Exchange Server Performance Monitoring
Everyone Knows When Exchange is Suffering Performance Issues

The email and calendaring services that Microsoft® Exchange Server provides are very important when it comes to your business. Nearly everyone in the company can feel the pain when Exchange is not performing well. All eyes are on IT to find and fix the problem quickly—and to implement measures to proactively prevent issues from occurring again.

How are you collecting and being alerted on Exchange performance today? Are you running several PowerShell scripts daily or weekly, checking logs, checking perfmon counters, etc.? If so, you’re probably spending too much time monitoring your Exchange environment and you may be missing critical metrics that could alert you to an impending failure, including:

- Mailbox database size & capacity
- Replication Status
- Mailbox failover events
- Storage I/O

Exchange Server Monitoring with AppInsight for Exchange

Exchange Server monitoring aims to optimize the performance and availability of the Microsoft Exchange messaging environment. With an agentless approach, IT pros can monitor various aspects of performance and availability of Exchange Server. Deeper visibility will enable IT pros to diagnose the root cause of performance issues—whether it be troubleshooting heavy server load, managing high rates of incoming emails, MAPI operations, POP3 requests, etc.

SolarWinds Server and Application Monitor delivers automated Exchange Server monitoring with AppInsight for Exchange. With AppInsight for Exchange, IT pros can now start troubleshooting performance issues using a single platform—without having to rely on multiple scripts, going through various system and app logs, looking at perfmon, and so on. AppInsight provides all the information you need to troubleshoot and monitor performance issues—right at your fingertips.

Start monitoring all aspects of your Exchange Server, such as:

- Replication health checks
- Database failover events
- Information store metrics like active connections
- Mailbox database capacity—which is useful for help desk & IT support
- Email queues, copy queues, and context index
- Verification of email delivery
- Server health

In addition to monitoring, you can also proactively alert your users’ mailbox size. With AppInsight for Exchange, you are sure to save time on some of the mundane Exchange tasks you perform daily.
A single view into Exchange Server performance

Out-of-the-box Dashboards Deliver Insight to Microsoft Exchange Performance

Server & Application Monitor delivers out-of-the-box dashboards within minutes once AppInsight for Exchange is assigned to a node. These dashboards give visibility into vital statistics via a dashboard of graph and gauges—as well as the ability to drill-down into performance, usage, and historical data.
AppInsight for Exchange dashboard displaying vital statistics for efficient Exchange Server monitoring

Proactive Mailbox Management

Once you have assigned AppInsight for Exchange, you can quickly view various areas for performance status—all within the same window. Monitor the largest mailboxes based on usage, and drill into historical mailbox usage patterns, including attachment size, synced mobile devices, mailbox capacity, and so on. Search for specific mailboxes by user and location—alert them directly when they are about to exceed the given mailbox size and threshold. This proactive approach ensures that end-users are alerted when their quota is nearly reached. Additionally, IT support and Exchange admins can provide detailed information mailbox size, attachment size, etc. This automation helps admins save several hours and leaves the responsibility of size reduction & management on the user.

AppInsight for Exchange also offers visibility into various areas of your Exchange environment:

- Manage mailbox quota
- Mailbox database capacity management
- Manage unused mailboxes
- Indexing & replication of public folders
- Automated alerting
Proactive identification mailbox statistics

End-User Monitoring

Server & Application Monitor measures Exchange Server and email performance from an end-user’s perspective. You can monitor the end-user experience to discover patterns that might lead to poor service. SolarWinds Server & Application Monitor can also monitor the end-user experience for Outlook® Web Access (OWA) clients.

- **MAPI**: Sends email through your SMTP server and verifies that it gets delivered to an email account on the Exchange Server
- **POP3**: Tests an email’s round trip from your SMTP mail server to a POP3 account and measures the time it takes to complete the trip
- **IMAP4**: Tests an email’s round trip from your SMTP mail server to your IMAP4 account and measures the time it takes to complete the trip

Built-In Expert Knowledge

A feature unique to SolarWinds Server & Application Monitor is the built-in expert knowledge, which gives you detailed information about every metric. Expert knowledge provides the definition of every metric, what is the nature of the problem for that metric, and also remediation tips on how to quickly detect, diagnose, and fix the problem.

