



## PRINT CONTROL PROXY

## **USER GUIDE**

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# 1.Scope

This document is a guide to the downloading, installation and usage of the Print Control Proxy (PCP) for the users of the application.

## 2. Introduction

Your application's Print Control functionality has thus far used a Java applet running in your browser to enable you to print to your local printer. In recent months, major browser developers including Microsoft, Google and Mozilla have announced plans to remove or restrict support for Java applets.

In view of this, CrimsonLogic has developed the PCP, a small service program that you download once and run on your machine. Like the applet, the PCP allows secured documents to be printed in a controlled manner at a printer connected to your machine. Compared to the applet, we find that the PCP leads to a more seamless printing experience.

# 3.System Requirements

### 3.1. Installation requirements

Print Control Proxy has the following installation requirements:							
User Environment	Windows Operating System: Windows Vista or later						
	.NET Framework: <b>version 4.5 or higher</b>						
Browser Requirement	If you are using Internet Explorer and you are facing issues loading the print page, refer to FAQ <u>section 5.2</u> below.						
Network Environment	If you are facing issues printing after installation, please make sure Print Control Proxy is whitelisted from firewalls, antiviruses or any other potential obstacles preventing PCP from communicating with the server. Additionally, ensure that TCP/IP Port 50000 is available.						

## 3.2. Other requirements

Print Control Proxy has the following requirements:						
Printer Driver	Printer Driver must be a PostScript-enabled driver.					
Requirement	Please contact your printer vendor for the latest PostScript- enabled driver. (Typically has "PS" in the driver name)					
Printer Connectivity	PCP currently only supports <b>USB</b> , <b>LPT</b> , <b>COM</b> , <b>DOT4</b> or valid <b>TCP/IP</b> ports.					
	Please ensure the TCP/IP ports do not have prefixes or suffixes (e.g. IP_123.123.123.123 or 123.123.123.123.123]					
	Please note that shared USB printers are <b>not</b> compatible, and shared network printers must be reachable (able to be pinged) by both computers.					
Printer Availability	When printing through PCP, the printer queue must <b>NOT</b> be paused or set to use offline. Additionally, the printer must be online (connected to computer) and the print queue must be empty to allow printing through PCP.					
	A simple way to test availability is to print a test page (see <u>section 4.3</u> )					
Printer Compatibility	Please refer to the printer compatibility list published on the application portal, or check with application support team.					
Latest Printer Listing (after installation of new printers)	Ensure to click on the "Refresh" button on the application print page to load the latest list of allowed printers installed on your system.					

## 4. Installation and Usage

### 4.1. Download, install and run

Upon accessing the application's printing page for the first time in your browser, you will see a message prompting you to download and install the PCP. Click on the link to download the PCP. You will be prompted to save (or run) the file. The below figures show the visuals for various browsers.

Do you want to run or save PrintControlProxyInstaller.exe (386 KB) from demo.phidelity-suite.com?					×
It is type of file could harm your computer.	<u>R</u> un	<u>S</u> ave	•	<u>C</u> ancel	

### Figure 1: Installing the PCP (Internet Explorer)



Figure 2: Installing the PCP (Firefox)



Figure 3: Installing the PCP (Chrome)

Run the installation with **administrator privileges**. (It is recommended that the user logged in during installation has admin rights)



Figure 4: Running the installer

The installer should run and the following screen should appear. (If it does not appear, click <u>here</u>) Click on **Install** to proceed.

随 Installation Wizard	-		>
Choose Install Location			0
Choose the folder in which to install Print Control Proxy.			Q
Setup will install Print Control Proxy in the following folder. To instal Browse and select another folder. Click Install to start the installatic	l in a differe n.	nt folder,	click
Destination Folder			_
C:\Program Files (x86)\Phidelity\Print Control Proxy	Bro	wse	
Space required: 824.0KB			
Space required: 824.0KB Space available: 300.2GB			
Space required: 824.0KB Space available: 300.2GB Print Control Proxy			
Space required: 824.0KB Space available: 300.2GB Print Control Proxy	Install	6.00	col

Figure 5: Installation confirmation window.

The installation will run, and you should see the following screen when it completes. Click **Close** to finish the installation.



Figure 6: Installation complete.

If alerted by the certificate installation warning, click 'Yes'.



Figure 7: Certificate Installation Warning

A popup indicating successful installation appears.



Figure 8: Installation successful

A prompt should appear saying that PCP is running.



Figure 9: "Print Control Proxy is running" prompts.

The PCP icon will appear in the System Tray at the bottom right of your screen.



Figure 10: PCP running in System Tray

Users are recommended to **perform a restart** after the installation.

Note: Mozilla Firefox users may need to follow steps (a) and (b) below:

a. Go to https://127.0.0.1:50000. Click on Advanced and Add Exception...



