Upgrading an ObserveIT One-Click Installation

This document was written for ObserveIT Enterprise version 7.6. This document uses screenshots and procedures written for Windows Server 2012 R2 and SQL Server 2014.

WHEN TO USE THIS DOCUMENT

This document contains detailed procedures and instructions on how to upgrade ObserveIT by using the interactive "One-Click" installation.

If you have previously installed or upgraded ObserveIT without using the One-Click interactive installer, you will need to perform a “custom” installation or upgrade. For instructions, please refer to Performing a Custom Installation of ObserveIT.

A custom installation is used when each component of the ObserveIT product is installed separately using a dedicated service account. Note that the One-Click installation or upgrade will not work when:

- The Application Server and Web Console are not on the same server
- The Application Server and Web Console do not share the same application pool
- The Web Categorization module is installed on a separate server
- SQL Secure encryption is enabled
- The SQL Service account does not have DB_Creator rights

It is not within the scope of this document to upgrade or deploy ObserveIT Agents.

RELEASE DOCUMENTATION

The most up-to-date ObserveIT release documentation is available at: http://documentation.observeit.com/7.6/#about_the_oit_documentation.htm.
UPGRADING AN OBSERVEIT INSTALLATION

ObserveIT can be easily upgraded when new versions are available. The older version does not need to be uninstalled in order to upgrade. The installation process first upgrades the ObserveIT Database, then the ObserveIT Web Console and Application Server components, and finally, the ObserveIT Agent that was installed on the same machine as the one that is used to run the installation. If required, you can perform a custom upgrade of the server-side components (Web Console and Application Server) separately.

Agents can be upgraded on Windows, Solaris, AIX, HP-UX, RHEL/CentOS, Oracle Linux, SLES (SuSE Linux enterprise Server), Ubuntu, Debian, Amazon Linux, or Mac endpoints.

ObserveIT can be easily upgraded by using the “One-Click” installation, which enables fast deployment of the product. The upgrade procedure is basically the same as for a first-time installation except that you select the "Upgrade" option. Note that you do not need to uninstall the older version in order to upgrade.

BACKWARD COMPATIBILITY - MINIMUM SUPPORTED VERSIONS AND UPGRADE REQUIREMENTS

Most features, functions, and capabilities of ObserveIT version 7.5.x are compatible with earlier versions of the ObserveIT Agent. However, you should avoid using Agents that have an earlier version than the server-side components. To maintain full feature compatibility, it is highly recommended that you upgrade your Agents to the most current version of the product.

The following are the minimum server-side and agent component versions that are supported in this release:

<table>
<thead>
<tr>
<th>Component</th>
<th>Minimum Supported Version</th>
<th>Upgrade Requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td>Server-side</td>
<td>ObserveIT 6.6 is the minimum supported version that can be upgraded to version 7.5.x.</td>
<td>If you have an earlier version that is not supported, first upgrade to the minimum supported version, and then upgrade to the latest version.</td>
</tr>
<tr>
<td>Agents (Windows or Unix)</td>
<td>ObserveIT 6.6 is the minimum supported version for Agents to be upgraded to 7.5.x (backward compatibility of Agents).</td>
<td>If you have an earlier version that is not supported, uninstall it, and then install the latest version.</td>
</tr>
</tbody>
</table>
CONSIDERATIONS PRIOR TO UPGRADE

Prior to performing an upgrade of an existing ObserveIT installation, you should be aware of the following:

▪ If you are upgrading to ObserveIT version 7.0.0 or higher, and if the Website Categorization module is not already installed, you will receive an option during upgrade to install it. The ObserveIT Website Categorization module automatically detects categories of Websites that end users are browsing, enabling alerts to be generated on browsing categories such as Gaming, Adults, Infected or Malicious Websites, Phishing Websites, and more. For further details about this feature, please refer to Website Categorization in the Product Documentation.

  Note that the Website Categorization module can be installed on the same machine as the Web Console or on a separate dedicated machine (recommended).

