SolarWinds ipMonitor

QuickStart Guide

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About SolarWinds

SolarWinds, Inc develops and markets an array of network management, monitoring, and discovery tools to meet the diverse requirements of today's network management and consulting professionals. SolarWinds products continue to set benchmarks for quality and performance and have positioned the company as the leader in network management and discovery technology. The SolarWinds customer base includes over 45 percent of the Fortune 500 and customers from over 90 countries. Our global business partner distributor network exceeds 100 distributors and resellers.

Contacting SolarWinds

You can contact SolarWinds in a number of ways, including the following:

Team	Contact Information
Sales	1.866.530.8100 www.solarwinds.com
Technical Support	www.solarwinds.com/support
User Forums	http://www.thwack.com/

Conventions

The documentation uses consistent conventions to help you identify items throughout the printed and online library.

Convention	Specifying
Bold	Window items, including buttons and fields.
Italics	Book and CD titles, variable names, new terms
`Fixed font`	File and directory names, commands and code examples, text typed by you
Straight brackets, as in [*value*]	Optional command parameters
Curly braces, as in {*value*}	Required command parameters
Logical OR, as in *value1*|*value2*	Exclusive command parameters where only one of the options can be specified

SolarWinds ipMonitor Documentation Library

The following documents are included in the SolarWinds ipMonitor documentation library:

Document	Purpose
Administrator Guide	Provides detailed setup, configuration, and conceptual information.
Page Help	Provides help for every window in the ipMonitor user interface
QuickStart Guide	Provides installation, setup, and common scenarios for which ipMonitor provides a simple, yet powerful, solution.
Release Notes	Provides late-breaking information, known issues, and updates. The latest Release Notes can be found at www.solarwinds.com.

Contents

Chapter 1

Installing SolarWinds ipMonitor

ipMonitor provides a simple, wizard-driven installation process.

System Requirements

System requirements for ipMonitor vary based upon the number of monitors. The following table represents the minimum system requirements.

Software	**Requirements**
Operating System	A 32-bit version of one of the following: • Windows Vista (IPv4 mode only) • Windows XP Professional SP2 or later • Windows Server 2003 SP1 and R2 • Windows Server 2008
Web Browser	Microsoft Internet Explorer 6 and up, Firefox 1.5 and up.
Hardware	**~500 monitors**
CPU Speed	Single core 2.0 GHz
Hard Drive Space	240MB
Memory	512MB

Note: 500 monitors require approximately 1.5MB of hard drive space per day for storing statistics.

Installing ipMonitor

The following procedure guides you through install ipMonitor.

Complete the following procedure to install ipMonitor:

1. Log on to the server on which you want to install ipMonitor.

2. If you downloaded the install file, click the exe.

3. If you received physical media, browse to the executable file, and then launch the executable.

4. Review the Welcome text, and then click **Next**.

5. Accept the terms of the EULA and then click **Next**.

6. Provide a user name and organization name and then click **Next**.

7. To select a different install location, click **Change** and navigate to the desired destination folder and then click **Next**.

8. Click **Install** on the Ready to Install Program window.

9. Click **Finish** to launch the ipMonitor Configuration Program.

Note: It is recommended that you do not install ipMonitor on a domain controller. To take full advantage of ipMonitor's security features, we suggest that you create an account specifically for the ipMonitor Service to run under that applies the minimum tokens required by the ipMonitor Service to operate successfully. However, when ipMonitor is installed on a domain controller, the Credential Manager cannot be enabled to impersonate Windows accounts with elevated permissions. There is no allowance for trust relationships outside of the domain, resulting in limited access to many ipMonitor features.

Licensing ipMonitor

After installing the software through the setup wizard and completing the Configuration Wizard, you are prompted to enter the license activation key for your product. If you do not have an activation key, the product runs in a time-limited evaluation mode.

To evaluate the software without a license:

Click **Continue Evaluation**.