Figure 11: Visit 127.0.0.1 in Mozilla

b. Click on Confirm Security Exception

onation in Identity			
The certificate is not tru a secure signature.	isted because it hasn't be	en verified as issued by a trusted au	thority using
	his exception		
Permanently store t	and a second second		

Figure 12: Confirm Security Exception

Finally, to verify that PCP is installed and running, go to <u>https://127.0.0.1:50000</u>. You should see the following screen:

https://127.0.0.1:50000/ × +	
← 0 🖗 https://127.0.0.1:50000	
PCP is running.	

#### Figure 13: PCP successfully running

Note: Refer to the <u>troubleshooting section</u> if the above screen does not appear.

4.2. Using the PCP

Access the printing page in the application. Once the application's printing page detects that PCP is running, the page will show a list of available printers. To print, select the desired printer from the drop-down box and click Print.

Printer: Hp 604*	
🗎 Print	n



You can click Refresh at any point to update the list of printers displayed in the drop-down box (this may be useful if you install a new printer).

### 4.3. Printing a test page

Access the test page through: <u>https://127.0.0.1:50000/testprint</u>. Loading of this page may take some time, depending on how many printers you have installed on your machine.

<b>Print Test Page</b>	-
Printer: HP 3035	▼ Submit

Select the printer you would like to test, and click on Submit. The test page will be sent to your printer.

## 5. Troubleshooting/FAQs

### 5.1. Unable to start the installer



a. Ensure that .NET Framework 4.5 is installed.

Download the installer for .NET Framework 4. from Microsoft at:

https://www.microsoft.com/en-

sg/download/details.aspx?id=40779.

- 5.2. Unable to print after installation
  - a. Ensure that PCP is running in the system tray.



b. If PCP is not running, go to Start Menu > All Programs > Phidelity

> Print Control Proxy and click the Print Control Proxy executable.

c. If PCP is already running but it still does not work:

#### Perform a restart.

If PCP still does not work after restarting, follow the steps below: For **Chrome** users (version 58 onwards):



- Upgrade to the latest version.
- If a temporary workaround is necessary:
- Go to <u>https://127.0.0.1:50000</u>.
- For older versions of PCP with the older SSL certificate,
   Chrome users with (version 58 onwards) will see the above screen displayed.
- Click Advanced > Proceed to 127.0.0.1 (unsafe) to temporarily allow PCP's old certificate.

#### For Internet Explorer users:

- Open the Internet Options page. (Click on the gear icon on the top right > Internet Options)
- Go to the **Security** tab.
- Click on Trusted Sites and click on Sites...
- Add the URL of the application into the list.
- Ensure that Enabled Protected Mode option is unchecked



- If the issue persists, go to the Trusted Sites in Security tab

following the instructions above.

- Click on **Custom Level**...
- Ensure that data sources across domains are set to Enable or Prompt



### 5.3. My antivirus stops PCP from running

Like most Windows applications, PCP uses the registry to store configuration values such as version numbers within the registry. This may cause PCP to be flagged by the antivirus during installation.

If the installer was already run once and the Start Menu items are already created, try running PCP from Start Menu.

If PCP is still blocked, please contact your system administrator, or manually whitelist PrintControlProxy.exe located in:

For 32-bit systems: C:\Program Files\Phidelity\Print Control Proxy For 64-bit systems: C:\Program Files (x86)\Phidelity\Print Control Proxy 5.4. The printer I want to use is not shown in the drop-down list

If your printer is newly installed, click the Refresh button to refresh the printer list.

	LITY PRINT CONTROL	
Printer:	Нр 604*	C Refresh
	🖹 Print	

Ensure that the printer supports the required 600dpi resolution and uses a PostScript driver (contact your printer vendor to be sure).

Ensure that the printer is running on a **USB**, **LPT**, **COM**, **DOT4** or a valid **Network** port.

To check the port:

#### a. Go to Control Panel > View devices and printers



b. Right click the printer you are using, select Printer properties



c. Under Ports tab, check the port in use.



If you are running a different type of port (e.g. WSD port), please add your network printers through a **Standard TCP/IP port**, or contact your system administrator.

- 5.5. "Document was sent to printer" but no printout was received
  - 1. Ensure that you can print a test page.
  - 2. Ensure that your printer driver uses a PostScript driver and not a PCL driver.
    - a. Go to Control Panel > View devices and printers



b. Right click the printer you are using, select Printer properties



c. Under Advanced tab, check the driver.

General Shari	ng F	Ports	Advanced	Color Management	Security	Device Options	Samsung
Always av	ailab	le					
⊖ Availa <u>b</u> le	from		12:00 AM	То	12:00	AM 🔹	
Priorit <u>y</u> :	1	-	▲ ▼				
Deiteren	<b>C</b>		Universal D	rint Driver 2			
Driver:	Sar	nsung	Universal P	rint Driver 3	× []	ve <u>w</u> Driver	

d. Make sure the driver is either, a discrete **PostScript driver** OR a **universal print driver** that **supports PostScript**.

