ICEVIEWER

Black Ice Software

MSI Installation Guide for
Network Administrators

07302025-R3403

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Introduction

The MSI installer for IceViewer is designed for large scale deployment of IceViewer in Active Directory environments. The MSI installer can install IceViewer in silent mode without user interaction and provides custom installation for users.

The IceViewer MSI installer can either be installed using command line parameters or using Group Policy settings.

With the Group Policy Settings the IceViewer's recommended deployment method is assigning to computer and not publishing or assigning to users.

For Citrix VDI deployment, a special installer is required. You can request a special installer from sales@blackice.com. Please note: VDI deployment is not supported with individual license keys.

Caution: Before proceeding to install IceViewer MSI all other IceViewer version must be uninstalled from the computers where the MSI will be installed.

Requirement

.NET framework 4.0 or higher

Command Line Installation

Installing the IceViewer on VDI

The IceViewer can be installed on Azure VDI, AWS VDI, VMware VDI, or any VDI system from the master image.
The base requirement for **licensing** of the IceViewer is the **IceViewer Special Installer** with the licensing mechanism designed for VDI.
The MSI or Interactive IceViewer Special Installer can be requested from Black Ice Software Sales sales@blackice.com.

The Interactive or MSI IceViewer Special Installer for VDI is not available for a single license and is not available from the online store only directly from Black Ice Software sales.

Installing the IceViewer on Citrix VDI

Installing the IceViewer on Citrix VDI for Citrix Virtual Apps and Desktops.

The diagram below illustrates the Citrix App Layering. The **Citrix App Layering** actually puts **applications** on a plane separate from the OS and splits the **application** into three main **layers**. Each **layer is** stored as a virtual disk. The **base layer** contains the **OS itself**.

The IceViewer should be **installed** and activated/registered on the **OS layer**, otherwise the IceViewer will deactivate as soon as the desktop is delivered to users.
An **alternative** solution is to install the IceViewer on the Master Image and **activate/register** on the **Master Image**. Installing the IceViewer on the Master image could be cumbersome and time consuming. The IceViewer should **not** be **installed** and **activated**/**registered** on the **Application Layer**.

For the available installation parameters and examples, please see:
Available Parameters of the MSI install
Examples for Command Line installation

For Citrix VDI deployment, a special installer is required. You can request a special installer from sales@blackice.com. **Please note**: VDI deployment is not supported with individual license keys.

Citrix App Layering Layer Priority   Citrix App Layering Process Flow
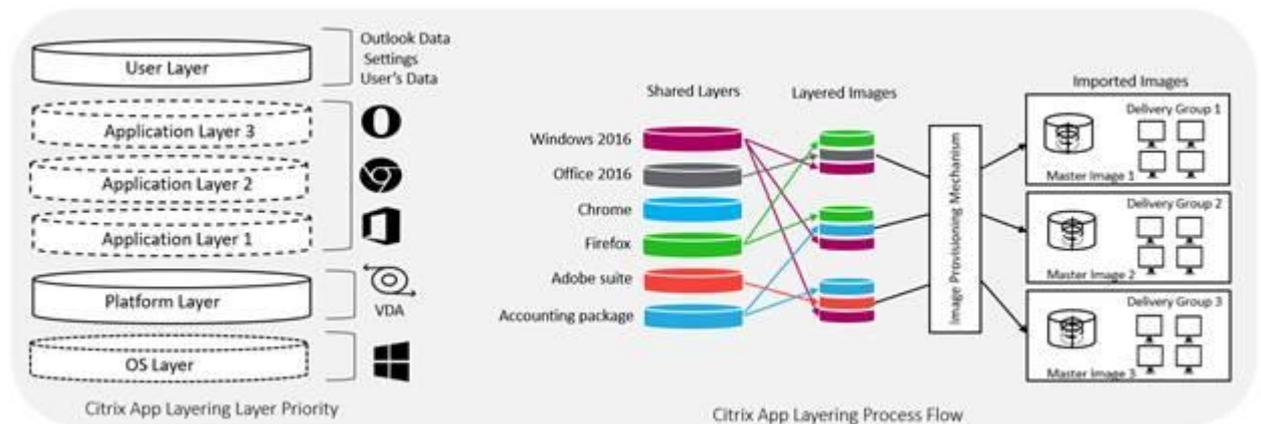
Registering through a Proxy server

In a secured environment where computers have no active Internet connection or Port 443 is being blocked by a firewall, the product can be registered through a **proxy server** with the **PTYPE parameter**.

Available options:

1. **Automatic Proxy setting**
   The Automatic Proxy uses the system proxy settings. When the Automatic Proxy setting is selected, the product uses the proxy IP address and port number configured in the *Control Panel > Internet Options > Connections > LAN Settings > Proxy Server area or in the Internet Explorer > Internet Options > Connections > LAN Settings > Proxy Server* area.

   Parameter: PTYPE=1
   Optional parameters: PIP, PPORT, PUSER, PPW

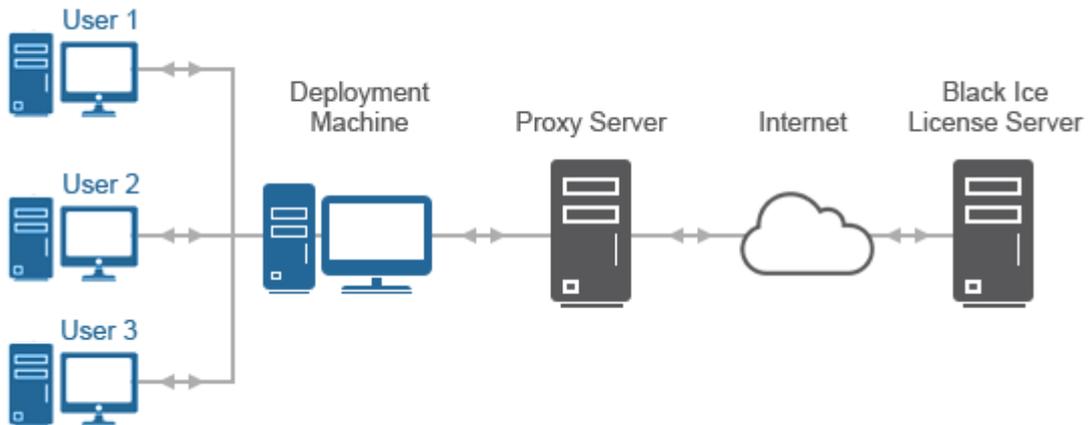   **NOTE:** The registration process cannot read the Proxy Username and Proxy User password from the Windows system. If the Proxy server is using user authentication, the Username and Password must be specified by using the PUSER and PPW parameters.

To use authentication for the Proxy Server connection, please use the PTYPE=2 (HTTP proxy) or PTYPE=3 (SOCKS proxy) options.

2. **HTTP Proxy option**
   Use the HTTP proxy option to configure the HTTP Proxy IP Address and port number manually. The HTTP proxy server receives HTTP requests from the Black Ice Printer Driver during registration and license validation and then forwards the requests to licenseserver.blackice.com. The user needs to specify the Proxy IP address and port. The default port is 8080.

   Parameter: PTYPE=2
   Required parameters: PIP, PPORT
   Optional parameters: PUSER, PPW

NOTE: If the Proxy server is using user authentication, the Username and Password must be specified by using the PUSER and PPW parameters.

3. <u>**SOCKS Proxy option**</u>
   Use the SOCKS proxy option to configure the Proxy IP address and port number manually. SOCKS proxy servers establish a TCP connection to licenseserver.blackice.com and forward TCP messages from the Black Ice Printer Driver during registration and license validation. The user needs to specify the Proxy IP address and port. The default port is 1080.

   Parameter: PTYPE=3
   Required parameters: PIP, PPORT
   Optional parameters: PUSER, PPW

   NOTE: Please make sure what type of proxy is using the Proxy server. For example: If the proxy server using HTTP proxy, then use the PTYPE=2 parameter.

   NOTE: If the Proxy server is using user authentication, the Username and Password must be specified by using the PUSER and PPW parameters.

For more information about how to register the Printer Driver through a Proxy server, please see the <u>Available Parameters of the MSI install</u> section.

Available Parameters of the MSI install

The IceViewer can be installed using the following command:

NOTE: If the parameter value has **space** characters, then it is required to use the quotation marks (") on the beginning and end of the value.

> **msiexec /i "IceViewer64BitSetup.msi" /q TARGETDIR="C:\Black Ice\IceViewer" REGNUM=XXXXX-XXXXXXXX-XXXXXXXXXX**

Parameters	Meaning
/i	Installs the product. Command line only
/x	Uninstalls the product. Command line only
(optional) **/q**	Silent installation that displays no user interface. Command line only.
(optional) **/l* log.txt** *(lowercase "L")*	Logs the MSI system calls to install the product to the "C:\temp\log.txt" file. Command line only For more information about the /l *(lowercase "L")* parameter, please refer to the <u>Quick Reference Guide for Windows MSI installers</u> section.

(optional) **IVTYPE=**	The **IVTYPE** property modifies the IceViewer edition to be installed. If using a serial number during installation, the installed IceViewer edition will depend on the provided serial number. If neither serial number, nor the IVTYPE property is provided, the IceViewer evaluation version will be installed. **0** or **missing**: IceViewer Pro **1**: IceViewer TIFF **2**: IceViewer PDF
(optional) **ALLUSERS=1**	The **ALLUSERS** property configures the installation context of the Start Menu items and desktop shortcuts. The Windows Installer performs a per-user installation or per-machine installation depending on the access privileges of the user. If **ALLUSERS=1** performs a per-machine installation. If **ALLUSERS** is not set, the installer does a per-user installation.
(optional) **CREGNUM=**	Serial number received during purchase. Use CREGNUM parameter for automatically registering the product for every user on the computer.
(optional) **REGNUM=**	Serial number received during purchase. Use REGNUM parameter for automatically registering the product for every user on the computer. **Note: In previous versions, REGNUM used to register the software for the user who installs the software. Since IceViewer (formerly TIFF Viewer) version 10.11, the CREGNUM and REGNUM parameters are registering the product for every user on the computer.**
(optional) **NOSERIAL=** 0: Disabled (default). 1: Enabled.	The IceViewer can be installed without registration with NOSERIAL=1 parameter. The IceViewer cannot be used until IceViewer is registered/activated for evaluation or with a license key by the Administrator after the installation.
(optional) **NLT=**	Citrix VDI Update. Contact [technical support](#) for details.

(optional) **TARGETDIR=**	Set target installation directory. If this value is not specified, the product will be installed to "\Program Files\Black Ice Software LLC\IceViewer"
(optional) **LANGUAGE=**	Set IceViewer language. English (Default) French German Spanish
(optional) **DESKTOPICON=**	Add the Black Ice IceViewer icon on user's desktop. **0**: Do not add the Black Ice IceViewer icon to the user's desktop. (Default) **1**: Add the Black Ice IceViewer icon on user's desktop.
(optional) **OFFICEPDFPREVIEW=**	Enable or disable the PDF Preview in Microsoft Outlook and Windows File Explorer. **0:** Disable the Office PDF Preview. (Default) **1:** Enable the Office PDF Preview. **Note:** The PDF preview is supported in the IceViewer PDF and the IceViewer Pro.
(optional) **COREAPP=**	Install the IceViewer Core Web App for Google Chrome and Microsoft Edge Browsers. **0:** Do not install IceViewer Core **(Default)**. **1:** Install the IceViewer Core with the AI Assistant feature. **2:** Install the IceViewer Core without the AI Assistant feature. **Note:** The IceViewer Core and the IceViewer Browser Extension cannot be installed at the same time. Either install the IceViewer Core or the IceViewer Browser extension.

(optional) **COREVIEWPDF**=	Enable in the IceViewer Core Web App to View PDF documents, not the default built-in Chrome or Edge viewer. **0:** Google Chrome and Microsoft Edge default PDF viewers open the PDF documents in the browser **(Default)**. **1:** The IceViewer Core opens the PDF documents in the browser. **Note:** PDF Viewing is supported in the IceViewer PDF and the IceViewer Pro.
(optional) **CORECONFIGFILE**=	The full path to the IceViewer Core Web App configuration XML file "BITV_Core_config.xml". The full path cannot contain variables. The Full path needs to be specified even if the XML file is located right next to the MSI installer. For technical details please see the **BITV_Core_config.xml description**.
(optional) **COREBROWSER**=	Set a browser in which the IceViewer Core will run. **0**: User Default Browser (**Default**). **1**: Google Chrome **2**: Microsoft Edge
(optional) **TRANSFORMS**=	Install the IceViewer with a transformation file.
(optional) **LICSER**=	License server domain name. "licenseserver.blackice.com"
(optional) **CPORT**=0 (default) Port number (0, 65536)	Client port is out going port to connect to the Black Ice License server. Default and Recommended port parameter value is 0. When using port parameter CPORT=0, the installation automatically selects a TCP/IP port which is currently not used by any other process on the system. When using a specific port number for CPORT parameter, the installation uses the specified port on the system/PC for the registration. If the specified port is used by another process on the system/PC, the registration will be unsuccessful.

(optional) **SPORT=1**	The SPORT parameter defines the TCPI/IP port to connect to Black Ice License Server port. Default port is HTTPS port 443 the **SSL parameter must be 1**. Alternatively, the following TCP/IP ports can be used for the registration: 80, 3500, 15000 **NOTE: For using alternative TCP/IP ports (80, 3500, 15000) for the registration set the SSL parameter to 0.**
(optional) **CUSTOMINI**=	The full path to the custom INI file. Path cannot contain variables. (Full path needs to be specified even if the INI file is located right next to the msi) The full path needs to be accessible from the computers where it will be installed by the GPO.
(optional) **CUSTOMRIBBON**=	The full path to the custom Ribbon RIBBONUI file. Path cannot contain variables. (Full path needs to be specified even if the RIBBONUI file is located right next to the MSI) The full path needs to be accessible from the computers where it will be installed by the GPO.
(optional) **CUSTOMQAT**=	The full path to the custom Quick Access Toolbar QATUI file. Path cannot contain variables. (Full path needs to be specified even if the QATUI file is located right next to the MSI) The full path needs to be accessible from the computers where it will be installed by the GPO.
(optional) **BITRACE=** 0 disables the Trace log (default) 1 enables the Trace log	By Enables detailed Trace log, will logs every event in the Custom Action section of the MSI installation, uninstallation, and registration. For more information about the Trace log and location of the Trace log, please refer to IceViewer MSI trace log section.
(optional) **SSL=** 1 enable the SSL (default) 0 disable the SSL	Set SSL parameter used for authentication for connecting to the license server. Parameter value set to 1, if using License Server port 443 for the registration. If the SSL= parameter is not specified, port 443 will be used by default. Parameter value set to 0, if using license server TCP/IP port 80, 3500, 15000 for the registration.

(optional) **PTYPE=** 0: Not using proxy server 1: Attempt to discover automatic proxy settings 2: Use HTTP proxy 3: Use SOCKS proxy	Set proxy server type for the connection. In a secured environment where the port 443 cannot be enabled, the product can be registered through proxy server with the PTYPE parameter. The PTYPE=1 - Using the system proxy settings. (Optional parameters: PIP, PPORT, PUSER, PPW) **NOTE:** Automatic Proxy Configuration (PTYPE=1) uses the proxy settings of Internet Explorer, and it is only able to discover the proxy address and port. The MSI Installer cannot read the User Name and Password of the Proxy Server automatically. Please use (Permit all connection) without user name and password parameter, with the PTYPE=1. If you need **authentication** for the Proxy Server connection, please use the PTYPE=2 (HTTP proxy) or PTYPE=3 (SOCKS proxy) options. The PTYPE=2 – Using HTTP proxy settings (Required parameter: PIP, PPORT, Optional parameter: PUSER, PPW) The PTYPE=3 – Using SOCKS proxy settings (Required parameter: PIP, PPORT, Optional parameter: PUSER, PPW) **NOTE: Please make sure, that what type of proxy is using the Proxy server.** For example: If the proxy server using HTTP proxy, please use the **PTYPE=2** parameter.
(optional) **PIP=**	The proxy server host name or IP address **NOTE: The PIP parameter is required, if the server using HTTP (PTYPE=2) or SOCKS (PTYPE=3) proxy settings.**
(optional) **PPORT=**	Port number on the PC to communicate with the Proxy server. The installation uses the specified port to reach the Proxy server. **NOTE: The PPORT parameter is required, if the server using HTTP (PTYPE=2) or SOCKS (PTYPE=3) proxy settings.**

(optional) **PUSER=**	User name for proxy servers which require authentication. **NOTE: The PUSER parameter is optional, if the server using HTTP (PTYPE=2) or SOCKS (PTYPE=3) proxy settings.** **NOTE:** If the Proxy server and the computer, where you are doing the installation are in the same domain, **please do not use the domain name in the PUSER parameter.**
(optional) **PPW=**	User password for proxy servers which require authentication. **NOTE: The PPW parameter is optional, if the server using HTTP (PTYPE=2) or SOCKS (PTYPE=3) proxy settings.**
(optional) **PLUGIN=**	Enables or Disables the Browser Plug-in for all users by default. Possible values: 0: The Browser Plug-in is Disabled for all users 1: The Browser Plug-in is Enabled for all users (default) 2: Install Browser Plug-in for all users, but JPEG files are not associated with the IceViewer Browser Plug-in; therefore, the IceViewer Browser Plug-in will not be the default viewer to open JPEG files in Internet Explorer. 3: Install Browser Plug-in, but Tiff files are not associated with the IceViewer Browser Plug-in; therefore, the IceViewer Browser Plug-in will not be the default viewer to open Tiff files in Internet Explorer.
(optional) **FORCEU=**	Possible values: 1: Force uninstallation of the IceViewer, even if it was registered with a transferable license, and the license cannot be validated with the Black Ice License server. Caution: Upon network problems, this option could result that a transferable license will not be removed properly from the Black Ice License server. This parameter can be used when there is no active internet connection. 0 (default): The uninstaller will notify the user of the occurring errors during the uninstallation.

(optional) **FORCECHECK**= 0: Disabled (default) 1: Enabled.	The FORCECHECK parameter can be used during the uninstallation. This parameter uninstalls the IceViewer and forces license type validation (static or transferable). This scenario is recommended, if product was initially registered and installed with a static serial number, but after installation the serial number was upgraded and converted to a transferable serial number by the Black Ice Sales team. Using the FORCECHECK parameter will allow the user to transfer the serial number. This parameter requires an active internet connection.
(optional) **FORCEI**=	We have added the FORCEI parameter to ignore the damaged SID (SID - User Identifier on Terminal Servers) parameter in the system and skip damaged SID. The IceViewer installation will fail if there is a damaged SID and the FORCEI parameter is not used. Possible values: 1: Enabled. 0: Disabled (default)

Quotation Marks for the parameters: If the parameter value has **space** characters, then it is required to use the quotation marks (") on the beginning and end of the value. For example: **msiexec /i "IceViewer64BitSetup.msi" /q TARGETDIR=**<mark>**"C:\Black Ice\IceViewer Pro"**</mark> **REGNUM=XXXXX-XXXXXXXX-XXXXXXXXXX** Quotation marks are necessary to make sure the installer will take the value as a single parameter. **NOTE: Please make sure that you use regular double quotation marks. (type the command directly to CMD, or copy and paste the command from this installation guide, or from Notepad.)**

*Note: To connect to the Black Ice License Server (licenseserver.blackice.com) it is required to use secure internet connection (HTTPS) on port 443. The IceViewer MSI Installer attempts to reach the Black Ice License Server three times during the registration to avoid momentary internet connection issues.

Caution: CREGNUM and REGNUM parameters cannot be used at the same time together.

NOTE: If CREGNUM or REGNUM parameters are not used, the IceViewer registers automatically as demo during the installation.

IceViewer MSI parameters for Chrome Extension

This section summarizes the Chrome extension MSI installation command and provides several installation samples. If the Chrome extension installation parameter is not specified, the default value of the parameters is used by the MSI installer for the Chrome Extension.

Example 1: Install IceViewer silently with the IceViewer Browser Extension for Microsoft Edge and Google Chrome for every user.

msiexec.exe /i "<<PATH>>\IceViewer64BitSetup.msi" /q

Note: The user will not be able to disable or remove the Chrome Extension and PDF documents will be opened with the default PDF viewer. PDF Viewing is supported in the IceViewer PDF and the IceViewer Pro.

(optional) **CHROME=**	Install the IceViewer Browser Extension for Google Chrome and Microsoft Edge for every user. **0:** Do not install IceViewer Browser Extension. **1:** Install IceViewer Browser Extension only for Google Chrome for every user. **2:** Install IceViewer Browser Extension only for Microsoft Edge for every user. **3:** Install IceViewer Browser Extension for both Microsoft Edge and Google Chrome for every user **(default)**.
(optional) **CHROMEEXTVIEWPDF=**	Enable in the Black Ice Chrome Extension to View PDF documents, not the default built-in Chrome or Edge viewer. **0:** Google Chrome and Microsoft Edge default viewer opens the PDF documents .**(default)** **1:** The Black Ice Chrome Extension opens the PDF documents. **Note:** PDF Viewing is supported in the IceViewer PDF and the IceViewer Pro.
(optional) **CHROMEEXTFORCEINSTALL=**	Enable to force the installation of the Black Ice Chrome extension. **0:** The users can enable or disable the Black Ice Chrome extension manually in Google Chrome and Microsoft Edge. **1:** The users cannot disable the Black Ice Chrome in Google Chrome and Microsoft Edge extension by **(default). Using Group Policy to install the extension. Users will not**

	have to manually enable the extension and approve to use the extension.
(optional) **CHROMECONFIGFILE=**	The full path to the IceViewer Browser Chrome Extension configuration XML file. The path cannot contain variables. The Full path needs to be specified even if the XML file is located right next to the MSI installer.

Example 1-5 installs the IceViewer Extension to view Tiff documents in the Extension.

Example 6 installs the IceViewer Extension to view Tiff and PDF documents in the Extension.

Example 2: Install IceViewer silently with the IceViewer Extension for Google Chrome for every user:

msiexec.exe /i "<<PATH>>\IceViewer64BitSetup.msi" CHROME=1 /q

Note: The user will not be able to disable or remove the Chrome Extension and Google Chrome and Microsoft Edge open the PDF documents with a default PDF viewer.
Note: PDF Viewing is supported in the IceViewer PDF and the IceViewer Pro.

Example 3: Install IceViewer silently with the IceViewer Extension for Microsoft Edge for every user:

msiexec.exe /i "<<PATH>>\IceViewer64BitSetup.msi " CHROME=2 /q

Note: The user will not be able to disable or remove the Chrome Extension and Google Chrome and Microsoft Edge open the PDF documents with a default PDF viewer.
Note: PDF Viewing is supported in the IceViewer PDF and the IceViewer Pro.

Example 4: Install IceViewer silently with a IceViewer Chrome Extension using a configuration XML file. Please specify the full path of the configuration XML file:

msiexec.exe /i "<<PATH>>\IceViewer64BitSetup.msi" CHROMECONFIGFILE="<<PATH>>\IceViewerChromeExtentionConfig.xml"

Please see more details information about the "IceViewer Chrome Extension configuration XML file" on the following link:
https://www.blackice.com/Help/Internet/IceViewer%20WebHelp/WebHelp/index.htm#t=How_to_edit_the_IceViewer_Chrome_Edge_extension_configuration_XML_file.htm

Note: The user will not be able to disable or remove the Chrome Extension and Google Chrome and Microsoft Edge open the PDF documents with a default PDF viewer.

Example 5: Install the IceViewer silently, with the Google Chrome and Microsoft Edge extension, the users can enable or disable the Black Ice Chrome extension in Google Chrome and Microsoft Edge:

Msiexec.exe /i "<<PATH>>\IceViewer64BitSetup.msi" CHROMEEXTFORCEINSTALL=0 /q

Note: Google Chrome and Microsoft Edge open the PDF documents with a default PDF viewer.
Note: PDF Viewing is supported in the IceViewer PDF and the IceViewer Pro.

Example 6: Install the IceViewer silently, with the Google Chrome and Microsoft Edge extension, and the Black Ice Chrome Extension opens the PDF documents.

msiexec.exe /i "<<PATH>>\IceViewer64BitSetup.msi" CHROMEEXTVIEWPDF=1 /q

Note: The user will not be able to disable or remove the Chrome Extension.

Example 7: Install IceViewer silently, without Chrome Extension, Google Chrome and Microsoft Edge open the PDF documents with a default PDF viewer:

msiexec.exe /i "<<PATH>>\IceViewer64BitSetup.msi" CHROME=0 /q

Note: Google Chrome and Microsoft Edge are not used for opening TIFF or PDF documents.
Note: PDF Viewing is supported in the IceViewer PDF and the IceViewer Pro.

How to install the IceViewer silently

To install the IceViewer MSI installer with silent mode, please open the Command Prompt as Administrator.

IceViewer can be installed silently using the following command:

msiexec /i "<<PATH>>\IceViewer64BitSetup.msi" /q REGNUM="XXXXX-XXXXXXXX-XXXXXXXXXX"

Note: the XXXXX-XXXXXXXX-XXXXXXXXXX must be the serial number of the customer.

How to update the IceViewer

To upgrade the IceViewer without uninstalling and reinstalling the IceViewer MSI.
The upgrade process will keep the Users current configuration of the IceViewer.

IceViewer MSI can be updated using the following command:
   msiexec /i "<<PATH>>\IceViewer64BitSetup.msi"

Available Parameters of the IceViewer MSI update

Parameters	Meaning
(optional) /q	Silent installation that displays no user interface. Command line only
(optional) /l* log.txt (lowercase "L")	Logs the MSI system calls to install the product to the "C:\temp\log.txt" file. Command line only For more information about the /l (lowercase "L") parameter, please refer to the Quick Reference Guide for Windows MSI installers section.
(optional) TARGETDIR=	Set target installation directory.
(optional) TRANSFORMS=	Install IceViewer with a transformation file.
(optional) CUSTOMINI=	The full path to the custom INI file.
(optional) NLT=	Citrix VDI Update. Contact [technical support](#) for details.
(optional) CHROMECONFIGFILE=	The full path to the IceViewer Chrome Extension config XML file.
(optional) BITRACE= 0 disables the Trace log (default) 1 enables the Trace log	By Enables detailed Trace log, will log every event in the Custom Action section of the MSI update
(optional) PLUGIN=	Enables or Disables the Browser Plug-in for all users by default.

How to uninstall IceViewer

If one clicks on the MSI installer file, while the IceViewer is installed on the computer, then the Uninstallation will start.

Proceed with the uninstallation to remove the IceViewer from the computer.

In **specific cases**, for example if the computer has no active internet connection, or there is an issue with the serial number, the following window may appear:
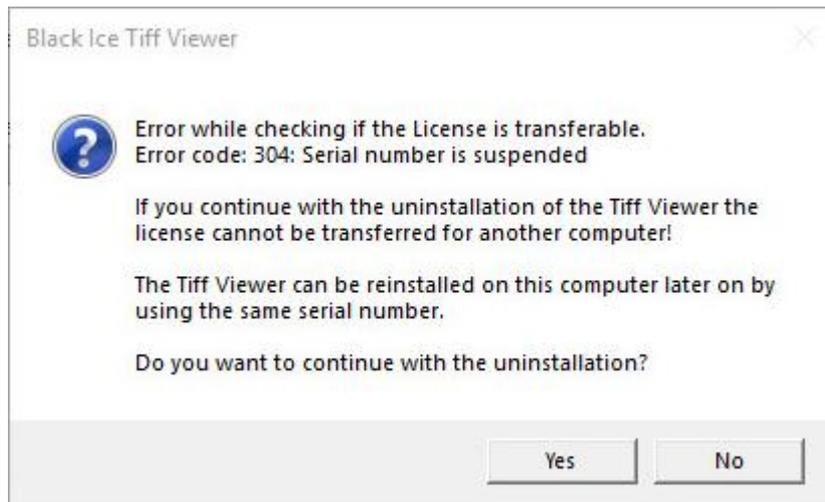
Click on the **Yes** to **ignore** the problem, and to force uninstalling the IceViewer.

Caution: Upon network problems, this option could result that a transferable license will not be removed properly from the Black Ice License server.

Click on the **No** button to cancel the uninstallation. In this case, you'll see the following error message. Click on the **OK** button, and the uninstallation will exit.
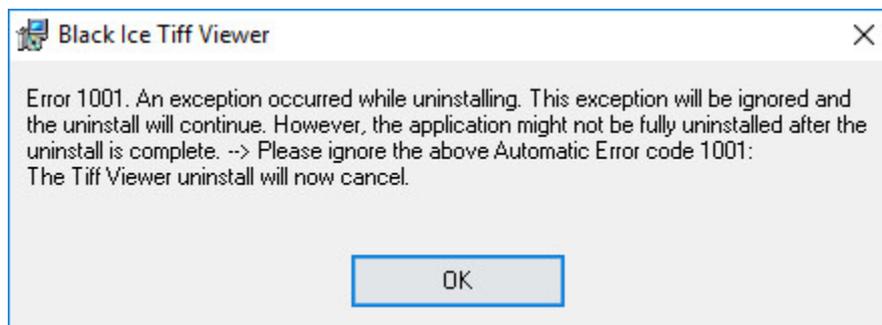
How to uninstall IceViewer silently

The **recommended** command to silently uninstall IceViewer:

Version	Command
11.65.1059 or less	MSIExec.exe /x {00C10A1C-9B89-4C4B-AD04-8F3C2917DA80} /q
11.70.1069	MSIExec.exe /x {F92831AE-450B-4E20-892F-CC8D7890E55C} /q
11.71.1073	MSIExec.exe /x {DA00C1DF-269A-4449-8C8E-D906DD7BB578} /q
11.72.1075	MSIExec.exe /x {A143D1FE-CF6F-4AC4-A939-C05E3FA1D620} /q
11.74.1098	MSIExec.exe /x {82F1D108-D594-4283-BEA9-665C515E60E9} /q
11.75.1099	MSIExec.exe /x {3FFAB476-8D71-48A2-A8E9-E8F030621346} /q
11.80.1103	MSIExec.exe /x {AF283AA5-49D8-4CAB-9CF9-46CFD06F4FD0} /q
11.85.1112	MSIExec.exe /x {FA49BE6D-F597-4A03-AA25-538D6E78A7BF} /q

11.90.1119	MSIExec.exe /x {C36E446C-7D9A-437D-AD42-78AD79071DC3} /q
11.95.1126	MSIExec.exe /x {BA1048CC-27FC-40A7-B717-F7C8264B8718} /q
11.97.1143	MSIExec.exe /x {8CF955F8-0728-484F-81E5-D15E3FF750AF} /q
11.98.1145	MSIExec.exe /x {EA44C5A3-741E-422A-9D03-DE9258338AD9} /q
12.00.1149	MSIExec.exe /x {26D18F5F-6841-4501-B0FF-1489791EC2B0} /q
12.05.1157	MSIExec.exe /x {F8DBCFD4-85BF-49CD-A7C0-1B90734F9FB0} /q

Alternatively, the IceViewer can be uninstalled by using the .msi file in the command:

msiexec.exe /x "<<PATH>>\IceViewer64BitSetup.msi" /q

You must use the IceViewer64BitSetup.msi or the IceViewer32BitSetup.msi file which was used for the installation. For example if IceViewer MSI 11.11 is installed on the computer, you must use the same version 11.11 IceViewer64BitSetup.msi or the IceViewer32BitSetup.msi file for the uninstallation.

