

Quest® InTrust 11.4.2

Preparing for Auditing and Monitoring Microsoft IIS



© 2020 Quest Software Inc. ALL RIGHTS RESERVED.

This guide contains proprietary information protected by copyright. The software described in this guide is furnished under a software license or nondisclosure agreement. This software may be used or copied only in accordance with the terms of the applicable agreement. No part of this guide may be reproduced or transmitted in any form or by any means, electronic or mechanical, including photocopying and recording for any purpose other than the purchaser's personal use without the written permission of Quest Software Inc.

The information in this document is provided in connection with Quest Software products. No license, express or implied, by estoppel or otherwise, to any intellectual property right is granted by this document or in connection with the sale of Quest Software products. EXCEPT AS SET FORTH IN THE TERMS AND CONDITIONS AS SPECIFIED IN THE LICENSE AGREEMENT FOR THIS PRODUCT, QUEST SOFTWARE ASSUMES NO LIABILITY WHATSOEVER AND DISCLAIMS ANY EXPRESS, IMPLIED OR STATUTORY WARRANTY RELATING TO ITS PRODUCTS INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTY OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, OR NON-INFRINGEMENT. IN NO EVENT SHALL QUEST SOFTWARE BE LIABLE FOR ANY DIRECT, INDIRECT, CONSEQUENTIAL, PUNITIVE, SPECIAL OR INCIDENTAL DAMAGES (INCLUDING, WITHOUT LIMITATION, DAMAGES FOR LOSS OF PROFITS, BUSINESS INTERRUPTION OR LOSS OF INFORMATION) ARISING OUT OF THE USE OR INABILITY TO USE THIS DOCUMENT, EVEN IF QUEST SOFTWARE HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES. Quest Software makes no representations or warranties with respect to the accuracy or completeness of the contents of this document and reserves the right to make changes to specifications and product descriptions at any time without notice. Quest Software does not make any commitment to update the information contained in this document.

If you have any questions regarding your potential use of this material, contact:

Quest Software Inc.

Attn: LEGAL Dept

4 Polaris Way

Aliso Viejo, CA 92656

Refer to our Web site (<https://www.quest.com>) for regional and international office information.

Patents

Quest Software is proud of our advanced technology. Patents and pending patents may apply to this product. For the most current information about applicable patents for this product, please visit our website at <https://www.quest.com/legal>.

Trademarks

Quest, the Quest logo, and Join the Innovation are trademarks and registered trademarks of Quest Software Inc. For a complete list of Quest marks, visit <https://www.quest.com/legal/trademark-information.aspx>. All other trademarks and registered trademarks are property of their respective owners.

Legend

 **CAUTION: A CAUTION icon indicates potential damage to hardware or loss of data if instructions are not followed.**

 **IMPORTANT, NOTE, TIP, MOBILE, or VIDEO:** An information icon indicates supporting information.

InTrust Preparing for Auditing and Monitoring Microsoft IIS

Updated - September 2020

Version - 11.4.2

Contents

IIS Auditing Overview	4
Installing the Knowledge Pack for Microsoft IIS	5
Configuring Service Logging for IIS and FTP Service	6
Known Issues with IIS 7.0 and FTP Service 7.5	7
How to Gather Event Data with InTrust	8
IP Address Resolution	8
How to Monitor for Critical Events	9
InTrust Knowledge Pack for Microsoft IIS	10
About us	11
Contacting Quest	11
Technical support resources	11

IIS Auditing Overview

InTrust with the Knowledge Pack for Microsoft IIS allows you to gather and monitor for events generated by Microsoft Internet Information Services (IIS). This information allows you to stay informed about who has been using the server and how many times your online information was accessed.

You can collect, report, and monitor for events generated by Microsoft IIS versions 7.0 and later. Gathering (but not monitoring) of events generated by Microsoft FTP Service is also supported.

i **IMPORTANT:** Make sure IIS is configured as follows:

- For real-time monitoring to work, on 64-bit Windows, IIS must be running in 32-bit mode.
- For gathering to work, IIS logging must be done on a per-site basis, meaning that the **One log per** option must be set to **Site** (instead of **Server**) in IIS Manager.