**Note:** You may wish to contact the printer vendor to be sure the driver is a proper PostScript driver, and that the driver is compatible with your printer.

- 3. Contact the application support team to ensure that you have not exceeded the print quota of the document.
- 4. Contact your network administrator to check if PCP can send and receive HTTP requests.

#### 5.6. PCP stuck while fetching printer list

Typically, the printer list is displayed in less than a minute. It can take longer if you have many printers installed. If it takes too long:

- i. Restart the workstation and try again.
- ii. If you are not running the latest version of PCP, there should be a

download link available for you to download the latest PCP.

v Version(dick	here to upgrade to latest version)		
	LITY PRINT CONTROL		
Printer:	Hp 604*	~	C Refresh
	Print		

- 5.7. Upgrading Phidelity version
  - 1. Download the latest version of PCP.

v Version(click	here to upgrade to latest version)		
	LITY PRINT CONTROL		
Printer:	Hp 604*	~	C Refresh
	Print		

2. The following screen will appear. Click **OK** to continue.



3. The uninstaller will launch. Click Uninstall to continue.

ntrol Proxy			NUM
ol Proxy from your computer.			0
will be uninstalled from the following folder. C	lick Uninstall to	start the	:
C:\Program Files (x86)\Phidelity\Print Cont	rol Proxy		
	Introl Proxy frol Proxy from your computer. will be uninstalled from the following folder. C C:\Program Files (x86)\Phidelity\Print Cont	Introl Proxy frol Proxy from your computer.	Introl Proxy frol Proxy from your computer. will be uninstalled from the following folder. Click Uninstall to start the C:\Program Files (x86)\Phidelity\Print Control Proxy

4. If PCP is detected to be running during the uninstall process, the following popup will appear. Click **Yes** to continue.

🞯 Print Control	Proxy Uninstall	—		
Uninstalling				NUMBER
Please wait wh	ile Print Control Proxy is being uninstalled.			0
Execute: "C:\P	rogram Files (x86)\Phidelity\Print Control Proxy\PrintCo	ntrolPro>	(y.exe" -u	ninsta
64-bit Windo	ws detected.			
Start Uninsta	Iling Phidelity Secure Printer			
Execute: C:	Program Piles (x86) Phidelity Print Control Proxy PrintC	ontroiPro	oxy.exe	•
-	Print Control Proxy v1.3.0.0		×	
:				
	An instance of Print Control Proxy is already run	ning.		
	Stop PCP to proceed with installation?	-		
-				
Print Control Prox	OK	Cancel		
	< Back Nav	45	Car	rel
	C Dack INC.		Cal	ICC1

5. When uninstall completes, the following screen will appear. Click **Finish** to proceed with the installation of the upgrade.

🕞 Print Control Proxy Uninstall	- 🗆 ×
	Completing the Print Control Proxy Uninstall Wizard
	Print Control Proxy has been uninstalled from your computer.
	Click Finish to close this wizard.
	< Back Finish Cancel

6. The installer will then run, and proceed to install the new version of PCP. Follow the installation steps <u>listed above</u>.

- 5.8. Unable to connect to 127.0.0.1
  - 1. Ensure that <u>https://127.0.0.1:50000</u> is not accessed via a proxy.
    - a. Click Start Button > Run/Search > type in "inetcpl.cpl"
       OR
    - b. Go to Control Panel > Internet Options

View by: Small icons ▼

c. Click the Connections and LAN Settings.

Seneral Security Privacy Content Connections Programs Advance         Image: Setup.         Dial-up and Virtual Private Network settings         Image: Setup.         Dial-up and Virtual Private Network settings         Image: Setup.         Image: SetUp.							
To set up an Internet connection, click       Setup         Dial-up and Virtual Private Network settings       Add         Add       Add         Add VPN       Remove         Choose Settings if you need to configure a proxy server for a connection.       Settings         Local Area Network (LAN) settings       LAN Settings do not apply to dai-up connections. Choose Settings above for dial-up settings.	General	Security	Privacy	Content	Connections	Programs	Advance
Dial-up and Virtual Private Network settings          Add         Add VgN         Add VgN         Choose Settings if you need to configure a proxy server for a connection.         Local Area Network (LAN) settings         LAN Settings do not apply to dial-up connections. Choose Settings above for dial-up settings.		To set u Setup.	p an Inter	net conne	ction, click	Set	yp
Add         Add VPL         Choose Settings if you need to configure a proxy server for a connection.         Choose Settings do not apply to dal-up connections. Choose Settings above for dal-up settings.	Dial-up	and Virtua	l Private N	Network se	ttings		
Add vgv       Choose Settings if you need to configure a proxy server for a connection.       Settings       Local Area Network (LAN) settings       LAN Settings do not apply to dial-up connections.       Choose Settings above for dial-up settings.						Add	ł
Remove           Choose Settings if you need to configure a proxy server for a connection.         Settings           Local Area Network (LAN) settings         Land Settings do not apply to dal-up connections. Choose Settings above for dial-up settings.						Add V	<u>P</u> N
Choose Settings if you need to configure a proxy server for a connection.       Settings         Local Area Network (LAN) settings       LAN Settings do not apply to dial-up connections. Choose Settings above for dial-up settings.						<u>R</u> emo	ve
Local Area Network (LAN) settings LAN Settings do not apply to dial-up connections. Choose Settings above for dial-up settings.	Choos	se Settings r for a conr	if you nee nection.	ed to confi	gure a proxy	Sett	ings
	Local A LAN S Choo	Area Netwo Settings do se Settings	rk (LAN) s not apply above fo	ettings — to dial-up r dial-up s	connections. ettings.	LAN se	ttings