Use this command before installing a newer versions or reinstalling previous versions. The abovecommand will work even if there was no prior IceViewer msi installation.

Examples for Command Line installation

(Administrator privilege required)

Please run the command line as administrator.

NOTE: If the parameter value has **space** characters, then it is required to use the quotation marks (") on the beginning and end of the value.

Example 1: Install IceViewer as Demo, silently, the target directory is C:\Black Ice\IceViewer

msiexec.exe /i "<<PATH>>\IceViewer64BitSetup.msi" /q TARGETDIR="C:\Black Ice\IceViewer"

Example 2: Install and register IceViewer, silently, the target directory is C:\Black Ice\IceViewer

msiexec.exe /i "<<PATH>>\IceViewer64BitSetup.msi" /q TARGETDIR="C:\Black Ice\IceViewer" REGNUM=xxxxx-xxxxxxxx-xxxxxxxxxx

Example 3: Install and register IceViewer silently and generate log from the installation.

msiexec.exe /i "<<PATH>>\IceViewer64BitSetup.msi" /q /l* "log.txt" REGNUM=xxxxx-xxxxxxxx-xxxxxxxxxx

Example 4: Install and register IceViewer silently to the default target directory into the Program Files folder.

msiexec.exe /i "<<PATH>>\IceViewer64BitSetup.msi" /q REGNUM=xxxxx-xxxxxxxx-xxxxxxxxxx

Example 5: Install IceViewer silently with a transformation file:

**msiexec.exe /i "<<PATH>>\IceViewer64BitSetup.msi"
TRANSFORMS=IceViewer.mst /q**

Example 6: Install and register IceViewer silently using a port 80 to contact the Black Ice
License Server, without SSL authentication.

**msiexec.exe /i "<<PATH>>\IceViewer64BitSetup.msi" /q REGNUM=xxxxx-
xxxxxxxx-xxxxxxxxxx LICSER=licenseserver.blackice.com CPORT=0 SPORT=80 SSL=0**

Example 7: Install IceViewer silently with a custom INI file. Please specify the full path of the
INI file:

**msiexec /i "<<PATH>>\IceViewer64BitSetup.msi" /q TARGETDIR="C:\Black
Ice\IceViewer" CUSTOMINI="C:\<<PATH>>\IceViewerMSI.ini" REGNUM=xxxxx-
xxxxxxxx-xxxxxxxxxx**

PowerShell Example (Terminal & Terminal (Admin)):
Example 7: Install IceViewer silently with a custom INI file. Please specify the full path of the
INI file:

**msiexec /i '"<<PATH>>\IceViewer64BitSetup.msi"' /q TARGETDIR= '"C:\Black
Ice\IceViewer"' CUSTOMINI= '"C:\<<PATH>>\IceViewerMSI.ini"' REGNUM=xxxxx-
xxxxxxxx-xxxxxxxxxx**

Example 8: Install and register IceViewer silently, and generate a trace log from installation.
Trace log could be very useful to identify and troubleshoot problems during the installation.

**msiexec.exe /i "<<PATH>>\IceViewer64BitSetup.msi" /q REGNUM=xxxxx-
xxxxxxxx-xxxxxxxxxx BITRACE=1**

Example 9: Install and register IceViewer silently, and contact the Black Ice License Server
through an automatically discovered proxy server.

**msiexec.exe /i "<<PATH>>\IceViewer64BitSetup.msi" /q REGNUM=xxxxx-
xxxxxxxx-xxxxxxxxxx PTYPE=1**

Example 10: Install and register IceViewer silently, and disable the Browser Plug-in for all
users.

**msiexec.exe /i "<<PATH>>\IceViewer64BitSetup.msi" /q REGNUM=xxxxx-
xxxxxxxx-xxxxxxxxxx PLUGIN=0**

Example 11: Install and register IceViewer silently, and add the Black Ice IceViewer icon on
user's desktop.

**msiexec.exe /i "<<PATH>>\IceViewer64BitSetup.msi" /q CREGNUM=xxxxx-
xxxxxxxx-xxxxxxxxxx DESKTOPICON=1**

Example 12: Install and register the IceViewer silently, and contact the Black Ice License Server through a HTTP proxy server.

msiexec.exe /i "<<PATH>>\IceViewer64BitSetup.msi" /q REGNUM=xxxxx-xxxxxxxx-xxxxxxxxxx PTYPE=2 PIP=192.168.0.100 PPORT=8080 PUSER=John.Doe PPW=mypassword

The **PPORT** parameter specifies the HTTP Proxy server port that IceViewer will use for connecting to the HTTP Proxy Server.

Please note that most HTTP Proxy Servers by default uses **port 8080**, therefore in most cases, the PPORT should be 8080.
If the specified HTTP Proxy server IP address or the HTTP Proxy server port is incorrect, **error code 57** occurs.
If the **PUSER** or **PPW** (Proxy User / Password) is incorrect **error code 81** occurs.
If the **PUSER** or **PPW** (Proxy User / Password) is **correct** and HTTP Proxy Server cannot connect to the Black Ice License Server, **error code 81** occurs.

Example 13: Install and register the IceViewer silently, and contact the Black Ice License Server through a SOCKS proxy server.

msiexec.exe /i "<<PATH>>\IceViewer64BitSetup.msi" /q REGNUM=xxxxx-xxxxxxxx-xxxxxxxxxx PTYPE=3 PIP=192.168.0.100 PPORT=1080 PUSER=John.Doe PPW=mypassword

The **PPORT** parameter specifies the SOCKS Proxy server port that IceViewer will use for connecting to the SOCKS Proxy Server.

Please note that most SOCKS Proxy Servers by default uses **port 1080**, therefore in most cases, the PPORT should be 1080.
If the specified SOCKS Proxy server IP address or the SOCKS Proxy server port is incorrect, **error code 57** occurs.
If the **PUSER** or **PPW** (Proxy User / Password) is incorrect **error code 81** occurs.
If the **PUSER** or **PPW** (Proxy User / Password) is **correct** and SOCKS Proxy Server cannot connect to the Black Ice License Server, **error code 81** occurs.

Example 14: Install IceViewer silently without registration. In this case, the IceViewer cannot be used until IceViewer is registered/activated for evaluation or with a license key by the Administrator after the installation.

msiexec.exe /i "<<PATH>>\IceViewer64BitSetup.msi" /q NOSERIAL=1

Example 15: Install IceViewer silently with French language:

msiexec.exe /i "<<PATH>>\IceViewer64BitSetup.msi" /q LANGUAGE=French

Example 16: Install IceViewer silently with the Office PDF Preview enabled:

msiexec /i "<<PATH>>\IceViewer64BitSetup.msi" OFFICEPDFPREVIEW=1 /q

Example 17: Install IceViewer silently with the IceViewer Core for every user:

msiexec.exe /i "<<PATH>>\IceViewer64BitSetup.msi" COREAPP=1 /q

Example 18: Install the IceViewer silently, with the IceViewer Core, and the IceViewer Core opens the PDF documents:

msiexec.exe /i "<<PATH>>\IceViewer64BitSetup.msi" COREAPP=1 COREVIEWPDF=1 /q

Note: PDF Viewing is supported in the IceViewer PDF and the IceViewer Pro.

Example 19: Install IceViewer silently with a IceViewer Core using a configuration XML file. Please specify the full path of the configuration XML file:

msiexec.exe /i "<<PATH>>\IceViewer64BitSetup.msi" COREAPP=1 CORECONFIGFILE="<<PATH>>\IceViewerCoreConfig.xml" /q

Please see more details information about the "IceViewer Core configuration XML file" on the following link:
https://www.blackice.com/Help/Internet/IceViewer%20WebHelp/WebHelp/index.htm#t=Customization_of_the_IceViewer_Core.htm

Example 20: Install the IceViewer silently with the IceViewer Core web application. The IceViewer Core will run in **Google Chrome**:

msiexec.exe /i "<<PATH>>\IceViewer64BitSetup.msi" COREAPP=1 COREBROWSER=1 /q

Example 21: Install the IceViewer silently with the IceViewer Core web application. The IceViewer Core will run in **Microsoft Edge**:

msiexec.exe /i "<<PATH>>\IceViewer64BitSetup.msi" COREAPP=1 COREBROWSER=2 /q

Example 22: Install the IceViewer silently with the IceViewer Core web application. The AI Assistant feature will not be installed.

msiexec.exe /i "<<PATH>>\IceViewer64BitSetup.msi" COREAPP=2 /q

Note: The AI Assistant feature is supported in the IceViewer Pro.

Example 23: Install IceViewer silently with a custom RIBBONUI file. Please specify the full path of the RIBBONUI file:

msiexec /i "<<PATH>>\IceViewer64BitSetup.msi" /q CUSTOMRIBBON="C:\<<PATH>>\IceViewer.RIBBONUI" REGNUM=xxxxx-xxxxxxxx-xxxxxxxxxx

Example 24: Install IceViewer silently with a custom QATUI file. Please specify the full path of the QATUI file:

> **msiexec /i "<<PATH>>\IceViewer64BitSetup.msi" /q**
> **CUSTOMQAT="C:\<<PATH>>\IceViewer.QATUI" REGNUM=xxxxx-xxxxxxxx-**
> **xxxxxxxxxx**

Example 25: Silently uninstall the IceViewer:

> **msiexec.exe /x "<<PATH>>\IceViewer64BitSetup.msi" /q**

Example 26: Silently uninstall the IceViewer if the MSI installer location is unknown:

Version	Command
11.65.1059 or less	MSIExec.exe /x {00C10A1C-9B89-4C4B-AD04-8F3C2917DA80} /q
11.70.1069	MSIExec.exe /x {F92831AE-450B-4E20-892F-CC8D7890E55C} /q
11.71.1073	MSIExec.exe /x {DA00C1DF-269A-4449-8C8E-D906DD7BB578} /q
11.72.1075	MSIExec.exe /x {A143D1FE-CF6F-4AC4-A939-C05E3FA1D620} /q
11.74.1098	MSIExec.exe /x {82F1D108-D594-4283-BEA9-665C515E60E9} /q
11.75.1099	MSIExec.exe /x {3FFAB476-8D71-48A2-A8E9-E8F030621346} /q
11.80.1103	MSIExec.exe /x {AF283AA5-49D8-4CAB-9CF9-46CFD06F4FD0} /q
11.85.1112	MSIExec.exe /x {FA49BE6D-F597-4A03-AA25-538D6E78A7BF} /q
11.90.1119	MSIExec.exe /x {C36E446C-7D9A-437D-AD42-78AD79071DC3} /q
11.95.1126	MSIExec.exe /x {BA1048CC-27FC-40A7-B717-F7C8264B8718} /q
11.97.1143	MSIExec.exe /x {8CF955F8-0728-484F-81E5-D15E3FF750AF} /q
11.98.1145	MSIExec.exe /x {EA44C5A3-741E-422A-9D03-DE9258338AD9} /q
12.00.1149	MSIExec.exe /x {26D18F5F-6841-4501-B0FF-1489791EC2B0} /q
12.05.1157	MSIExec.exe /x {F8DBCFD4-85BF-49CD-A7C0-1B90734F9FB0} /q

Example 27: Force uninstallation of the IceViewer, even if it was registered with a transferable license, and the license cannot be validated with the Black Ice License server. Caution: Upon network problems, this option could result that a transferable license will not be removed properly from the Black Ice License server. This parameter can be used when there is no active internet connection.

> **msiexec.exe /x "<<PATH>>\IceViewer64BitSetup.msi" FORCEU=1 /q**

Example 28: Uninstalls the IceViewer silently and forces license type validation (static or transferable). This scenario is recommended, if product was initially registered and installed with a static serial number, but after installation the serial number was upgraded and converted to a transferable serial number by the Black Ice Sales team. Using the FORCECHECK parameter will allow the user to transfer the serial number. This parameter requires an active internet connection.

> **msiexec.exe /x "<<PATH>>\IceViewer64BitSetup.msi" FORCECHECK=1 /q**

Quick Reference Guide for Windows MSI installers

The following section contains information about general parameters, and options which can be used with any Windows MSI installer, including the Black Ice MSI installations.

Applies to Windows ® Installer. V 5.0.7601.23432

msiexec /Option <Required Parameter> [Optional Parameter]

Install Options

> </package | /i> <Product.msi>
> Installs or configures a product
>
> /a <Product.msi>
> Administrative install - Installs a product on the network
>
> /j<u|m> <Product.msi> [/t <Transform List>] [/g <Language ID>]
> Advertises a product - m to all users, u to current user
>
> </uninstall | /x> <Product.msi | ProductCode>
> Uninstalls the product

Display Options

> /quiet
> Quiet mode, no user interaction
>
> /passive
> Unattended mode - progress bar only
>
> /q[n|b|r|f]
> > Sets user interface level
> > n - No UI
> > b - Basic UI
> > r - Reduced UI
> > f - Full UI (default)
> /help
> Help information

Restart Options

> /norestart
> Do not restart after the installation is complete
>
> /promptrestart
> Prompts the user for restart if necessary
>
> /forcerestart
> Always restart the computer after installation

Logging Options

/l[i|w|e|a|r|u|c|m|o|p|v|x|+|!|*] <LogFile> *(lowercase "L")*
     i - Status messages
     w - Nonfatal warnings
     e - All error messages
     a - Start up of actions
     r - Action-specific records
     u - User requests
     c - Initial UI parameters
     m - Out-of-memory or fatal exit information
     o - Out-of-disk-space messages
     p - Terminal properties
     v - Verbose output
     x - Extra debugging information
     + - Append to existing log file
     ! - Flush each line to the log
     * - Log all information, except for v and x options
/log <LogFile> *(lowercase "L")*
     Equivalent of /l* <LogFile> *(lowercase "L")*

Update Options

/update <Update1.msp>[;Update2.msp]
     Applies update(s)

/uninstall <PatchCodeGuid>[;Update2.msp] /package <Product.msi | ProductCode>
     Remove update(s) for a product

Repair Options

/f[p|e|c|m|s|o|d|a|u|v] <Product.msi | ProductCode>
     Repairs a product
     p - only if file is missing
     o - if file is missing or an older version is installed (default)
     e - if file is missing or an equal or older version is installed
     d - if file is missing or a different version is installed
     c - if file is missing or checksum does not match the calculated value
     a - forces all files to be reinstalled
     u - all required user-specific registry entries (default)
     m - all required computer-specific registry entries (default)
     s - all existing shortcuts (default)
     v - runs from source and recaches local package

Setting Public Properties
     [PROPERTY=PropertyValue]

Consult the Windows ® Installer SDK for additional documentation on the command line syntax.

Pre configure User's setting at installation.

CUSTOM INI file configuration

The Black Ice IceViewer Server uses two INI files. There is an INI file that is embedded in the MSI installer "IceViewer.ini" which includes the default configuration for the IceViewer. The Administrator can customize the default configuration for users on the system by creating a custom INI file with a different configuration. The custom INI will be merged into the default INI file and will be the default configuration for all users on the system. The custom INI file name could be any name selected by the IT manager who prepares the installation.

The second INI file is the user's INI file is created from the default INI file when IceViewer is first executed. The changes the user makes in the configuration will be saved in the user's INI file.
When IceViewer is updated using a custom INI file, the already existing default INI is overwritten. The custom INI is merged with the default INI embedded in the installer. If the existing default INI contained an eLicense section, that configuration will be used in the new default INI for license validation.
The user's INI file is not modified during the update process.

The INI file used only for the installation located in the IceViewer's installation directory by default:

On 64-bit operating systems:
      With 64-bit installer:
      c:\Program Files\Black Ice Software LLC\IceViewer\IceViewer.ini
      With 32-bit installer:
      c:\Program Files (x86)\Black Ice Software LLC\IceViewer\IceViewer.ini

On 32-bit operating systems:
      c:\Program Files\Black Ice Software LLC\IceViewer\IceViewer.ini

The user's INI file is located in the user's Roaming directory, which is hidden as default

directory:

C:\Users\Username\AppData\Roaming\Black Ice - IceViewer\IceViewer.ini

Instructions for using the custom INI file

The custom INI file can control file type association, the getting started window and the file extension dialog.

Administrators are able to set the parameters below in the custom ini file:

[FileAssociation]

This section will be used if *First Start=0* and File *Extension Dialog=2*. IceViewer will not be associated with the file type if the value is 0. IceViewer will be the default viewer for that file type if the value is 1.

For example:
Jpg=0; IceViewer will not be associated with jpg files.
tif=1; IceViewer will be the default viewer for tif files.

Possible file types are: pdf, tif, jpg, bmp, png, cal, txt, fax

Note: Due to the system restrictions in Windows 8 and Windows 8.1 the file association doesn't work on Windows 8 and Windows 8.1 systems.

[Startup]

BrowserPlugin: Sets the file formats the Browser Plug-in is registered to when the Administrator clicks "Enable" in the IceViewer main menu > Browser Plugin Switch. If the plug-in is already enabled, the Administrator has to click "Disable" then "Enable" for the changes to take effect:
0: IceViewer was installed with the PLUGIN=0 option. This value only indicates that IceViewer was installed with the Browser Plug-in disabled. If the Browser Plugin is enabled on the user interface by the Administrator, it will be associated with both JPEG and TIFF files.
1: The Browser Plug-in is associated with both JPEG and TIFF files
2: The Browser Plug-in is associated with TIFF files, but not associated with JPEG files; therefore, the IceViewer Browser Plug-in will not be the default viewer to open JPEG files in Internet Explorer.
3: The Browser Plug-in is associated with JPEG files, but not associated with TIFF files; therefore, the IceViewer Browser Plug-in will not be the default viewer to open Tiff files in Internet Explorer.

[Viewer_Settings]

First Start: Controls file type association. IceViewer can be associated with default or custom file types when the IceViewer first starts.
0: Custom file type association *requires File Extension Dialog value to be set to*

2!
1: Default file type association.

Display_mode: IceViewer default view mode. If Save View Setting is enabled, it overwrites the Display_mode configuration.
4: Normal – Pixel to Pixel view
8: Preview best fit to width or fit to height to view the entire document.
64: Scaled – Scale the Image to DPI
4096: Fit to width

Selection_Mode: Specifies the default selection mode.
1: Zoom mode
2: Panning
3: Annotation select

Auto_Rotate_Mode: Controls the Auto Rotation configuration of IceViewer. The possible values are the followings:
0: Disable Auto Rotation
1: Rotate Landscape to Portrait clockwise
2: Rotate Landscape to Portrait counter-clockwise
3: Rotate Portrait to Landscape clockwise
4: Rotate Portrait to Landscape counter-clockwise

[General_Settings]

Open_In_New_Window: Controls how IceViewer opens documents if there is already a document opened in the current window.
0: Always open documents in the current window, closing the old document.
1: Open the document in a new window. (Default)

File Extensions Dialog: Controls the file type association window
0: Dialog does not appear, and no association is made in the background
1: Dialog appears at startup to select the file association
2: Dialog does not appear and file type association will be implemented automatically according to settings in First Start and File Association sections.

Getting started: Controls the getting started dialog
0: Getting started dialog does not appear.
1: Getting started dialog appears during startup.

Thumbnail_View: Enable the Thumbnail View for multi-page documents.
1: Enable the Thumbnail View for multi-page documents.
0: Disable this function.

Save View Setting: Enable Save View Setting feature. Selects the Save current view upon exit option in the IceViewer Options > View. If Save View Setting is enabled, it overwrites the Display_mode configuration.
0: Disable the Save View Setting feature.
1: Enable the Save View Setting feature.

AutoSave: Enable Auto Save feature.
0: Disable Auto Save feature.

1: Enable Auto Save feature.

Show_Annotation_Color_Lost: Configures the action for Annotation burn in on monochrome images.
0: Always ask.
11: Convert image to color.
22: Convert annotation to monochrome.

Enable_File_Navigation: Enable File Navigation feature. This feature enables IceViewer to navigate and open files from the directory in which the currently opened document is placed.
0: Disable File Navigation feature.
1: Enable File Navigation feature. (by default)

Enable_Thumbnail_Browser: Enable Thumbnail Browser feature
0: Disable the Thumbnail Browser feature.
1: Enable the Thumbnail Browser feature.

Enable_Send_In_Email: Enable Send documents in Email feature.
0: Disable Send documents in Email feature.
1: Enable Send documents in Email feature. (Default)

Enable_Upload_To_SharePoint: Enable Upload documents to SharePoint feature.
0: Disable Upload documents to SharePoint feature.
1: Enable Upload documents to SharePoint feature. (Default)

Enable_OCR: Enable OCR (Optical Character Recognition feature) and Search.
0: Disable OCR and Search.
1: Enable OCR and Search. (Default)

Enable_Printing: Enable Printing in IceViewer.
0: Disable Printing.
1: Enable Printing. (Default)

Enable_Scan: Enable Scanning in IceViewer.
0: Disable Scanning.
1: Enable Scanning. (Default)
The 'Enable_File_Navigation', 'Enable_Thumbnail_Browser', 'Enable_Send_In_Email', 'Enable_Upload_To_SharePoint', 'Enable_OCR', 'Enable_Scan' features only can be enabled through the INI placed in the installation directory of the IceViewer. By default, the secondary INI file is placed in one of the following directories, which can be modified only by the Administrator:

On 64-bit operating systems:
    With 64-bit installer:
    c:\Program Files\Black Ice Software LLC\IceViewer\IceViewer.ini
    With 32-bit installer:
    c:\Program Files (x86)\Black Ice Software LLC\IceViewer\IceViewer.ini

On 32-bit operating systems:
    c:\Program Files\Black Ice Software LLC\IceViewer\IceViewer.ini

NOTE: To make sure users cannot edit the secondary INI file of the IceViewer, install the IceViewer into the default directory, or make sure the IceViewer is installed into a directory which can be modified only by the Administrator.

Citrix-Disable_Recent_File_List: Disables the Recent File List on IceViewer. This option is enabled automatically if IceViewer detects an installed Citrix XenApp on the system, otherwise it will be disabled. This option improved the stability of IceViewer, since in some cases the recent file list cannot be opened through Citrix XenApp due to security reasons.
0: Enables Recent File List. The recently opened documents will be shown in IceViewer. (Default option on systems without Citrix XenApp)
1: Disables Recent File List. The recently opened documents will not be shown in IceViewer. (Default option on systems with Citrix XenApp)

AutoLoadAnnotationFile: Configures the Enable loading annotation file automatically option in the IceViewer General options.
0: Disables loading annotation file automatically option
1: Enables loading annotation file automatically option

Enable_Saving: If the "Enable Saving" is unchecked the Save and Save as function are disabled in the IceViewer and in the Browser Plug-in for all users. If the "Enable Saving" is unchecked the IceViewer doesn't ask for saving the modification when closing. The "Enable Saving" can be edited by Administrators.
0: Saving is disabled
1: Saving is enabled (this is the default value)

Disable_Memory_Files: The "Disable_Memory_Files" option configures the IceViewer to load the entire images into the memory before opening to reduce the loading time.
0: Enable loading the entire image into memory before opening a document. This option results faster loading. (default option)
1: Disable loading the entire image into the memory.

BurnAnnotationOnSave: Configures the "Burn annotation into the image when saving the document" option in the IceViewer General options. If this option is enabled, IceViewer automatically burns the annotations into the opened file when saving the document.
1: Enable "Burn annotation into the image when saving the document" option
0: Disable "Burn annotation into the image when saving the document" option (default)

Restrict_Saving: When this option is enabled, every saved document will be saved into the specified directory. This feature is useful if Administrators want to restrict every User's access to only one directory, or if Administrators want to keep the documents in one directory.

NOTE: When using the "Restrict saving into the following directory" option, please make sure that every user who uses IceViewer has write permissions in the specified directory.

0: Allows saving documents into any directory (default)
1: Restricts the saving documents only into the specified directory

Save_Directory: Specifies the directory, which will be used when the Restrict_Saving option is enabled. Environment variables also can be used to specify the directory, for example:
<<USERPROFILE>>\Documents

Enable_Tools: By using this option, Administrators can deny access for all standard users on the computer to the features under the Tools ribbon tab. The restriction not applies to users with Administrative privileges.
1: Allows accessing the features under the Tools ribbon tab for standard users.
0: Denies accessing the features under the Tools ribbon tab for standard users.

Enable_Annotations: By using this option, Administrators can deny access for all standard users on the computer to the features under the Annotations ribbon tab. The restriction not applies to users with Administrative privileges.
1: Allows accessing the features under the Annotations ribbon tab for standard users.
0: Denies accessing the features under the Annotations ribbon tab for standard users.

Enable_Document_Cleanup: By using this option, Administrators can deny access for all standard users on the computer to the features under the Document Cleanup ribbon tab. The restriction not applies to users with Administrative privileges.
1: Allows accessing the features under the Document Cleanup ribbon tab for standard users.
0: Denies accessing the features under the Document Cleanup ribbon tab for standard users.

Enable_Options: By using this option, Administrators can deny access for all standard users on the computer to the settings under the Options window. The restriction not applies to users with Administrative privileges.
1: Allows accessing the options under the Options window for standard users.
0: Denies accessing the options under the Options window for standard users.

Magnifying_Scale: Sets the magnification value of the magnifying glass feature. The value is specified in percentages (without the % sign). The default value is 200.

Note: The 'Enable_File_Navigation', 'Enable_Thumbnail_Browser', 'Enable_Send_In_Email', 'Enable_Upload_To_SharePoint', 'Enable_OCR', 'Enable_Scan' features only can be enabled through the INI placed in the installation directory of the IceViewer by the Administrator.

On 64-bit operating systems:

With 64-bit installer:
c:\Program Files\Black Ice Software LLC\IceViewer\IceViewer.ini

With 32-bit installer:
c:\Program Files (x86)\Black Ice Software LLC\IceViewer\IceViewer.ini

On 32-bit operating systems:
c:\Program Files\Black Ice Software LLC\IceViewer\IceViewer.ini

[UI_Settings]

Theme: Specifies the general theme for the IceViewer user interface.
0: Use the modern white Office theme. (Default)
1: Use the classic blue Office theme.

Custom_Ribbon: Specifies the file path of an exported Ribbon layout. That will be imported at the first launch of IceViewer.

Custom_QAT: Specifies the file path of an exported Quick Access Toolbar. That will be imported at the first launch of IceViewer.

[Tiff_Default_Compressions]

Use_Original_Compression detects the original compression of the document, and automatically selects the detected compression upon saving if it's possible, otherwise it uses the defined default compression. (For example, if a color (24bit) image with JPEG compression is converted into monochrome (1bit) image, the IceViewer cannot save the image into JPEG compression.
1: Enables Use original compression.
0: Disables Use original compression.

Monochrome defines the default compression method for Monochrome (1bit) documents:
201: No compression
202: Pack Bits
203: LZW compression
205: CCIT G3 1D no EOL
206: CCIT G3 1D EOL
207: CCIT G3 2D
208: CCIT G4 (default)

Greyscale defines the default compression method for grayscale (8bit) documents:
201: No compression
202: Pack Bits
203: LZW compression (default)
204: LZW Differential compression

Color defines the default compression method for color (24bit) documents:

201: No compression
202: Pack Bits
203: LZW compression (default)
204: LZW Differential compression
209: JPEG compression

[PDF_Default_Compressions]

Use_Original_Compression detects the original compression of the document, and automatically selects the detected compression upon saving if it's possible, otherwise it uses the defined default compression. (For example, if a color (24bit) image with JPEG compression is converted into monochrome (1bit) image, the IceViewer cannot save the image into JPEG compression.
1: Enables Use original compression.
0: Disables Use original compression.

Monochrome defines the default compression method for Monochrome (1bit) documents:
32: No compression
2048: CCIT FAX compression
512: FLAT compression (default)

Greyscale defines the default compression method for grayscale (8bit) documents:32: 32: No compression
1024: Run-Length
512: FLAT compression (default)

Color defines the default compression method for color (24bit) documents:
32: No compression
4096: JPEG compression
512: FLAT compression (default)
Jpeg_Quality defines the quality of the JPEG compression. [0-100]

[Annotation_Settings]
Annotations_Visible: Shows or hides all annotations.
1: Show annotations (default)
0: Hide annotations

Default_Stamp: Selects the stamp type for the Default Stamp button on the Home ribbon.
0: Rubber stamp (default)
1: Stamp from file
2: Personalized stamp
3: Timestamp

Rubber_Stamp: Selects the stamp type for the Rubber Stamp button on the Annotation ribbon.
1: Approved (default)

2: Assigned
3: Checked
4: Copy
5: Draft
6: Extended
7: Fax
8: Faxed
9: Important
10: Invoice
11: Notice
12: Official
13: On File
14: Paid
15: Passed
16: Pending
17: Processed
18: Received
19: Rejected
20: Release
21: Sent
22: Shipped
23: Top Secret
24: Urgent
25: Void
26: Secret
27: Confidential
28: Client

Timestamp_Show_Date: Shows or hides the date on the Timestamp.
1: Show the date (default)
0: Hide the date

Timestamp_Date_Format: Sets the date format for the Timestamp.
0: Use default date format from the computer (default)
1: MM/DD/YYYY   (E.g.: 09/30/2017)
2: M/D/YY   (E.g.: 9/30/17)
3: YYYY/MM/DD   (E.g.: 2017/09/30)
4: DD/MM/YYYY   (E.g.: 30/09/2017)
5: DD-MON-YYYY   (E.g.: 30-SEP-2017)
6: Julian Date   (E.g.: 2458026)

Timestamp_Show_Time: Shows or hides the time on the Timestamp.
1: Show the time (default)
0: Hide the time

Timestamp_Time_Format: Sets the time format for the Timestamp.
0: 12 hour format (default)
1: 24 hour format

Timestamp_Show_Minutes: Shows or hides the minutes on the Timestamp. To show the minutes, Timestamp_Show_Time must also be set to 1.

