



IBM Software Group

IBM WebSphere® Application Server V7

Tivoli® Composite Application Manager for WebSphere - Administration



@business on demand.

© 2008 IBM Corporation
Updated September 19, 2008

This presentation discusses the Tivoli embedded composite application manager as found in IBM WebSphere Application Server V7.

Agenda

- ITCAM administration
- Summary



This presentation focuses on administering and using ITCAM.

Section

Administration

The next section presents an example of ITCAM for WebSphere V7 usage.

IBM Software Group

Start ITCAM for WebSphere V7

Monitoring and Tuning

- Performance Monitoring Infrastructure (PMI) **1**
- Request metrics
- Performance Viewer

Select	Name	Node
<input type="checkbox"/>	nodeagent	AIMCP023Node01
<input type="checkbox"/>	server1 2	AIMCP023Node01
Total 2		

Additional Properties

- Tivoli Application Statistics **3**

Performance Monitoring Infrastructure (PMI)

Performance Monitoring Infrastructure (PMI) > server1 > ITCAM

Use this page to enable or disable the ITCAM for WAS Data Collector. Changes will take effect after the server is restarted.

Runtime **4** Configuration

General Properties

ITCAM for WAS monitoring state

Start Monitoring **5**

Apply OK Reset Cancel **6**

ITCAM for WebSphere Administration © 2008 IBM Corporation 4

The first step to using ITCAM for WebSphere V7 is to start the ITCAM for WebSphere V7 monitors on each server that has been configured and you want monitoring. This step has to be performed each time the server is started. Note that the sequence above starts with “Monitoring and Testing” from the left panel of the administrative console and proceeds as shown. In the next three steps you select a server, “Tivoli Application Statistics” and the runtime tab in that specific order. In the fifth step, the radio button indicates the action to be taken when you click the “Apply” or “OK” buttons in step 6. Clicking the single button will start ITCAM for WebSphere V7 if it is not running and stop it otherwise.

IBM Software Group IBM

Turn on counters

The screenshot shows the following steps:

1. Select "Performance Monitoring Infrastructure (PMI)" in the left navigation pane.
2. Select a server (e.g., "server1") in the "You can administer the following resources:" table.
3. Click the "Custom" link.
4. Click the "Configuration" tab.
5. Select "ITCAM Application Performance" in the left navigation pane.

next slide

5

ITCAM for WebSphere Administration © 2008 IBM Corporation

After starting ITCAM for WebSphere V7, the next step is to select which counters to collect. Your process starts with the “Monitoring and Tuning” menu item from the left panel of the administrative console and proceeds through these steps onto the next page. The steps are select a server and from that main page, click “Custom”. This will bring up a new page with the performance monitoring infrastructure counters available. From this latter menu select “ITCAM Application Performance” which brings up the panel shown on the next slide. Note that ITCAM here actually refers to the ITCAM for WebSphere V7 subset in this case.

Select counters

7

Enable Disable

Select	Counter	Type	Description	Status
<input type="checkbox"/>	90%CPUUsage	CountStatistic	This metric collects the CPU usage and then calculates the 90% median CPU usage.	Disabled
<input type="checkbox"/>	90%ResponseTime	CountStatistic	This metric collects the response time and then calculates the 90% median response time.	Disabled
<input type="checkbox"/>	AverageCPUUsage	AverageStatistic	This metric collects the CPU usage and then calculates the average CPU usage in milliseconds.	Enabled
<input type="checkbox"/>	AverageResponseTime	AverageStatistic	This metric collects the response time and then calculates the average response in milliseconds.	Enabled
<input type="checkbox"/>	LastMinuteAverageCPUUsage	AverageStatistic	This metric collects the CPU usage for the last minute and then calculates the average CPU usage in milliseconds.	Enabled
<input type="checkbox"/>	LastMinuteAverageResponseTime	AverageStatistic	This metric collects the response time for the last minute and then calculates the average response in milliseconds.	Enabled
<input type="checkbox"/>	MaximumCPUUsage	CountStatistic	This metric collects the CPU usage and then calculates the maximum CPU usage in milliseconds.	Disabled
<input type="checkbox"/>	MaximumResponseTime	CountStatistic	This metric collects the response time and then calculates the maximum response in milliseconds.	Disabled
<input type="checkbox"/>	MinimumCPUUsage	CountStatistic	This metric collects the CPU usage and then calculates the minimum CPU usage in milliseconds.	Disabled
<input type="checkbox"/>	MinimumResponseTime	CountStatistic	This metric collects the response time and then calculates the minimum response in milliseconds.	Disabled
<input type="checkbox"/>	RequestCount	CountStatistic	The total number of requests.	Enabled

6

Total 11



This is the final panel to select counters to collect. In step 6, you check the counters you want to turn on and then select enable. You select all the counters by clicking the left most icon under the enable button as shown here. Some of the counters are turned on automatically by the system and will remain in “Disabled” status until needed; these include the items labeled “Disabled” in the picture here.

