

# **EveryonePrint 4.3**

# Installation and Configuration Guide



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## 1. EveryonePrint Overview

### 1.1 What is EveryonePrint?

EveryonePrint is a server based secure and mobile printing solution that allows users to print from their workstation PC's, laptops and notebooks, mobile devices and tablets with ease, using Web print, driver printing, email, WiFi or Google Cloud printing.



- Web printUsers can upload documents to print via a Web portal, optionally with<br/>login validation.
- Driver printUsers can print from within their programs and applications on<br/>workstations or notebooks, with or without a driver installation, directly<br/>to the EveryonePrint server, optionally with authentication.
- **Email print** Users can send documents to print from mobile devices, by sending an email with documents attached, to an email address configured for the purpose. EveryonePrint retrieves emails and processes to the relevant print queues, optionally allowing for secure printing with login validation or privacy release codes.
- Mobile printUsers can send documents to print using the native Apple iOS AirPrint<br/>capability on iPhones and iPads, Google Android based smartphones<br/>and tablets, or Windows Phone devices, with optional authentication or<br/>release code print.
- Google Cloud PrintUsers can print from their Google Chromebook, phone or tablets,<br/>Google Apps such as Gmail, Google Docs, Google Sheets, or using any<br/>other application or device that supports Google Cloud Print, to the<br/>printers you select in EveryonePrint.<br/>After 31 December 2020, Google Cloud Print will no longer be<br/>supported.



What printing methods are available to users can be customized in the administration interface.

Print jobs can be held in secure private print clouds, until user walks up to their printer of choice and release their print jobs, either by entering a private release code, login credentials, or by card swipe.

EveryonePrint can be configured for many different uses and different integrations with existing environments, integrating with existing print accounting or print management systems and much more. If in doubt about the best setup for your organization, please contact EveryonePrint support or your local EveryonePrint solution specialist.



### **1.2 Prerequisites and Requirements**

EveryonePrint is available for installation on both Windows and Linux server operating systems. For more information about installing EveryonePrint on Linux Enterprise, refer to the specific EveryonePrint for Linux Enterprise documentation.

The following are required for a successful EveryonePrint installation:

- A server with the following minimum specifications:
  - Supported servers include: Windows 2008 Server SP1 (32 or 64 bit), Windows 2008 R2 Server (32 or 64 bit), Windows 2012 or Windows 2012 R2, Windows 2016, Windows 2019
  - Recent generation server CPU processor, such as Intel Xeon 64 or equivalent (see below for important note about performance). Desktop CPU's are NOT recommended for production use.
  - Minimum 4 GB free RAM memory (minimum 8 GB free RAM memory recommended for higher volume processing)
  - Minimum 20 GB free hard disk space for print job spooling and processing (40 GB free disk space recommended for higher volume processing)
  - No anti-virus program monitoring or interrupting the EveryonePrint directories
- For Microsoft Office document support, either use the built-in conversion engine (see separate licensing requirements) or Microsoft Office installed on the EveryonePrint server
  - For Microsoft Office document support using Microsoft engine, the following must be installed:
    - Microsoft Office 2007 SP2, Microsoft Office 2010 or Microsoft Office 2013 installed with minimum Word, Excel and PowerPoint. Both 32 bit and 64 bit editions are supported.
    - Microsoft Office must be activated.
- For OpenOffice document support, either use the built-in conversion engine (see separate licensing requirements) or OpenOffice installed on the EveryonePrint server
  - For OpenOffice or LibreOffice document support (odt, ods, odp) using OpenOffice engine, OpenOffice 3.3 or 3.4 must be installed. (LibreOffice and other OpenOffice variants are supported, but install OpenOffice to support these OpenOffice document variants)
- No proxy server interrupting local communication on the server (localhost/127.0.0.1)
- A local administrative user



If Email Print is enabled, the following are minimum specifications:

- A POP3/IMAP (SSL or non-SSL), Exchange MAPI or Exchange Web Services email account configured on a mail server to which users can send email print jobs, for example print@yourcompany.com
- EveryonePrint can support Microsoft Exchange with the following:
  - o Microsoft MAPI via RPC protocol with NTLM authentication
  - Microsoft Exchange Web Services over HTTPS with Basic, NTLM, or forms-based authentication. Kerberos, ADFS and RPC over http(s) authentication is not supported.

#### See section 18.2 for information about how to check and verify Exchange support.

• An SMTP server for sending release code or authentication emails from EveryonePrint to the users email address



### 1.3 Important note about performance

EveryonePrint can be a resource demanding application, as the EveryonePrint typically handle many of the tasks done by a normal workstation.

In a normal client/server environment, when a user prints a Word document, Office on the client PC renders the document to print. With EveryonePrint, if a user uploads a Word document, that conversion and rendering now takes place on the server, and effectively EveryonePrint assumes the workload of many clients.

# It's therefore essential that the EveryonePrint server is fitted with proper sufficient CPU and memory to handle the print volume.

