

# **ColorPlus Printer (PSA)**

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**Black Ice Software**

## **MSI Installation Guide for Network Administrators**

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## Introduction

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

The ColorPlus Printer (PSA) MSI installer can either be installed using command line parameters or using Group Policy settings.

## Supported Operating Systems

- Windows 11 24H2 or newer
- Windows Server 2025 24H2 or newer

## Command Line Installation

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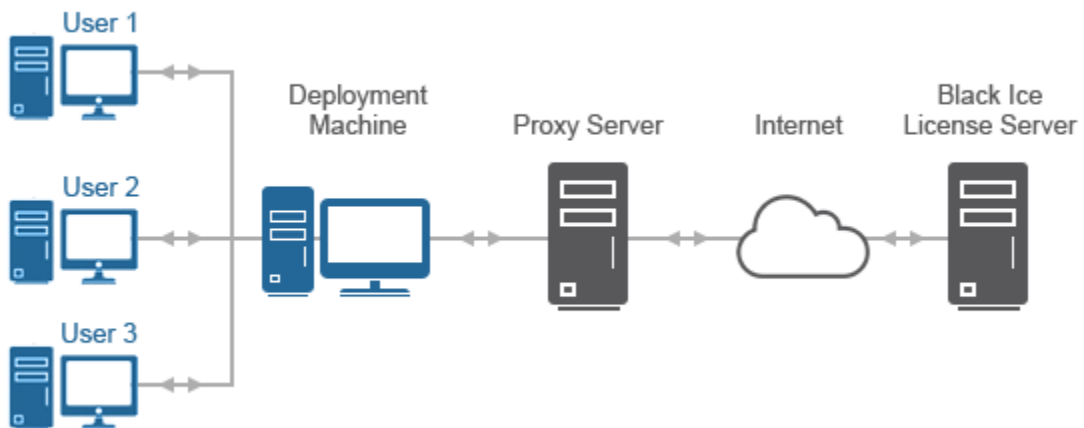
[Unavailable Parameters of the ColorPlus Printer \(PSA\) MSI update](#)

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## Registering through a Proxy server

In a secure environment where computers have no active Internet connection, or Port 443 is 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. **SOCKS Proxy option**

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 uses 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 (PSA) through a Proxy server, please see the [Available Parameters of the MSI install](#) section.

## Available Parameters of the MSI install

ColorPlus Printer (PSA) can be installed using the following command:

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

```
msiexec /i "BIColorPlusPrinterPSASetup.msi" /q TARGETDIR="C:\Black Ice\ColorPlus PSA" REGNUM=XXXXXX-XXXXXXXX-XXXXXXXXXX
```

Parameters	Meaning
<b>/i</b>  Can be used for updating the Printer (PSA).	Install the product. Command line only  <b>Please make sure to run the command line as administrator when installing/uninstalling the Printer (PSA).</b>
<b>/x</b>	Uninstall the product. Command line only  <b>Please make sure to run the command line as administrator when installing/uninstalling the Printer (PSA).</b>
<b>/q</b>  Can be used for updating the Printer (PSA).	Silent installation that displays no user interface. Command line only
(optional) <b>/l* log.txt</b> ( <i>lowercase "L"</i> )  Can be used for updating the Printer (PSA).	Logs the MSI system calls to install the product to the "C:\temp\log.txt" file. Command line only  For more information about the <b>/l</b> ( <i>lowercase "L"</i> ) parameter.
<b>REGNUM=</b> <b>(required for silent mode)</b>	Use the serial number received during purchase with the REGNUM parameter to automatically register the product for every user on the computer.  The serial number included how many printers can be installed on the Windows system. The MSI installer automatically installs the number of printers assigned to the serial key.  To use evaluation/demo registration, use the <b>REGNUM=evaluation</b> . <b>NOTE: Evaluation will expire in 15 days.</b>
<b>TARGETDIR=(optional)</b>  Can be used for updating the Printer (PSA).	Set target installation directory. If this value is not specified, the product will be installed to " <code>\Program Files\Black Ice Software LLC\Black Ice ColorPlus Printer (PSA) "</code>