1: Show the minutes (default)
0: Hide the minutes

Timestamp_Show_Seconds: Shows or hides the seconds on the Timestamp. To show the seconds, Timestamp_Show_Time and Timestamp_Show_Minutes must also be set to 1.
1: Show the seconds (default)
0: Hide the seconds

Timestamp_Show_Timezone: Shows or hides the time zone on the Timestamp. To show the timezone, Timestamp_Show_Time must also be set to 1.
1: Show the time zone
0: Hide the time zone (default)

Timestamp_Show_Text: Adds additional text to the Timestamp, specified in the Timestamp_Text key.
1: Show additional text
0: Do not show additional text

Timestamp_Text: Specifies the text added to the Timestamp if the Timestamp_Show_Text option is enabled.
The value is a single line of text, max 35 characters.

Timestamp_Text_Position: Specifies the position of the additional text on the Timestamp, if the Timestamp_Show_Text option is enabled.
0: Place the text above the date and time. (default)
1: Place the text below the date and time.
2: Place the text to the left of the date and time.
3: Place the text to the right of the date and time.

Timestamp_Text_Alignment: Specifies the alignment of the additional text relative to the date and time on the Timestamp, if the Timestamp_Show_Text option is enabled. And the text is placed above or below the date and time.
0: Align the text to the left (default)
1: Align the text to the center
2: Align the text to the right

Timestamp_Burn_To_Every_Page: Specifies which pages the timestamp annotations will appear on, if the annotations are burnt in.
0: Only burn the timestamp annotations to the page where they were placed. (default)
1: Burn the timestamp annotations to every page of the document.

[OCR_Settings]

Open_With_Application=<path>
The absolute path of the application to open OCR documents.
For example: C:\Program Files (x86)\Microsoft Office\Office12\WINWORD.EXE
If empty, IceViewer uses the default text editor on the system.

OCR_Language=<Language>
The language of the OCR. By default, the **OCR_Language=English**.

Output_Directory =<path>

The absolute path of the directory to save the OCR files.

For example: C:\Users\Tester\Desktop

If empty, IceViewer saves the OCR files next to the original document.

[Printer Settings]

Center Image Vertically =<1 or 0>

Enables or Disables the Center the Image Vertically option on the Print dialog of IceViewer.

Possible options:

1: Option Enabled

0: Option Disabled

Center Image Horizontally =<1 or 0>

Enables or Disables the Center the Image Horizontally option on the Print dialog of IceViewer.

Possible options:

1: Option Enabled

0: Option Disabled

Scale Page =<1 or 0>

Enables or Disables the Scale to Fit Page Proportionally option on the Print dialog of IceViewer.

Possible options:

1: Option Enabled

0: Option Disabled

Use DPI =<1 or 0>

Enables or Disables the Use Image DPI option on the Print dialog of IceViewer.

Possible options:

1: Option Enabled

0: Option Disabled

Stretch Page =<1 or 0>

Enables or Disables the Stretch to Fit Page option on the Print dialog of IceViewer.

Possible options:

1: Option Enabled

0: Option Disabled

Print Annotations =<1 or 0>

Enables or Disables the Print annotations option on the Print dialog of IceViewer.

Possible options:

1: Option Enabled

0: Option Disabled

[Browser Plug-In Viewer Settings]

Fit Mode =<number>

This option configures the default View Mode of the Browser Plug-In. Possible options:
40015: Normal Size
40044: Fit to Width
40028: Actual Size (Scale to DPI)
40046: Fit to Window

Always Show Thumbnails=<number>
This option configures the Show thumbnail for single documents of the Browser Plug-In. Possible options:
0: Disable/Uncheck the "Show thumbnail for single documents" on Browser Plug-In - Option
1: Enable/Check the "Show thumbnail for single documents" on Browser Plug-In - Option

[Browser Plug-In Printer Settings]

Stretch to page=<1 or 0>
Enables or Disables the Stretched to Fit Page option in IceViewer Browser Plug-In.
Possible options:
1: Option Enabled
0: Option Disabled

Center on page=<1 or 0>
Enables or Disables the Center on Page option in IceViewer Browser Plug-In.
Possible options:
1: Option Enabled
0: Option Disabled

Print all pages=<1 or 0>
Configures the Default Printing Mode in IceViewer Browser Plug-In.
Possible options:
1: Print all pages.
0: Print only the current page.

[Scan_Settings]

Remember_Batch_Scan_Directory=<1 or 0>
When this option is 1, the IceViewer will always remember and use the previously used batch scan directory.
1: Remember batch scan directory (default)
0: Do not remember batch scan directory

Batch_Scan_directory=<<USERPROFILE>>\Documents
This option specifies the default scan directory where the batch scanned documents will be saved. One can use environment variables in the path.

TwainDSM=<1 or 0>

Twain data source manager selection allows users to select which data source manager version must be used for scanning.

Values:
1: Use TwainDSM.dll (Twain 2.0 or newer) - Default
0: Use Twain_32.dll (Twain 1.9 or older)

Using custom INI file

When using the custom INI file, please follow the steps below **as an administrator** to install the product correctly:

1. **Uninstall the previous version of IceViewer from your computer or you can uninstall it with "Add/Remove" application in Windows:**
   - o "Start menu -> run -> type: "cmd" press enter (or right-click and select run as administrator on Vista or Windows 7)

     On Windows 8 and 8.1, type "cmd" into the right menu Search, right click on the Command Prompt and select Run as Administrator.

   - o Type: **"msiexec.exe /x "<<PATH>>\IceViewer64BitSetup.msi" /q"** and press enter
   - o Delete the "IceViewer.ini" files from your computer for each user: "C:\Documents and Settings\<<username>>\Application Data\Black Ice - IceViewer \IceViewer.ini" or "C:\Documents and Settings\<<username>>\AppData\Roaming\Black Ice - IceViewer \IceViewer.ini".

2. **Extract "IceViewerMSI.zip" file with the password provided.**

3. **Create custom IceViewerMSI.ini using custom settings.**

   - o **Custom INI Sample 1:** Using the following INI file settings, only TIF, BMP, CAL, ICA, FAX formats will be associated with IceViewer. The list can be modified according to which file formats should be associated with IceViewer (tif=0 not associate / tif=1 – associate). Getting started window and the File Extension Dialog will not appear for the users.

     [Viewer_Settings]
     First Start=0

```
[General_Settings]
Getting Started=0
File Extensions Dialog=2
Display_Mode=4096
[FileAssociation]
jpg=0
tif=1
bmp=1
cal=1
txt=0
fax=1
png=0
```

When tif=1, both .tif and .tiff files will be associated.
When jpg=1, both .jpg and .jpeg files will be associated.

- o **Custom INI file Sample 2**: using the following ini file settings without file format association settings, the default file type association will occur. IceViewer will be associated with TIF, BMP, CAL, FAX formats. Getting started window and the File Extension Dialog will not appear for the users.

```
[Viewer_Settings]
First Start=1
[General_Settings]
Getting Started=0
File Extensions Dialog=2
Display_Mode=4
```

For the complete list of the available INI file options, please refer to the Contents of the IceViewer INI files section.

4. After creating the custom INI, please open the Command Prompt "Start menu -> run -> type: "cmd" press enter (or right-click and select run as administrator on Vista or Windows 7)

On Windows 8 and 8.1, type "cmd" into the right menu Search, right click on the Command Prompt and select Run as Administrator.

5. Type the following in a single line (Please specify the full path of the MSI and the INI file):

If one uses **space** characters in command line parameter, then it is required to use the "" quotation marks.

msiexec /i "<<PATH>>\IceViewer64BitSetup.msi" /q TARGETDIR=C:\IceViewer CUSTOMINI="<<PATH>>\IceViewerMSI.ini" REGNUM=XXXXX-XXXXXXXX-XXXXXXXXXX

This command will add the parameters to the msi install.

*For the available parameters, see the **Available Parameters of the MSI install** section.*

Contents of the IceViewer INI files

C:\Program Files\Black Ice Software LLC\IceViewer**IceViewer.ini**
Default ini file for every user until the user first user executes the IceViewer and the user's ini file is created. Please see "The user specific INI files." sections below.

This INI file is located in the installed application directory, and contains the settings from the custom INI files.

[eLicense Server Settings]
Domain Name=licenseserver.blackice.com
Server Port=443
Server Port Use HTTPS=1
Client Port=0
Server Port 2=443
Server Port 2 Use HTTPS=1
Client Port 2=0
Server Port 3=443
Server Port 3 Use HTTPS=1
Client Port 3=0
Company ID=Black Ice

[Registration keys]
Demo Registration=<DEMO NUMBER>

[FileAssociation] // this comes from msi installer, if set
jpg=0
tif=0
bmp=0
cal=0
txt=0
fax=0
png=0

[Startup]
BrowserPlugin=1

[Viewer_Settings] // this comes from msi installer, if set
First Start=0
Display_Mode=4
Selection_Mode=1
Auto_Rotate_Mode=0

[General_Settings] // this comes from msi installer, if set
Open_In_New_Window=1
File Extensions Dialog=0
Getting started=1
Enable_Thumbnail_Browser=1
Thumbnail_View=1
Save View Setting=1

AutoSave=0
Show_Annotation_Color_Lost=0
Enable_File_Navigation=1
Enable_Send_In_Email=1
Enable_Upload_To_SharePoint=1
Enable_OCR=1
Enable_Printing=1
Enable_Scan=1
Citrix-Disable_Recent_File_List=
AutoLoadAnnotationFile=1
Enable_Saving=1
Disable_Memory_Files=0
BurnAnnotationOnSave=0
Restrict_Saving=0
Save_Directory=
Enable_Tools=1
Enable_Annotations=1
Enable_Document_Cleanup=1
Enable_Options=1
Magnifying_Scale=200

[Annotation_Settings]
Annotations_Visible=1
Default_Stamp=0
Rubber_Stamp=1
Timestamp_Show_Date=1
Timestamp_Date_Format=0
Timestamp_Show_Time=1
Timestamp_Time_Format=0
Timestamp_Show_Minutes=1
Timestamp_Show_Seconds=1
Timestamp_Show_Timezone=0
Timestamp_Show_Text=0
Timestamp_Text=
Timestamp_Text_Position=0
Timestamp_Text_Alignment=0
Timestamp_Burn_To_Every_Page=0

[Tiff_Default_Compressions]
Monochrome=208
Greyscale=203
Color=203
Use_Original_Compression=1

[PDF_Default_Compressions]
Monochrome=32
Greyscale=1024
Color=4096
Jpeg_Quality=85
Use_Original_Compression=1

[OCR_Settings]
Open_With_Application=
OCR_Language=English
Output_Directory=

[Printer Settings]
Center Image Vertically=1
Center Image Horizontally=1
Scale Page=0
Use DPI=1
Stretch Page=0
Print Annotations=0

[Browser Plug-In Viewer Settings]
Fit Mode=40046
Always Show Thumbnails=1

[Browser Plug-In Printer Settings]
Stretch to page=0
Center on page=1
Print all pages=1

[Scan_Settings]
Remember_Batch_Scan_Directory=1
Batch_Scan_directory=<<USERPROFILE>>\Documents
TwainDSM=1

The user specific INI files:
The ini files below, contains the user settings and are written by application after installation. If these files contains user settings, they will have priority and these setting will used by default.

Examples for the user specific INI files:

C:\Users\Steven\AppData\Roaming\Black Ice - IceViewer**IceViewer.ini**
[Viewer_Settings]
First Start=0
Auto_Rotate_Mode=0
[General_Settings]
Getting Started=1
File Extensions Dialog=1

C:\Users\Steven\AppData\Local\VirtualStore\Windows**IceViewer.ini**
[Recent File List]
File1=C:\work\email.tif
File2=C:\info\images\img302C.tif
File3=C:\info\images\001.tif
File4=C:\info\images\TIFF\001.tif

Using the custom INI file from a shared network drive

To use the custom INI file from a shared network drive, one has to specify the full UNC path of the shared network drive in the CUSTOMINI parameter.

To install the IceViewer using the custom INI file from a shared network drive, one has to run the command prompt as Administrator, and execute the following command:

> **msiexec /i "C:\temp\IceViewer64BitSetup.msi"**
> **CUSTOMINI="\\servername\TestMSI\custom.ini" REGNUM= XXXXX-XXXXXXXX-**
> **XXXXXXXXXX**

Please note the IceViewer cannot be installed with the CUSTOMINI parameter if the custom INI files path is defined with a network drive letter.

For example: msiexec /i "C:\temp\IceViewer64BitSetup.msi"
CUSTOMINI="T:\TestMSI\custom.ini" REGNUM= XXXXX-XXXXXXXX-XXXXXXXXXX

The IceViewer INI File

The IceViewer can be preconfigured for all Users on the system by using the MSI Installer with the INI file. The INI file used during installation will be referenced as the primary INI file. The IceViewer will create a secondary INI file for each user that the user can access. The user's INI file will be referenced as secondary INI file.

The primary INI file located at:

On 64-bit operating systems:
> **With 64-bit installer:**
> *c:\Program Files\Black Ice Software LLC\IceViewer Server\IceViewer.ini*
> **With 32-bit installer:**
> *c:\Program Files (x86)\Black Ice Software LLC\IceViewer Server\IceViewer.ini*

On 32-bit operating systems:
> *c:\Program Files\Black Ice Software LLC\IceViewer Server\IceViewer.ini*

A User can configure the IceViewer by using the secondary INI file associated with the program.
The INI file is located at: `C:\Users\Username\AppData\Roaming\Black Ice - IceViewer`

NOTE: IceViewer uses a primary INI file, which is generated during the installation and located in the IceViewer installation directory. When IceViewer runs for the first time, the entries are copied from the primary INI file into the secondary INI file. In case of missing entries in the secondary INI file, IceViewer also copies the missing entries from the primary INI file.

The 'Enable_File_Navigation', 'Enable_Thumbnail_Browser', 'Enable_Send_In_Email', 'Enable_Upload_To_SharePoint', 'Enable_OCR', 'Enable_Scan' features only can be enabled through the primary INI file that is placed in the installation directory of the

IceViewer. By default, the primary INI file is placed in one of the following directories, which can be modified only by the Administrator:

<u>On 64-bit operating systems:</u>
        With 64-bit installer:
        c:\Program Files\Black Ice Software LLC\IceViewer\IceViewer.ini

        With 32-bit installer:
        c:\Program Files (x86)\Black Ice Software LLC\IceViewer\IceViewer.ini

<u>On 32-bit operating systems:</u>
        c:\Program Files\Black Ice Software LLC\IceViewer\IceViewer.ini

NOTE: In order to make sure users cannot edit the primary INI file of the IceViewer, install the IceViewer into the default directory, or make sure the IceViewer is installed into a directory which can be modified only by the Administrator.

MSI Installation example:
msiexec.exe /i "IceViewer64BitSetup.msi" /l* "C:\log.txt" ALLUSERS=1
CUSTOMINI="C:\Temp\IceViewer.ini" REGNUM=xxxxx-xxxxxx-xxxxxxxxxxxx /q

Group Policy / Active Directory Installation

[How to create MST (transform file) for GPO deployment](#)

[How to use ORCA](#)

[How to set up a Group Policy Object for installing IceViewer MSI on domain computers automatically](#)

[How to uninstall the IceViewer MSI from computers with the Group Policy Object](#)

How to create MST (transform file) for GPO deployment

With the help of transformation files (MST), one can customize the IceViewer MSI install. Transformation files can be created using the ORCA tool. ORCA is available in the *Windows SDK Components for Windows Installer Developers*.

For more information about ORCA please see the following Microsoft Knowledge Base webpage: http://support.microsoft.com/kb/255905

How to use ORCA

1. Open IceViewer64BitSetup.msi with ORCA .
2. Start a new transform by clicking on *Transform\New Transform.*
3. Select *Property* Table from tables (Figure 1).

Figure 1

4. From the Table menu, select Add Row to display the Add Row dialog box.

5. Select Property name. You can specify the property names describe above. For example, TARGETDIR, REGNUM, CUSTOMINI, PRINTERNAME... etc.

6. Select Value and enter Property Value, for example the Target directory in most systems is the c:\Program Files\Black Ice Software LLC\IceViewer .
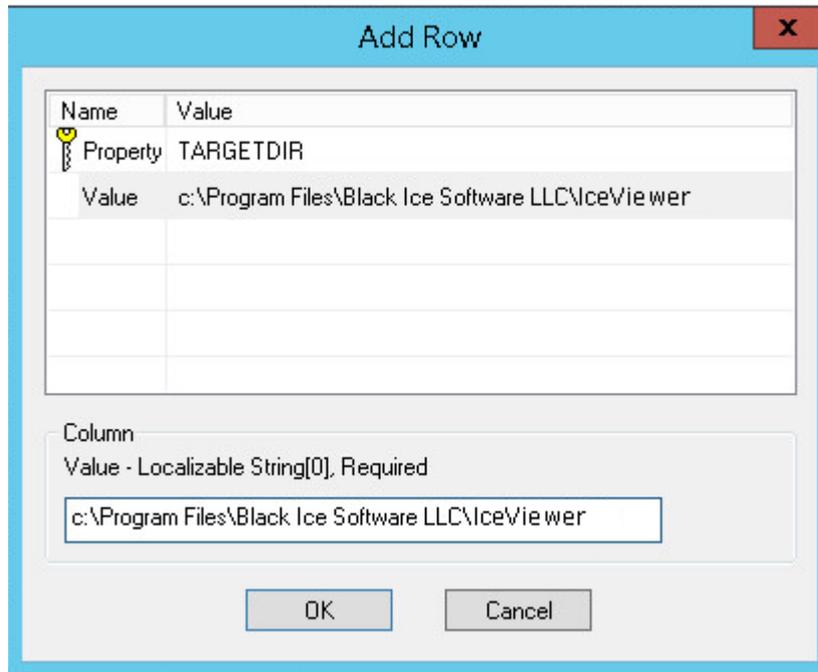
7. Click OK.

8. Save Transform by clicking Transform\Generate Transform… sub-menu. For Example: "IceViewer.mst" transform file.

Assign the transform file(s) in the Group Policy Manager when specifying the deployable software package (MSI).

If installing the IceViewer from command line, the transformation file can be entered like this:

msiexec.exe /i "IceViewer64BitSetup.msi" TRANSFORMS=IceViewer.mst /q

How to set up a Group Policy Object for installing IceViewer MSI on domain computers automatically

1. Copy the Install packages to a network share that **can be accessed from the computers** where the software needs to be installed.

2. To set up a *Group Policy Object, start* the *Group Policy Management console* on a Domain controller computer.

   Run *gpmc.msc*
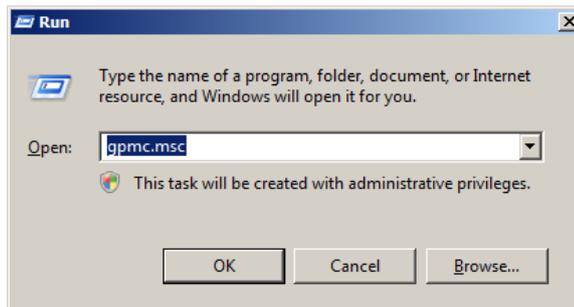
3. Create a new Group Policy

   Left click on the desired Domain and select "*Create a GPO in this domain, and Link it here…*". Define a new GPO by defining the name and press OK.
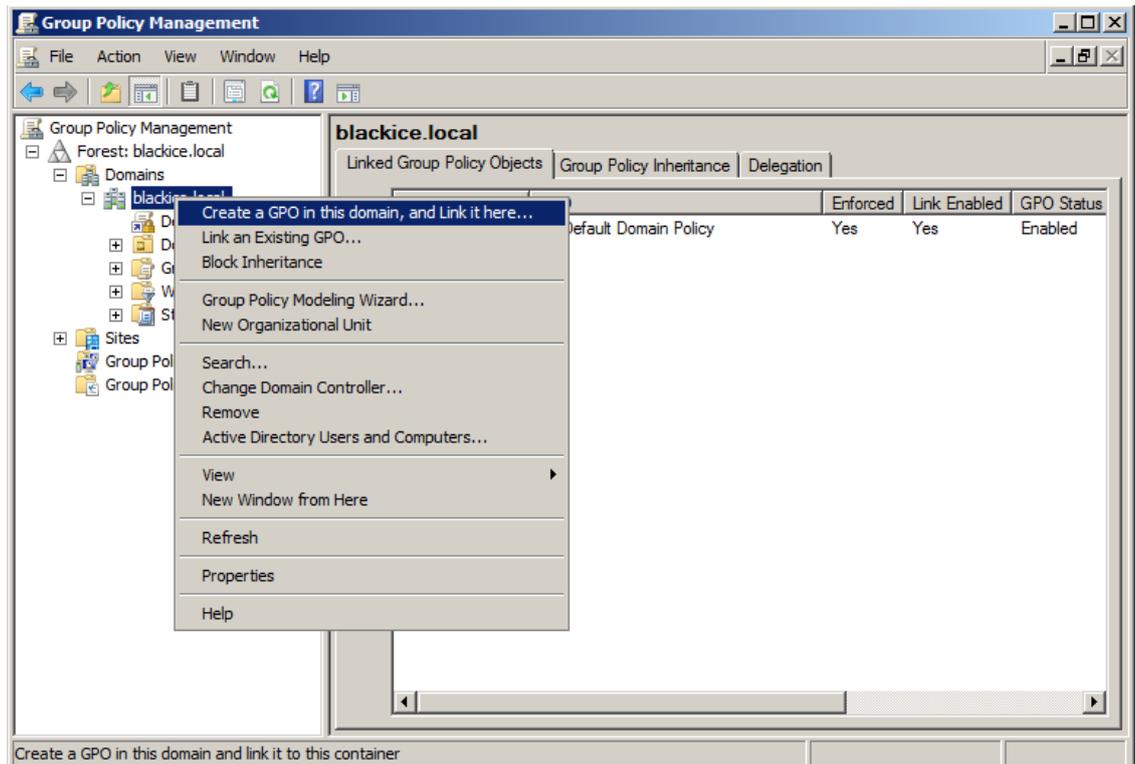
4. Define computers for the GPO.

   Remove the default Groups and Users from the **Security Filtering Options**.
   Click **Add** to search and define computers in the domain.
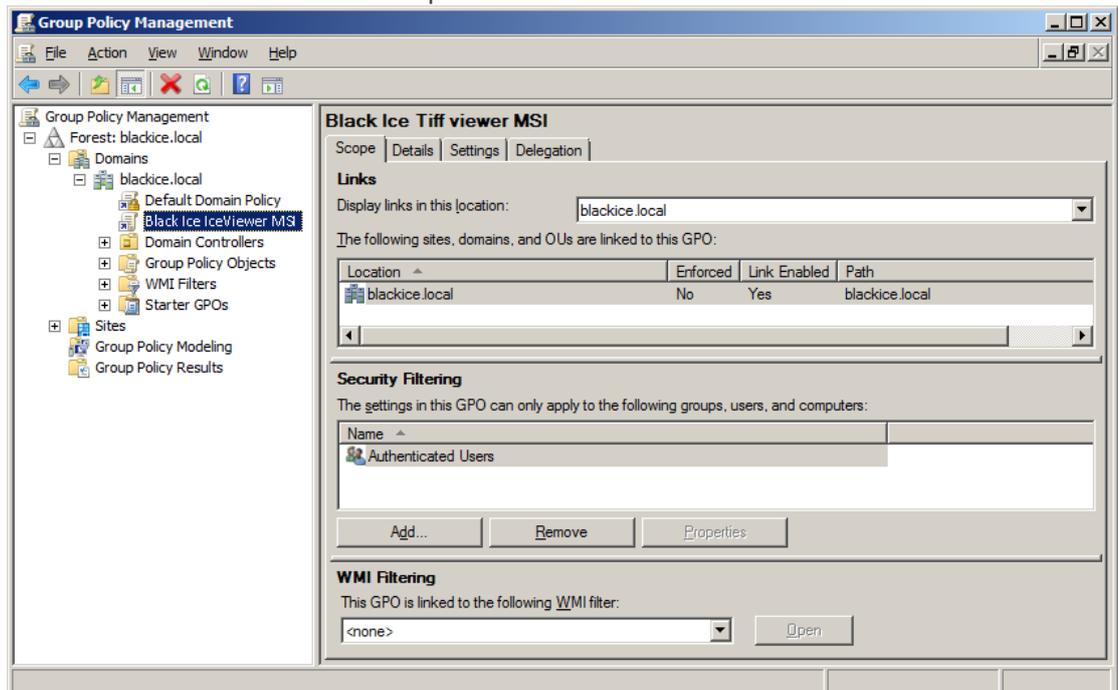
5. Add computers
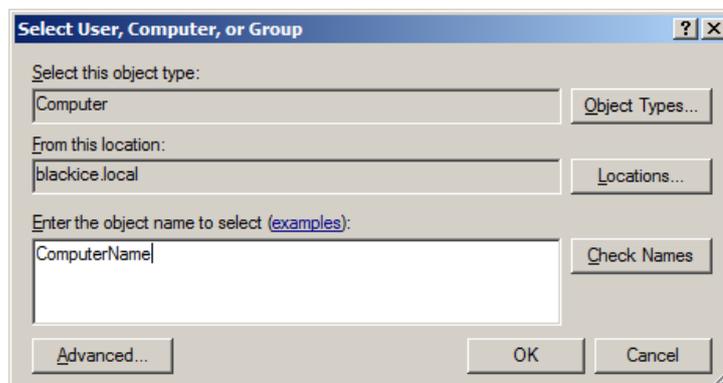
6. Edit Group Policy Object by left clicking on the GPO name and selecting **Edit**.

---
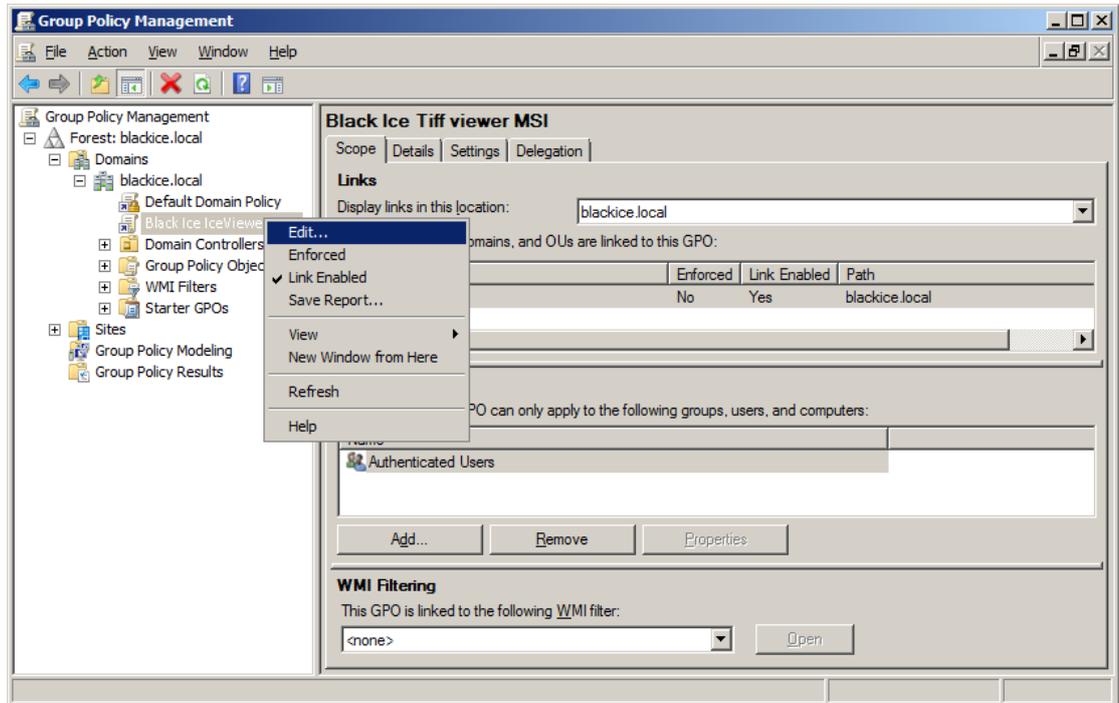
7. Change Privilege for the installation
   Navigate to: **Computer Configuration \ Policies \ Administrative Templates \ Windows Components \ Windows Installer**.

   Modify the **Always install with elevated privileges** setting to **Enabled**.
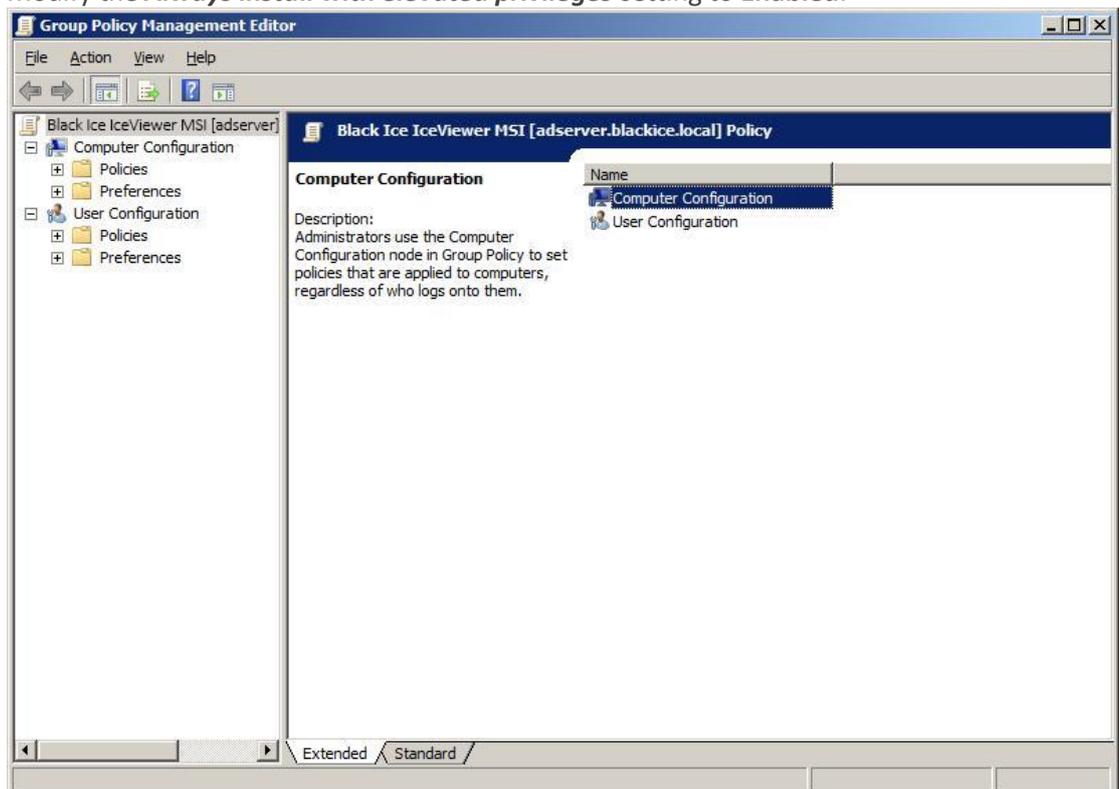
8. Prepare the mst configuration file with ORCA to be used with the install package.

