

**HERMES SoftLab
Citrix Presentation Server
SMART Plug-In for
HP Operations Manager
(SPI for Citrix)**

*(This version, Version 03.20, is for use with
HP Operations Manager for Windows)*

User's Guide

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Notices

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Chapter 1

Document Overview

Edition History

New editions are complete revisions of the manual. The printing dates for each edition are listed below.

Edition	Date
First Edition	September 2006
Second Edition	April 2007
Third Edition	November 2007
Fourth Edition	August 2008
Fifth Edition	January 2009

Conventions

The following typographical conventions are used in this manual:

Font	Definition	Example
<i>Italic</i>	Product names, book or manual titles, man page names, and section, table, and figure titles. Emphasis. Window and dialog box names.	Refer to the <i>SPI for Citrix Installation and Configuration Guide</i> for additional information. You <i>must</i> follow these steps. In the <i>Node Bank</i> window, select a node.
Bold	Commands on menus and buttons, dialog box titles and options, menu and icon names.	In the menu, first click Actions , and then Agents .
Computer	File names, syntax, directory names, or text that should be entered on screen or that is displayed on the monitor.	The following file is located on the root directory of the SPI for Citrix installation CD: <code>ctxspi-readme-win.txt</code> .

Product Documentation

With SPI for Citrix, the following documentation is provided:

- *HERMES SoftLab Citrix Presentation Server SMART Plug-In for HP Operations Manager Installation and Configuration Guide*
Installation and Configuration Guide is available in printed and PDF format (*CTXSPI-InstallGuideWIN.pdf*).
- *HERMES SoftLab Citrix Presentation Server SMART Plug-In for HP Operations Manager User's Guide*
User's guide is available in printed and PDF format (*CTXSPI-UserGuideWIN.pdf*).
- *HERMES SoftLab Citrix Presentation Server SMART Plug-In for HP Operations Manager - Supported Citrix and HP Software Platforms*
Supported Platforms document is available in PDF format (*CTXSPI-Supported_Platforms.pdf*).
- Release notes
Release notes are available in TXT format (*ctxspi-release-notes-win.txt*).
- Readme
Readme file is available in TXT format (*ctxspi-readme-win.txt*).
- HERMES SoftLab license terms file
License file is available in TXT format (*hsl_license_terms.txt*)

Customer Support

Use the following e-mail and Web page addresses if you need help with the licensing process or while using the product, and if you would like additional information about this or other HERMES SoftLab products.

Licensing

To obtain the license activation file you can visit HERMES SoftLab licensing portal:

<http://spi.hermes-softlab.com/licensing/>

or send an e-mail to the following address:

spi-licensing@hermes-softlab.com

For more information on licensing and licensing procedure refer to *HERMES SoftLab Citrix Presentation Server SMART Plug-In for HP Operations Manager Installation and Configuration Guide*.

If you encounter any problems with the licensing process, contact the HERMES SoftLab licensing department at:

spi-licensing@hermes-softlab.com

Contacting Support

IMPORTANT

Should you require additional assistance or information while using the product, contact the vendor that shipped the software.

If you have purchased the software directly from HERMES SoftLab, send e-mail to:

support-ctxspi@hermes-softlab.com

Before Contacting Support

Before you contact the support department, have the following information available so that a technical support analyst can work on your problem more efficiently:

- the support file `ctxspi_supp_<node_name>.zip`
To create the support file `ctxspi_supp_<node_name>.zip`, run the **Collect Support Information** tool on one or more nodes and then manually zip

%OvAgentDir%\ctxspi directory hierarchy on nodes. To run the tool, perform the following step:

1. Go to SPI for Citrix/CTXSPI-SPI Maintenance/CTXSPI-SPI Support tool group and run the **CTXSPI-Collect Support Information** tool on the managed nodes for which you would like to collect the information. The files with the support information are created in the following directory on the node(s):

%OvAgentDir%\ctxspi

2. Manually zip the contents of the above directory hierarchy into the ctxspi_supp_<node_name>.zip file, where <node_name> is the name of the managed node.

- symptoms
- sequence of events leading to the problem
- commands and options that you used
- messages you have received (a description with the time and date)

General Information

For marketing or business-related issues in reference to this or other HERMES SoftLab SPIs, send e-mail to:

spi-info@hermes-softlab.com

Product Web Sites

Visit HERMES SoftLab SMART Plug-In Web site at:

http://www.hermes-softlab.com/products/SPI/about_SPI.html

and the company Web site at:

<http://www.hermes-softlab.com/>

Chapters Summary

This guide describes how to use HERMES SoftLab Citrix Presentation Server SMART Plug-In for HP Operations Manager to monitor and manage Citrix Presentation Server resources from the HP Software environment. It also addresses and troubleshoots some of the possible problems, which may occur while using this product.

NOTE

This document assumes that you are familiar with the HP Operations Manager administration procedures and concepts.

The guide contains the following chapters:

- [“Getting Started” on page 9](#)
This chapter contains the basic information on Citrix environment, and an overview of SPI for Citrix functionality.
- [“Setting Up the Environment” on page 17](#)
This chapter provides procedural instructions for the elementary tasks of setting up and using SPI for Citrix.
- [“Managing Citrix Presentation Servers” on page 27](#)
This chapter provides the instructions for monitoring and managing Citrix Presentation Server environment.
- [“Managing Citrix License Servers” on page 81](#)
This chapter provides the instructions for monitoring and managing Citrix License Servers.
- [“Managing Citrix Web Interface Servers” on page 93](#)
This chapter provides the instructions for monitoring and managing Citrix Web Interface Servers.
- [“Managing Citrix Secure Gateway Servers” on page 111](#)
This chapter provides the instructions for monitoring and managing Citrix Secure Gateway Servers.
- [“Maintaining SPI for Citrix” on page 125](#)
This chapter provides the instructions for SPI for Citrix maintenance and administration.

- [“Quick Reference” on page 135](#)
This chapter contains reference information for SPI for Citrix components.
- [“Troubleshooting” on page 247](#)
This chapter includes known problems that can occur when using SPI for Citrix, and procedures for their resolution or workaround.
- Appendix A, [“File Locations” on page 249](#)
This chapter contains a list of SPI for Citrix files and their locations on the HPOM management server and on managed nodes.
- Appendix B, [“Performance Data” on page 255](#)
This chapter contains a list of performance data that is collected by SPI for Citrix.

Chapter 2

Getting Started

About Citrix Presentation Server

Citrix products focus on IT access challenges and offer a service-oriented approach to providing access on demand. Citrix deals with application and desktop virtualization, Web application optimization, Web application security, SSL VPN gateways, on-demand assistance, online collaboration and IP telephony markets.

Citrix product suite includes:

- Citrix Presentation Server
Central management of applications and delivering application functionality
- Citrix Access Gateway
SSL VPN to securely deliver any application with policy-based SmartAccess control
- Citrix Password Manager
Single sign-in access to applications running in Citrix environment
- Citrix Conferencing Manager
Real-time application sharing and conferencing

Typical Enterprise Setup of Citrix Environment

Typical enterprise setup of Citrix environment consists of the following infrastructure elements:

- Citrix Presentation Server Farm
- Application Servers
- ICA Clients (access from LAN, wireless network, and internet)

Citrix Presentation Server Farm is grouping of servers into a centralized administrative unit and combines one or more zone (Presentation Servers and Data Collector), License Server, and Data Store.

- **Zone** is a grouping of servers that share a common Data Collector. Servers run end-user applications within their own protected memory space, while Data Collector maintains dynamic information about servers, published applications, server load, and user sessions in a zone.
- **License Server** stores information about server and client licenses.
- **Data Store** is a central repository for information about farm configuration, published applications, servers, printers, licenses, and Citrix administrators.

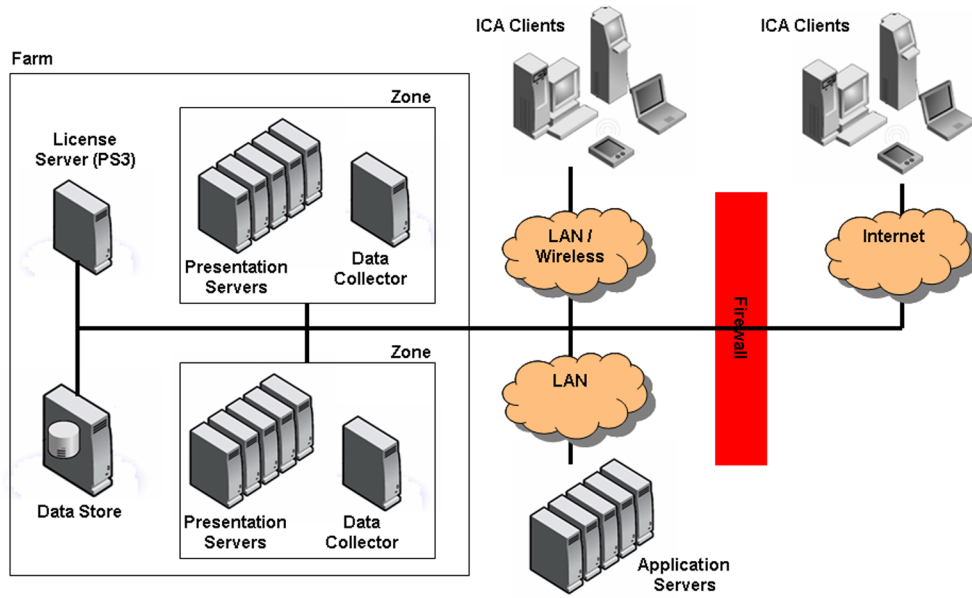


Figure 1. Typical Enterprise Setup

About SPI for Citrix

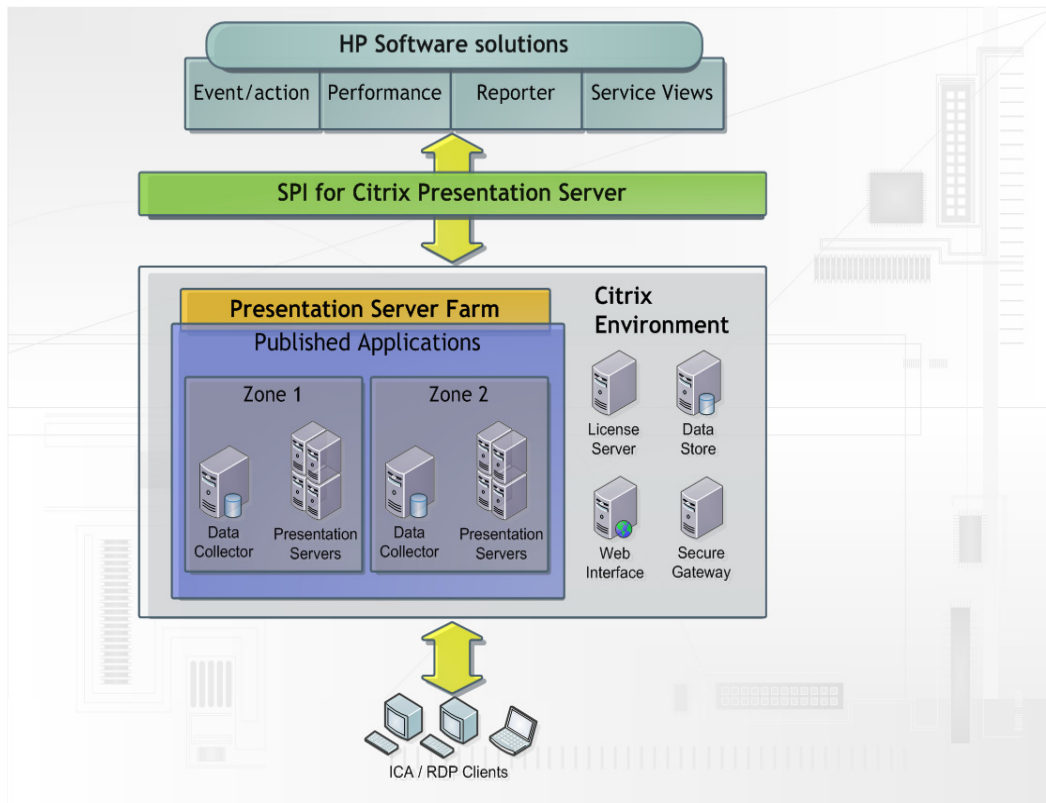
HERMES SoftLab Citrix Presentation Server SMART Plug-In for HP Operations Manager (SPI for Citrix) is designed specifically for use with Citrix products in HP Software environments. SPI for Citrix in combination with HP Operations Manager provides the first power-user grade management solution. It enables you to monitor and manage the Citrix environment using graphical representations of environment architecture, and service oriented representations of hierarchical dependencies and business impact of Citrix components, their failures, or performance degradations.

With SPI for Citrix you can proactively and securely manage a distributed Citrix environment from one, centralized point. Additional benefits include the following:

- Non-stop availability – Alerts and alarms measuring availability and performance are displayed, logged, and can be linked to automatic email/paging alerting or automatic counteraction such as rebooting or disabling.
- Latency – Source of this significant user experience problem can be confirmed and isolated to specific components. Trending reports enable proactive solutions before users are impacted. No user/client side agents are required.
- Scalability – SPI for Citrix integrates with the HP Software family, which for large corporate environments. Autodiscovery, Top 10 reports, and Mass Commands all simplify manageability as the Citrix environment increases.
- End-to-end – Citrix management within the HP Software environment covers back-end applications, network equipment, as well as full OS and hardware management. Databases, routers, SAP Applications and Citrix Servers are all examples in the chain of service level delivery for an ERP system. The HP Software family of solutions automatically integrates the individual point solutions for each link into a full end-to-end managed service.

High-Level Architecture

Below is the high-level diagram of SPI for Citrix architecture.



Quick Introduction to SPI for Citrix

The main components of SPI for Citrix include the following:

- HP Operations Manager/Windows Policies
- HP Operations Manager/Windows Tools
- HP Operations Manager/Windows Reports
- HP Operations Manager/Windows Graphs
- HP Operations Manager/Windows Service Map

Although these components are discussed in detail in the chapters that follow, a brief description of each is listed below.

Policies

Policies instruct HP Operations Manager for UNIX engines how to solve system management issues, for example, “Monitor CPU Utilization”.

SPI for Citrix policies enable you to define complex rules and instructions for monitoring different systems and services. Policies are instructions for HP Operations Manager (HPOM) agents that monitor your Citrix environment. When an issue is detected, a message is sent to the HP Operations Manager (HPOM) console.

In addition, you can define automated actions to be performed upon detecting a specific issue, or include instructions for operators as part of the message. Every policy can start automatic or operator initiated action when issue is detected. You can check which actions were launched when issue was detected, and check the action outcome in the message annotation.

Tools

SPI for Citrix supplies powerful tools for monitoring and managing your Citrix environment. SPI for Citrix tools enable you to inspect, analyze and manage your Citrix environment, check the current status of the environment, and react to issues in your environment.

SPI for Citrix tools enable you to perform the following tasks:

- manage Citrix sessions
- manage Citrix services

- monitor sessions, services, applications, and all components of your Citrix environment
- perform discovery of your Citrix environment and update the Citrix service model
- troubleshoot the SPI for Citrix installation and configuration
- license SPI for Citrix
- manage Citrix nodes

Reports

SPI for Citrix also offers reporting functionality, where collected performance data can be represented in web-based reports. SPI for Citrix integrates with the HP Operations Manager for Windows reporting component (Reporter Lite) and with the HP Reporter products. You can generate reports on the following information:

- How much CPU time, physical, and virtual memory Citrix services consume on each Citrix server
- Citrix published application use on farm and server level
- Logon/logoff activity on farm and server level
- Detailed user activity (list of sessions, duration of each session, CPU, memory, and swap usage of each session)
- User and published application accounting information useful for billing purposes
- Top 10 reports on published application resource consumption and server end-user latency
- Threshold assistant reports that help you adjust monitoring templates to your Citrix environment

Graphs

SPI for Citrix also offers graphing functionality, where collected performance data can be represented in near real-time graphs. SPI for Citrix integrates with the HP Operations Manager for Windows graphing component (Performance Manager Lite) and with the HP Performance Manager products. You can generate graphs on the following information:

- Citrix Presentation Server user / session activity
- Citrix License Server use

- Citrix Web Interface user logon activity
- Citrix Secure Gateway user activity

Service Map

Service map is a component of the HP Operations Manager for Windows. This component enables you to manage your IT (information technology) environment while focusing on the IT services that you provide.

SPI for Citrix integrates into the HP Operations Manager for Windows service map component. It automatically generates a Citrix service map of the Citrix enterprise configuration, which offers complete graphical representation of your Citrix environment and its hierarchical organization. All Citrix object types (farms, zones, servers, clients) in your environment are displayed in a tree view, which shows the components and their hierarchical dependencies.

In addition, graphical representation of your Citrix environment clearly indicates relations between Citrix environment components, how they impact one another, and which business services are affected. This enables you to effectively manage services within your information technology framework.

Chapter 3

Setting Up the Environment

Setting Up the Citrix Environment

SPI for Citrix enables you to monitor and manage your Citrix environment from one, centralized point. For this purpose, Citrix Presentation Servers are added as managed nodes on the HPOM management server.

Setting up your Citrix environment involves installing, licensing, and configuring SPI for Citrix on the HPOM management server and on the managed nodes. For more information on how to install, license and configure managed nodes refer to *SPI for Citrix Installation and Configuration Guide*.

When you successfully configured your environment, you can start using the SPI for Citrix product. For procedural information on how to:

- perform autodiscovery of Citrix components and update your configuration, refer to [“Autodiscovery of the Citrix Environment” on page 19](#)
- launch SPI for Citrix tools on managed nodes, refer to [“Launching Tools” on page 22](#)
- deploy SPI for Citrix policies on managed nodes, refer to [“Deploying Policies” on page 23](#)
- configure SPI for Citrix reporting functionality, refer to [“Configuring Reports” on page 24](#)

Autodiscovery of the Citrix Environment

SPI for Citrix offers autodiscovery of Citrix farms, zones, servers, and published applications, as well as dependencies between them in a farm. SPI for Citrix also monitors any Citrix configuration changes, and allows you to update your service map once a day (this can be configured) if changes occur.

For the autodiscovery feature SPI for Citrix uses HP Operations Manager for Windows service map component. Service map consists of two parts:

- Citrix farms
covers Citrix Presentation Server servers and published applications
- Citrix infrastructure
covers Web interface, Citrix License Server, and Secure Gateway servers

Generating Service Map for a Citrix Farm

To generate SPI for Citrix service map for a Citrix farm, perform the following steps:

1. Login to your Windows machine where the HP Operations Manager for Windows console is installed as the user administrator (opcadm).
2. Select **Policy Management** and **Policy Groups**. Then, select **SPI for Citrix**.
3. Depending on the type of the node (Citrix Presentation Server 4.5, 4.0, 3.0, or 1.0), select one of the following policy groups:
 - CTXSPI-Presentation Server 4.5 / CTXSPI-PS45 Discovery
 - CTXSPI-Presentation Server 4.0 / CTXSPI-PS4 Discovery
 - CTXSPI-Presentation Server 3.0 / CTXSPI-PS3 Discovery
 - CTXSPI-Presentation Server 1.0 / CTXSPI-PS1 Discovery
4. In the right window pane, select and right-click **CTXSPI-ChkServiceModel** and **CTXSPI-DscServiceModel2** policies.
5. In the menu select **All Tasks** and then **Deploy on**. The *Deploy Policies on* window opens.
6. Select the node(s) on which you want to execute autodiscovery. Typically, one node per farm is sufficient for this purpose. When you make your selections, click **OK** and wait for deployment to finish.
7. Select **Tools**, then select **SPI for Citrix**.
8. Select the tool **CTXSPI-Presentation Server / CTXSPI-PS Discovery**.

9. Launch the tool **CTXSPI-Force Service Model Update** against the server and after a while (depending on the size of your farm) the farm should appear in the service map under *Services / Applications / SPI for Citrix / Farms:Container*.

Generating Service Map for a Citrix Infrastructure Server

To generate SPI for Citrix service map for a Citrix infrastructure server, which includes Web Interface, Secure Gateway, and Citrix License Server, perform the following steps:

1. Login to your Windows machine where the HP Operations Manager for Windows console is installed as the user administrator (opcadm).
2. Select **Policy management** and **Policy groups**. Then, select **SPI for Citrix**.
3. Depending on the type of the node and product version, select one of the following policy groups:

For a Citrix Web Interface server:

- CTXSPI-Web Interface 4.x / CTXSPI-WI4 Discovery
- CTXSPI-Web Interface 3.0 / CTXSPI-WI3 Discovery

For a Citrix Secure Gateway server:

- CTXSPI-Secure Gateway 3.0 / CTXSPI-SG3 Discovery
- CTXSPI-Secure Gateway 2.0 / CTXSPI-SG2 Discovery

For a Citrix License server:

- CTXSPI-Citrix License Server 4.5 / CTXSPI-CLS45 Discovery
- CTXSPI-Citrix License Server 2.0 / CTXSPI-CLS2 Discovery
- CTXSPI-Citrix License Server 1.0 / CTXSPI-CLS1 Discovery

4. In the right window pane, select and right-click the **CTXSPI-ChkServiceModel** and **CTXSPI-DscServiceModel2** policies.
5. In the menu select **All Tasks** and then **Deploy on**. The *Deploy policies on* window opens.
6. Select the node(s) on which you want to execute autodiscovery on. When you make your selections, click **OK** and wait for deployment to finish.
7. Select **Tools**, then select **SPI for Citrix**.
8. Depending on the type of the node and product version, select one of the following tool groups:

For a Citrix Web Interface server:

- CTXSPI-Web Interface / CTXSPI-WI Discovery

For a Citrix Secure Gateway server:

- CTXSPI-Secure Gateway / CTXSPI-SG Discovery

For a Citrix License server:

- CTXSPI-Citrix License Server / CTXSPI-CLS Discovery

9. Launch the tool **CTXSPI-Force Service Model Update** against the server. The server is displayed in the service map:

For a Citrix Web Interface server:

- *Services / Applications / SPI for Citrix / Infrastructure / Citrix Web Interface:Container*

For a Citrix Secure Gateway server:

- *Services / Applications / SPI for Citrix / Infrastructure / Citrix Secure Gateway Servers:Container*

For a Citrix License server:

- *Services / Applications / SPI for Citrix / Infrastructure / Citrix License Servers:Container*

Launching Tools

SPI for Citrix implements many HP Operations Manager for Windows tools. To start a selected tool on a selected node, perform the following steps:

1. Right-click the tool under **Tools/SPI for Citrix** tool group hierarchy.
2. From the context menu, select **All Tasks -> Launch Tool...** menu item.
3. A *Select where to launch this tool* window opens. In the *Select Nodes/Services* tree, select nodes/node groups where you want to launch this tool, and click on the **Launch...** button.
4. Depending on the tool, an optional *Edit parameters* window will open. Under the *Parameters*, enter parameter values, and click on the **Launch...** button.
5. A *Tool Status* window will open, showing the status of the tool execution and optional tool output.

Deploying Policies

Policies instruct HP Operations Manager engines how to solve system management issues, for example, “Monitor CPU Utilization”. Additionally, when a specific system event occurs, policies can generate HP Operations Manager messages. These messages then trigger automatic or operator-initiated actions.

Follow the steps in this section to distribute policies to nodes. Note that the Administrator should also customize the thresholds within the policies.

1. Right-click the policy or policy group under **Policy management/Policy groups/SPI for Citrix** policy group hierarchy.
2. From the context menu, select **All Tasks -> Deploy on...** menu item.
3. A *Deploy policies on...* window opens. In the *Managed nodes* tree, select nodes or node groups where you want to deploy policy or policy group, and click on the **OK** button.

NOTE

SPI for Citrix policies are logically grouped together under the SPI for Citrix policy group. For example, you can deploy policies in the Quick Start group to get started quickly with SPI for Citrix. For additional information on policies grouped by common usage, refer to [Chapter 9, “Quick Reference”](#).

Removing Policies

To remove the SPI for Citrix policies from a managed node, perform the following steps:

1. Right-click the node under **Nodes** node group hierarchy.
2. From the context menu, select **View -> Policy inventory** menu item.
3. In the right pane, select policies that you want to remove from the node.
4. Right-click the policy selection.
5. From the context menu, select **All Tasks -> Remove from node** menu item.

Configuring Reports

SPI for Citrix reports integrate with HP Operations Manager for Windows and HP Reporter products. SPI for Citrix integration with HP Reporter requires that the following actions have occurred prior to the installation of reports on a system:

- The HP Reporter is installed and the Reporter Service is running.
- An HPOM agent is installed on the Managed Nodes for which you want to generate reports.

Assigning Policies and Collecting Performance Data

To produce reports, performance data collection policies must be deployed to Citrix managed nodes. Policies related to collecting performance data are grouped together as follows:

- reports for Citrix Presentation Server
 - Citrix Presentation Server 4.5 data collection policies are located in *SPI for Citrix / CTXSPI-Presentation Server 4.5 / CTXSPI-PS45 Data Collection* policy group
 - Citrix Presentation Server 4.0 data collection policies are located in *SPI for Citrix / CTXSPI-Presentation Server 4.0 / CTXSPI-PS4 Data Collection* policy group
 - Citrix Presentation Server 3.0 data collection policies are located in *SPI for Citrix / CTXSPI-Presentation Server 3.0 / CTXSPI-PS3 Data Collection* policy group
 - Citrix Presentation Server 1.0 data collection policies are located in *SPI for Citrix / CTXSPI-Presentation Server 1.0 / CTXSPI-PS1 Data Collection* policy group
- reports for Citrix License Server
 - Citrix License Server 4.5 data collection policies are located in *SPI for Citrix / CTXSPI-Citrix License Server 4.5 / CTXSPI-CLS45 Data Collection* policy group
 - Citrix License Server 2.0 data collection policies are located in *SPI for Citrix / CTXSPI-Citrix License Server 2.0 / CTXSPI-CLS2 Data Collection* policy group
 - Citrix License Server 1.0 data collection policies are located in *SPI for Citrix / CTXSPI-Citrix License Server 1.0 / CTXSPI-CLS1 Data Collection* policy group
- reports for Citrix Secure Gateway system
 - Citrix Secure Gateway 3.0 data collection policies are located in *SPI for Citrix / CTXSPI-Secure Gateway 3.0 / CTXSPI-SG3 Data Collection* policy group
 - Citrix Secure Gateway 2.0 data collection policies are located in *SPI for Citrix / CTXSPI-Secure Gateway 2.0 / CTXSPI-SG2 Data Collection* policy group

- reports for Citrix Web Interface system
 - Citrix Web Interface 4.x data collection policies are located in *SPI for Citrix / CTXSPI-Web Interface 4.x / CTXSPI-WI4 Data Collection* policy group
 - Citrix Web Interface 3.0 data collection policies are located in *SPI for Citrix / CTXSPI-Web Interface 3.0 / CTXSPI-WI3 Data Collection* policy group

After the policies are successfully distributed to managed nodes, the Embedded Performance Agent (CODA agent) begins to collect performance data. Reports will be generated for all Citrix systems where CODA agents are collecting data.

Chapter 4

Managing Citrix Presentation Servers

About Managing Citrix Presentation Server Environment

This chapter contains information for setting up management of Citrix Presentation Server environment. It provides information on policies and tools, needed to monitor and manage Citrix services, sessions, and each component in Citrix Presentation Server environment. It also describes how you can employ these policies and tools to get maximum results.

Managing Citrix Presentation Server environment involves the following:

- [“Managing Citrix Presentation Server Services” on page 29](#)
- [“Managing Citrix Presentation Server Sessions” on page 39](#)
- [“Managing Citrix Presentation Server Servers” on page 51](#)
- [“Managing Citrix Presentation Server Zones” on page 57](#)
- [“Managing Citrix Presentation Server Farms” on page 60](#)
- [“Managing Presentation Server User Logon Process” on page 63](#)
- [“Managing Windows User Profiles” on page 68](#)
- [“Managing Citrix Farm Service Map” on page 74](#)
- [“Collecting Presentation Server Performance Information” on page 77](#)

Managing Citrix Presentation Server Services

Managing Citrix Presentation Server services involves monitoring and handling the following software items:

- Citrix Presentation Server, Terminal Server, and related Windows OS services
- System and Application event-log messages related to the above services

Overview

This section contains the following information:

- notes on deploying the SPI for Citrix on Citrix Presentation Server nodes (refer to [“Setting Up Citrix Presentation Server Services Management”](#) on page 29)
- which policies are needed for monitoring Citrix Presentation Server services (refer to [“Policies”](#) on page 30)
- which tools are needed for managing Citrix Presentation Server services (refer to [“Tools”](#) on page 31)

Setting Up Citrix Presentation Server Services Management

To monitor and manage Citrix Presentation Server services, deploy the policies to all managed nodes. Based on the Citrix Presentation Server version, use the following policy groups:

- **on Citrix Presentation Server 4.5**
deploy the *CTXSPI-PS45 Quick Start/CTXSPI-PS45 Services* policy group
- **on Citrix Presentation Server 4.0**
deploy the *CTXSPI-PS4 Quick Start/CTXSPI-PS4 Services* policy group
- **on Citrix Presentation Server 3.0**
deploy the *CTXSPI-PS3 Quick Start/CTXSPI-PS3 Services* policy group
- **on Citrix Presentation Server 1.0**
deploy the *CTXSPI-PS1 Quick Start/CTXSPI-PS1 Services* policy group

Before you deploy the policies, verify that SPI for Citrix is fully configured and licensed on all Citrix Presentation Server managed nodes. For this purpose, you can use the **CTXSPI-Check Requirements/Configuration** tool.

If you are not sure which version of the Presentation Server product you have installed on managed nodes, execute the tool **CTXSPI-Display Citrix Node Type Version** against those nodes.

NOTE

For instructions on how to work with SPI for Citrix tools, policies, and reports, refer to [Chapter 3, “Setting Up the Environment”](#).

Policies

To set up management of the Citrix Presentation Server services, deploy the policies in the following policy groups:

CTXSPI-Presentation Server 4.5 / CTXSPI-PS4 Quick Start / CTXSPI-PS45 Services

- . CTXSPI-ChkCitrixPSServices
- . CTXSPI-ChkOsAndTSServices
- . CTXSPI-ChkIMAServiceAdvanced
- . CTXSPI-FwdCitrixPSAppWarnError
- . CTXSPI-FwdCitrixPSSysWarnError
- . CTXSPI-FwdCitrixRuntimeError
- . CTXSPI-FwdOsAndTSAppWarnError
- . CTXSPI-FwdOsAndTSSysWarnError

CTXSPI-Presentation Server 4.0 / CTXSPI-PS4 Quick Start / CTXSPI-PS4 Services

- . CTXSPI-ChkCitrixPSServices
- . CTXSPI-ChkOsAndTSServices
- . CTXSPI-ChkIMAServiceAdvanced
- . CTXSPI-FwdCitrixPSAppWarnError
- . CTXSPI-FwdCitrixPSSysWarnError
- . CTXSPI-FwdCitrixRuntimeError
- . CTXSPI-FwdOsAndTSAppWarnError
- . CTXSPI-FwdOsAndTSSysWarnError

CTXSPI-Presentation Server 3.0 / CTXSPI-PS3 Quick Start / CTXSPI-PS3 Services

- . CTXSPI-ChkCitrixPSServices
- . CTXSPI-ChkOsAndTSServices
- . CTXSPI-ChkIMAServiceAdvanced
- . CTXSPI-FwdCitrixPSAppWarnError
- . CTXSPI-FwdCitrixPSSysWarnError
- . CTXSPI-FwdCitrixRuntimeError
- . CTXSPI-FwdOsAndTSAppWarnError
- . CTXSPI-FwdOsAndTSSysWarnError

CTXSPI-Presentation Server 1.0 / CTXSPI-PS1 Quick Start / CTXSPI-PS1 Services

- . CTXSPI-ChkCitrixPSServices
- . CTXSPI-ChkOsAndTSServices
- . CTXSPI-ChkIMAServiceAdvanced
- . CTXSPI-FwdCitrixPSAppWarnError
- . CTXSPI-FwdCitrixPSSysWarnError
- . CTXSPI-FwdCitrixRuntimeError
- . CTXSPI-FwdOsAndTSAppWarnError
- . CTXSPI-FwdOsAndTSSysWarnError

CTXSPI-Presentation Server 4.5 / CTXSPI-PS45 Additional

- . CTXSPI-FwdCitrixPSAppInfo
- . CTXSPI-FwdCitrixPSSysInfo
- . CTXSPI-FwdOsAndTSAppInfo
- . CTXSPI-FwdOsAndTSSysInfo

CTXSPI-Presentation Server 4.0 / CTXSPI-PS4 Additional

- . CTXSPI-FwdCitrixPSAppInfo
- . CTXSPI-FwdCitrixPSSysInfo
- . CTXSPI-FwdOsAndTSAppInfo
- . CTXSPI-FwdOsAndTSSysInfo

CTXSPI-Presentation Server 3.0 / CTXSPI-PS3 Additional

- . CTXSPI-FwdCitrixPSAppInfo
- . CTXSPI-FwdCitrixPSSysInfo
- . CTXSPI-FwdOsAndTSAppInfo
- . CTXSPI-FwdOsAndTSSysInfo

CTXSPI-Presentation Server 1.0 / CTXSPI-PS1 Additional

- . CTXSPI-FwdCitrixPSAppInfo
- . CTXSPI-FwdCitrixPSSysInfo
- . CTXSPI-FwdOsAndTSAppInfo
- . CTXSPI-FwdOsAndTSSysInfo

Tools

To manage the Citrix Presentation Server services, SPI for Citrix provides the tools in the following tool group:

CTXSPI-Presentation Server / CTXSPI-PS Services

- . CTXSPI-Start Netlogon Service
- . CTXSPI-Start Citrix Print Manager Service

- . CTXSPI-Start Terminal Services Service
- . CTXSPI-Start Spooler Service
- . CTXSPI-Start Citrix XTE Server Service
- . CTXSPI-Start Client Network Service
- . CTXSPI-Start Citrix SMA Service
- . CTXSPI-Start Citrix 64-bit Virtual Memory Optimization Service
- . CTXSPI-Start SSL Server Relay Service
- . CTXSPI-Start IMA Service
- . CTXSPI-Start ADF Installer Service
- . CTXSPI-Start Citrix Virtual Memory Optimization Service
- . CTXSPI-Start Diagnostic Facility COM Server Service
- . CTXSPI-Start Terminal Services Session Directory Service
- . CTXSPI-Start Citrix WMI Service
- . CTXSPI-Start MetaFrame COM Server Service
- . CTXSPI-Start Encryption Service
- . CTXSPI-Start Resource Manager Mail Service
- . CTXSPI-Start Citrix CPU Utilization Mgmt/Resource Mgmt Service
- . CTXSPI-Start Citrix CPU Utilization Mgmt/User-Session Sync Service
- . CTXSPI-Start Citrix XML Service
- . CTXSPI-Start Citrix Health Monitoring and Recovery Service
- . CTXSPI-Start Citrix Streaming Service
- . CTXSPI-Start Encryption Service 4.5
- . CTXSPI-Start Citrix Services Manager Service
- . CTXSPI-Stop Netlogon Service
- . CTXSPI-Stop Citrix Print Manager Service
- . CTXSPI-Stop Terminal Services Service
- . CTXSPI-Stop Spooler Service
- . CTXSPI-Stop Citrix XTE Server Service
- . CTXSPI-Stop Client Network Service
- . CTXSPI-Stop Citrix SMA Service
- . CTXSPI-Stop Citrix 64-bit Virtual Memory Optimization Service
- . CTXSPI-Stop SSL Server Relay Service
- . CTXSPI-Stop IMA Service
- . CTXSPI-Stop ADF Installer Service
- . CTXSPI-Stop Citrix Virtual Memory Optimization Service
- . CTXSPI-Stop Diagnostic Facility COM Server Service

- . CTXSPI-Stop Terminal Services Session Directory Service
- . CTXSPI-Stop Citrix WMI Service
- . CTXSPI-Stop MetaFrame COM Server Service
- . CTXSPI-Stop Encryption Service
- . CTXSPI-Stop Resource Manager Mail Service
- . CTXSPI-Stop Citrix CPU Utilization Mgmt/Resource Mgmt Service
- . CTXSPI-Stop Citrix CPU Utilization Mgmt/User-Session Sync Service
- . CTXSPI-Stop Citrix XML Service
- . CTXSPI-Stop Citrix Health Monitoring and Recovery Service
- . CTXSPI-Stop Citrix Streaming Service
- . CTXSPI-Stop Encryption Service 4.5
- . CTXSPI-Stop Citrix Services Manager Service
- . CTXSPI-Status OS and Terminal Server Services
- . CTXSPI-Status Presentation Server Services

How It Works

Service Monitoring Policies

Citrix Presentation Server product employs several Windows services. Not all of them are required for correct operation of the Citrix Presentation Server, a few optional services can be turned on only when you want to use a specific Citrix Presentation Server capability.