To license the software on a server with Internet access:

1. Click **Enter Licensing Information**.
2. Select **I have internet access and an activation key**.
3. Click the http://www.solarwinds.com/customerportal link to access the customer portal on the SolarWinds web site.
4. Log on to the portal using your SolarWinds customer ID and password.
5. Click **License Management** on the left navigation bar.
6. Navigate to your product, choose an activation key from the **Unregistered Licenses** section, and then copy the activation key.
7. ***If you cannot find an activation key in the Unregistered Licenses section,*** contact SolarWinds customer support.
8. Return to the Activate ipMonitor window, and then enter the activation key in the **Activation Key** field.
9. ***If you access Internet web sites through a proxy server,*** click **I access the internet through a proxy server**, and enter the proxy address and port.
10. Click **Next**.
11. Enter your email address and other registration information, and then click **Next**.

To license the software on a server without Internet access:

1. Click **Enter Licensing Information**
2. Select **This server does not have internet access**, and then click **Next**.
3. Click **Copy Unique Machine ID**.
4. Paste the copied data into a text editor document.
5. Transfer the document to a computer with Internet access.
6. On the computer with Internet access, complete the following steps:
7. Browse to http://www.solarwinds.com/customerportal/licensemanagement.aspx and then log on to the portal with your SolarWinds customer ID and password.
8. Navigate to your product, and then click **Manually Register License**.
9. If the **Manually Register License** option is not available for your product, contact SolarWinds customer support.
10. Provide the Machine ID from Step 5, and then download your license key file.
11. Transfer the license key file to the server.
12. Return to the Activate ipMonitor window, browse to the license key file, and then click **Next**.

Configuring SolarWinds ipMonitor

Complete the following procedure to configure ipMonitor:

1. In the Configuration Program, click **Next** on the Software Licensing window.
2. Click **Next** on the First Run Service Settings window.
3. Click **Next** on the First Run HTTP Server Settings window.
4. Add a new administrator account:
   a. Enter the user name for the account in the **User Name** box.
   b. Enter the password for the account in the **Password** and **Confirm Password** boxes.
   c. Click **Add Account**.
5. Click **Next** on the First Run Administrator Account window.
6. In the **Administrator’s Email Address** box, type an email address.
7. Click **Next** on the First Run Default ipMonitor Serving Settings window.
8. Click **Finish** to complete the configuration steps and launch ipMonitor.

Installing the Self-Signed Certificate

Complete the following procedure to install the self-signed certificate and allow secure ipMonitor sessions:

1. ***If you are using Firefox as your web browser***, you see a **Website Certified by an Unknown Authority** dialog box. Complete the following step:
   - Select the **Accept this certificate permanently** option, then click **OK**.
2. ***If you are using Internet Explorer 6 as your web browser***, you will see a **Security Alert** dialog box and must complete the following steps:

   a. Click **View Certificate**.

   b. Click **Install Certificate** to launch the Certificate Import Wizard.

   c. Click **Next**.

   d. Select the **Automatically select the certificate store based on the type of certificate** option, and then click **Next**.

   e. Click **Finish**.

   f. Click **Yes** to install this certificate.

   g. Click **OK** to close the Certificate Import Wizard dialog box.

   h. Click **OK** to close the Certificate dialog box, and then click **Yes**.
3. ***If you are using Internet Explorer 7 as your web browser***, you will see a certificate error and must complete the following steps:

   a. Click **Continue to this website (not recommended)**.

   b. Click the **Certificate Error** on the address bar to view the security report.

   c. Click **View Certificates**.

   d. Click **Install Certificate** to launch the Certificate Import Wizard.

   e. Click **Next**.

   f. Select the **Automatically select the certificate store based on the type of certificate** option, and then click Next.

   g. Click **Finish**.

   h. Click **Yes** to install this certificate.

   i. Click **OK** to close the Certificate Import Wizard dialog box.

   j. Click **OK** to close the Certificate dialog box.

   The self-signed certificate is now trusted for secure ipMonitor sessions.