EveryonePrint contains multiple ways to print, Web upload, Driver Print, Email Print and Mobile/App print. Each of these perform differently, and performance further depends on the document type and complexity of the document

Web Print	Upload of Microsoft Office or OpenOffice documents is most resource demanding, with each job processing taking from 1–2 seconds for simple jobs to 15–20 seconds for more complex documents. PDF documents and images require very little server processing, and are processed typically in less than 2 seconds.
Email Print	Office, PDF and images attached to emails are processed similar to Web Print jobs, and take the same time and resources to process.
Driver Print	With Driver Print there are 2 different core methods: "Simple" which uses a generic driver the user have already got on their machine, meaning no need to download and install a driver for the user; and "Advanced" where the user uses a manufacturer Postscript or PCL driver, for example, to use finishing options like stapling and binding.
	Driver Print fundamentally is very efficient. With "Simple" driver print, users print with a generic Postscript driver, and this data is converted and ultimately sent to the final destination printer using the driver installed on the EveryonePrint server.
Mobile Print	Print jobs from native app printing from mobile devices is typically very efficient, as little processing is required.

In case of excessive print job volume within a short time, the server will simply let jobs it cannot handle expire.



The following numbers are based on load testing with mixed Office and PDF documents, various number of pages and complexity, to simulate a typical customer environment.

The server was an Intel i7-level server CPU with 4 GB ram on Windows 2008 R2 only running EveryonePrint and Microsoft Office. This server could process and print:

Web/Email print:	800	Jobs per hour
Simple Driver Print:	1500	Jobs per hour
Advanced Driver Print:	12000	Jobs per hour
Mobile Print:	1500	Jobs per hour

So the usage pattern, volume of jobs, features used and the documents printed fully determines how many servers are needed. Target the number of servers for the peak load. If using a highend server and the expected print volume is less than above test results, a single server should be sufficient.

#### 1.4 Ports and protocols

#### Web interfaces and Web Print

EveryonePrint includes Web interfaces for administrator configuration, Web print upload and user print release. Per default the following ports are used:

HTTP (non-SSL) TCP port 7290 HTTPS (SSL) TCP port 9443

#### **Driver Print**

Printing to EveryonePrint via driver, is either through HTTP/HTTPS IPP printing protocol or the LPD server for LPR print. Per default, the following ports are used:

IPP print	TCP port 631				
IPP print (SSL)	TCP port 9443				
LPR print	TCP port 515				

#### Email Print

The EveryonePrint server will communicate with external mail servers on the network when retrieving and sending emails. The ports used depend on the mail servers configuration, but typical ports are:

POP3 non-SSL:TCP port 110POP3 SSL:TCP port 995IMAP non-SSL:TCP port 143IMAP SSL:TCP port 993SMTP non-SSL:TCP port 25SMTP SSL:TCP port 465Exchange MAPI:TCP port 135 and Windows RPC protocolsExchange WS:HTTP TCP port 80 and HTTPS TCP port 443

#### **Mobile Print**

Refer to separate EveryonePrint Mobile Gateway documentation for details on Mobile Print ports and protocols requirements.



#### **Google Cloud Print**

The EveryonePrint server communicates with the Google Cloud Print services hosted with Google through the following ports:

TCP port 80 and 443 XMPP protocol TCP port 5222

Important! The Google Cloud Print service is marked as a BETA software by Google. This means that Google could change anything and everything at anytime, interrupting or breaking the integration between EveryonePrint and Google Cloud Print.

After 31 December 2020, Google Cloud Print will no longer be supported.

#### Other ports

When EveryonePrint releases print jobs to Windows print queues, internal Windows printing protocols are used, RPC, IPP, LPR etc, depending on the printers driver configuration.

#### **1.5 Supported documents**

The following document formats are supported via Web and Email Print. All document formats are supported under Driver Print.

File format	Requirements			
Pdf, html, htm, gif, png, jpg, tif, bmp, txt	No special requirements			
doc, docx, xls, xlsx, ppt, pptx, rtf	Requires Microsoft Office or EveryonePrint			
	built-in conversion engine (see separate			
	licensing requirements)			
odt, ods, odp	Requires OpenOffice or EveryonePrint built-in			
	conversion engine (see separate licensing			
	requirements)			



### **1.6 EveryonePrint with print accounting solutions**

EveryonePrint can work seamlessly as an add-on to nearly all print accounting or print management solutions. Set the EveryonePrint edition to **EveryonePrint Connect** (see section 3.4 *Choose EveryonePrint Edition*) and under Printing and Security *(see section 3.11 Printing and Security)*, choose either **Privacy with Authentication** or **Direct with Authentication**, so users and their print jobs are authenticated.



When a user sends a print job via EveryonePrint, EveryonePrint will send the print job into the associated print queue with the user's username as the print job owner, and print accounting solutions monitoring the Windows print queue, will use this information to track and account the print jobs.



EveryonePrint can either be installed directly on the print server or on a separate server, for example in a DMZ zone.





If EveryonePrint is installed on its own separate server, and not the print server, EveryonePrint can still send print jobs to the print servers where the print accounting solution is installed. See section *12 Printing to remote print servers* for more information about sending jobs to remote servers.



EveryonePrint has deep integration with several of the most popular print accounting and print management solutions in the market, to allow for advanced guest printing scenarios, displaying user account balances inside of EveryonePrint, and more. Contact EveryonePrint support to obtain details, on how to enable these integration features for your accounting or print management solution.