**Expert Knowledge**

**Definition:**
Shows the current number of submitted messages not yet processed by the transport layer.

**Information:**
The queues should remain below 50 at any given time. Anything above this amount should be cleared within 15 minutes.

**Possible problems:**
Mailbox server is not communicating properly with the transport server.

**Remediation:**
Verify network connectivity and transport server functionality. Additional bottlenecks may include disk reads or writes, processor time, available memory, and network configuration.

Leverage Expert Knowledge to know possible reasons of performance issues in Exchange Server
Advanced Reporting Engine offers Standardized & Customizable Reports

SolarWinds makes it easy to generate, customize, and share historical reports showing Exchange Server performance and availability. A simple interface facilitates modification of out-of-the-box reports and enables the creation of custom reports. Create reports for specific user profiles & Exchange mailboxes, usages, and more—making it easy to generate reports in minutes. Server & Application Monitor allows admins to automate report generation, scheduled reporting, and email delivery.

Users By Mailbox Size
Displays an info about users by mailbox size.
Summary of Orion Objects: Mailboxes

<table>
<thead>
<tr>
<th>USER DISPLAY NAME</th>
<th>MAILBOX TYPE</th>
<th>PRIMARY SMTP EMAIL ADDRESS</th>
<th>TOTAL MAILBOX SIZE</th>
<th>TOTAL ITEMS</th>
<th>ATTACHMENT SIZE</th>
<th>LAST LOGGED ON DATE</th>
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<td>743</td>
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<td>5/4/2014</td>
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Generate out-of-the-box and custom reports in minutes

Advanced Alert Manager

Set real-time statistical thresholds from baseline data and get notified if a component causes an application to slow down. Server & Application Monitor lets you configure alerts based on correlated events, sustained conditions, complex state combinations, resource dependencies, and more. If a component like mailbox database capacity is close to reaching the threshold, then you get notified before it goes into a critical state, thereby fixing such issues before the end-user faces availability and performance problems.
Get proactively notified of performance issues in Exchange before your end-users

Real-Time Process Explorer

Real-Time Process Explorer (RTPE) provides real-time insight into your server performance. The advantage of the RTPE is that you don’t need to physically, or remotely, log in to a particular machine and run the Task Manager to retrieve that machine’s vital statistics. Information for both monitored and unmonitored processes is displayed directly through the product. You can now monitor the performance of all your nodes that are running Exchange Servers.

With the Real-Time Process Explorer, you can monitor processes and services by:

- CPU Utilization
- Memory Utilization
- Virtual Memory Utilization
- Disk I/O

Real-time insight into your server performance
Exchange Server monitoring made easy

- Proactively manage Exchange Server
- Configure mailbox quote of every mailbox in your Exchange environment
- Manage mailbox database capacity
- Manage unused mailboxes
- Keep your replication backups available and complete in case Exchange crashes
- Track mailbox sizes to understand usage and storage capacity

Top 3 Reasons to Download Server & Application Monitor Now

- Multi-vendor server hardware monitors and comprehensive application monitoring & management of hundreds of applications, such as Exchange, IIS, SQL, Linux®, Active Directory®, and more
- Troubleshoot app issues with visibility across infrastructure layers
- Hassle free monitoring of server & apps in under an hour

SolarWinds (NYSE: SWI) provides powerful and affordable IT management software to customers worldwide - from Fortune 500 enterprises to small businesses. The company works to put its users first and remove the obstacles that have become “status quo” in traditional enterprise software. SolarWinds products are downloadable, easy to use and maintain, and provide the power, scale, and flexibility needed to address users’ management priorities. SolarWinds online user community, http://thwack.com, is a gathering-place where tens of thousands of IT pros solve problems, share technology, and participate in product development for all of the company’s products. Learn more today at http://www.solarwinds.com.

For additional information, please contact SolarWinds at 866.530.8100 or e-mail sales@solarwinds.com.

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