Chapter 2

Getting Started

A wealth of information can be collected about your network using the powerful tools that comprise ipMonitor. The following section steps you through some common use cases. By stepping through this quick introduction, you will learn how to discover devices on your network and monitor them, keep your network organized using smartgroups and maps, create alerts and associate them with monitors, generate reports, and display network status using the Dashboard and the Network Operations Center (NOC) views.

1. Discovering Your Network Devices and Adding Monitors
2. Monitoring Your Network
3. Organizing Your Network
4. Drawing Maps
5. Understanding Alerts
6. Generating Reports

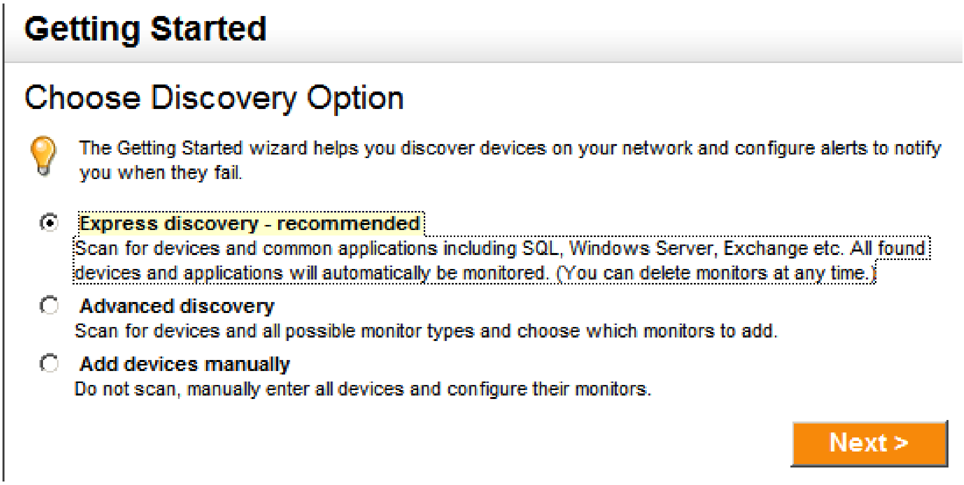
Discovering Your Network Devices and Adding Monitors

Open the web interface to access the Getting Started Wizard. The Getting Started page provides choices to help you discover devices on your network and configure alerts to notify you when they fail. The Express discovery quickly scans for devices and common applications including SQL, Windows Server, and Exchange.

All found devices and applications will automatically be monitored. You can delete monitors at any time. Complete the following procedure to discover your networked devices.

To discover devices on your network:

1. Log on to the ipMonitor web interface with your administrator account username and password.
2. Select **Yes** on the Getting Started Wizard, and then click **Next**.
3. Select **Express discovery**.



