

## NPM Upgrade Guide

**Last Updated: 6-7-2016 | SolarWinds Upgrade Guide 1.0**

**Supports:** NPM 12.0 and earlier

This guide walks you through upgrading only your NPM product. We include checklists to prepare and complete your upgrades, gotchas, and troubleshooting steps.




**i** If you are upgrading from NPM 10.3 or earlier, we recommend starting with a fresh install. Read [this article](#) for details.

**i** Upgrading multiple products? See our [SolarWinds multiple products upgrade guide!](#)

## Preflight upgrade checklist

This preflight checklist details a number of important steps to help plan and prep for your upgrade.

<input type="checkbox"/>	Review release notes	Review product release notes and available documentation in our <a href="#">Success Center</a> .
<input type="checkbox"/>	Review system requirements	<p>Make sure your environment has all of the required hardware and software needs for your installations. You can verify the requirements for products and <a href="#">multi-module environments</a> guidelines.</p> <p>Product requirements include <a href="#">NPM 12.0</a>   <a href="#">SAM 6.2.4</a>   <a href="#">NCM 7.5</a>   <a href="#">NTA 4.2</a>   <a href="#">SRM 6.3</a>. You may need to also check the administrator guide for your product to locate the requirements.</p>
<input type="checkbox"/>	Review licenses	Review your current product licenses and determine if you need to make any changes. You can download any updated license keys for your upgrade through your Customer Portal. Verify any license upgrades and needs with your SolarWinds account manager or <a href="#">contact SolarWinds</a> .

<input type="checkbox"/>	Do you need to migrate?	<p>You may need to migrate products and databases to new dedicated servers or to shared servers. <a href="#">Check if you need to migrate</a> by reviewing new requirements, your products, and your current environment.</p> <p> Migrating adds time to your upgrade, but you have the best opportunity to update to new servers during an upgrade.</p>
<input type="checkbox"/>	Gather credentials	<p>Make sure you have all account credentials, SQL database credentials, your SolarWinds account, and local admin server credentials.</p>
<input type="checkbox"/>	Build your upgrade path	<p>Use the <a href="#">Upgrade Product Advisor</a> to build your upgrade path. If you have NPM, upgrade NPM first. If you have SAM but not NPM, upgrade SAM first. The Product Upgrade Advisor always provides the upgrade process in steps.</p> <p> We recommend downloading a PDF of your upgrade path from the Product Upgrade Advisor tool. You can use it as a checklist as you complete upgrades.</p>
<input type="checkbox"/>	Run all Windows updates	<p>Before upgrading, check for and <b>run all Microsoft Windows Updates</b> on your main poller, all additional pollers, and all additional web servers. As you upgrade, if a Windows update runs, your system may reboot as needed by Windows.</p>
<input type="checkbox"/>	Schedule the upgrade	<p>Set up the maintenance window, preferably off-peak hours. Depending on the number of products, size of database(s), and size of environment, you may need hours to complete your upgrade.</p> <p> Upgrades will require polling engines and SolarWinds services to be offline for a length of time, causing you to lose a portion of polling data.</p>
<input type="checkbox"/>	Notify your company	<p>Send a message to your company of the upgrade schedule and maintenance window. If you need additional help, contact and allocate specific staff to be available.</p>

## How long does an upgrade take?

The time it takes to complete an upgrade depends on:

- Hardware
- Database server performance and database size
- Number of additional pollers
- Number of additional web servers
- Environment performance
- Number of modules being upgraded

- Number of devices being polled

Since every configuration is different, we cannot predict exactly how long your upgrade will take. Coming soon, we are compiling feedback with the [Thwack community](#) about upgrade times to help give you a ballpark estimate. Through this guide, we include steps and tips to help reduce time for your upgrade.

---


## Gotchas you should review



- NPM 12 **no longer includes the Orion Global Search**. This feature was a technical preview available in NPM 11.5.X. For details, see [this article](#).
- If **NPM and DPA are installed on the same server**, follow [this article](#) before upgrading NPM.
- NPM 12.0 **no longer supports Windows Server 2003, 2008, 2008 SP1, or 2008 R2 without SP1**.
- NPM 12.0 has **new port requirements**: 5671 (Rabbit MQ messaging), 17791 (agent communication to 2008 R2 SP1), 17778 (SW Information Service, agent communication to 2012).
- If you have edited resource properties, the **All Groups resource may be empty after upgrading** to NPM 12.
- When upgrading to NPM 12, using the **group by feature for custom properties may return no results**, and the data loading may hang or not complete. All regular functionality is unaffected by the issue.
- When upgrading to NPM 12.0 with SAM, we recommend **upgrading SAM to 6.2 or later**. For alerting, SNMPv3 trigger conditions will not properly work with SAM 6.1.1 or earlier on NPM 12.0.
- NPM 11.5 and later **no longer support SQL 2005**.
- SolarWinds installations on **Windows server 2008 R2 and Windows 7 require a Microsoft hotfix** to fully use the FIPS-compatibility features of SolarWinds products. For more information about this required Microsoft hotfix, see <http://support.microsoft.com/kb/981119>.
- For NPM 11.5, if you have Virtualization Manager (VMan) installed and integrated, you may need to **upgrade and reintegrate VMan after upgrading**. To verify upgrade paths with VMan, you may want to contact Support. For NPM 11.5, you should have VMan 6.0 installed. For NPM 11.5.2 and SAM 6.2.1, you should have VMan to 6.3 installed.
- If you have **written your own code**, such as changing SolarWinds .css files or adding .js files, or been directed to make changes by Support, the code may be overwritten during the upgrade. You can learn more about upgrading with [custom code here](#).
- Always check that you have **enough hard drive space** for zipped and unzipped installers. One unzipped installer could consume a couple GBs of space.
- During your upgrade, make sure to **upgrade one version at a time** on each poller. The versions must match between the main and additional poller or you will receive a Database Configuration Failure Error.
- If you are **upgrading from a very early or End of Life SolarWinds product** version, you may want to install a new product instead of performing an upgrade, saving or migrating your data. SolarWinds Support can provide the best advice for these upgrade scenarios.