<p><b>CONFIG</b>=(optional)</p> <p><b>Can be used for updating the Printer (PSA).</b></p>	<p>The full path to the config JSON file. Path cannot contain variables. (Full path needs to be specified even if the JSON 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.</p> <p>For example;  <b>CONFIG=C:\temp\customColorPlusMSI.json</b></p>
<p><b>BITRACE</b> =(optional)  0 disables the Trace log (default)  1 enables the Trace log</p> <p><b>Can be used for updating the Printer Driver.</b></p>	<p>By Enables detailed Trace log, will log every event in the Custom Action section of the MSI installation, uninstallation, and registration.</p> <p>For more information about the Trace log and location of the Trace log, please refer to <a href="#">Printer Driver MSI Installer Trace log</a> section.</p>
<p><b>PRINTERNAME</b>=(optional)</p>	<p>To rename the Black Ice Printer (PSA) custom printer name. Use this option to specify a custom printer name for the installed Black Ice Printer (PSA) on the system.</p> <p>The printer's name must be between 3 and 30 characters, and cannot contain any of the following characters:  &lt;&gt; / * ? \ "   % @"</p>
<p>Registration configuration parameters</p>	
<p>(optional) <b>LICSER</b>=</p> <p><b>Can be used for updating the Printer Driver.</b></p>	<p>License server domain name.</p> <p>"licenseserver.blackice.com"</p>
<p>(optional) <b>CPORT</b>=0 (default)  Port number (0, 65536)</p> <p><b>Can be used for updating the Printer Driver.</b></p>	<p>Client port is an outgoing port to connect to the Black Ice License server. Default and Recommended port parameter value is 0.</p> <p>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.</p> <p>When using a specific port number for the CPORT parameter, the installation uses the specified port on the system/PC for registration. If the specified port is used by another process on the system/PC, the registration will be unsuccessful.</p>

<p>(optional) <b>SPORT=1</b></p> <p><b>Can be used for updating the Printer (PSA).</b></p>	<p>The SPORT parameter defines the TCP/IP port to connect to the Black Ice License Server port. The default port is HTTPS port 443; the <b>SSL parameter must be 1.</b></p> <p>Alternatively, the following TCP/IP ports can be used for the registration: 80, 3500, 15000</p> <p><b>NOTE: For using alternative TCP/IP ports (80, 3500, 15000) for the registration set the SSL parameter to 0.</b></p>
<p>(optional) <b>SSL=</b> 1 enable the SSL (default) 0 disable the SSL</p> <p><b>Can be used for updating the Printer (PSA).</b></p>	<p>Set the SSL parameter used for authentication for connecting to the license server.</p> <p>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.</p> <p>Parameter value set to 0, if using license server TCP/IP port 80, 3500, 15000 for the registration.</p>
<p>Proxy Server configuration parameters</p>	
<p>(optional) <b>PTYPE=</b> 0: Not using proxy server 1: Attempt to discover automatic proxy settings 2: Use HTTP proxy 3: Use SOCKS proxy</p> <p><b>Can be used for updating the Printer (PSA).</b></p>	<p>Set proxy server type for the connection.</p> <p>In a secured environment where port 443 cannot be enabled, the product can be registered through a proxy server with the PTYPE parameter.</p> <p>The PTYPE=1 - Using the system proxy settings. (Optional parameters: PIP, PPORT, PUSER, PPW)</p> <p><b>NOTE:</b> 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 Username and Password of the Proxy Server automatically. Please use (Permit all connection) without username and password parameter, with the PTYPE=1.</p> <p>If you need <b>authentication</b> for the Proxy Server connection, please use the PTYPE=2 (HTTP proxy) or PTYPE=3 (SOCKS proxy) options.</p> <p>The PTYPE=2 – Using HTTP proxy settings (Required parameter: PIP, PPORT, Optional parameter: PUSER, PPW)</p> <p>The PTYPE=3 – Using SOCKS proxy settings (Required parameter: PIP, PPORT, Optional parameter: PUSER, PPW)</p>

