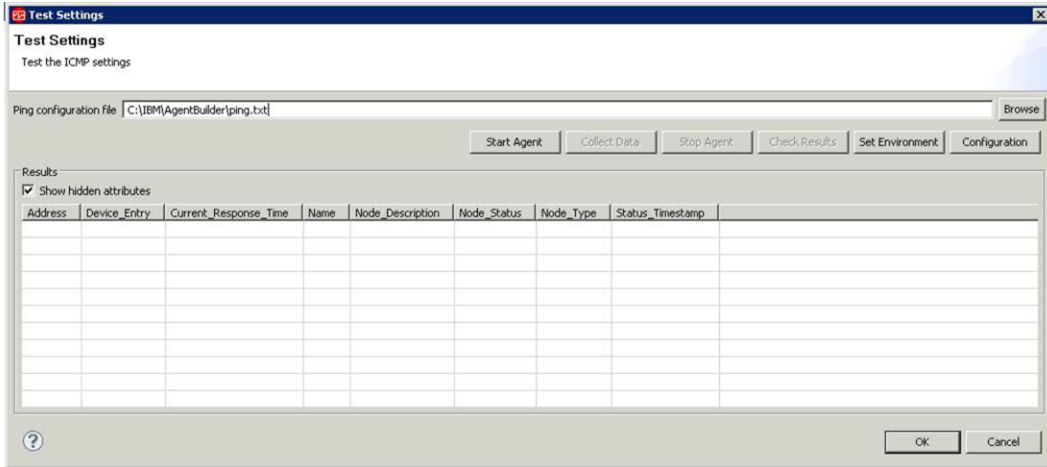
During agent creation, click Test on the Ping information page.

After agent is created, select an attribute group on the Agent Editor Data Source tab. Click Test.

This module covers the second method to test the agent.

Test settings 1

- Point to the Ping configuration file as specified on Slide 4
- Click Start Agent



13

Use the ping monitor data source to create a ping agent

© 2014 IBM Corporation

A new screen pops-up where you can start the agent by using the “Start Agent” button.

Test settings 2

Click Collect Data

The screenshot shows the 'Test Settings' dialog box. At the top, there is a status message: 'The test agent has been started. Log files can be found in C:\Users\ADMINI~1\AppData\Local\Temp\..._1407530265815\TMAITM6\logs.'. Below this is a 'Ping configuration file' field containing 'C:\IBM\AgentBuilder\ping.txt' and a 'Browse' button. A row of buttons includes 'Start Agent', 'Collect Data' (highlighted with a yellow callout), 'Stop Agent', 'Check Results', 'Set Environment', and 'Configuration'. The 'Results' section has a checked checkbox for 'Show hidden attributes' and a table with the following columns: Address, Device_Entry, Current_Response_Time, Name, Node_Description, Node_Status, Node_Type, and Status_Timestamp. The table is currently empty. At the bottom right are 'OK' and 'Cancel' buttons.

14

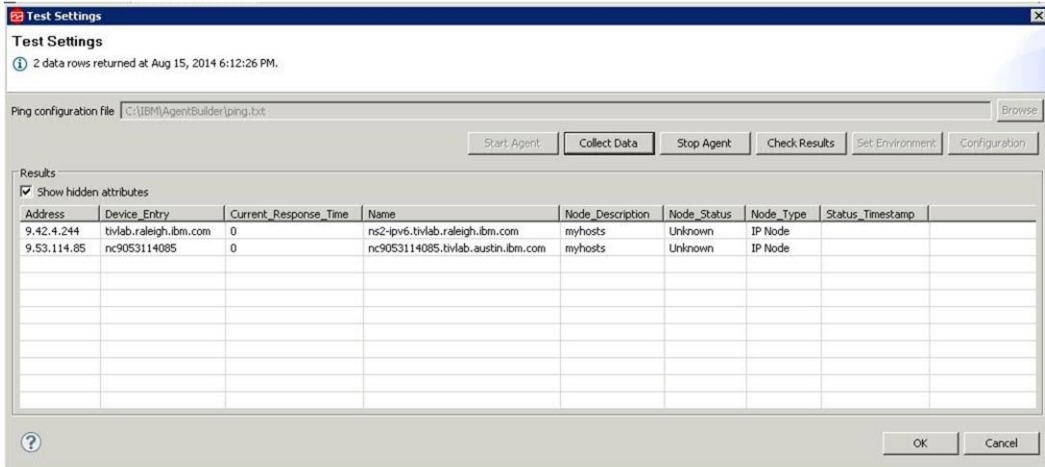
Use the ping monitor data source to create a ping agent