Citrix Presentation Server services have been changing with the different versions of the product. Some have been removed, and new ones have been added. The table below shows all Citrix Presentation Server services and product versions those services were part of:

Service Name	PS 4.5	PS 4.0	PS 3.0	PS 1.0
ADF Installer Service	yes	yes	yes	yes
Citrix CPU Utilization Mgmt/Resource Mgmt	yes	yes		
Citrix CPU Utilization Mgmt/User-Session Sync	yes	yes		
Citrix Print Manager Service	yes	yes		
Citrix SMA Service	yes	yes		
Citrix SSL Relay (as of PS3, this service has become part of Citrix XTE Server service)				yes

Service Name	PS 4.5	PS 4.0	PS 3.0	PS 1.0
Citrix Virtual Memory Optimization (Citrix 64-bit Virtual Memory Optimization)	yes	yes		
Citrix WMI Service	yes	yes	yes	yes
Citrix XML Service	yes	yes	yes	yes
Citrix XTE Server	yes	yes	yes	
Client Network	yes	yes	yes	yes
Diagnostic Facility COM Server	yes	yes	yes	
Encryption Service	yes	yes	yes	yes
Independent Management Architecture	yes	yes	yes	yes
MetaFrame COM Server	yes	yes	yes	yes
Resource Manager Mail	yes	yes	yes	yes
Citrix Streaming Service	yes			
Citrix Health Monitoring and Recovery	yes			
Citrix Services Manager	yes			

As Citrix Presentation Server heavily depends on the Terminal Server component of Windows OS, it is important to also monitor the Terminal Server-related services. For correct Citrix Presentation Server operation two other components of Windows OS need to run, the Netlogon and Print Spooler services.

The table below lists Windows OS services that are important from the Citrix Presentation Server perspective:

Service Name	Windows 2003	Windows 2000
Net Logon	yes	yes
Print Spooler	yes	yes
Terminal Services	yes	yes
Terminal Services Session Directory	yes	

The following policies implement Presentation Server and Terminal Server / Windows OS service monitoring:

- CTXSPI-ChkCitrixPSServices
Monitors the state of all required and optional Citrix Presentation Server services.
- CTXSPI-ChkOSAndTSServices

Monitors the state of all important Terminal Server and Windows OS services.

- **CTXSPI-ChkIMAServicAdvanced**
Actively probes the Independent Management Architecture (IMA) service to see whether the service is operational. This is the most important Presentation Server service, and this additional probing ensures that status of service health is known.

Windows Event Log Forwarding Policies

Citrix Presentation Server product logs the internal issues it detects to the Windows Event Log. To early detect issues that may be developing, it is essential to monitor both Application and System Windows Event Logs. The following Presentation Server Application event log sources are being monitored:

Application Event Log Source Name	PS 4.5	PS 4.0	PS 3.0	PS 1.0
Citrix 64-bit Virtual Memory Optimization	yes	yes		
Citrix Configuration Logging	yes			
Citrix Resource Management	yes			
Citrix Virtual Memory Optimization	yes	yes		
Citrix WMI Service	yes	yes	yes	yes
CitrixHealthMon	yes			
CLTMGR		yes	yes	yes
CTXCPUUtilMgmt	yes	yes		
CtxSbxAppMsg	yes	yes		
InstallationManager	yes	yes	yes	yes
RADE Licensing	yes			
RADEEvents	yes			
MetaframeEvents	yes	yes	yes	yes
Reliability Server	yes	yes	yes	
twpopup	yes	yes	yes	yes
wsxica	yes	yes	yes	yes
DSCheck			yes	yes
Citrix SSL Relay				yes
MFSNMPAgent		yes	yes	yes

The following Presentation Server system event log sources are being monitored:

System Event Log Source Name	PS 4.5	PS 4.0	PS 3.0	PS 1.0
Cdm	yes	yes	yes	yes
Citrix Resource Management		yes	yes	yes
CPSLicensing	yes			
CtxSbx	yes	yes		
ICABrowser		yes	yes	yes
IMABrowserSS	yes	yes	yes	yes
IMAService	yes	yes	yes	yes
MetaFrame	yes	yes	yes	yes

As Presentation Server heavily depends on the Terminal Server component of Windows OS, it is important to also monitor the Terminal Server Event Log messages. For correct Citrix Presentation Server operation two other components of Windows OS need to run, the Netlogon and Print Spooler services.

The table below lists Terminal Server and Windows OS Application and System event log sources that are being monitored:

Application Event Log Source Name	Windows 2003	Windows 2000
SpoolerCtrs	yes	yes
TermDD	yes	yes
TermServDevices	yes	yes
TermService		yes
TermServJet		yes
TermServSessDir	yes	yes
Netlogon	yes	yes
Print	yes	yes

Additionally, SPI for Citrix monitors for any Visual C++ Runtime Library errors that may occur in any Citrix service. These errors manifest as application popups that are logged to the Windows Event Log. IMA service is particularly subject to these errors.

System Event Log Source Name	PS 4.5	PS 4.0	PS 3.0	PS 1.0
Application Popup	yes	yes	yes	yes

The following policies implement Event Log forwarding:

- `CTXSPI-FwdCitrixPSAppWarnError`
Forwards Citrix Presentation Server-related Warning and Error messages from the Windows Application event log.
- `CTXSPI-FwdCitrixPSSysWarnError`
Forwards Citrix Presentation Server-related Warning and Error messages from the Windows System event log.
- `CTXSPI-FwdOsAndTSAppWarnError`
Forwards Terminal Server and OS-related Warning and Error messages from the Windows Application event log.
- `CTXSPI-FwdOsAndTSSysWarnError`
Forwards Terminal Server and OS-related Warning and Error messages from the Windows System event log.
- `CTXSPI-FwdCitrixPSAppInfo`
Forwards Citrix Presentation Server-related Informational messages from the Windows Application event log.
- `CTXSPI-FwdCitrixPSSysInfo`
Forwards Citrix Presentation Server-related Informational messages from the Windows System event log.
- `CTXSPI-FwdOsAndTSAppInfo`
Forwards Terminal Server and OS-related Informational messages from the Windows Application event log.
- `CTXSPI-FwdOsAndTSSysInfo`
Forwards Terminal Server and OS-related Informational messages from the Windows System event log.
- `CTXSPI-FwdCitrixRuntimeError`
Forwards runtime errors of Citrix services.

Interacting with Services

A number of tools allow interacting with Presentation Server and Terminal Server / Windows OS services. These are located in the *CTXSPI-Presentation Server / CTXSPI-PS Services* tool group. They enable you to start, stop, and check the status of relevant services:

- `CTXSPI-Start <service name> Service`
Starts the <service name> service on the managed node.
- `CTXSPI-Stop <service name> Service`
Stops the <service name> service on the managed node.

- **CTXSPI-Status Presentation Server Services**
Shows the status of installed Presentation Server services.
- **CTXSPI-Status OS and Terminal Server Services**
Shows the status of Terminal Server-related and Windows OS services.

Managing Citrix Presentation Server Sessions

Managing Citrix Presentation Server sessions involves monitoring and managing the following:

- session resource consumption
- session network issues
- session state
- server resources
- end-user experience
- ability to logon to farm's servers

Overview

This section contains the following information:

- notes on deploying the SPI for Citrix on Citrix Presentation Server nodes (refer to [“Setting Up Citrix Presentation Server Sessions Management”](#) on page 39)
- which policies are needed for monitoring Citrix Presentation Server sessions (refer to [“Policies”](#) on page 40)
- which tools are needed for managing Citrix Presentation Server sessions (refer to [“Tools”](#) on page 43)

Setting Up Citrix Presentation Server Sessions Management

To monitor and manage Citrix Presentation Server sessions, deploy the policies to all Presentation Server managed nodes. Based on the Citrix Presentation Server version, use the following policy groups:

- **on Citrix Presentation Server 4.5**
deploy the *CTXSPI-PS45 Quick Start/CTXSPI-PS45 Sessions* policy group
- **on Citrix Presentation Server 4.0**
deploy the *CTXSPI-PS4 Quick Start/CTXSPI-PS4 Sessions* policy group
- **on Citrix Presentation Server 3.0**
deploy the *CTXSPI-PS3 Quick Start/CTXSPI-PS3 Sessions* policy group
- **on Citrix Presentation Server 1.0**
deploy the *CTXSPI-PS1 Quick Start/CTXSPI-PS1 Sessions* policy group

Before you deploy the policie, verify that SPI for Citrix is fully configured and licensed on all Citrix Presentation Server managed nodes. For this purpose you can use the **CTXSPI-Check Requirements/Configuration** tool.

If you are not sure which version of the Presentation Server product you have installed on managed nodes, execute the **CTXSPI-Display Citrix Node Type Version** tool against those nodes.

NOTE

For instructions on how to work with SPI for Citrix tools, policies, and reports, refer to [Chapter 3, "Setting Up the Environment"](#).

Policies

To set up management of the Citrix Presentation Server sessions, deploy the policies in the following policy groups:

CTXSPI-Presentation Server 4.5 / CTXSPI-PS4 Quick Start / CTXSPI-PS45 Sessions

- . CTXSPI-ChkICASessionLatencyAverage
- . CTXSPI-ChkICASessionLatencyDeviation
- . CTXSPI-ChkICASessionLatencyLast
- . CTXSPI-ChkProcessesNum
- . CTXSPI-ChkSessionHandleCount
- . CTXSPI-ChkSessionPageFileBytes
- . CTXSPI-ChkSessionProcessorTime
- . CTXSPI-ChkSessionsActive
- . CTXSPI-ChkSessionsAll
- . CTXSPI-ChkSessionsDisconnected
- . CTXSPI-ChkSessionsListening
- . CTXSPI-ChkSessionThreadCount
- . CTXSPI-ChkSessionTotalBytes
- . CTXSPI-ChkSessionTotalErrors
- . CTXSPI-ChkSessionTotalFrames
- . CTXSPI-ChkSessionTotalTimeouts
- . CTXSPI-ChkSessionTotalTransportErrors
- . CTXSPI-ChkSessionWorkingSet

CTXSPI-Presentation Server 4.0 / CTXSPI-PS4 Quick Start / CTXSPI-PS4 Sessions

- . CTXSPI-ChkICASessionLatencyAverage

- . CTXSPI-ChkICASessionLatencyDeviation
- . CTXSPI-ChkICASessionLatencyLast
- . CTXSPI-ChkProcessesNum
- . CTXSPI-ChkSessionHandleCount
- . CTXSPI-ChkSessionPageFileBytes
- . CTXSPI-ChkSessionProcessorTime
- . CTXSPI-ChkSessionsActive
- . CTXSPI-ChkSessionsAll
- . CTXSPI-ChkSessionsDisconnected
- . CTXSPI-ChkSessionsListening
- . CTXSPI-ChkSessionThreadCount
- . CTXSPI-ChkSessionTotalBytes
- . CTXSPI-ChkSessionTotalErrors
- . CTXSPI-ChkSessionTotalFrames
- . CTXSPI-ChkSessionTotalTimeouts
- . CTXSPI-ChkSessionTotalTransportErrors
- . CTXSPI-ChkSessionWorkingSet

CTXSPI-Presentation Server 3.0 / CTXSPI-PS3 Quick Start / CTXSPI-PS3 Sessions

- . CTXSPI-ChkICASessionLatencyAverage
- . CTXSPI-ChkICASessionLatencyDeviation
- . CTXSPI-ChkICASessionLatencyLast
- . CTXSPI-ChkProcessesNum
- . CTXSPI-ChkSessionHandleCount
- . CTXSPI-ChkSessionPageFileBytes
- . CTXSPI-ChkSessionProcessorTime
- . CTXSPI-ChkSessionsActive
- . CTXSPI-ChkSessionsAll
- . CTXSPI-ChkSessionsDisconnected
- . CTXSPI-ChkSessionsListening
- . CTXSPI-ChkSessionThreadCount
- . CTXSPI-ChkSessionTotalBytes
- . CTXSPI-ChkSessionTotalErrors
- . CTXSPI-ChkSessionTotalFrames
- . CTXSPI-ChkSessionTotalTimeouts
- . CTXSPI-ChkSessionTotalTransportErrors
- . CTXSPI-ChkSessionWorkingSet

CTXSPI-Presentation Server 1.0 / CTXSPI-PS1 Quick Start / CTXSPI-PS1 Sessions

- . CTXSPI-ChkICASessionLatencyAverage
- . CTXSPI-ChkICASessionLatencyDeviation
- . CTXSPI-ChkICASessionLatencyLast
- . CTXSPI-ChkProcessesNum
- . CTXSPI-ChkSessionHandleCount
- . CTXSPI-ChkSessionPageFileBytes
- . CTXSPI-ChkSessionProcessorTime
- . CTXSPI-ChkSessionsActive
- . CTXSPI-ChkSessionsAll
- . CTXSPI-ChkSessionsDisconnected
- . CTXSPI-ChkSessionsListening
- . CTXSPI-ChkSessionThreadCount
- . CTXSPI-ChkSessionTotalBytes
- . CTXSPI-ChkSessionTotalErrors
- . CTXSPI-ChkSessionTotalFrames
- . CTXSPI-ChkSessionTotalTimeouts
- . CTXSPI-ChkSessionTotalTransportErrors
- . CTXSPI-ChkSessionWorkingSet

CTXSPI-Presentation Server 4.5 / CTXSPI-PS45 Additional

- . CTXSPI-LogOffSessions
- . CTXSPI-DisconnectSessions
- . CTXSPI-ChkSessionsStale
- . CTXSPI-ChkSessionsShadowing
- . CTXSPI-ChkSessionsDown

CTXSPI-Presentation Server 4.0 / CTXSPI-PS4 Additional

- . CTXSPI-LogOffSessions
- . CTXSPI-DisconnectSessions
- . CTXSPI-ChkSessionsStale
- . CTXSPI-ChkSessionsShadowing
- . CTXSPI-ChkSessionsDown

CTXSPI-Presentation Server 3.0 / CTXSPI-PS3 Additional

- . CTXSPI-LogOffSessions
- . CTXSPI-DisconnectSessions
- . CTXSPI-ChkSessionsStale
- . CTXSPI-ChkSessionsShadowing

- . CTXSPI-ChkSessionsDown

CTXSPI-Presentation Server 1.0/ CTXSPI-PS1 Additional

- . CTXSPI-LogoffSessions
- . CTXSPI-DisconnectSessions
- . CTXSPI-ChkSessionsStale
- . CTXSPI-ChkSessionsShadowing
- . CTXSPI-ChkSessionsDown

Tools

To manage the Citrix Presentation Server sessions, SPI for Citrix provides the tools in the following tool groups:

CTXSPI-Presentation Server / CTXSPI-PS Information

- . CTXSPI-Display Application Sessions in Farm
- . CTXSPI-Display Session Information
- . CTXSPI-Display Session Information By User
- . CTXSPI-Find User Sessions in Farm

CTXSPI-Presentation Server / CTXSPI-PS Session Control / CTXSPI-PS Disconnect

- . CTXSPI-Disconnect All Application Sessions in Farm
- . CTXSPI-Disconnect All Sessions in Farm
- . CTXSPI-Disconnect All Sessions in Zone
- . CTXSPI-Disconnect All Sessions on Server
- . CTXSPI-Disconnect Farm Sessions by Username
- . CTXSPI-Disconnect Server Sessions by Name

CTXSPI-Presentation Server / CTXSPI-PS Session Control / CTXSPI-PS Logoff

- . CTXSPI-Logoff All Application Sessions in Farm
- . CTXSPI-Logoff All Sessions in Farm
- . CTXSPI-Logoff All Sessions in Zone
- . CTXSPI-Logoff All Sessions on Server
- . CTXSPI-Logoff Farm Sessions by Username
- . CTXSPI-Logoff Server Sessions by Name

CTXSPI-Presentation Server / CTXSPI-PS Session Control / CTXSPI-PS Send Message

- . CTXSPI-Send Message to Application Sessions in Farm
- . CTXSPI-Send Message to Farm Sessions
- . CTXSPI-Send Message to Zone Sessions

- . CTXSPI-Send Message to Server Sessions
- . CTXSPI-Send Message to Session
- . CTXSPI-Send Message to User Sessions

CTXSPI-Presentation Server / CTXSPI-PS Session Control / CTXSPI-PS Reset

- . CTXSPI-Reset Session
- . CTXSPI-Reset Session by ID

CTXSPI-Presentation Server / CTXSPI-PS Session Control / CTXSPI-PS Logon Control

- . CTXSPI-Enable Application in Farm
- . CTXSPI-Disable Application in Farm
- . CTXSPI-Disable Logons to Server
- . CTXSPI-Disable Logons to Zone
- . CTXSPI-Disable Logons to Farm
- . CTXSPI-Enable Logons to Server
- . CTXSPI-Enable Logons to Zone
- . CTXSPI-Enable Logons to Farm
- . CTXSPI-Status of Logons to Server
- . CTXSPI-Status of Logons to Zone
- . CTXSPI-Status of Logons to Farm

How It Works

Monitoring End-User Experience

SPI for Citrix monitors end-user experience by monitoring ICA Session Latency performance counters on Citrix Presentation Server. These counters are provided on a per-session basis on every Presentation Server. Thus you receive a good overall view what the end-user experience is.

ICA Session Latency is defined as a measure of the round trip time of a keyboard or mouse event from client to server and back. It is the amount of time that elapses between the user clicking their mouse in an ICA session, and the result of that mouse click being seen on the client.

The following monitoring policies deal with session latency monitoring:

- . CTXSPI-ChkICASessionLatencyAverage
Monitors average ICA session latency. By monitoring Average ICA Session Latency, you can detect the degradation of end-user experience over longer periods of time. In response you can limit the number of users on a server or add

another server to the farm before the end-users start to complain about "slow" system response.

- **CTXSPI-ChkICASessionLatencyDeviation**
Monitors the amount of change in ICA session latency. Many application performance specialists claim this is the most important parameter to monitor. Constant changes in session latency have a very bad impact on user productivity, as users often have to look for visual feedback whether a specific action has been carried out or not.
- **CTXSPI-ChkICASessionLatencyLast**
Monitors last recorded ICA session latency. By monitoring Last ICA Session Latency of each session on a server, you can identify short-term degradations of end-user experience and correlate them to other events on the server/in a farm for better understanding of the impact that these events have on the overall farm performance in terms of end-user experience.

Session Resource Consumption Policies

Session resource consumption policies are able to detect excessive use of system's resources. These often indicate application faults. In a multi-user environment, such as Citrix Presentation Server, excessive use of system resources by only one session can result in bad end-user experience for all other users connected to the same server.

Session resource consumption policies include two separate sets of thresholds: one for Console session and one for all other sessions. Console session is very different from all other user sessions as, among other things, all system services are running in it. Therefore it typically shows higher use of system resources compared to ordinary user sessions. To monitor session resource consumption, the following policies are provided:

- **CTXSPI-ChkProcessesNum**
Monitors the number of processes currently running on the system.
- **CTXSPI-ChkSessionHandleCount**
Monitors the total number of handles currently opened by processes running in individual session.
- **CTXSPI-ChkSessionPageFileBytes**
Monitors virtual memory consumption of processes running in individual session.
- **CTXSPI-ChkSessionProcessorTime**
Monitors percentage of elapsed processor time used by processes running in individual session.
- **CTXSPI-ChkSessionThreadCount**

Monitors the total number of threads currently active in processes running in individual session.

- **CTXSPI-ChkSessionTotalBytes**
Monitors the total number of bytes transferred over the network between individual Terminal Server client and server.
- **CTXSPI-ChkSessionTotalFrames**
Monitors the total number of frames transferred over the network between individual Terminal Server client and server.
- **CTXSPI-ChkSessionWorkingSet**
Monitors physical memory consumption of processes running in individual session.

Session Network Issue Detection Policies

Session network issues detection policies are able to detect various issues on the network connection between Citrix Presentation Server and its clients. These issues usually have very high impact on end-user experience in form of unresponsive applications or even loss of connectivity.

- **CTXSPI-ChkSessionTotalErrors**
The total number of errors detected on the network connection between individual Citrix Presentation Server client and server. Examples of errors include: lost ACK's, badly formed packets...
- **CTXSPI-ChkSessionTotalTimeouts**
The total number of time-outs detected on the network connection between individual Citrix Presentation Server client and server. These are typically the result of a noisy line. On high latency networks, you should consider increasing protocol time-out if these occur often.
- **CTXSPI-ChkSessionTotalTransportErrors**
The total number of transport-level errors on the network connection between individual Citrix Presentation Server client and server.

Monitoring Session State Information

Session state information monitoring policies monitor session states on a server level.

- **CTXSPI-ChkSessionsActive**
Monitors the number of active sessions on the server. Before deployed, Citrix Presentation Server systems are often load-tested to determine how much load (active sessions) they can take. This policy can monitor against load-testing established baselines and alert when a system crosses them.

- **CTXSPI-ChkSessionsDisconnected**
Monitors the number of inactive (disconnected) sessions on the server. Inactive sessions are not connected to any client, but they are still consuming resources on the server. Users can re-connect to these sessions. If the number of inactive sessions increases over time, this can impact system performance. To preserve system resources you can log off sessions that have been inactive for a long time.
- **CTXSPI-ChkSessionsAll**
Monitors the number of all sessions on the server. In addition to active and inactive sessions, these also include sessions in more exotic states like connected / connecting / idle / down / listening / resetting...
- **CTXSPI-ChkSessionsStale**
Monitors the number of sessions in Stale state on the server.
- **CTXSPI-ChkSessionsDown**
Monitors the number of sessions in Down state on the server. Occasionally, sessions do not log off correctly and remain in Down state until the server is rebooted. This policy alerts you if these sessions are accumulating on your server.
- **CTXSPI-ChkSessionsShadowing**
Monitors the number of sessions in Shadowing state on the server. Session shadowing means being able to interact with end-user sessions. While useful tool for user collaboration, training, and troubleshooting, it can also be a security issue if used by unauthorized users.
- **CTXSPI-ChkSessionsListening**
Monitors the number of sessions in Listening state on the server. On Citrix Presentation Server system, there have to be exactly two sessions in Listening state at all times. One is listening for incoming RDP connections (Terminal Services clients), and the other is listening for incoming ICA connections (Citrix clients).

Preserving Server Resources

Lengthy inactive or disconnected sessions consume server resources, making them unavailable to users actively working on a specific server. SPI for Citrix is able to disconnect or logoff such sessions in order to free system resources for other users to use.

- **CTXSPI-LogOffSession**
Logs off sessions that have been disconnected for a long time. Time interval can be configured. This action will free system virtual and physical memory for other users to use.
- **CTXSPI-DisconnectSessions:**
Disconnects sessions that have been inactive for a long time. Time interval can be configured. This action will free networking resources allocated by an inactive

session.

Viewing Session Information

A set of tools is provided that allows displaying various session information. These tools are located in the *CTXSPI-Presentation Server / CTXSPI-PS Information* tool group.

- **CTXSPI-Display Application Sessions in Farm**
Displays all sessions in a farm that are running the specified published application. It displays basic session information such as published application, user and server name, and session ID.
- **CTXSPI-Display Session Information**
Displays basic session information such as session ID, name, username, session state, logon time, and last-input time.
- **CTXSPI-Display Session Information by User**
Displays basic session information for all sessions currently running on a system, sorted by username.
- **CTXSPI-Find User Sessions in Farm**
Displays detailed session information of a particular user in a farm. Effectively displays what applications and Presentation Servers are being used by the specified user.

Interacting with Sessions

SPI for Citrix provides a rich set of tools that allow interaction with end-user sessions. These tools are located in the *CTXSPI-Presentation Server / CTXSPI-PS Session Control* tool group.

- **CTXSPI-PS Disconnect**
Tools in this group allow disconnecting selected or all sessions from the farm, zone, server, or user. Sessions can be selected by their session name or published application name.
- **CTXSPI-PS Logoff**
Tools in this group allow logging off selected or all sessions from the farm, zone, server, or user. Sessions can be selected by their session name or published application name.
- **CTXSPI-PS Send Message**
Tools in this group allow sending messages to selected or all sessions from the farm, zone, server, or user. Sessions can be selected by their session name or published application name.
- **CTXSPI-PS Reset**

Tools in this group allow resetting individual sessions. Sessions can be selected by their session name or ID.

Controlling Session Logons to Servers

SPI for Citrix allows controlling used logons to Citrix farm servers. You can enable or disable logons to individual servers, to all servers in a zone, or to all servers in a farm. All these actions can be carried out as a single atomic operation. Additionally, you can enable or disable published applications in a farm.

Session logon control tools are located in the *CTXSPI-Presentation Server / CTXSPI-PS Session Control / CTXSPI-PS Logon Control* tool group:

- **CTXSPI-Disable Logons to Server**
Disables user logons to an individual Citrix Presentation Server.
- **CTXSPI-Disable Logons to Zone**
Disables user logons to all Presentation Server servers in farm's zone. It is sufficient to execute this tool on only one server that is part of the zone, and it will disable logons to all servers in that same zone.
- **CTXSPI-Disable Logons to Farm**
Disables user logons to all Presentation Server servers in a farm. It is sufficient to execute this tool on only one server in the farm, and it will disable logons to all servers in the farm.
- **CTXSPI-Enable Logons to Server**
Enables user logons to an individual Citrix Presentation Server.
- **CTXSPI-Enable Logons to Zone**
Enables user logons to all Presentation Server servers in farm's zone. It is sufficient to execute this tool on only one server that is part of the zone, and it will enable logons to all servers in that same zone.
- **CTXSPI-Enable Logons to Farm**
Enables user logons to all Presentation Server servers in a farm. It is sufficient to execute this tool on only one server in the farm, and it will enable logons to all servers in the farm.
- **CTXSPI-Status of Logons to Server**
Shows status of user logons to an individual Citrix Presentation Server.
- **CTXSPI-Status of Logons to Zone**
Shows status of user logons to all Presentation Server servers in farm's zone. It is sufficient to execute this tool on only one server that is part of the zone, and it will show status of logons for all servers in that same zone.
- **CTXSPI-Status of Logons to Farm**

Shows status of user logons to all Presentation Server servers in a farm. It is sufficient to execute this tool on only one server in the farm, and it will show status of logons to all servers in the farm.

- **CTXSPI-Enable Application in Farm**
Enables published application in a farm.
- **CTXSPI-Disable Application in Farm**
Disables published application in a farm.

Managing Citrix Presentation Server Servers

Managing Citrix Presentation Server servers involves monitoring server availability and reacting to issues occurring on servers.

Servers in Citrix farms are typically load-balanced, meaning their user loads are very similar. With lots of open sessions on each server, a new server that comes online (either through expected or unexpected reboot or start up) can be faced with a large number of logons directed to it by the load-balancing algorithm. Standard logon procedure is demanding on server resources. Very intensive logon activity can cause the new server to become overloaded and slow, even to the point where its IMA service (the primary Citrix server service) stops responding. Such a server is sometimes referred to as being the "black hole", and the farm is said to be experiencing the "black hole effect".

The "black hole effect" can have serious consequences for the farm end-users. The whole farm can become unresponsive to new logon requests until the affected "black hole" server is powered down.

SPI for Citrix provides the logon throttling functionality that can prevent the "black hole effect" in a farm. Logon throttling closely monitors the logon activity on individual Citrix server. If it detects a large number of logons within a short period of time, it temporarily disables logons to the server, allowing the server to process the existing logon requests. After a while, logon throttling re-enables the logons and server is again able to accept new user sessions.

Overview

This section contains the following information:

- notes on deploying the SPI for Citrix on Citrix Presentation Server nodes (refer to [“Setting Up Citrix Presentation Server Servers Management”](#) on page 52)
- guidelines and instructions for customizing the logon throttler functionality (refer to [“Customizing the Logon Throttling”](#) on page 53)
- which policies are needed for monitoring Citrix Presentation Server servers (refer to [“Policies”](#) on page 54)
- which tools are needed for managing Citrix Presentation Server servers (refer to [“Tools”](#) on page 55)

Setting Up Citrix Presentation Server Servers Management

To monitor and manage Citrix Presentation Server servers, deploy the policies to all managed nodes. Based on the Citrix Presentation Server version, use the following policy groups:

- **on Citrix Presentation Server 4.5**
deploy the *CTXSPI-LogonThrottler* and *CTXSPI-FwdLogonThrottlerEvents* policies from the *CTXSPI-PS45 Additional* policy group
- **on Citrix Presentation Server 4.0**
deploy the *CTXSPI-PS4 Quick Start/CTXSPI-PS4 Servers* policy group
- **on Citrix Presentation Server 3.0**
deploy the *CTXSPI-PS3 Quick Start/CTXSPI-PS3 Servers* policy group
- **on Citrix Presentation Server 1.0**
deploy the *CTXSPI-PS1 Quick Start/CTXSPI-PS1 Servers* policy group

Before you deploy the policies, verify that SPI for Citrix is fully configured and licensed on all Citrix Presentation Server managed nodes. For this purpose, you can use the **CTXSPI-Check Requirements/Configuration** tool.

If you are not sure which version of the Presentation Server product you have installed on managed nodes, execute the **CTXSPI-Display Citrix Node Type Version** tool against those nodes.

NOTE

For instructions on how to work with SPI for Citrix tools, policies, and reports, refer to [Chapter 3, "Setting Up the Environment"](#).

After the first execution of the *CTXSPI-LogonThrottler* policy on the Citrix server (9 minutes by default), the Logon Throttler functionality gets installed and starts monitoring the server.

NOTE

For optimal performance, the schedule of the *CTXSPI-LogonThrottler* policy should not be modified. If the schedule really needs to be modified, you must set it to execute at least once every 20 minutes.

To remove the logon throttling functionality, remove the distributed logon throttler policies from the managed node. Logon Throttler will be disabled and removed in 30 minutes after the policies were removed.

Customizing the Logon Throttling

Default settings are suitable for most Citrix servers.

You can modify values of the following parameters of the policy *CTXSPI-LogonThrottler*:

- `CheckInterval`
- `MaxLogons`
- `SleepDuration`
- `LogoffFactor`

These parameters are located in the Logon Throttler configuration file `CTXSPIPM.ini`, located on the management server.

Logon Throttler parameters work in pairs and complement each other.

MaxLogons [number] (default: 8)

CheckInterval [seconds] (default: 60)

`MaxLogons` and `CheckInterval` parameters determine the criteria for temporary disabling logons to the server.

`MaxLogons` specifies the maximum number of new logons allowed in the time-frame `CheckInterval`. If this number is exceeded, Logon Throttler will temporarily disable logons to the server. See `SleepDuration` and `LogoffFactor` parameters for details on how long logons will be disabled.

SleepDuration [seconds] (default: 20)

LogoffFactor [%] (default: 50)

`SleepDuration` and `LogoffFactor` parameters determine how long the logons to the server will be disabled once disabling criteria has been met.

`SleepDuration` specifies how much (in seconds) each individual logon contributes to the total amount of time the logons will be disabled on the server. If you have very resource-intensive logon process, you should consider setting this parameter to a higher value.

`LogoffFactor` specifies how much (in %) each individual logoff contributes to the total duration logons are disabled on the server. `LogoffFactor` of 50 means that each logoff contributes 50% as much as a logon does. As logoffs also consume server resources, this parameter is used to model their impact. For resource-intensive logoff process you should consider setting this parameter to a higher value.

Example

Take the default parameter values:

```
MaxLogons = 8
CheckInterval = 60
SleepDuration = 20
LogoffFactor = 50
```

There are 9 logons and 4 logoffs within the last 60 seconds. Logon Throttler will disable logons to the server for $(9 + 4 * (50/100)) * 20 = 220$ seconds. After 220 seconds, the logons will be re-enabled on the server.

Modifying Logon Throttler Parameters

To modify the Logon Throttler parameters, perform the following procedure:

1. Using the editor, open the file `CTXSPIPM.ini` on the management server.
2. Locate the following text:

```
[CTXSPI.LogonThrottlerPlugin]
Binary = CTXSPIPLT.exe
Timeout = 30
CheckInterval = 60
MaxLogons = 8
SleepDuration = 20
LogoffFactor = 50
```
3. Modify the values of the parameters `CheckInterval`, `MaxLogons`, `SleepDuration`, and `LogoffFactor` according to your needs and save the file.
4. Deploy instrumentation on the managed node.
5. Restart the SPI for Citrix subagent by consecutively launching the following tools from the *SPI for Citrix / CTXSPI-SPI Maintenance / CTXSPI-SPI Configure* tool group:
 - `CTXSPI-Unregister Subagent`
 - `CTXSPI-Register Subagent`

Policies

To set up management of the Citrix Presentation Server servers, deploy the policies in the following policy groups:

CTXSPI-Presentation Server 4.5 / CTXSPI-PS45 Additional

- `CTXSPI-LogonThrottler`
- `CTXSPI-FwdLogonThrottlerEvents`

CTXSPI-Presentation Server 4.0 / CTXSPI-PS4 Quick Start / CTXSPI-PS4 Servers

- `CTXSPI-LogonThrottler`

- . CTXSPI-FwdLogonThrottlerEvents

CTXSPI-Presentation Server 3.0 / CTXSPI-PS3 Quick Start / CTXSPI-PS3 Servers

- . CTXSPI-LogonThrottler
- . CTXSPI-FwdLogonThrottlerEvents

CTXSPI-Presentation Server 1.0 / CTXSPI-PS1 Quick Start / CTXSPI-PS1 Servers

- . CTXSPI-LogonThrottler
- . CTXSPI-FwdLogonThrottlerEvents

Tools

To manage the Citrix Presentation Server servers, SPI for Citrix provides the tools in the following tool group:

CTXSPI-Presentation Server / CTXSPI-PS Information

- . CTXSPI-Display Application Information
- . CTXSPI-Display Streamed Application Information
- . CTXSPI-Display Server Mode

How It Works

Monitoring Logon and Logoff Activities

Logon Throttler closely monitors all logon and logoff activity on a Citrix server.

When criteria for temporary disabling logons are met, Logon Throttler will:

- . Write a message to the Windows Application Event Log on a Citrix system that logons have been disabled by the *SPI for Citrix - Logon Throttler* component.
- . Disable logons for a specific amount of time.

Windows Event Log message is intercepted on the Citrix system by the *CTXSPI-FwdLogonThrottlerEvents* policy and forwarded to the HPOM management server.

When it is time to re-enable logons on a Citrix server, Logon Throttler will:

- . Write a message to the Windows Application Event Log on a Citrix system that logons have been re-enabled by the *SPI for Citrix - Logon Throttler* component.
- . Enable logons on a system.

Windows Event Log message is intercepted on the Citrix system by the *CTXSPI-FwdLogonThrottlerEvents* policy and forwarded to the HPOM management server.

If Logon Throttler disabled logons to the server, it will re-enable logons to the server if any of the following occurs:

- Logons have been disabled for specific amount of time (typical Logon Throttler operation)
- The HPOM agent has been stopped

These conditions guarantee that logons to the server get re-enabled if they are disabled by the Logon Throttler.

Viewing Published Application Information

Occasionally, you may need an insight into particular configurational detail of an individual Citrix Presentation Server.

The following tools help you to manage Presentation Server servers:

- **CTXSPI-Display Application Information**
Displays a list of applications that are published on the selected Presentation Server system.
- **CTXSPI-Display Application Information in Farm**
Displays a list of applications that are published in a farm.
- **CTXSPI-Display Server Mode**
Displays the type of connection this server has to the farm's Data Store database:
 - *Direct connection* means server maintains a direct connection to the Data Store.
 - *Indirect connection* means that server maintains an indirect connection to the Data Store through another server that is hosting the Data Store. The latter is only used when running Data Store on an Access database.

Viewing Streamed Application information

Occasionally, you may need an insight into the particular configurational detail of an individual Citrix Presentation Server.

The following tools help you to manage Presentation Server servers:

- **CTXSPI-Display Streamed Application Information**
Displays a list of streamed applications that are published on the selected Presentation Server system.

Managing Citrix Presentation Server Zones

Managing Citrix Presentation Server zones involves monitoring and managing Zone Data Collector servers.

Overview

This section contains the following information:

- notes on deploying the SPI for Citrix on Citrix Presentation Server nodes (refer to [“Setting Up Citrix Presentation Server Zone Management”](#) on page 57)
- which policies are needed for monitoring Citrix Presentation Server zones (refer to [“Policies”](#) on page 58)
- which tools are needed for managing Citrix Presentation Server zones (refer to [“Tools”](#) on page 58)

Setting Up Citrix Presentation Server Zone Management

To monitor and manage Citrix Presentation Server zones, deploy the policies to all managed nodes. Based on the Citrix Presentation Server version, use the following policy groups:

- **on Citrix Presentation Server 4.5**
deploy the *CTXSPI-PS45 Quick Start/CTXSPI-PS45 Zones* policy group
- **on Citrix Presentation Server 4.0**
deploy the *CTXSPI-PS4 Quick Start/CTXSPI-PS4 Zones* policy group
- **on Citrix Presentation Server 3.0**
deploy the *CTXSPI-PS3 Quick Start/CTXSPI-PS3 Zones* policy group
- **on Citrix Presentation Server 1.0**
deploy the *CTXSPI-PS1 Quick Start/CTXSPI-PS1 Zones* policy group

Before you deploy the policies, verify that SPI for Citrix is fully configured and licensed on all Citrix Presentation Server managed nodes. For this purpose you can use the **CTXSPI-Check Requirements/Configuration** tool.