Getting Started

Choose Discovery Option

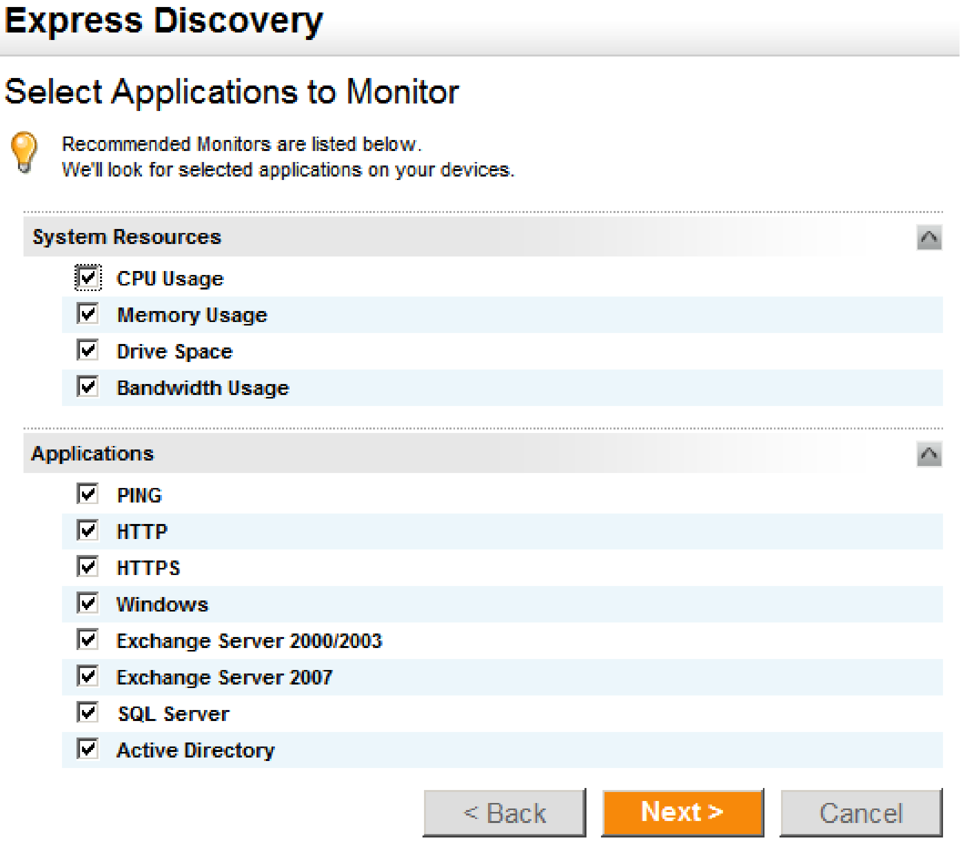
The Getting Started wizard helps you discover devices on your network and configure alerts to notify you when they fail.

● Express discovery - recommended
Scan for devices and common applications including SQL, Windows Server, Exchange etc. All found devices and applications will automatically be monitored. (You can delete monitors at any time.)

○ Advanced discovery
Scan for devices and all possible monitor types and choose which monitors to add.

○ Add devices manually
Do not scan, manually enter all devices and configure their monitors.

4. Select which applications and resources to monitor and then click **Next**.



Express Discovery

Select Applications to Monitor

Recommended Monitors are listed below.
We'll look for selected applications on your devices.

System Resources

☑ CPU Usage
☑ Memory Usage
☑ Drive Space
☑ Bandwidth Usage

Applications

☑ PING
☑ HTTP
☑ HTTPS
☑ Windows
☑ Exchange Server 2000/2003
☑ Exchange Server 2007
☑ SQL Server
☑ Active Directory

5. **.** Enter IP Ranges. In the **Start Address** and **End Address** text boxes, type the start and end of an IP address range to scan for devices and click **Next.**

Note: Scanning a large IP address range may take a long time. In the interest of providing you with a quick start, please select only a small IP address range of 100 addresses or less for your initial scan.

6. ***If you have Windows network credentials you want to use for discovering Windows network resources***, complete the following procedure:

a. Click **Next** to open the Credentials window.

b. Click **New Credential** to launch the Credentials Wizard.

c. In the **Credential Name** text box, type a name for the credential, and then click **Next.**

d. Type the details of your Windows network credential in the **Account**, **Password**, and **Confirm Password** text boxes, then click **Next.**

e. Click **Credential may only be used by my Account**, and then click **Next**.

f. Click **Finish**.

g. Click **Apply**.

. ***If you have SNMP community strings you want to use for discovering SNMP devices and resources***, complete the following procedure:

a. In the **SNMP Credential** text box, type the SNMP community string.

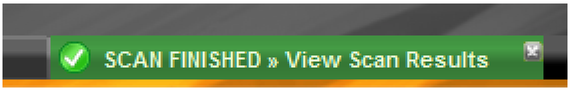
b. ***If you want to specify additional SNMP community strings***, click **Add SNMP Community** to create additional entries.

7. Click **Next** to begin Discovery Scan and then wait for the device scan to finish.

8. Wait for a few scans to finish. Scans are finished when the device state changes from **Scanning device** to **Scanning Complete**.