	<p><b>NOTE: Please make sure what type of proxy is using the Proxy server.</b> For example: If the proxy server uses HTTP proxy, then use the <b>PTYPE=2</b> parameter.</p>
<p>(optional) <b>PIP=</b>  <b>Can be used for updating the Printer (PSA).</b></p>	<p>The proxy server host name or IP address</p> <p><b>NOTE: The PIP parameter is required, if the server uses HTTP (PTYPE=2) or SOCKS (PTYPE=3) proxy settings.</b></p>
<p>(optional) <b>PPORT=</b>  <b>Can be used for updating the Printer (PSA).</b></p>	<p>Port number on the PC to communicate with the Proxy server. The installation uses the specified port to reach the Proxy server.</p> <p><b>NOTE: The PPORT parameter is required, if the server uses HTTP (PTYPE=2) or SOCKS (PTYPE=3) proxy settings.</b></p>
<p>(optional) <b>PUSER=</b>  <b>Can be used for updating the Printer (PSA).</b></p>	<p>Username for proxy servers which require authentication.</p> <p><b>NOTE: The PUSER parameter is optional, if the server uses HTTP (PTYPE=2) or SOCKS (PTYPE=3) proxy settings.</b></p> <p><b>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.</b></p>
<p>(optional) <b>PPW=</b>  <b>Can be used for updating the Printer (PSA).</b></p>	<p>User password for proxy servers which require authentication.</p> <p><b>NOTE: The PPW parameter is optional, if the server uses HTTP (PTYPE=2) or SOCKS (PTYPE=3) proxy settings.</b></p>
<p>(optional) <b>NOSERIAL=</b> 0: Disabled (default). 1: Enabled.</p>	<p>The Printer Driver can be installed without registration with the NOSERIAL=1 parameter. The Printer Driver cannot be used until Printer Driver is registered/activated for evaluation or with a license key by the Administrator after the installation.</p>

*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 "BIColorPlusPrinterPSASetup.msi" /q 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](https://licenseserver.blackice.com)) it is required to use secure internet connection (HTTPS) on port 443. The Printer Driver Licensed MSI Installer attempts to reach the Black Ice License Server three times during the registration to avoid momentary internet connection issues.**

## ***How to install the ColorPlus Printer (PSA) silently***

To install the ColorPlus Printer (PSA) MSI in silent mode, please open the Command Prompt as Administrator.

ColorPlus Printer (PSA) can be installed using the following command:

```
msiexec /i "<<PATH>>\BIColorPlusPrinterPSASetup.msi" /q REGNUM=XXXXXX-XXXXXXXX-XXXXXXXX
```

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

*Note: The Installation Update and Uninstallation does not require system reboot.*

## ***How to update the ColorPlus Printer (PSA)***

Upgrade the ColorPlus Printer (PSA) without uninstalling and reinstalling the ColorPlus Printer (PSA) MSI.

The upgrade process will keep the Users current configuration of the ColorPlus Printer (PSA).

**The printer driver Update does NOT require system restart.**

ColorPlus Printer Driver MSI can be updated using the following command:

```
msiexec /i "<<PATH>>\BIColorPlusPrinterPSASetup.msi"
```

## ***How to uninstall the ColorPlus Printer (PSA) silently***

Silently uninstall ColorPlus Printer (PSA)

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

## **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 (") at the beginning and end of the value.

Example 1: Install and register ColorPlus Printer (PSA) silently to the default target directory into the Program Files folder.

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

Example 2: Install ColorPlus Printer (PSA) evaluation version in silent mode to the default target directory into the Program Files folder.

```
msiexec.exe /i "<<PATH>>\BIColorPlusPrinterPSASetup.msi" REGNUM=evaluation  
/q
```

Example 3: Install and register ColorPlus Printer (PSA) silently, the target directory is C:\Black Ice\ColorPlus

```
msiexec.exe /i ""<<PATH>>\BIColorPlusPrinterPSASetup.msi"/q  
TARGETDIR="C:\Black Ice\ColorPlus" REGNUM=xxxxx-xxxxxxxx-xxxxxxxx
```

Example 4: Install and register ColorPlus Printer (PSA) silently and generate log from the installation.

```
msiexec.exe /i "<<PATH>>\BIColorPlusPrinterPSASetup.msi" /q /!*"v "log.txt"  
REGNUM=xxxxx-xxxxxxxx-xxxxxxxx
```

Example 5: Install and register ColorPlus Printer (PSA) silently with a config JSON file. Please specify the full path of the JSON file:

```
msiexec /i "<<PATH>>\BIColorPlusPrinterPSASetup.msi" /q  
CUSTOMINI="C:\<<PATH>>\ColorPlusMSI.json" REGNUM=xxxxx-xxxxxxxx-  
xxxxxxxx
```

PowerShell Example (Terminal & Terminal (Admin)):

Example 6: Install the ColorPlus Printer (PSA) silently with a config JSON file. Please specify the full path of the INI file:

```
msiexec /i ""<<PATH>>\BIColorPlusPrinterPSASetup.msi"" /q CONFIG=  
"C:\<<PATH>>\ColorPlusMSI.json" REGNUM=xxxxx-xxxxxxxx-xxxxxxxx
```