If you are not sure which version of the Presentation Server product you have installed on managed nodes, execute the **CTXSPI-Display Citrix Node Type Version** tool against those nodes.

NOTE

For instructions on how to work with SPI for Citrix tools, policies, and reports, refer to [Chapter 3, “Setting Up the Environment”](#).

Policies

To set up management of the Citrix Presentation Server zones, distribute the policies in the following policy groups:

CTXSPI-Presentation Server 4.5/CTXSPI-PS45 Quick Start/CTXSPI-PS45 Zones

- CTXSPI-chkDCchanges

CTXSPI-Presentation Server 4.0/CTXSPI-PS4 Quick Start/CTXSPI-PS4 Zones

- CTXSPI-ChkDCchanges

CTXSPI-Presentation Server 3.0/CTXSPI-PS3 Quick Start/CTXSPI-PS3 Zones

- CTXSPI-ChkDCchanges

CTXSPI-Presentation Server 1.0/CTXSPI-PS1 Quick Start/CTXSPI-PS1 Zones

- CTXSPI-ChkDCchanges

Tools

To manage the Citrix Presentation Server zones, SPI for Citrix provides the tools in the following tool group:

CTXSPI-Presentation Server / CTXSPI-PS Information

- CTXSPI-Display Zone Information
- CTXSPI-Display Number of Servers in Zone

How It Works

Data Collector Monitoring

Each zone in a farm contains one server that is designated as the zone Data Collector. Zone Data Collectors store dynamic information about the servers, published tools, server load, and user sessions in their zone. The zone Data Collector tracks, for example, which tools are available, and how many sessions are running on each server in the zone.

In large zones it is recommended to set up a dedicated Data Collector, which can focus on maintaining dynamic zone information.

Citrix zones are designed to be robust. If the Data Collector server fails, a new Data Collector is elected among the remaining servers in a zone.

The following policies implement zone Data Collector monitoring:

- **CTXSPI-ChkDCChanges**
Detects Data Collector change in a zone. As zones are designed to be robust, the election of a new Data Collector can happen automatically without human intervention and generally unnoticed. While not being a critical event, it enables the operators to detect and investigate any issues, occurring in the zone. This is especially important if a dedicated Data Collector has been appointed in a zone.

Displaying Zone Information

Two tools are available for displaying the zone information. These tools are located in the *CTXSPI-Presentation Server / CTXSPI-PS Information* tool group:

- **CTXSPI-Display Zone Information**
Displays zone name and zone Data Collector for the server where the tool is executed on.
- **CTXSPI-Display Number of Servers in Zone**
Displays number of servers in a zone.

Managing Citrix Presentation Server Farms

Managing Citrix Presentation Server farms involves monitoring and managing:

- Data Store consistency.
- Viewing Citrix farm information.

Overview

This section contains the following information:

- notes on deploying the SPI for Citrix on Citrix Presentation Server nodes (refer to [“Setting Up Citrix Presentation Server Farm Management”](#) on page 60)
- which policies are needed for monitoring Citrix Presentation Server farms (refer to [“Policies”](#) on page 61)
- which tools are needed for managing Citrix Presentation Server farms (refer to [“Tools”](#) on page 61)

Setting Up Citrix Presentation Server Farm Management

To monitor and manage Citrix Presentation Server farms, deploy the policies to selected managed nodes. Based on the Citrix Presentation Server version, use the following policies:

- **on Citrix Presentation Server 4.5**
deploy the *CTXSPI-Presentation Server 4.5/CTXSPI-PS45 Additional/CTXSPI-ChkDataStoreConsistency* policy
- **on Citrix Presentation Server 4.0**
deploy the *CTXSPI-Presentation Server 4.0/CTXSPI-PS4 Additional/CTXSPI-ChkDataStoreConsistency* policy
- **on Citrix Presentation Server 3.0**
deploy the *CTXSPI-Presentation Server 3.0/CTXSPI-PS3 Additional/CTXSPI-ChkDataStoreConsistency* policy
- **on Citrix Presentation Server 1.0**
deploy the *CTXSPI-Presentation Server 1.0/CTXSPI-PS1 Additional/CTXSPI-ChkDataStoreConsistency* policy

Before you deploy the policies, verify that SPI for Citrix is fully configured and licensed on all Citrix Presentation Server managed nodes. For this purpose you can use the **CTXSPI-Check Requirements/Configuration** tool.

If you are not sure which version of the Presentation Server product you have installed on managed nodes, execute the **CTXSPI-Display Citrix Node Type Version** tool against those nodes.

NOTE

For instructions on how to work with SPI for Citrix tools, policies, and reports, refer to [Chapter 3, "Setting Up the Environment"](#).

Policies

To set up management of the Citrix Presentation Server farms, deploy the policies in the following policy groups:

CTXSPI-Presentation Server 4.5/CTXSPI-PS45 Additional

- CTXSPI-ChkDataStoreConsistency

CTXSPI-Presentation Server 4.0/CTXSPI-PS4 Additional

- CTXSPI-ChkDataStoreConsistency

CTXSPI-Presentation Server 3.0/CTXSPI-PS3 Additional

- CTXSPI-ChkDataStoreConsistency

CTXSPI-Presentation Server 1.0/CTXSPI-PS1 Additional

- CTXSPI-ChkDataStoreConsistency

Tools

To manage the Citrix Presentation Server farms, SPI for Citrix provides the tools in the following tool groups:

CTXSPI-Presentation Server / CTXSPI-PS Farm

- CTXSPI-Check Data Store Consistency

CTXSPI-Presentation Server / CTXSPI-PS Information

- CTXSPI-Display Number of Servers in Farm
- CTXSPI-Display Presentation Server Information
- CTXSPI-Display License Information

How It Works

Monitoring Data Store Consistency

The Data Store provides a repository of persistent information about the farm that each server can reference. This includes:

- farm configuration information
- published application configuration
- server configuration
- farm administrator accounts
- printer configuration

Data Store information is stored in a database. Supported databases are Microsoft Access, Microsoft SQL Server, Oracle, IBM DB2.

The following policy implements Citrix farm monitoring:

- **CTXSPI-ChkDataStoreConsistency**
Data Store information is stored in database in encrypted form. The database itself cannot guard information in Data Store for consistency. SPI for Citrix uses the DSCheck tool, used by this policy to regularly check if information in Data Store is still consistent. Inconsistent information in Data Store can in the long run jeopardize farm operations. You can use this policy only on a server with direct connection to the Data Store.

Performing Data Store Consistency Check

SPI for Citrix also provides the tool for initiating Data Store consistency check. This tool is located in the *CTXSPI-Presentation Server / CTXSPI-PS Farm* tool group:

- **CTXSPI-Check Data Store Consistency**
Performs Data Store consistency check. You can execute this tool only on a server with direct connection to the Data Store.

Displaying Farm Information

SPI for Citrix offers tools for displaying farm information. These tools are located in the *CTXSPI-Presentation Server / CTXSPI-PS Information* tool group:

- **CTXSPI-Display Number of Servers in Farm**
Displays the number of Citrix Presentation Server servers in a farm.
- **CTXSPI-Display Presentation Server Information**
Displays basic configuration information for all Presentation Server servers in a farm, for example, server name, IP, server zone, and product version information.
- **CTXSPI-Display License Information**
Displays all Citrix licenses that are available on a farm level and their usage. Note that this tool only works with Presentation Server version 1.0. With Presentation Server 3.0 and above, Citrix has moved the licensing functionality to a dedicated Citrix License Server. See [Chapter 5, “Managing Citrix License Servers”](#) for details.

Managing Presentation Server User Logon Process

User logon is a rather complex and resource intensive process on a Citrix Presentation Server system. It is initiated when a Citrix farm load balancing algorithm selects the system where the published application, which the user has selected, will be started, and ends when the application is running and the user can interact with it.

SPI for Citrix breaks down the user logon process on a Presentation Server system into five phases:

- Phase 1: User profile loading
- Phase 2: Applying group policy objects (GPOs)
- Phase 3: User environment initialization and Active Setup
- Phase 4: Logon script execution
- Phase 5: Citrix-specific initialization

For each user logon process phase SPI for Citrix measures its duration. Duration is also calculated for the complete user logon process.

Managing Citrix Presentation Server user logon process involves managing and monitoring the following:

- Monitoring user logon process
- Viewing user logon process information

Overview

This section contains the following information:

- notes on deploying the SPI for Citrix on Citrix Presentation Server nodes (refer to [“Setting Up Citrix Presentation Server User Logon Process Management” on page 64](#))
- which policies are needed for monitoring Citrix Presentation Server user logon process (refer to [“Policies” on page 64](#))
- which tools are needed for managing Citrix Presentation Server user logon process (refer to [“Tools” on page 66](#))

Setting Up Citrix Presentation Server User Logon Process Management

To monitor and manage user logon process on Citrix Presentation Servers, deploy the policies to all Presentation Server managed nodes. Based on the Citrix Presentation Server version, use the following policies:

- **on Citrix Presentation Server 4.5**
deploy the *CTXSPI-PS45 Quick Start/CTXSPI-PS45 Logon Process* policy group
- **on Citrix Presentation Server 4.0**
deploy the *CTXSPI-PS4 Quick Start/CTXSPI-PS4 Logon Process* policy group
- **on Citrix Presentation Server 3.0**
deploy the *CTXSPI-PS3 Quick Start/CTXSPI-PS3 Logon Process* policy group
- **on Citrix Presentation Server 1.0**
deploy the *CTXSPI-PS1 Quick Start/CTXSPI-PS1 Logon Process* policy group

Before you deploy the policies, verify that SPI for Citrix is fully configured and licensed on all Citrix Presentation Server managed nodes. For this purpose you can use the **CTXSPI-Check Requirements/Configuration** tool.

If you are not sure which version of the Presentation Server product you have installed on managed nodes, execute the **CTXSPI-Display Citrix Node Type Version** tool against those nodes.

NOTE

For instructions on how to work with SPI for Citrix tools, policies, and reports, refer to [Chapter 3, "Setting Up the Environment"](#).

Policies

To set up management of the Citrix Presentation Server user logon process, deploy the policies in the following policy groups:

CTXSPI-Presentation Server 4.5 / CTXSPI-PS45 Quick Start / CTXSPI-PS45 Logon Process

- CTXSPI-ChkPSUserLogonProcess
- CTXSPI-ChkPSUserLogonProcessCompleted

CTXSPI-Presentation Server 4.0 / CTXSPI-PS4 Quick Start / CTXSPI-PS4 Logon Process

- CTXSPI-ChkPSUserLogonProcess
- CTXSPI-ChkPSUserLogonProcessCompleted

CTXSPI-Presentation Server 3.0 / CTXSPI-PS3 Quick Start / CTXSPI-PS3 Logon Process

- . CTXSPI-ChkPSUserLogonProcess
- . CTXSPI-ChkPSUserLogonProcessCompleted

CTXSPI-Presentation Server 1.0 / CTXSPI-PS1 Quick Start / CTXSPI-PS1 Logon Process

- . CTXSPI-ChkPSUserLogonProcess
- . CTXSPI-ChkPSUserLogonProcessCompleted

Depending on your needs, you might also consider deploying some of the following policies:

CTXSPI-Presentation Server 4.5 / CTXSPI-PS45 Additional

- . CTXSPI-ChkPSUserLogonProcessPh1
- . CTXSPI-ChkPSUserLogonProcessPh2
- . CTXSPI-ChkPSUserLogonProcessPh3
- . CTXSPI-ChkPSUserLogonProcessPh4
- . CTXSPI-ChkPSUserLogonProcessPh5

CTXSPI-Presentation Server 4.0 / CTXSPI-PS4 Additional

- . CTXSPI-ChkPSUserLogonProcessPh1
- . CTXSPI-ChkPSUserLogonProcessPh2
- . CTXSPI-ChkPSUserLogonProcessPh3
- . CTXSPI-ChkPSUserLogonProcessPh4
- . CTXSPI-ChkPSUserLogonProcessPh5

CTXSPI-Presentation Server 3.0 / CTXSPI-PS3 Additional

- . CTXSPI-ChkPSUserLogonProcessPh1
- . CTXSPI-ChkPSUserLogonProcessPh2
- . CTXSPI-ChkPSUserLogonProcessPh3
- . CTXSPI-ChkPSUserLogonProcessPh4
- . CTXSPI-ChkPSUserLogonProcessPh5

CTXSPI-Presentation Server 1.0 / CTXSPI-PS1 Additional

- . CTXSPI-ChkPSUserLogonProcessPh1
- . CTXSPI-ChkPSUserLogonProcessPh2
- . CTXSPI-ChkPSUserLogonProcessPh3
- . CTXSPI-ChkPSUserLogonProcessPh4
- . CTXSPI-ChkPSUserLogonProcessPh5

Tools

To monitor and manage Citrix Presentation Server user logon process information, SPI for Citrix provides tools in the following tool groups:

CTXSPI-Presentation Server / CTXSPI-PS Information

- CTXSPI-Display Logons by User
- CTXSPI-Display Recent User Logons

How It Works

Monitoring User Logon Process

The following policies implement Presentation Server user logon process monitoring:

- **CTXSPI-ChkPSUserLogonProcess**
Monitors duration of the complete user logon process. User logon process duration is defined as the sum of all individual logon process phase durations.
- **CTXSPI-ChkPSUserLogonProcessCompleted**
Monitors whether a user logon process has completed in a timely manner. By default, if any phase of the user logon process takes more than 5 minutes, or if the process does not go through all logon process phases, the user logon process is considered to be incomplete.
- **CTXSPI-ChkPSUserLogonProcessPh1**
Monitors duration of phase 1 of the user logon process. By default, if the phase takes more than 5 minutes to complete, the message is sent to the HPOM console.
- **CTXSPI-ChkPSUserLogonProcessPh2**
Monitors duration of phase 2 of the user logon process. By default, if the phase takes more than 5 minutes to complete, the message is sent to the HPOM console.
- **CTXSPI-ChkPSUserLogonProcessPh3**
Monitors duration of phase 3 of the user logon process. By default, if the phase takes more than 5 minutes to complete, the message is sent to the HPOM console.
- **CTXSPI-ChkPSUserLogonProcessPh4**
Monitors duration of phase 4 of the user logon process. By default, if the phase takes more than 5 minutes to complete, the message is sent to the HPOM console.
- **CTXSPI-ChkPSUserLogonProcessPh5**
Monitors duration of phase 5 of the user logon process. By default, if the phase takes more than 5 minutes to complete, the message is sent to the HPOM console.

Viewing User Logon Process Information

A set of tools allow viewing user logon process information that is being collected on Presentation Server systems. These tools are located in the *CTXSPI-Presentation Server / CTXSPI-PS Information* tool group:

- **CTXSPI-Display Logons by User**
Displays all logons that were carried out on a system by a specified user. All logons older than 24 hours are purged from the local store.
- **CTXSPI-Display Recent User Logons**
Displays all user logons that were carried out within a specified amount of time. All logons older than 24 hours are purged from the local store.

Managing Windows User Profiles

A user profile is a collection of settings, configurations, and personal files that are unique to each user. A number of settings can be configured using user profiles, for example, printers, temporary files location, mapped drives, desktop settings, and so on.

In addition to system settings, most of installed applications set up their own user-specific settings into the user profile.

There are basically four different ways user profiles can be used in Citrix Presentation Server environments:

- Local profiles
- Roaming profiles
- Mandatory profiles
- Hybrid profiles (Flex, Jumping, Simplify, and so on)

For more details on user profiles, refer to Citrix Presentation Server / Terminal Server-related documentation.

Managing Windows user profiles on a Citrix Presentation Server involves managing and monitoring the following:

- Windows User profile volume (size, number of files)
- Presence of specific file categories in user profile (for example, executable files, media files, and so on)

Overview

This section contains the following information:

- notes on deploying the SPI for Citrix on Citrix Presentation Server nodes (refer to [“Setting Up Windows User Profile Management” on page 69](#))
- which policies are needed for monitoring Windows user profiles (refer to [“Policies” on page 69](#))
- which tools are needed for managing Windows user profiles (refer to [“Tools” on page 71](#))

Setting Up Windows User Profile Management

To monitor and manage Windows user profiles on Citrix Presentation Servers, deploy the policies to all Presentation Server managed nodes. Based on the Citrix Presentation Server version, use the following policies:

- **on Citrix Presentation Server 4.5**
deploy the *CTXSPI-PS45 Quick Start/CTXSPI-PS45 User Profiles* policy group
- **on Citrix Presentation Server 4.0**
deploy the *CTXSPI-PS4 Quick Start/CTXSPI-PS4 User Profiles* policy group
- **on Citrix Presentation Server 3.0**
deploy the *CTXSPI-PS3 Quick Start/CTXSPI-PS3 User Profiles* policy group
- **on Citrix Presentation Server 1.0**
deploy the *CTXSPI-PS1 Quick Start/CTXSPI-PS1 User Profiles* policy group

Before you deploy the policies, verify that SPI for Citrix is fully configured and licensed on all Citrix Presentation Server managed nodes. For this purpose you can use the **CTXSPI-Check Requirements/Configuration** tool.

If you are not sure which version of the Presentation Server product you have installed on managed nodes, execute the **CTXSPI-Display Citrix Node Type Version** tool against those nodes.

NOTE

For instructions on how to work with SPI for Citrix tools, policies, and reports, refer to [Chapter 3, "Setting Up the Environment"](#).

Policies

To set up management of the Windows user profiles on Presentation Server systems, deploy the policies in the following policy groups:

CTXSPI-Presentation Server 4.5 / CTXSPI-PS45 Quick Start / CTXSPI-PS45 User Profiles

- CTXSPI-ChkProfileFullSize
- CTXSPI-ChkProfileRoamingSize
- CTXSPI-ChkProfilesTotalSize
- CTXSPI-ChkProfilesTotalRoamingSize

CTXSPI-Presentation Server 4.0 / CTXSPI-PS4 Quick Start / CTXSPI-PS4 User Profiles

- CTXSPI-ChkProfileFullSize

- . CTXSPI-ChkProfileRoamingSize
- . CTXSPI-ChkProfilesTotalSize
- . CTXSPI-ChkProfilesTotalRoamingSize

CTXSPI-Presentation Server 3.0 / CTXSPI-PS3 Quick Start / CTXSPI-PS3 User Profiles

- . CTXSPI-ChkProfileFullSize
- . CTXSPI-ChkProfileRoamingSize
- . CTXSPI-ChkProfilesTotalSize
- . CTXSPI-ChkProfilesTotalRoamingSize

CTXSPI-Presentation Server 1.0 / CTXSPI-PS1 Quick Start / CTXSPI-PS1 User Profiles

- . CTXSPI-ChkProfileFullSize
- . CTXSPI-ChkProfileRoamingSize
- . CTXSPI-ChkProfilesTotalSize
- . CTXSPI-ChkProfilesTotalRoamingSize

Depending on your needs, you might also consider deploying some of the following policies:

CTXSPI-Presentation Server 4.5 / CTXSPI-PS45 Additional

- . CTXSPI-ChkProfileFileCount
- . CTXSPI-ChkProfileRoamingFileCount
- . CTXSPI-ChkProfileExecutableCount
- . CTXSPI-ChkProfileMediaCount
- . CTXSPI-ChkProfilesTotalFileCount
- . CTXSPI-ChkProfilesTotalRoamingFileCount
- . CTXSPI-ChkProfilesTotalExecutableCount
- . CTXSPI-ChkProfilesTotalMediaCount

CTXSPI-Presentation Server 4.0 / CTXSPI-PS4 Additional

- . CTXSPI-ChkProfileFileCount
- . CTXSPI-ChkProfileRoamingFileCount
- . CTXSPI-ChkProfileExecutableCount
- . CTXSPI-ChkProfileMediaCount
- . CTXSPI-ChkProfilesTotalFileCount
- . CTXSPI-ChkProfilesTotalRoamingFileCount
- . CTXSPI-ChkProfilesTotalExecutableCount
- . CTXSPI-ChkProfilesTotalMediaCount

CTXSPI-Presentation Server 3.0 / CTXSPI-PS3 Additional

- . CTXSPI-ChkProfileFileCount
- . CTXSPI-ChkProfileRoamingFileCount
- . CTXSPI-ChkProfileExecutableCount
- . CTXSPI-ChkProfileMediaCount
- . CTXSPI-ChkProfilesTotalFileCount
- . CTXSPI-ChkProfilesTotalRoamingFileCount
- . CTXSPI-ChkProfilesTotalExecutableCount
- . CTXSPI-ChkProfilesTotalMediaCount

CTXSPI-Presentation Server 1.0 / CTXSPI-PS1 Additional

- . CTXSPI-ChkProfileFileCount
- . CTXSPI-ChkProfileRoamingFileCount
- . CTXSPI-ChkProfileExecutableCount
- . CTXSPI-ChkProfileMediaCount
- . CTXSPI-ChkProfilesTotalFileCount
- . CTXSPI-ChkProfilesTotalRoamingFileCount
- . CTXSPI-ChkProfilesTotalExecutableCount
- . CTXSPI-ChkProfilesTotalMediaCount

Tools

To manage Windows user profiles, SPI for Citrix provides the tools in the following tool group:

CTXSPI-Presentation Server / CTXSPI-PS information

- . CTXSPI-Display User Profile Information

How It Works

Viewing Windows User Profile Information

SPI for Citrix provides the tool that allows insight into user profiles on a system. It is located in the *CTXSPI-Presentation Server/CTXSPI-PS Information* tool group:

- . CTXSPI-Display User Profile Information
Displays the information about the user profiles on the Citrix Presentation Server system.

Monitoring Windows User Profile Volume

Roaming profiles are by far the most common profile type used in Presentation Server environments. They are very easy to set up, and users have the benefit of

having the same application / user settings on every Presentation Server they connect to.

Roaming profiles are copied from the network share location each time user logs on to the Presentation Server system and copied back to the same network location when user logs off from the system. This ensures that any settings user might have changed during the session are preserved and saved.

When users work on a Citrix Presentation Server system, a lot of temporary files can get stored to the user profile. Often it does not make sense to copy all those temporary files to the network share location when user logs off. Therefore administrators can limit the set of user profile directories that get preserved.

You can partition roaming profiles in two parts:

- "roaming" part and
- "temporary" part of user's profile.

The following policies implement monitoring of Windows user profiles:

- `CTXSPI-ChkProfileFileCount`
Monitors the number of files in individual user profile.
- `CTXSPI-ChkProfileFullSize`
Monitors the total size of individual user profile.
- `CTXSPI-ChkProfileRoamingFileCount`
Monitors the number of files in the roaming part of individual user profile. "Roaming part" refers to the set of directories that get copied to the user's network share location.
- `CTXSPI-ChkProfileRoamingSize`
Monitors the size of the roaming part of individual user profile. "Roaming part" refers to the set of directories that get copied to the user's network share location.
- `CTXSPI-ChkProfilesTotalFileCount`
Monitors the total number of files in all user profiles on a Presentation Server system.
- `CTXSPI-ChkProfilesTotalRoamingFileCount`
Monitors the total number of files in roaming parts of all user profiles. "Roaming part" refers to the set of directories that get copied to the user's network share location.
- `CTXSPI-ChkProfilesTotalRoamingSize`
Monitors the total size of roaming parts of the user profiles. "Roaming part" refers to the set of directories that get copied to the user's network share location.
- `CTXSPI-ChkProfilesTotalSize`
Monitors the total size of all user profiles on a Citrix Presentation Server system.

Monitoring for Presence of Specific File Categories in Windows User Profiles

SPI for Citrix allows monitoring of Windows user profiles for presence and amount of specific file categories. Three file categories can be tracked: executable files, media files, and custom files. The first two file categories are pre-defined by monitoring policies, and the third category can be freely customized.

- Predefined executable files have the following suffixes:
.exe;.bat;.com;.btm;.pif;.cmd;.lnk;.scr;.vbs;.js;.wsf;.vbe;.vb;.wsh;.jse
- Predefined media files have the following suffixes:
.wav;.wma;.aif;.aiff;.voc;.au;.snd;.ogg;.nsv;.nsa;.m4a;.mp3;.mp3;.mp2;.mp1;.aac;.apu;.mid;.miz;.rmi;.kar;.mpg;.mpeg;.m2v;.avi;.asf;.cda;.pls;.m3u;.mp2v

The following policies implement monitoring for presence of specific file categories in Windows user profiles:

- CTXSPI-ChkProfileExecutableCount
Monitors the number of executable files in individual user profile.
- CTXSPI-ChkProfilesTotalExecutableCount
Monitors the total number of executable files in all user profiles.
- CTXSPI-ChkProfileMediaCount
Monitors the number of media files in individual user profile.
- CTXSPI-ChkProfilesTotalMediaCount
Monitors the total number of media files in all user profiles.

Managing Citrix Farm Service Map

SPI for Citrix offers autodiscovery of Citrix farms, zones, servers, and published applications, as well as the dependencies between them in a farm.

SPI for Citrix also monitors any Citrix configuration changes, and allows you to update your service map once a day (this can be configured) if changes occur.

Overview

This section contains the following information:

- notes on deploying SPI for Citrix on Presentation Server nodes (refer to [“Setting Up Citrix Farm Service Map Management”](#) on page 74)
- which policies are needed for monitoring Presentation Server service map (refer to [“Policies”](#) on page 75)
- which tools are needed for managing Presentation Server service map (refer to [“Tools”](#) on page 75)

Setting Up Citrix Farm Service Map Management

To monitor and manage Citrix farm service map, deploy the policies to up to three Presentation Server managed nodes for each farm.

Based on the Citrix Presentation Server version, use the following policy groups:

- **on Citrix Presentation Server 4.5**
deploy the *CTXSPI-Presentation Server 4.5 / CTXSPI-PS45 Discovery* policy group
- **on Citrix Presentation Server 4.0**
deploy the *CTXSPI-Presentation Server 4.0 / CTXSPI-PS4 Discovery* policy group
- **on Citrix Presentation Server 3.0**
deploy the *CTXSPI-Presentation Server 3.0 / CTXSPI-PS3 Discovery* policy group
- **on Citrix Presentation Server 1.0**
deploy the *CTXSPI-Presentation Server 1.0 / CTXSPI-PS1 Discovery* policy group

Before you deploy the policies, verify that SPI for Citrix is fully configured and licensed on all Citrix Presentation Server managed nodes. For this purpose you can use the **CTXSPI-Check Requirements/Configuration** tool.

If you are not sure which version of the Presentation Server product you have installed on managed nodes, execute the **CTXSPI-Display Citrix Node Type Version** tool against those nodes.

NOTE

For instructions on how to work with SPI for Citrix tools, policies, and reports, refer to [Chapter 3, “Setting Up the Environment”](#).

Policies

To set up and manage the Citrix farm service map, deploy the policies in the following policy groups:

CTXSPI-Presentation Server 4.5 / CTXSPI-PS45 Discovery

- CTXSPI-ChkServiceModel
- CTXSPI-DscServiceModel2

CTXSPI-Presentation Server 4.0 / CTXSPI-PS4 Discovery

- CTXSPI-ChkServiceModel
- CTXSPI-DscServiceModel2

CTXSPI-Presentation Server 3.0 / CTXSPI-PS3 Discovery

- CTXSPI-ChkServiceModel
- CTXSPI-DscServiceModel2

CTXSPI-Presentation Server 1.0 / CTXSPI-PS1 Discovery

- CTXSPI-ChkServiceModel
- CTXSPI-DscServiceModel2

Tools

To manage the Citrix farm service map, SPI for Citrix provides the tool in the following tool group:

CTXSPI-Presentation Server / CTXSPI-PS Discovery

- CTXSPI-Force Service Model Update

How It Works

Generating Citrix Farm Service Map

SPI for Citrix uses HP Operations Manager for Windows service map component for autodiscovery of your Citrix environment. Service map consists of two parts. Citrix farms part covers Citrix Presentation Server servers and published applications, and Citrix infrastructure part covers Web interface, Secure Gateway, and Citrix License Servers.

For instructions on how to perform autodiscovery and generate the Citrix farm service map, refer to [Chapter 3, "Setting Up the Environment"](#).

Collecting Presentation Server Performance Information

SPI for Citrix Presentation Server graphs and reports require that performance data is being collected on all Citrix Presentation Server nodes that are being managed. Without these policies deployed, SPI for Citrix graphs and reports for Presentation Servers will remain empty.

Overview

This section contains the following information:

- which policies are needed for collecting SPI for Citrix Presentation Server performance data (refer to [“Policies” on page 77](#))

Policies

The policies listed below are required to collect SPI for Citrix Presentation Server performance data. Depending on the Citrix Presentation Server version, deploy the corresponding policy group:

CTXSPI-Presentation Server 4.5 / CTXSPI-PS45 Data Collection

CTXSPI-Presentation Server 4.0 / CTXSPI-PS4 Data Collection

CTXSPI-Presentation Server 3.0 / CTXSPI-PS3 Data Collection

CTXSPI-Presentation Server 1.0 / CTXSPI-PS1 Data Collection

- CTXSPI-ServerConfigLogging
- CTXSPI-ServicesLogging
- CTXSPI-SessionsEXLogging
- CTXSPI-SessionsICALogging
- CTXSPI-SessionSTSSLogging
- CTXSPI-LogProfile
- CTXSPI-LogProfiles
- CTXSPI-LogPSUserLogonProcess
- CTXSPI-LogApps

How It Works

Presentation Server Data Collection

SPI for Citrix Presentation Server reports and graphs rely on performance data being collected on the managed nodes. Performance data is stored in the Embedded Performance Component of the HPOM agent. Another name for this performance component is also the CODA subagent.

The following policies collect data on the Presentation Server managed nodes:

- **CTXSPI-ServerConfigLogging**
Collects basic server configuration information like server, zone, and farm name.
- **CTXSPI-ServicesLogging**
Collects performance information about Citrix services. Information collected includes CPU, physical and virtual memory consumption.
- **CTXSPI-SessionsEXLogging**
Collects extended information about every published application instance running on a Citrix Presentation Server system. Information collected includes session name, session ID, user domain and account name, published application name, CPU and memory consumption of published application, whether this is a desktop or published application session.
- **CTXSPI-SessionsICALogging**
Collect selected performance counters for every instance of the "ICA Session" performance object. These counters include ICA session latency and deviation.
- **CTXSPI-SessionsTSSLogging**
Collect selected performance counters for every instance of the "Terminal Services Session" performance object. These counters include CPU and memory consumption, handle and thread count use, network traffic, and so on.
- **CTXSPI-LogProfile**
Collects user profile information for each individual user that has profile on the Citrix Presentation Server system. Information collected includes size of complete profile and roaming part of the profile, number of executable and media files, and so on.
- **CTXSPI-LogProfiles**
Collects summary user profile information on the Citrix Presentation Server system. Information collected includes total size of all user profiles and roaming parts of their profiles, number of executable and media files, and so on.
- **CTXSPI-LogPSUserLogonProcess**
Collects user logon process information for every user that logs-in to the Citrix

Presentation Server system. Information collected includes user domain and account name, duration of logon process phases and of the complete logon process, and so on.

- **CTXSPI-LogApps**
Collects published application usage information on the Citrix Presentation Server system. Information collected includes application distinguished name and the number of running instances.

Chapter 5

Managing Citrix License Servers

About Managing Citrix License Servers

This chapter contains information for setting up management of Citrix License Servers. It provides information on policies and tools, needed to monitor and manage Citrix License Servers, and describes how you can employ these policies and tools.

Managing Citrix License Servers involves the following:

- [“Managing Citrix License Server Services” on page 83](#)
- [“Managing Citrix License Server Licenses” on page 87](#)
- [“Managing Citrix License Server Service Map” on page 90](#)
- [“Collecting Citrix License Server Performance Information” on page 92](#)

Managing Citrix License Server Services

Managing Citrix License Server services involves managing and monitoring the following:

- Citrix License Server-related services
- Citrix License Server-related Windows Event Log entries

Overview

This section contains the following information:

- notes on deploying the SPI for Citrix on Citrix License Server nodes (refer to [“Setting Up Citrix License Server Services Management” on page 83](#))
- which policies are needed for monitoring Citrix License Server services (refer to [“Policies” on page 84](#))
- which tools are needed for managing Citrix License Server services (refer to [“Tools” on page 84](#))

Setting Up Citrix License Server Services Management

To monitor and manage Citrix License Server services, deploy the policies to all Citrix License Server managed nodes.

Depending on the Citrix License Server version, use the following policy groups:

- **on Citrix License Server 4.5 (comes with Citrix Presentation Server 4.5)**
deploy the *CTXSPI-Citrix License Server 4.5/CTXSPI-CLS45 Quick Start* and *CTXSPICitrix License Server 4.5/CTXSPI-CLS45 Additional* policy groups
- **on Citrix License Server 2.0 (comes with Citrix Presentation Server 4.0)**
deploy the *CTXSPI-Citrix License Server 2.0/CTXSPI-CLS2 Quick Start* and *CTXSPI-Citrix License Server 2.0/CTXSPI-CLS2 Additional* policy groups
- **on Citrix License Server 1.0 (comes with Citrix Presentation Server 3.0)**
deploy the *CTXSPI-Citrix License Server 1.0/CTXSPI-CLS1 Quick Start* and *CTXSPI-Citrix License Server 1.0/CTXSPI-CLS1 Additional* policy groups

Before you deploy the policies, verify that SPI for Citrix is fully configured and licensed on all Citrix License Server managed nodes. For this purpose, you can use the *CTXSPI-Check Requirements/Configuration* tools.

If you are not sure which version of the Citrix Licence Server product you have installed on managed nodes, execute the tools *CTXSPI-Display Citrix Node Type Version* against those nodes.

NOTE

For instructions on how to distribute SPI for Citrix tools, policies, and reports, refer to [Chapter 3, "Setting Up the Environment"](#).

Policies

To set up management of the Citrix License Server services, deploy the policies in the following policy groups:

CTXSPI-Citrix License Server 4.5/CTXSPI-CLS45 Quick Start

- . CTXSPI-ChkCitrixLSServices
- . CTXSPI-FwdCitrixLSAppWarnError

CTXSPI-Citrix License Server 2.0/CTXSPI-CLS2 Quick Start

- . CTXSPI-ChkCitrixLSServices
- . CTXSPI-FwdCitrixLSAppWarnError

CTXSPI-Citrix License Server 1.0/CTXSPI-CLS1 Quick Start

- . CTXSPI-ChkCitrixLSServices
- . CTXSPI-FwdCitrixLSAppWarnError

CTXSPI-Citrix License Server 4.5/CTXSPI-CLS45 Additional

- . CTXSPI-FwdCitrixLSAppInfo

CTXSPI-Citrix License Server 2.0/CTXSPI-CLS2 Additional

- . CTXSPI-FwdCitrixLSAppInfo

CTXSPI-Citrix License Server 1.0/CTXSPI-CLS1 Additional

- . CTXSPI-FwdCitrixLSAppInfo

Tools

To manage the Citrix License Server services, SPI for Citrix provides the tools in the following tool group:

CTXSPI-Citrix License Server / CTXSPI-CLS Services

- . CTXSPI-Start Citrix Licensing Service
- . CTXSPI-Start Citrix Licensing WMI Service
- . CTXSPI-Start License Management Console for Citrix Licensing Service
- . CTXSPI-Status Citrix License Server Services
- . CTXSPI-Stop Citrix Licensing Service

- CTXSPI-Stop Citrix Licensing WMI Service
- CTXSPI-Stop License Management Console for Citrix Licensing Service

How It Works

Service Monitoring Policies

Citrix License Server is manipulated as a single Windows service, although internally it consists of two daemons:

- license manager daemon
- Citrix vendor daemon

Citrix Licensing WMI service allows accessing Citrix licensing information through WMI.

A separate service, License Management Console for Citrix Licensing service, allows License Management Console to access licensing information.

The table below lists all Citrix License Server services and versions of Presentation Server product they are delivered as part of:

Service Name	PS 4.5	PS 4.0	PS 3.0
Citrix Licensing Service	yes	yes	yes
Citrix Licensing WMI Service	yes	yes	yes
License Management Console for Citrix Licensing Service	yes	yes	yes

The following policy implements Citrix License Server service monitoring:

- CTXSPI-ChkCitrixLSServices
Monitors all Citrix License Server services (listed in the table above) if they are in running state.

Windows Event Log Forwarding Policies

Citrix License Server services log the internal issues they detect to the Windows Event Log. To early detect issues that may be developing, it is essential to monitor

the Application Windows Event Log. The following Citrix License Server Application event log sources are being monitored:

Application EventLog Source Name	PS 4.5	PS 4.0	PS 3.0
CITRIX_LicenseServer	yes	yes	yes
CTXLMC	yes	yes	yes
Imgnd_LicenseServer	yes	yes	yes

The following policies implement Event Log forwarding.