© 2014 IBM Corporation

After the Collect Data button is activated, click it and then click the “Stop Agent” button. The results section shows the results of the test.

Test settings 3

- The data that is collected is displayed as shown here. Confirm that all servers are listed.
- Click Check Results



Check the test results

Data collection status

- Make sure that no errors are displayed here
- Testing concludes here. Click OK

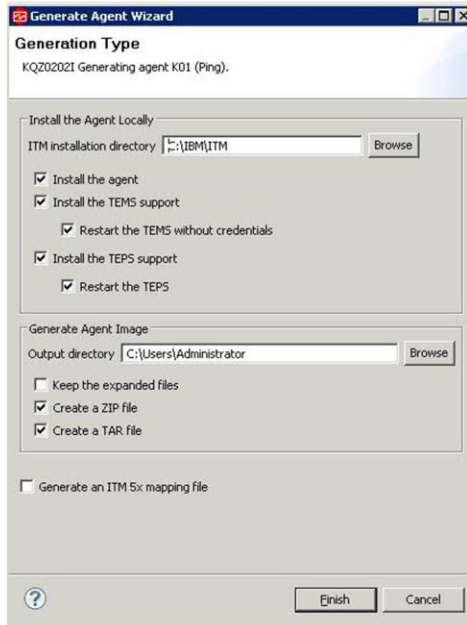
Query_Name	Object_Name	Object_Type	Object_Status	Error_Code	Last_Collection_Start	Last_Collection_Finished	Last_Collection_Duration	Average_Collection_Du
Managed_Nodes	Managed_Nodes	PING	ACTIVE	NO_ERROR	Aug 15, 2014 6:08:04 PM	Aug 15, 2014 6:08:04 PM	0.0	0.0

Make sure NO_ERROR is displayed under Error_Code.

Click OK.

Generate agent wizard

- IBM Tivoli Monitoring Agent > Generate Agent will present the following option
- Select the options for local and remote installation
- Click Finish



17

Use the ping monitor data source to create a ping agent

© 2014 IBM Corporation

Choose the appropriate options to install the agent, along with the application support, on the local system.

Also, create the agent .zip and .tar files to install the agent on other systems.

Click Finish.