Example 7: Install and register ColorPlus Printer (PSA) silently and generate a trace log from installation. Trace logs could be very useful to identify and troubleshoot problems during installation.

```
msiexec.exe /i "<<PATH>>\BIColorPlusPrinterPSASetup.msi" /q REGNUM=xxxxx-xxxxxxx-xxxxxxx BITRACE=1
```

Example 8: Install and register ColorPlus Printer (PSA) silently with a custom Printer name.

```
msiexec.exe /i "<<PATH>>\BIColorPlusPrinterPSASetup.msi" /q REGNUM=xxxxx-xxxxxxx-xxxxxxx PRINTERNAME="My Printer Name"
```

Example 9: Install and register ColorPlus Printer (PSA) silently using the LICSER parameter to contact the Black Ice License Server.

```
msiexec.exe /i "<<PATH>>\BIColorPlusPrinterPSASetup.msi" /q REGNUM=xxxxx-xxxxxxx-xxxxxxx LICSER=licenseserver.blackice.com
```

Example 10: Install and register ColorPlus Printer (PSA) silently using a port 80 to contact the Black Ice License Server, without SSL authentication.

```
msiexec.exe /i "<<PATH>>\BIColorPlusPrinterPSASetup.msi" /q REGNUM=xxxxx-xxxxxxx-xxxxxxx LICSER=licenseserver.blackice.com CPORT=0 SPORT=80 SSL=0
```

Example 11: Install and register ColorPlus Printer (PSA) silently and contact the Black Ice License Server through an automatically discovered proxy server.

```
msiexec.exe /i "<<PATH>>\BIColorPlusPrinterPSASetup.msi" /q REGNUM=xxxxx-xxxxxxx-xxxxxxx PTYPE=1
```

Example 12: Install ColorPlus Printer (PSA) silently without registration. In this case, the Printer (PSA) cannot be used until Printer (PSA) is registered/activated for evaluation or with a license key by the Administrator after the installation.

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

Example 13: Install ColorPlus Printer (PSA) silently with a transformation file:

```
msiexec.exe /i "<<PATH>>\BIColorPlusPrinterPSASetup.msi" /q TRANSFORMS="ColorPlus.mst" /q
```

Example 14: Install and register the ColorPlus Printer (PSA) silently and contact the Black Ice License Server through a HTTP proxy server.

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

The **PPORT** parameter specifies the HTTP Proxy server port that ColorPlus Printer Driver 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's 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 15: Install and register the ColorPlus Printer (PSA) silently and contact the Black Ice License Server through a SOCKS proxy server.

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

The PPORT parameter specifies the SOCKS Proxy server port that ColorPlus Printer Driver 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's 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 16: Silently uninstall ColorPlus Printer (PSA)

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

## Configuring the Printer (PSA) with Custom Config JSON file

The Black Ice Printer (PSA) can be configured during installation with a configuration JSON file, to use a System Administrator defined configuration setting. Configuration Settings specified in the JSON file will be used by the MSI installation process, to configure the Black Ice printer driver for default settings for every user on the system.

For example:

```
msiexec /i "<<PATH>>\BIColorPlusPrinterPSASetup.msi"  
CUSTOMINI="<<PATH>>\ColorPlus.json" REGNUM=XXXXX-XXXXXXXX-XXXXXXXXXX
```

## Printer (PSA) MSI Installer Trace log

The Printer (PSA) 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 BiPSAMSITraceDataLog.txt file located in the c:\Windows\SystemTemp\ directory. The MSI installer log feature of /!\* "C:\temp\MSI.log" saves System installation related information and does not record any information during the Custom Action script execution that is specific for the Black Ice Printer (PSA) Installation/Uninstallation and registration.

### Enable Trace log

To enable the Trace log for the Printer (PSA) MSI Installation, include the following parameter in the MSI Installation.

<b>BITRACE</b> =(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 "BIColorPlusPrinterPSASetup.msi" /q BITRACE=1 REGNUM=XXXXX-  
XXXXXXXX-XXXXXXXXXX
```

## ***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 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 connections.

**Solution:** Please check the network connection, and if the computer has an active internet connection. If you are using proxy, please check the proxy server connection, and please make sure that the Proxy server's 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.

**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.