# 2. Quick Start Guide

The following section walks through a simple setup of EveryonePrint, with a user uploading a document to print via the Web portal.

### 2.1 Installation Summary

These are the overall steps involved in setting up and configuring an EveryonePrint server.

Setup email account	If email printing is to be used (optional), start by configuring the pop3/imap/MAPI/EWS email account to which users send their print jobs, for example print@yourcompany.com
Prepare server	Prepare the server on which to install EveryonePrint, ensure that it meets the minimum requirements for memory and disk space.
Prepare printers	Prepare the printers on the server on which users should be able to print
Install and configure EveryonePrint	Run the installer, configure in EveryonePrint Admin, do a test print job to selected printers

If the server has been prepared, the basic EveryonePrint installation and configuration takes less than 10 minutes.

### 2.2 Configure Email Account

An essential component in the mobile printing process with EveryonePrint, is the email account to which users send emails with documents attached to print.

The EveryonePrint server supports POP3, IMAP4, Microsoft Exchange MAPI or Exchange Web Services email accounts, either with or without SSL encryption. There are no limitations to the mail servers supported, as long as they adhere to standard POP3, IMAP4 or MAPI mail specifications.

Most enterprise email systems, such as Microsoft Exchange and Lotus Domino/Notes, fully support IMAP email access and SMTP for sending emails.

Note that email printing is not required for EveryonePrint to function. The Email Print features can be disabled, if the wish is to only use, for example, Web and Driver print.

If for some reason you are unable to configure an email account, please contact EveryonePrint support, and we can provide you with a temporary account on the EveryonePrint mail servers for initial setup and demo purposes, such as <u>your-company@everyoneprint.net</u>.



### 2.3 Prepare printers on the server

If the server on which to install EveryonePrint is not already a print server containing printers, install the relevant printers on the server.

🗞 Printers and Faxes			
Eile Edit View Favorites Tools Help			
📙 🔇 Back 👻 🕥 👻 🏂 🔎 Search 🎓 Folders	1 13 13 >	< 🍤   🖽-	
Address Shinters and Faxes			
Name 🔺	Documents	Status	Comments
실 Add Printer			
General Adobe PDF	0	Ready	
🚵 BAO13	0	Ready	

EveryonePrint can print to locally installed printers or local print queues which point to other print servers with printing via LPR or using other printer ports. For printing to remote print servers, see the section *12 Printing to remote print servers*.

There are no known limitations to the type of printer, driver or the communication protocol of the printer. If you can print to the printer from Word without any special configuration with each print job, then users printing via EveryonePrint, should be able to print to it as well.

### 2.4 Installing EveryonePrint

Before running the EveryonePrint installer, make sure that you are logged on as local administrator.

Install EveryonePrint by running the installer EveryonePrintSetup.exe. The installer will let you select destination directory, start menu name and other similar basic settings. EveryonePrint will install by default in c:\Program Files (x86)\EveryonePrint or equivalent for localized versions of Windows.



At the last screen of the installer, you're presented with two options:



EveryonePrint is installed as a Windows service, and automatically starts with Windows.



For EveryonePrint to successfully convert documents and print, the EveryonePrint Web service in Windows Services must be logged on as a user with local administrative rights. You can open Windows Services by checking the "Go to Services" in the above dialog.

Name 🛆	Descript	ion 1	Status	Startup T	уре	Log On As		
🖏 Distributed Transac	Coord	vervon	ePrint We	b service	Prope	erties (Local	Comput	er)
🆓 DNS Client	Resol			,				
Error Reporting Ser	Collect	Genera	l Log On	Recover	y Dep	endencies		
🏶 Event Log	Enable							
EveryonePrint Data	The da	Log o	n as:					
EveryonePrint Web	The W	O Lo	ocal System	account				
Replication	Allows		Allow serv		act with	a deskton		
Relp and Support	Enable		<u></u>			1.320111.50		
HTTP SSL	This se	• <u>I</u>	his account	: A	dministr	ator		Bro
🖏 Human Interface D	Enable			<u> </u>				
MAPI CD-Burning	Manaç	E	assword:	•	•••••	•••••		
Notexing Service	Index	c.						
🖏 Intersite Messaging	Enable	Lo	onfirm passv	vora: J•				
68. IDEEC CONTRACTOR	Duranda							

Make sure that you're using a local administrative user. It does not have to be .\Administrator specifically, but a local user account which is member of Administrators group.

Only the EveryonePrint Web service should be started as local administrator. Other EveryonePrint Windows services such as "EveryonePrint Data service" and "EveryonePrint Print Service" should run as LocalSystem.

#### 2.4.1 Unattended/Silent installation or update of EveryonePrint

The EveryonePrint installer program accepts optional command line parameters. These can be useful when deploying new EveryonePrint servers, or updating existing EveryonePrint installations.



#### /SILENT or /VERYSILENT

Instructs installer to be silent or very silent. When installer is silent the wizard and the background window are not displayed but the installation progress window is. When a setup is very silent this installation progress window is not displayed. Everything else is normal so for example error messages during installation are displayed.