See the **How to create MST (transform file) for GPO deployment** section of this documentation.

9. Add the IceViewer MSI installer package.
    Navigate to: *Computer Configuration \ Policies \ Software Settings \ Software installation*

    Left click on the right pane, select **New > Package**
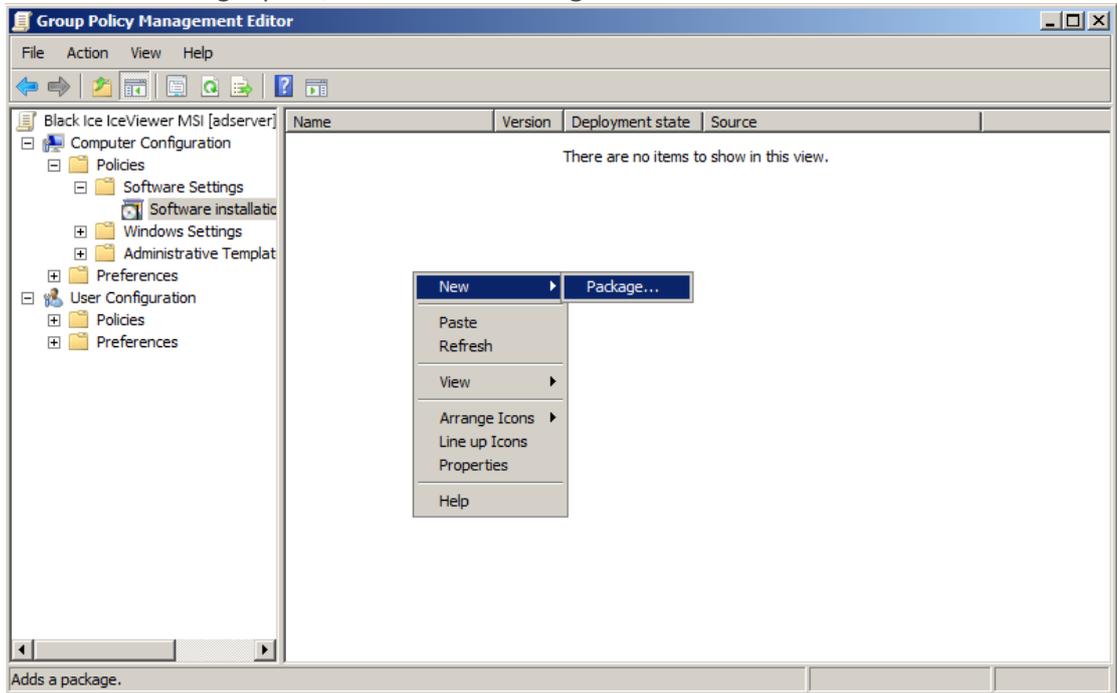
10. **Copy the Install packages to a network share** which is accessible from the computers where the software needs to be installed.
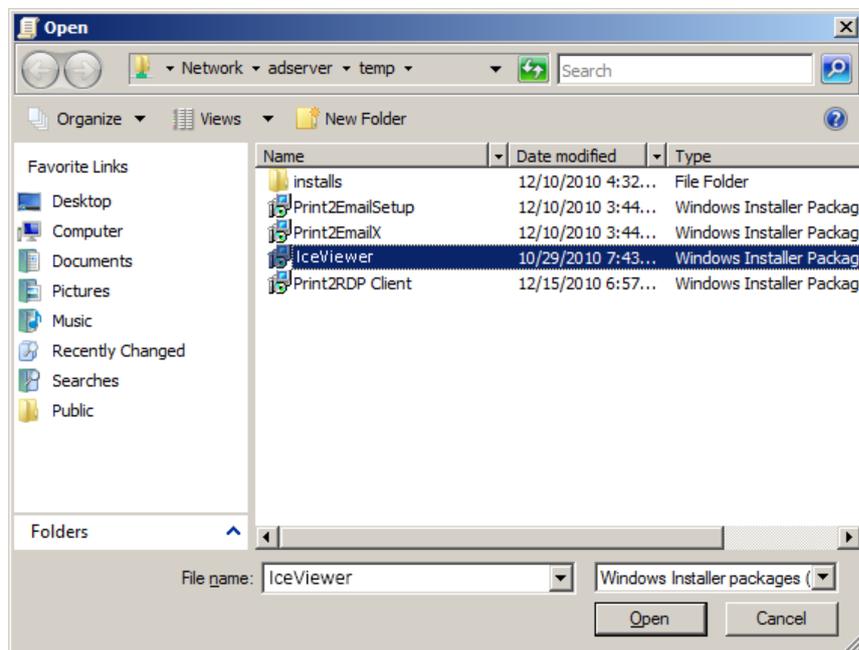
11. Select **Advanced** Software Deployment.
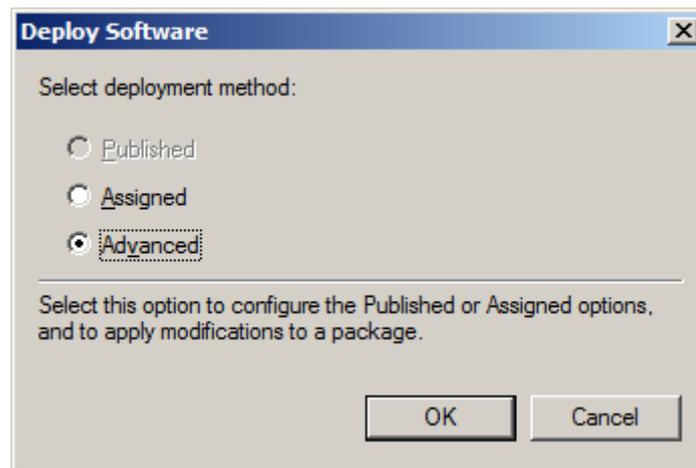
12. On the Modifications tab, please **add the previously created mst** file with the REGNUM and optionally the TARGETDIR or other properties. Click OK.
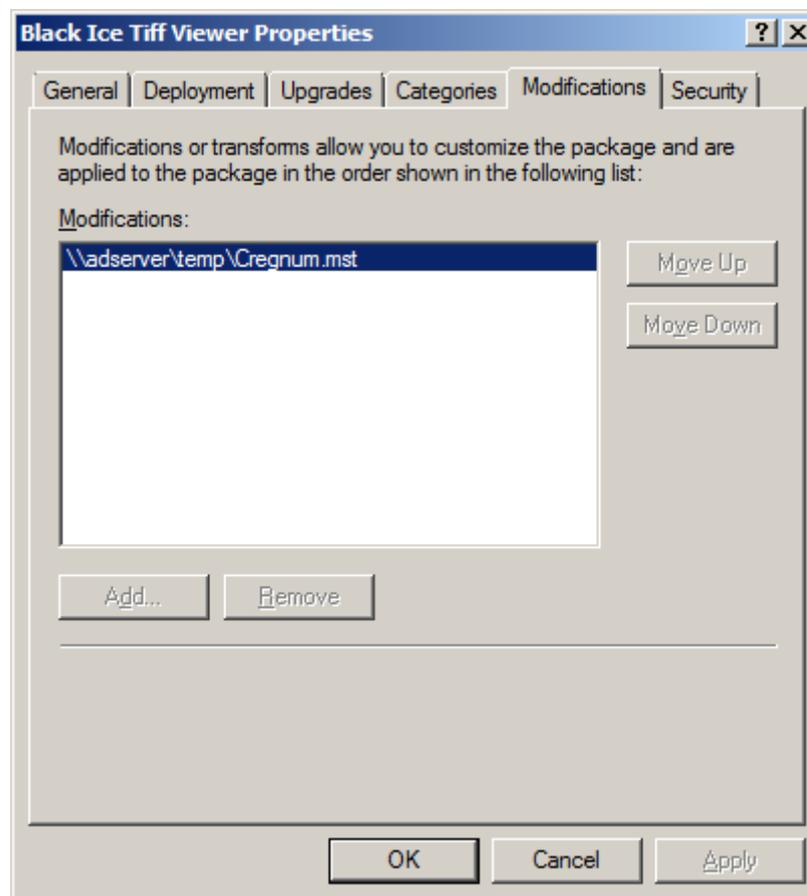
13. To Update the *Group Policies Object* please run the following command on the

    Run *gpupdate*
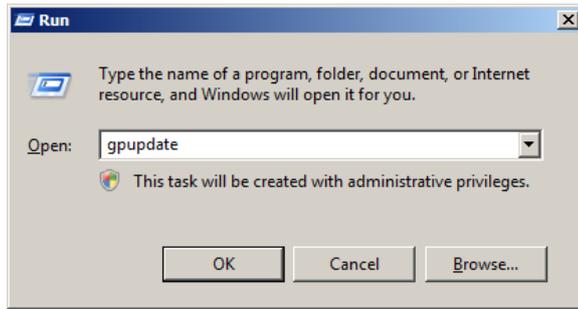
14. Restart the client computers to install the software.

How to upgrade existing installation of IceViewer using Group Policy Object

One needs to add the new version of IceViewer as a Software Package to the same Group Policy Object where the previous version of IceViewer is located.

1. Navigate to **Policies > Software Settings > Software installation**
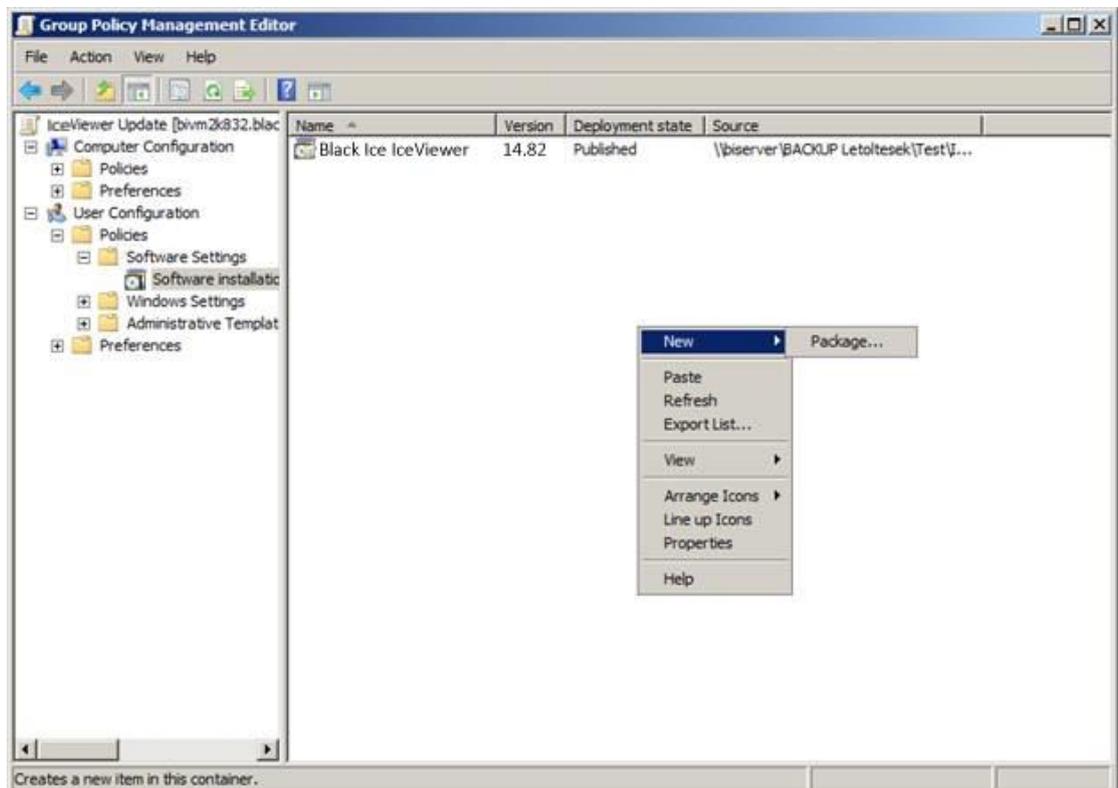
2. Right click in the open area, choose **New > Package...**

3. Navigate to the new version of the IceViewer MSI you want to use to upgrade your existing installations.

4. In the **Upgrades** tab select "**Required upgrade for existing packages**".
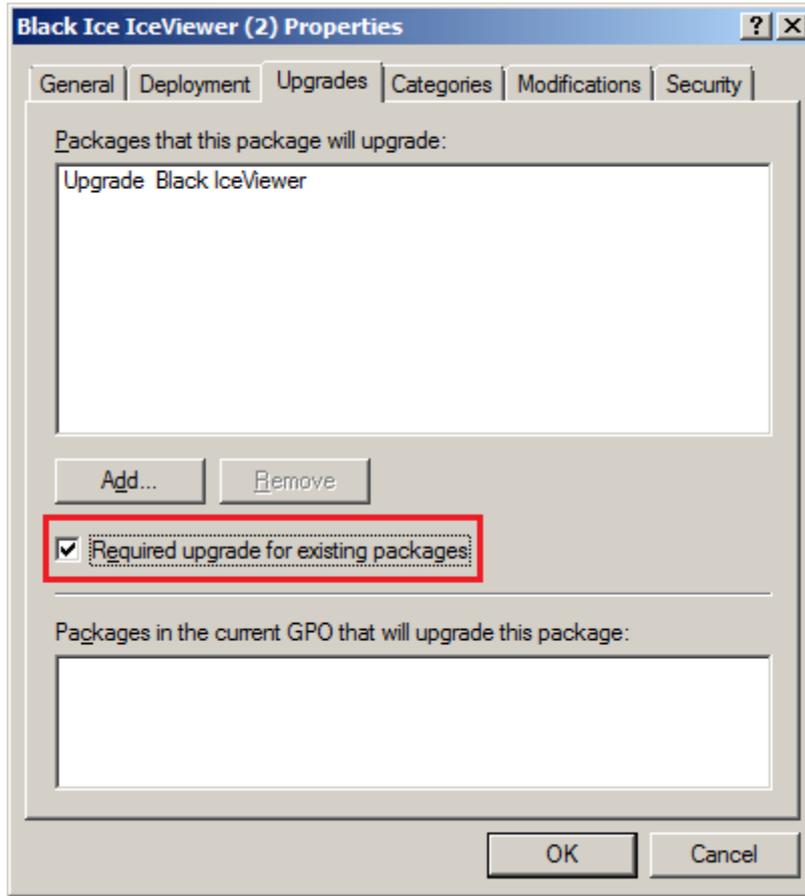
The rest of the settings should be the same as the old version of the IceViewer software package.

5. When the Group Policy Object configuration is finished the **Software installation** window should look similar to the picture below:

How to uninstall the IceViewer with MSI using GPO

1. Navigate to and Edit the previously created Group Policy Object by left clicking on the GPO name and selecting **Edit**.

2. Select the IceViewer MSI installer package.
   Navigate to: *Computer Configuration \ Policies \ Software Settings \ Software installation*

   Left click on the IceViewer MSI and select **All Tasks \ Remove…**
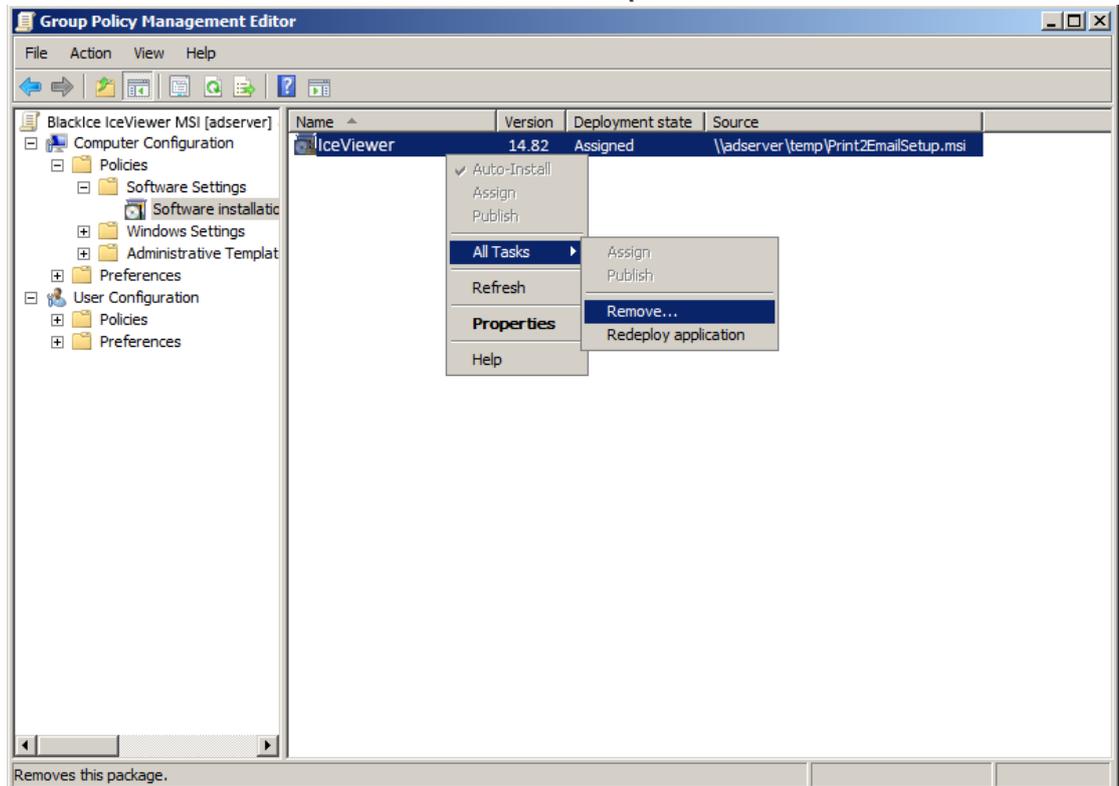
3. Select **Immediately Uninstall the Software from users and computers** option to remove the software from the computers.
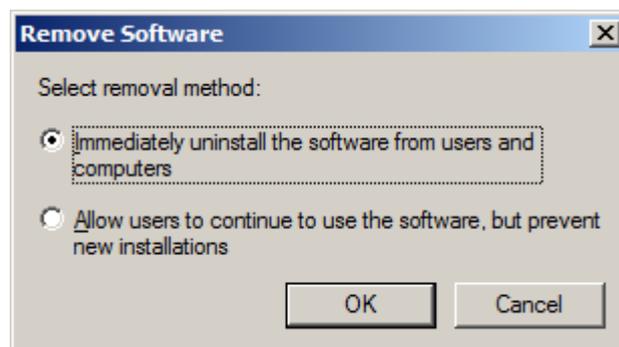
4. Restart the client computers to uninstall the software.

Note: Please make sure the new Group Policy has been updated on the client computers. In certain situations, the client computers might need to be rebooted twice.

Intune Deployment of the IceViewer using MSI Packages

This document is a step-by-step guide on how to deploy the IceViewer MSI package to enrolled users and devices with the help of Microsoft Intune.

Install the IceViewer MSI installer with the "Line-of-business app" option

Install the IceViewer MSI installer with the "Windows app (Win32)" option

Sync an app to the enrolled device

Status/Monitoring – Intune MSI Application Deployment

Update/Upgrade an IceViewer

Uninstall an IceViewer

Install the IceViewer MSI installer with the "Line-of-business app" option

Login to [Microsoft Intune admin center](#)
Navigate to the Apps -> Windows:
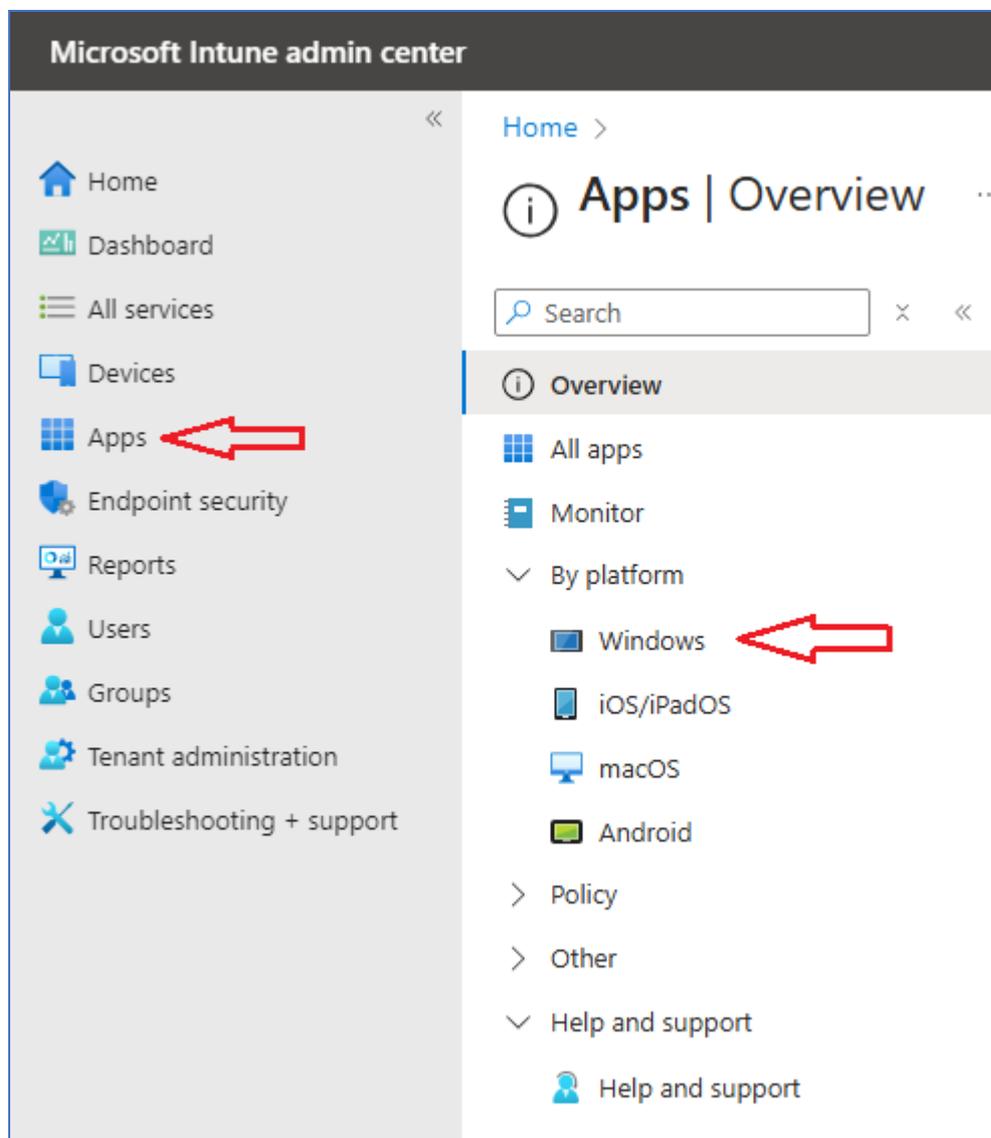
Click on **+Add** to add a new Intune application for deployment.
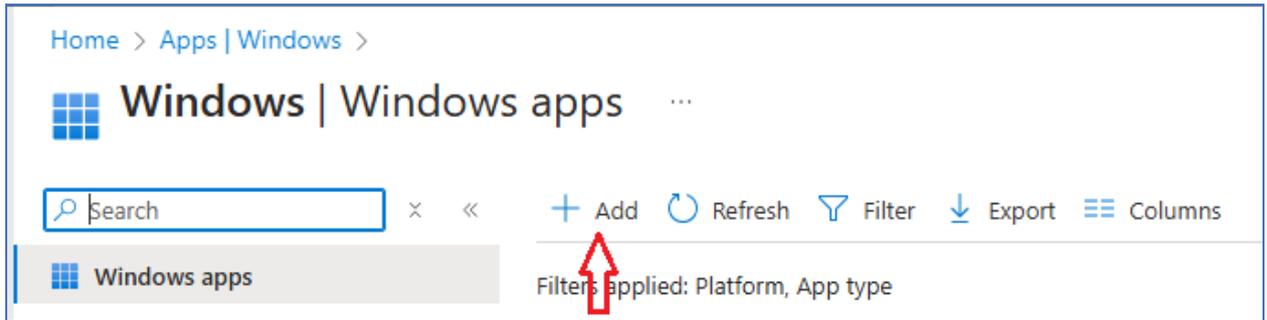
Select the **Line-of-Business app** - App Type drop-down menu from the Add app.

Click on the "Select app package file" to upload the IceViewer64BitSetup.msi file to Intune.:

On the App package file, check out the following settings Name:

Click on OK on the App Package file.

Click on the App Information option from Add App in Intune Application Information Details.

Fill in the following information details in App Information.
Command-line Argument: /q REGNUM="XXXXX-XXXXXXXX-XXXXXXXXXX"
Note: the XXXXX-XXXXXXXX-XXXXXXXXXX must be the serial number of the customer.

After filling in the information, click the Next option.
The next page will appear for Intune MSI Application Deployment - Assignment Options.

Click on the Add Group button from the Assignment tab of the application created.

Select groups where you want to assign this app from Add Group.
There are 3 (three) Assignment types - Select one assignment type.
You can deploy the MSI application to some group of devices or users as required.

The MSI application is per machine then it will get installed in the machine context.
Select Required or Available for Enrolled Devices.
Click on Included Groups from **Add Group**.

Select the groups you want to make this app required or available from Assign.
Click on Select Groups to select a Group for the required assignment from Assign.
Search the Device/user Group in the search option in Select Groups and select the
DEVICE/USER group that you want to deploy.

Click **Next** to save the Assignment.

On the following page, Review the values and settings you entered for the app.

Add App ...
Windows MSI line-of-business app

App package file	IceViewer64BitSetup.msi
Name	IceViewer 64-bit for Windows 11/10
Description	IceViewer
Publisher	Black Ice Software LLC
App install context	Device
Ignore app version	No
Command-line arguments	/q REGNUM="XXXXX-XXXXXXXX-XXXXXXXXXX"
Category	No Category
Show this as a featured app in the Company Portal	No
Information URL	No Information URL
Privacy URL	No Privacy URL
Developer	No Developer
Owner	No Owner
Notes	No Notes
Logo	No logo

Assignments

Group mode	Group	Filter mode	Filter	Install
> Required				
Available for enrolled devices				
Uninstall				

[Previous] [Create]

When you are done, click **Create** to add the app to Intune.

Install the IceViewer MSI installer with the "Windows app (Win32)" option

First, the .MSI package needs to be converted into an .INTUNEWIN format so it can be uploaded to Intune.

Download the Microsoft Win32 Content Prep tool from Microsoft's official link. This tool is essential for converting your .MSI files into .INTUNEWIN format, suitable for Intune.

Organize Your Files: Create a dedicated folder, such as 'Microsoft Win32 Content Prep', and within it, establish Source and Output subfolders for better management of the original and converted files.
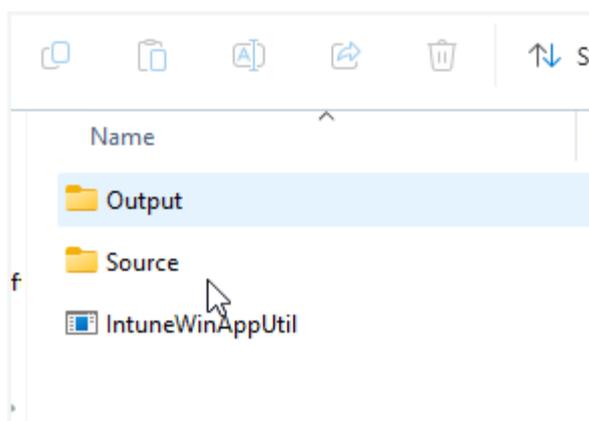
Run the **IntuneWinAppUtil** tool with the following parameters:
IntuneWinAppUtil.exe -c "C:\Microsoft Win32 Content Prep\Source" -s "IceViewer64BitSetup.msi" -o "C:\Microsoft Win32 Content Prep\Output"

The **Output** folder contains the .INTUNEWIN file for installation.