InTrust can process the event data written by IIS to the following logs:

- Microsoft IIS WWW Log
- Microsoft IIS FTP Log
- Windows Security Log (events generated by IIS)

Installing the Knowledge Pack for Microsoft IIS

Support for IIS auditing and real-time monitoring is provided by the Knowledge Pack for Microsoft IIS. The Knowledge Pack must be installed on top of an existing InTrust installation.

Configuring Service Logging for IIS and FTP Service

1. In Internet Information Services Manager, in the left pane, click the necessary site or server.
2. In the right pane, click **Logging**.
3. On the screen that opens, set the Format option to **W3C**.
4. Configure other logging options as necessary.

Known Issues with IIS 7.0 and FTP Service 7.5

The following issues exist with gathering and real-time monitoring of IIS 7.0 and FTP Service 7.5 logs:

1. The "Oversized request" real-time monitoring rule does not work for these logs.
2. When gathering uses agent-side log backup, filtering by the **sc-bytes**, **cs-bytes** and **time-taken** fields does not work in the following audit data filters:
 - MS IIS: Web Site: Failed Access
 - MS IIS: Web Site: Restricted Access
 - MS IIS FTP Site Log
 - MS IIS: Web Site: Warning-code Access
 - MS IIS: FTP Site: Successful Logons
 - MS IIS: Web Site: Successful Access
 - MS IIS: FTP Site: Failed Logons
 - MS IIS: FTP Site: Upload
 - MS IIS: FTP Site: All Logons
 - MS IIS Web Site Log
 - MS IIS: Web Site: Not Found Errors
 - MS IIS: FTP Site: Download
3. If gathering uses agent-side log backup, the "Web site total statistics" and "WEB site daily traffic [chart]" reports cannot be generated from the resulting events.
4. Real-time monitoring and gathering of FTP logs with the agent-side audit log backup enabled does not work.
5. Gathering of WWW log in UTF-8 format does not work if **Do not create new log files** logging option is selected.

How to Gather Event Data with InTrust

IIS logs can be collected with or without agents. For successful gathering, make sure the system requirements are met, as described in [Microsoft IIS Events](#).

To gather IIS log data

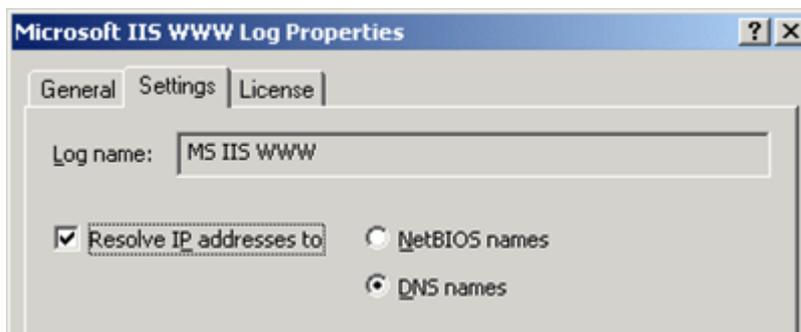
1. In InTrust Manager, select **Configuration | Sites | Microsoft Windows Network**, and make sure the **All IIS Servers** site includes your IIS servers.
2. To automatically install agents on the site computers, select **Install Agents** from the site's shortcut menu.
3. Select the **IIS Daily Collection** task, or configure a new task as needed, with a gathering job associated with the correct gathering policy and site. In the task properties, select the **Schedule enabled** option.
4. Select the **IIS Weekly Reporting** task, or configure a new reporting task as needed, and enable its schedule in the similar way.

CAUTION: If you change the location of IIS log files between gathering sessions, make sure the old log files are available in the new location.

IP Address Resolution

If specified by InTrust settings, IP addresses found in the log are resolved to host names, and InTrust saves them both (IP addresses and host names) into the log, appending them to original fields. This can significantly slow down the gathering process; so this option is disabled by default. If necessary, you can enable this option in the following way:

1. In InTrust Manager, select **Configuration | Data Sources**.
2. On the right pane, select the IIS log you need, for example, Microsoft IIS WWW Log
3. From its shortcut menu, select **Properties**, on the **Settings** tab select **Resolve IP addresses to** and specify whether to resolve them into NetBIOS names or DNS names:



How to Monitor for Critical Events

To monitor for critical events, InTrust agents are used on the computers included in the target site. If the agents are not yet installed, they will be deployed automatically as soon as you activate a real-time monitoring policy.