If a restart is necessary and the '/NORESTART' command isn't used (see below) and installer is silent, it will display a Reboot now? message box. If it's very silent it will reboot without asking.

#### /NORESTART

Instructs installer not to reboot even if it's necessary.

#### /DIR="x:\dirname"

Overrides the default directory name displayed on the Select Destination Location wizard page. A fully qualified pathname must be specified. Should only be used on new installations!



### 2.5 EveryonePrint Admin

To configure EveryonePrint start the EveryonePrint Admin from the shortcut either in the Windows start menu, the desktop icon or by entering the URL for the admin interface:

🖉 EveryonePrint - Admin Login - Windows Inter	net Explorer				×
S + 127.0.0.1:7290/admin/login.	cfm?dest=index.cfm&		•	🔸 🗙 Google	<b>₽</b> •
😪 🍄 🌈 EveryonePrint - Admin Login		1		💁 • 🗟 • 🖶 •	<u>Page</u> ▼
EVERYC Prin	To sign in, please Username:   Password:		Login		
					=
				👩 😜 Internet	€ 100% + //

http://127.0.0.1:7290/admin or https://localhost:9443/admin

#### 2.5.1 Access EveryonePrint Admin remotely

The admin interface can be accessed remotely from any client with access to the IP address of the computer hosting the EveryonePrint service, through the URL: http://{server-ip}:7290/admin where {server-ip} is the IP address of the server, or https://{server-ip}:9443/admin, if the network and firewall configuration permits it.

#### 2.5.2 Default EveryonePrint Admin login

The default username and password for the EveryonePrint Admin is:

Username: admin Password: eop

It is strongly recommended to change this password after logging on, by going to **Administrator Login** in the Settings section.



### 2.6 Adding Printers to EveryonePrint

A server on which EveryonePrint is installed may contain many printers that may or may not be used in EveryonePrint. It is therefore necessary to add the printers to be used in EveryonePrint, via the admin interface.

🍓 Printers and Faxes			
Eile Edit View Favorites Tools Help			
🛛 😋 Back 👻 🌖 👻 🏂 📔 🔎 Search 🛛 🏷 Folders	: 🕼 🕑 >	< 🍤   🖽-	
Address 💱 Printers and Faxes			
Name 🔺	Documents	Status	Comments
Add Printer			
Adobe PDF	0	Ready	
BAO13	0	Ready	

Go to **Devices** in the admin site. If no printers have been added previously, it will automatically show the "Add New Device" page.

Import All P	rinters from Server
New Printer I	Details
Printer ID:	
	(Leave Printer ID blank and an ID will be created automatically)
Printer Description:	
Output Printer:	(select printer)
	$\square$ Send a test print to printer after adding
	Add New Printer

Click "Import All Printers from Server" to automatically add all printers that exist on the server on which EveryonePrint is installed. Imported printers can be changed or removed at any time afterwards, if any adjustments are necessary later.

A printer can also be added manually for more control.

New Printer Details				
Printer ID:	172.18.1.200			
	(Leave Printer ID blank and an ID will be created automatically)			
Printer Description:	Building A, Office 1.3			
Output Printer:	BA013			
	Send a test print to printer after adding			
	Add New Printer			

Printer ID	A unique identifier for the printer. Can be a number, serial
	number, IP address or similar.



	<b>Important:</b> If using EveryonePrint with release terminals, make sure the Printer ID is as defined by the release terminal supplier, for example the output device IP address.
Printer Description	A user friendly description of the device, to identify the printer to the end user
Output Printer	The corresponding Windows print queue as installed on the EveryonePrint server.

Check the box **Send a test print** to send a test print job from the EveryonePrint application after adding the printer, useful for verifying the configuration of the device.

### 2.7 Access user Web portal and do simple test print

To complete a simple test print, access the user Web portal (covered in detail later in this guide), by going to  $\frac{\text{http:}//127.0.0.1:7290}{\text{.}}$ .

every Pri	ONE nt
	To sign in, please enter your username and password below. Username: anything
	Password: •••••••••

You will be presented with a login screen. Enter any username and password, no validation of the entered login takes place, if no authentication has been configured in EveryonePrint Admin -> Settings -> User Authentication.

From the main My Print Jobs page, upload a simple text document.

#### My Print Jobs

Jpload Document To Print	
	Browse
Supported documents include Microsoft Office, OpenOffice, RTF and PDF. For other formats, use <b>Driver Print</b> .	Next »

The document will be processed and once complete, a list of the available printers will be shown.



Date/Time	F	llename	Pages	Status	refresh 🖸
7/16/10 8:25 PM	1	Test Page To print this job, select a printer below: Building A, office 11.3 Advanced Building A, office 3.3 Advanced	1	Awaiting rele	ase

Release to a printer and confirm the output.

#### You have successfully completed the basic EveryonePrint installation!

Please see the next sections for configuring the EveryonePrint server further, with user authentication, printing behavior, additional print methods and so on.



## 3. Configuring EveryonePrint

The following section covers the configuration screens in EveryonePrint Admin.

### 3.1 Dashboard with statistics

The **Dashboard** is an overall view of completed print job usage and activity in the EveryonePrint system.