▪ If the Full Text Search (FTS) utility of Microsoft SQL Server is not installed before you begin the upgrade, you will receive a prompt during the upgrade procedure. The FTS utility enhances ObserveIT’s powerful Search feature by providing an accelerated search experience, and it is highly recommended that you install it. By clicking Yes in the prompt window, you can install the FTS utility after completing the upgrade.

  Note: If you install the FTS utility after completing the upgrade, you must run the following command line in Microsoft SQL Server Management Studio: FTS EXEC dbo.uspDBA_FTSIndexCreate;

▪ The upgrade process has no impact on the operating system of the endpoints on which the ObserveIT components are running. Whether the upgrade process succeeds or fails, no changes will be made to the actual operating system.

▪ Upgrading the components does not require a reboot of the ObserveIT Application/Web Console Servers, or the SQL server, or any of the computers running the Agent software.

▪ During the upgrade process, no sessions are recorded. The installed Agents will not be able to communicate with the ObserveIT Application Server during the time that is required for the actual upgrade. In addition, each Agent that needs to be upgraded will not be able to record data.

  Note: When performing an upgrade for large scale enterprises, depending on the size of the database, a number of prerequisites are required for the successful migration of data. It is recommended that you contact ObserveIT support to help you do this.
PREPARING WORKING BACKUPS

The upgrade process should complete without any issues. However, because upgrading the ObserveIT Database involves changes to the data, it is very important that you have a valid and working backup before you begin the upgrade process.

Note: Although Active Directory will NOT be changed in any way during the ObserveIT upgrade process, it is a critical component of the customer’s infrastructure, and it is vital that a working backup is available.

A valid and working backup is required for the following components that are being upgraded:

- System State backup of the ObserveIT Web Console server, ObserveIT Application Server, and SQL Server that hosts the ObserveIT databases, using a Microsoft-supported Windows Server backup method/software.
- Full backup of the SQL Server ObserveIT databases using a Microsoft-supported SQL Server backup method/software.
- It is recommended to make sure that you have a working and verified System State backup of all the currently recorded endpoints for the process of installing the Agent software on them.

Important: If any of the above components are running as Virtual Machines, consult with your virtualization software vendor for alternative backup methods, such as creating VM snapshots. Do not assume that by simply running a VM snapshot you will be fully covered.

WORST CASE SCENARIOS AND ROLLBACK

In case something goes wrong during the upgrade process, you can revert to your backup. However, in a worst-case scenario or in the case of a catastrophic event, if your backup does not work, you must be prepared to install the ObserveIT Application Server/Web Console Server and/or SQL Server operating system from scratch. Once reinstalled and configured to be members of the domain (if required), you will need to install the ObserveIT application and deploy the Agents.

RISKS AND MITIGATION

Although the upgrade process itself makes no changes to the operating system, a failure of the process may negatively impact a customer’s business requirements or deployment scenarios. Before you start the upgrade process, it is highly recommended that you consider any risks that could impact a customer’s requirements, and the steps that should be taken to mitigate these risks, where possible.

The following potential risks could occur after upgrading ObserveIT:

- Failure to record user sessions on some monitored endpoints for a short time/indefinite time.
- Failure to record user sessions on all monitored endpoints for a short time/indefinite time.
- Failure to identify shared privileged accounts for a short time/indefinite time.
- Failure to receive alerts and reports for a short time/indefinite time.
- Failure to interact with 3rd-party tools such as ticketing systems and log monitoring systems for a short time/indefinite time.
- Failure to retrieve and replay recorded data for a short time/indefinite time.
- Failure to record remote vendor access to monitored endpoints by using a gateway scenario for a short time/indefinite time.
- Loss of the entire recorded session database.
- Temporary/prolonged failure to meet compliance and/or regulatory requirements during the period of recording failures.