- CTXSPI-FwdCitrixLSAppwarnError
Forwards Citrix License Server-related Warning and Error messages from the Windows Application event log.
- CTXSPI-FwdCitrixLSAppInfo
Forwards Citrix License Server-related Informational messages from the Windows Application event log.

Interacting with Services

A number of tools allow interacting with Citrix License Server services. These are located in the *CTXSPI-Citrix License Server / CTXSPI-CLS Services* tool group. They allow starting, stopping, and checking the status of relevant services:

- CTXSPI-Start Citrix Licensing Service
Starts the Citrix Licensing service.
- CTXSPI-Stop Citrix Licensing Service
Stops the Citrix Licensing service.
- CTXSPI-Start Citrix Licensing WMI Service
Starts Citrix Licensing WMI service.
- CTXSPI-Stop Citrix Licensing WMI Service
Stops Citrix Licensing WMI service.
- CTXSPI-Start License Management Console for Citrix Licensing Service
Starts License Management Console for Citrix Licensing service.
- CTXSPI-Stop License Management Console for Citrix Licensing Service
Stops License Management Console for Citrix Licensing service.

Managing Citrix License Server Licenses

Managing Citrix License Server licenses involves managing and monitoring the following:

- Monitoring Citrix license use
- Viewing Citrix license use information
- Performing license check-out diagnostics

Overview

This section contains the following information:

- notes on deploying the SPI for Citrix on Citrix License Server nodes (refer to [“Setting Up Citrix License Server Licenses Management” on page 87](#))
- which policies are needed for monitoring Citrix License Server licenses (refer to [“Policies” on page 88](#))
- which tools are needed for managing Citrix License Server licenses (refer to [“Tools” on page 88](#))

Setting Up Citrix License Server Licenses Management

To monitor and manage Citrix License Server licenses, deploy the policies to all Citrix License Server managed nodes. Based on the Citrix License Server version, use the following policies:

- **on Citrix License Server 4.5 (comes with Presentation Server 4.5)**
deploy the *CTXSPI-CLS45 Quick Start* policy group
- **on Citrix License Server 2.0 (comes with Presentation Server 4.0)**
deploy the *CTXSPI-CLS2 Quick Start* policy group
- **on Citrix License Server 1.0 (comes with Presentation Server 3.0)**
deploy the *CTXSPI-CLS1 Quick Start* policy group

Before you deploy the policies, verify that SPI for Citrix is fully configured and licensed on all Citrix License Server managed nodes. For this purpose you can use the **CTXSPI-Check Requirements/Configuration** tool.

If you are not sure which version of the Citrix License Server product you have installed on managed nodes, execute the **CTXSPI-Display Citrix Node Type Version** tool against those nodes.

NOTE

For instructions on how to deploy SPI for Citrix tools, policies, and reports, refer to [Chapter 3, "Setting Up the Environment"](#).

Policies

To set up management of the license on Citrix License Server systems, deploy the policies in the following policy groups:

CTXSPI-Citrix License Server 4.5 / CTXSPI-CLS45 Quick Start

- CTXSPI-ChkCitrixLSLicenseUse

CTXSPI-Citrix License Server 2.0 / CTXSPI-CLS2 Quick Start

- CTXSPI-ChkCitrixLSLicenseUse

CTXSPI-Citrix License Server 1.0 / CTXSPI-CLS1 Quick Start

- CTXSPI-ChkCitrixLSLicenseUse

Tools

To monitor and manage Citrix License Server licenses, SPI for Citrix provides tools in the following tool group:

CTXSPI-Citrix License Server / CTXSPI-CLS Information

- CTXSPI-Display License Use Information
- CTXSPI-Display License Use Details
- CTXSPI-Display License Checkout Diagnostics

How It Works

Monitoring Citrix License Use

Citrix License Server is responsible for maintaining licenses for a variety of Citrix products. For Citrix Presentation Server product, it typically maintains information on two types of licenses:

- server licenses (also called Citrix Start-up License)
- concurrent user licenses (their name depends on the product for which they can be used)

The following policy implements monitoring of Citrix License Server license use:

- CTXSPI-ChkCitrixLSLicenseUse
Monitors the license utilization for all Citrix License Server license types.

Viewing Citrix License Use Information

The following tools allow viewing of the Citrix License Server license use information:

- `CTXSPI-Display License Use Information`
Displays Citrix License Server license use summary information, including license type, number of available and used licenses, and license utilization.
- `CTXSPI-Display License Use Details`
Displays detailed Citrix License Server license use information.

Performing License Check-out Diagnostics

The following tool allows performing the Citrix License Server license check-out diagnostics:

- `CTXSPI-Display License Checkout Diagnostics`
Displays license check-out diagnostics for each license set installed on the Citrix License Server.

Managing Citrix License Server Service Map

SPI for Citrix offers autodiscovery of Citrix License Servers.

Overview

This section contains the following information:

- notes on deploying SPI for Citrix on Citrix License Server nodes (refer to [“Setting Up Citrix License Server Service Map Management”](#) on page 90)
- which policies are needed for monitoring Citrix License Server service map (refer to [“Policies”](#) on page 91)
- which tools are needed for managing Citrix License Server service map (refer to [“Tools”](#) on page 91)

Setting Up Citrix License Server Service Map Management

To monitor and manage Citrix License Server service map, deploy the policies to all Citrix License Server managed nodes. Based on the Citrix License Server version, use one of the following policy groups:

- **on Citrix License Server 4.5**
deploy the *CTXSPI-Citrix License Server 4.5 / CTXSPI-CLS45 Discovery*
- **on Citrix License Server 2.0**
deploy the *CTXSPI-Citrix License Server 2.0 / CTXSPI-CLS2 Discovery*
- **on Citrix License Server 1.0**
deploy the *CTXSPI-Citrix License Server 2.0 / CTXSPI-CLS1 Discovery*

Before you deploy the policies, verify that SPI for Citrix is fully configured and licensed on all Citrix License Server managed nodes. For this purpose you can use the **CTXSPI-Check Requirements/Configuration** tool.

If you are not sure which version of the Citrix License Server product you have installed on managed nodes, execute the tool **CTXSPI-Display Citrix Node Type Version** against those nodes.

NOTE

For instructions on how to work with SPI for Citrix applications, templates and reports, refer to [Chapter 3, “Setting Up the Environment”](#).

Policies

To set up and manage the Citrix License Server service map, deployed the policies in the following policy groups:

CTXSPI-Citrix License Server 4.5 / CTXSPI-CLS45 Discovery

- CTXSPI-ChkServiceModel
- CTXSPI-DscServiceModel2

CTXSPI-Citrix License Server 2.0 / CTXSPI-CLS2 Discovery

- CTXSPI-ChkServiceModel
- CTXSPI-DscServiceModel2

CTXSPI-Citrix License Server 1.0 / CTXSPI-CLS1 Discovery

- CTXSPI-ChkServiceModel
- CTXSPI-DscServiceModel2

Tools

To manage the Citrix License Server service map, SPI for Citrix provides the tools in the following tool group:

CTXSPI-Citrix License Server / CTXSPI-CLS Discovery

- CTXSPI-Force Service Model Update

How It Works

Generating Citrix License Server Service Map

For instructions on how to perform autodiscovery and generate the Citrix License Server service map, refer to [Chapter 3, “Setting Up the Environment”](#).

Collecting Citrix License Server Performance Information

SPI for Citrix graphs and reports for Citrix License Servers require that performance data is being collected on all Citrix License Server nodes that are being managed. Without these policies deployed, SPI for Citrix graphs and reports for Citrix License Servers will remain empty.

Overview

This section contains the following information:

- which policies are needed for collecting SPI for Citrix Citrix License Server performance data (refer to [“Policies” on page 92](#))

Policies

The policies listed below are required to collect SPI for Citrix Citrix License Server performance data. Depending on the Citrix License Server version, deploy the corresponding policy group:

CTXSPI-Citrix License Server 4.5 / CTXSPI-CLS45 Data Collection

CTXSPI-Citrix License Server 2.0 / CTXSPI-CLS2 Data Collection

CTXSPI-Citrix License Server 1.0 / CTXSPI-CLS1 Data Collection

- CTXSPI-LogCitrixLSLicenseUse

How It Works

Citrix License Server Data Collection

SPI for Citrix reports and graphs rely on performance data being collected on the managed nodes. Performance data is stored in the Embedded Performance Component of the HPOM agent. Another name for this performance component is also the CODA subagent.

The following policies collect data on the Citrix License Server managed nodes:

- CTXSPI-LogCitrixLSLicenseUse
Collects Citrix License Server license use information like number of available and used licenses, and license utilization for each license feature installed.

Chapter 6

Managing Citrix Web Interface Servers

About Managing Citrix Web Interface Servers

The Web Interface provides users with access to Presentation Server applications and content through a standard Web browser or through the Program Neighborhood Agent. It also enables guest users to attend Conferencing Manager conferences.

This chapter contains information for setting up management of Citrix Web Interface Servers. It provides information on policies and tools, needed to monitor and manage Citrix Web interface Servers, and describes how you can employ these policies and tools.

Managing Citrix Web Interface Servers involves the following:

- [“Managing Citrix Web Interface Servers” on page 95](#)
- [“Setting Up Web Interface Monitoring” on page 97](#)
- [“Managing Citrix Web Interface User Logons” on page 98](#)
- [“Managing Citrix Web Interface Availability” on page 101](#)
- [“Managing Citrix Web Interface Service Map” on page 106](#)
- [“Collecting Citrix Web Interface Server Performance Information” on page 108](#)

Managing Citrix Web Interface Servers

Managing Citrix Web Interface servers involves monitoring and managing Web Interface configuration.

Overview

This section provides the information on the tools SPI for Citrix provides for managing Citrix Web Interface servers.

IMPORTANT

Current version of SPI for Citrix supports Web Interface version 4.6 / 4.5 / 4.2 / 4.0 / 3.0, running on Windows Server 2003. Web Interface running on Windows 2000 Server is not supported.

For Web Interface, version 4.0 and above, it is possible to monitor multiple Web Interfaces on one managed node. Web Interfaces must be configured to run on different IIS sites, monitoring multiple Web Interfaces running on single IIS site is not supported.

Tools

To manage the Citrix Web Interface servers, SPI for Citrix provides the tools in the following tool group:

CTXSPI-Web Interface / CTXSPI-WI Information

- CTXSPI-WI Display Configuration

Policies

There are no policies available in SPI for Citrix to monitor Web Interface servers.

How It Works

Web Interface Configuration

When troubleshooting Web Interface issues, the Web interface configuration file is often the first thing to inspect. The information on configuration is stored in the file `webInterface.conf`, located in Citrix Web Interface web site directory hierarchy.

To quickly access the Web Interface configuration, SPI for Citrix provides the following tool:

- **CTXSPI-WI Display Configuration**
Displays the Citrix Web Interface configuration settings. This tool outputs the contents of the `webInterface.conf` file.

To install or uninstall Web Interface monitoring, SPI for Citrix provides the tools in the following tool group:

CTXSPI-Web Interface / CTXSPI-WI Configure

- **CTXSPI-Install WI Monitoring**
- **CTXSPI-Uninstall WI Monitoring**

For details on these two tools refer to [“Setting Up Web Interface Monitoring”](#) on [page 97](#).

Setting Up Web Interface Monitoring

Before you can use any Web Interface passive monitoring policies or tools, you need to correctly set up monitoring of the Citrix Web Interface systems. Web Interface monitoring integrates with IIS web server using the IIS filter and IIS extension in order to intercept user interaction with the Citrix Web Interface web pages.

NOTE

Only execute these tools as part of the Installation/uninstallation procedure described in the *SPI for Citrix Installation and Configuration Guide*.

IMPORTANT

Installing and uninstalling Web Interface monitoring restarts Internet Information Server (IIS) on the managed node, so plan the running of tools carefully.

Tools for setting up Web Interface Monitoring are located in the **CTXSPI-Web Interface / CTXSPI-WI Configure** tool group:

- **CTXSPI-Install WI Monitoring**
Installs IIS filter and IIS extension required for Web Interface management to work correctly.
- **CTXSPI-Uninstall WI Monitoring**
Uninstalls IIS filter and IIS extension required for Web Interface management to work correctly.

Managing Citrix Web Interface User Logons

Managing Citrix Web Interface user logons involves managing and monitoring the following:

- Failed logons
- Logon process duration

IMPORTANT

Only Citrix Web Interface "Explicit" login types can be managed. "Pass-through" login type is not supported.

Overview

This section contains the following information:

- notes on deploying the SPI for Citrix on Citrix Web Interface Server nodes (refer to [“Setting Up Citrix Web Interface User Logons Management” on page 98](#))
- which policies are needed for monitoring Citrix Web Interface user logons (refer to [“Policies” on page 99](#))
- which tools are needed for managing Citrix Web Interface user logons (refer to [“Tools” on page 99](#))

Setting Up Citrix Web Interface User Logons Management

To monitor and manage Citrix Web Interface user logons, deploy the policies to all Citrix Web Interface Server managed nodes.

Depending on the Citrix Web Interface Server version, use the following policy groups:

- **on Citrix Web Interface Server 4.x**
deploy the *CTXSPI-Web Interface 4.x/CTXSPI-WI4 Quick Start* policy group
- **on Citrix Web Interface Server 3.0**
deploy the *CTXSPI-Web Interface 3.0/CTXSPI-WI3 Quick Start* policy group

Before you deploy the policies, verify that SPI for Citrix is fully configured and licensed on all Citrix Web Interface Server managed nodes. For this purpose you can use the **CTXSPI-Check Requirements/Configuration** tool.

If you are not sure which version of the Citrix Web Interface product you have installed on managed nodes, execute the **CTXSPI-Display Citrix Node Type Version** tool against those nodes.

NOTE

For instructions on how to deploy SPI for Citrix tools, policies, and reports, refer to [Chapter 3, "Setting Up the Environment"](#).

Policies

To set up management of the Citrix Web Interface user logons, deploy the policies in the following policy groups:

CTXSPI-Web Interface 4.x/CTXSPI-WI4 Quick Start

- CTXSPI-ChkwebInterfaceFailedLogons
- CTXSPI-ChkwebInterfaceLogonTime

CTXSPI-Web Interface 3.0/CTXSPI-WI3 Quick Start

- CTXSPI-ChkwebInterfaceFailedLogons
- CTXSPI-ChkwebInterfaceLogonTime

Tools

To manage the Citrix Web Interface user logons, SPI for Citrix provides the tools in the following tool group:

Web Interface / CTXSPI-WI Information

- CTXSPI-WI Display Last Failed Logins
- CTXSPI-WI Display Last Logins
- CTXSPI-WI Display Last Successful Logins

How It Works

Monitoring User Logons

Explicit login type on Citrix Web Interface requires users to enter the username and password in order to access Citrix published applications. Using this information, Web Interface is able to authenticate the user and obtain list of published applications a specific user is allowed to use. After successful authentication, the list of published applications is most of the time provided instantly. But sometimes this can take quite some time (if completed at all) and can get users frustrated.

The following policies help monitoring Citrix Web Interface user logons:

- **CTXSPI-ChkWebInterfaceFailedLogons**
Monitors for presence of a number of subsequent failed user logons. Failed user logon means that user was not able to logon to the Web Interface after providing username and password. A large number of subsequent failed user logons can indicate an issue with Web Interface or its connectivity to farm.
- **CTXSPI-ChkWebInterfaceLogonTime**
Monitors user logon duration for each user that logs on to the Web Interface.

Displaying User Logons

Besides monitoring, it can often be useful to inspect the user logon history on individual Citrix Web Interface.

The following tools can be used to view Web Interface user logons:

- **CTXSPI-WI Display Last Failed Logins**
Displays information about all failed user logons that occurred within specific amount of time.
- **CTXSPI-WI Display Last Logins**
Displays information about all successful and failed user logons that occurred within specific amount of time.
- **CTXSPI-WI Display Last Successful Logins**
Displays information about all successful user logons that occurred within specific amount of time.

Managing Citrix Web Interface Availability

The Web Interface provides users with access to the Presentation Server applications and content through a standard Web browser by exchanging information with the XML brokers. XML broker is any Presentation Server configured to handle XML requests via XML Service (the default behavior of any Presentation Server). It is a link between the farm it belongs to and the outer world (Web Interface). One Web Interface site can aggregate applications from many farms and more than one XML broker can be configured for one farm.

SPI for Citrix is able to actively monitor the availability of Web Interface and its dependant components by simulating end-user's activity on it. For this purpose, a special user account that is used for availability probing is required. See the *SPI for Citrix Installation Guide*, chapter *Setting Up Web Interface Availability User Account* on how to set up this account.

SPI for Citrix is also able to monitor for potential issues by probing all members of the configured Web Interface infrastructure. For example, if there are more than one XML brokers defined for one farm and one of them is not responding to the Web Interface, the end-user might only experience longer logon time. But from the infrastructural point of view, the administrator should be notified if any XML broker is experiencing problems, therefore the probing process covers three availability types:

- Web Interface site availability
- farm availability
- broker availability

Web Interface site availability represents end-user's experience and is divided into two phases:

- Accessing the Web Interface logon page
- User authentication and authorization (enumeration of user's published applications across all configured farms)

Farm availability represents end-user's experience in a context of a single farm and is divided into two phases:

- Enumeration of user's published applications in the farm
- Requesting the published application and receiving the ICA file. This is further divided into:
 - Host address request (farm load balancing)
 - Ticket request

Broker availability is used for pinpointing infrastructural issues. It has only one phase - enumeration of user's published applications.

For each phase, SPI for Citrix measures its duration. Duration is also calculated for the complete probing process.

Managing Citrix Web Interface availability involves managing and monitoring the following:

- Monitoring the availability probing process
- Viewing availability information
- Manually executing probe to get immediate availability results

Overview

This section contains the following information:

- notes on deploying SPI for Citrix on Citrix Web Interface Server nodes (refer to [“Setting Up Citrix Web Interface Availability” on page 102](#))
- which policies are needed for monitoring Citrix Web Interface availability (refer to [“Policies” on page 103](#))
- which tools are needed for managing Citrix Web Interface availability (refer to [“Tools” on page 103](#))

Setting Up Citrix Web Interface Availability

Before you can use Web Interface availability monitoring policies or tools, you need to correctly set up the Web Interface availability user account. See the *SPI for Citrix Installation Guide*, chapter *Setting Up Web Interface Availability User Account* on how to set up this account. Then deploy the policies from the following policy group to the Web Interface manages nodes that will execute availability probing:

- **CTXSPI-Web Interface 4.x/CTXSPI-WI4 Quick Start**

IMPORTANT

Web Interface active monitoring is supported only on Web Interface, version 4.0, 4.2, 4.5, and 4.6. Unlike passive monitoring, all possible Web Interface configurations are supported and are automatically detected.

Before you deploy the policies, verify that SPI for Citrix is fully configured and licensed on all Citrix Web Interface Server managed nodes. For this purpose you can use the **CTXSPI-Check Requirements/Configuration** tool.

If you are not sure which version of the Citrix Web Interface Server product you have installed on managed nodes, execute the **CTXSPI-Display Citrix Node Type Version** tool against those nodes.

NOTE

For instructions on how to deploy SPI for Citrix tools, policies, and reports, refer to [Chapter 3, "Setting Up the Environment"](#).

Policies

To set up management of the Citrix Web Interface availability, deploy the policies in the following policy groups:

CTXSPI-Web Interface 4.x/CTXSPI-WI4 Additional

- . CTXSPI-ChkBrokerAvailAppEnum
- . CTXSPI-ChkFarmAvailAppEnum
- . CTXSPI-ChkFarmAvailAppLB
- . CTXSPI-ChkSiteAvailAppEnum
- . CTXSPI-ChkSiteAvailLogonPage

CTXSPI-Web Interface 4.x/CTXSPI-WI4 Quick Start

- . CTXSPI-ChkBrokerAvail
- . CTXSPI-ChkBrokerAvailCompleted
- . CTXSPI-ChkFarmAvail
- . CTXSPI-ChkFarmAvailCompleted
- . CTXSPI-ChkSiteAvail
- . CTXSPI-ChkSiteAvailCompleted

Tools

To manage the Citrix Web Interface availability, SPI for Citrix provides the tools in the following tool group:

Web Interface / CTXSPI-WI Information

- . CTXSPI-WI Display Recent Broker Availability
- . CTXSPI-WI Display Recent Farm Availability
- . CTXSPI-WI Display Recent Site Availability
- . CTXSPI-WI Execute Site Availability Test

How It Works

Monitoring Availability

The following policies help monitoring Citrix Web Interface site availability:

- **CTXSPI-ChkSiteAvail**
Monitors the duration of Web Interface site availability.
- **CTXSPI-ChkSiteAvailCompleted**
Monitors whether all phases of Web Interface site availability have completed successfully.
- **CTXSPI-ChkSiteAvailLogonPage**
Monitors the time required for the Web Interface logon page to be delivered.
- **CTXSPI-ChkSiteAvailAppEnum**
Monitors the time required for the end-user published applications to be enumerated for all configured farms.

The following policies help monitoring farm (configured for particular Web Interface site) availability:

- **CTXSPI-ChkFarmAvail**
Monitors the duration of farm availability.
- **CTXSPI-ChkFarmAvailCompleted**
Monitors whether all phases of farm availability have completed successfully.
- **CTXSPI-ChkFarmAvailAppEnum**
Monitors the time required for the end-user published applications to be enumerated.
- **CTXSPI-ChkFarmAvailAppLB**
Monitors the time required for a published application to be load-balanced.

The following policies help monitoring XML broker (configured for particular farm) availability:

- **CTXSPI-ChkBrokerAvail**
Monitors the duration of broker availability.
- **CTXSPI-ChkBrokerAvailCompleted**
Monitors whether all phases of broker availability have completed successfully.
- **CTXSPI-ChkBrokerAvailAppEnum**
Monitors the time required for end-user published applications to be enumerated by individual XML broker.

Displaying Availability Probing Results

Besides monitoring, it can often be useful to inspect the availability probing history on the individual Citrix Web Interface server.

The following tools can be used to view Web Interface availability results:

- `CTXSPI-WI Display Recent Broker Availability`
Displays results of the recent broker availability measurements.
- `CTXSPI-WI Display Recent Farm Availability`
Displays results of the recent farm availability measurements.
- `CTXSPI-WI Display Recent Site Availability`
Displays results of the recent Web Interface site availability measurements.

The following tool can be used to perform the probe of the site, farm, and broker availability and display its results:

- `CTXSPI-WI Execute Site Availability Test`
Executes site, farm, and broker availability tests and displays test results. This tool should be used to check if everything is well configured for Web Interface availability policies or when you want to get immediate availability results.

Managing Citrix Web Interface Service Map

SPI for Citrix offers autodiscovery of Citrix Web Interface systems.

Overview

This section contains the following information:

- notes on deploying SPI for Citrix on Citrix Web Interface Server nodes (refer to [“Setting Up Citrix Web Interface Server Service Map Management”](#) on page 106)
- which policies are needed for monitoring Citrix Web Interface Server service map (refer to [“Policies”](#) on page 107)
- which tools are needed for managing Citrix Web Interface Server service map (refer to [“Tools”](#) on page 107)

Setting Up Citrix Web Interface Server Service Map Management

To monitor and manage Citrix Web Interface Server service map, deploy the policies to all Citrix Web Interface Server managed nodes.

Based on the Citrix Web Interface Server version, use the following policy groups:

- **on Citrix Web Interface Server 4.x**
deploy the *CTXSPI-WI4 Discovery* policy group
- **on Citrix Web Interface Server 3.0**
deploy the *CTXSPI-WI3 Discovery* policy group

Before you deploy the policies, verify that SPI for Citrix is fully configured and licensed on all Citrix Web Interface Server managed nodes. For this purpose you can use the **CTXSPI-Check Requirements/Configuration** tool.

If you are not sure which version of the Citrix Web Interface Server product you have installed on managed nodes, execute the **CTXSPI-Display Citrix Node Type Version** tool against those nodes.

NOTE

For instructions on how to deploy SPI for Citrix tools, policies, and reports, refer to [Chapter 3, “Setting Up the Environment”](#).

Policies

To set up and manage the Citrix Web Interface Server service map, deploy the policies in the following policy groups:

CTXSPI-Web Interface 4.x / CTXSPI-WI4 Discovery

- CTXSPI-ChkServiceModel
- CTXSPI-DscServiceModel2

CTXSPI-Web Interface 3.0 / CTXSPI-WI3 Discovery

- CTXSPI-ChkServiceModel
- CTXSPI-DscServiceModel2

Tools

To manage the Citrix Web Interface Server service map, SPI for Citrix provides the tools in the following tool group:

CTXSPI-Web Interface / CTXSPI-WI Discovery

- CTXSPI-Force Service Model Update

How It Works

Generating Citrix Web Interface Server Service Map

For instructions on how to perform autodiscovery and generate the Citrix Web Interface Server service map, refer to [Chapter 3, "Setting Up the Environment"](#).

Collecting Citrix Web Interface Server Performance Information

SPI for Citrix graphs and reports for Citrix Web Interface Server require that performance data is being collected on all Citrix Web Interface Server nodes that are being managed. Without these policies deployed, SPI for Citrix graphs and reports for Citrix Web Interface Servers will remain empty.

Overview

This section contains the following information:

- which policies are needed for collecting SPI for Citrix Citrix Web Interface Server performance data (refer to [“Policies” on page 108](#))

Policies

The following policies are required to collect SPI for Citrix Citrix Web Interface Server performance data. Depending on the Citrix Web Interface Server version, deploy the corresponding policy group:

CTXSPI-Web Interface 4.x / CTXSPI-WI4 Data Collection

- CTXSPI-LogSiteAvail
- CTXSPI-LogWIFailedLogons
- CTXSPI-LogWIUserLogonProcess

CTXSPI-Web Interface 3.0 / CTXSPI-WI3 Data Collection

- CTXSPI-LogWIFailedLogons
- CTXSPI-LogWIUserLogonProcess

How It Works

Citrix Web Interface Server Data Collection

SPI for Citrix reports and graphs rely on performance data being collected on the managed nodes. Performance data is stored in the Embedded Performance Component of the HPOM agent. Another name for this performance component is also the CODA subagent.

The following policies collect data on the Citrix Web Interface Server managed nodes:

- **CTXSPI-LogSiteAvail**

Collects data about Web Interface site availability. Data collected includes Web Interface URL, probing start time, the duration of the Web Interface logon page response, the duration of the application enumeration of all farms that are configured for this site.

Collects data about farm availability. Data collected includes farm name, probing start time, the name of the Presentation Server that was selected by the application load-balancing, the name of the requested application, the duration of the application enumeration, the duration of handing the application request, the duration of handling the host address request, the duration of handling the ticket request.

Collects data about XML broker availability. Data collected includes broker name, the name of the farm this broker belongs to, probing start time, the duration of the application enumeration.

- **CTXSPI-LogWIFailedLogons**

Collects data about failed logons on a Web Interface. Data collected includes username, Web Interface URL, and number of failed user logons that occurred since the last data collection.

- **CTXSPI-LogWIUserLogonProcess**

Collects data about user logons process duration for each user that logged-in to a Web Interface. Data collected includes username, Web Interface URL, logon start time and duration.

Chapter 7

Managing Citrix Secure Gateway Servers

About Managing Citrix Secure Gateway Servers

Citrix Secure Gateway is a Citrix infrastructure component you can use to secure access to server farms and access centers. It transparently encrypts and authenticates all user connections to protect against data tampering and theft.

Citrix Secure Gateway eases firewall traversal and provides a secure Internet gateway between Citrix servers and client devices. Typically, it is installed in the demilitarized zone on the network.

This chapter contains information for setting up management of Citrix Secure Gateway servers. It provides information on policies and tools, needed to monitor and manage Citrix Secure Gateway servers, and describes how you can employ these policies and tools.

Managing Citrix Secure Gateway servers involves the following:

- [“Managing Citrix Secure Gateway Services” on page 113](#)
- [“Managing Citrix Secure Gateway Sessions” on page 116](#)
- [“Managing Citrix Secure Gateway Service Map” on page 120](#)
- [“Collecting Citrix Secure Gateway Server Performance Information” on page 122](#)

Managing Citrix Secure Gateway Services

Managing Citrix Secure Gateway services involves managing and monitoring the following:

- Citrix Secure Gateway-related services
- Citrix Secure Gateway-related Windows Event Log entries

Overview

This section contains the following information:

- notes on deploying the SPI for Citrix on Citrix Secure Gateway Server nodes (refer to [“Setting Up Citrix Secure Gateway Services Management”](#) on page 113)
- which policies are needed for monitoring Citrix Secure Gateway services (refer to [“Policies”](#) on page 114)
- which tools are needed for managing Citrix Secure Gateway services (refer to [“Tools”](#) on page 114)

Setting Up Citrix Secure Gateway Services Management

To monitor and manage Citrix Secure Gateway services, deploy the policies to all Citrix Secure Gateway managed nodes.

Depending on the Citrix Secure Gateway version use the following policy groups:

- **on Citrix Secure Gateway Server 3.0 (comes with Citrix Presentation Server 4.0)**
deploy the *CTXSPI-Secure Gateway 3.0/CTXSPI-SG3 Quick Start* and *CTXSPI-Secure Gateway 3.0/CTXSPI-SG3 Additional* policy groups
- **on Citrix Secure Gateway Server 2.0 (comes with Citrix Presentation Server 3.0 and 1.0)**
deploy the *CTXSPI-Secure Gateway 2.0/CTXSPI-SG2 Quick Start* and *CTXSPI-Secure Gateway 2.0/CTXSPI-SG2 Additional* policy groups

Before you deploy the policies, verify that SPI for Citrix is fully configured and licensed on all Citrix Presentation Server managed nodes. For this purpose you can use the **CTXSPI-Check Requirements/Configuration** tool.

If you are not sure which version of the Citrix Secure Gateway product you have installed on managed nodes, execute the **CTXSPI-Display Citrix Node Type Version** tool against those nodes.

NOTE

For instructions on how to deploy SPI for Citrix tools, policies, and reports, refer to [Chapter 3, "Setting Up the Environment"](#).

Policies

To set up management of the Citrix Secure Gateway services, deploy the policies in the following policy groups:

CTXSPI-Secure Gateway 3.0/CTXSPI-SG3 Quick Start

- CTXSPI-ChkCitrixSGService
- CTXSPI-SG3-FwdCitrixSGSecGwyWarnError

CTXSPI-Secure Gateway 2.0/CTXSPI-SG2 Quick Start

- CTXSPI-ChkCitrixSGService
- CTXSPI-SG2-FwdCitrixSGSecGwyWarnError

CTXSPI-Secure Gateway 3.0/CTXSPI-SG3 Additional

- CTXSPI-SG3-FwdCitrixSGSecGwyInfo

CTXSPI-Secure Gateway 2.0/CTXSPI-SG2 Additional

- CTXSPI-SG2-FwdCitrixSGSecGwyInfo

Tools

To manage the Citrix Secure Gateway services, SPI for Citrix provides the tools in the following tool group:

CTXSPI-Secure Gateway / CTXSPI-SG Services

- CTXSPI-Start Secure Gateway Service
- CTXSPI-Status Secure Gateway Service
- CTXSPI-Stop Secure Gateway Service

How It Works

Service Monitoring Templates

Citrix Secure Gateway is implemented as a single Windows service. The following policy implements Citrix Secure Gateway service monitoring:

- CTXSPI-ChkCitrixSGService
Monitors Citrix Secure Gateway service to check if it is in running state.

Windows Event Log Forwarding Policies

Citrix Secure Gateway service logs the internal issues it detects to the Windows Event Log. When installed, it introduces its own Event Log. To early detect issues that may be developing, it is essential to monitor the Application Windows Event Log. The following Citrix Secure Gateway event logs are being monitored:

Event Log Name	SG 3.0	SG 2.0
Secure Gateway	yes	
CitrixSecureGateway		yes

The following policies implement Event Log forwarding:

- **CTXSPI-SG3-FwdCitrixSGSecGwyWarnError**
Forwards Citrix Secure Gateway 3.0-related Warning and Error messages from the Windows Secure Gateway event log.
- **CTXSPI-SG3-FwdCitrixSGSecGwyInfo**
Forwards Citrix Secure Gateway 3.0-related Informational messages from the Windows Secure Gateway event log.
- **CTXSPI-SG2-FwdCitrixSGSecGwyWarnError**
Forwards Citrix Secure Gateway 2.0-related Warning and Error messages from the Windows CitrixSecureGateway event log.
- **CTXSPI-SG2-FwdCitrixSGSecGwyInfo**
Forwards Citrix Secure Gateway 2.0-related Informational messages from the Windows CitrixSecureGateway event log.

Interacting with Services

A set of tools allows interacting with Citrix Secure Gateway service. These are located in the *CTXSPI-Secure Gateway/CTXSPI-SG Services* tool group. They allow starting, stopping, and checking status of Citrix Secure Gateway service:

- **CTXSPI-Start Secure Gateway Service**
Starts the Secure Gateway service on the managed node.
- **CTXSPI-Stop Secure Gateway Service**
Stops the Secure Gateway service on the managed node.
- **CTXSPI-Status Secure Gateway Service**
Shows the status of the Secure Gateway service on the managed node.

Managing Citrix Secure Gateway Sessions

Managing Citrix Secure Gateway sessions involves managing and monitoring the following:

- Citrix Secure Gateway-related sessions
- Citrix Secure Gateway-related Windows Event Log entries

Overview

This section contains the following information:

- notes on distributing the SPI for Citrix on Citrix Secure Gateway nodes (refer to [“Setting Up Citrix Secure Gateway Session Management”](#) on page 116)
- which policies are needed for monitoring Citrix Secure Gateway sessions (refer to [“Policies”](#) on page 117)

There are no tools available in SPI for Citrix to manage Citrix Secure Gateways sessions.

Setting Up Citrix Secure Gateway Session Management

To monitor and manage Citrix Secure Gateway sessions, deploy the policies to all Citrix Secure Gateway managed nodes.

Depending on the Citrix Secure Gateway version use the following policy groups:

- **on Citrix Secure Gateway 3.0 (comes with Citrix Presentation Server 4.0)**
deploy the *CTXSPI-Secure Gateway 3.0/CTXSPI-SG3 Quick Start* policy group
- **on Citrix Secure Gateway 2.0 (comes with Citrix Presentation Server 3.0 and 1.0)**
deploy the *CTXSPI-Secure Gateway 2.0/CTXSPI-SG2 Quick Start* policy group

Before you deploy the policies, verify that SPI for Citrix is fully configured and licensed on all Citrix Secure Gateway managed nodes. For this purpose you can use the **CTXSPI-Check Requirements/Configuration** tool.

If you are not sure which version of the Citrix Secure Gateway product you have installed on managed nodes, execute the **CTXSPI-Display Citrix Node Type Version** tool against those nodes.

NOTE

For instructions on how to distribute SPI for Citrix applications, templates and reports, refer to [Chapter 3, "Setting Up the Environment"](#).

Policies

To set up management of the Citrix License Server services, deploy the policies in the following policy groups:

CTXSPI-Secure Gateway 3.0/CTXSPI-SG3 Quick Start

- CTXSPI-SG3-ChkBytesSecFromClients
- CTXSPI-SG3-ChkBytesSecToClients
- CTXSPI-SG3-ChkClientConnectTimeAvg
- CTXSPI-SG3-ChkConnectionsSec
- CTXSPI-SG3-ChkSSLHandshakesPending
- CTXSPI-SG3-ChkSSLHandshakesSec
- CTXSPI-SG3-ChkSSLHandshakeTimeAvg
- CTXSPI-SG3-ChkTotalActiveConnections
- CTXSPI-SG3-ChkTotalPendingConnections

CTXSPI-Secure Gateway 2.0/CTXSPI-SG2 Quick Start

- CTXSPI-SG2-ChkClientConnectTimeLast
- CTXSPI-SG2-ChkTotalActiveConnections
- CTXSPI-SG2-ChkTotalPendingConnections

How It Works

Network Resource Consumption

Network resource consumption can be monitored cumulatively across all active sessions. Only Citrix Secure Gateway 3.0 provides metrics suitable for monitoring network resource consumption.

Policies that work only on Citrix Secure Gateway 3.0:

- CTXSPI-SG3-ChkBytesSecFromClients
Monitors the amount of bytes per second transferred from all connected clients to the Citrix Secure Gateway.
- CTXSPI-SG3-ChkBytesSecToClients
Monitors the amount of bytes per second transferred from the Citrix Secure Gateway to all connected clients.

There are no policies available to monitor network resource consumption on Citrix Secure Gateway 2.0.

Connection Process

Monitoring Citrix Secure Gateway connection process can give an insight into the ability of Citrix Secure Gateway to handle incoming connection requests. Under high load, the number of pending connections and the client connect time will typically increase.