---

## Prepare your environment to upgrade


When you are ready to upgrade, complete these steps. They include the common actions you need to complete before upgrading products.




 If you have a test or staging environment, we highly recommend testing the upgrade first. You cannot roll back an installation once completed.


<input type="checkbox"/>	<p>1. Back up the DB Snapshot your VMs</p>	<p>Back up your SolarWinds SQL database. If you need help, please check your vendor's site for documentation and instructions.</p> <p>If you have your database on a VM, create a snapshot or copy of your VM.</p> <div style="border: 1px solid black; background-color: #fff9c4; padding: 5px; margin-top: 10px;">  You cannot roll back an upgrade. Always create a database backup.         </div>
<input type="checkbox"/>	<p>2. Back up custom code (Optional)</p>	<p>(Optional) Back up your <a href="#">custom code</a>.</p>
<input type="checkbox"/>	<p>3. Back up Report Writer reports (Optional)</p>	<p><b>Upgrading to NPM 12.0 or SAM 6.2.4?</b> You can skip this step.</p> <p>If you use Report Writer reports (NPM 10.5 and earlier) or still have legacy reports, back up the reports folder to save your custom reports:</p> <ul style="list-style-type: none"> <li>• 64 bit OS: C:\Program Files x86\Solarwinds\Orion\Reports</li> <li>• 32 bit OS: C:\Program Files\Solarwinds\Orion</li> </ul>
<input type="checkbox"/>	<p>4. Exclude files on anti-virus software</p>	<p>In order to ensure the best performance on your server host and provide full file access, you should exclude specific file paths and directories from anti-virus software scans. See <a href="#">this article</a> for details.</p> <div style="border: 1px solid #add8e6; background-color: #e6f2ff; padding: 10px; margin-top: 10px;">  You could also place your systems behind a firewall to completely disable your anti-virus software during an upgrade.         </div>
<input type="checkbox"/>	<p>5. Stop services</p>	<p>Stop services in the Orion Service Manager on the main polling engine, all additional polling engines, and all web servers.</p>

## Upgrade NPM

This checklist details the steps for upgrading only NPM in your environment.

 **Upgrade Tip!** If you upgrade multiple versions of the same product, skip the website optimization step in the Configuration Wizard. Only run this step with the last installation to save time.

<input type="checkbox"/>	1. Upgrade Buddy Tool (Optional)	<p>(Optional) The <b>Orion Upgrade Buddy</b> provides continuous monitoring of node status as you upgrade NPM. During long or extended upgrades, the tool monitors systems and sends an email if a system goes down. The application zip includes a PDF user guide with installation and configuration instructions.</p>
<input type="checkbox"/>	2. Installation step using the upgrade path (Repeatable)	<p>Following the upgrade path, download the NPM product installation file from your <a href="#">Customer Portal</a> in the My Downloads area. Save this file to your systems.</p> <p><b>If you are directly installing NPM 12</b>, see step 3.</p> <div style="border: 1px solid #ccc; background-color: #e6f2ff; padding: 5px; margin: 10px 0;"> <p> Depending on the version, you may have a smart bundle of all install files per system, separate files to download, or the standalone installer.</p> </div> <ol style="list-style-type: none"> <li>1. Main Poller: Unzip, upgrade, and run the Configuration Wizard.</li> <li>2. Each Additional Poller: Unzip, upgrade, and run the Configuration Wizard.</li> </ol> <div style="border: 1px solid #ccc; background-color: #fff9c4; padding: 5px; margin: 10px 0;"> <p> <b>Upgrade Tip!</b> Run your upgrade installations and Configuration Wizards at the same time on your additional pollers to save time.</p> </div> <ol style="list-style-type: none"> <li>3. Each Additional Web Server: Unzip, upgrade, and run the Configuration Wizard.</li> </ol> <div style="border: 1px solid #ccc; background-color: #e6f2ff; padding: 5px; margin: 10px 0;"> <p> During an additional web server upgrade, you can point users to the website of the main polling engine, or to any web server that is already upgraded.</p> </div> <p>After installing this product and version on your entire environment, check the product and version as done on your downloaded Upgrade Path PDF or list. If you have additional versions to install, repeat this step.</p>
<input type="checkbox"/>	3. Run the improved NPM 12 installer	<p>When you <b>upgrade to NPM 12</b>, you will use our <b>improved standalone installer</b>. To learn more about upgrading with the installer, see <a href="#">this article</a>.</p> <p>This installer runs a series of tests against the current environment and products:</p> <ol style="list-style-type: none"> <li>1. If you need to update your environment, a list of required changes displays with KB articles for more information. Complete all updates.</li> <li>2. If you need to install additional product versions, an upgrade path displays with links to release notes and bits to download. Complete any additional upgrades using the repeatable steps.</li> <li>3. Re-run this installer for updates and the final product version installation.</li> <li>4. If all tests pass and all versions are correct, NPM 12.0 installs.</li> </ol>