Select a reporting date range for the dashboard by selecting the **date from** and **date to** fields, and clicking **Apply**.

	From	1/1/20	10	to 3	0/9/20	010	apj	oly
	201	0	-	Janua	nry 2	010		0
0 September 2	2010	Мо	Ти	We	Th	Fr	Sa	Su
MMMMM	Mor					1	- 2	3
		4	5	6	- 7	8	9	10
		11	12	13	14	15	16	17
		18	19	20	21	-22	23	24
		- 25	26	27	28	29	30	31



The number of pages reported in the Dashboard does not reflect the accurate printed output on device, as EveryonePrint reports the number of pages contained in the document, not the actual output. For accurate output tracking, use EveryonePrint together with a print accounting system.

### 3.2 EveryonePrint Monitor

The **Monitor** in the admin shows recent print jobs and email activity in the EveryonePrint server, useful for verifying the status of certain print jobs or just monitoring activity.

Print Job	Monito	r		
Last 20 Print Jo	obs			
Date/Time	Source	User	Filename	Status
7/14/10 9:58 AM	Web	j.smith	important document.docx	Printed
7/14/10 9:57 AM	Web	jane.doe	pricing table.xls	Printed
7/14/10 9:48 AM	Web	alex	Nice presentation.pdf	Printed
7/14/10 9:47 AM	Web	bob	Sales Proposal.pdf	Printed
7/14/10 9:10 AM	Web	andrew	Contract X.doc	Printed
7/13/10 8:33 PM	Web	thomas	important document.docx	Printed
7/13/10 8:32 PM	Web	john	pricing table.xls	Awaiting release
7/13/10 7:14 PM	Driver	jane	Nice presentation.pdf	Awaiting release

Print jobs not actively being processed or printing, can be deleted by clicking the red cross.

If the card server service is enabled, the Monitor will also show recent active card swipes.

#### Active Recent Card Swipes

Date/Time	Device	CardID	Username
10/23/11 12:42 PM	MFP 02	b4617f8006f	- unknown -
10/23/11 12:41 PM	MFP 02	4f56416b78	johnsmith

If an unknown card has been swiped, click the "unknown" username, to associate that card with an actual username.

If a user logs out on the release terminal, the relevant card swipes sessions are cleared from the Monitor.

#### 3.2.1 Hide user and document information in Monitor

For situations where administrators should not be able to view user names and/or document names in the Monitor, for privacy reasons, a settings parameter can be added to the main EveryonePrint configuration file eop.xml found in the installation directory.

- 1. Stop EveryonePrint Web service
- 2. Open eop.xml in a text editor such as Notepad
- 3. Add/edit the following parameter:

<adminprivacy>0</adminprivacy>

- 0 = Normal operation
- 1 = User name is hidden
- 2 = Document name is hidden



- 3 = User name and Document name are hidden
- 4. Start the EveryonePrint Web service

#### 3.2.2 Hide the Monitor completely

For situations where the Monitor view should be hidden completely from the EveryonePrint administration interface, a settings parameter can be added to the main EveryonePrint configuration file eop.xml found in the installation directory.

```
true</cardserverallowselfreg><ldapcardidfield/><ssoenabled>false</ssoenab
pin><logincreaterequireemail>crue</logincreaterequireemail><logincreatere
gincreateplatforp><hidemonitor>true</hidemonitor></settings>
```

- 1. Stop EveryonePrint Web service
- 2. Open eop.xml in a text editor such as Notepad
- 3. Add/edit the following parameter:

<hidemonitor>true</hidemonitor>

4. Start the EveryonePrint Web service

#### 3.3 Licensing

In EveryonePrint Admin and General Settings, are overall application settings for EveryonePrint.

EveryonePrint installs with a 60 day trial license. An EveryonePrint license can be purchased from most print/copy manufacturers, resellers and print solution providers worldwide or by contacting EveryonePrint.

Licensing	
Server name:	LAB2008R264-1
Server ID:	4102-A770-D8EF
Current license:	Evaluation (expires in 46 days)
License key:	

License keys are unique to the particular server where EveryonePrint is installed. If the server where EveryonePrint is installed is renamed or changed significantly, a new license key must be issued. Changes to server which will trigger a new license key requirement include CPU or primary MAC address changes.

To obtain a license key, supply your EveryonePrint representative with the *Server name* and *Server ID*.

A license for EveryonePrint gives access to a specific edition of EveryonePrint, either EveryonePrint Standalone or EveryonePrint Connect. A license for Connect cannot be used with Standalone edition, and vice versa. See section *3.4 Choose EveryonePrint Edition* for more information about editions.



### 3.4 Choose EveryonePrint Edition

An important setting in EveryonePrint, is the selection of edition. EveryonePrint can be used in many different environments and configurations depending on customer needs. This setting turns on and off features relevant to overall configurations:

- If EveryonePrint is used as a standalone secure and mobile print solution, or
- If EveryonePrint is an add-on to a print accounting solution.

Depending on the choice, different features only relevant for that type of configuration are enabled.

#### EveryonePrint Edition Configuration

Choose the configuration below which is most relevant for this installation. Depending on the selection below, different features will be enabled.