Policies that work only on Citrix Secure Gateway 3.0:

- `CTXSPI-SG3-ChkClientConnectTimeAvg`
Monitors the average amount of time (in milliseconds) it takes for a client connection request to complete the connection process.
- `CTXSPI-SG3-ChkConnectionsSec`
Monitors the number of successfully completed client connection requests per second.
- `CTXSPI-SG3-ChkTotalPendingConnections`
Monitors the number of client connection requests that have not yet completed the connection process.
- `CTXSPI-SG3-ChkSSLHandshakesPending`
Monitors the number of SSL handshakes currently in progress between clients and the Citrix Secure Gateway.
- `CTXSPI-SG3-ChkSSLHandshakesSec`
Monitors the number of successful SSL handshakes per second.
- `CTXSPI-SG3-ChkSSLHandshakeTimeAvg`
Monitors the average time (in milliseconds) for an SSL handshake to complete.

Policies that work only on Citrix Secure Gateway 2.0:

- `CTXSPI-SG2-ChkClientConnectTimeLast`
Monitors the amount of time (in milliseconds) it took the last client connection request to complete the connection process.
- `CTXSPI-SG2-ChkTotalPendingConnections`
Monitors the number of client connection requests that have not yet completed the connection process.

Active Connections

Monitoring the number of active sessions in correlation with other Citrix Secure Gateway performance metrics helps determine if and when the server is becoming overloaded.

Policies that work only on Citrix Secure Gateway 3.0:

- `CTXSPI-SG3-ChkTotalActiveConnections`
Monitors the number of currently active Citrix Secure Gateway connections.

Policies that work only on Citrix Secure Gateway 2.0:

- `CTXSPI-SG2-ChkTotalActiveConnections`
Monitors the number of currently active Citrix Secure Gateway connections.

Managing Citrix Secure Gateway Service Map

SPI for Citrix offers autodiscovery of Citrix Secure Gateway servers.

Overview

This section contains the following information:

- notes on deploying SPI for Citrix on Citrix Secure Gateway Server nodes (refer to [“Setting Up Citrix Secure Gateway Server Service Map Management”](#) on page 120)
- which policies are needed for monitoring Citrix Secure Gateway Server service map (refer to [“Policies”](#) on page 121)
- which tools are needed for managing Citrix Secure Gateway Server service map (refer to [“Tools”](#) on page 121)

Setting Up Citrix Secure Gateway Server Service Map Management

To monitor and manage Citrix Secure Gateway Server service map, deploy the policies to all Citrix Secure Gateway Server managed nodes.

Based on the Citrix Secure Gateway Server version, use the following policy groups:

- **on Citrix Secure Gateway Server 3.0**
deploy the *CTXSPI-Secure Gateway 3.0 / CTXSPI-SG3 Discovery* policy group
- **on Citrix Secure Gateway Server 2.0**
deploy the *CTXSPI-Secure Gateway 2.0 / CTXSPI-SG2 Discovery* policy group

Before you deploy the policies, verify that SPI for Citrix is fully configured and licensed on all Citrix Secure Gateway Server managed nodes. For this purpose you can use the **CTXSPI-Check Requirements/Configuration** tool.

If you are not sure which version of the Citrix Secure Gateway Server product you have installed on managed nodes, execute the tool **CTXSPI-Display Citrix Node Type Version** against those nodes.

NOTE

For instructions on how to work with SPI for Citrix tools, policies, and reports, refer to [Chapter 3, “Setting Up the Environment”](#).

Policies

To set up and manage the Citrix Secure Gateway Server service map, deploy the policies in the following policy groups:

CTXSPI-Secure Gateway 3.0/ CTXSPI-SG3 Discovery

- CTXSPI-ChkServiceModel
- CTXSPI-DscServiceModel2

CTXSPI-Secure Gateway 2.0/ CTXSPI-SG2 Discovery

- CTXSPI-ChkServiceModel
- CTXSPI-DscServiceModel2

Tools

To manage the Citrix Secure Gateway Server service map, SPI for Citrix provides the tools in the following tool group:

CTXSPI-Secure Gateway / CTXSPI-SG Discovery

- CTXSPI-Force Service Model Update

How It Works

Generating Citrix Secure Gateway Server Service Map

For instructions on how to perform autodiscovery and generate the Citrix Web Interface Server service map, refer to [Chapter 3, "Setting Up the Environment"](#).

Collecting Citrix Secure Gateway Server Performance Information

SPI for Citrix graphs and reports for Citrix Secure Gateway Server require that performance data is collected on all Citrix Secure Gateway Server nodes that are being managed. Without these policies deployed, SPI for Citrix graphs and reports for Citrix Secure Gateway Servers will remain empty.

Overview

This section contains the following information:

- which policies are needed for collecting SPI for Citrix Citrix Secure Gateway Server performance data
(refer to [“Policies” on page 122](#))

Policies

The following policies are required to collect SPI for Citrix Citrix Secure Gateway Server performance data:

CTXSPI-Secure Gateway 3.0 / CTXSPI-SG3 Data Collection

- CTXSPI-SG3-LogSGActivity

CTXSPI-Secure Gateway 2.0 / CTXSPI-SG2 Data Collection

- CTXSPI-SG2-LogSGActivity

How It Works

Citrix Secure Gateway Server Data Collection

SPI for Citrix reports and graphs rely on performance data being collected on the managed nodes. Performance data is stored in the Embedded Performance Component of the HPOM agent. Another name for this performance component is also the CODA subagent.

The following policies collect data on the Citrix Secure Gateway Server managed nodes:

Templates that work only on **Citrix Secure Gateway 3.0**:

- CTXSPI-SG3-LogSGActivity
Collects data about Citrix Secure Gateway connection activity, including network

traffic from and to clients, number of active and pending connections, connection attempts per second and average client connect time, and number of pending SSL handshakes, number of SSL handshakes per second, and average SSL handshake time.

Policies that work only on **Citrix Secure Gateway 2.0**:

- CTXSPI-SG2-LogSGActivity
Collects data about Citrix Secure Gateway connection activity, including number of active and pending connections, and last client connect time.

Chapter 8

Maintaining SPI for Citrix

About Maintaining SPI for Citrix

SPI for Citrix requires some maintenance and administration, and a number of tools and policies is provided to help you with this tasks.

SPI for Citrix maintenance involves the following:

- [“SPI for Citrix Requirements and Configuration” on page 129](#)
- [“Licensing SPI for Citrix” on page 130](#)
- [“Configuring SPI for Citrix” on page 131](#)
- [“Determining Citrix Node-Type Version” on page 132](#)
- [“Generating SPI for Citrix Support Information” on page 133](#)
- [“Removing SPI for Citrix from the Managed Node” on page 134](#)

Overview

This section contains the following information:

- notes on deploying SPI for Citrix on Citrix nodes (refer to [“Setting Up SPI for Citrix Maintenance” on page 127](#))
- which policies are needed for maintaining SPI for Citrix (refer to [“Policies” on page 127](#))
- which tools are needed for maintaining SPI for Citrix (refer to [“Tools” on page 128](#))

Setting Up SPI for Citrix Maintenance

For SPI for Citrix maintenance, deploy policies to all Citrix managed nodes. Policies needed for maintaining SPI for Citrix are located in the following policy group:

- **SPI for Citrix/CTXSPI-SPI Licensing**

SPI for Citrix also provides tools for administration and maintenance of Citrix managed nodes. These tools are located in the following tool group on the management server:

- **SPI for Citrix/CTXSPI-SPI Maintenance**

Before you deploy the policies, verify that SPI for Citrix is fully configured and licensed on all Citrix Web Interface Server managed nodes. For this purpose you can use the **CTXSPI-Check Requirements/Configuration** tool.

If you are not sure which version of the Citrix product you have installed on managed nodes, execute the **CTXSPI-Display Citrix Node Type Version** tool against those nodes.

NOTE

For instructions on how to deploy SPI for Citrix tools, policies, and reports, refer to [Chapter 3, “Setting Up the Environment”](#).

Policies

The following policies are required to carry out specific SPI for Citrix maintenance tasks:

CTXSPI-SPI Licensing

- CTXSPI-LicOpMsg

Tools

To maintain SPI for Citrix, the following tools in tool groups are provided:

SPI for Citrix/CTXSPI-SPI Maintenance/CTXSPI-SPI Configure

- . CTXSPI-Configure Farm Administrator Accounts
- . CTXSPI-Display Citrix Node Type Version
- . CTXSPI-Register Subagent
- . CTXSPI-Unregister Subagent

SPI for Citrix/CTXSPI-SPI Maintenance/CTXSPI-SPI Licensing

- . CTXSPI-1. Clear License Request File on Mgmt Server
- . CTXSPI-2. Generate License Request for Node
- . CTXSPI-3. Merge License Activation Codes on Mgmt Server
- . CTXSPI-List License Activation Codes

SPI for Citrix/CTXSPI-SPI Maintenance/CTXSPI-SPI Support

- . CTXSPI-Check Requirements/Configuration
- . CTXSPI-Collect Support Information

SPI for Citrix/CTXSPI-SPI Maintenance/CTXSPI-SPI Uninstall

- . CTXSPI-Remove SPI from Managed Node

SPI for Citrix Requirements and Configuration

In order for SPI for Citrix to operate correctly, the following general and configuration requirements should be fulfilled on the Citrix managed node:

- Valid SPI for Citrix license
- Distributed SPI for Citrix Data Collector files
- Running SPI for Citrix subagent and plug-in manager components

Node-type specific requirements and configuration items include the following:

- For Presentation Server system:
 - Presentation Server version
 - Running MFCOM component
 - Correctly configured farm administrator account
- For Citrix Web Interface system:
 - Web Interface version
 - OS version
 - IIS site filter and extension need to be installed
- For Citrix License Server system:
 - Citrix License Server version
- For Citrix Secure Gateway Server system:
 - Citrix Secure Gateway Server version

Typically, when installing and configuring SPI for Citrix to work on the managed node, you can use the **CTXSPI-Check Requirements/Configuration** tool to verify that SPI for Citrix is correctly installed and configured on the managed nodes. The tool also reports configuration problems, enabling you to quickly resolve any deficiencies in installation and configuration.

The following tools implement SPI for Citrix requirements and configuration-related tasks:

- **CTXSPI-Check Requirements/Configuration**
Displays the result of the SPI for Citrix requirements and configuration check on the managed node.

Licensing SPI for Citrix

In order for SPI for Citrix to operate correctly on the Citrix managed node, a valid product license needs to be available for that node.

The following policies implement SPI for Citrix licensing related activities:

- `CTXSPI-LicOpCMsg`
Intercepts and processes licensing related `opcmsg` messages generated on the managed node.

The following tools implement SPI for Citrix licensing related tasks:

- `CTXSPI-1. Clear License Request File on Mgmt Server`
Clears license request file on the management server.
- `CTXSPI-2. Generate License Request for Node`
Generates license request for the managed node and sends it to the management server.
- `CTXSPI-3. Merge License Activation Codes on Mgmt Server`
License requests are activated by HERMES SoftLab licensing system. When you receive license activation codes, you need to merge them with the existing set of license activations using this tool.
- `CTXSPI-List License Activation Codes`
Lists license activation codes that are available on the management server, along with their expiration dates.

NOTE

For detailed description of the licensing procedure refer to *SPI for Citrix Installation and Configuration Guide*.

Configuring SPI for Citrix

When configuring SPI for Citrix, one of the essential tasks is the registration of the SPI subagent with the HPOM agent. SPI for Citrix subagent is the principal component of the SPI for Citrix, capable of performing advanced Citrix management features.

Another important configuration task for managing Citrix farm servers is to define a farm administrator account for each farm.

The following tools implement SPI for Citrix configuration related tasks:

- **CTXSPI-Register Subagent**
Register SPI subagent with the HPOM agent on the managed node. This is typically performed during the installation of the SPI for Citrix to the managed node.
- **CTXSPI-Unregister Subagent**
Unregister SPI subagent with the HPOM agent on the managed node. This is typically performed during the uninstallation of the SPI for Citrix from the managed node.
- **CTXSPI-Configure Farm Administrator Accounts**
Launches the "*SPI for Citrix Farm Administrator Account*" GUI tool on a management console where farm administrator account for each farm to be managed can be specified.

NOTE

For more details on configuring SPI for Citrix, refer to *SPI for Citrix Installation and Configuration Guide*.

Determining Citrix Node-Type Version

Before you deploy SPI for Citrix policies to Citrix managed nodes, you should know exactly which version of Citrix Presentation Server, Citrix Web Interface, Citrix License Server, and Citrix Secure Gateway is installed on the managed node.

The following tool is able to determine node-type version:

- `CTXSPI-Display Citrix Node Type Version`
Checks for presence and displays the version of Citrix node types on a system.

Supported Citrix node types include:

- Citrix Presentation Server
- Citrix Web Interface
- Citrix License Server
- Citrix Secure Gateway

Generating SPI for Citrix Support Information

Should something go wrong when installing or using the SPI for Citrix product, the SPI for Citrix support engineers will most likely want to get the specific pieces of information from the node that will help them troubleshoot the issue.

The following tool helps generate SPI for Citrix support information:

- `CTXSPI-Collect Support Information`
Collects support information and copies it to a specific location on the managed node. For detailed description, refer to *SPI for Citrix Installation and Configuration Guide*.

Removing SPI for Citrix from the Managed Node

Detailed procedure for uninstalling SPI for Citrix from the managed nodes is described in the *SPI for Citrix Installation and Configuration Guide*.

One of the last steps of this procedure is also removing the SPI for Citrix files and directories from the managed node.

The following tool helps to remove SPI for Citrix files from the managed node:

- **CTXSPI-Remove SPI from Managed Node**
Removes all SPI for Citrix files and directories from the managed node. Note that the complete uninstall procedure has to be performed on the managed node before this tool can be executed. Refer to *SPI for Citrix Installation and Configuration Guide*.

Chapter 9

Quick Reference

SPI for Citrix Tools and Tool Groups

When you install SPI for Citrix, a new top level tool group is added in the HP Operations Manager administrator GUI. The *SPI for Citrix* tool group contains all tools, used for managing your Citrix environment.

CTXSPI-Web Interface

Top-level Citrix Web Interface tool group.

CTXSPI-WI Discovery

SPI for Citrix Web Interface service discovery tool group.

CTXSPI-Force Service Model Update

Tools for automatic discovery of the Citrix infrastructure configuration.

Command: CTXSPISwitch.cmd triggermonitor CTXSPI-DscServiceModel2

Execute on: Managed Node

CTXSPI-WI Configure

Installs and configures Web Interface monitoring components.

CTXSPI-Uninstall WI Monitoring

Uninstalls CTXSPI Web Interface Monitoring components. To uninstall Web Interface Monitoring, IIS must be restarted. You must provide the 'allow_iis_restart' parameter to allow it.

Command: CTXSPISwitch.cmd uninstallwi allow_iis_restart_not

Execute on: Managed Node

CTXSPI-Install WI Monitoring

Installs CTXSPI Web Interface Monitoring components and restarts IIS. You must provide the 'allow_iis_restart' parameter to allow it. Otherwise, WI Monitoring components are not going to be installed.

Command: CTXSPISwitch.cmd allow_iis_restart_not

Execute on: Managed Node

CTXSPI-WI Information

SPI for Citrix Web Interface information tool group.

CTXSPI-WI Display Configuration

Displays the contents of the WebInterface.conf file.

Command: CTXSPISwitch.cmd widispconf

Execute on: Managed Node

CTXSPI-WI Display Last Failed Logins

Displays users that failed to authenticate to Web Interface in the last x seconds (x is a configurable parameter).

Command: CTXSPISwitch.cmd wilastloginsfailed 300

Execute on: Managed Node

CTXSPI-WI Display Last Logins

Displays all users that logged in to Web Interface in the last x seconds (x is a configurable parameter).

Command: CTXSPISwitch.cmd wilastlogins 300

Execute on: Managed Node

CTXSPI-WI Display Last Successful Logins

Displays users that successfully logged in to Web Interface in the last x seconds (x is a configurable parameter).

Command: CTXSPISwitch.cmd wilastloginsok 300

Execute on: Managed Node

CTXSPI-WI Display Recent Broker Availability

Displays results of the recent broker availability measurements. Requires one of ChkBrokerAvail or LogSiteAvail policies to be deployed.

Command: CTXSPISwitch.cmd brokavaildisprecent /minutes:15

Execute on: Managed Node

CTXSPI-WI Display Recent Farm Availability

Displays results of the recent farm availability measurements. Requires one of ChkFarmAvail or LogSiteAvail policies to be deployed.

Command: CTXSPISwitch.cmd farmavaildisprecent /minutes:15

Execute on: Managed Node

CTXSPI-WI Display Recent Site Availability

Displays results of the recent Web Interface site availability measurements. Requires one of ChkSiteAvail or LogSiteAvail policies to be deployed.

Command: CTXSPISwitch.cmd siteavaildisprecent /minutes:15

Execute on: Managed Node

CTXSPI-WI Execute Site Availability Test

Executes site availability test and displays test results.

Command: CTXSPISwitch.cmd siteavailexec

Execute on: Managed Node

CTXSPI-Secure Gateway

Top-level Citrix Secure Gateway tool group.

CTXSPI-SG Discovery

SPI for Citrix Secure Gateway service discovery tool group.

CTXSPI-Force Service Model Update

Tools for automatic discovery of the Citrix infrastructure configuration

Command: CTXSPISwitch.cmd triggermonitor CTXSPI-DscServiceModel2

Execute on: Managed Node

CTXSPI-SG Services

SPI for Citrix Secure Gateway services tool group.

CTXSPI-Start Secure Gateway Service

Starts a Citrix Secure Gateway service. The Citrix Secure Gateway service provides secure access to Citrix Presentation Server farms.

Command: CTXSPISwitch.cmd startsvc "CtxSecGwy"

Execute on: Managed Node

CTXSPI-Status Secure Gateway Service

Shows the status of a Citrix Secure Gateway service. The Citrix Secure Gateway service provides secure access to Citrix Presentation Server farms.

Command: CTXSPISwitch.cmd dispmsgsvc

Execute on: Managed Node

CTXSPI-Stop Secure Gateway Service

Stops a Citrix Secure Gateway service. The Citrix Secure Gateway service provides secure access to Citrix Presentation Server farms.

Command: CTXSPIswitch.cmd stopsvc "CtxSecGwy"

Execute on: Managed Node

CTXSPI-SPI Maintenance

SPI for Citrix Presentation Server maintenance tool group.

CTXSPI-SPI Uninstall

SPI for Citrix uninstall tool group.

CTXSPI-Remove SPI from Managed Node

Removes all SPI for Citrix files from the managed node and performs all necessary cleanup steps. Run this tool only after you have undeployed all SPI for Citrix policies from the managed node, and properly uninstalled Web Interface monitoring and unregistered SPI for Citrix subagent.

Command: cmd.exe /c "if exist "%OvAgentDir%\bin\instrumentation" (cscript.exe "%OvAgentDir%\bin\instrumentation\CTXSPI-RemoveWholeSPI.vbs" -removeWholeSPI) else (cscript.exe "%OvAgentDir%\bin\OpC\cmds\CTXSPI-RemoveWholeSPI.vbs" -removeWholeSPI)"

Execute on: Managed Node

CTXSPI-SPI Support

SPI for Citrix support tool group.

CTXSPI-Collect Support Information

Collects various support information about the Citrix managed node.

Command: CTXSPIsupport.exe -infall

Execute on: Managed Node

CTXSPI-Check Requirements/Configuration

Checks whether a managed node matches SPI for Citrix requirements and whether it is correctly configured.

Command: CTXSPISwitch.cmd chkreqall

Execute on: Managed Node

CTXSPI-SPI Licensing

SPI for Citrix licensing tool group.

CTXSPI-2. Generate License Request for Node

Generates the SPI for Citrix license request information for a managed node. Usually executed on many nodes at once to speed-up generation of license requests. License request information for all nodes is collected on a management server in a single license request file.

Command: CTXSPILicensing -generate -company_name "your company name"

Execute on: Managed Node

CTXSPI-1. Clear License Request File on Mgmt Server

Clears the SPI for Citrix license request file on a management server. Usually, this is the first step when requesting SPI for Citrix licenses.

Command: \\\$OPC_MGMTSV\SPI-Share\ctxspi\bin\CTXSPILicensing -clear

Execute on: Management Server

CTXSPI-3. Merge License Activation Codes on Mgmt Server

Merges newly obtained SPI for Citrix license activation codes with the existing license activations. After a successful license merge, the license activation codes are ready to be deployed to Citrix managed nodes.

Command: \\\$OPC_MGMTSV\SPI-Share\ctxspi\bin\CTXSPILicensing -merge

Execute on: Management Server

CTXSPI-List License Activation Codes

Lists and counts the existing SPI for Citrix license activation codes on the management server.

Command: \\\$OPC_MGMTSV\SPI-Share\ctxspi\bin\CTXSPILicensing -list

Execute on: Management Server

CTXSPI-SPI Configure

SPI for Citrix configuration tool group.

CTXSPI-Register Subagent

Registers SPI for Citrix subagent with the HPOM agent.

Command: CTXSPISwitch.cmd regsubagt

Execute on: Managed Node

CTXSPI-Unregister Subagent

Unregisters SPI for Citrix subagent with the HPOM agent.

Command: CTXSPISwitch.cmd unregsubagt

Execute on: Managed Node

CTXSPI-Configure Farm Administrator Accounts

Configures farm administrator accounts that SPI for Citrix uses to interact with Citrix farms. Each farm that is managed needs to have exactly one account configured.

Command: \\\$OPC_MGMTSV\SPI-Share\ctxspi\bin\CTXSPIConfig.exe

Execute on: Management Console

CTXSPI-Display Citrix Node Type Version

Displays the installation status and version of the Citrix product or component on the managed node. Supported node types are: Citrix Presentation Server, Citrix Web Interface, Citrix License Server, and Citrix Secure Gateway.

Command: CTXSPISwitch.cmd dispntver

Execute on: Managed Node

CTXSPI-Citrix License Server

Top-level Citrix License Server tool group.

CTXSPI-CLS Services

SPI for Citrix License Server services tool group.

CTXSPI-Stop Citrix Licensing Service

Stops a Citrix Licensing service. The Citrix Licensing service provides licenses for Citrix Access Suite products.

Command: CTXSPISwitch.cmd stopsvc "CitrixLicensing"

Execute on: Managed Node

CTXSPI-Stop License Management Console for Citrix Licensing Service

Stops a License Management Console for a Citrix Licensing service. The License Management Console for the Citrix Licensing service allows the License Management Consoles to connect to the Citrix License server.

Command: CTXSPISwitch.cmd stopsvc "CTXLMC"

Execute on: Managed Node

CTXSPI-Start License Management Console for Citrix Licensing Service

Starts a License Management Console for a Citrix Licensing service. The License Management Console for the Citrix Licensing service allows the License Management Consoles to connect to the Citrix License server.

Command: CTXSPISwitch.cmd startsvc "CTXLMC"

Execute on: Managed Node

CTXSPI-Stop Citrix Licensing WMI Service

Stops a Citrix Licensing WMI service. The Citrix Licensing WMI service provides WMI access to the Citrix license information.

Command: CTXSPISwitch.cmd stopsvc "Citrix_GTLicensingProv"

Execute on: Managed Node

CTXSPI-Status Citrix License Server Services

Shows the status of all Citrix License Server services.

Command: CTXSPISwitch.cmd dispclssvc

Execute on: Managed Node

CTXSPI-Start Citrix Licensing WMI Service

Starts a Citrix Licensing WMI service. The Citrix Licensing WMI service provides WMI access to the Citrix license information.

Command: CTXSPISwitch.cmd startsvc "Citrix_GTLicensingProv"

Execute on: Managed Node

CTXSPI-Start Citrix Licensing Service

Starts a Citrix Licensing service. The Citrix Licensing service provides licenses for Citrix Access Suite products.

Command: CTXSPISwitch.cmd startsvc "CitrixLicensing"

Execute on: Managed Node

CTXSPI-CLS Information

SPI for Citrix License Server information tool group.

CTXSPI-Display License Checkout Diagnostics

Displays the Citrix License Server license check-out diagnostics.

Command: CTXSPISwitch.cmd dispclslicdiag

Execute on: Managed Node

CTXSPI-Display License Use Details

Displays the Citrix License Server license use details.

Command: CTXSPISwitch.cmd dispclslicdetail

Execute on: Managed Node

CTXSPI-Display License Use Information

Displays the Citrix License Server license use information.

Command: CTXSPISwitch.cmd dispclslic

Execute on: Managed Node

CTXSPI-CLS Discovery

SPI for Citrix License Server service discovery tool group.

CTXSPI-Force Service Model Update

Tool for automatic discovery of the Citrix infrastructure configuration.

Command: CTXSPISwitch.cmd triggermonitor CTXSPI-DscServiceModel2

Execute on: Managed Node

CTXSPI-Presentation Server

Top-level Citrix Presentation Server tool group.

CTXSPI-PS Discovery

SPI for Citrix Presentation Server service discovery tool group.

CTXSPI-Force Service Model Update

Forces generation of the OpC message which contains Citrix Presentation Server service model information.

Command: CTXSPISwitch.cmd triggermonitor CTXSPI-DscServiceModel2

Execute on: Managed Node

CTXSPI-PS Farm

SPI for Citrix Presentation Server farm tool group.

CTXSPI-Check Data Store Consistency

Performs Data Store consistency check

Command: dscheck.exe

Execute on: Managed Node

CTXSPI-PS Session Control

SPI for Citrix Presentation Server session control tool group.

CTXSPI-PS Disconnect

SPI for Citrix Presentation Server session disconnect tool group.

CTXSPI-Disconnect All Application Sessions in Farm

Disconnects all user sessions that are currently running a specific published application in a farm. It is enough to select only one Citrix Presentation Server from the farm. You must provide an application name using one of the following parameters:

1. Use the /appshortname: "*appname*" parameter, where *appname* is the application's browser name.
2. Use the default /appname: "*appname*" parameter, where *appname* is the application's distinguished name. You can also use an asterisk (*) as a wildcard character match for multiple characters. It will only be treated as a wildcard character if used as a last character in a word, otherwise it will be treated as a normal character. Wildcard pattern matching allows you to specify more than one application. For example, if you want to specify all applications in Department A, you would use /appname: "Applications/Department A/*".

Command: CTXSPISwitch.cmd discappsess

Execute on: Managed Node

CTXSPI-Disconnect All Sessions in Zone

Disconnects all sessions in a zone. Operator needs to select only one Presentation Server from the zone.

Command: CTXSPISwitch.cmd disconnectzone

Execute on: Managed Node

CTXSPI-Disconnect Farm Sessions by Username

Disconnects all user sessions in a farm. Operator needs to specify a username and select a Presentation Server from the farm.

Command: CTXSPISwitch.cmd disconnectuser type_username_here

Execute on: Managed Node

CTXSPI-Disconnect All Sessions in Farm

Disconnects all sessions in a farm. Operator needs to select only one Citrix Presentation Server from the farm.

Command: CTXSPISwitch.cmd disconnectfarm

Execute on: Managed Node

CTXSPI-Disconnect All Sessions on Server

Disconnects all sessions on a Presentation Server.

Command: CTXSPISwitch.cmd disconnectserver

Execute on: Managed Node

CTXSPI-Disconnect Server Session by Name

Disconnects a session on a Presentation Server. Operator needs to specify a session name and select a Presentation Server.

Command: CTXSPISwitch.cmd disconnectsession type_session_name_here

Execute on: Managed Node

CTXSPI-PS Send Message

SPI for Citrix Presentation Server session send message tool group.

CTXSPI-Send Message to Application Sessions in Farm

Sends a message to all user sessions that are currently running a specific published application in a farm. It is enough to select only one Citrix Presentation Server from the farm. You must provide an application name using one of the following parameters:

1. Use the /appshortname:"*appname*" parameter, where *appname* is the application's browser name.

2. Use the default `/appname:"appname"` parameter, where *appname* is the application's distinguished name. You can also use an asterix (*) as a wildcard character match for multiple characters. It will only be treated as a wildcard character if used as a last character in a word, otherwise it will be treated as a normal character. Wildcard pattern matching allows you to specify more than one application. For example, if you want to specify all applications in Department A, you would use `/appname:"Applications/Department A/*"`.

Command: `CTXSPISwitch.cmd sendmsgappsess`

Execute on: Managed Node

CTXSPI-Send Message to Farm Sessions

Sends a message to all sessions in a farm. Operator needs to specify a message text and select a Presentation Server that is part of the farm.

Command: `CTXSPISwitch.cmd sendmsgfarm \ "Type message here, leave both backslash-quotes intact\"`

Execute on: Managed Node

CTXSPI-Send Message to User Sessions

Sends a message to all sessions in a farm. Operator needs to specify a username, message text, and execute the tool on a Presentation Server that is part of the farm.

Command: `CTXSPISwitch.cmd sendmsguser type_username_here \ "Type message here, leave both backslash-quotes intact\"`

Execute on: Managed Node

CTXSPI-Send Message to Session

Sends a message to a session on a Presentation Server. Operator needs to specify a session name, message text, and select a Presentation Server.

Command: `CTXSPISwitch.cmd sendmsgsession type_session_name_here \ "Type message here, leave both backslash-quotes intact\"`

Execute on: Managed Node

CTXSPI-Send Message to Zone Sessions

Sends a message to all sessions in a zone. Operator needs to specify a message text and select a Presentation Server that is part of the zone.

Command: `CTXSPISwitch.cmd sendmsgzone \ "Type message here, leave both backslash-quotes intact\"`

Execute on: Managed Node

CTXSPI-Send Message to Server Sessions

Sends a message to all sessions on a Presentation Server. Operator needs to specify a message text and select a Presentation Server.

Command: CTXSPISwitch.cmd sendmsgserver \`"Type message here, leave both backslash-quotes intact"`

Execute on: Managed Node

CTXSPI-PS Reset

SPI for Citrix Presentation Server session reset tool group.

CTXSPI-Reset Session

Resets a session on a Presentation Server. Operator needs to specify a session name and select a Presentation Server.

Command: CTXSPISwitch.cmd resetsession `type_session_name_here`

Execute on: Managed Node

CTXSPI-Reset Session by ID

Resets a session on a Presentation Server. Operator needs to specify a session ID and select a Presentation Server.

Command: CTXSPISwitch.cmd resetsessionid `type_session_id`

Execute on: Managed Node

CTXSPI-PS Logoff

SPI for Citrix Presentation Server session logoff tool group.

CTXSPI-Logoff All Application Sessions in Farm

Logs off all user sessions that are currently running a specific published application in a farm. It is enough to select only one Citrix Presentation Server from the farm. You must provide an application name using one of the following parameters:

1. Use the `/appshortname:"appname"` parameter, where *appname* is the application's browser name.
2. Use the default `/appname:"appname"` parameter, where *appname* is the application's distinguished name. You can also use an asterisk (*) as a wildcard character match for multiple characters. It will only be treated as a wildcard character if used as a last character in a word, otherwise it will be treated as a normal character. Wildcard pattern matching allows you to specify more than one application. For example, if you want to specify all applications in Department A, you would use `/appname:"Applications/Department A/*"`.

Command: CTXSPISwitch.cmd logoffappsess

Execute on: Managed Node

CTXSPI-Logoff All Sessions in Zone

Logs off all sessions in a zone. Operator needs to select a Presentation Server from the zone.

Command: CTXSPISwitch.cmd logoffzone

Execute on: Managed Node

CTXSPI-Logoff All Sessions on Server

Logs off all sessions on a Presentation Server. Operator needs to select a Presentation Server.

Command: CTXSPISwitch.cmd logoffserver

Execute on: Managed Node

CTXSPI-Logoff Server Session by Name

Logs off a session on a Presentation Server. Operator needs to specify a session name and select a Presentation Server.

Command: CTXSPISwitch.cmd logoffsession type_session_name_here

Execute on: Managed Node

CTXSPI-Logoff All Sessions in Farm

Logs off all sessions in a farm. Operator needs to select a Presentation Server from the farm.

Command: CTXSPISwitch.cmd logofffarm

Execute on: Managed Node

CTXSPI-Logoff Farm Sessions by Username

Logs off all user sessions in a farm. Operator needs to specify a username and select a Presentation server from the farm.

Command: CTXSPISwitch.cmd logoffuser type_username_here

Execute on: Managed Node

CTXSPI-PS Logon Control

SPI for Citrix Presentation Server session logon control tool group.

CTXSPI-Enable Logons to Farm

Enables logons to a farm. Operator needs to execute this tool on a Presentation Server that is part of the farm.

Command: CTXSPISwitch.cmd logonfarm enable

Execute on: Managed Node

CTXSPI-Disable Logons to Server

Disables logons to a server. Operator needs to execute this tool on a Presentation Server.

Command: CTXSPISwitch.cmd logonserver disable

Execute on: Managed Node

CTXSPI-Status of Logons to Zone

Shows whether logons are enabled/disabled for each Presentation Server in a zone. Operator needs to execute this tool on a Presentation Server that is part of the zone.

Command: CTXSPISwitch.cmd logonzone status

Execute on: Managed Node

CTXSPI-Status of Logons to Farm

Shows whether logons are enabled/disabled for each Presentation Server in a farm. Operator needs to execute this tool on a Presentation Server that is part of the farm.

Command: CTXSPISwitch.cmd logonfarm status

Execute on: Managed Node

CTXSPI-Enable Logons to Server

Enables logons to a server. Operator needs to execute this tool on a Presentation Server.

Command: CTXSPISwitch.cmd logonserver enable

Execute on: Managed Node

CTXSPI-Enable Logons to Zone

Enables logons to a zone. Operator needs to execute this tool on a Presentation Server that is part of the zone.

Command: CTXSPISwitch.cmd logonzone enable

Execute on: Managed Node

CTXSPI-Status of Logons to Server

Shows whether logons are enabled/disabled on a server. Operator needs to execute this tool on a Presentation Server.

Command: CTXSPISwitch.cmd logonserver status

Execute on: Managed Node

CTXSPI-Disable Logons to Zone

Disables logons to a zone. Operator needs to execute this tool on a Presentation Server that is part of the zone.

Command: CTXSPISwitch.cmd logonzone disable

Execute on: Managed Node

CTXSPI-Disable Logons to Farm

Disables logons to a farm. Operator needs to execute this tool on a Presentation Server that is part of the farm.

Command: CTXSPISwitch.cmd logonfarm disable

Execute on: Managed Node

CTXSPI-Enable Application in Farm

Enables published application in a farm. It is enough to select only one Citrix Presentation Server from the farm. You must provide an application name using one of the following parameters:

1. Use the /appshortname: "*appname*" parameter, where *appname* is the application's browser name.
2. Use the default /appname: "*appname*" parameter, where *appname* is the application's distinguished name. You can also use an asterisk (*) as a wildcard character match for multiple characters. It will only be treated as a wildcard character if used as a last character in a word, otherwise it will be treated as a normal character. Wildcard pattern matching allows you to specify more than one application. For example, if you want to specify all applications in Department A, you would use /appname: "Applications/Department A/*".

Command: CTXSPISwitch.cmd enableapp

Execute on: Managed Node

CTXSPI-Disable Application in Farm

Disables published application in a farm. It is enough to select only one Citrix Presentation Server from the farm. You must provide an application name using one of the following parameters:

1. Use the /appshortname:"*appname*" parameter, where *appname* is the application's browser name.
2. Use the default /appname:"*appname*" parameter, where *appname* is the application's distinguished name. You can also use an asterix (*) as a wildcard character match for multiple characters. It will only be treated as a wildcard character if used as a last character in a word, otherwise it will be treated as a normal character. Wildcard pattern matching allows you to specify more than one application. For example, if you want to specify all applications in Department A, you would use /appname:"Applications/Department A/*".

Command: CTXSPISwitch.cmd disableapp

Execute on: Managed Node

CTXSPI-PS Services

SPI for Citrix Presentation Server services tool group.

CTXSPI-Stop MetaFrame COM Server Service

Stops a MetaFrame COM Server service. The service provides COM access to the MetaFrame Farm.

Command: CTXSPISwitch.cmd stopsvc MFCom

Execute on: Managed Node

CTXSPI-Stop Spooler Service

Stops a Spooler service. The service manages all local and network print queues and controls all printing jobs.

Command: CTXSPISwitch.cmd stopsvc Spooler

Execute on: Managed Node

CTXSPI-Start Terminal Services Session Directory Service

Starts a Terminal Services Session Directory service. The service enables a user connection request to be routed to the appropriate Terminal Server in a cluster.

Command: CTXSPISwitch.cmd startsvc Tssdis

Execute on: Managed Node

CTXSPI-Start Resource Manager Mail Service

Starts a Resource Manager Mail service. The service provides mail support for the Resource Manager.

Command: CTXSPISwitch.cmd startsvc ResourceManagerMail

Execute on: Managed Node

CTXSPI-Start SSL Server Relay Service

Starts a SSL Server Relay service. The service enables SSL-secured communication to the relay with configurable forwarding of the decrypted data using SOCKSv5.