Login to Microsoft Intune admin center
Navigate to the Apps -> Windows:
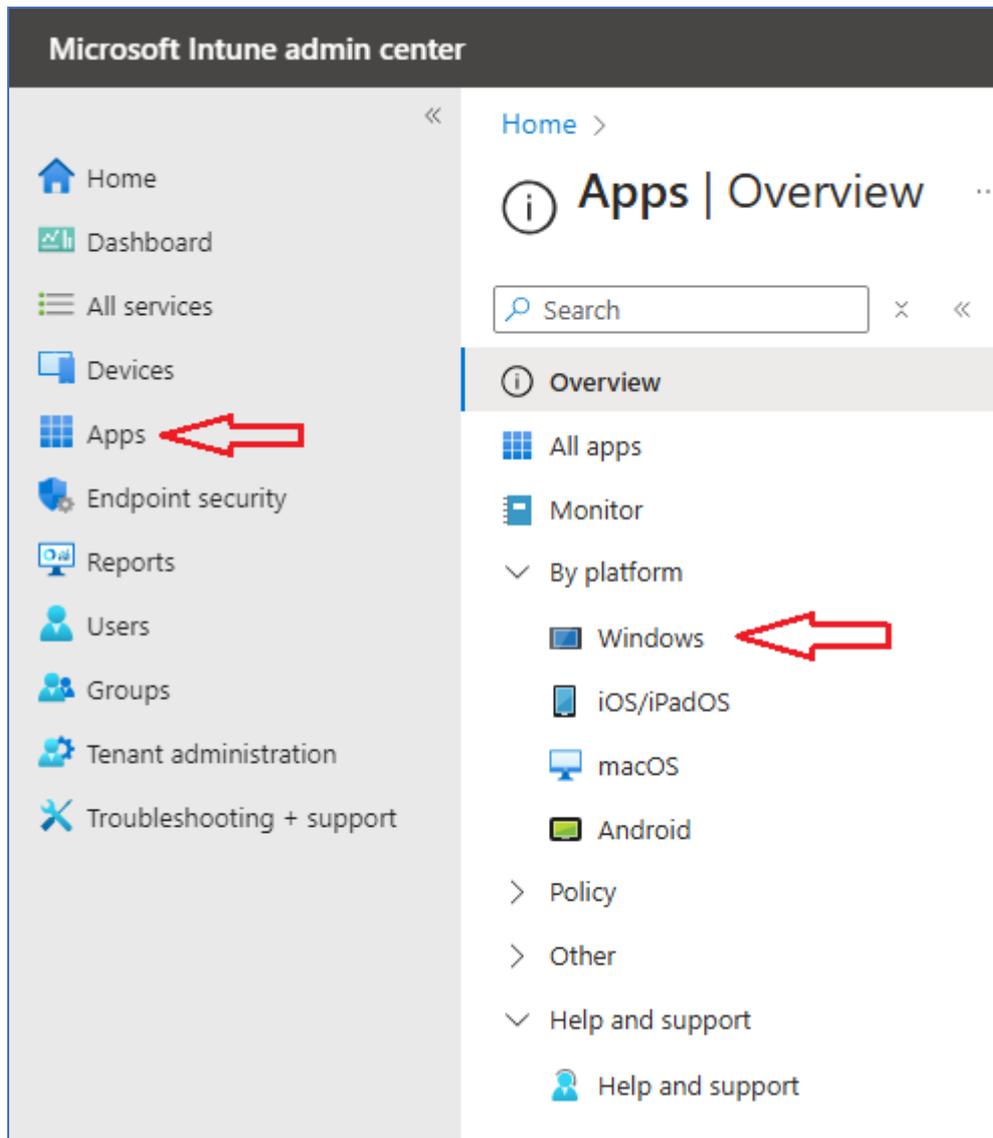
Click on **+Add** to add a new Intune application for deployment.
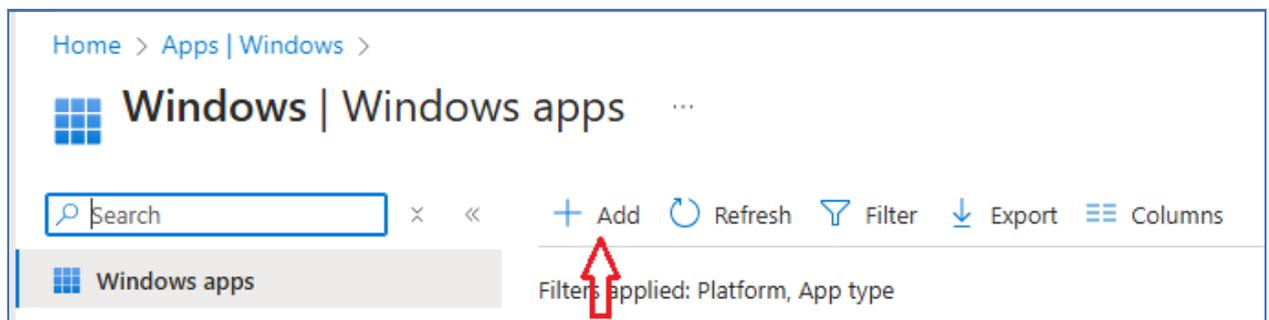
Select the **Line-of-Business app** - App Type drop-down menu from the Add app.
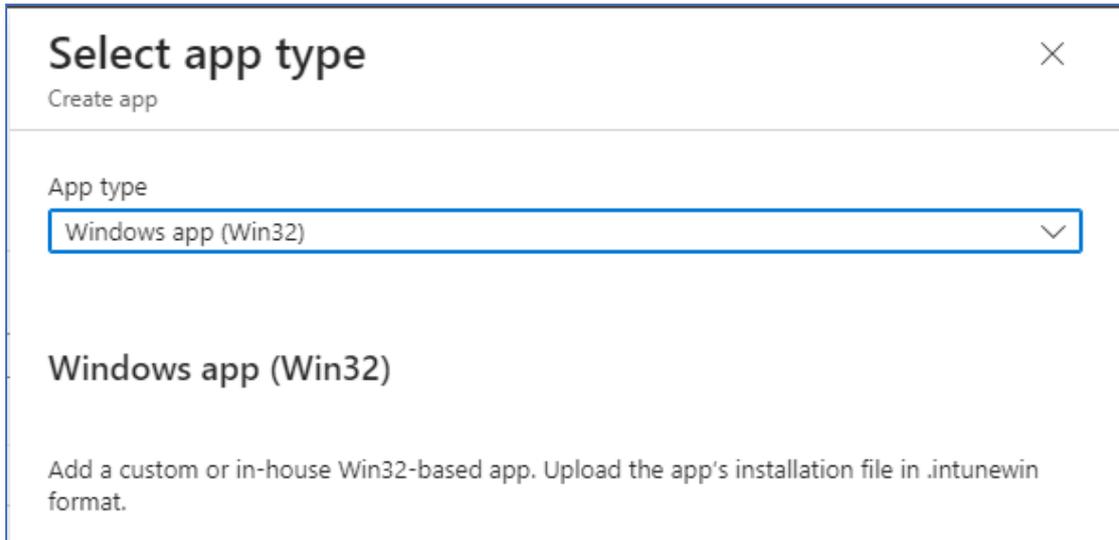
Click on the "Select app package file" to upload the IceViewer64BitSetup.intunewin file to Intune.:

On the App package file, check out the following settings Name:

Click on OK on the App Package file.
Click on the **App Information** option from Add App in Intune Application Information Details.
Need to specify the Publisher field.

The Intune automatic field is the Install and Uninstall command field.
Important: Add the REGNUM="XXXXX-XXXXXXXX-XXXXXXXXXX" to the Install command field.
Note: the XXXXX-XXXXXXXX-XXXXXXXXXX must be the serial number of the customer.

On the Requirements page, specify the rules for the app to be installed on the device. I am going to require 64-bit for Operating System architecture and the Minimum operating system of Windows 10 1607. Specify the best choices based on your company's needs.

Next, the **Detection rules** allow us to check the device to see whether the application being deployed is already on that device or not. If the application version is already on that device, it will not install. However, if nothing is detected it will go ahead and deploy. There are two options: one is to Manually configure detection rules and the other is to use a custom detection script. We will use Manually configure detection rules > + Add:

There are three Rule types to choose from: MSI, File, and Registry. Since we used an MSI package, it will automatically populate the MSI product code, so we will go ahead and click MSI.

See the rule here requires using the MSI Product code and I have the option to use the MSI Product version check. We will not need it in this case.

Next, **Dependencies** enables us to add apps that might need to be paired together for this application to be installed. We are selecting no dependencies in this case.

Next, **Supersedence** enables us to specify which apps will be either updated or replaced.

Note: If you want to update an app, disable the "Uninstall previous version" option. If you want to replace an app, however, you can enable that choice. In this case, there is nothing under Supersedence, but I may write another blog on this topic shortly if people are interested.

The next page will appear for Intune MSI Application Deployment - Assignments Options.

Click on the **Add Group** button from the Assignment tab of the application created.
Select groups where you want to assign this app from Add Group.

There are 3 (three) Assignment types - Select one assignment type.
You can deploy the MSI application to some group of devices or users as required.
The MSI application is per machine then it will get installed in the machine context.
Select Required or Available for Enrolled Devices.
Click on Included Groups from Add Group.
Select the groups you want to make this app required or available from Assign.
Click on Select Groups to select a Group for the required assignment from Assign.
Search the Device/user Group in the search option in Select Groups and select the DEVICE/USER group that you want to deploy.

Review your MSI installation and click **Create** when you are ready.

Sync an app to the enrolled device

Once the application is deployed from Microsoft Intune, it can be synced to a device by following the below steps:
Go to an enrolled device, in our case we used a Windows 11 machine.
Right-click on the Windows icon and then go to Settings.
Click on Accounts -> Access work or school.

Click on the **Info** button.
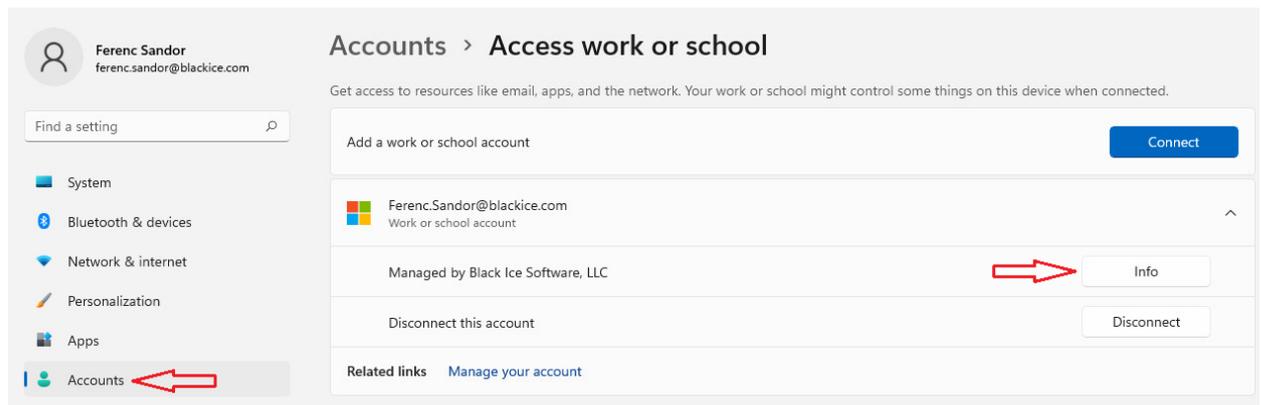
Click on sync for syncing apps and policies.
Optional: Restart your machine if the app does not appear on your device.

Status/Monitoring – Intune MSI Application Deployment

You can check the state of the deployed application.

Navigate via Microsoft Intune - Apps > **Monitor**.
Click on **App Install Status** and select the application you want to know the status of the application.

From the application (this will be in the application name), click on Overview to get a graphical view of the MSI application deployment status.

Update/Upgrade an IceViewer

Intune will automatically reinstall, update, or remove a required app based on the following conditions:

- If an end user uninstalls an app that you have required to be installed on the end user's device, Intune will automatically reinstall the app.
- If a required app install fails or somehow the app is not present on the device, Intune evaluates compliance and reinstalls the app.
- If the admin deploys uninstall intent and the app is present on the device and failed to uninstall, Intune evaluates compliance and uninstalls the app.

When you need to update or upgrade an already installed app, use the following steps:

Navigate via Microsoft Intune – Apps > **All apps**.
Find and select your app from the list of apps.
Select **Properties** under Manage from the app pane.
Select **Edit** next to **App information**.
Click on the listed file next to **Select file** to update.
The **App package file** pane is displayed.

Uninstall an IceViewer

When you need to uninstall an app from a user's device, use the following steps:
Navigate via Microsoft Intune – Apps > All apps > IceViewer > Manage > Properties
> Assignments > Edit.

In the **Add group** pane, select **Uninstall**.
Select **Included Groups** to select the groups of users that are affected by this app
assignment.
Select the groups that you want to apply the uninstall assignment.
Click **Select** on the **Select groups** pane.
Click **OK** on the **Assign** pane to set the assignment.
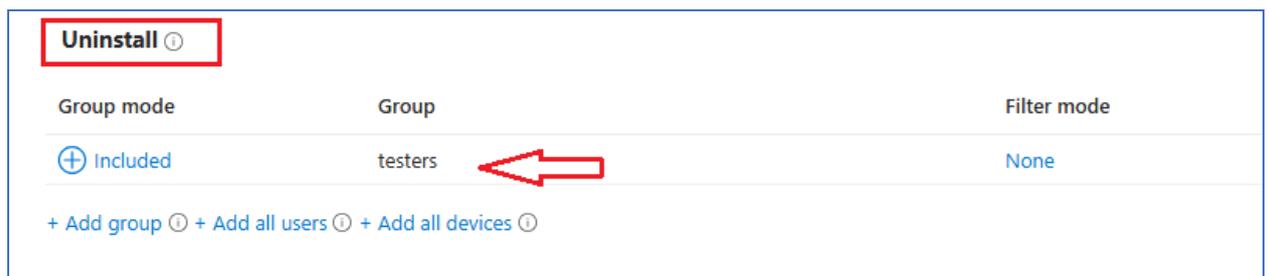
Note: If you want to exclude any groups of users from being affected by this app
assignment, select **Exclude Groups**.
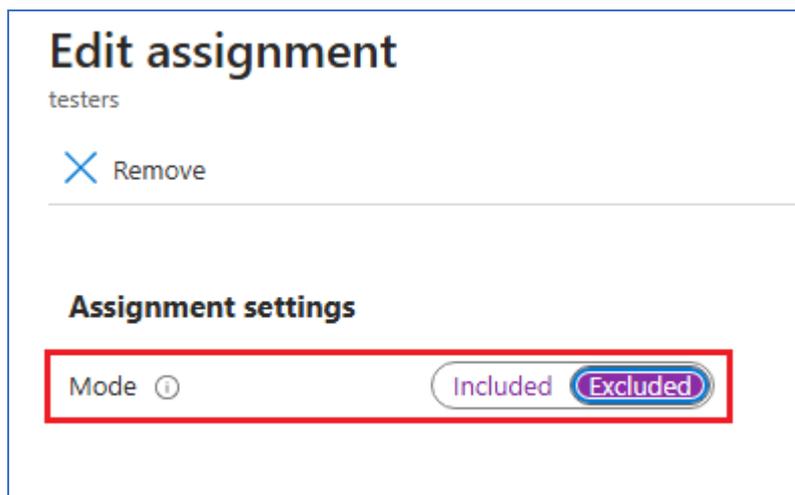
Select **OK** in the **Add group** pane.
Select **Review and Save** in the app **Assignments** pane.

Installing the IceViewer with SCCM

To deploy the IceViewer MSI installer with SCCM (System Center Configuration Manager), please follow the steps below how to create an Application package for IceViewer in SCCM.

Open the System Center Configuration Manager

Navigate to Software Library
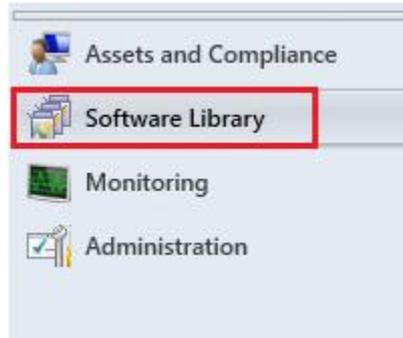
Select Applications
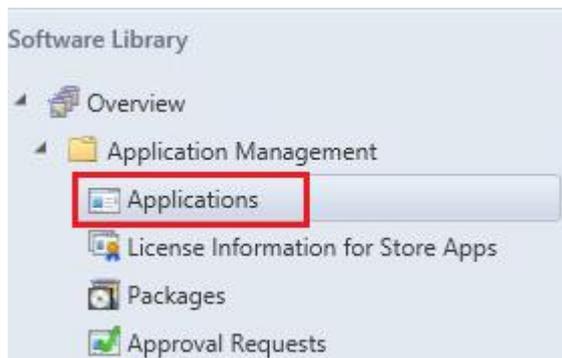
Right click on form and select **Create Application**
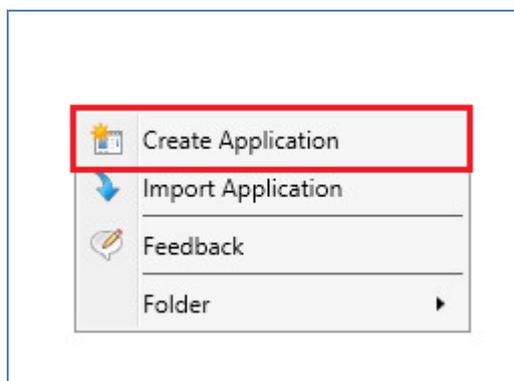
Add MSI installer file (Example:
\\BiVM2k12R2SCCM\MSI_Installers\IceViewer64BitSetup.msi)
Type: Windows Installer (*.msi file)
Note: The location file from shared directory on SCCM server.
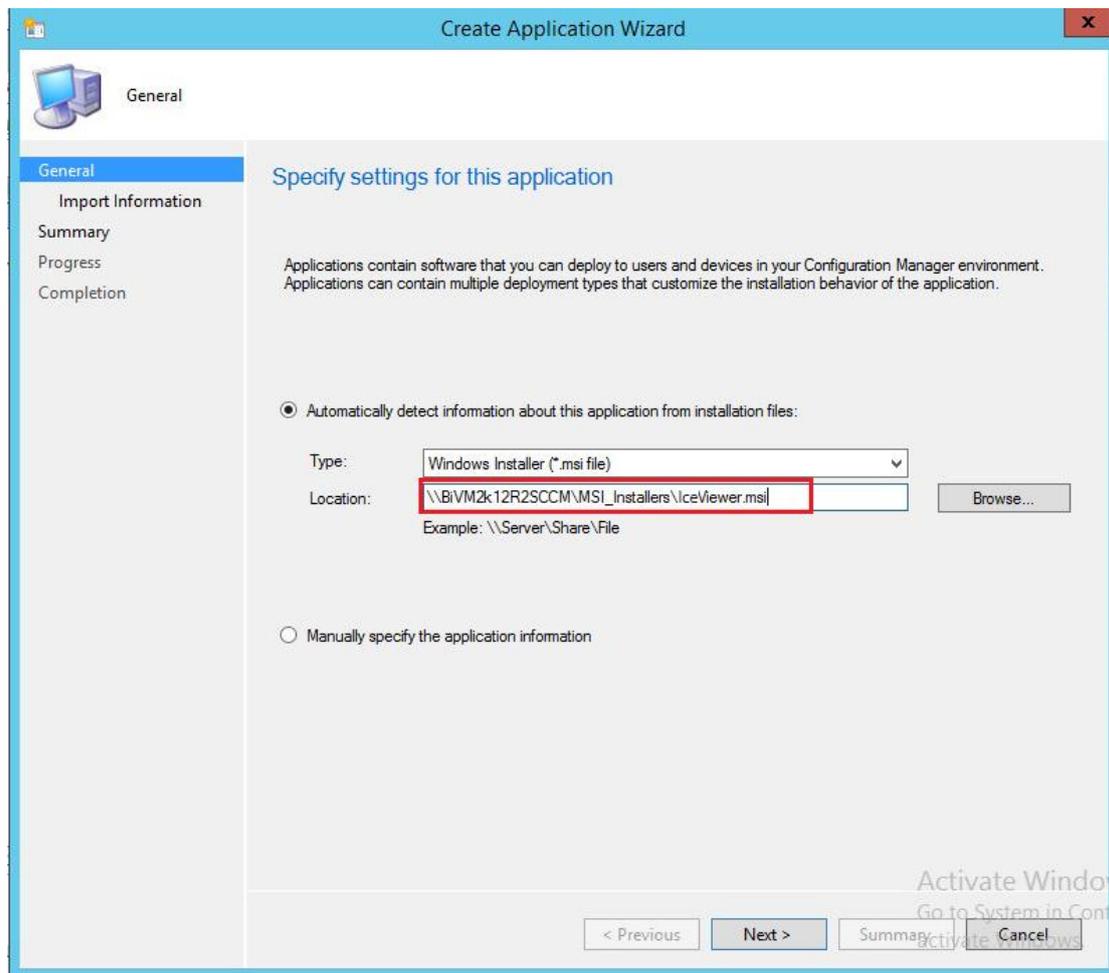
Click **Next** button.
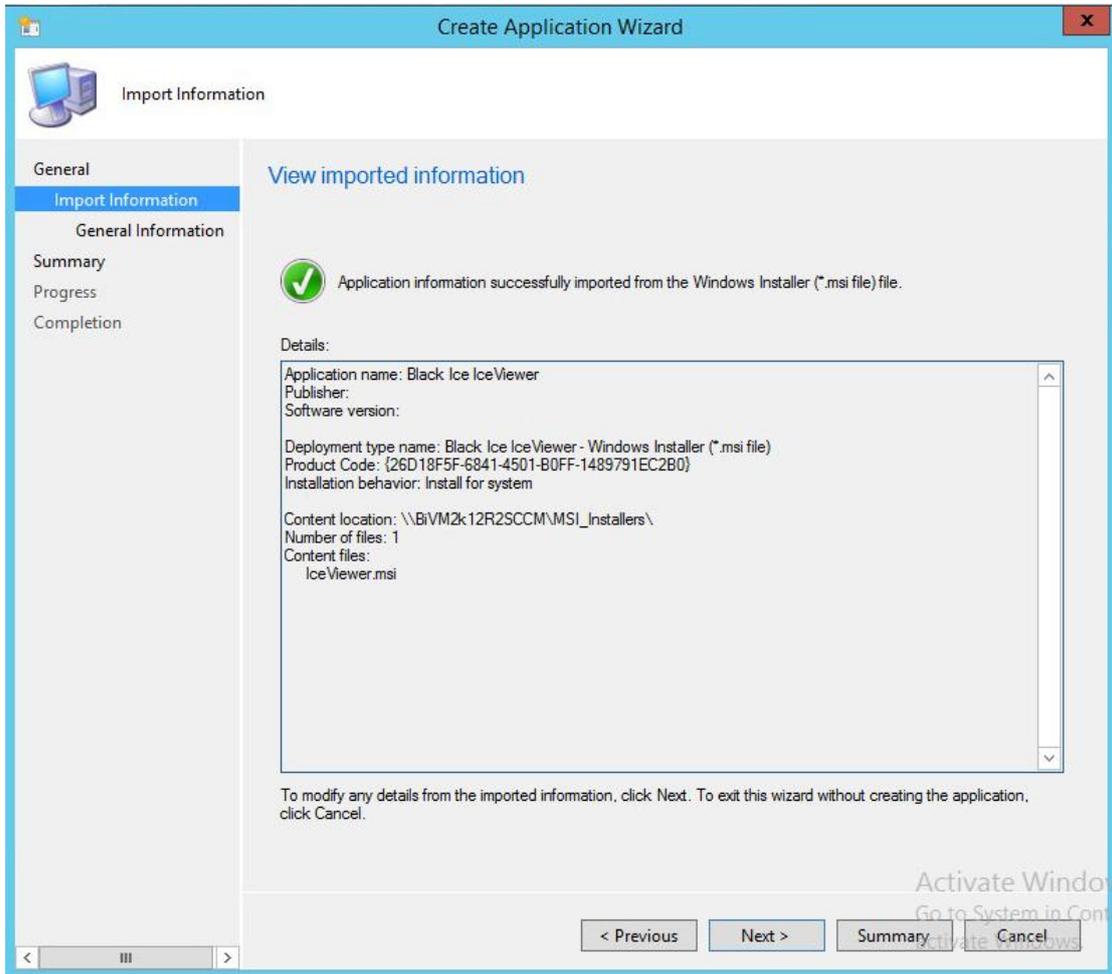
Click **Next** button.
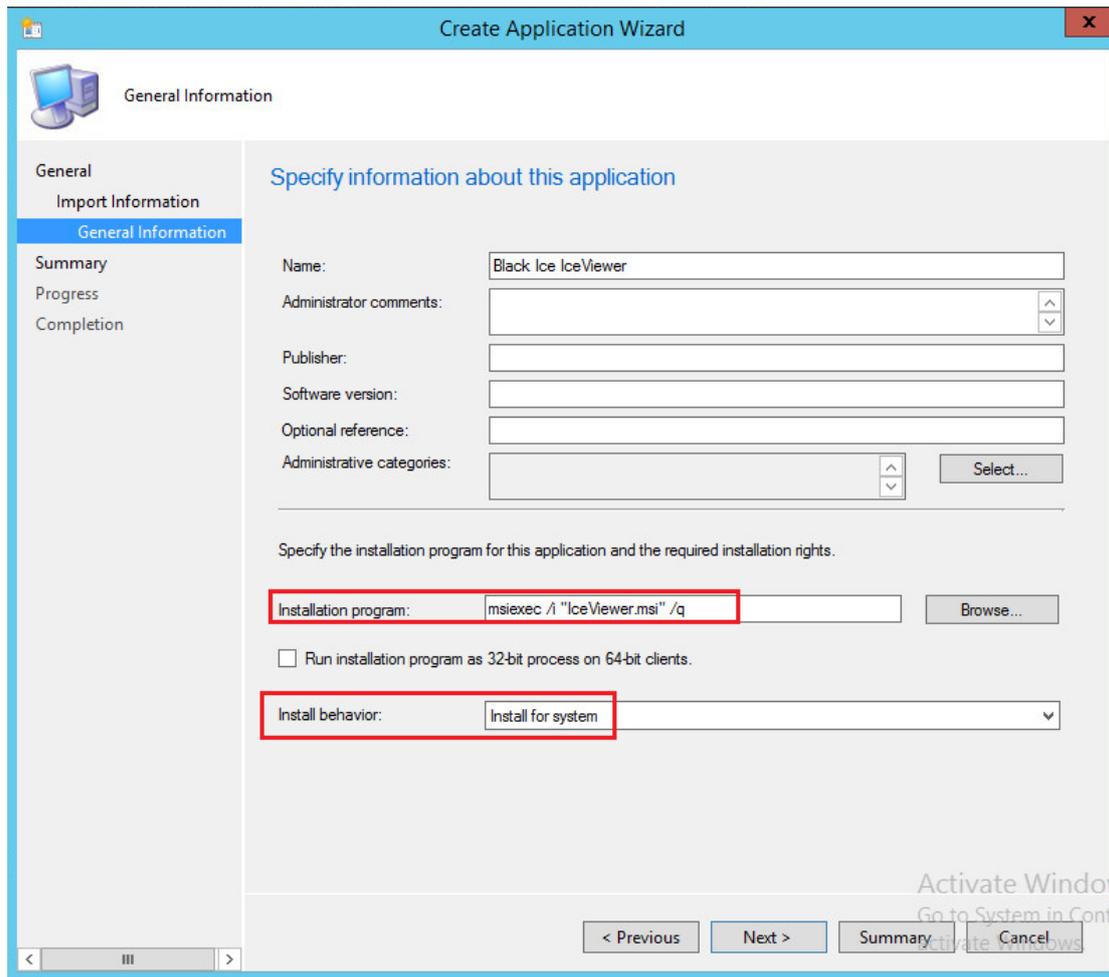
Configure the following entries:
- Publisher
- Software version

Example:
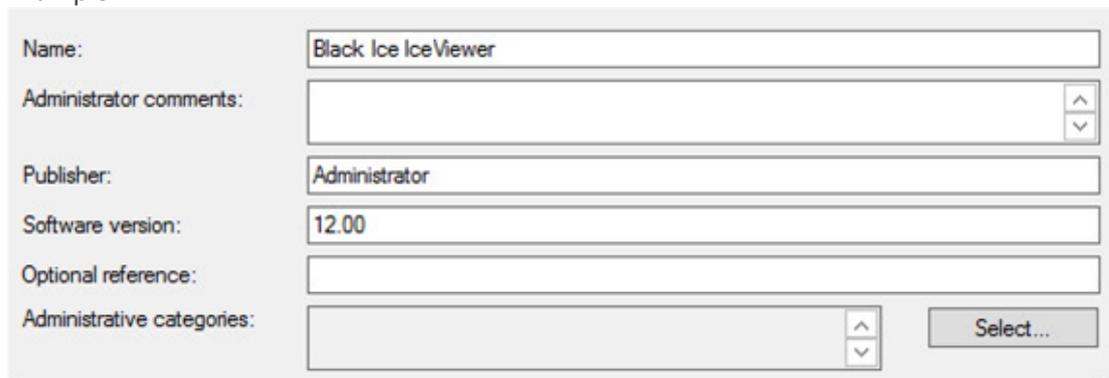
The SCCM automatically fills the Installation program.
Msiexec /i "IceViewer64BitSetup.msi" /q

Install with TRANSFORM parameter.
Create transforms (MST) file with Orca", read the "**How to use ORCA**" section.
Add the TRANSFORM parameter with transformation file with full path.
Example: \\[**SCCM Server**]\MSI installers\IceViewer.mst

Note: The location file from shared directory on SCCM server.

The MSI installer does not support the environments variable.

If using the environments variable for the CUSTOMINI or TARGETDIR parameters, create a batch file with the following text:
msiexec /i "IceViewer64BitSetup.msi" CUSTOMINI="%randomname%IceViewer.ini" REGNUM=xxxxx-xxxxxxxx-xxxxxxxxxx /q

NOTE: The Installer behavior is **Install for system**.

Check the **Run installation program as 32-bit process on 64-bit clients**.