To mitigate some of the above risks, the following steps should be taken before upgrading ObserveIT:

1. Make sure that no user(s) is connected to any monitored endpoint during the upgrade.
2. Use an SLA-calculated window of opportunity to perform the upgrade, when no remote vendors may be impacted.
3. Notify privileged users of the upgrade process.
4. Make sure that you have working backups.
5. Disconnect remote vendor access before upgrading to prevent future connections.
6. On Terminal Endpoint/Citrix endpoints, make sure that all logged on users are disconnected and logged off.
PREREQUISITES FOR UPGRADE

In this guide, it is assumed that the ObserveIT Application Server and the Database Server reside on two separate servers. If needed, they can reside on the same machine, but in this case, you must consider performance issues.

*Note: Microsoft SQL Server 2012, 2014, and 2016 versions are supported. Microsoft SQL Server 2008 is no longer supported for the ObserveIT Application Server version 7.5 and up.*

Before upgrading, make sure that the following prerequisites are met and that you have the relevant information:

- The Application Server and Database Server computers are members of the same Active Directory domain.
- The location of the ObserveIT installation folder.
- Local or domain credentials with administrative permissions for the ObserveIT Application Server and SQL Server.
- Permissions to access the SQL Server database engine (SYSADMIN permissions).
- Full network connectivity with no firewall restrictions between the components of the deployment, or permissions to create the appropriate firewall rules to allow the requested traffic type.
- Make sure that there is a change/maintenance window reserved for the changes that are required for the ObserveIT deployment process, and that the upgrade will not be halted or postponed due to a system freeze or other restrictions.
  *Note: Planned downtime is not required for the ObserveIT recorded servers' Agent removal and installation process.*

- In cases when alerts are generated during the upgrade process, to enable risky users and their alerts to be updated in the User Risk Dashboard, it is recommended that you shut down the server-side processes before starting the upgrade.
DOWNLOADING THE LATEST VERSION

1. You can download the application files containing the .MSI installers that are required for the installation from: http://www.observeit.com/support/product_releases_download?download=1.

2. Copy the binaries to the ObserveIT Application server to $C:\Temp$.

3. Extract the content of the ZIP file to $C:\Temp$.

A new folder will be created. For example: $C:\Temp\ObserveIT_Setup_v7.5.0.28.zip$. 

![Image of folder structure showing extracted files]
OBSERVEIT ONE-CLICK UPGRADE

If the Application Server and Web Console reside on the same system and you are using ObserveIT version 6.6 or higher, you can perform the ObserveIT "One-Click" upgrade.

The following steps describe how to run the "One-Click" upgrade:

1. Run the Setup.exe file as an administrator. This file can be found in the root folder which was created when you extracted the setup files from the archive (see above screenshot).

   After running the installer, the ObserveIT main installation screen opens.
2. In the **SQL Server** section, enter the hostname of the SQL Server as well as the credentials to be used to access the SQL server.

3. In the **License** section, select the **Upgrade** option.

4. Agree to the **Terms of Service**, and then click **Install**.

5. After the upgrade process begins, you will be prompted to enter the **Upgrade Activation Key**.

![Upgrade Activation Window](image)

6. To generate the key, copy the text that appears in the **Upgrade Activation** window and send it to licenses@observeit.com.

7. When you receive the key by email, paste it in the text box area, and click the **Activate** button.

   *Note: If you cannot obtain the key at this time, click **Cancel** to abort the upgrade process. No changes will be made to the application or in the database.*

The installation process first upgrades the ObserveIT Database, followed by the ObserveIT Web Console and Application Server components, and finally, the ObserveIT Agent that was installed on the same machine as the one that is used to run the installation.
8. After the installation has completed successfully, click the Close button to close the Installer. The ObserveIT Web Console opens to display the login page.
IMPORTANT NOTES ABOUT UPGRADE

- If you are upgrading to ObserveIT version 7.0.0 or higher, and if the **Website Categorization** module is not already installed, you will receive an option during upgrade to install it. After clicking **Install** during the One-Click Upgrade, the following window automatically opens, displaying information and requirements about the Website Categorization Installation.

Click **Next** to continue.
Upon successful installation of the module, ObserveIT - Website Categorization is included in the summary of the installed components at the end of the install procedure.