d. Ensure that **Bypass proxy server for local addresses** is checked. Click on **Advanced**.

Local Area Netw	vork (LAN) Settings	$\times$
Automatic confi Automatic conf use of manual	ìguration figuration may override manual settings. To ensure ti settings, disable automatic configuration.	he
<u>A</u> utomatical	lly detect settings	
Use automa	atic configuration <u>s</u> cript	
Address	http://localhost:9999/pacfiles/test.pi	
Proxy server		
Use a proxy dial-up or V	y server for your LAN (These settings will not apply to PN connections).	>
Addr <u>e</u> ss:	yourproxy Port: 8080 Advanced	
Bypass	proxy server for local addresses	
	OK Cancel	

e. Ensure that under the **Exceptions** section, there are entries for 127.0.0.1 and localhost.

10	Туре	Proxy address to use		Port
♥.≡.	HTTP:	yourproxy	:	8080
	Secure:	yourproxy	:	8080
	ETP:	yourproxy	:	8080
	So <u>c</u> ks:		:	
	⊻ <u>U</u> se the	e same proxy server for all protoc	ols	
xcepti	ions Do not use	e proxy server for addresses begin	nning with	:
	localhost	1; ;		

f. Keep clicking **OK** until the Internet Options window is dismissed.

- 5.9. "An error occurred while retrieving the document from the server."
  - 1. Steps for Firefox and Chrome users:
    - a. Ensure that you are able to navigate to the web application in Internet Explorer.

#### OR

- b. Change your proxy settings to read system proxy settings, ensure that the browser is still able to navigate to the web application and follow the steps below.
- 2. For all users:
  - a. Consult your network administrator.
  - b. Ensure that in Internet Explorer, your proxy settings (if any) are manually configured and not read from a script.
    - If your settings are read from a script or must be detected automatically, contact your network administrator to whitelist the application's domain from the proxy server.
  - c. If the browser is able to view the web application but the error still persists:
    - Check with your network administrator and ensure that PCP is allowed to send and receive HTTP requests.

- 5.10. Printer does not show up after upgrading PCP
  - 1. Ensure that you can print a test page.
  - 2. Ensure that your printer driver uses a PostScript driver and not a PCL driver.
    - b. Go to Control Panel > View devices and printers



c. Right click the printer you are using, select Printer properties



d. Under Advanced tab, check the driver.

Available Available from 12:00 AM To 12:00 AM	Always available Available from 12:00 AM To 12:00 AM	General Sharing Ports	Advanced Color Manager	ment Security Dev	ice Options	Samsung
O Available from 12:00 AM ↔ To 12:00 AM ↔	O Availa <u>b</u> le from 12:00 AM → To 12:00 AM →	Always available				
Priority: 1	Priority:	○ Availa <u>b</u> le from	12:00 AM	To 12:00 AM	a v	
		Priority: 1				

e. Make sure the driver is either, a discrete PostScript driver OR a universal print driver that supports PostScript.

**Note:** You may wish to contact the printer vendor to be sure the driver is a proper PostScript driver.

#### 5.11. If the above steps did not resolve your issue

Please send an email to the application support team. Please include:

- A screenshot or explanation of the issue you are facing
- PCP log files from the Print Control Proxy logs folder (Start Menu > All Programs > Phidelity > Print Control Proxy > Print Control Proxy logs folder). The log files look like this:

23/2/2017 3:18 PM	Text Document
16/2/2017 6:59 PM	Text Document
20/2/2017 9:34 AM	Text Document
23/2/2017 9:54 AM	Text Document
	23/2/2017 3:18 PM 16/2/2017 6:59 PM 20/2/2017 9:34 AM 23/2/2017 9:54 AM

Please include the following details as well:

- □ Browser used (and version)
- □ Model of printer
- □ Operating system