Command: CTXSPISwitch.cmd startsvc "Citrix SSL Relay"

Execute on: Managed Node

CTXSPI-Start IMA Service

Starts an Independent Management Architecture service. The service provides management services for Citrix products.

Command: CTXSPISwitch.cmd startsvc IMAService

Execute on: Managed Node

CTXSPI-Stop SSL Server Relay Service

Stops a SSL Server Relay service. The service enables SSL-secured communication to the relay with configurable forwarding of the decrypted data using SOCKSv5.

Command: CTXSPISwitch.cmd stopsvc "Citrix SSL Relay"

Execute on: Managed Node

CTXSPI-Stop Diagnostic Facility COM Server Service

Stops a Diagnostic Facility COM Server service.

Command: CTXSPISwitch.cmd stopsvc CdfSvc

Execute on: Managed Node

CTXSPI-Stop Citrix SMA Service

Stops a Citrix SMA service. The Suite Monitoring and Alerting service watches the event log and WMI for problems and raises alerts in the Access Suite Console.

Command: CTXSPISwitch.cmd stopsvc "Citrix SMA Service"

Execute on: Managed Node

CTXSPI-Start Citrix 64-bit Virtual Memory Optimization Service

Starts a Citrix 64-bit Virtual Memory Optimization service. The service dynamically optimizes 64-bit applications running on the system.

Command: CTXSPISwitch.cmd startsvc "Citrix 64-bit Virtual Memory Optimization"

Execute on: Managed Node

CTXSPI-Stop Citrix WMI Service

Stops a Citrix WMI service. The service provides the Citrix WMI classes.

Command: CTXSPISwitch.cmd stopsvc CitrixWMIService

Execute on: Managed Node

CTXSPI-Start Encryption Service

Starts an Encryption service. The service enables secure communication with RC5 128-bit encryption between the Citrix ICA Clients and MetaFrame Presentation Server system.

Command: CTXSPISwitch.cmd startsvc "Encryption Service"

Execute on: Managed Node

CTXSPI-Start Citrix WMI Service

Starts a Citrix WMI service. The service provides the Citrix WMI classes.

Command: CTXSPISwitch.cmd startsvc CitrixWMIService

Execute on: Managed Node

CTXSPI-Stop Encryption Service

Stops an Encryption service. The service enables secure communication with RC5 128-bit encryption between the Citrix ICA Clients and MetaFrame Presentation Server system.

Command: CTXSPISwitch.cmd stopsvc "Encryption Service"

Execute on: Managed Node

CTXSPI-Stop Citrix Print Manager Service

Stops a Citrix Print Manager service. The service supports the Citrix Advanced Universal Printing Architecture.

Command: CTXSPISwitch.cmd stopsvc cpsvc

Execute on: Managed Node

CTXSPI-Status OS and Terminal Server Services

Shows the status of relevant Microsoft Windows and Terminal Server services.

Command: CTXSPISwitch.cmd dispostssvc

Execute on: Managed Node

CTXSPI-Stop Citrix 64-bit Virtual Memory Optimization Service

Stops a Citrix 64-bit Virtual Memory Optimization service. Service dynamically optimizes a 64-bit applications running on the system.

Command: CTXSPISwitch.cmd stopsvc "Citrix 64-bit Virtual Memory Optimization"

Execute on: Managed Node

CTXSPI-Stop Resource Manager Mail Service

Stops a Resource Manager Mail service. The service provides mail support for a Resource Manager.

Command: CTXSPISwitch.cmd stopsvc ResourceManagerMail

Execute on: Managed Node

CTXSPI-Start Citrix CPU Utilization Mgmt/User-Session Sync Service

Starts a Citrix CPU Utilization Mgmt/User-Session Sync service. The service synchronizes the CPU Utilization Management user ID of a process with the user ID of the session owner of the process

Command: CTXSPISwitch.cmd startsvc CTXCPUUsync

Execute on: Managed Node

CTXSPI-Stop Citrix CPU Utilization Mgmt/User-Session Sync Service

Stops a Citrix CPU Utilization Mgmt/User-Session Sync service. The service synchronizes the CPU Utilization Management user ID of a process with the user ID of the session owner of the process

Command: CTXSPISwitch.cmd stopsvc CTXCPUUsync

Execute on: Managed Node

CTXSPI-Stop Terminal Services Session Directory Service

Stops a Terminal Services Session Directory service. The service enables a user connection request to be routed to the appropriate Terminal Server in a cluster.

Command: CTXSPISwitch.cmd stopsvc Tssdis

Execute on: Managed Node

CTXSPI-Start Citrix XTE Server Service

Starts a Citrix XTE Server service.

Command: CTXSPISwitch.cmd startsvc CitrixXTEServer

Execute on: Managed Node

CTXSPI-Stop Citrix Virtual Memory Optimization Service

Stops a Citrix Virtual Memory Optimization service. The service dynamically optimizes tools running on the system.

Command: CTXSPISwitch.cmd stopsvc "Citrix Virtual Memory Optimization"

Execute on: Managed Node

CTXSPI-Stop IMA Service

Stops an Independent Management Architecture service. The service provides management services for the Citrix products.

Command: CTXSPISwitch.cmd stopsvc IMAService

Execute on: Managed Node

CTXSPI-Stop Client Network Service

Stops a Client Network service. The service maps client drives and peripherals for access in ICA sessions.

Command: CTXSPISwitch.cmd stopsvc CdmService

Execute on: Managed Node

CTXSPI-Stop Citrix XTE Server Service

Stops a Citrix XTE Server service.

Command: CTXSPISwitch.cmd stopsvc CitrixXTEServer

Execute on: Managed Node

CTXSPI-Stop Terminal Services Service

Stops a Terminal Services service. The service allows users to connect interactively to the system.

Command: CTXSPISwitch.cmd stopsvc TermService

Execute on: Managed Node

CTXSPI-Start Citrix Virtual Memory Optimization Service

Starts a Citrix Virtual Memory Optimization service. The service dynamically optimizes tools running on the system.

Command: CTXSPISwitch.cmd startsvc "Citrix Virtual Memory Optimization"

Execute on: Managed Node

CTXSPI-Start Citrix SMA Service

Starts a Citrix SMA service. The Suite Monitoring and Alerting service watches the event log and WMI for problems and raises alerts in the Access Suite Console.

Command: CTXSPISwitch.cmd startsvc "Citrix SMA Service"

Execute on: Managed Node

CTXSPI-Stop Citrix CPU Utilization Mgmt/Resource Mgmt Service

Stops a Citrix CPU Utilization Mgmt/Resource Mgmt service. The service manages resource consumption to enforce entitlement policies.

Command: CTXSPISwitch.cmd stopsvc ctxcpuSched

Execute on: Managed Node

CTXSPI-Start Diagnostic Facility COM Server Service

Starts a Diagnostic Facility COM Server service.

Command: CTXSPISwitch.cmd startsvc CdfSvc

Execute on: Managed Node

CTXSPI-Stop Citrix XML Service

Stops a Citrix XML service. The Citrix XML service services XML data requests sent by Citrix components.

Command: CTXSPISwitch.cmd stopsvc CtxHttp

Execute on: Managed Node

CTXSPI-Start MetaFrame COM Server Service

Starts a MetaFrame COM Server service. The service provides COM access to the MetaFrame Farm.

Command: CTXSPISwitch.cmd startsvc MFCom

Execute on: Managed Node

CTXSPI-Stop Netlogon Service

Stops a Netlogon service. The service maintains a secure channel between this computer and the domain controller for authenticating users and services.

Command: CTXSPISwitch.cmd stopsvc Netlogon

Execute on: Managed Node

CTXSPI-Status Presentation Server Services

Shows the status of all Presentation Server services.

Command: CTXSPISwitch.cmd disppssvc

Execute on: Managed Node

CTXSPI-Start Citrix XML Service

Starts a Citrix XML service. The Citrix XML service services XML data requests sent by Citrix components.

Command: CTXSPISwitch.cmd startsvc CtxHttp

Execute on: Managed Node

CTXSPI-Start Spooler Service

Starts a Spooler service. The service manages all local and network print queues and controls all printing jobs.

Command: CTXSPISwitch.cmd startsvc Spooler

Execute on: Managed Node

CTXSPI-Start Client Network Service

Starts a Client Network service. The service maps client drives and peripherals for access in ICA sessions.

Command: CTXSPISwitch.cmd startsvc CdmService

Execute on: Managed Node

CTXSPI-Start Netlogon Service

Starts a Netlogon service. The service maintains a secure channel between this computer and the domain controller for authenticating users and services.

Command: CTXSPISwitch.cmd startsvc Netlogon

Execute on: Managed Node

CTXSPI-Start Terminal Services Service

Starts a Terminal Services service. The service allows users to connect interactively to the system.

Command: CTXSPISwitch.cmd startsvc TermService

Execute on: Managed Node

CTXSPI-Start ADF Installer Service

Starts an ADF Installer service. The service provides support for installing ADF packages that were created with the Citrix Packager.

Command: CTXSPISwitch.cmd startsvc "ADF Installer"

Execute on: Managed Node

CTXSPI-Start Citrix Print Manager Service

Starts a Citrix Print Manager service. The service supports the Citrix Advanced Universal Printing Architecture.

Command: CTXSPISwitch.cmd startsvc cpsvc

Execute on: Managed Node

CTXSPI-Stop ADF Installer Service

Stops an ADF Installer service. provides support for installing ADF packages that were created with the Citrix Packager.

Command: CTXSPISwitch.cmd stopsvc "ADF Installer"

Execute on: Managed Node

CTXSPI-Start Citrix CPU Utilization Mgmt/Resource Mgmt Service

Starts a Citrix CPU Utilization Mgmt/Resource Mgmt service. The service manages resource consumption to enforce entitlement policies.

Command: CTXSPISwitch.cmd startsvc ctxcpuSched

Execute on: Managed Node

CTXSPI-Start Citrix Health Monitoring and Recovery Service

Starts a Citrix Health Monitoring and Recovery Service.

Command: CTXSPISwitch.cmd startsvc "CitrixHealthMon"

Execute on: Managed Node

CTXSPI-Stop Citrix Health Monitoring and Recovery Service

Stops a Citrix Health Monitoring and Recovery Service.

Command: CTXSPISwitch.cmd stopsvc "CitrixHealthMon"

Execute on: Managed Node

CTXSPI-Start Encryption Service 4.5

Starts a Citrix Encryption service. The service enables secure communication with a RC5 128-bit encryption between the Citrix ICA Clients and Citrix Presentation Server system.

Command: CTXSPISwitch.cmd startsvc "Citrix Encryption Service"

Execute on: Managed Node

CTXSPI-Stop Encryption Service 4.5

Stops a Citrix Encryption service. The service enables secure communication with a RC5 128-bit encryption between the Citrix ICA Clients and Citrix Presentation Server system.

Command: CTXSPIswitch.cmd stopsvc "Citrix Encryption Service"

Execute on: Managed Node

CTXSPI-Start Citrix Streaming Service

Starts a Citrix Streaming Service. The service manages the Citrix Streaming Client.

Command: CTXSPIswitch.cmd startsvc "RadeSvc"

Execute on: Managed Node

CTXSPI-Stop Citrix Streaming Service

Stops a Citrix Streaming Service. The service manages the Citrix Streaming Client.

Command: CTXSPIswitch.cmd stopsvc "RadeSvc"

Execute on: Managed Node

CTXSPI-Start Citrix Services Manager Service

Starts a Citrix Services Manager Service. The service provides Citrix Presentation Server with an interface to the operating system.

Command: CTXSPIswitch.cmd startsvc "IMAAdvanceSrv"

Execute on: Managed Node

CTXSPI-Stop Citrix Services Manager Service

Stops a Citrix Services Manager Service. The service provides Citrix Presentation Server with an interface to the operating system.

Command: CTXSPIswitch.cmd stopsvc "IMAAdvanceSrv"

Execute on: Managed Node

CTXSPI-PS Information

SPI for Citrix Presentation Server information tool group.

CTXSPI-Display Zone Information

Displays zone information of the selected Citrix Presentation Server node.

Command: CTXSPIswitch.cmd displzones

Execute on: Managed Node

CTXSPI-Display Session Information

Displays detailed session information of the Citrix Presentation Server node.

Command: CTXSPISwitch.cmd displsessions

Execute on: Managed Node

CTXSPI-Display Server Mode

Displays Data Store connection mode (direct/indirect) in which Presentation Server operates.

Command: CTXSPISwitch.cmd displmode

Execute on: Managed Node

CTXSPI-Display Recent User Logons

Displays User Logons that occurred within the specific time interval.

Command: CTXSPISwitch.cmd displlogonuser /minutes:15

Execute on: Managed Node

CTXSPI-Display Presentation Server Information

Displays details of the Presentation Servers in a farm.

Command: CTXSPISwitch.cmd displsrv

Execute on: Managed Node

CTXSPI-Display License Information

Displays the Citrix farm license details (usage, availability).

Command: CTXSPISwitch.cmd displlic

Execute on: Managed Node

CTXSPI-Display Number of Servers in Farm

Displays the number of Citrix servers in a farm, to which selected Citrix server belongs.

Command: CTXSPISwitch.cmd displfarmsrvcnt

Execute on: Managed Node

CTXSPI-Display User Profile Information

Displays information about user profiles.

Command: CTXSPISwitch.cmd dispprofilestatus CTXSPI-DisplayUserProfileInformation

Execute on: Management Server

CTXSPI-Display Application Information

Displays published tools on a server.

Command: CTXSPISwitch.cmd displapps

Execute on: Managed Node

CTXSPI-Display Application Information in Farm

Displays published application information in a farm. It is enough to select only one Citrix Presentation Server from the farm.

Command: CTXSPISwitch.cmd dispapps

Execute on: Managed Node

CTXSPI-Display Logons by User

Displays logons for the particular user.

Command: CTXSPISwitch.cmd displogonuser /
user:<enter_account_in_format_DOMAIN\USER>

Execute on: Managed Node

CTXSPI-Display Number of Servers in Zone

Displays the number of servers in the Presentation Server's zone.

Command: CTXSPISwitch.cmd displzonesrvcnt

Execute on: Managed Node

CTXSPI-Display Session Information By User

Displays detailed session information of the Presentation Server, grouped by username.

Command: CTXSPISwitch.cmd displsessbyusr

Execute on: Managed Node

CTXSPI-Find User Sessions in Farm

Displays detailed session information of the particular user in a farm.

Command: CTXSPISwitch.cmd dispfarmsess /username:"<enter_user_name>"

Execute on: Managed Node

CTXSPI-Display Streamed Application Information

Displays streamed published tools on a server.

Command: CTXSPISwitch.cmd displstreamedapps

Execute on: Managed Node

CTXSPI-Display Application Sessions in Farm

Displays all users that are currently running a specific published application in a farm. It is enough to select only one Citrix Presentation Server from the farm. You must provide an application name using one of the following parameters:

1. Use the /appshortname:"*appname*" parameter, where *appname* is the application's browser name.
2. Use the default /appname:"*appname*" parameter, where *appname* is the application's distinguished name. You can also use an asterisk (*) as a wildcard character match for multiple characters. It will only be treated as a wildcard character if used as a last character in a word, otherwise it will be treated as a normal character. Wildcard pattern matching allows you to specify more than one application. For example, if you want to specify all applications in Department A, you would use /appname:"Applications/Department A/*".

Command: CTXSPISwitch.cmd dispappusers

Execute on: Managed Node

SPI for Citrix Policies and Policy Groups

When you install SPI for Citrix, a new top level policy group is added in the HP Operations Manager administrator GUI. The *SPI for Citrix* policy group contains all policies, used for managing your Citrix environment.

When you use SPI for Citrix, policies are grouped by their purpose. This structure helps you to quickly find the policies that you need to assign.

SPI for Citrix provides four types of policies:

- Schedule policies
- Logfile policies
- Message policies
- Monitor policies

Citrix servers incorporate several Windows Services. Failure on a system could prevent a service from starting, or could terminate it, which could lead to inoperability of the Citrix server. Therefore, such events need to be reported. SPI for Citrix monitors Citrix Windows Services and in case of failure sends alerts. These messages include information about the service and its purpose, the impact of its failure, and provides instructions for corrective action.

Policies for monitoring Citrix sessions monitor status and performance of Citrix sessions on the Citrix servers.

Policies for logging extended performance data collect extended performance metrics for all Citrix service processes. In addition, these policies also log server farm membership and session data.

Schedule Policies

CTXSPI-DisconnectSessions

Disconnects sessions that are idle for more then the specified time (default time = 60 minutes).

Execute every: 14m47s

Command line: "CTXSPISwitch.cmd disconsessions 60"

CTXSPI-LogApps

Logs published application usage.

Execute on:

Minute: "4,9,14,19,24,29,34,39,44,49,54,59"

Hour: "0-23"

Day: "1-31"

Month: "1-12"

Command line: CTXSPIAppsLog.cmd

CTXSPI-LogCitrixLSLicenseUse

Logs the Citrix License Server license use information.

Execute on:

Minute: "3,8,13,18,23,28,33,38,43,48,53,58"

Hour: "0-23"

Day: "1-31"

Month: "1-12"

Command line: "CTXSPILsluLog.cmd"

CTXSPI-LogOffSessions

Logs off sessions that are disconnected for more than the specified time (default time = 180 minutes).

Execute every: 15m7s

Command line: "CTXSPISwitch.cmd logoffsessions 180"

CTXSPI-LogPSUserLogonProcess

Logs the Presentation Server user logon process performance information.

Execute on:

Minute: "2,7,12,17,22,27,32,37,42,47,52,57"

Hour: "0-23"

Day: "1-31"

Month: "1-12"

Command line: "CTXSPIPsldLog.cmd"

CTXSPI-LogProfile

Logs the profiles status.

Execute on:

Minute: "9"
Hour: "0,12"
Day: "1-31"
Month: "1-12"
Command line: "CTXSPIProfileLog.cmd"

CTXSPI-LogProfiles

Logs the sum of all profiles status.
Execute on:
Minute: "9,19,29,39,49,58"
Hour: "0-23"
Day: "1-31"
Month: "1-12"
Command line: "CTXSPIProfilesLog.cmd"

CTXSPI-LogWIFailedAuth

Logs the Web Interface failed user logon authentications.
Execute on:
Minute: "1,6,11,16,21,26,31,36,41,46,51,56"
Hour: "0-23"
Day: "1-31"
Month: "1-12"
Command line: "CTXSPIWiflLog.cmd"

CTXSPI-LogWIUserLogonProcess

Logs the Web Interface user logon process duration.
Execute on:
Minute: "1,6,11,16,21,26,31,36,41,46,51,56"
Hour: "0-23"
Day: "1-31"
Month: "1-12"
Command line: "CTXSPIWildLog.cmd"

CTXSPI-LogSiteAvail

Logs performance of configured Web Interface site(s), farm(s) and XML broker(s).

Execute on:

Minute: "2,7,12,17,22,27,32,37,42,47,52,57"

Hour: "0-23"

Day: "1-31"

Month: "1-12"

Command line: "CTXSPIAvailLog.cmd logsiteavail"

CTXSPI-LogonThrottler

Protects the server from being overloaded by intensive user logons.

Execute every: 9m

Command line: "CTXSPISwitch.cmd logonthrottler"

CTXSPI-SG2-LogSGActivity

Logs the selected Citrix Secure Gateway 2.0 performance data.

Execute on:

Minute: "2,7,12,17,22,27,32,37,42,47,52,57"

Hour: "0-23"

Day: "1-31"

Month: "1-12"

Command line: "CTXSPICollectPerf.cmd CTXSPI_SGS2"

CTXSPI-SG3-LogSGActivity

Logs the selected Citrix Secure Gateway 3.0 performance data.

Execute on:

Minute: "2,7,12,17,22,27,32,37,42,47,52,57"

Hour: "0-23"

Day: "1-31"

Month: "1-12"

Command line: "CTXSPICollectPerf.cmd CTXSPI_SGS3"

CTXSPI-ServerConfigLogging

Logs the Citrix-specific configuration information for a server.

Execute on:

Minute: "17"

Hour: "0-23"

Day: "1-31"

Month: "1-12"

Command line: "CTXSPIFarmLogUx.cmd"

CTXSPI-ServicesLogging

Logs the selected performance data for Citrix services.

Execute on:

Minute: "1,6,11,16,21,26,31,36,41,46,51,56"

Hour: "0-23"

Day: "1-31"

Month: "1-12"

Command line: "CTXSPICollectPerf.cmd CTXSPI_SVCS"

CTXSPI-SessionsExLogging

Logs the extended performance data for Citrix sessions.

Execute on:

Minute: "3,8,13,18,23,28,33,38,43,48,53,58"

Hour: "0-23"

Day: "1-31"

Month: "1-12"

Command line: "CTXSPISesxLogUx.cmd"

CTXSPI-SessionsICALogging

Logs the selected performance data for Citrix ICA sessions.

Execute on:

Minute: "2,7,12,17,22,27,32,37,42,47,52,57"

Hour: "0-23"

Day: "1-31"

Month: "1-12"

Command line: "CTXSPICollectPerf.cmd CTXSPI_SICA"

CTXSPI-SessionsTSSLogging

Logs the selected performance data for Terminal Services sessions.

Execute on:

Minute: "2,7,12,17,22,27,32,37,42,47,52,57"

Hour: "0-23"

Day: "1-31"

Month: "1-12"

Command line: "CTXSPICollectPerf.cmd CTXSPI_SESS"

Logfile Policies

CTXSPI-FwdCitrixLSAppInfo

Forwards all Citrix License Server Application informational event log entries.

Event log name: "%APPLICATION_LOG%"

Rules:

Description: forwards info CITRIX_LicenseServer

Severity: Normal

Description: forwards info CTXLMC

Severity: Normal

Description: forwards info lmgrd_LicenseServer

Severity: Normal

CTXSPI-FwdCitrixLSAppWarnError

Forwards all Citrix License Server Application warning / error event log entries.

Event log name: "%APPLICATION_LOG%"

Rules:

Description: forwards warning/error CITRIX_LicenseServer

Severity: Warning Critical

Description: forwards warning/error CTXLMC

Severity: Warning Critical

Description: forwards warning/error lmgrd_LicenseServer

Severity: Warning Critical

CTXSPI-FwdCitrixPSAppInfo

Forwards all Citrix Presentation Server Application informational event log entries.

Event log name: "%APPLICATION_LOG%"

Rules:

Description: forwards informational Citrix 64-bit Virtual Memory Optimization

Severity: Normal

Description: forwards informational Citrix SSL Relay

Severity: Normal

Description: forwards informational Citrix Virtual Memory Optimization

Severity: Normal

Description: forwards informational Citrix WMI Service

Severity: Normal

Description: forwards informational CLTMGR

Severity: Normal

Description: forwards informational CTXCPUUtilMgmt

Severity: Normal

Description: forwards informational CtxSbxAppMsg

Severity: Normal

Description: forwards informational DSCheck

Severity: Normal

Description: forwards informational InstallationManager

Severity: Normal

Description: forwards informational MetaframeEvents

Severity: Normal

Description: forwards informational MFSNMPAgent

Severity: Normal

Description: forwards informational Reliability Server

Severity: Normal

Description: forwards informational twpopup

Severity: Normal

Description: forwards informational wsxica

Severity: Normal

Description: forwards informational Citrix Configuration Logging

Severity: Normal

Description: forwards informational Citrix Resource Management

Severity: Normal

Description: forwards informational CitrixHealthMon

Severity: Normal

Description: forwards forwards informational RADE Licensing

Severity: Normal

Description: forwards informational RADEEvents

Severity: Normal

CTXSPI-FwdCitrixPSAppWarnError

Forwards all Citrix Presentation Server Application warning / error event log entries.

Event log name: "%APPLICATION_LOG%"

Rules:

Description: forwards warning/error Citrix 64-bit Virtual Memory Optimization

Severity: Warning Critical

Description: forwards warning/error Citrix SSL Relay

Severity: Warning Critical

Description: forwards warning/error Citrix Virtual Memory Optimization

Severity: Warning Critical

Description: forwards warning/error Citrix WMI Service

Severity: Warning Critical

Description: forwards warning/error CLTMGR

Severity: Warning Critical

Description: forwards warning/error CTXCPUUtilMgmt

Severity: Warning Critical

Description: forwards warning/error CtxSbxAppMsg

Severity: Warning Critical

Description: forwards warning/error DSCheck

Severity: Warning Critical

Description: forwards warning/error InstallationManager

Severity: Warning Critical

Description: forwards warning/error MetaframeEvents

Severity: Warning Critical

Description: forwards warning/error MFSNMPAgent

Severity: Warning Critical

Description: forwards warning/error Reliability Server

Severity: Warning Critical

Description: forwards warning/error twpopup

Severity: Warning Critical

Description: forwards warning/error wxica

Severity: Warning Critical

Description: forwards warning/error Citrix Configuration Logging

Severity: Warning Critical

Description: forwards warning/error Citrix Resource Management

Severity: Warning Critical

Description: forwards warning/error CitrixHealthMon

Severity: Warning Critical

Description: forwards warning/error RADE Licensing

Severity: Warning Critical

Description: forwards warning/error RADEEvents

Severity: Warning Critical

CTXSPI-FwdCitrixPSSysInfo

Forwards all Citrix Presentation Server System informational event log entries.

Event log name: "%SYSTEM_LOG%"

Rules:

Description: forwards informational Cdm

Severity: Normal

Description: forwards informational Citrix Resource Management

Severity: Normal

Description: forwards informational CtxSbx

Severity: Normal

Description: forwards informational ICABrowser

Severity: Normal

Description: forwards informational IMABrowserSS

Severity: Normal

Description: forwards informational IMAService

Severity: Normal

Description: forwards informational MetaFrame

Severity: Normal

Description: forwards informational CPSLicensing

Severity: Normal

CTXSPI-FwdCitrixPSSysWarnError

Forwards all Citrix Presentation Server System warning / error event log entries.

Event log name: "%SYSTEM_LOG%"

Rules:

Description: forwards warning/error Cdm

Severity: Warning Critical

Description: forwards warning/error Citrix Resource Management

Severity: Warning Critical

Description: forwards warning/error CtxSbx

Severity: Warning Critical

Description: forwards warning/error ICABrowser

Severity: Warning Critical

Description: forwards warning/error IMABrowserSS

Severity: Warning Critical

Description: forwards warning/error IMAService

Severity: Warning Critical

Description: forwards warning/error MetaFrame

Severity: Warning Critical
Description: forwards warning/error CPSLicensing
Severity: Warning Critical

CTXSPI-FwdLogonThrottlerEvents

Forwards all Logon Throttler warning / error event log entries.
Event log name: "%APPLICATION_LOG%"
Rules:

CTXSPI-FwdOsAndTSAppInfo

Forwards all OS and Terminal Server Application informational event log entries.
Event log name: "%APPLICATION_LOG%"
Rules:
Description: forwards informational SpoolerCtrs
Severity: Normal

CTXSPI-FwdOsAndTSAppWarnError

Forwards all OS and Terminal Server Application warning / error event log entries.
Event log name: "%APPLICATION_LOG%"
Rules:
Description: forwards warning/error SpoolerCtrs
Severity: Warning Critical

CTXSPI-FwdOsAndTSSysInfo

Forwards all OS and Terminal Server System informational event log entries.
Event log name: "%SYSTEM_LOG%"
Rules:
Description: forwards informational TermDD
Severity: Normal
Description: forwards informational TermServDevices
Severity: Normal
Description: forwards informational TermService
Severity: Normal

Description: forwards informational TermServJet

Severity: Normal

Description: forwards informational TermServSessDir

Severity: Normal

Description: forwards informational Netlogon

Severity: Normal

Description: forwards informational Print

Severity: Normal

CTXSPI-FwdOsAndTSSysWarnError

Forwards all OS and Terminal Server System warning / error event log entries.

Event log name: "%SYSTEM_LOG%"

Rules:

Description: forwards warning/error TermDD

Severity: Warning Critical

Description: forwards warning/error TermServDevices

Severity: Warning Critical

Description: forwards warning/error TermService

Severity: Warning Critical

Description: forwards warning/error TermServJet

Severity: Warning Critical

Description: forwards warning/error TermServSessDir

Severity: Warning Critical

Description: forwards warning/error Netlogon

Severity: Warning Critical

Description: forwards warning/error Print

Severity: Warning Critical

CTXSPI-SG2-FwdCitrixSGSecGwyInfo

Forwards all Citrix Secure Gateway 2.0 informational event log entries.

Event log name: "%CitrixSecureGateway_LOG%"

Rules:

Description: forwards info

Severity: Normal

CTXSPI-SG2-FwdCitrixSGSecGwyWarnError

Forwards all Citrix Secure Gateway 2.0 warning / error event log entries.

Event log name: "%CitrixSecureGateway_LOG%"

Rules:

Description: forwards warning/error

Severity: Warning Critical

CTXSPI-SG3-FwdCitrixSGSecGwyInfo

Forwards all Citrix Secure Gateway 3.0 "Secure Gateway" informational event log entries.

Event log name: "%Secure Gateway_LOG%"

Rules:

Description: forwards info

Severity: Normal

CTXSPI-SG3-FwdCitrixSGSecGwyWarnError

Forwards all Citrix Secure Gateway 3.0 "Secure Gateway" warning / error event log entries.

Event log name: "%Secure Gateway_LOG%"

Rules:

Description: forwards warning/error

Severity: Warning Critical

CTXSPI-FwdCitrixRuntimeError

Forwards runtime errors of Citrix services.

Event log name: "%SYSTEM_LOG%"

Rules:

Description: forwards informational/warning/error Application Popup

Severity: Critical

Message Policies

CTXSPI-LicOpcMsg

Suppress non-SPI for Citrix licensing messages.

Rules:

Description: Intercepts license request generation messages

Severity: Normal Warning Minor Major Critical

Source: SPI for Citrix

Object: License

Message text: "LicenseRequestGeneration"

Description: Intercepts "license not found" error

Severity: Normal Warning Minor Major Critical

Source: SPI for Citrix

Object: License

Message text: "LIC_CHK_NOTFOUND"

Description: Intercepts "part of license information is missing" error

Source: SPI for Citrix

Object: License

Message text: "LIC_CHK_LICACTINFO"

Description: Intercepts "license key is incorrect" error

Source: SPI for Citrix

Object: License

Message text: "LIC_CHK_LK"

Description: Intercepts "incorrect product ID" error

Source: SPI for Citrix

Object: License

Message text: "LIC_CHK_PID"

Description: Intercepts "number of processors too high" error
Source: SPI for Citrix
Object: License
Message text: "LIC_CHK_NRP"

Description: Intercepts "license is time-limited" error
Source: SPI for Citrix
Object: License
Message text: "LIC_USING_TRIAL"

Description: Intercepts "license expired" error
Source: SPI for Citrix
Object: License
Message text: "LIC_CHK_EXP"

Description: Intercepts "license file not present" error
Source: SPI for Citrix
Object: License
Message text: "LIC_OPENR_LICFILE"

Description: Intercepts all other CTXSPI licensing errors
Source: SPI for Citrix
Object: License
Message text: "CTXSPI license file on node <MSG_NODE_NAME> does not exist."

Monitor Policies

CTXSPI-ChkCitrixLSLicenseUse

Monitors Citrix License Server license use.

Execute every: 5m

Command line: "CTXSPISwitch.cmd chkclslic CTXSPI-ChkCitrixLSLicenseUse"

Rules:

Description: major.

Threshold: 98.000000

Severity: Major

Description: warning.

Threshold: 95.000000

Severity: Warning

CTXSPI-ChkCitrixLSServices

Monitors Citrix License Server services.

Execute every: 5m

Command line: "CTXSPISwitch.cmd chkclssvc CTXSPI-ChkCitrixLSServices"

Rules:

Object: CitrixLicensing

Description: Not installed.

Threshold: 2.000000

Severity: Critical

Object: CitrixLicensing

Description: Running.

Threshold: 1.000000

Severity: Normal

Object: CitrixLicensing

Description: Not running.

Threshold: 0.000000

Severity: Critical

Object: Citrix_GTLicensingProv

Description: Running.

Threshold: 1.000000

Severity: Normal

Object: Citrix_GTLicensingProv

Description: Not running.

Threshold: 0.000000

Severity: Minor

Object: CTXLMC

Description: Running.

Threshold: 1.000000

Severity: Normal

Object: CTXLMC

Description: Not running.

Threshold: 0.000000

Severity: Major

CTXSPI-ChkCitrixPSServices

Monitors mandatory and optional Citrix Presentation Server services.

Execute every: 5m

Command line: "CTXSPISwitch.cmd chkctxsvc CTXSPI-ChkCitrixPSServices"

Rules:

Object: ADF Installer

Description: Running.

Threshold: 1.000000

Severity: Normal

Object: ADF Installer

Description: Not running.

Threshold: 0.000000

Severity: Major

Object: ctxcpuSched
Description: Running.
Threshold: 1.000000
Severity: Normal

Object: ctxcpuSched
Description: Not running.
Threshold: 0.000000
Severity: Major

Object: CTXCPUUsync
Description: Running.
Threshold: 1.000000
Severity: Normal

Object: CTXCPUUsync
Description: Not running.
Threshold: 0.000000
Severity: Major

Object: cpsvc
Description: Running.
Threshold: 1.000000
Severity: Normal

Object: cpsvc
Description: Not running.
Threshold: 0.000000
Severity: Major

Object: Citrix SSL Relay
Description: Running.

Threshold: 1.000000

Severity: Normal

Object: Citrix SSL Relay

Description: Not running.

Threshold: 0.000000

Severity: Major

Object: Citrix SMA Service

Description: Running.

Threshold: 1.000000

Severity: Normal

Object: Citrix SMA Service

Description: Not running.

Threshold: 0.000000

Severity: Major

Object: Citrix Virtual Memory Optimization

Description: Running.

Threshold: 1.000000

Severity: Normal

Object: Citrix Virtual Memory Optimization

Description: Not running.

Threshold: 0.000000

Severity: Major

Object: Citrix 64-bit Virtual Memory Optimization

Description: Running.

Threshold: 1.000000

Severity: Normal

Object: Citrix 64-bit Virtual Memory Optimization

Description: Not running.

Threshold: 0.000000

Severity: Major

Object: CitrixWMIService

Description: Running.

Threshold: 1.000000

Severity: Normal

Object: CitrixWMIService

Description: Not running.

Threshold: 0.000000

Severity: Major

Object: CtxHttp

Description: Running.

Threshold: 1.000000

Severity: Normal

Object: CtxHttp

Description: Not running.

Threshold: 0.000000

Severity: Major

Object: CitrixXTEServer

Description: Running.

Threshold: 1.000000

Severity: Normal

Object: CitrixXTEServer

Description: Not running.
Threshold: 0.000000
Severity: Major

Object: CdmService
Description: Not installed.
Threshold: 2.000000
Severity: Critical

Object: CdmService
Description: Running.
Threshold: 1.000000
Severity: Normal

Object: CdmService
Description: Not running.
Threshold: 0.000000
Severity: Critical

Object: CdfSvc
Description: Running.
Threshold: 1.000000
Severity: Normal

Object: CdfSvc
Description: Not running.
Threshold: 0.000000
Severity: Minor

Object: Encryption Service
Description: Not installed.
Threshold: 2.000000

Severity: Critical

Object: Encryption Service

Description: Running.

Threshold: 1.000000

Severity: Normal

Object: Encryption Service

Description: Not running.

Threshold: 0.000000

Severity: Critical

Object: Citrix Encryption Service

Description: Not installed.

Threshold: 2.000000

Severity: Critical

Object: Citrix Encryption Service

Description: Running.

Threshold: 1.000000

Severity: Normal

Object: Citrix Encryption Service

Description: Not running.

Threshold: 0.000000

Severity: Critical

Object: IMAService

Description: Not installed.

Threshold: 2.000000

Severity: Critical

Object: IMAService
Description: Running.
Threshold: 1.000000
Severity: Normal

Object: IMAService
Description: Not running.
Threshold: 0.000000
Severity: Critical

Object: MFCom
Description: Not installed.
Threshold: 2.000000
Severity: Critical

Object: MFCom
Description: Running.
Threshold: 1.000000
Severity: Normal

Object: MFCom
Description: Not running.
Threshold: 0.000000
Severity: Major

Object: RadeSvc
Description: Not installed.
Threshold: 2.000000
Severity: Critical

Object: RadeSvc
Description: Running.

Threshold: 1.000000

Severity: Normal

Object: RadeSvc

Description: Not running.

Threshold: 0.000000

Severity: Major

Object: IMAAdvanceSrv

Description: Not installed.

Threshold: 2.000000

Severity: Critical

Object: IMAAdvanceSrv

Description: Running.

Threshold: 1.000000

Severity: Normal

Object: IMAAdvanceSrv

Description: Not running.

Threshold: 0.000000

Severity: Major

Object: CitrixHealthMon

Description: Not installed.