- From ObserveIT version 6.6.1, Secure (HTTPS) is selected by default in the Web Console section. This means that the Web Console is automatically configured to work with the secure HTTPS protocol using a self-signed certificate during installation. If you want your upgraded installation to work in HTTP mode, you will need to uninstall the older ObserveIT version and install the new version in HTTP mode. You can do this by deselecting the Secure (HTTPS) check box.

- From ObserveIT version 6.0, if the Full Text Search (FTS) utility of Microsoft SQL Server is not already installed, you will receive a prompt during upgrade. If you want to install the FTS module after completing the upgrade, click Yes to execute a script that will initialize the database to use the module. Click No to abort the upgrade.

- To upgrade some or all installed Agents, you will need to manually perform an Agent installation on all the monitored endpoints and workstations.

- Upgrading the components does not require a reboot of the servers, but will result in a temporary loss of recording during the upgrade process.

- From ObserveIT version 7.5 and up, the following prerequisites are installed automatically: Node.js, IIS ReWrite Module, IIS Node Module. They are listed with the other installed components in the final dialog of the install procedure.
VERIFYING THE INSTALLED VERSION

You can verify the latest installed version of ObserveIT in the Web Console by selecting About from the Help menu in the upper right corner of the Web Console.

In addition, the Deployed Agent Versions portal (located at the top of the Admin Dashboard of the ObserveIT Web Console) displays the current Agent version number and the number of Agents running the latest software and earlier software versions. This enables you to easily identify whether the upgrade was successful and what is the main software version that you are working with (that most of the Agents are running).
UPGRADING AGENTS
Following upgrade of the ObserveIT Application Server, Web Console, and Database Server components, you can upgrade the ObserveIT Agents, as required. Please refer to the ObserveIT Product documentation for instructions on:

- [Upgrading Windows Agents]
- [Upgrading Unix/Linux Agents]
- [Upgrading Mac Agents]

MANUALLY UPGRADING OBSERVEIT COMPONENTS
If the Application Server and Web Console reside on separate systems, you will need to perform a manual upgrade for these components.

For instructions on how to do this, please refer to the following topics in the ObserveIT Product Documentation:

- [Manually Upgrading the ObserveIT Database]
- [Manually Upgrading the ObserveIT Web Console and Application Server]

If required, you can also contact ObserveIT support for help.
VERIFYING SUCCESSFUL USER ACTIVITY RECORDING

After successfully upgrading the server-side components of ObserveIT and at least one Agent, you can begin using ObserveIT to record and replay user sessions on the monitored endpoints. For detailed information about viewing and replaying recorded sessions, please refer to the Product Documentation User Guide.

The following steps provide an overview of how to verify user activity recording and replay:

1. Log on to one of the monitored endpoints.
2. Perform some actions such as opening one or two applications, typing some text in a Notepad window, running some commands in a Command Prompt window, and opening one or two Control Panel applets.
3. Log off from the monitored endpoint.
4. On the ObserveIT Application Server, open the ObserveIT Web Management Console (which uses SSL encryption) by typing the following URL in a browser window (IE, Chrome, or Firefox):
   
   https://FQDN-of-ObserveIT-server/observeit
   
   For example: https://oitapp.oit-demo.local/observeit

5. Log on using the admin user and the password you configured.
6. Use the Endpoint or User diaries to find the recorded session.
7. Expand the session (by clicking the icon on its left) and review the textual transcript of the actions you performed in Step 2.
8. Replay the recorded session by clicking the Video icon next to the session.
9. Close the browser window.
TROUBLESHOOTING THE INSTALLATION

If you experience issues when installing the server-side components or the Agents, note that the ObserveIT installation program generates a detailed textual transcript of all the installed components. In addition, each of the setup programs generate log files with detailed information about the progress and results of each installation process. If you experience a problem when installing the product, ObserveIT support may ask you to send the contents of these files to assist in troubleshooting. Some of the files are stored in the setup directory; others are in the subdirectories under the %systemroot%\Program Files\ObserveIT\ folder.

When contacting support, it is recommended that you copy the textual trace files and provide as much information about your system as possible.

Send the information to the ObserveIT support portal at http://www.observeit.com/Support.