Click **Next** button.
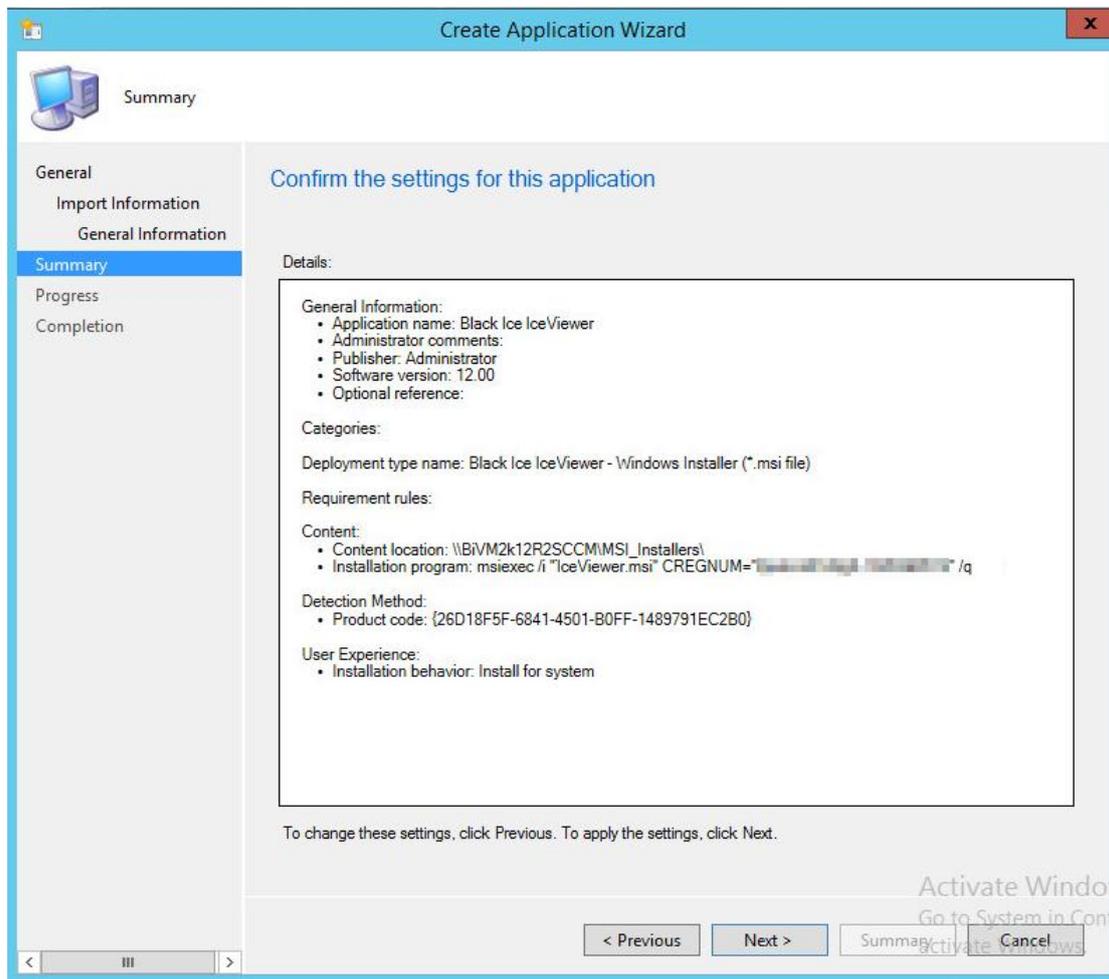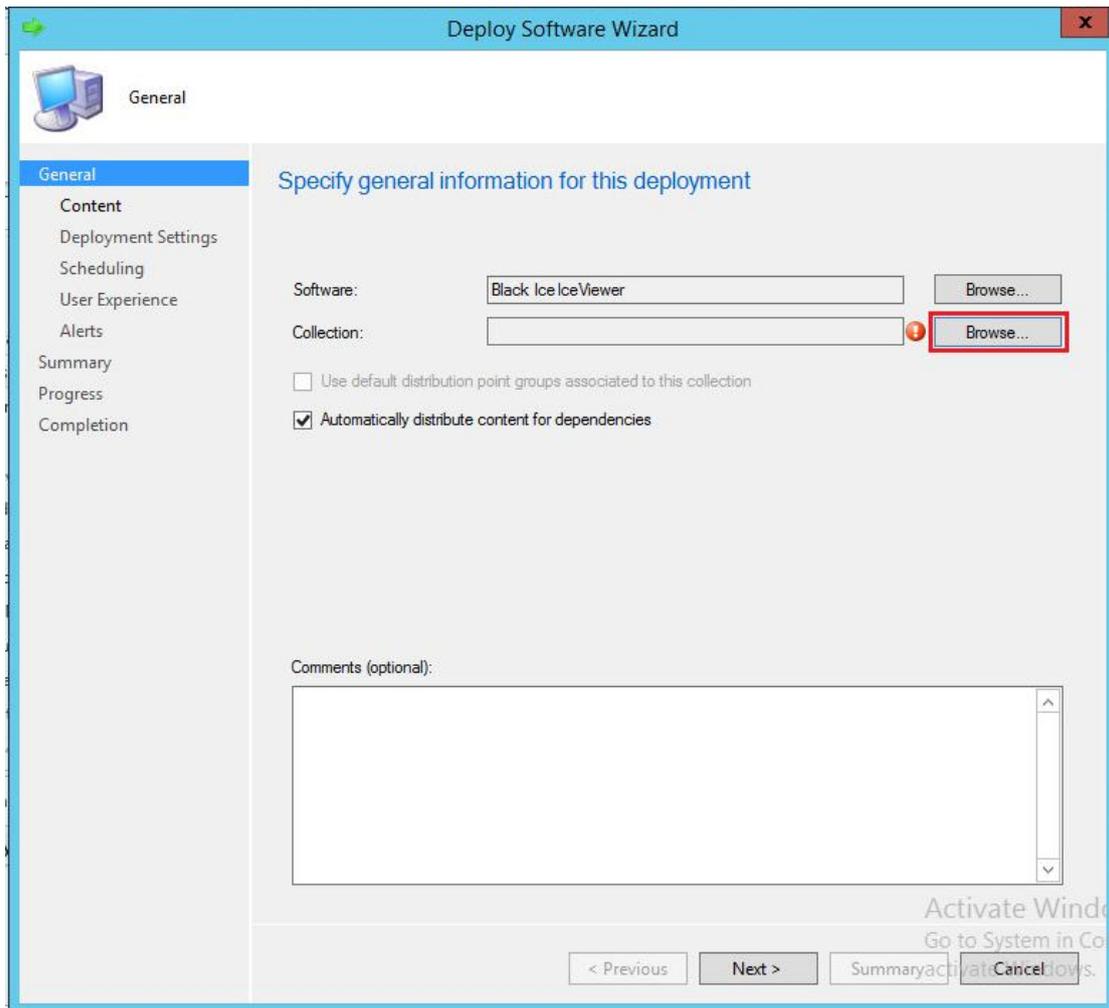
Click **Next** button.
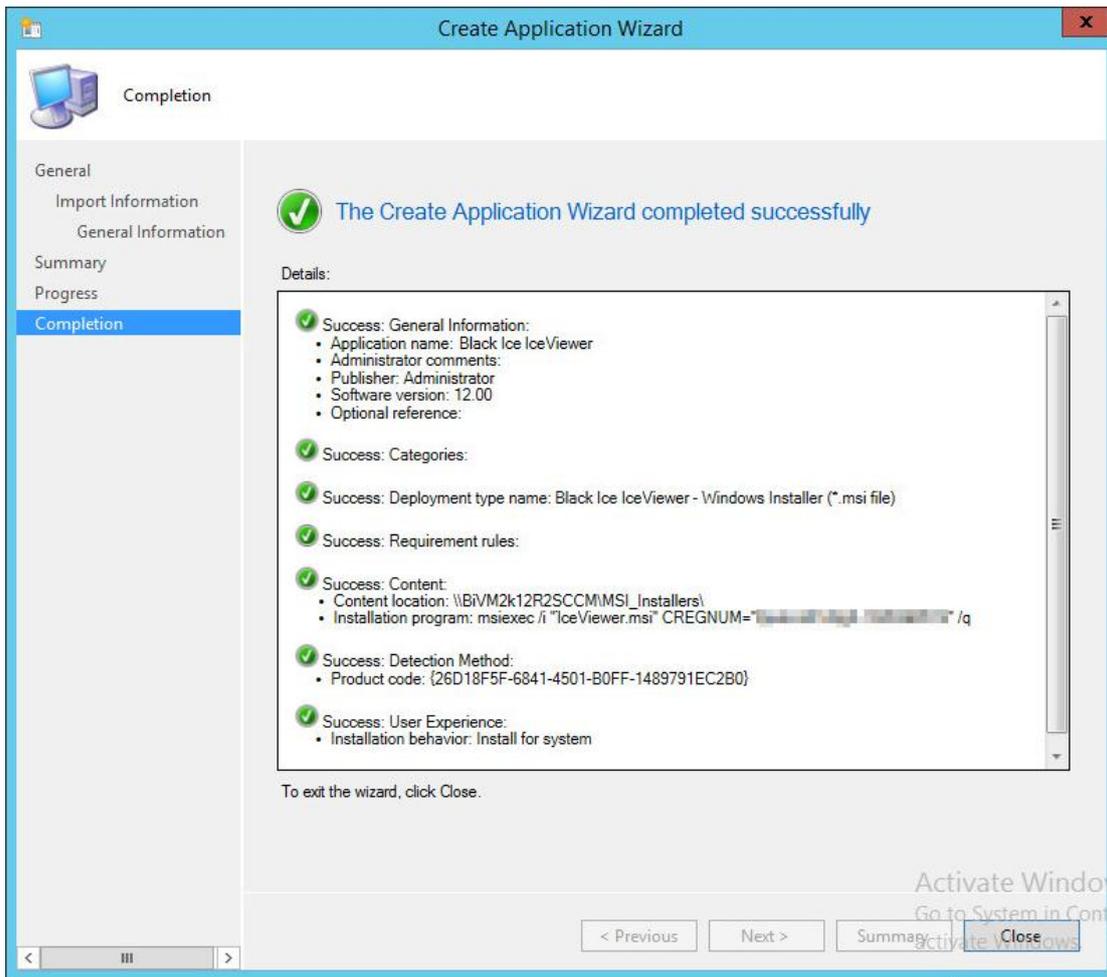
Click the **Close** button.

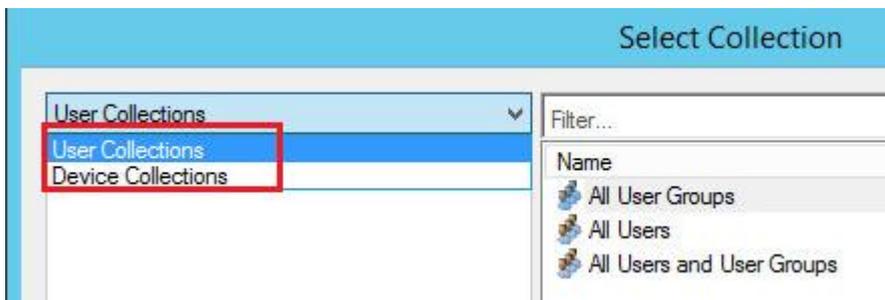Finished the install package:
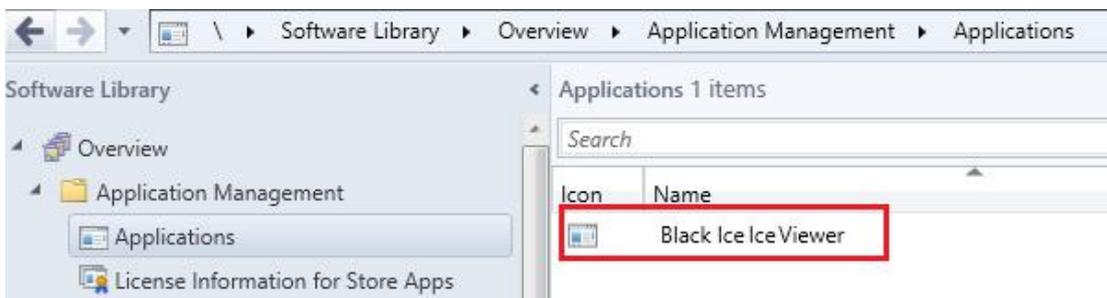
Install (**Deploy**) the Application to client(s)
Right click on Application (Example: Black Ice IceViewer)
Select the Deploy:
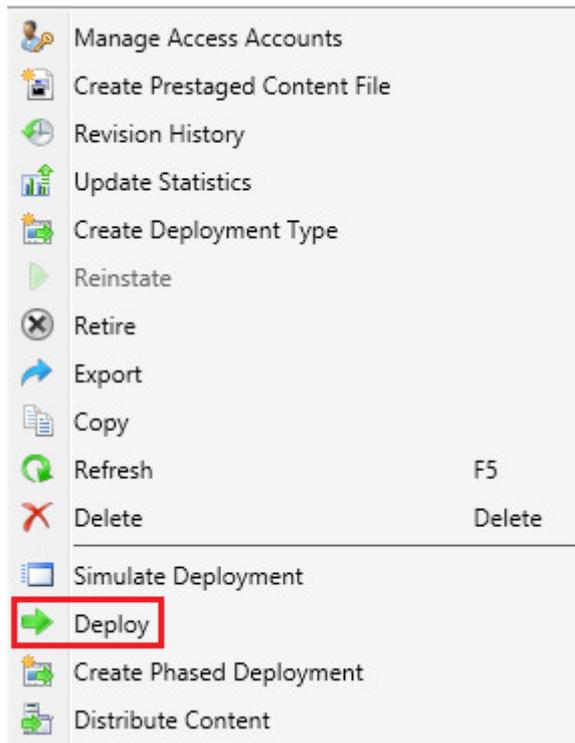
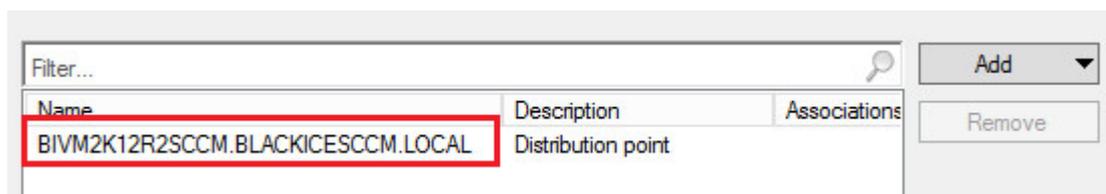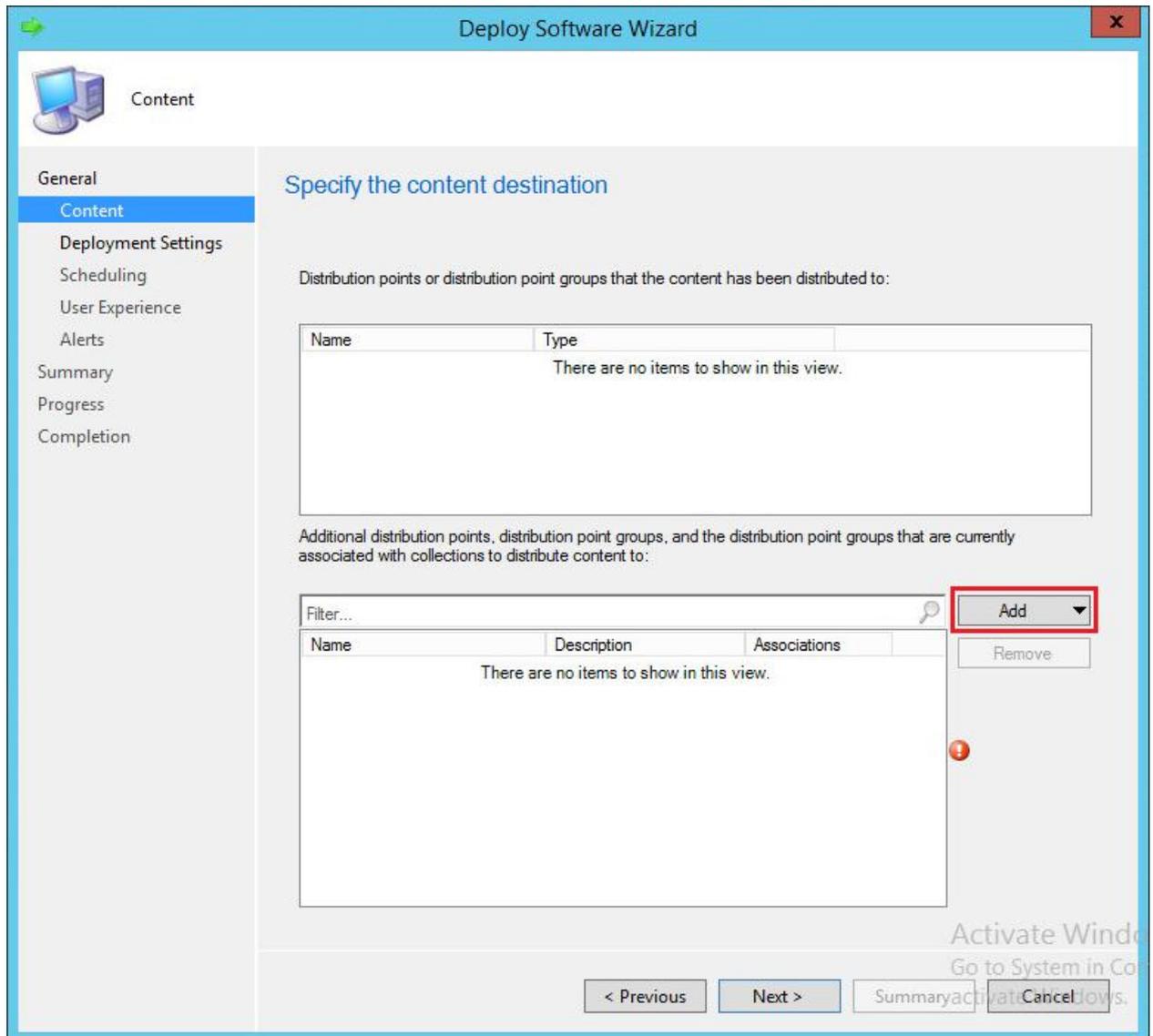Click to Collection -> Browse... button.
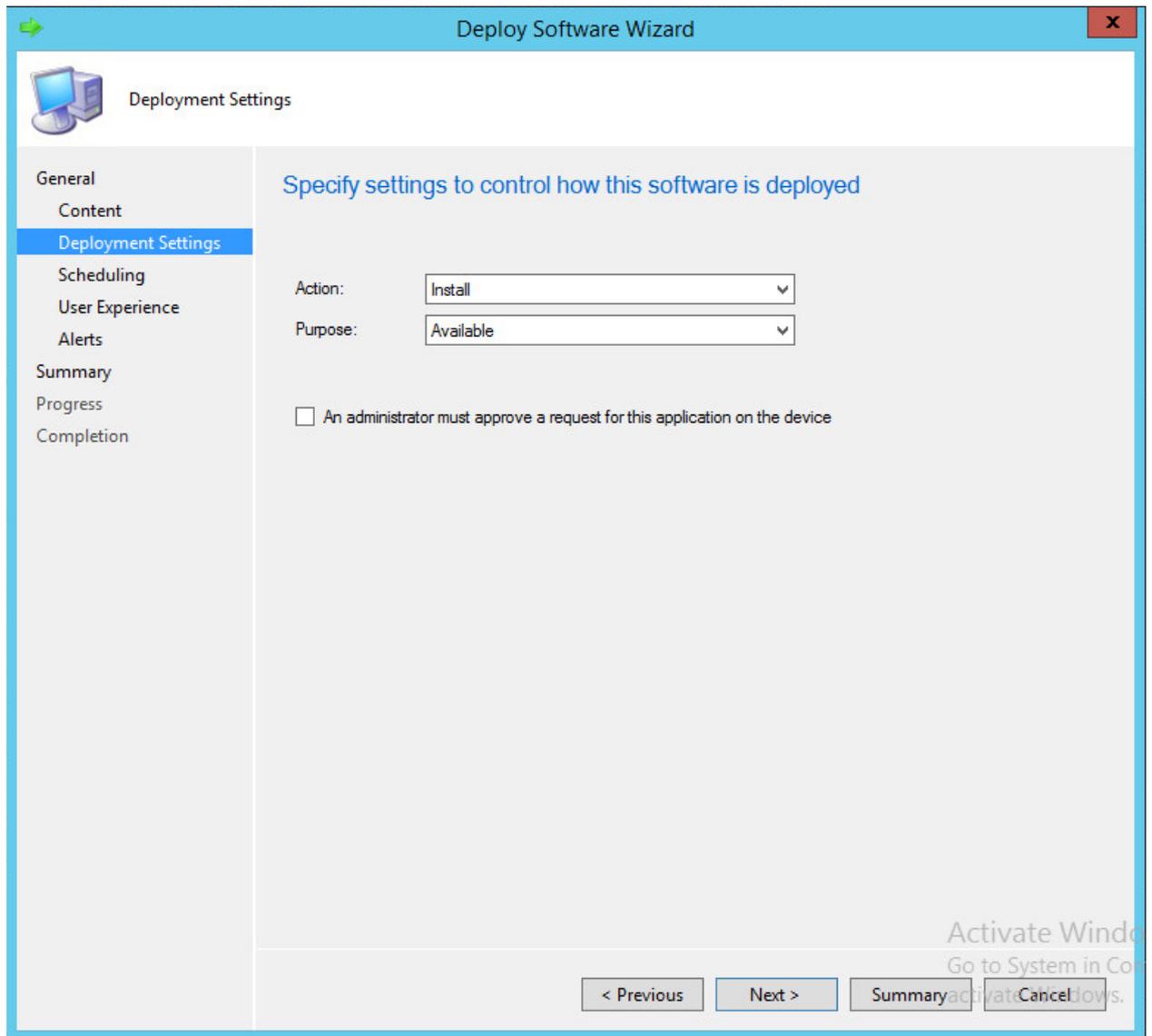
You can add Application to Users or Devices

Install for Users, select the User Collections
Install for Computers, select the Device Collections

Example for User:
Select the Testers
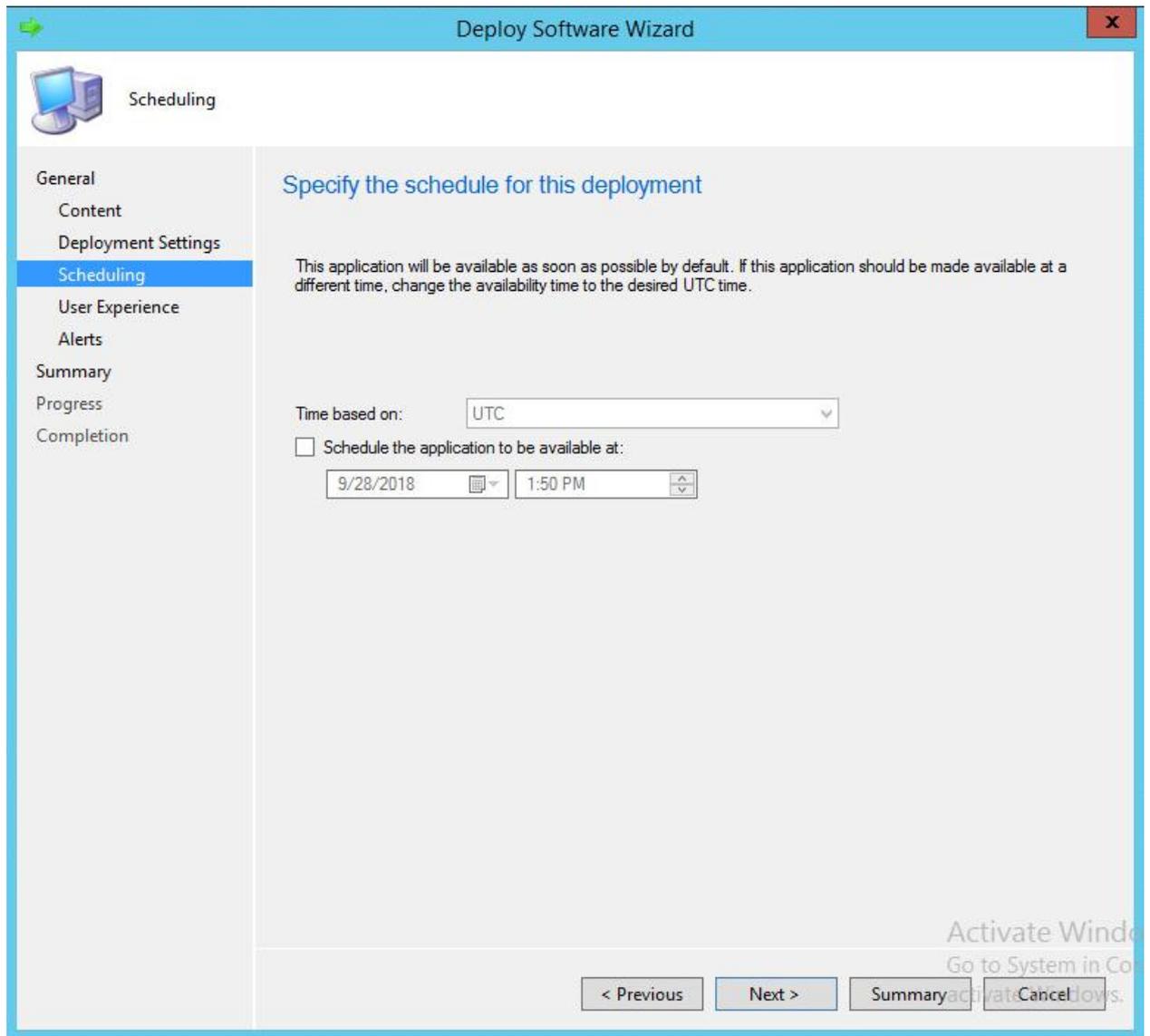Click **Next** button.

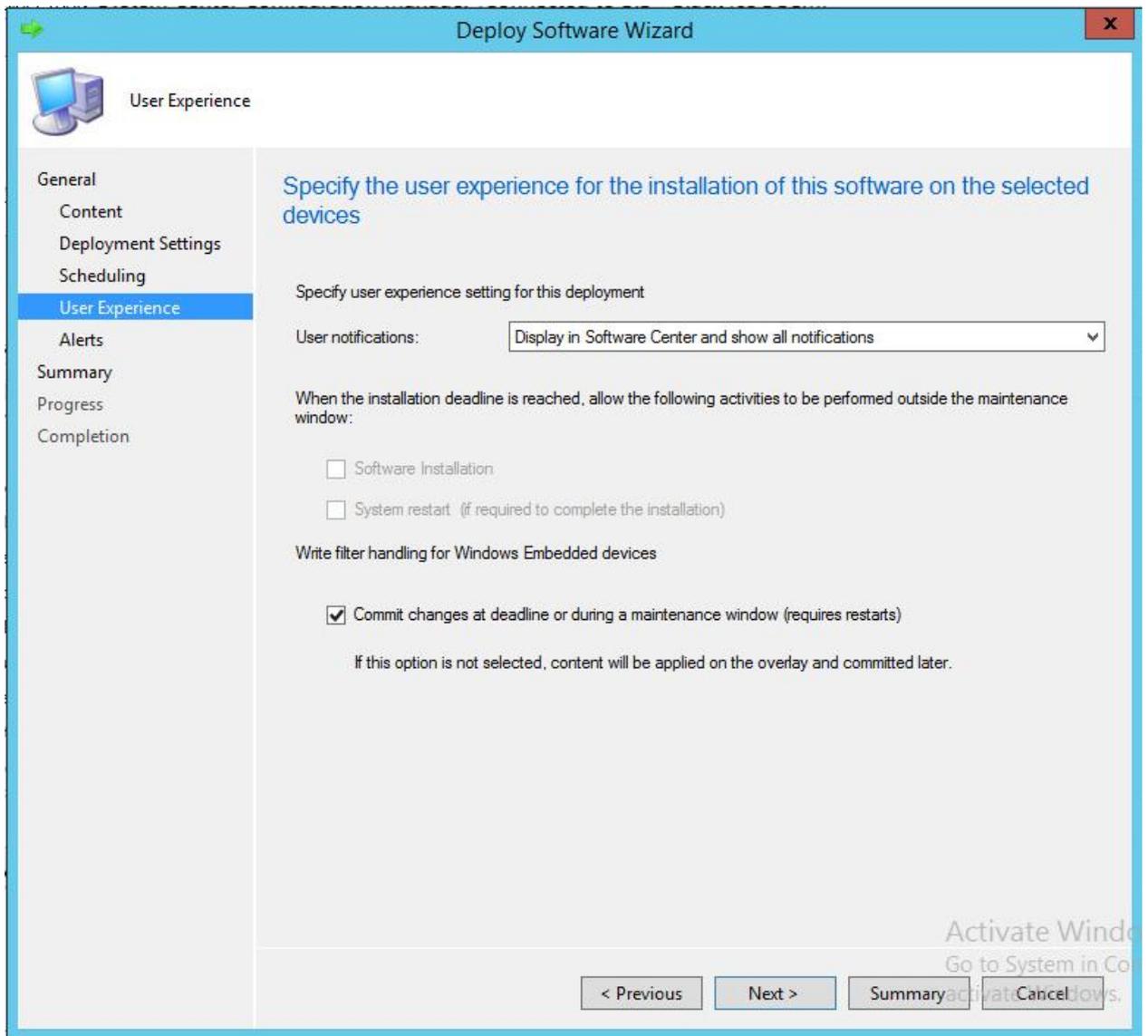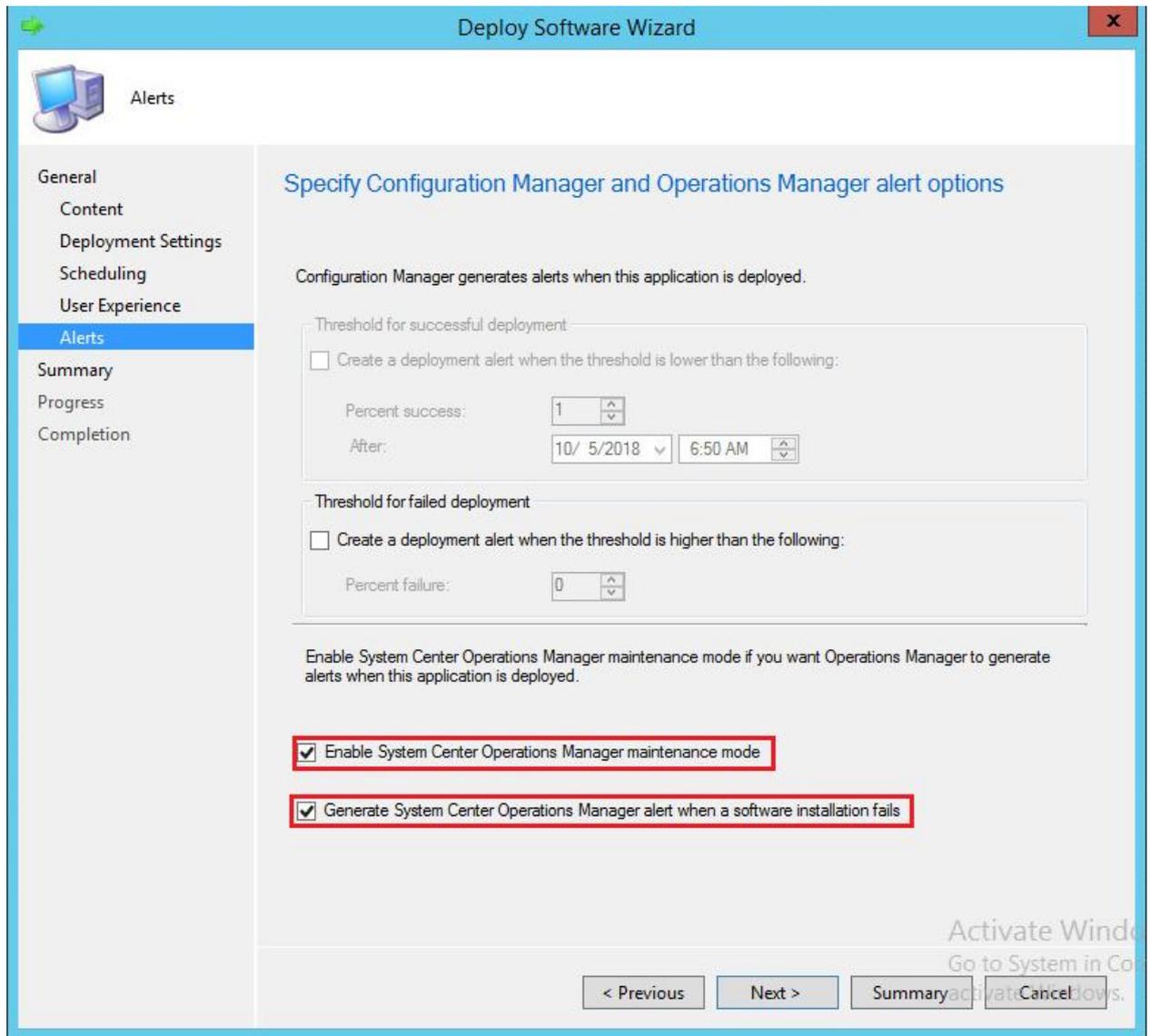Click **Add** button and select the Distribution Point

Click **Next** button.