Agent installation - Complete

- The agent is displayed in Manage Tivoli Enterprise Monitoring Services window

Service/Application	Task/SubSystem	Configured	Status	Configuration	Startup	Account	Desktop	HotStdyby	Version	Host	Port
Eclipse Help Server	HELPSVR	Yes	Started	up-to-date	Auto	LocalSystem	No	No	06.30.02.00		
Tivoli Enterprise Portal	Browser	Yes		N/A	N/A	N/A	N/A	N/A	06.30.02.00	localhost	
Tivoli Enterprise Portal	Desktop	Yes		N/A	N/A	N/A	N/A	N/A	06.30.02.00	NC9053114...	
Tivoli Enterprise Portal Server	KFWSRV	Yes (TEMS)	Started	up-to-date	Auto	LocalSystem	No	No	06.30.02.00		
Warehouse Summarization and Pru...	Primary	Yes (TEMS)	Started	up-to-date	Auto	LocalSystem	No	No	06.30.02.00		
Monitoring Agent for Windows OS	Primary	Yes (TEMS)	Started	up-to-date	Auto	LocalSystem	Yes	No	06.30.02.00		
Warehouse Proxy	Primary	Yes (TEMS)	Started	up-to-date	Auto	LocalSystem	No	No	06.30.02.00		
Monitoring Agent for SOA_MBeans	travelpor	Yes (TEMS)	Started	up-to-date	Auto	LocalSystem	No	No	06.23.00.00		
Monitoring Agent for SOA_MBeans	Template			N/A					06.23.00.00		
Monitoring Agent for Ping	Primary	No		N/A					06.30.00.00		
Monitoring Agent for JDBC1	test2	Yes (TEMS)	Started	up-to-date	Auto	LocalSystem	No	No	06.23.00.00		
Monitoring Agent for JDBC1	test1	Yes (TEMS)	Started	up-to-date	Auto	LocalSystem	No	No	06.23.00.00		
Monitoring Agent for JDBC1	Template			N/A					06.23.00.00		
Universal Agent	Primary	Yes (TEMS)	Started	up-to-date	Auto	LocalSystem	No	No	06.23.02.00		
Agentless Monitoring for Solaris OS	Template			N/A					06.30.02.00		
Agentless Monitoring for HP-LIX OS	Template			N/A					06.30.02.00		
Agentless Monitoring for Linux OS	Template			N/A					06.30.02.00		
Agentless Monitoring for AIX OS	Template			N/A					06.30.02.00		
Agentless Monitoring for Windows OS	Template			N/A					06.30.02.00		
Performance Analyzer	Primary	No		N/A					06.30.02.00		
Tivoli Enterprise Monitoring Automa...	KAS1	No		N/A					06.30.02.00		
Tivoli Enterprise Monitoring Server	TEMS1	Yes	Started	up-to-date	Auto	LocalSystem	No	No	06.30.02.00		

18

Use the ping monitor data source to create a ping agent

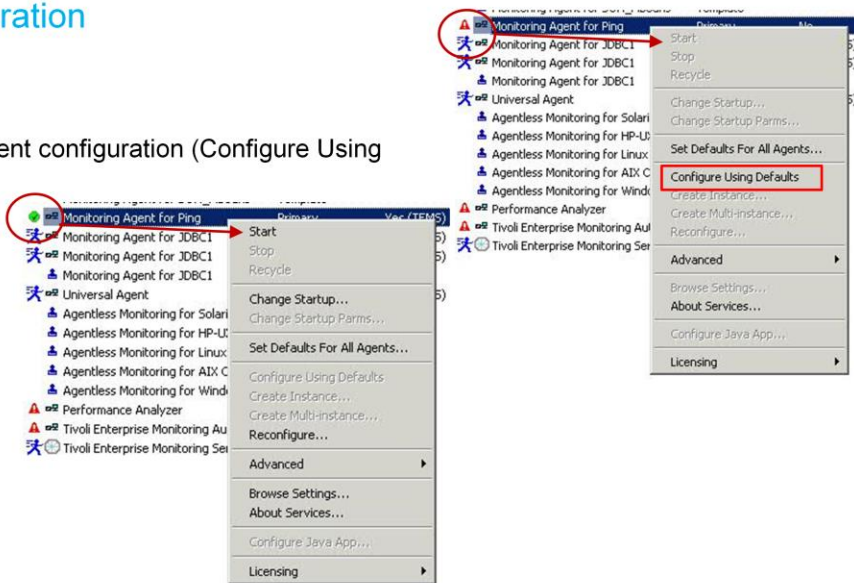
© 2014 IBM Corporation

The newly installed agent is displayed in Manage Tivoli Enterprise Monitoring Services window.

You can also view the installed agent in the output of kincinfo (on Windows) and cinfo (on Linux® or UNIX®).