9. Click **Add All Scanned Devices**.

10. A tab appears on the Dashboard containing the scan results summary.



11. Select **Show Alert List** to review the added alerts.

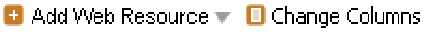
12. Click **Go to Dashboard**. The Dashboard page appears, summarizing the current network state.

Monitoring Your Network

The Dashboard page you are viewing contains Web Resources that show you the current status of your network devices and monitors. This view is customizable.

Adding Web Resources

Complete the following procedure to add another Web Resource to the Dashboard:



1. On the **Add Web Resource** menu, click **Top XX Devices by Availability**.
2. Click **OK**.

The web resource appears in the dashboard.

Re-arranging Web Resources

Complete the following procedure to change the layout of the Dashboard:

1. Move the pointer over the web resource title **Top 10 Devices by Availability**.

   The pointer changes shape to a four-pointed arrow.
2. Drag the title to a new location.

Inspecting Devices in the Dashboard

Complete the following procedure to examine devices in the dashboard.

1. In the **Top 10 Devices by Availability** web resource, click **ipMonitor Host**.

   You are now seeing the Dashboard page for this device.
2. In the **Monitor states for ipMonitor Host** web resource, click **ipMonitor [CPU-Processor Total]**.

   You are now seeing the Dashboard page for this monitor.

Organizing Your Network

The Devices tab contains views that allow you to classify, organize, and see the status of the devices and monitors in your network. One way you can classify and organize your devices and monitors is by creating groups.

Creating Groups

A group is a collection of devices, monitors, and potentially other groups. You may create groups inside other groups, and monitors and devices may be members of multiple groups. Complete the following procedure to create a group:

1. Click the **Devices** tab.
2. In the **Groups** tree, select the **My Network** group.
3. On the **Add** menu, click **Add New Group**.
4. In the **Group Name** box, type `Important Devices`, and then click **OK**.

   Your new group, Important Devices, appears in the Groups tree list.
5. In the **Groups** tree, select the **Important Devices** group.
6. On the **Add** menu, click **Add Existing Devices**.
7. From the device list, select at least one device that you consider important, and then click **Continue**.

Creating SmartGroups

A SmartGroup is a dynamic group whose contents are determined by parameters that you set. Unlike regular groups, whose contents never change, the contents of a SmartGroup automatically keep track of changes in your network. Some examples of SmartGroups include:

- a group of all your network devices located in Texas.
- a group of all the offline monitors in your network.
- a group of all the Cisco devices in your network.

Complete the following procedure to create a SmartGroup that contains all the Cisco devices in your network:

1. In the **Groups** tree, select the **My Network** group.
2. On the **Add** menu, click **Add New SmartGroup**.
3. In the **Name** box, type `All Cisco Devices`.
4. In the **SmartGroup Contains** box, select **Devices**.

5. In the **Start With** box, select **No Devices**.
6. Add a rule to add devices with the string “Cisco” in the Device Vendor property to the SmartGroup
   a. Click the arrow in the box after “devices, where”, and then select **property** from the list.
   b. Click **Click here to Select a Property** to open the property window.
   c. In the box at the bottom of the window, select **Device Properties**.
   d. In the list, click **Device Vendor**, and then click the Close button to exit the window.
   e. Click **RegEx Wizard** to open the Regex Wizard window.
   f. In the **Match begins with** text box, type `Cisco`, and then press TAB.
   g. Scroll down to the bottom of the window, and then copy the text `\iCisco.*?$` that has been created in the **Regular Expression you have built** box.
   h. Click **Close** to return to the **Edit SmartGroup** page.
   i. Paste `\iCisco.*?$` into the **Matches regular expression** box.
7. Click **Preview** to preview the contents of the new SmartGroup.
8. Click **OK** to create the SmartGroup.