Use default settings and click **Next** button.
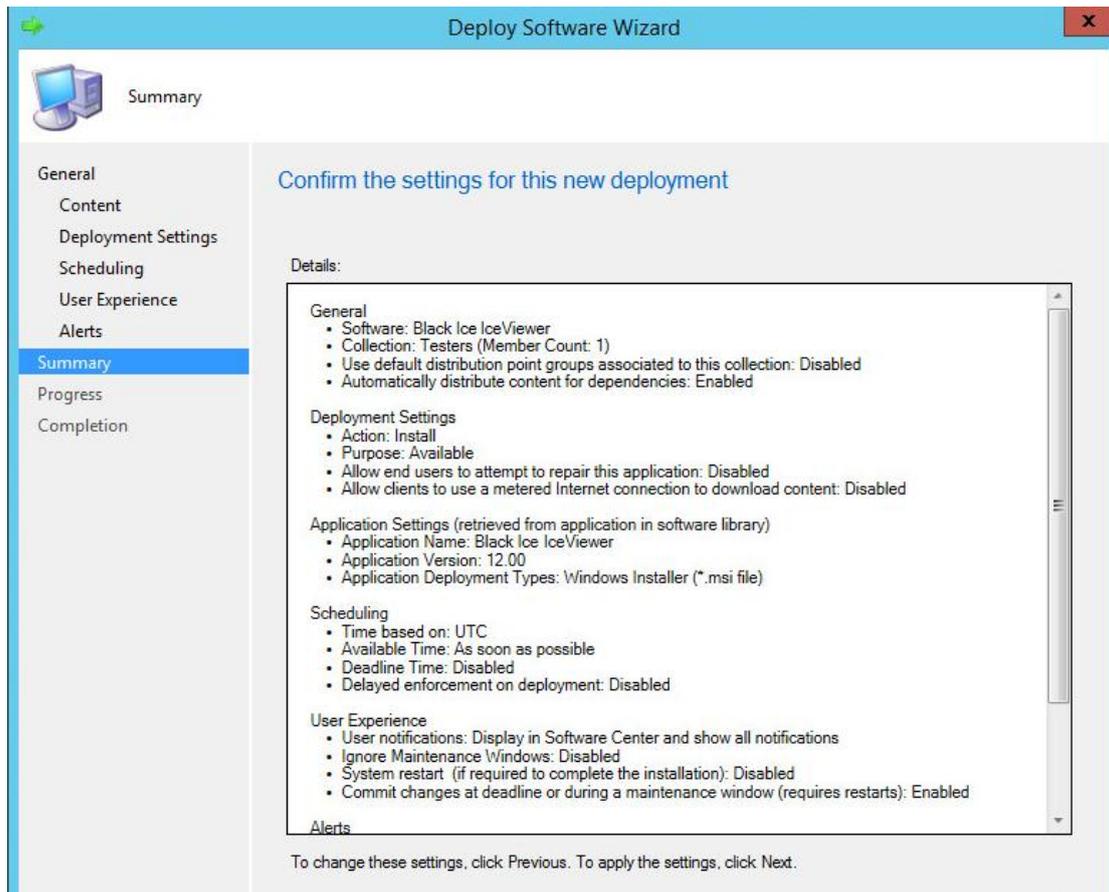You can configure the installation time.

Click **Next** button.

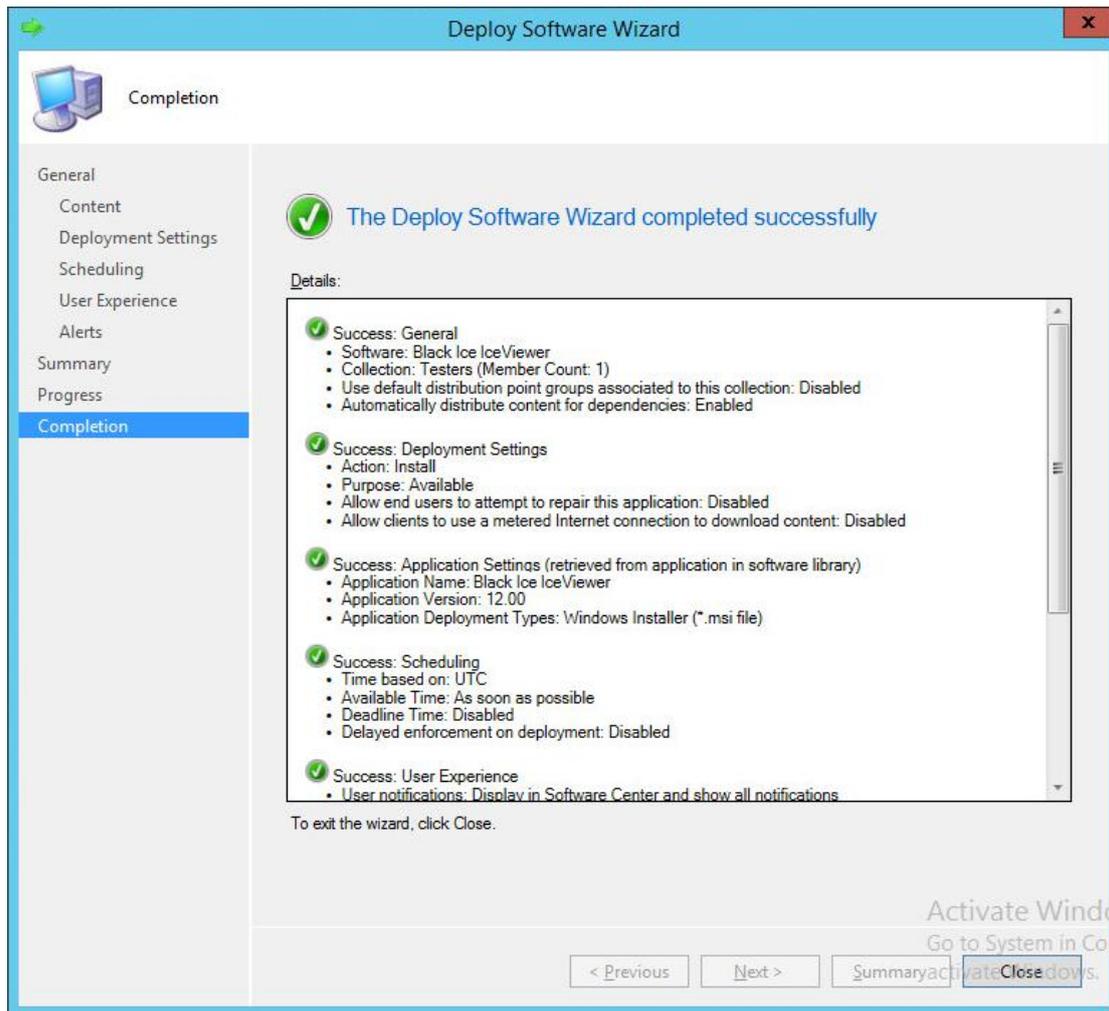Click **Next** button.

Click **Next** button.

Deploy Software Wizard

Summary

General
  Content
  Deployment Settings
  Scheduling
  User Experience
  Alerts
Summary
Progress
Completion

Confirm the settings for this new deployment

Details:

General
• Software: Black Ice IceViewer
• Collection: Testers (Member Count: 1)
• Use default distribution point groups associated to this collection: Disabled
• Automatically distribute content for dependencies: Enabled

Deployment Settings
• Action: Install
• Purpose: Available
• Allow end users to attempt to repair this application: Disabled
• Allow clients to use a metered Internet connection to download content: Disabled

Application Settings (retrieved from application in software library)
• Application Name: Black Ice IceViewer
• Application Version: 12.00
• Application Deployment Types: Windows Installer (*.msi file)

Scheduling
• Time based on: UTC
• Available Time: As soon as possible
• Deadline Time: Disabled
• Delayed enforcement on deployment: Disabled

User Experience
• User notifications: Display in Software Center and show all notifications
• Ignore Maintenance Windows: Disabled
• System restart (if required to complete the installation): Disabled
• Commit changes at deadline or during a maintenance window (requires restarts): Enabled

Alerts

To change these settings, click Previous. To apply the settings, click Next.

Click **Next** button.

Click **Close** button.

Finished the installation.

Check **Installation**.
Select the Monitoring -> Overview -> Deployments

Install the IceViewer MSI on client computers

Open the **System Center** and select **Applications**.
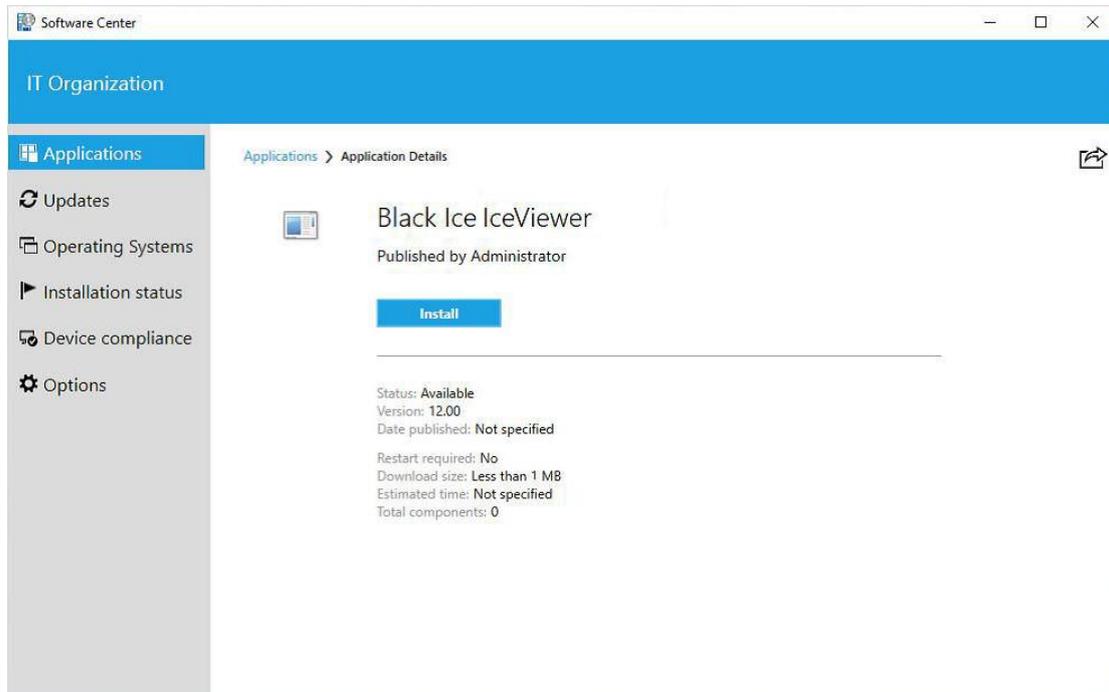
Click **Install** button.

Uninstall the IceViewer MSI from client computer

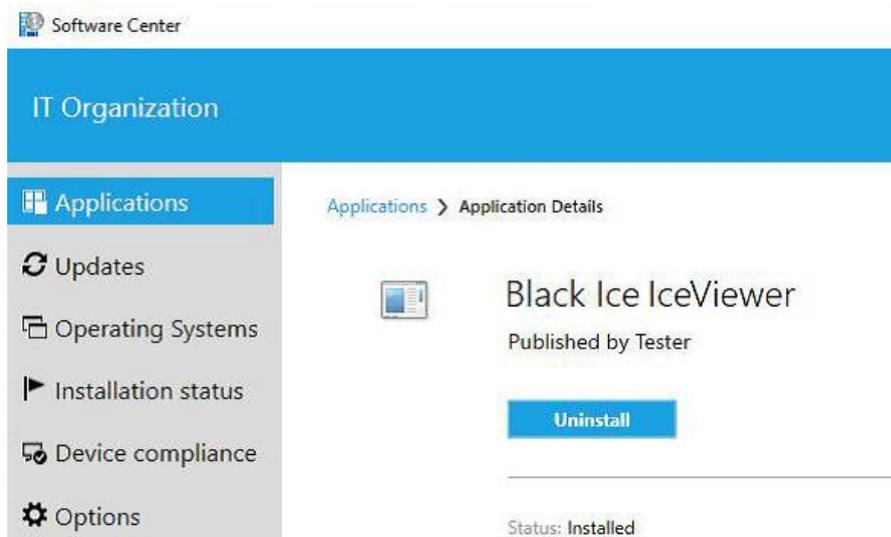Open the **System Center** and select **Applications**.

Click **Uninstall** button.

Publishing IceViewer with Citrix XenApp

This page includes descriptions for how to publish the IceViewer from a Citrix XenApp environment.

[Publishing IceViewer from Citrix XenApp Server](#)

Publishing IceViewer from Citrix XenApp Server

In order to publish the IceViewer Server through Citrix XenApp, install IceViewer on the Citrix XenApp server, and open the Citrix Delivery Services Console.

Navigate to the **Citrix Resources > XenApp > Your Farm > Applications** and click on **Publish Application** on the right-side menu.
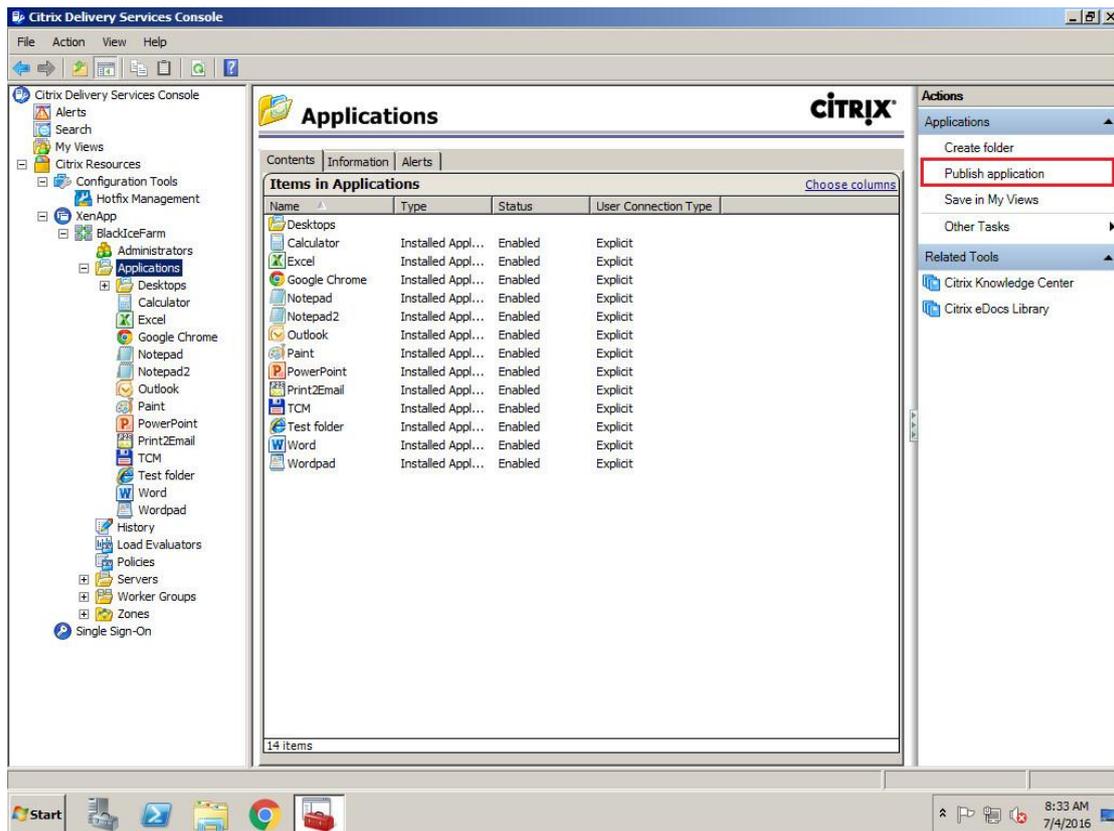
Go through on the Publish Application wizard of the Citrix XenApp. Enter the display name you would like to be displayed.
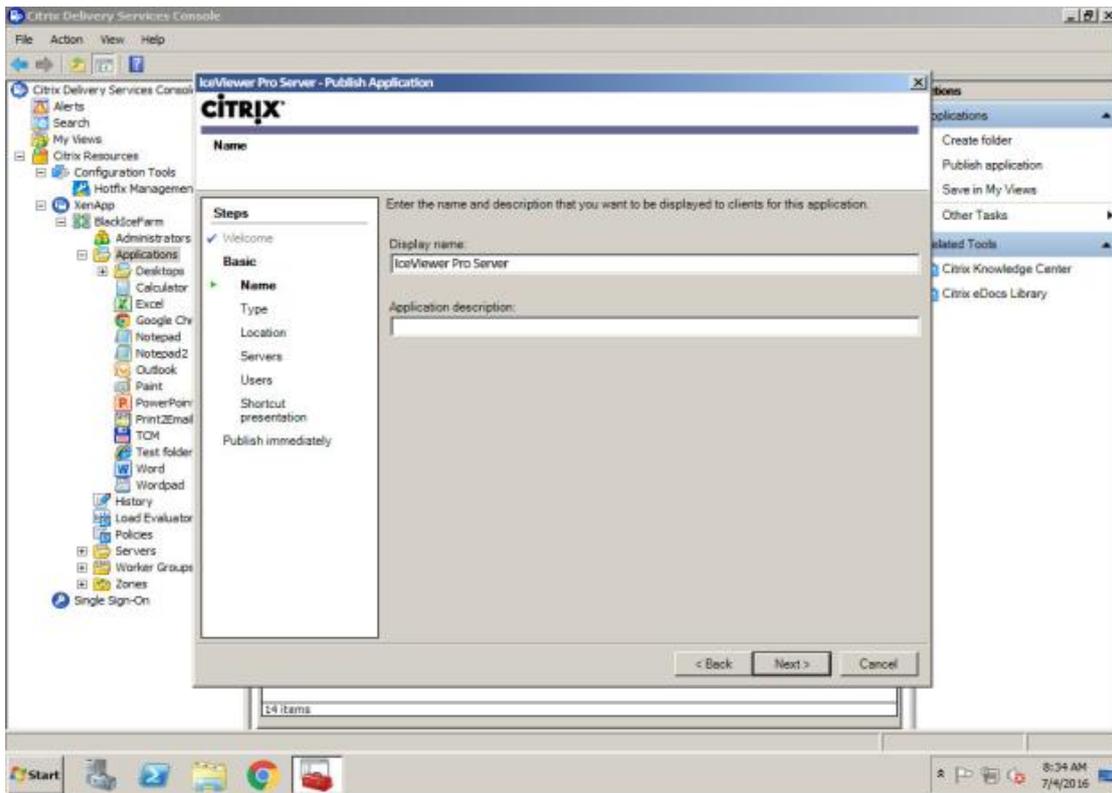
Select **Application** > **Accessed from a server**. This accessing method provides the most reliable functioning of the IceViewer, and to make sure that the registration on the client will work properly.
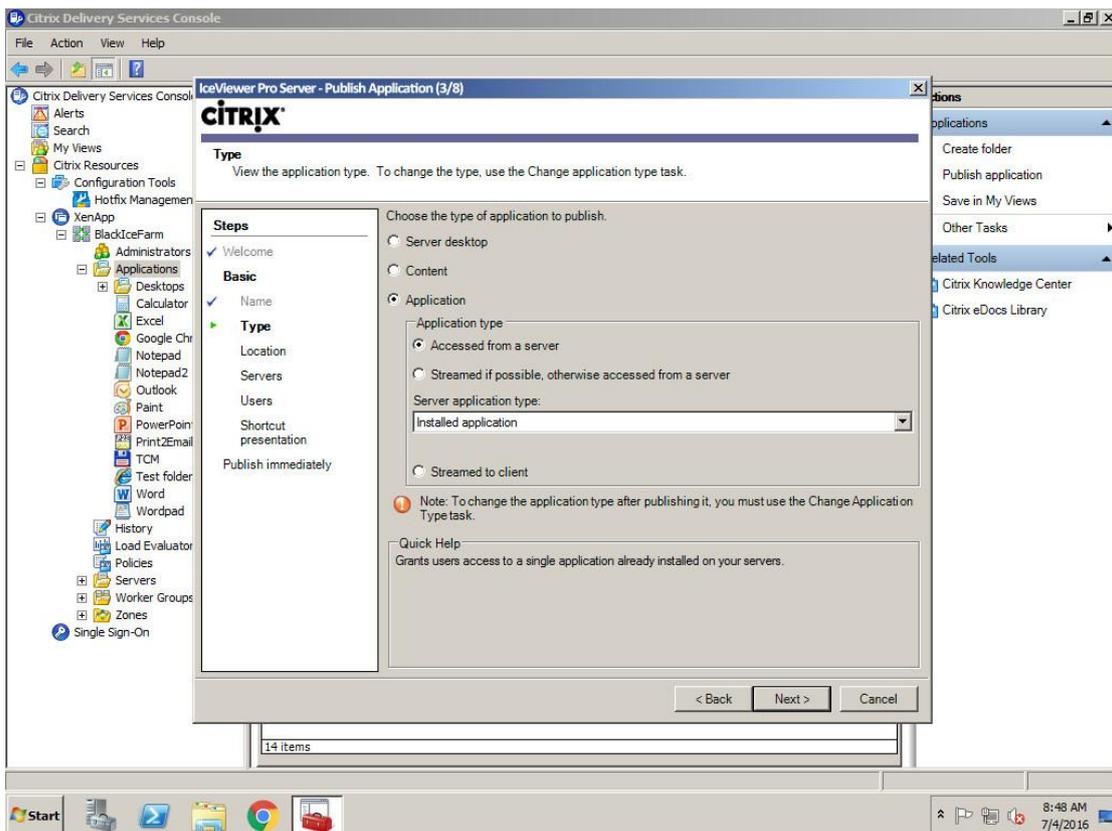
Browse the location of the IceViewer executable file. By default, it's the following:
C:\Program Files (x86)\Black Ice Software LLC\IceViewer**IceViewerPro32BitSetup.exe**
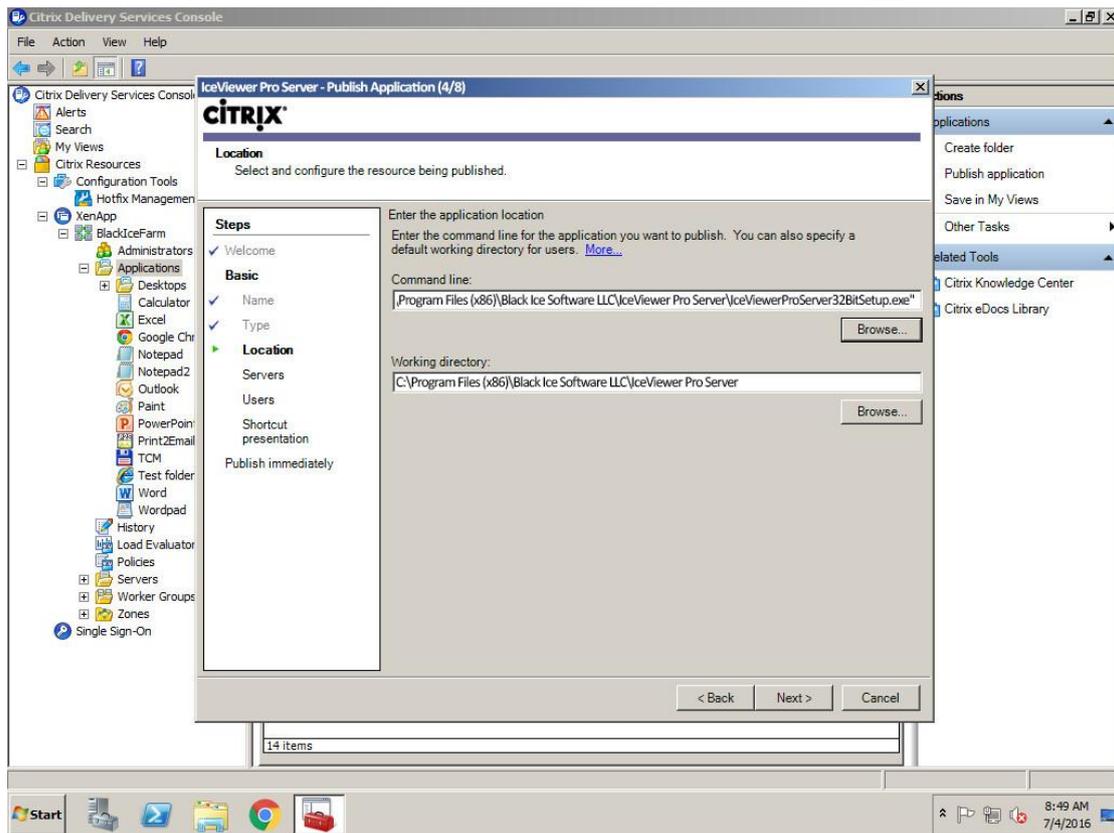
Choose the servers on which the IceViewer will run.
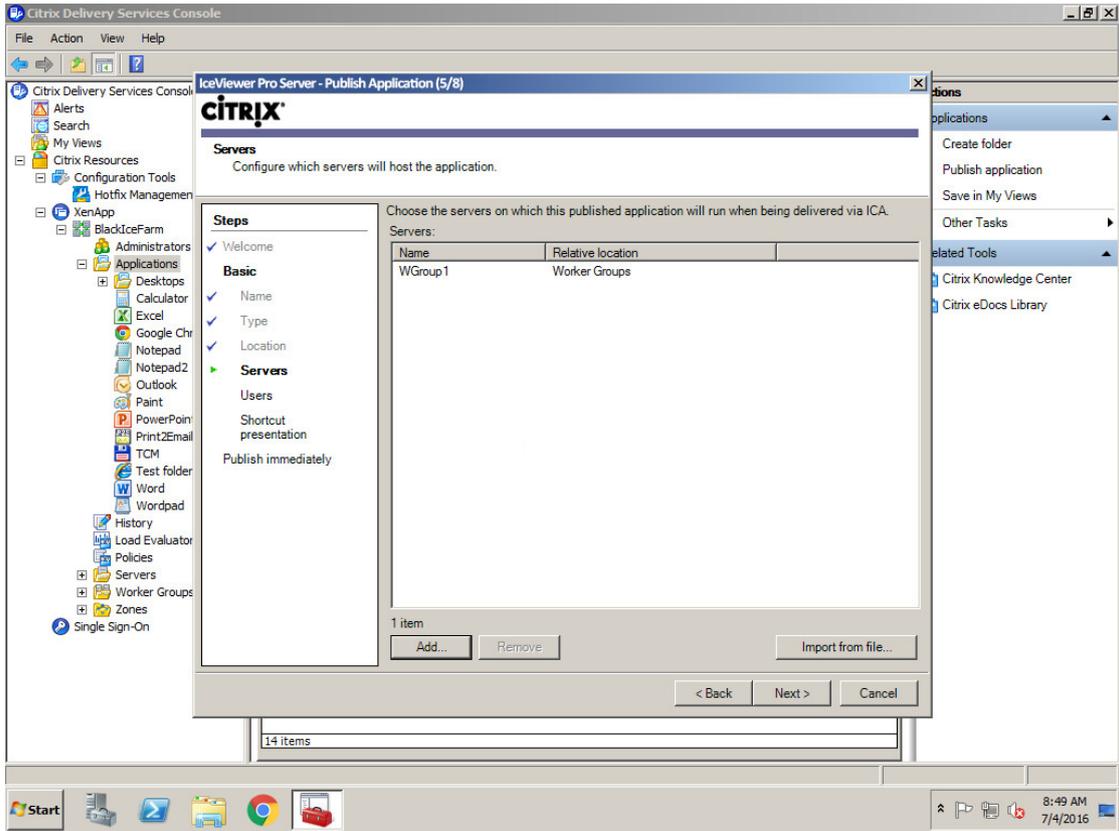
Specify the users who can access the IceViewer.
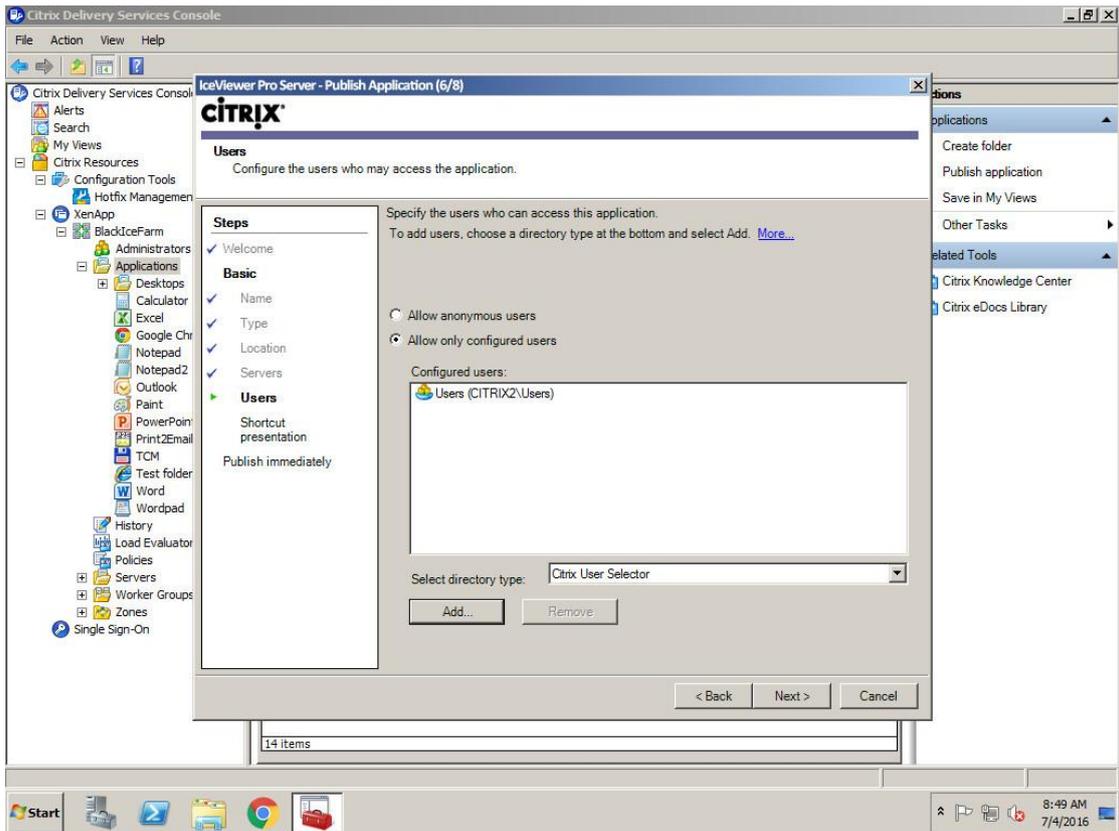
Customize the shortcut presentation if needed.
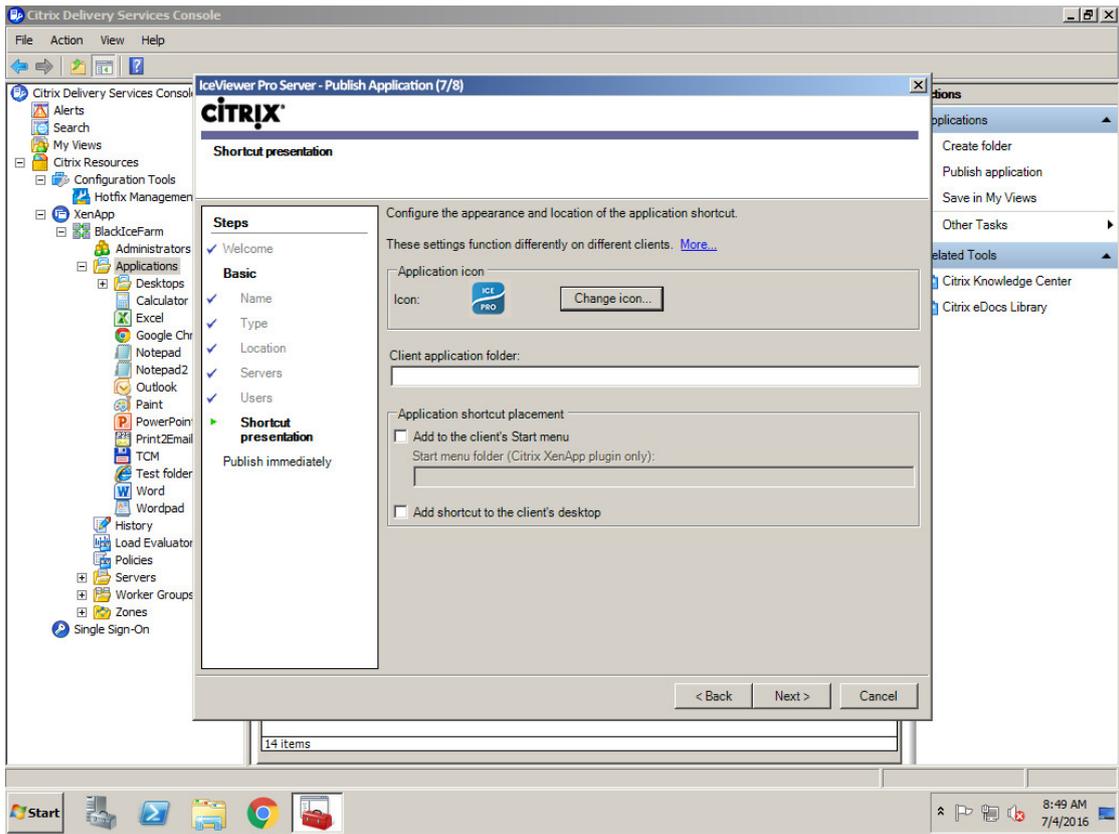
Finish publishing.
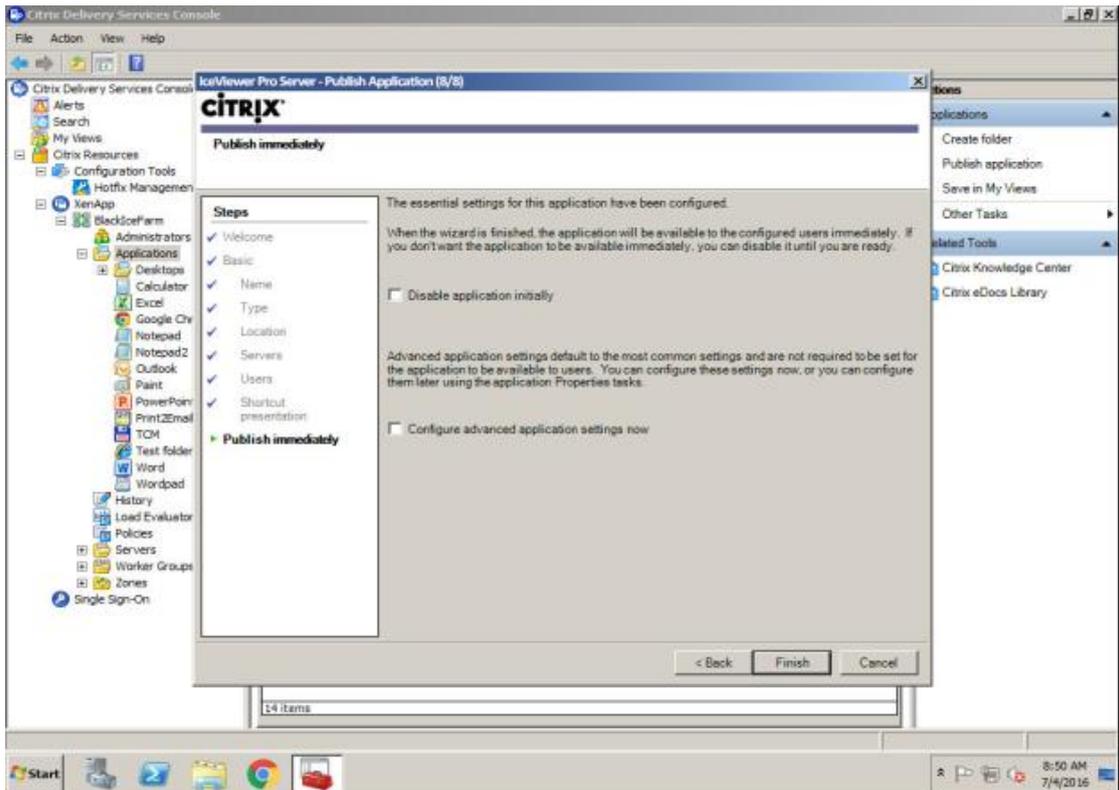
From now on, when accessing the Citrix XenApp Server form the client, the appropriate users will see the IceViewer Server application.
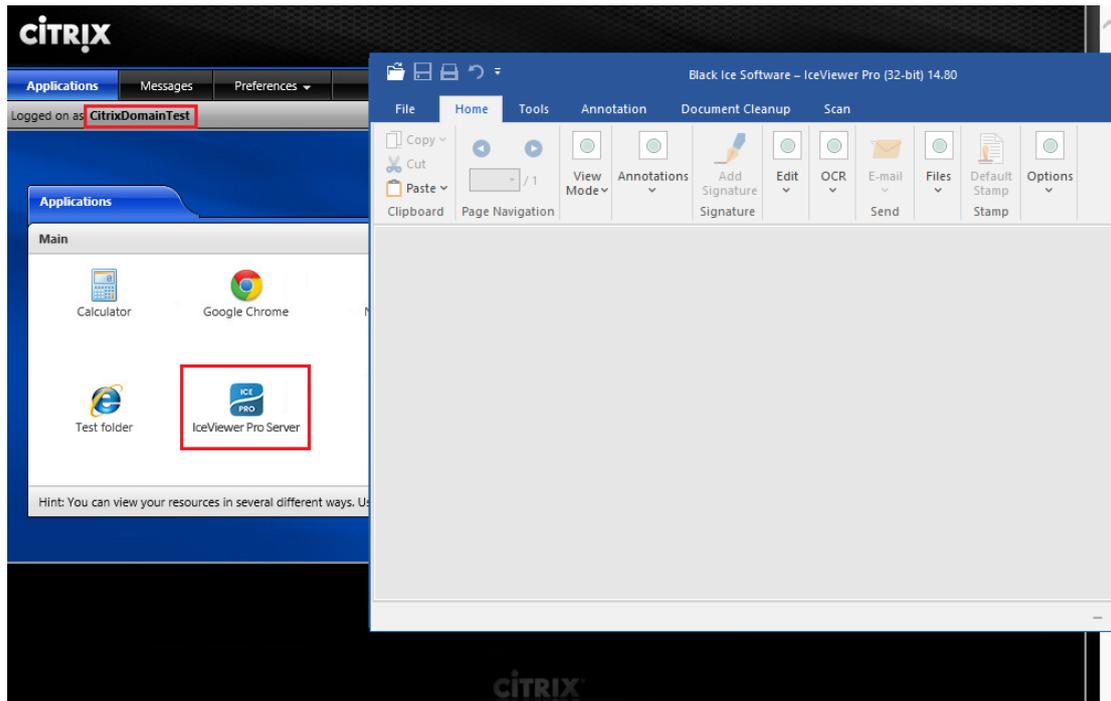
Licensing Error codes