- C EveryonePrint Secure Standalone EveryonePrint is installed standalone without a print accounting solution
- EveryonePrint Connect Add-on to accounting EveryonePrint is installed as an add-on to a print accounting or print management solution

Please refer to EveryonePrint current price list for a list of features available in different editions of EveryonePrint.

### 3.5 Logging and Troubleshooting

All errors and other information from EveryonePrint are logged to the central EveryonePrint log "eopapp\_yyyy\_mm\_dd.log" located by default in c:\Program Files (x86)\EveryonePrint\logs

Other EveryonePrint components, such as the built-in IPP print server also creates log files in the \logs directory.



For troubleshooting, enable "Debug Logging" in the EveryonePrint admin interface, and the logs generated become very detailed with all activity in the EveryonePrint server.

Do not use debug logging in production unless necessary for troubleshooting, as debug logging can create very large log files.



### 3.6 Document Support

EveryonePrint includes a built-in Microsoft Office and OpenOffice conversion engine, which means that users can send Office documents to print, and EveryonePrint can convert and print those documents without relying on any outside third party applications.

The built-in conversion engine is enabled by default, but you can choose to either use the builtin engine or use Microsoft Office and OpenOffice to convert and print documents.

#### Document Support Choose document formats to support in addition to the standard PDF, images and txt formats. ✓ Microsoft Office 2007 SP2, Microsoft Office 2010 or Microsoft Office 2013 For conversion and processing of Microsoft Office documents, choose the conversion engine you wish to use. Use Microsoft Office 2007 SP2, Microsoft Office 2010 or Microsoft Office 2013 application installed on the EveryonePrint server. Requires Microsoft Office installed on the EveryonePrint server. **Run Document Conversion Tests** Use built-in Microsoft Office document conversion engine, no Microsoft Office installation required on the EveryonePrint server. (Requires EveryonePrint Professional license). Refer to the EveryonePrint documentation for requirements and limitations when using the built-in conversion engine. OpenOffice 3.3 or 3.4 For conversion and processing of OpenOffice documents, choose the conversion engine you wish to use. O Use OpenOffice 3.x application installed on the EveryonePrint server. Requires OpenOffice 3.x installed on the EveryonePrint server. Use built-in OpenOffice document conversion engine, no OpenOffice installation required on the EveryonePrint server. (Requires EveryonePrint Professional license). Refer to the EveryonePrint documentation for requirements and limitations when using the built-in

The built-in conversion engine requires a license with the feature enabled. Refer to the section *3.4 Choose EveryonePrint Edition* for licensing requirements.

Important! The built-in conversion engine cannot guarantee 100% accurate print output. For environments where document output fidelity is critical, such as higher education environments, where students pay for their prints, it is strongly recommended to use Microsoft Office engine for conversion.

Enabling the option to use Microsoft Office or OpenOffice for conversion, without first installing the supporting application (MS Office or OpenOffice) will result in conversion errors. You can install Microsoft Office and OpenOffice and enable additional document support at any time, including after installing EveryonePrint.

For more information about installing Microsoft Office and OpenOffice for document conversion, refer to section *13 Installing document support applications*.

conversion engine.



### 3.7 Application Settings

When EveryonePrint is configured in a privacy mode, prints are held in EveryonePrint until release. Adjust the timeout for when unreleased jobs are cleaned up and auto deleted. Default value is 1440 minutes (24 hours).

Application Settings		
How long jobs are kept as "awaiting release" before being deleted:	1440	minutes

### 3.8 Print output settings

For documents which do not have a set size, such as Microsoft PowerPoint presentations, choose the default paper size, either A4 (default in Europe) or Letter (default in North America).

Print Output Settings
Default paper size for "unknown sizes": A4 210 x 297 mm

By default EveryonePrint will print jobs as simplex in color. Under Print Output Settings, different default settings can be chosen, for example, presetting all jobs to be printed as duplex in black/white.

Choose how jobs are printed by default, and whether users should be able to modify output settings.

Preset all print jobs to print as:

O Simplex

Duplex long-side (most common duplex setting)

C Duplex short-side

Preset all jobs to print as black/white

**Important:** Converting all print jobs to black/white for printing requires significant extra processing time and resources during the print operation.

Z Allow users to change settings for simplex or duplex, and color or black/white in the release interfaces. Uncheck this to lock output settings to the presets above.

Settings can further be restricted, so users are not able to modify the presets.

The settings apply to Web upload, Email print jobs and simple Driver print jobs.

### 3.9 Languages and Location

EveryonePrint support multiple languages and locale for displaying dates and numbers in local formats.

Web Interface	Languages		
Choose the language	s that should be available in the	EveryonePrint Web interfaces.	
🗹 Dansk	🗹 English	🗹 Français	

Select the languages that should be available to use for users. Selected languages will appear in the top navigation of the user interfaces.



Choose the default language that appears, and the language used in email responses sent from EveryonePrint, such as emails containing release codes and similar.

Default Langu	age And Email Langi	uage
Choose the default la email responses sent		s at first, and what language should be used in
C Dansk	● English	C Français

Select the locale determining how numbers and dates should be formatted relevant to your location.