Agent configuration

- Complete the agent configuration (Configure Using Defaults)
- Start the agent



19

Use the ping monitor data source to create a ping agent

© 2014 IBM Corporation

Complete the agent configuration by right-clicking the agent in the Manage Tivoli Enterprise Monitoring Services window.

When a green check mark is displayed, right-click to start the agent.

In the `<itm_home>/bin` directory on Linux or UNIX systems, run the command: **itmcmd config -A <product_code>**.

The product code 00 is used in this illustration.

Use **itmcmd agent start 00** to start the agent after configuration is completed.

Agent start - Complete

- Manage Tivoli Enterprise Monitoring Services window displays the Monitoring Agent for Ping

Manage Tivoli Enterprise Monitoring Services - TEMS Mode - [Local Computer]											
Actions Options View Windows Help											
Service/Application	Task/SubSystem	Configured	Status	Configuration	Startup	Account	Desktop	HotStdyb	Version	Host	Port
Eclipse Help Server	HELPSVR	Yes	Started	up-to-date	Auto	LocalSystem	No	No	06.30.02.00		
Tivoli Enterprise Portal	Browser	Yes		N/A	N/A	N/A	N/A	N/A	06.30.02.00	localhost	
Tivoli Enterprise Portal	Desktop	Yes		N/A	N/A	N/A	N/A	N/A	06.30.02.00	NC9053114...	
Tivoli Enterprise Portal Server	KFWSRV	Yes (TEMS)	Started	up-to-date	Auto	LocalSystem	No	No	06.30.02.00		
Warehouse Summarization and Pru...	Primary	Yes (TEMS)	Started	up-to-date	Auto	LocalSystem	No	No	06.30.02.00		
Monitoring Agent for Windows OS	Primary	Yes (TEMS)	Started	up-to-date	Auto	LocalSystem	Yes	No	06.30.02.00		
Warehouse Proxy	Primary	Yes (TEMS)	Started	up-to-date	Auto	LocalSystem	No	No	06.30.02.00		
Monitoring Agent for SOA_MBeans	travelport	Yes (TEMS)	Started	up-to-date	Auto	LocalSystem	No	No	06.23.00.00		
Monitoring Agent for SOA_MBeans	Template			N/A					06.23.00.00		
Monitoring Agent for Ping	Primary	Yes (TEMS)	Started	up-to-date	Auto	LocalSystem	No	No	06.20.00.00		
Monitoring Agent for JDBC1	test2	Yes (TEMS)	Started	up-to-date	Auto	LocalSystem	No	No	06.23.00.00		
Monitoring Agent for JDBC1	test1	Yes (TEMS)	Started	up-to-date	Auto	LocalSystem	No	No	06.23.00.00		
Monitoring Agent for JDBC1	Template			N/A					06.23.00.00		
Universal Agent	Primary	Yes (TEMS)	Started	up-to-date	Auto	LocalSystem	No	No	06.23.02.00		
Agentless Monitoring for Solaris OS	Template			N/A					06.30.02.00		
Agentless Monitoring for HP-LUX OS	Template			N/A					06.30.02.00		
Agentless Monitoring for Linux OS	Template			N/A					06.30.02.00		
Agentless Monitoring for AIX OS	Template			N/A					06.30.02.00		
Agentless Monitoring for Windows OS	Template			N/A					06.30.02.00		
Performance Analyzer	Primary	No		N/A					06.30.02.00		
Tivoli Enterprise Monitoring Automa...	KAS1	No		N/A					06.30.02.00		
Tivoli Enterprise Monitoring Server	TEMS1	Yes	Started	up-to-date	Auto	LocalSystem	No	No	06.30.02.00		

20

Use the ping monitor data source to create a ping agent

© 2014 IBM Corporation

The Manage Tivoli Enterprise Monitoring Services window shows that the agent is started.