The IceViewer MSI Installation automatically logs the Product Licensing registration process during the installation in the BiTVMSIRegistrationDataLog.txt file located in the User's temp folder.
(for example: c:\Users\Administrator\temp\BiTVMSIRegistrationDataLog.txt)

If the registration was successful, the log file contains the following message:
Registration was successful.

Otherwise the error code could be the one of the followings:
Error code 15 - The specified Serial Number is not valid for this product.
Error code 23 - Error receiving answer from the Black Ice Software License Server.
Error code 28 - Error sending license number to the Black Ice Software License Server.
Error code 34 - Error registering the product.
Error code 200 - The Printer driver is already registered.

IceViewer MSI Trace log

The Printer Driver MSI Installation Trace Log is an optional parameter which logs every event of the Black Ice installation Custom Action scripts. The MSI installer saves the logging information in the BiTVMSITraceDataLog.txt file located in the User's temp folder (%TEMP%). The MSI installer log feature of /l* "C:\temp\MSI.log" saves System installation related information and does not records any information during the Custom Action script execution that is specific for the Black Ice printer driver Installation/Uninstallation and registration.
The generated log file located in the User's TEMP folder. To navigate to the User's TEMP folder, open up a folder window and insert %TEMP% into the Address bar then press Enter. Alternatively, you can open a Command Line (cmd.exe), navigate to TEMP directory (cd %TEMP%).
(for example: c:\Users\Administrator\temp\BiTVMSITraceDataLog.txt)

Enable Trace log
To enable the Trace log for the IceViewer MSI Installation, include the following parameter in the MSI Installation.

BITRACE =(optional) 0 disables the Trace log 1 enables the Trace log	Enables detailed Trace log which logs every event of the MSI Custom Action script during installation/uninstallation and registration.

For example:
msiexec.exe /i "IceViewer64BitSetup.msi" /q TARGETDIR=C:\Temp BITrace=1
REGNUM=xxxxx-xxxxxxxx-xxxxxxxxxx

Example of the IceViewer MSI Trace log
Here is an example of the BI IceViewer MSI Trace log:
02/14/14 23:03:07: Install called

02/14/14 23:03:07: Install: Target directory: C:\Program Files (x86)\Black Ice Software LLC\IceViewer
02/14/14 23:03:07: Install: WritePlugInDatatoRegistry
02/14/14 23:03:07: WritePlugInDataToRegistry called
02/14/14 23:03:07: WritePlugInDataToRegistry: Check if Internet Explorer is installed
02/14/14 23:03:07: IsIEInstalled called

The IceViewer Trace log could contain the following lines

The Trace log function is going through on the following functions during the installation process and writes each event into the BiTVMSITraceDataLog.txt log file when the event is successfully finished.

```
UpdateSerials
```
- UpdateSerials called

```
DeleteProductFromBILM
```
- DeleteProductFromBILM called

```
CheckBILMIsInstalled
```
- Check if BILM is already installed

```
SetBILMInstallSilentMode
```
- Set BILM installation to run in silent mode

```
DeleteBILMInstallSilentModeFlag
```
- Delete BILM Installation Silent Mode Flag from the Registry

```
InstallBILM
```
- InstallBILM called
- InstallBILM finished

```
AddProductVersionToBILM
```
- Add product version to register in the BILM

```
IsTerminalServer
```
- The IceViewer cannot be installed on Windows Server.

```
Encoding
```
- Encoding: Start original: " + <original> + " original.Length : " + <original.Length>
- Encoding: Fill finished

```
RegisterDemoAndReleaseApp
```
- RegisterDemoAndReleaseApp called
- RegisterDemoAndReleaseApp: Registering the product with the serial key specified   in the cregnum parameter: " + <Serial Number>
- RegisterDemoAndReleaseApp: Registering the product with the serial key specified   in the regnum parameter: " + <Serial Number>
- RegisterDemoAndReleaseApp: Call the Initialize function from the eLicense.DLL
- RegisterDemoAndReleaseApp: The called Initialize function from the eLicense.DLL returned with error: " + <Result>
- RegisterDemoAndReleaseApp: Check if the serial number specified correctly
- RegisterDemoAndReleaseApp: Release Registration
- egisterDemoAndReleaseApp: Check if the Serial Number is valid
- RegisterDemoAndReleaseApp: The specified Serial Number is not valid
- RegisterDemoAndReleaseApp: Delete the License Number from Registry: Software\Black Ice Software Inc.\License Information\Black Ice

- RegisterDemoAndReleaseApp: Delete the License Number from Registry: Software\Black Ice Software LLC\License Information\Black Ice
- RegisterDemoAndReleaseApp: Send the License Number to the eLicense Server
- RegisterDemoAndReleaseApp: Return: " + <Result code> + " - " + <Error Message>
- RegisterDemoAndReleaseApp: The received License number from the eLicense Server   is incorrect
- RegisterDemoAndReleaseApp: Serial number encoding
- RegisterDemoAndReleaseApp: Serial number save to value: HKEY_LOCAL_MACHINE\Software\Black Ice Software LLC\License Information\Black   Ice
- RegisterDemoAndReleaseApp: Create License number for all users
- RegisterDemoAndReleaseApp: Save registry: HKEY_LOCAL_MACHINE\Software\Black Ice Software LLC\License Information\Black Ice
- RegisterDemoAndReleaseApp: Get License Number from eLicense Server
- RegisterDemoAndReleaseApp: Return: " + <Result code> + " - " + error message
- RegisterDemoAndReleaseApp: Create License number for all users
- RegisterDemoAndReleaseApp: Save registry: HKEY_LOCAL_MACHINE\Software\Black Ice Software LLC\License Information\Black Ice
- RegisterDemoAndReleaseApp finished

- WriteeLicenseToINI
- WriteeLicensetoINI Called
- WriteeLicensetoINI: licser parameter: " + <License Server>
- WriteeLicensetoINI: No licser parameter, set default eLicense Server: " +   <LicenseServe>
- WriteeLicensetoINI: cport parameter: " + <Client Port>
- WriteeLicensetoINI: No cport parameter, set default eLicense client port: " +   <ClientPort>
- WriteeLicensetoINI: sport parameter: " + <Server Port>
- WriteeLicensetoINI: No sport parameter, set default eLicense server port: " +   <ServerPort>
- WriteeLicensetoINI: Localizing IceViewer.ini: " + <Ini File Name>
- WriteeLicensetoINI: Write domain name: " + <License Server>
- WriteeLicensetoINI: Write server port: " + <Server Port>
- WriteeLicensetoINI: Write client port: " + <ClientPort>
- WriteeLicensetoINI: Write server port 2: 3500
- WriteeLicensetoINI: Write client port 2: 3500
- WriteeLicensetoINI: Write server port 3: 15000
- WriteeLicensetoINI: Write client port 3: 15000
- WriteeLicensetoINI: Company ID: Black Ice
- WriteeLicensetoINI finished

- DeleteLicenseKey
- Deletelicensekey Called
- DeleteLicenseKey: Delete license number
- DeleteLicenseKey: Delete serial number
- DeleteLicenseKey: Delete free license number
- DeleteLicenseKey: Delete demo license number
- DeleteLicenseKey finished

- IsIEInstalled
- IsIEInstalled called
- IsIEInstalled: Read registry: HKEY_LOCAL_MACHINE\SOFTWARE\Microsoft\Internet Explorer Version
- IsIEInstalled: Internet Explorer is not installed
- IsIEInstalled: Internet Explorer installed version: " + <Version>
- IsIEInstalled: Internet Explorer is not installed

```
        - IsIEInstalled finished

- DisablePlugin
        - DisablePlugin called
        - DisablePlugin: Delete .tif: HKEY_CLASSES_ROOT\.tif-> Content Type
        - DisablePlugin: Delete .tiff: HKEY_CLASSES_ROOT\.tiff-> Content Type
        - DisablePlugin: Delete .tif: HKEY_CLASSES_ROOT\.tiff-> CLSID
        - DisablePlugin: Delete .tiff: HKEY_CLASSES_ROOT\.tiff-> CLSID
        - DisablePlugin: Delete .tiff: HKEY_CLASSES_ROOT\MIME\Database\Content
        Type\image/tiff-> CLSID
        - DisablePlugin: IE Installed: Delete File Associations

- WritePlugInDataToRegistry
        - WritePlugInDataToRegistry called
        - WritePlugInDataToRegistry: Check if Internet Explorer is installed
        - WritePlugInDataToRegistry: Write the installed plugin to Internet
Explorer into        registry: HKEY_LOCAL_MACHINE\SOFTWARE\Microsoft\Internet
Explorer\Plugins
        -WritePlugInDataToRegistry: Check if Natscape is installed
        - WritePlugInDataToRegistry: Write the installed plugin to Natscape into
the     registry: HKEY_LOCAL_MACHINE\SOFTWARE\Netscape\Netscape Navigator
        - WritePlugInDataToRegistry finished

- ReadCustomINI
        - ReadCustomINI called
        - ReadCustomINI: Custom ini: " <Custom Ini>
        - ReadCustomINI: Plugin: " <Plugin>
               - ReadCustomINI finished
        - ReadCustomINI: IceViewer ini: " + <File Name>
               - ReadCustomINI: Called file association
               - ReadCustomINI: File association: Set jpg:
               - ReadCustomINI: File association: Set tif:
               - ReadCustomINI: File association: Set bmp:
               - ReadCustomINI: File association: Set cal:
               - ReadCustomINI: File association: Set ica:
               - ReadCustomINI: File association: Set txt:
               - ReadCustomINI: File association: Set fax:
               - ReadCustomINI: File association finished
        - ReadCustomINI: Viewer Settings: First Start:
        - ReadCustomINI: General Settings: File Extensions Dialog:
        - ReadCustomINI: Viewer settings: Display Mode:
        - ReadCustomINI: General settings: Getting Started:
        - ReadCustomINI: Message Boxes: Thank You:
        - ReadCustomINI: Viewer settings: Selection mode:
        - ReadCustomINI: General Settings: Save view setting:
        - ReadCustomINI: General settings: Thumbnail view:
        - ReadCustomINI: General settings: Auto save:
        - ReadCustomINI: General Settings: Enable thumbail browser:
        - ReadCustomINI: General settings: Show annotation color lost:
        - ReadCustomINI finished

- Install
        - Install called
        - Install: Target directory: " + <Target Dir>
        - Install: Silent mode
        - Install: WritePlugInDatatoRegistry
        - Install: WriteeLicensetoINI
        - Install: ReadCustomINI
        - Install finished

- Uninstall
        - Uninstall called
```

```
        - Uninstall: Target dir: " + <Target Dir>
        - Uninstall: Error: The IceViewer Server is still running.
        - Uninstall: Error: The IceViewer is still running.
        - Uninstall: Error: The IceViewer cannot be installed Windows Terminal
Server.
        - Uninstall: Delete demo license number
        - Uninstall: Delete free license number
        - Uninstall: Delete license key
        - Uninstall: Delete IceViewer.ini:" + <Target Dir> + "IceViewer.ini
        - Uninstall: Delete license number key
        - Uninstall: Delete serial number key
        - Uninstall: Delete license key
        - Uninstall: Delete free license key
        - Uninstall: Delete free license number key
        - Uninstall: Delete demo license number key
        - Uninstall: Delete demo license number
        - Uninstall finished
```

Troubleshooting

Common installation error codes

The following list includes the most commonly occurring installation error codes, and the meanings of the error:

Error code 34 - Error registering the product.
Solution: This error code covers several different registration errors on the server and on the client. This should be followed by the exact error message received from the server. In case the exact error message cannot be resolved, please contact our technical support with the occurring error codes.

Error code 37 - Error getting information for creating serial number. No MAC address or Volume ID could be obtained from the system.
Solution: Please make sure that the computer has an enabled Network Card with valid MAC address.

Error code 51 - Failed to get proxy setting value for the installation.
Solution: Please start the installation (or command line in case of command line installation) as Administrator.

Error code 81 - Error sending license number to the eLicense Server. Check the network settings and connection.
Solution: Please check the network connection, and if the computer have active internet connection. If you are using proxy, please check the proxy server connection, and please make sure that the Proxy server IP address or name is correct.

Error code 1603 – This error code can cover several issues during the installation.
Solution: Please generate a BITRACE log, and contact our technical support with the generated log file.

Error code 1612 / Error code 1714 – Windows cannot find the original MSI installer required for uninstallation or update. For more details, please see the [System Error 1612 when uninstalling or updating using the MSI installer](#) section.

Error code 1001 - This error code can cover several issues during the installation in the install script.
Solution: Please generate a BITRACE log, and contact our technical support with the generated log file.

## MSI Installation error - This installation package could not be opened.

Description of the problem:
Running the MSI installer and display "This installation package could not be opened."

msiexec /i "IceViewer64BitSetup.msi" REGNUM=XXXXX-XXXXXXXX-XXXXXXXXXX

There are several causes of for the problem:
- MSI package is damaged.
- The MSIEXEC command is not executed in the same directory as the "**IceViewer64BitSetup.msi**" file.
- The quotation mark is not standard quotation marks around the .msi file ("**IceViewer64BitSetup.msi**"). MS Office product and Word has different quotation marks. To avoid quotation mark errors, please type the MSI command into notepad before you cut and paste it to the command line.
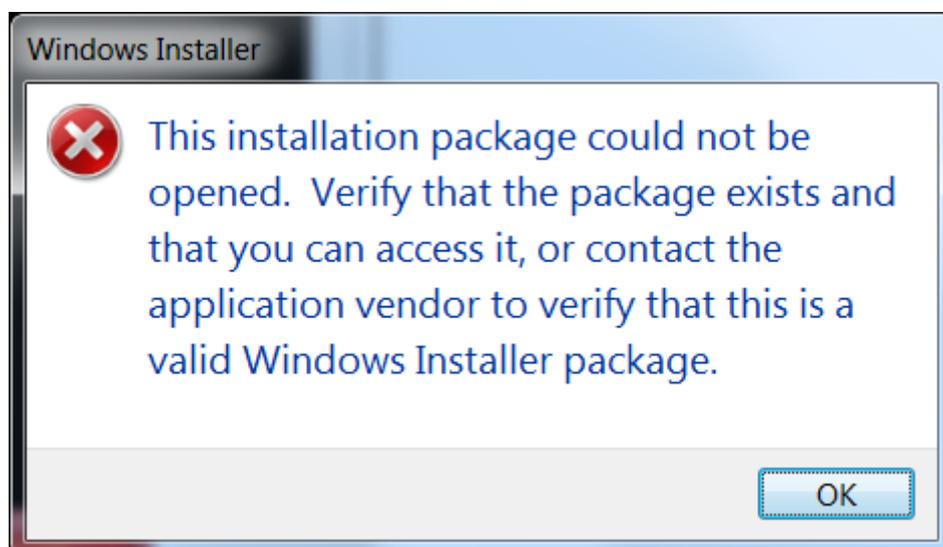
IceViewer is not uninstalling on Windows 10 clients using GPO

In certain cases, on Windows 10 client computers, the Group Policy is not getting updated automatically. This issue can be caused by different time configuration on the client and on the domain controller computers.

In this case, please run the **gpupdate** command on the client computer manually.

To run the command, open the command line, type **gpupdate** and press enter.
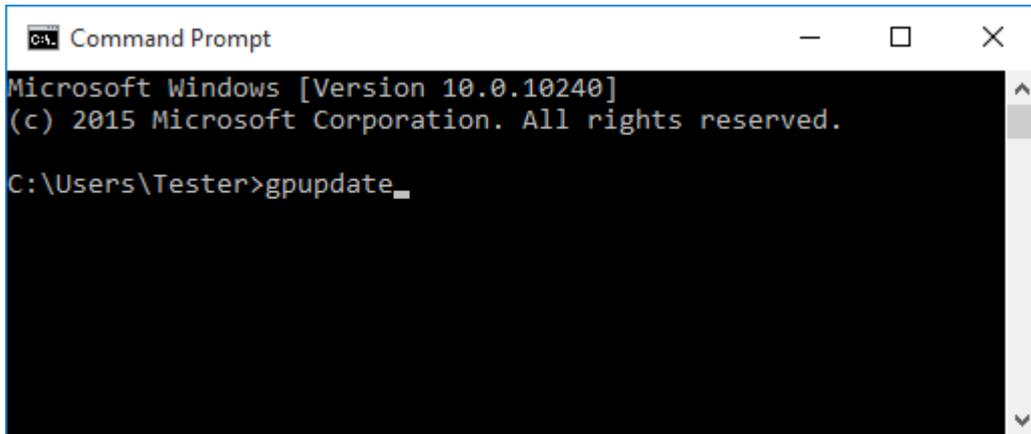
Once the gpupdate finished successfully, restart the client computer.

Cannot uninstall IceViewer

If case the IceViewer MSI cannot be uninstalled due to any occurring error messages, or network connection problems, one can use the FORCEU=1 parameter to force the IceViewer to complete the uninstallation, remove every file and license, even if there are errors occurring during the uninstallation.

For example:
msiexec.exe /x "IceViewer64BitSetup.msi" FORCEU=1

Caution: Upon network problems, this option could result that a transferable license will not be removed properly.

System Error 1612 when uninstalling or updating using the MSI installer

When uninstalling or updating the application using the MSI installer, you may receive the following error in the log files or the Event Viewer:

> Product: IceViewer -- Error 1714. The older version of IceViewer cannot be removed. Contact your technical support group. System Error 1612.

When installing a product using an MSI installer, the MSI installer is copied to the **C:\Windows\Installer directory**, because the MSI package is necessary for uninstallation or update.
System Error 1612 indicates that Windows cannot find the original MSI installer used for installing the product either at the location used for installation or in the C:\Windows\Installer directory.

To solve the problem, you will need to find the original MSI installer used for installing the application.

If you are trying to uninstall the application, uninstall the product by running the original MSI installer instead of using the Windows Control Panel or Settings.

If you are updating the application, run the installer of the new version manually, or remove the "/q" silent switch from the command line.
During the update process, you will receive the following error message:
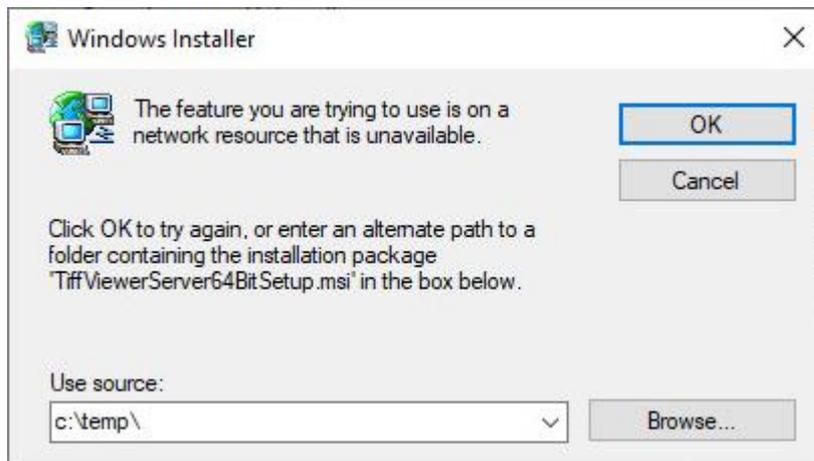
Click on the **Browse…** button and find the installer of the old version.
After clicking OK, the update should proceed normally.