Locale	
Locale determines currency, number and date formatting.	
English (UK)	



### 3.10 Modifying language text strings

All text strings used in the EveryonePrint end-user Web interfaces are part of a translation system, so users easily can change from one language to another.

It's possible to manually edit the language files containing the raw text, and change any text appearing in EveryonePrint.

The language files are located in

<install-directory>\eop\languagefiles

Files are named public\_ for the end-user interface and the language abbreviation \_en for English \_se for Swedish and so on.

To edit, for example, the English text strings in the end-user interface, open public\_en.xml in an editor such as Notepad, and carefully edit the text. Both plain text and HTML tags are possible.

For example, to change the Advanced Driver Print instructions for Windows 7 English, to insert a link, edit the following from:

<cfcase value="dp\_win7\_7b">Choose the driver for the printer model specified below or click <strong>Have Disk..</strong> to install driver, and click <strong>OK</strong>.</cfcase>

To:

<cfcase value="dp\_win7\_7b">Choose the driver for the printer model specified below or click <strong>Have Disk..</strong> to install driver, and click <strong>OK</strong>. To download the driver <a href="http://www.acme.com/driver.zip">click here</a>.</cfcase>

This would change the appearance in the EveryonePrint Web interface to:

 Choose the driver for the printer model specified below or click Have Disk.. to install driver, and click OK. To download the driver click here

IMPORTANT: Language files are provided as is. It's strongly recommended to backup the language files prior to editing. EveryonePrint provide no assistance or support relating to changing of language files. Any changes done to language files will automatically be overwritten by any EveryonePrint update.



### 3.11 Printing and Security

The Printing and Security screen contains the primary settings that determine the overall printing behavior of EveryonePrint. Decide here how EveryonePrint will behave when a user sends an email print job, whether a user can print with or without authentication, and so on.

There are 2 overall modes for Printing and Security, where one keeps prints in EveryonePrint until they're released (Privacy Print), and another releases prints to a pre-selected print queue immediately following processing (Direct Print).

Please note that changing Printing and Security mode changes how EveryonePrint features work, so if you for example use Driver Print in one mode, but then change mode, the Driver Print configuration changes, and it is therefore necessary to add your Driver Print printer again.

**Privacy Print** Privacy print is used if users print jobs should be stored in EveryonePrint until the user releases the print, either in one of the EveryonePrint Web interfaces or on a release terminal dedicated to EveryonePrint.

#### Privacy Print (Prints Are Held In EveryonePrint Until Release)

- O Privacy with Release Code What this means?
  - Web print User sees release code on screen
  - Driver print User supplies release code in printer configuration
  - Email Print User gets email reply with release code
- C Privacy with Authentication What this means?
  - Web print Users must logon Web portal to upload print jobs
  - Driver print Users supplies authentication information in printer configuration
  - Email print Users must logon and associate email address with username

Privacy Print has 2 modes:

#### Privacy with Release Code

When this mode is selected, users can print without authentication via Web, driver and email.

Web Print in Privacy with Release Code:

Users can access the Web print interface without having to log on. A release code is shown on screen. Users can either release jobs to print in the Web interface, or enter the release code on a supported release terminal.

Driver Print in Privacy with Release Code:

Users add a printer to their computer which is preconfigured with a fixed release code, they can use to release print jobs, either in the EveryonePrint release Web interface, or on a supported release terminal.

Email Print in Privacy with Release Code:

When a user has sent documents to print via email to EveryonePrint, the user will get a reply email from the system, with a release code for the job, to use for release either in EveryonePrint release Web interface or on a release terminal.



#### Privacy with Authentication:

When this mode is selected, users must enter a username and password to print, which is authenticated as per the settings in the **User Authentication** screen.

Web Print in Privacy with Authentication:

Users log on the user Web printing portal and upload their documents to print, which are stored in EveryonePrint. The user can release using the Web interface, or by authenticating at a release terminal.

Driver Print in Privacy with Authentication:

Users add a printer to their computer which will be configured in such a way that authentication details are sent with the print job. Users can release print jobs sent via Driver Print, either by logging on to the Web interface or by authenticating at a release terminal.

Email Print in Privacy with Authentication:

Users send documents to print as attachments in an email, which are picked up by EveryonePrint. The first time a user sends an email print job, they are asked to authenticate with their username and password. After successful authentication, the users email address is associated with their username, and all subsequent jobs from that address are processed without delay. A user can have an unlimited number of associated email addresses, which means a user can print from an employee device and from home etc. Users can release print sent via Email Print, either by logging on to the Web interface or by authenticating at a release terminal.

**Direct Print** The Direct Print mode is used if an external secure printing solution is used or if print jobs should be printed directly immediately, either anonymously or with authentication.

#### Direct Print (Prints Are Sent To Print Queue Immediately) Print jobs are released immediately to the selected print queue below. Use this option if an external secure printing solution is used or if print jobs should be printed directly immediately. Print queue for direct print. Secure Pull Print Queue

#### O Direct with No Authentication - What this means?

- Web print Any user can access the Web print portal and upload documents to print. Owner of the job is IP address of client sending job
- Driver print All users can print via driver. Prints are released directly to selected queue. Owner is sending computers username or IP address
- Email Print All email print jobs are directly released to specific queue. Owner of the job is the email address of sending user

#### Oirect with Authentication - What this means?

- Web print Users must logon Web portal to upload print jobs.
- Driver print Users supplies authentication information in printer configuration
- Email print Users must logon and associate email address with username

Driver Print has 2 modes:

#### Direct with No Authentication:

This is the most direct and open configuration setting. Any user can send print jobs, and they are released automatically to the selected print queue.