Threshold: 2.000000

Severity: Critical

Object: CitrixHealthMon

Description: Running.

Threshold: 1.000000

Severity: Normal

Object: CitrixHealthMon
Description: Not running.
Threshold: 0.000000
Severity: Major

Object: ResourceManagerMail
Description: Running.
Threshold: 1.000000
Severity: Normal

Object: ResourceManagerMail
Description: Not running.
Threshold: 0.000000
Severity: Minor

CTXSPI-ChkCitrixSGService

Monitors a Citrix Secure Gateway service.

Execute every: 5m

Command line: "CTXSPISwitch.cmd chkcsgrvc CTXSPI-ChkCitrixSGService"

Rules:

Description: Not installed.

Threshold: 2.000000

Severity: Major

Description: Running.

Threshold: 1.000000

Severity: Normal

Description: Not running.

Threshold: 0.000000

Severity: Critical

CTXSPI-ChkDCChanges

Detects Data Collector change in the Citrix zone.

Execute every: 6m29s

Command line: "CTXSPISwitch.cmd chkdc CTXSPI-ChkDCChanges"

Rules:

Description: Data Collector in a zone has changed.

Threshold: 0.000000

Severity: Warning

CTXSPI-ChkDataStoreConsistency

Monitors the farm's Data Store consistency.

Execute every: 23h

Command line: "CTXSPISwitch.cmd chkdscons CTXSPI-ChkDataStoreConsistency"

Rules:

Description: Data Store inconsistent.

Threshold: 1.000000

Severity: Major

CTXSPI-ChkICASessionLatencyAverage

Checks the average latency of all ICA sessions.

Execute every: 5m

Rules:

Description: If average ICA session latency is major.

Threshold: 700.000000

Severity: Major

Description: If average ICA session latency is warning.

Threshold: 400.000000

Severity: Warning

CTXSPI-ChkICASessionLatencyDeviation

Checks the latency deviation of all ICA sessions.

Execute every: 5m

Rules:

Description: ICA session latency deviation major.

Threshold: 2000.000000

Severity: Major

Description: ICA session latency deviation minor.

Threshold: 1000.000000

Severity: Warning

CTXSPI-ChkICASessionLatencyLast

Checks the last recorded latency of all ICA sessions.

Execute every: 5m

Rules:

Description: If current ICA session latency is major.

Threshold: 1000.000000

Severity: Major

Description: If current ICA session latency is warning.

Threshold: 700.000000

Severity: Warning

CTXSPI-ChkIMAServiceAdvanced

Monitors the Citrix IMA service availability by periodically enumerating published applications on a server.

Execute every: 5m7s

Command line: "CTXSPISwitch.cmd chkIMAService CTXSPI-ChkIMAServiceAdvanced"

Rules:

Description: If IMA service not responding to application enumeration query, send a message.

Threshold: 1.000000

Severity: Critical

CTXSPI-ChkOsAndTSServices

Monitors mandatory and optional Windows and Terminal Server services.

Execute every: 5m

Command line: "CTXSPISwitch.cmd chkostssvc CTXSPI-ChkOsAndTSServices"

Rules:

Object: Netlogon

Description: Running.

Threshold: 1.000000

Severity: Normal

Object: Netlogon

Description: Not running.

Threshold: 0.000000

Severity: Critical

Object: Spooler

Description: Running.

Threshold: 1.000000

Severity: Normal

Object: Spooler

Description: Not running.

Threshold: 0.000000

Severity: Major

Object: TermService

Description: Not installed.

Threshold: 2.000000

Severity: Critical

Object: TermService

Description: Running.

Threshold: 1.000000

Severity: Normal

Object: TermService

Description: Not running.

Threshold: 0.000000

Severity: Critical

Object: Tssdis

Description: Running.

Threshold: 1.000000

Severity: Normal

Object: Tssdis

Description: Not running.

Threshold: 0.000000

Severity: Major

CTXSPI-ChkPSUserLogonProcess

Monitors the duration of the complete Citrix Presentation Server user logon process.

Execute every: 5m

Command line: "CTXSPISwitch.cmd chkpslogon Phase0 CTXSPI-ChkPSUserLogonProcess"

Rules:

Description: time-out.

Threshold: 1000000000.000000

Severity: Major

Description: major.

Threshold: 180000.000000

Severity: Major

Description: warning.
Threshold: 120000.000000
Severity: Warning

CTXSPI-ChkPSUserLogonProcessCompleted

Monitors the number of completed phases of the Citrix Presentation Server user logon process.

Execute every: 5m

Command line: "CTXSPISwitch.cmd chkpslogon Completed CTXSPI-ChkPSUserLogonProcessCompleted"

Rules:

Description: major.

Threshold: 4.000000

Severity: Major

CTXSPI-ChkPSUserLogonProcessPh1

Monitors the user profile loading phase of the Citrix Presentation Server user logon process.

Execute every: 5m

Command line: "CTXSPISwitch.cmd chkpslogon Phase1 CTXSPI-ChkPSUserLogonProcessPh1"

Rules:

Description: time-out.

Threshold: 1000000000.000000

Severity: Major

Description: major.

Threshold: 180000.000000

Severity: Major

Description: warning.

Threshold: 120000.000000

Severity: Warning

CTXSPI-ChkPSUserLogonProcessPh2

Monitors the applying group policies phase of the Citrix Presentation Server user logon process.

Execute every: 5m

Command line: "CTXSPISwitch.cmd chkpslogon Phase2 CTXSPI-ChkPSUserLogonProcessPh2"

Rules:

Description: time-out.

Threshold: 1000000000.000000

Severity: Major

Description: major.

Threshold: 180000.000000

Severity: Major

Description: warning.

Threshold: 120000.000000

Severity: Warning

CTXSPI-ChkPSUserLogonProcessPh3

Monitors the user initialization phase of the Citrix Presentation Server user logon process.

Execute every: 5m

Command line: "CTXSPISwitch.cmd chkpslogon Phase3 CTXSPI-ChkPSUserLogonProcessPh3"

Rules:

Description: time-out.

Threshold: 1000000000.000000

Severity: Major

Description: major.

Threshold: 180000.000000

Severity: Major

Description: warning.
Threshold: 120000.000000
Severity: Warning

CTXSPI-ChkPSUserLogonProcessPh4

Monitors the loading user scripts phase of the Citrix Presentation Server user logon process.

Execute every: 5m

Command line: "CTXSPISwitch.cmd chkpslogon Phase4 CTXSPI-ChkPSUserLogonProcessPh4"

Rules:

Description: time-out.
Threshold: 1000000000.000000
Severity: Major

Description: major.
Threshold: 180000.000000
Severity: Major

Description: warning.
Threshold: 120000.000000
Severity: Warning

CTXSPI-ChkPSUserLogonProcessPh5

Monitors the Citrix initialization phase of the Citrix Presentation Server user logon process.

Execute every: 5m

Command line: "CTXSPISwitch.cmd chkpslogon Phase5 CTXSPI-ChkPSUserLogonProcessPh5"

Rules:

Description: time-out.
Threshold: 1000000000.000000
Severity: Major

Description: major.
Threshold: 180000.000000
Severity: Major

Description: warning.
Threshold: 120000.000000
Severity: Warning

CTXSPI-ChkProcessesNum

Checks the number of processes across all sessions on a Citrix server.
Execute every: 5m
Command line: "CTXSPISwitch.cmd cntprocs CTXSPI-ChkProcessesNum"
Rules:
Description: Check for major number of processes.
Threshold: 500.000000
Severity: Major

Description: Check for warning number of processes.
Threshold: 300.000000
Severity: Warning

CTXSPI-ChkProfileExecutableCount

Monitors the number of executable files in the profile.
Execute every: 5m
Command line: "CTXSPISwitch.cmd chkprofileexecutables CTXSPI-ChkProfileExecutableCount"
Rules:
Description: warning.
Threshold: 1.000000
Severity: Warning

CTXSPI-ChkProfileFileCount

Monitors the profile file count.

Execute every: 5m

Command line: "CTXSPISwitch.cmd chkprofilefilecount CTXSPI-ChkProfileFileCount"

Rules:

Description: major.

Threshold: 2000.000000

Severity: Major

Description: warning.

Threshold: 1500.000000

Severity: Warning

CTXSPI-ChkProfileFullSize

Monitors the profile's full size.

Execute every: 5m

Command line: "CTXSPISwitch.cmd chkprofilefullsize CTXSPI-ChkProfileFullSize"

Rules:

Description: major.

Threshold: 100.000000

Severity: Major

Description: warning.

Threshold: 70.000000

Severity: Warning

CTXSPI-ChkProfileMediaCount

Monitors the number of media files in the profile.

Execute every: 5m

Command line: "CTXSPISwitch.cmd chkprofilemedias CTXSPI-ChkProfileMediaCount"

Rules:

Description: warning.
Threshold: 1000.000000
Severity: Warning

CTXSPI-ChkProfileRoamingFileCount

Monitors the roaming profile file count.
Execute every: 5m
Command line: "CTXSPISwitch.cmd chkprofileroamingfilecount CTXSPI-ChkProfileRoamingFileCount"
Rules:
Description: major.
Threshold: 1800.000000
Severity: Major

Description: warning.
Threshold: 1300.000000
Severity: Warning

CTXSPI-ChkProfileRoamingSize

Monitors the profile roaming size.
Execute every: 5m
Command line: "CTXSPISwitch.cmd chkprofileroamingsize CTXSPI-ChkProfileRoamingSize"
Rules:
Description: major.
Threshold: 90.000000
Severity: Major

Description: warning.
Threshold: 60.000000
Severity: Warning

CTXSPI-ChkProfilesTotalExecutableCount

Monitors the number of executable files in all profiles.

Execute every: 5m

Command line: "CTXSPISwitch.cmd chkprofilesexecutables CTXSPI-ChkProfilesTotalExecutableCount"

Rules:

Description: warning.

Threshold: 1.000000

Severity: Warning

CTXSPI-ChkProfilesTotalFileCount

Monitors all profiles file count.

Execute every: 5m

Command line: "CTXSPISwitch.cmd chkprofilesfilecount CTXSPI-ChkProfilesTotalFileCount"

Rules:

Description: major.

Threshold: 200000.000000

Severity: Major

Description: warning.

Threshold: 150000.000000

Severity: Warning

CTXSPI-ChkProfilesTotalMediaCount

Monitors the number of media files in all profiles.

Execute every: 5m

Command line: "CTXSPISwitch.cmd chkprofilesmedias CTXSPI-ChkProfilesTotalMediaCount"

Rules:

Description: warning.

Threshold: 40000.000000

Severity: Warning

CTXSPI-ChkProfilesTotalRoamingFileCount

Monitors all roaming profiles file count.

Execute every: 5m

Command line: "CTXSPISwitch.cmd chkprofilesroamingfilecount CTXSPI-ChkProfilesTotalRoamingFileCount"

Rules:

Description: major.

Threshold: 180000.000000

Severity: Major

Description: warning.

Threshold: 130000.000000

Severity: Warning

CTXSPI-ChkProfilesTotalRoamingSize

Monitors all profiles roaming size.

Execute every: 5m

Command line: "CTXSPISwitch.cmd chkprofilesroamingsize CTXSPI-ChkProfilesTotalRoamingSize"

Rules:

Description: major.

Threshold: 20000.000000

Severity: Major

Description: warning.

Threshold: 15000.000000

Severity: Warning

CTXSPI-ChkProfilesTotalSize

Monitors the sum of all profiles size.

Execute every: 5m

Command line: "CTXSPISwitch.cmd chkprofilestotalsize CTXSPI-ChkProfilesTotalSize"

Rules:

Description: major.

Threshold: 30000.000000

Severity: Major

Description: warning.

Threshold: 25000.000000

Severity: Warning

CTXSPI-ChkServiceModel

Periodically checks a Citrix service model and sends a message if any changes to the model occurred.

Execute every: 24h

Command line: "CTXSPISwitch.cmd chkmodel CTXSPI-ChkServiceModel"

Rules:

Description: No previous service model information exists (COMP returns ERRORLEVEL == 2).

Threshold: 2.000000

Severity: Warning

Description: Service model has changed (COMP returns ERRORLEVEL == 1).

Threshold: 1.000000

Severity: Warning

CTXSPI-ChkSessionHandleCount

Monitors the handle count for each individual end-user session.

Execute every: 5m

Rules:

Description: Handle Count major.

Threshold: 40000.000000

Severity: Major

Description: Handle Count warning.

Threshold: 30000.000000

Severity: Warning

Description: Handle Count major.

Threshold: 20000.000000

Severity: Major

Description: Handle Count warning.

Threshold: 15000.000000

Severity: Warning

CTXSPI-ChkSessionPageFileBytes

Checks the page file bytes used by any session.

Execute every: 5m

Rules:

Description: If Page File Bytes used by any session is major.

Threshold: 768000000.000000

Severity: Major

Description: If Page File Bytes used by any session is warning.

Threshold: 640000000.000000

Severity: Warning

Description: If Page File Bytes used by any session is major.

Threshold: 384000000.000000

Severity: Major

Description: If Page File Bytes used by any session is warning.

Threshold: 256000000.000000

Severity: Warning

CTXSPI-ChkSessionProcessorTime

Checks the percentage of processor time used by any session.

Execute every: 5m

Rules:

Description: If % Processor Time used by any session major.

Threshold: 95.000000

Severity: Major

Description: If % Processor Time used by any session warning.

Threshold: 75.000000

Severity: Warning

Description: If % Processor Time used by any session major.

Threshold: 90.000000

Severity: Major

Description: If % Processor Time used by any session warning.

Threshold: 70.000000

Severity: Warning

CTXSPI-ChkSessionThreadCount

Monitors the thread count for each individual end-user session.

Execute every: 5m

Rules:

Description: Thread Count major.

Threshold: 2000.000000

Severity: Major

Description: Thread Count warning.

Threshold: 1500.000000

Severity: Warning

Description: Thread Count major.

Threshold: 1000.000000

Severity: Major

Description: Thread Count warning.

Threshold: 800.000000

Severity: Warning

CTXSPI-ChkSessionTotalBytes

Monitors the amount of network traffic (bytes / second) consumed by individual sessions.

Execute every: 5m

Rules:

Description: Total Bytes is major.

Threshold: 4000000.000000

Severity: Major

Description: Total Bytes is warning.

Threshold: 2000000.000000

Severity: Warning

CTXSPI-ChkSessionTotalErrors

Checks total frames used by any session.

Execute every: 5m

Rules:

Description: Total Errors is major.

Threshold: 10.000000

Severity: Major

Description: Total Errors is warning.

Threshold: 3.000000

Severity: Warning

CTXSPI-ChkSessionTotalFrames

Checks total frames used by any session.

Execute every: 5m

Rules:

Description: Total Frames is major.

Threshold: 512.000000

Severity: Major

Description: Total Frames is warning.

Threshold: 256.000000

Severity: Warning

CTXSPI-ChkSessionTotalTimeouts

Checks total timeouts used by any session.

Execute every: 5m

Rules:

Description: Total Timeouts is major.

Threshold: 10.000000

Severity: Major

Description: Total Timeouts is warning.

Threshold: 3.000000

Severity: Warning

CTXSPI-ChkSessionTotalTransportErrors

Monitors the total number of transport errors for each individual end-user session.

Execute every: 5m

Rules:

Description: Total Transport Errors major.

Threshold: 10.000000

Severity: Major

Description: Total Transport Errors warning.

Threshold: 3.000000

Severity: Warning

CTXSPI-ChkSessionWorkingSet

Checks working set bytes used by any session.

Execute every: 5m

Rules:

Description: If working set size used by any session is major.

Threshold: 512000000.000000

Severity: Major

Description: If working set size used by any session is warning.

Threshold: 384000000.000000

Severity: Warning

Description: If working set size used by any session is major.

Threshold: 256000000.000000

Severity: Major

Description: If working set size used by any session is warning.

Threshold: 128000000.000000

Severity: Warning

CTXSPI-ChkSessionsActive

Checks the number of active sessions on a Citrix Presentation Server.

Execute every: 4m53s

Command line: "CTXSPISwitch.cmd cntsess CTXSPI-ChkSessionsActive active"

Rules:

Description: Check for major number of ACTIVE session states.

Threshold: 100.000000

Severity: Major

Description: Check for warning number of ACTIVE session states.

Threshold: 70.000000

Severity: Warning

CTXSPI-ChkSessionsAll

Checks the number of sessions on a Citrix Presentation Server.

Execute every: 5m31s

Command line: "CTXSPISwitch.cmd cntsess CTXSPI-ChkSessionsAll all"

Rules:

Description: Check for major number of ACTIVE session states.

Threshold: 120.000000

Severity: Major

Description: Check for warning number of ACTIVE session states.

Threshold: 90.000000

Severity: Warning

CTXSPI-ChkSessionsDisconnected

Checks the number of disconnected sessions on a Citrix Presentation Server.

Execute every: 5m17s

Command line: "CTXSPISwitch.cmd cntsess CTXSPI-ChkSessionsDisconnected disconnected"

Rules:

Description: Check for major number of DISCONNECTED session states.

Threshold: 50.000000

Severity: Major

Description: Check for warning number of DISCONNECTED session states.

Threshold: 30.000000

Severity: Warning

CTXSPI-ChkSessionsDown

Checks the number of down sessions on a Citrix Presentation Server.

Execute every: 5m37s

Command line: "CTXSPISwitch.cmd cntsess CTXSPI-ChkSessionsDown down"

Rules:

Description: Check for major number of DOWN session states.

Threshold: 15.000000

Severity: Major

Description: Check for warning number of DOWN session states.

Threshold: 8.000000

Severity: Warning

CTXSPI-ChkSessionsListening

Checks the number of listening sessions on a Citrix Presentation Server.

Execute every: 5m11s

Command line: "CTXSPISwitch.cmd cntsess CTXSPI-ChkSessionsListening listening"

Rules:

Description: major.

Threshold: 1.000000

Severity: Major

CTXSPI-ChkSessionsShadowing

Checks the number of shadowing sessions on a Citrix Presentation Server.

Execute every: 6m19s

Command line: "CTXSPISwitch.cmd cntsess CTXSPI-ChkSessionsShadowing shadowing"

Rules:

Description: Check for major number of SHADOWING session states.

Threshold: 15.000000

Severity: Major

Description: Check for warning number of SHADOWING session states.

Threshold: 8.000000

Severity: Warning

CTXSPI-ChkSessionsStale

Checks the number of stale sessions on a Citrix Presentation Server.

Execute every: 5m53s

Command line: "CTXSPISwitch.cmd cntsess CTXSPI-ChkSessionsStale stale"

Rules:

Description: Check for major number of STALE session states.

Threshold: 15.000000

Severity: Major

Description: Check for warning number of STALE session states.

Threshold: 8.000000

Severity: Warning

CTXSPI-ChkWebInterfaceFailedAuth

Monitors Citrix Web Interface failed user logon authentications.

Execute every: 5m

Command line: "CTXSPISwitch.cmd chkwifailed CTXSPI-ChkWebInterfaceFailedAuth"

Rules:

Description: Failed Authentication Major.

Threshold: 7.000000

Severity: Major

Description: Failed Authentication Warning.

Threshold: 5.000000

Severity: Warning

CTXSPI-ChkWebInterfaceLogonTime

Monitors Citrix Web Interface user logon times.

Execute every: 5m

Command line: "CTXSPISwitch.cmd chkwilogon CTXSPI-ChkWebInterfaceLogonTime"

Rules:

Description: Logon Time Major.

Threshold: 60.000000

Severity: Major

Description: Logon Time Warning.

Threshold: 30.000000

Severity: Warning

Severity: Warning

CTXSPI-DscServiceModel2

Uploads a Citrix service model.

Rules:

Description: Autodiscovery.

Threshold: 1.000000

Severity: Warning

CTXSPI-SG2-ChkClientConnectTimeLast

Monitors the amount of time (in ms) the last client connection request needed to complete the connection process.

Execute every: 5m

Rules:

Description: major.

Threshold: 15000.000000

Severity: Major

Description: warning.

Threshold: 10000.000000

Severity: Warning

CTXSPI-SG2-ChkTotalActiveConnections

Monitors the total number of active client connections on the Citrix Secure Gateway.

Execute every: 5m

Rules:

Description: major.

Threshold: 240.000000

Severity: Major

Description: warning.
Threshold: 200.000000
Severity: Warning

CTXSPI-SG2-ChkTotalPendingConnections

Monitors the total number of pending client connections on the Citrix Secure Gateway.

Execute every: 5m

Rules:

Description: major.

Threshold: 10.000000

Severity: Major

Description: warning.
Threshold: 5.000000
Severity: Warning

CTXSPI-SG3-ChkBytesSecFromClients

Monitors the data throughput rate (in bytes per second) from all connected clients to the Secure Gateway.

Execute every: 5m

Rules:

Description: major.

Threshold: 6000000.000000

Severity: Major

Description: warning.
Threshold: 3000000.000000
Severity: Warning

CTXSPI-SG3-ChkBytesSecToClients

Monitors the data throughput rate (in bytes per second) from the Secure Gateway to all connected clients.

Execute every: 5m

Rules:

Description: major.

Threshold: 6000000.000000

Severity: Major

Description: warning.

Threshold: 3000000.000000

Severity: Warning

CTXSPI-SG3-ChkClientConnectTimeAvg

Monitors the average amount of time (in ms) for a client connection request to complete the connection process.

Execute every: 5m

Rules:

Description: major.

Threshold: 15000.000000

Severity: Major

Description: warning.

Threshold: 10000.000000

Severity: Warning

CTXSPI-SG3-ChkConnectionsSec

Monitors the number of successful client connections per second on the Citrix Secure Gateway.

Execute every: 5m

Rules:

Description: major.

Threshold: 10.000000

Severity: Major

Description: warning.

Threshold: 5.000000

Severity: Warning

CTXSPI-SG3-ChkSSLHandshakeTimeAvg

Monitors the average time (in ms) for a SSL handshake to complete on the Citrix Secure Gateway.

Execute every: 5m

Rules:

Description: major.

Threshold: 5000.000000

Severity: Major

Description: warning.

Threshold: 3000.000000

Severity: Warning

CTXSPI-SG3-ChkSSLHandshakesPending

Monitors the number of pending SSL handshakes on the Citrix Secure Gateway.

Execute every: 5m

Rules:

Description: major.

Threshold: 10.000000

Severity: Major

Description: warning.

Threshold: 5.000000

Severity: Warning

CTXSPI-SG3-ChkSSLHandshakesSec

Monitors the number of SSL handshakes per second on the Citrix Secure Gateway.

Execute every: 5m

Rules:

Description: major.

Threshold: 10.000000

Severity: Major

Description: warning.

Threshold: 5.000000

Severity: Warning

CTXSPI-SG3-ChkTotalActiveConnections

Monitors the total number of active client connections on the Citrix Secure Gateway.

Execute every: 5m

Rules:

Description: major.

Threshold: 240.000000

Severity: Major

Description: warning.

Threshold: 200.000000

Severity: Warning

CTXSPI-SG3-ChkTotalPendingConnections

Monitors the total number of pending client connections on the Citrix Secure Gateway.

Execute every: 5m

Rules:

Description: major.

Threshold: 10.000000

Severity: Major

Description: warning.

Threshold: 5.000000

Severity: Warning

CTXSPI-ChkBrokerAvail

Monitors the duration of broker availability.

Execute every: 5m

Command line: "CTXSPISwitch.cmd brokavailchk CTXSPI-ChkBrokerAvail"

Rules:

Description: time-out.

Threshold: 1000000000.000000

Severity: Major

Description: major.

Threshold: 300000.000000

Severity: Major

Description: minor.

Threshold: 120000.000000

Severity: Minor

Description: warning.

Threshold: 60000.000000

Severity: Warning

CTXSPI-ChkBrokerAvailCompleted

Monitors whether all phases of broker availability have completed successfully.

Execute every: 5m

Command line: "CTXSPISwitch.cmd brokavailchkcomplete CTXSPI-ChkBrokerAvailCompleted"

Rule:

Description: major.

Threshold: 0.000000

Severity: Major

CTXSPI-ChkFarmAvail

Monitors the duration of farm availability.

Execute every: 5m
Command line: "CTXSPISwitch.cmd farmavailchk CTXSPI-ChkFarmAvail"
Rules:
Description: time-out.
Threshold: 1000000000.000000
Severity: Major

Description: major.
Threshold: 480000.000000
Severity: Major

Description: minor.
Threshold: 180000.000000
Severity: Minor

Description: warning.
Threshold: 90000.000000
Severity: Warning

CTXSPI-ChkFarmAvailCompleted

Monitors whether all phases of farm availability have completed successfully.
Execute every: 5m
Command line: "CTXSPISwitch.cmd farmavailchkcomplete CTXSPI-ChkFarmAvailCompleted"
Rule:
Description: major.
Threshold: 1.000000
Severity: Major

CTXSPI-ChkSiteAvail

Monitors the duration of Web Interface site availability.
Execute every: 5m
Command line: "CTXSPISwitch.cmd siteavailchk CTXSPI-ChkSiteAvail"

Rules:

Description: time-out.

Threshold: 1000000000.000000

Severity: Major

Description: major.

Threshold: 600000.000000

Severity: Major

Description: minor.

Threshold: 240000.000000

Severity: Minor

Description: warning.

Threshold: 120000.000000

Severity: Warning

CTXSPI-ChkSiteAvailCompleted

Monitors whether all phases of Web Interface site availability have completed successfully.

Execute every: 5m

Command line: "CTXSPISwitch.cmd siteavailchkcomplete CTXSPI-ChkSiteAvailCompleted"

Rule:

Description: major.

Threshold: 1.000000

Severity: Major

CXTSPI-ChkBrokerAvailAppEnum

Monitors the time required for the end-user published applications to be enumerated by individual XML broker.

Execute every: 5m

Command line: "CTXSPISwitch.cmd brokavailchkph1 CTXSPI-ChkBrokerAvailAppEnum"

Rules:

Description: time-out.

Threshold: 1000000000.000000

Severity: Major

Description: major.

Threshold: 300000.000000

Severity: Major

Description: minor.

Threshold: 120000.000000

Severity: Minor

Description: warning.

Threshold: 60000.000000

Severity: Warning

CTXSPI-ChkFarmAvailAppEnum

Monitors the time required for the end-user published applications to be enumerated.

Execute every: 5m

Command line: "CTXSPISwitch.cmd farmavailchkph1 CTXSPI-ChkFarmAvailAppEnum"

Rules:

Description: time-out.

Threshold: 1000000000.000000

Severity: Major

Description: major.

Threshold: 300000.000000

Severity: Major

Description: minor.

Threshold: 120000.000000

Severity: Minor

Description: warning.

Threshold: 60000.000000

Severity: Warning

CTXSPI-ChkFarmAvailAppLB

Monitors the time required for a published application to be load-balanced.

Execute every: 5m

Command line: "CTXSPISwitch.cmd farmavailchkph2 CTXSPI-ChkFarmAvailAppLB"

Rules:

Description: time-out.

Threshold: 1000000000.000000

Severity: Major

Description: major.

Threshold: 180000.000000

Severity: Major

Description: minor.

Threshold: 60000.000000

Severity: Minor

Description: warning.

Threshold: 30000.000000

Severity: Warning

CTXSPI-ChkSiteAvailAppEnum

Monitors the time required for the end-user published applications to be enumerated for all configured farms.

Execute every: 5m

Command line: "CTXSPISwitch.cmd siteavailchkph2 CTXSPI-ChkSiteAvailAppEnum"

Rules:

Description: time-out.

Threshold: 1000000000.000000

Severity: Major

Description: major.

Threshold: 300000.000000

Severity: Major

Description: minor.

Threshold: 120000.000000

Severity: Minor

Description: warning.

Threshold: 60000.000000

Severity: Warning

CTXSPI-ChkSiteAvailLogonPage

Monitors the time required for the Web Interface logon page to be delivered.

Execute every: 5m

Command line: "CTXSPISwitch.cmd siteavailchkph1 CTXSPI-ChkSiteAvailLogonPage"

Rules:

Description: time-out.

Threshold: 1000000000.000000

Severity: Major

Description: major.

Threshold: 300000.000000

Severity: Major

Description: minor.

Threshold: 120000.000000

Severity: Minor

Description: warning.

Threshold: 60000.000000

Severity: Warning

SPI for Citrix Reports and Report Groups

When you install SPI for Citrix, a new top level report group is added in the HP Operations Manager administrator GUI. The *SPI for Citrix* report group contains all reports used for managing your Citrix environment.

When you use SPI for Citrix, reports are grouped by their purpose. This structure helps you to quickly find the report that you need to use.

NOTE

All reports require SPI for Citrix policies assigned on a server for at least two days.

SPI for Citrix Metric Lists

CTXSPI_SICA

Summarization: 300

Retain days: 42

Metrics:

- . LATENCYLASTRECORDED
- . LATENCYSESSIONAVERA
- . LATENCYSESSIONDEV
- . HINSTANCENAME

CTXSPI_SVCS

Summarization: 3600

Retain days: 35

Metrics:

- . PCTPROCESSORTIME
- . PAGEFILEBYTES
- . HINSTANCENAME
- . WORKINGSET

CTXSPI_WILD

Summarization: 300

Retain days: 35

Metrics:

- . URL
- . WILDKEY
- . USERNAME
- . DURATION
- . STARTTIME

CTXSPI_PROFILE

Summarization: 300

Retain days: 28

Metrics:

- . MEDIA_SIZE
- . TIME
- . CUSTOM_EXT
- . FILE_COUNT
- . EXECUTABLES_SIZE
- . EXECUTABLES_EXT
- . CUSTOM_SIZE
- . ROAMING_SIZE
- . ROAMING_FILE_COUNT
- . CUSTOM_COUNT
- . FULL_SIZE
- . EXECUTABLES_COUNT
- . MEDIA_EXT
- . USER
- . MEDIA_COUNT

CTXSPI_SESS

Summarization: 300

Retain days: 42

Metrics:

- . TOTALFRAMES
- . TOTALERRORS
- . PAGEFILEBYTES
- . TOTALTIMEOUTS
- . WORKINGSET
- . PRIVATEBYTES
- . PCTPROCESSORTIME
- . HINSTANCENAME

CTXSPI_SGS3

Summarization: 300

Retain days: 35

Metrics:

- . CONNSTOTALACT
- . CONNSTOTALPEND
- . SSLHANDAVGTIME
- . DUMMYKEY
- . CONNSPERSEC
- . BYTESSECFROMCL
- . SSLHANDPERSEC
- . BYTESSECTOCL
- . SSLHANDPEND
- . AVGCLCONNTIME

CTXSPI_SGS2

Summarization: 300

Retain days: 35

Metrics:

- . LASTCONNTIME
- . DUMMYKEY
- . TOTALACTIVE
- . TOTALPENDING

CTXSPI_LSLU

Summarization: 300

Retain days: 35

Metrics:

- . NRAVAIL
- . FEATURENAME
- . PCTUSED
- . NRUSED

CTXSPI_WIFL

Summarization: 300

Retain days: 35

Metrics:

- . URL
- . USERNAME
- . NRFAILED

CTXSPI_SESM

Summarization: 300

Retain days: 42

Metrics:

- . SUMMKEY
- . NUMDESKTOPSESS
- . NUMACTSESS
- . NUMPROCS
- . NUMIPXSESS
- . NUMIPSESS
- . NUMAPPINST
- . NUMDISCSESS
- . NUMMODEMSESS
- . NUMNETBIOSESS
- . NUMALLSESS

CTXSPI_SESX

Summarization: 300

Retain days: 42

Metrics:

- . LOGONTIME
- . USERNAME
- . CPUTIME
- . SESSIONID
- . WORKINGSETSIZE
- . APPDN
- . DOMAINNAME
- . SESSIONNAME
- . PAGEFILESIZE
- . STATE
- . ADDR_FAMILY
- . LASTINPUTTIME
- . ISDESKTOPSESS
- . ISMODEMSESS

CTXSPI_FARM

Summarization: 3600

Retain days: 3

Metrics:

- . ZONENAME
- . FARMNAME

CTXSPI_PSLD

Summarization: 300

Retain days: 35

Metrics:

- . PH4SCRIPTS
- . LOGONTYPE
- . USERNAME

- . DURATION
- . PH1PROFILE
- . PH5CTXINIT
- . PH3USERINIT
- . PHCOMPLETED
- . PSLDKEY
- . STARTTIME
- . PH2POLICY

CTXSPI_PROFILES

Summarization: 300

Retain days: 35

Metrics:

- . MEDIA_SIZE
- . TIME
- . CUSTOM_EXT
- . FILE_COUNT
- . EXECUTABLES_SIZE
- . EXECUTABLES_EXT
- . CUSTOM_SIZE
- . ROAMING_SIZE
- . ROAMING_FILE_COUNT
- . CUSTOM_COUNT
- . FULL_SIZE
- . EXECUTABLES_COUNT
- . MEDIA_EXT
- . MEDIA_COUNT

SPI for Citrix Report Categories

SG2 - Citrix Secure Gateway 2.0

CTXSPI_Sg2Top10SrvLastConn28Days

Top 10 Servers by Average Client Connect Time (last 28 days)

CTXSPI_Sg2ConnDetails28Days

Connection Statistics (last 28 days)

CTXSPI_Sg2Top10SrvPending28Days

Top 10 Servers by Average Number of Pending Connections (last 28 days)

CTXSPI_Sg2Top10SrvActive28Days

Top 10 Servers by Average Number of Active Connections (last 28 days)

PS - User Profiles

CTXSPI_PsProfCustFileStatsServerDay

Server statistics on custom files in user profiles (yesterday)

CTXSPI_PsProfTop30UsersProfileSizeDay

Top 30 users by their user profile size (yesterday)

CTXSPI_PsProfMediaFileStatsServerDay

Server statistics on media files in user profiles (yesterday)

CTXSPI_PsProfExecFileStatsServerDay

Server statistics on executable files in user profiles (yesterday)

CTXSPI_PsProfTopServersProfileSizeDay

Top servers by size of user profiles (yesterday)

CTXSPI_PsProfUserProfileDetailsDay

User profile details (yesterday)

CTXSPI_PsProfTop30UsersExecFilesSizeDay

Top 30 users by size of executable files in user profile (yesterday)

CTXSPI_PsProfTop30UsersCustFilesSizeDay

Top 30 users by size of custom files in user profile (yesterday)

CTXSPI_PsProfTop30UsersMediaFilesSizeDay

Top 30 users by size of media files in user profile (yesterday)

PS - Sessions

CTXSPI_PsSessionsLogonLogoff28DaysServer

Logon/Logoff Activity (server/last 28 days)

CTXSPI_PsSessionsStateServer

Number of Sessions in Active/Disc./Other State (server/yesterday)

CTXSPI_PsSessionsState28DaysServer

Number of Sessions in Active/Disc./Other State (server/last 28 days)

CTXSPI_PsSessionsState28DaysFarm

Number of Sessions in Active/Disc./Other State (farm/last 28 days)

CTXSPI_PsSessionsStateFarm

Number of Sessions in Active/Disc./Other State (farm/yesterday)

CTXSPI_PsSessionsLogonLogoffServer

Logon/Logoff Activity (server/yesterday)

CTXSPI_PsSessionsLogonLogoffFarm

Logon/Logoff Activity (farm/yesterday)

CTXSPI_PsSessionsLogonLogoff28DaysFarm

Logon/Logoff Activity (farm/last 28 days)

CTXSPI_PsSessionsUserstatFarm

User's Sessions Duration and Resource Consumption (farm/yesterday)

PS - Users

CTXSPI_PsUserNrUsersDayServer

Number of Logged-in Users (server/yesterday)

CTXSPI_PsUserNrUsers28DaysFarm

Number of Logged-in Users (farm/last 28 days)

CTXSPI_PsUserNrUsersDayFarm

Number of Logged-in Users (farm/yesterday)

CTXSPI_PsUserNrUsers28DaysServer

Number of Logged-in Users (server/last 28 days)

WI - Citrix Web Interface

CTXSPI_WiAllLogonsPerUser28Days

All Web Interface User Logons (last 28 days)

CTXSPI_WiAvgLogonTimePerHourUrlYesterday

Average User Logon Time per Web Interface URL (yesterday)

CTXSPI_WiNrFailedLogonsPerUrl28Days

Number of Failed User Logons per Web Interface URL (last 28 days)

CTXSPI_WiTop30UsersMostFailedLogons28Days

Top 30 Users with Highest Number of Failed Logons (last 28 days)

CTXSPI_WiAvgLogonTimePerHourUrl28Days

Average User Logon Time per Web Interface URL (last 28 days)

CTXSPI_WiTop10WiWorstLogonTime28Days

Top 10 Web Interfaces with Longest Logon Time (last 28 days)

CTXSPI_WiTop30UsersWorstLogonTime28Days

Top 30 Users with Longest Web Interface Logon Time (last 28 days)

CTXSPI_WiTop10WiWorstLogonTimeYesterday

Top 10 Web Interfaces with Longest Logon Time (yesterday)