Drawing Maps

A well-drawn map allows you to better visualize the effects of a failing device or monitor. ipMonitor creates default maps for each group and device in your network, but you will get the most benefit from your maps if you customize them by creating connections between devices and adding background images.

Complete the following procedures to customize the map for the Important Devices group:

1. View the map of the Important Devices group:
   a. Click the **Devices** tab.
   b. In the **Groups** tree, select the **Important Devices** group.
   c. On the **view** menu, click the **Map** button.

2. Resize your view of the map:
    - Move the **Scale** slider left to zoom in and right to zoom out.

      - or -
    - Click **Fit To Screen** to automatically size the map to the full extent of the area.
3. Click **Edit Map**.
4. Change the icon of a map object:
    a. Click the object. A bounding box appears.
    b. Click the **Icons** list, and then select an icon category.
    c. Click an icon. The object changes to that icon.
5. Resize a map object:
    a. Click the object. A bounding box appears.
    b. Drag a handle on the bounding box to resize it.
6. Create a connection between two map objects:
    a. Click the line drawing tool from the **Drawing Tools** palette.
    b. Drag one object to the other to draw a line.
7. Assign a monitor status to the connection:
    a. Click the selection tool from the **Drawing Tools** palette.
    b. Click a line to select it.
    c. Click **Assign monitor**.
    d. Select a monitor option and click **OK**. A monitor status indicator appears over the line.
8. Change the layout of the map:
    - Select an object and drag it to a new location.

      -or-
    - On the **Auto Layout** menu, click a layout type:
        - Circular
        - Organic
        - Tiled

9. Add a background to the map:
   a. On the **Change Background** menu, click **Upload Background**.
   b. Click **Browse**, and then select a JPG, PNG, or GIF format image file.
   c. Click **Upload**.
10. Click **Save** to save the map.
11. Click **Close** to exit the map editor.

Understanding Alerts

An alert is a configurable response to a change in the status of a monitor. One of the many strengths of ipMonitor is the ability to alert on almost every aspect of your network. You can trigger responses when an alert is generated and when it is resolved; you can create simple or complex conditions under which an alert is triggered or reset; you can suppress alerts when a set of simple or complex conditions exist; you can create an escalation path that triggers when an alert remains unresolved.

The triggering of an alerts and the resetting of an alert can trigger any number of the following types of actions:

- Send an email, page, or beeper message.
- Send an SNMP trap.
- Send a Windows “Net Send” broadcast message
- Log alerts to a file or to the Windows event log.
- Run an external program.
- Reboot a server or restart a service.

Complete the following procedure to create an alert that watches for changes in the Important Devices group, and that escalates the issue to management if the down state persists after the third alert:

1. Click the **Configuration** tab.
2. Click **Alert List**.
3. Add a new alert:
   a. Click **Add Alert**.
   b. In the **Alert Name** box, type `Notify techs then escalate`.

4. Add an action to notify technicians:
    a. On the **Add Action** menu, click **Simple Email**.
    b. In the **Action Name** box, type `Send email to techs`.
    c. In the **Send an Email Message To** box, type a local email address.
    d. Click **OK**.
5. Add an action to notify managers after three alerts:
    a. On the **Add Action** menu, click **Simple Email**.
    b. In the **Action Name** box, type `Send email to manager`.
    c. In the **Alert Range** box, type `3-`
    d. In the **Send an Email Message To** box, type a local email address.
    e. Click **OK**.
6. Associate this alert with a group of devices:
    a. Click **Add Groups**.
    b. Select the **Important Devices** group, and then click **Continue**.
7. Click **OK**.

Generating Reports

Reports make it easy to view detailed, historical monitoring data about devices and monitors in both graphical and tabular formats.

Complete the following procedure to generate a quick disk utilization report of the ipMonitor host:

1. Click the **Reports** tab.
2. From the **Device Reports** list, click **Disk Utilization**.
3. From the **Select Device** list, select **ipMonitor Host**, and then click **Continue**.
4. Click **Cancel / Back** to return to the Reports tab.