<input type="checkbox"/>	4. Upgrade Orion Agents	<p>If you have the Global Agent Setting to Allow automatic updates (enabled by default), the Orion Agents automatically upgrade in the background. Agents are tied to their release version. The upgrades take a bit of time to complete, but will not require any actions. You can skip this step if the option is enabled.</p> <p>If automatic upgrades are disabled, upgrade the Orion Agents:</p> <ol style="list-style-type: none"> <li>1. Open the Manage Agents page. Orion Agents requiring upgrades display Update Required.</li> <li>2. Select all agents needing updates and click More Actions &gt; Update. The agents upgrade in the background.</li> </ol> <div style="border: 1px solid #ccc; background-color: #e6f2ff; padding: 5px; margin-top: 10px;"> <p> You can enable the option through Settings &gt; All Settings &gt; Agent Settings and click Define Global Agent Settings.</p> </div>
<input type="checkbox"/>	5. Start the engines	Start services in the Orion Service Manager on the main polling engine, all additional polling engines, and all web servers.

---

## After the upgrade check your system

All product versions should be installed properly. You should open the products and verify the versions displayed in the footer of the web console. Try current and new features with your system to check performance and expected functionality. If you run into issues, check the troubleshooting tips.

---

## Troubleshooting

If you receive errors, try the following:

- If you experience issues and are not on the latest product versions, we recommend completing a full upgrade. Use the [Product Upgrade Advisor](#) to create the upgrade path. Many of these updates solve issues you may experience part way through your upgrade.
- Check our [Success Center](#) for troubleshooting. We recommend searching the name of the product, the version number, any error codes or messages displayed, and the general issue you found.
- Check your [Customer Portal](#) for any new hotfixes.
- If you receive (500) internal server error after an upgrade, use the Orion permission checker to make sure your Group Policy is not locked. See [this article](#) for full details.
- If your views do not load when first opening the console, run the Configuration Wizard again.

If an issue occurs you need additional help with, [contact Support](#). We recommend gathering [diagnostics](#), a screenshot of the issue, and any error codes you receive. Attach and add this information to your ticket. You may also want to gather additional diagnostics on your additional pollers and web servers.

---

## Want to learn more?

- Still need to download the upgrade? Visit the [Customer Portal](#).
- Check the [NPM Getting Started Guide](#) or additional our [NPM documentation](#).
- Review the latest [NPM release notes](#).

---

## Legal notices

© 2016 SolarWinds Worldwide, LLC. All rights reserved.

This document may not be reproduced by any means nor modified, decompiled, disassembled, published or distributed, in whole or in part, or translated to any electronic medium or other means without the prior written consent of SolarWinds. All right, title, and interest in and to the software and documentation are and shall remain the exclusive property of SolarWinds and its respective licensors.

SOLARWINDS DISCLAIMS ALL WARRANTIES, CONDITIONS OR OTHER TERMS, EXPRESS OR IMPLIED, STATUTORY OR OTHERWISE, ON SOFTWARE AND DOCUMENTATION FURNISHED HEREUNDER INCLUDING WITHOUT LIMITATION THE WARRANTIES OF DESIGN, MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, AND NONINFRINGEMENT. IN NO EVENT SHALL SOLARWINDS, ITS SUPPLIERS, NOR ITS LICENSORS BE LIABLE FOR ANY DAMAGES, WHETHER ARISING IN TORT, CONTRACT OR ANY OTHER LEGAL THEORY EVEN IF SOLARWINDS HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

The SolarWinds and other SolarWinds marks, identified on the SolarWinds website, as updated from SolarWinds from time to time and incorporated herein, are registered with the U.S. Patent and Trademark Office and may be registered or pending registration in other countries. All other SolarWinds trademarks may be common law marks or registered or pending registration in the United States or in other countries. All other trademarks or registered trademarks contained and/or mentioned herein are used for identification purposes only and may be trademarks or registered trademarks of their respective companies.