SG3 - Citrix Secure Gateway 3.0

CTXSPI_Sg3NetworkDetails28Days

Connection Traffic Statistics (last 28 days)

CTXSPI_Sg3SSLHandshakeDetails28Days

Connection SSL Handshake Statistics (last 28 days)

CTXSPI_Sg3ConnDetails28Days

Connection Statistics (last 28 days)

LS - Citrix License Server

CTXSPI_LsLicenseUse28Days

Citrix License Use (last 28 days)

PS - Published Applications

CTXSPI_PsTopAppNumInst28DaysServer

Top 10 Applications by Number of Launched Instances (server/last 28 days)

CTXSPI_PsTopAppCpu28DaysServer

Top 10 Applications by CPU use (server/last 28 days)

CTXSPI_PsAppNrUsersDayServer

Number of Published Application Users (server/yesterday)

CTXSPI_PsTopAppMemDayServer

Top 10 Applications by Memory use (server/yesterday)

CTXSPI_PsTopAppCpu28DaysFarm

Top 10 Applications by CPU use (farm/last 28 days)

CTXSPI_PsAppNrUsersDayFarm

Number of Published Application Users (farm/yesterday)

CTXSPI_PsTopAppMem28DaysFarm

Top 10 Applications by Memory use (farm/last 28 days)

CTXSPI_PsAppNrConcurrUsersDayServer

Number of Concurrent Published Application Users (server/yesterday)

CTXSPI_PsTopAppNumInstDayServer

Top 10 Applications by Number of Launched Instances (server/yesterday)

CTXSPI_PsTopAppMem28DaysServer

Top 10 Applications by Memory use (server/last 28 days)

CTXSPI_PsAppNrConcurrUsersDayFarm

Number of Concurrent Published Application Users (farm/yesterday)

CTXSPI_PsTopAppNumInst28DaysFarm

Top 10 Applications by Number of Launched Instances (farm/last 28 days)

CTXSPI_PsTopAppCpuDayFarm

Top 10 Applications by CPU use (farm/yesterday)

CTXSPI_PsAppNrConcurrUsers28DaysServer

Number of Concurrent Published Application Users (server/last 28 days)

CTXSPI_PsAppNrUsers28DaysFarm

Number of Published Application Users (farm/last 28 days)

CTXSPI_PsTopAppNumInstDayFarm

Top 10 Applications by Number of Launched Instances (farm/yesterday)

CTXSPI_PsTopAppMemDayFarm

Top 10 Applications by Memory use (farm/yesterday)

CTXSPI_PsAppNrConcurrUsers28DaysFarm

Number of Concurrent Published Application Users (farm/last 28 days)

CTXSPI_PsTopAppCpuDayServer

Top 10 Applications by CPU use (server/yesterday)

CTXSPI_PsAppNrUsers28DaysServer

Number of Published Application Users (server/last 28 days)

PS - Threshold Assistant**CTXSPI_PsThrAssSessNetLat28DaysFarm**

Threshold Assistant for Session Latency Policies (farm/last 28 days)

CTXSPI_PsThrAssSessCpuMem28DaysFarm

Threshold Assistant for Session CPU and Memory Policies (farm/last 28 days)

CTXSPI_PsThrAssSessState28DaysServer

Threshold Assistant for Session State Policies (server/last 28 days)

CTXSPI_PsThrAssSessNetTra28DaysServer

Threshold Assistant for Session Network Traffic Policies (server/last 28 days)

CTXSPI_PsThrAssSessNetLat28DaysServer

Threshold Assistant for Session Latency Policies (server/last 28 days)

CTXSPI_PsThrAssSessState28DaysFarm

Threshold Assistant for Session State Policies (farm/last 28 days)

CTXSPI_PsThrAssSessCpuMem28DaysServer

Threshold Assistant for Session CPU and Memory Policies (server/last 28 days)

CTXSPI_PsThrAssSessNetTra28DaysFarm

Threshold Assistant for Session Network Traffic Policies (farm/last 28 days)

PS - User Logon Process**CTXSPI_PsLogProcSrvLogonTime28Days**

User Logon Process Duration Statistics per Server (last 28 days)

CTXSPI_PsLogProcTop30UsersUnfinPhaDay

Top 30 Users with Highest Number of Unsuccessful Logons (yesterday)

CTXSPI_PsLogProcTop30SrvWorstPh5DurDay

Top 30 Servers with Longest Phase 5 User Logon Phase (yesterday)

CTXSPI_PsLogProcSrvUnfinPhase2Day

Servers with Issues in Phase 3 User Logon Phase (yesterday)

CTXSPI_PsLogProcSrvUnfinPhase3Day

Servers with Issues in Phase 4 User Logon Phase (yesterday)

CTXSPI_PsLogProcSrvUnfinPhase0Day

Servers with Issues in Phase 1 User Logon Phase (yesterday)

CTXSPI_PsLogProcTop30SrvWorstPh1DurDay

Top 30 Servers with Longest Phase 1 User Logon Phase (yesterday)

CTXSPI_PsLogProcTop30UsersWorstLT28Days

Top 30 Users with Highest Average Logon Time Duration (last 28 days)

CTXSPI_PsLogProcSrvUnfinPhasesDay

Servers with User Logon Issues (yesterday)

CTXSPI_PsLogProcSrvUnfinPhase1Day

Servers with Issues in Phase 2 User Logon Phase (yesterday)

CTXSPI_PsLogProcSrvLogonDetailsDay

User Logon Process Details per Server (yesterday)

CTXSPI_PsLogProcTop30SrvWorstPh2DurDay

Top 30 Servers with Longest Phase 2 User Logon Phase (yesterday)

CTXSPI_PsLogProcSrvUnfinPhase4Day

Servers with Issues in Phase 5 User Logon Phase (yesterday)

CTXSPI_PsLogProcTop30SrvWorstPh4DurDay

Top 30 Servers with Longest Phase 4 User Logon Phase (yesterday)

CTXSPI_PsLogProcTop30SrvWorstPh3DurDay

Top 30 Servers with Longest Phase 3 User Logon Phase (yesterday)

CTXSPI_PsLogProcUserLogonDetailsDay

User Logon Process Details (yesterday)

CTXSPI_PsLogProcTop30SrvWorstLogonTime28Days

Top 30 Servers with Highest Average User Logon Time (last 28 days)

CTXSPI_PsLogProcTop30SrvCompletedLogonsDay

Top 30 Servers with Highest Number of Completed User Logons (yesterday)

PS - Servers

CTXSPI_PsTopSrvSvcSwapDayFarm

Top 10 Servers with Highest Citrix Services Swap use (farm/yesterday)

CTXSPI_PsTopSrvSvcMemDayFarm

Top 10 Servers with Highest Citrix Services Memory use (farm/yesterday)

CTXSPI_PsTopSrvSvcsSwap28DaysFarm

Top 10 Servers with Highest Citrix Services Swap use (farm/last 28 days)

CTXSPI_PsTopSrvSessAvgLatDayFarm

Top 10 Servers with Largest Average Session Latency (farm/yesterday)

CTXSPI_PsTopSrvSessAvgLat28DaysFarm

Top 10 Servers with Largest Average Session Latency (farm/last 28 days)

CTXSPI_PsTopSrvSessLatDev28DaysFarm

Top 10 Servers with Largest Session Latency Deviation (farm/last 28 days)

CTXSPI_PsTopSrvSessLatDevDayFarm

Top 10 Servers with Largest Session Latency Deviation (farm/yesterday)

CTXSPI_PsTopSrvSvcsMem28DaysFarm

Top 10 Servers with Highest Citrix Services Memory use (farm/last 28 days)

CTXSPI_PsTopSrvSvcsCpu28DaysFarm

Top 10 Servers with Largest Citrix Services CPU use (farm/last 28 days)

CTXSPI_PsTopSrvSvcsCpuDayFarm

Top 10 Servers with Largest Citrix Services CPU use (farm/yesterday)

CTXSPI Support**CTXSPI_SupportSesx**

Support report for Sesx

CTXSPI_SupportSgs2

Support report for Sgs2

CTXSPI_SupportFarm

Support report for Farm

CTXSPI_SupportWifl

Support report for Wifl

CTXSPI_SupportPsld

Support report for Psld

CTXSPI_SupportSesm

Support report for Sesm

CTXSPI_SupportFarmOneV

Support report for FarmOneV

CTXSPI_SupportSica

Support report for Sica

CTXSPI_SupportSesxAppDn

Support report for Sesx / AppDn

CTXSPI_SupportWild

Support report for Wild

CTXSPI_SupportProfiles

Support report for Profiles

CTXSPI_SupportProfile

Support report for Profile

CTXSPI_SupportLslu

Support report for Lslu

CTXSPI_SupportSess

Support report for Sess

CTXSPI_SupportSgs3

Support report for Sgs3

PS - Accounting

CTXSPI_PsAccountingUserMonthFarm

User Accounting Information (farm/last month)

CTXSPI_PsAccountingAppMonthFarm

Application Accounting Information (farm/last month)

SPI for Citrix Autogroups

Product Citrix

Group: SPI for Citrix

Datasource: ^CTXSPI.*

SPI for Citrix Graphs

The SPI for Citrix graph family contains the following graph categories and graphs:

SG2 - Connection Activity

This graph category contains the following graphs:

Connection Statistics

Shows the number of active connections, the number of pending connections, and the last client connect time on the Secure Gateway 2.0 system

Metrics:

- CTXSPI:CTXSPI_SGS2:LASTCONNTIME
- CTXSPI:CTXSPI_SGS2:TOTALACTIVE
- CTXSPI:CTXSPI_SGS2:TOTALPENDING

SG3 - Connection Activity

This graph category contains the following graphs:

Connection Statistics

Shows the number of active connections, the number of pending connections, the number of connection per second, and the average client connect time on the Secure Gateway 3.0 system

Metrics:

- CTXSPI:CTXSPI_SGS3:CONNSPERSEC
- CTXSPI:CTXSPI_SGS3:CONNSTOTALACT
- CTXSPI:CTXSPI_SGS3:CONNSTOTALPEND
- CTXSPI:CTXSPI_SGS3:AVGCLCONNTIME

Connection Network Load

Shows the network traffic rate coming from clients and being delivered to clients on a Secure Gateway 3.0 system

Metrics:

- CTXSPI:CTXSPI_SGS3:BYTESSECFROMCL

- CTXSPI:CTXSPI_SGS3:BYTESSECTOCL

SSL Handshake Statistics

Shows the number of SSL handshakes per second, the number of pending SSL handshakes, and the average SSL handshake time on a Secure Gateway 3.0 system

Metrics:

- CTXSPI:CTXSPI_SGS3:SSLHANDPERSEC
- CTXSPI:CTXSPI_SGS3:SSLHANDPEND
- CTXSPI:CTXSPI_SGS3:SSLHANDAVGTIME

PS - Session Resource Use

This graph category contains the following graphs:

Session Network Timeouts (no Console)

Shows total number of session network timeouts for individual sessions

Metrics:

- CTXSPI:CTXSPI_SESS:TOTALTIMEOUTS

Session Network Frames (no Console)

Shows total number of session network frames used by individual sessions

Metrics:

- CTXSPI:CTXSPI_SESS:TOTALFRAMES

Session Physical Memory (no Console)

Shows physical memory consumption for individual sessions

Metrics:

- CTXSPI:CTXSPI_SESS:WORKINGSET

Session Virtual Memory (no Console)

Shows virtual memory consumption for individual sessions

Metrics:

- CTXSPI:CTXSPI_SESS:PAGEFILEBYTES

Session Network Transport Errors (no Console)

Shows total number of session network transport errors for individual sessions

Metrics:

- CTXSPI:CTXSPI_SESS:TOTALTRANSERRORS

Session Network Bytes (no Console)

Shows total number of session network bytes used by individual sessions

Metrics:

- CTXSPI:CTXSPI_SESS:TOTALBYTES

Session Thread Count (no Console)

Shows number of threads used by individual sessions

Metrics:

- CTXSPI:CTXSPI_SESS:THREADCOUNT

Session Network Errors (no Console)

Shows total number of session network errors for individual sessions

Metrics:

- CTXSPI:CTXSPI_SESS:TOTALERRORS

Session Handle Count (no Console)

Shows number of handles used by individual sessions

Metrics:

- CTXSPI:CTXSPI_SESS:HANDLECOUNT

Session CPU (no Console)

Shows CPU consumption for individual sessions

Metrics:

- TSSPI_SESS:TSSPI_SESS:CPUTIME

WI - User Logon Process

This graph category contains the following graphs:

User Logon Failures

Shows the number of failed user logons for each individual user that logged-in to the Web Interface system

Metrics:

- CTXSPI:CTXSPI_WIFL:NRFAILED

User Logon Duration

Shows duration of the logon process for each individual user that logged-in to the Web Interface system

Metrics:

- CTXSPI:CTXSPI_WILD:DURATION

Total User Logon Failures

Shows the total number of failed user logons on the Web Interface system

Metrics:

- CTXSPI:CTXSPI_WIFL:NRFAILED

Average User Logon Duration

Shows the average duration of the logon process for all users that logged-in to the Web Interface system

Metrics:

- CTXSPI:CTXSPI_WILD:DURATION

PS - Sessions

This graph category contains the following graphs:

All Sessions

Shows the number of all sessions on the server

Metrics:

- CTXSPI:CTXSPI_SESM:NUMALLSESS

Session Processes

Shows the number of processes running across all sessions on the server

Metrics:

- CTXSPI:CTXSPI_SESM:NUMPROCS

Active Sessions

Shows the number of active sessions on the server

Metrics:

- CTXSPI:CTXSPI_SESM:NUMACTSESS

Application Instances

Shows the number of published application instances running across all sessions on the server

Metrics:

- CTXSPI:CTXSPI_SESM:NUMAPPINST

Desktop Sessions

Shows the number of desktop sessions on the server

Metrics:

- CTXSPI:CTXSPI_SESM:NUMDESKTOPSESS

Inactive Sessions

Shows the number of inactive sessions on the server

Metrics:

- CTXSPI:CTXSPI_SESM:NUMDISCSESS

PS - User Profiles

This graph category contains the following graphs:

Custom Files Size

Shows the total size of custom-defined files across all user profiles on the system

Metrics:

- CTXSPI:CTXSPI_PROFILES:CUSTOM_SIZE

Executable Files Size

Shows the total size of executable files present across all user profiles

Metrics:

- CTXSPI:CTXSPI_PROFILES:EXECUTABLES_SIZE

Media Files Size

Shows the total size of media files across all user profiles on the system

Metrics:

- . CTXSPI:CTXSPI_PROFILES:MEDIA_SIZE

Custom Files Count

Shows the number of custom-defined files across all user profiles on the system

Metrics:

- . CTXSPI:CTXSPI_PROFILES:CUSTOM_COUNT

Media Files Count

Shows the number of media files across all user profiles on the system

Metrics:

- . CTXSPI:CTXSPI_PROFILES:MEDIA_COUNT

Executable Files Count

Shows the number of executable files present across all user profiles

Metrics:

- . CTXSPI:CTXSPI_PROFILES:EXECUTABLES_COUNT

Profiles Size

Shows total and roaming size that all user profiles occupy on the system

Metrics:

- . CTXSPI:CTXSPI_PROFILES:ROAMING_SIZE
- . CTXSPI:CTXSPI_PROFILES:FULL_SIZE

CLS - License Server

This graph category contains the following graphs:

Feature License Utilization

Shows the percentage of used feature licenses on a Citrix License Server

Metrics:

- . CTXSPI:CTXSPI_LSLU:PCTUSED

Feature License Use

Shows the number of available and used feature licenses on a Citrix License Server

Metrics:

- CTXSPI:CTXSPI_LSLU:NRAVAIL
- CTXSPI:CTXSPI_LSLU:NRUSED

PS - User Logon Process

This graph category contains the following graphs:

Completed User Logon Process Phases

Shows the number of completed user logon process phases for each individual user that logged-in to the system

Metrics:

- CTXSPI:CTXSPI_PSLD:PHCOMPLETED

User Logon Process Duration (Phase 4)

Shows duration of the phase 4 of the logon process for each individual user that logged-in to the system

Metrics:

- CTXSPI:CTXSPI_PSLD:PH4SCRIPTS

User Logon Process Duration (Phase 3)

Shows duration of the phase 3 of the logon process for each individual user that logged-in to the system

Metrics:

- CTXSPI:CTXSPI_PSLD:PH3USERINIT

User Logon Duration

Shows duration of the logon process for each individual user that logged-in to the system

Metrics:

- CTXSPI:CTXSPI_PSLD:DURATION

User Logon Process Duration (Phase 1)

Shows duration of the phase 1 of the logon process for each individual user that logged-in to the system

Metrics:

- CTXSPI:CTXSPI_PSLD:PH1PROFILE

User Logon Process Duration (Phase 2)

Shows duration of the phase 2 of the logon process for each individual user that logged-in to the system

Metrics:

- CTXSPI:CTXSPI_PSLD:PH2POLICY

User Logon Process Duration (Phase 5)

Shows duration of the phase 5 of the logon process for each individual user that logged-in to the system

Metrics:

- CTXSPI:CTXSPI_PSLD:PH5CTXINIT

Average User Logon Duration

Shows the average duration of the logon process for all users that logged-in to the system

Metrics:

- CTXSPI:CTXSPI_PSLD:DURATION

PS - Active Session Load

This graph category contains the following graphs:

Active Sessions vs. System Network IO

Shows the number of active sessions vs. system network IO rate

Metrics:

- CTXSPI:CTXSPI_SESM:NUMACTSESS
- GLOBAL:GBL_NET_OUT_PACKET_RATE
- GLOBAL:GBL_NET_IN_PACKET_RATE

Active Sessions vs. System Virtual Memory

Shows the number of active sessions vs. system virtual memory utilization

Metrics:

- CTXSPI:CTXSPI_SESM:NUMACTSESS
- GLOBAL:GBL_SWAP_SPACE_UTIL

Active Sessions vs. System Disk IO

Shows the number of active sessions vs. system disk IO rate

Metrics:

- CTXSPI:CTXSPI_SESM:NUMACTSESS
- GLOBAL:GBL_DISK_PHYS_IO_RATE

Active Sessions vs. System CPU

Shows the number of active sessions vs. system CPU utilization

Metrics:

- CTXSPI:CTXSPI_SESM:NUMACTSESS
- GLOBAL:GBL_CPU_TOTAL_UTIL

Active Sessions vs. System Physical Memory

Shows the number of active sessions vs. system physical memory utilization

Metrics:

- CTXSPI:CTXSPI_SESM:NUMACTSESS
- GLOBAL:GBL_MEM_UTIL

Chapter 10

Troubleshooting

Troubleshooting Assistance

This chapter describes the possible errors that can occur when using SPI for Citrix and gives instructions on how to solve them.

Currently, there are no known issues or workarounds for this product.

Appendix A

File Locations

File Tree on the Management Server

Below is a list of file locations for SPI for Citrix located on the management server:

Directory:

<SPI-Share>\ctxspi\bin

Files:

CTXSPI-Check.vbs
CTXSPI-De1SvcMap.vbs
CTXSPI-DeleteSvcTreeRules.vbs
CTXSPI-GetMsgNodeId.vbs
CTXSPI-UpdSvcMap.cmd
CTXSPIConfig.exe
CTXSPILicensing.exe

Directory:

<SPI-Share>\ctxspi\conf

Files:

CTXSPIconf.ini

Directory:

<SPI-Share>\ctxspi\doc

Files:

hsl_software_license_support_terms_signed.txt

Directories:

- for OM/W 7.x

<InstrumentationDir>\windows 2000\5.0\SPI for Citrix
<InstrumentationDir>\windows server 2003\5.2\SPI for Citrix

- for OM/W 8.x

<InstrumentationDir>\Categories\SPI for Citrix\windows

Files:

CTXSPI-Avail.vbs
CTXSPI-CLSServices.vbs
CTXSPI-DataStore.vbs
CTXSPI-DispLogons.vbs
CTXSPI-LogonThrottler.vbs
CTXSPI-LsTools.vbs
CTXSPI-NodeTypes.vbs
CTXSPI-OSAndTSServices.vbs
CTXSPI-PSLogonPolicyTools.vbs
CTXSPI-PSServices.vbs

CTXSPI-ProfileStatus.vbs
CTXSPI-ProfilesStatus.vbs
CTXSPI-PsTools.vbs
CTXSPI-RemoveWholeSPI.vbs
CTXSPI-SGService.vbs
CTXSPI-Service.vbs
CTXSPI-wiInstall.vbs
CTXSPI-wiPolicyTools.vbs
CTXSPI-wiTools.vbs
CTXSPI-wiUninstall.vbs
CTXSPIAppsLog.cmd
CTXSPIAvailLog.cmd
CTXSPICollectPerf.cmd
CTXSPIDumpDdf.exe
CTXSPIFarmLogUx.cmd
CTXSPIFarmProbe_net11.exe
CTXSPIFarmProbe_net20.exe
CTXSPILicensing.exe
CTXSPILogToDdf.cmd
CTXSPILogsLuLog.cmd
CTXSPIMsgCenterx64.dll
CTXSPIMsgCenterx86.dll
CTXSPIMsgEng.dll
CTXSPIPFA.exe
CTXSPIPG.exe
CTXSPIPLS_win2000.sys
CTXSPIPLS_win2003_x64.sys
CTXSPIPLS_win2003_x86.sys
CTXSPIPLSx64.exe
CTXSPIPLSx86.exe
CTXSPIPLT.exe
CTXSPIPM.exe
CTXSPIPM.ini
CTXSPIPMP.exe
CTXSPIPerfDumpDdf.exe
CTXSPIProfileLog.cmd
CTXSPIProfilesLog.cmd
CTXSPIPSldLog.cmd
CTXSPISesxLogUx.cmd
CTXSPISubAgent.exe
CTXSPISubAgent.reg
CTXSPISubAgent.xml
CTXSPISupport.exe
CTXSPISupportCallie.exe
CTXSPISwitch.cmd
CTXSPITraceMsg.exe
CTXSPIUtil.exe
CTXSPIWIMP.exe
CTXSPIWI_TPL.ini
CTXSPIWiExtension.dll
CTXSPIWiFilter.dll

CTXSPIwiflLog.cmd
CTXSPIwildLog.cmd
CTXSPIWrap.exe
CTXSPI_APPS.spec
CTXSPI_AVAILB.spec
CTXSPI_AVAILF.spec
CTXSPI_AVAILS.spec
CTXSPI_COLLECT_PERF.pfd
CTXSPI_FARM.spec
CTXSPI_LSLU.spec
CTXSPI_PROFILE.spec
CTXSPI_PROFILES.spec
CTXSPI_PSLD.spec
CTXSPI_SESM.spec
CTXSPI_SESS.spec
CTXSPI_SESX.spec
CTXSPI_SGS2.spec
CTXSPI_SGS3.spec
CTXSPI_SICA.spec
CTXSPI_SVCS.spec
CTXSPI_WIFL.spec
CTXSPI_WILD.spec
CTXSPIconf.ini
ctxspi_svcrule.xml

Directory:

<ovInstallDir>\newconfig\OVPM

Files:

VPI_GraphsSPI for Citrix.txt

File Tree on the Managed Node

Below is a list of file locations for SPI for Citrix located on the managed node:

Directory:

<ovAgentDir>\bin\instrumentation

Files:

CTXSPI-Avail.vbs
CTXSPI-CLSServices.vbs
CTXSPI-DataStore.vbs
CTXSPI-DispLogons.vbs
CTXSPI-LogonThrottler.vbs
CTXSPI-LsTools.vbs
CTXSPI-NodeTypes.vbs

CTXSPI-OsAndTSServices.vbs
CTXSPI-PSLogonPolicyTools.vbs
CTXSPI-PSServices.vbs
CTXSPI-ProfileStatus.vbs
CTXSPI-ProfileStatus.vbs
CTXSPI-PsTools.vbs
CTXSPI-RemoveWholeSPI.vbs
CTXSPI-SGService.vbs
CTXSPI-Service.vbs
CTXSPI-WiInstall.vbs
CTXSPI-WiPolicyTools.vbs
CTXSPI-WiTools.vbs
CTXSPI-WiUninstall.vbs
CTXSPIAppsLog.cmd
CTXSPIAvailLog.cmd
CTXSPICollectPerf.cmd
CTXSPIDumpDdf.exe
CTXSPIFarmLogUx.cmd
CTXSPIFarmProbe_net11.exe
CTXSPIFarmProbe_net20.exe
CTXSPILicensing.exe
CTXSPILogToDdf.cmd
CTXSPILs1uLog.cmd
CTXSPIMsgCenterx64.dll
CTXSPIMsgCenterx86.dll
CTXSPIMsgEng.dll
CTXSPIPFA.exe
CTXSPIPG.exe
CTXSPIPLS_win2000.sys
CTXSPIPLS_win2003_x64.sys
CTXSPIPLS_win2003_x86.sys
CTXSPIPLSx64.exe
CTXSPIPLSx86.exe
CTXSPIPLT.exe
CTXSPIPM.exe
CTXSPIPM.ini
CTXSPIPMP.exe
CTXSPIPerfDumpDdf.exe
CTXSPIProfileLog.cmd
CTXSPIProfilesLog.cmd
CTXSPIPS1dLog.cmd
CTXSPISESxLogUx.cmd
CTXSPISubAgent.exe
CTXSPISubAgent.reg
CTXSPISubAgent.xml
CTXSPISupport.exe
CTXSPISupportCallie.exe
CTXSPISwitch.cmd
CTXSPITraceMsg.exe
CTXSPIUtil.exe
CTXSPIWIMP.exe

CTXSPIWI_TPL.ini
CTXSPIwiExtension.dll
CTXSPIwiFilter.dll
CTXSPIwiFlLog.cmd
CTXSPIwidLog.cmd
CTXSPIWrap.exe
CTXSPI_APPS.spec
CTXSPI_AVAILB.spec
CTXSPI_AVAILF.spec
CTXSPI_AVAILS.spec
CTXSPI_COLLECT_PERF.pfd
CTXSPI_FARM.spec
CTXSPI_LSLU.spec
CTXSPI_PROFILE.spec
CTXSPI_PROFILES.spec
CTXSPI_PSLD.spec
CTXSPI_SESM.spec
CTXSPI_SESS.spec
CTXSPI_SESX.spec
CTXSPI_SGS2.spec
CTXSPI_SGS3.spec
CTXSPI_SICA.spec
CTXSPI_SVCS.spec
CTXSPI_WIFL.spec
CTXSPI_WILD.spec
CTXSPIconf.ini
ctxspi_svcrule.xml

In the following folders, temporary files are created during the SPI execution:

<OvAgentDir>\ctxspi\bin
<OvAgentDir>\ctxspi\conf
<OvAgentDir>\ctxspi\data
<OvAgentDir>\ctxspi\log
<OvAgentDir>\ctxspi\support

Appendix B

Performance Data

Data Source Metrics

Below is a list of performance data collected on a specific managed node.

Presentation Server Managed Node

Below is a short description of data sources and corresponding metrics that are collected on the Presentation Server managed node:

CTXSPI_APPS data source

Published application usage

Metric Name	Description
APPNAME	Fully-qualified name of the application
APPUSAGE	The number of running instances

CTXSPI_FARM data source

Farm and zone membership information

Metric Name	Description
FARMNAME	The name of the farm the server is part of
ZONENAME	The name of the zone the server is part of

CTXSPI_PROFILE data source

User profile statistics for each individual user profile on Presentation Server system

Metric Name	Description
USER	The username
FULL_SIZE	Full profile size
ROAMING_SIZE	Roaming profile size
FILE_COUNT	The number of all files in the profile
ROAMING_FILE_COUNT	The number of roaming files in the profile
TIME	Timestamp of the user profile measurement
EXECUTABLES_EXT	Extensions for executable files

Metric Name	Description
EXECUTABLES_COUNT	The number of executable files in the profile
EXECUTABLES_SIZE	Total size of executable files in the profile
MEDIA_EXT	Extensions for media files
MEDIA_COUNT	Total size of media files in the profile
MEDIA_SIZE	Total size of media files in the profile
CUSTOM_EXT	Extensions for custom files
CUSTOM_COUNT	The number of custom files in the profile
CUSTOM_SIZE	Total size of custom files in the profile

CTXSPI_PROFILES data source

User profile statistics for all user profiles on Presentation Server

Metric Name	Description
TIME	Timestamp of the user profile measurement
FULL_SIZE	Full size of all profiles
ROAMING_SIZE	Roaming size of all profiles
FILE_COUNT	The number of all files in all profiles
ROAMING_FILE_COUNT	The number of roaming files in all profiles
EXECUTABLES_EXT	Extensions for executable files
EXECUTABLES_COUNT	The number of executable files in all profiles
EXECUTABLES_SIZE	Total size of executable files in all profiles
MEDIA_EXT	Extensions for media files
MEDIA_COUNT	The number of media files in all profiles
MEDIA_SIZE	Total size of media files in all profiles
CUSTOM_EXT	Extensions for custom files
CUSTOM_COUNT	The number of custom files in all profiles
CUSTOM_SIZE	Total size of custom files in all profiles

CTXSPI_PSLD data source

Presentation Server user logon process performance data

Metric Name	Description
PSLDKEY	Logon ID
STARTTIME	Start time of the logon process
LOGONTYPE	Client type (ICA or RDP session)
PHCOMPLETED	The number of completed logon phases
PH1PROFILE	The duration of the phase 1 of the logon process (in ms)
PH2POLICY	The duration of the phase 2 of the logon process (in ms)
PH3USERINIT	The duration of the phase 3 of the logon process (in ms)
PH4SCRIPTS	The duration of the phase 4 of the logon process (in ms)
PH5CTXINIT	The duration of the phase 5 of the logon process (in ms)
DURATION	Total duration of the user logon process
USERNAME	Username

CTXSPI_SESM data source

Summary session information

Metric Name	Description
SUMMKEY	Dummy key value
NUMALLSESS	The number of all sessions on a server
NUMACTSESS	The number of active session on a server
NUMDISCSESS	The number of disconnected sessions on a server
NUMAPPINST	The number of sessions running published applications on a server
NUMIPSESS	The number of IP sessions running on a server
NUMIPXSESS	The number of IPX sessions running on a server
NUMNETBIOSSESS	The number of NetBIOS sessions running on a server
NUMMODEMSESS	The number of modem sessions running on a server
NUMDESKTOPSESS	The number of desktop sessions running on a server
NUMPROCS	The number of processes running on a server

CTXSPI_SESS data source

Performance session information

Metric Name	Description
HINSTANCENAME	The name of a user session
PCTPROCESSORTIME	The % of processor time consumption of a user session (in %)
WORKINGSET	Physical memory consumption of a user session (in bytes)
PAGEFILEBYTES	Virtual memory consumption of a user session (in bytes)
TOTALERRORS	Total network errors per second on a user session
TOTALFRAMES	Total network frames per second on a user session
TOTALTIMEOUTS	Total network timeouts per second that occurred on a user session
HANDLECOUNT	The number of session handles
THREADCOUNT	The number of session threads
TOTALBYTES	Total number of session bytes per second transferred
TOTALTRANSERRORS	Total number of session transmission errors

CTXSPI_SESX data source

Extended session information

Metric Name	Description
SESSIONNAME	The name of a user application session
SESSIONID	The ID of a user application session
DOMAINNAME	The domain name of the user running the application session
USERNAME	The username of the user running the application session
STATE	The state of the user application session (can be one of: active, disconnected, connected, and so on)
LOGONTIME	The logon time of the user application session (in seconds since 1.1.1970)
LASTINPUTTIME	The time when user made the last interactive input on an application session (in seconds since 1.1.1970)
ADDRFAMILY	The address family of a user application session (can be one of: IP / IPX / NetBIOS)
ISMODEMSESS	Is the session a modem session (can be 1 - session is modem session, 0 - session is not a modem session)
APPDN	Fully-qualified name of the application running within a session

Metric Name	Description
ISDESKTOPSESS	Is the session a desktop session (can be 1 - session is desktop session, 0 - session is not a desktop session)
CPUTIME	Cumulative amount of CPU time spent by the application session (in seconds)
WORKINGSETSIZE	The amount of physical memory currently spent by the application session (in bytes)
PAGEFILESIZE	The amount of virtual memory currently spent by the application on a session (in bytes)

CTXSPI_SICA data source

ICA Session statistics

Metric Name	Description
HINSTANCENAME	The name of a user ICA session
LATENCYLASTRECORDED	The last-recorded session latency on a user ICA session (in milliseconds)
LATENCYSESSIONAVERAGE	The average session latency on a user ICA session (in milliseconds)
LATENCYSESSIONDEV	The session latency deviation

CTXSPI_SVCS data source

Citrix service resource consumption

Metric Name	Description
HINSTANCENAME	The name of the Citrix service
PCTPROCESSORTIME	The % of the processor time consumption of a Citrix service (in %)
WORKINGSET	Physical memory consumption of a Citrix service (in bytes)
PAGEFILEBYTES	Virtual memory consumption of a Citrix service (in bytes)

Citrix License Server Managed Node

Below is a short description of data sources and corresponding metrics that are collected on the Citrix License Server managed node:

CTXSPI_LSLU data source

Citrix License Server license use

Metric Name	Description
FEATURENAME	The Citrix license server feature name
NRAVAIL	The number of available feature licenses
NRUSED	The number of user feature licenses
PCTUSED	The % of used feature licenses

Web Interface Managed Node

Below is a short description of data sources and corresponding metrics that are collected on the Web Interface managed node:

CTXSPI_AVAILB data source

Broker availability

Metric Name	Description
UNIQUEKEY	The dummy key
STARTTIME	The start time of the measurement
MEASUREMENTID	GUID identifying site and its components measurement
FARMNAME	The name of the farm the broker is part of
BROKERNAME	The name of the XML broker that was tested
ENUMERATION	The duration of the application enumeration (in ms)
COMPLETED	The number of completed phases
STATUS	The description of an error (if applicable)
DURATION	The total duration of the broker availability
RESERVED1	Reserved for future use
RESERVED2	Reserved for future use
RESERVED3	Reserved for future use

CTXSPI_AVAILF data source

Farm availability

Metric Name	Description
UNIQUEKEY	The dummy key
STARTTIME	The start time of the measurement
MEASUREMENTID	The GUID identifying site and its components measurement
FARMNAME	The name of the farm
HOSTNAME	The name of the Presentation Server that was selected by the application load-balancing
APPLICATIONNAME	The name of the requested application
ENUMERATION	The duration of the application enumeration (in ms)
REQUEST	The duration of handing the application request (in ms)
ADDRESSREQUEST	The duration of handling the host address request (in ms)
TICKETREQUEST	The duration of handling the ticket request (in ms)
COMPLETED	The number of completed phases
STATUS	The description of an error (if applicable)
DURATION	The total duration of the farm availability
RESERVED1	Reserved for future use
RESERVED2	Reserved for future use
RESERVED3	Reserved for future use

CTXSPI_AVAILS data source

Site availability

Metric Name	Description
UNIQUEKEY	The dummy key
STARTTIME	The start time of the measurement
MEASUREMENTID	The GUID identifying site and its components measurement
SITEURL	The Web Interface site URL
CONNECTION	The duration of the Web Interface logon page response (in ms)
ENUMERATION	The duration of the application enumeration of all farms that are configured for this site (in ms)
COMPLETED	The number of completed phases

Metric Name	Description
STATUS	The description of an error (if applicable)
DURATION	The total duration of the site availability
RESERVED1	Reserved for future use
RESERVED2	Reserved for future use
RESERVED3	Reserved for future use

CTXSPI_WIFL data source

Web Interface failed user logon information

Metric Name	Description
USERNAME	The username
NRFAILED	The number of failed user logons since last measurement
URL	The Web Interface URL

CTXSPI_WILD data source

Web Interface user logon process information

Metric Name	Description
WILDKEY	The logon ID
DURATION	The user logon process duration (in ms)
STARTTIME	The time when user logon process started
URL	The Web Interface URL
USERNAME	The username

Secure Gateway Managed Node

Below is a short description of data sources and corresponding metrics that are collected on the Secure Gateway managed node:

CTXSPI_SGS2 data source

Secure Gateway 2 performance data

Metric Name	Description
DUMMYKEY	The dummy key
LASTCONNTIME	The last client connect time
TOTALACTIVE	The total number of active connections
TOTALPENDING	The total number of pending connections

CTXSPI_SGS3 data source

Secure Gateway 3 performance data

Metric Name	Description
DUMMYKEY	The dummy key
BYTESSECFROMCL	Network traffic per second from all client connections
BYTESSECTOCL	Network traffic per second from all client connections
AVGCLCONNTIME	The average client connect time
CONNSPERSEC	Connections per second
CONNSTOTALACT	The total number of active connections
CONNSTOTALPEND	The total number of pending connections
SSLHANDPEND	The number of pending SSL handshakes
SSLHANDPERSEC	The number of SSL handshakes per second
SSLHANDAVGTIME	The average SSL handshake time