To simplify the configuration of the real-time monitoring workflow, InTrust Knowledge Pack for Microsoft IIS offers predefined monitoring rules and policies.

i | **IMPORTANT:** For real-time monitoring to work on 64-bit Windows, IIS must be running in 32-bit mode.

To configure IIS monitoring with InTrust

1. In InTrust Manager, carry out the following:
 - a. Enable the rule that will handle the events you need, for example, 'Unauthorized web-page access attempt', or any other rule from **Real-Time Monitoring | Rules | IIS RTM Rules | Common Attacks**.
 - b. Activate a monitoring policy that will bind this rule to your InTrust site, that is the **Real-Time Monitoring | Policies | IIS Security** policy.
 - c. If you want to get an email notification upon alert generation, in the **Configuration | Personnel**, select **Notification Groups**, select the necessary group and specify the desired recipients.
 - d. Select the site you will monitor (All IIS Servers), and from its shortcut menu, select **Properties**. Click **Security**, and make sure the list of accounts includes users you want to be able to work with the alerts (as alert readers or alert managers). Check the same for the rule group containing the rule you are using.
2. In Monitoring Console, do the following:
 - a. Open the profile you want to work with, or create a profile by running Monitoring Console Administration from the Start menu.
 - b. Configure an alert view to display the necessary alerts.

For detailed information on configuring gathering and monitoring processes, refer to the [Auditing Guide](#) and [Real-Time Monitoring Guide](#).

InTrust Knowledge Pack for Microsoft IIS

The Knowledge Pack for Microsoft IIS offers a set of predefined InTrust objects that will help you configure the gathering and monitoring of event data from your IIS servers. The following objects are included:

- Gathering policies:
 - IIS: Security
Collects all IIS security events to both a repository and a database.
 - IIS: Health
Collects all IIS health events both to a repository and a database.
 - IIS: Usage: WWW
Collects IIS Web Site log both to a repository and a database.
 - IIS: Usage: FTP
Collects IIS FTP Site log both to a repository and a database.
- Import policies:
 - IIS: Security
Imports all IIS security events to a database.
 - IIS: Health
Imports all IIS health events to a database.
 - IIS: Usage: WWW
Imports events from IIS Web Site log to a database.
 - IIS: Usage: FTP
Imports events from IIS FTP Site log to a database.
- Jobs:
 - IIS Security events collection
Collection of all the IIS security events to the default repository and the default database.
 - IIS Web Site Reporting
Weekly reporting of IIS Web Site usage and security events.
 - IIS FTP Reporting
Weekly reporting of IIS FTP Site usage and security events.
- Tasks:
 - IIS Daily collection
Daily collection of all the IIS events to the default repository and the default database.
 - IIS Weekly Reporting
Weekly reporting of IIS statistics and the most critical events.
- “All IIS servers” site
- “IIS Security” real-time monitoring policy
Applies real-time monitoring rules related to IIS security.

Quest creates software solutions that make the benefits of new technology real in an increasingly complex IT landscape. From database and systems management, to Active Directory and Office 365 management, and cyber security resilience, Quest helps customers solve their next IT challenge now. Around the globe, more than 130,000 companies and 95% of the Fortune 500 count on Quest to deliver proactive management and monitoring for the next enterprise initiative, find the next solution for complex Microsoft challenges and stay ahead of the next threat. Quest Software. Where next meets now. For more information, visit www.quest.com.

Contacting Quest

For sales or other inquiries, visit www.quest.com/contact.

Technical support resources

Technical support is available to Quest customers with a valid maintenance contract and customers who have trial versions. You can access the Quest Support Portal at <https://support.quest.com>.

The Support Portal provides self-help tools you can use to solve problems quickly and independently, 24 hours a day, 365 days a year. The Support Portal enables you to:

- Submit and manage a Service Request
- View Knowledge Base articles
- Sign up for product notifications
- Download software and technical documentation
- View how-to-videos
- Engage in community discussions
- Chat with support engineers online
- View services to assist you with your product