Tivoli Enterprise Portal – Desktop view

- The Tivoli Enterprise Portal client displays the Ping agent along with the workspaces

The screenshot shows the Tivoli Enterprise Portal client interface. The Navigator tree on the left shows the hierarchy: Enterprise > Windows Systems > NC9053114085 > JDBC1 > Ping. The 'Report' view at the bottom displays a table of ping data. The 'View Choices' panel on the right lists various actions like 'Adding a table', 'Adding a note', etc.

Node	Timestamp	Address	Device Entry	Current Response Time	Name	Node Description	Node Status	Node Type	Status Timestamp
NC9053114085-01	08/15/14 20:59:45	9.42.4.253	twlab.raleigh.ibm.com	32	rtp-ns2.twlab.raleigh.ibm.com	myhosts	Active	IP Node	08/15/14 20:59:35
NC9053114085-01	08/15/14 20:59:45	9.53.114.85	nc9053114085	1	nc9053114085.twlab.austin.ibm.com	myhosts	Active	IP Node	08/15/14 20:59:35

21 Use the ping monitor data source to create a ping agent © 2014 IBM Corporation

A navigator item for this agent is displayed in the Tivoli Enterprise Portal client under the system where it is installed.

The report view displays the data that is collected by the agent.

The attributes that are related to this agent are activated in Tivoli Enterprise Portal situation editor to define situations.

Summary

- Now that you completed this module, you can perform these tasks:
 - Create an agent by using the ping data source
 - Use the agent to perform ping operations
 - Install the agent along with application support locally or on remote systems
 - Start monitoring data for the agent in Tivoli Enterprise Portal client

Now that you completed this module, you can create a new agent by using a Ping data source to perform ping operations.

You can install the agent along with application support locally or on remote systems.

You can configure and start the Ping monitoring agent.

Trademarks, disclaimer, and copyright information

IBM, the IBM logo, ibm.com, and Tivoli are trademarks or registered trademarks of International Business Machines Corp., registered in many jurisdictions worldwide. Other product and service names might be trademarks of IBM or other companies. A current list of other IBM trademarks is available on the web at "[Copyright and trademark information](http://www.ibm.com/legal/copytrade.shtml)" at <http://www.ibm.com/legal/copytrade.shtml>

Linux is a registered trademark of Linus Torvalds in the United States, other countries, or both.

Microsoft, Windows, and the Windows logo are registered trademarks of Microsoft Corporation in the United States, other countries, or both.

UNIX is a registered trademark of The Open Group in the United States and other countries.

Other company, product, or service names may be trademarks or service marks of others.

THE INFORMATION CONTAINED IN THIS PRESENTATION IS PROVIDED FOR INFORMATIONAL PURPOSES ONLY. WHILE EFFORTS WERE MADE TO VERIFY THE COMPLETENESS AND ACCURACY OF THE INFORMATION CONTAINED IN THIS PRESENTATION, IT IS PROVIDED "AS IS" WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED. IN ADDITION, THIS INFORMATION IS BASED ON IBM'S CURRENT PRODUCT PLANS AND STRATEGY, WHICH ARE SUBJECT TO CHANGE BY IBM WITHOUT NOTICE. IBM SHALL NOT BE RESPONSIBLE FOR ANY DAMAGES ARISING OUT OF THE USE OF, OR OTHERWISE RELATED TO, THIS PRESENTATION OR ANY OTHER DOCUMENTATION. NOTHING CONTAINED IN THIS PRESENTATION IS INTENDED TO, NOR SHALL HAVE THE EFFECT OF, CREATING ANY WARRANTIES OR REPRESENTATIONS FROM IBM (OR ITS SUPPLIERS OR LICENSORS), OR ALTERING THE TERMS AND CONDITIONS OF ANY AGREEMENT OR LICENSE GOVERNING THE USE OF IBM PRODUCTS OR SOFTWARE.

© Copyright International Business Machines Corporation 2014. All rights reserved.