IBM Software Group IBM

View output

Monitoring and Tuning

- Performance Monitoring Infrastructure (PMI)
- Request metrics
- Performance Viewer 1
- Current activity

Start Monitoring Stop Monitoring

Select	Name	Node
<input type="checkbox"/>	nodeagent	AIMCP023Noc
<input type="checkbox"/>	server1	AIMCP023Noc

Total 2 2

Refresh View Module(s)

- server1
 - Advisor
 - Settings
 - Summary Reports
 - Performance Modules
 - DCS Statistics
 - ExtensionRegistryStats.name
 - SipContainerModule
 - Dynamic Caching
 - JDBC Connection Pools
 - HAManager
 - JVM Runtime
 - Object Pool
 - ORB
 - Servlet Session Manager
 - Thread Pools
 - Transaction Manager
 - Web Applications
 - Workload Management
 - ITCAM Application Performance 3

Deselect All

ITCAM Application Performance

<input checked="" type="checkbox"/>	●	RequestCount ?
<input checked="" type="checkbox"/>	◆	AverageResponseTime ?
<input checked="" type="checkbox"/>	◆	LastMinuteAverageResponseTime ?
<input type="checkbox"/>		AverageCPUUsage ?
<input type="checkbox"/>		LastMinuteAverageCPUUsage ?

After starting ITCAM for WebSphere V7 and selecting counters, you can return to the Performance Viewer and find an ITCAM check box under performance modules as shown here. When you check that box, the system will display the ITCAM data collected. Note that ITCAM here actually refers to the ITCAM for WebSphere V7 subset in this case. The last minute category seen here refers to data collected over the last minute.

Section

Summary and reference

The next section presents a summary and a reference.

Summary

- ITCAM for WebSphere V7 requires a start every time an application server is restarted
- Provides additional counters for Tivoli Performance Viewer



ITCAM for WebSphere V7 is an enhancement to the Tivoli Performance Viewer found in the administrative console of WebSphere. ITCAM for WebSphere V7 is also a subset of the IBM Tivoli Composite Application Manager, which is a single focus point for a large IT center. ITCAM for WebSphere V7 is installed separately from WebSphere.

Feedback

Your feedback is valuable

You can help improve the quality of IBM Education Assistant content to better meet your needs by providing feedback.

- Did you find this module useful?
- Did it help you solve a problem or answer a question?
- Do you have suggestions for improvements?

Click to send e-mail feedback:

mailto:iea@us.ibm.com?subject=Feedback_about_WASv7_ITCAM_admin.ppt

This module is also available in PDF format at: ..WASv7_ITCAM_admin.pdf



You can help improve the quality of IBM Education Assistant content by providing feedback.

Trademarks, copyrights, and disclaimers

The following terms are trademarks or registered trademarks of International Business Machines Corporation in the United States, other countries, or both:

IBM Tivoli WebSphere

A current list of other IBM trademarks is available on the Web at <http://www.ibm.com/legal/copytrade.shtml>

Product data has been reviewed for accuracy as of the date of initial publication. Product data is subject to change without notice. This document could include technical inaccuracies or typographical errors. IBM may make improvements or changes in the products or programs described herein at any time without notice. Any statements regarding IBM's future direction and intent are subject to change or withdrawal without notice, and represent goals and objectives only. References in this document to IBM products, programs, or services does not imply that IBM intends to make such products, programs or services available in all countries in which IBM operates or does business. Any reference to an IBM Program Product in this document is not intended to state or imply that only that program product may be used. Any functionally equivalent program, that does not infringe IBM's intellectual property rights, may be used instead.

Information is provided "AS IS" without warranty of any kind. THE INFORMATION PROVIDED IN THIS DOCUMENT IS DISTRIBUTED "AS IS" WITHOUT ANY WARRANTY, EITHER EXPRESS OR IMPLIED. IBM EXPRESSLY DISCLAIMS ANY WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE OR NON-INFRINGEMENT. IBM shall have no responsibility to update this information. IBM products are warranted, if at all, according to the terms and conditions of the agreements (for example, IBM Customer Agreement, Statement of Limited Warranty, International Program License Agreement, etc.) under which they are provided. Information concerning non-IBM products was obtained from the suppliers of those products, their published announcements or other publicly available sources. IBM has not tested those products in connection with this publication and cannot confirm the accuracy of performance, compatibility or any other claims related to non-IBM products.

IBM makes no representations or warranties, express or implied, regarding non-IBM products and services.

The provision of the information contained herein is not intended to, and does not, grant any right or license under any IBM patents or copyrights. Inquiries regarding patent or copyright licenses should be made, in writing, to:

IBM Director of Licensing
IBM Corporation
North Castle Drive
Armonk, NY 10504-1785
U.S.A.

Performance is based on measurements and projections using standard IBM benchmarks in a controlled environment. All customer examples described are presented as illustrations of how those customers have used IBM products and the results they may have achieved. The actual throughput or performance that any user will experience will vary depending upon considerations such as the amount of multiprogramming in the user's job stream, the I/O configuration, the storage configuration, and the workload processed. Therefore, no assurance can be given that an individual user will achieve throughput or performance improvements equivalent to the ratios stated here.

© Copyright International Business Machines Corporation 2008. All rights reserved.

Note to U.S. Government Users - Documentation related to restricted rights-Use, duplication or disclosure is subject to restrictions set forth in GSA ADP Schedule Contract and IBM Corp.