Web Print with Direct with No Authentication:

Users can access the Web Print portal and upload a document to print. It is immediately released to the printer selected in the EveryonePrint Admin by administrators. The owner of the print job in the print queue, is the users sending IP address.

Driver Print with Direct with No Authentication:

Users provide no special authentication information when sending print jobs via Driver Print. Prints are released to the preselected print queue automatically. The owner of the job in the queue, is the username of the sending clients computer, if available, otherwise the sending users IP address.

Email Print with Direct with No Authentication:

Any user can send an email with documents attached to print. The processed jobs are released immediately to the preselected print queue. The owner of the job in the print queue, is the users email address.

#### Direct with Authentication:

The Direct with Authentication mode is used primarily if an external secure print accounting system or print management system, is configured with one central "follow me" pull-queue. Users authenticate to print, and prints sent via EveryonePrint are released directly into this external print queue, from where users can release using, for example, embedded MFP release terminals.

Web Print in Privacy with Authentication:

Users log on the user Web printing portal and upload their documents to print. Print job is released directly to preselected queue.

Driver Print in Privacy with Authentication:

Users add a printer to their computer which will be configured in such a way that authentication details are sent with the print job. Print job is released directly to preselected queue.

Email Print in Privacy with Authentication:

Users send documents to print as attachments in an email, which are picked up by EveryonePrint. The first time a user sends an email print job, they are asked to authenticate with their username and password. After successful authentication, the users email address is associated with their username, and all subsequent jobs from that address are processed without delay. A user can have an unlimited number of associated email addresses, which means a user can print from an employee device and from home etc. Print jobs received via email in this mode are released directly to preselected queue.



### 3.12 User Authentication

If Printing and Security is set to either **Privacy with Authentication** or **Direct with Authentication**, then the actual authentication method, how user logins are validated, is configured in the User Authentication screen. If a different Printing and Security mode is used, then settings in the User Authentication screen are ignored.

Per default no authentication method is chosen, which means that any entered username and password is accepted as valid. This is useful for initial setup and testing, but should not be used in production.

EveryonePrint supports Authentication via LDAP, which includes Windows Active Directory.

#### 3.12.1 LDAP Authentication

Enter the details for the LDAP authentication server, including a test username and password of a valid user account in the LDAP, and click **Save and Test** to verify the configuration.

<ul> <li>Authentication via LDAP - Users enti- against the LDAP server below.</li> </ul>	er username and password which is authenticated			
LDAP Server IP/hostname:	dc1			
LDAP Server port:	389 (default 389 for non-SSL and 636 for SSL)			
Start search DN:	OU=Students,DC=university,DC=local			
Field containing username:	sAMAccountName			
	, Typically "sAMAccountName" or "cn" (without the quotes)			
Field containing email address:	mail			
Field containing card ID:	physicalDeliveryOfficeName			
User object class:	user			
Field containing users device group names (leave blank if not used):				
LDAP administrator username:	administrator@university.local			
LDAP administrator password:	•••••			
You can test the entered LDAP settings	by entering a login for a normal user below.			
Test username:	student1			
Test password:	•••••			
	Save and Test			

A highly recommended tool for identifying proper LDAP settings to use, is **LDAP Browser 2.6**, which can be downloaded for free via <u>http://www.ldapadministrator.com</u>



Changes saved successfully. Authentication test using test user account failed. Error details: General Runtime Error javax.naming.CommunicationException: 10.1.0.14:389 [Root exception is java.net.ConnectException: Connection timed out: connect]; ROOT CAUSE=Connection timed out: connect

If test authentication fails, an error message will be shown. See common LDAP error codes and typical causes in the Troubleshooting Tips section of this guide.

#### 3.12.2 Prepend/append username with domain information

The ability to prepend or append the username with certain information, is relevant in authenticated print environments, where EveryonePrint integrates with accounting solutions, which depend on extended domain information in the print job owner details.

Leave the prepend/append value field blank unless specifically required.

Prepend extends the username, by inserting additional information, such as a domain, before the username. For example, if the simple username is "john", but print jobs should be appear with the username "domain\john", add the setting:

prepend:domain \

Value to prepend or append username (leave blank if not	prepend:lab2\
used):	

Append extends the username by appending additional information, such as a domain name, at the end of the username. For example, if the simple username is "john", but print jobs should be appear with the username "john@domain.com", add the setting:

append:@domain.com

Value to prepend or append username (leave blank if not	
Value to prepend or append username (leave blank if not	append:@lab2.local
used):	



### 3.13 User Web Portal Configuration

A central interface in EveryonePrint is the Web portal, where end users will go to upload documents to print via Web Print, see instructions for how to use Driver Print and guide for Email Print.

Pri		ail Print My	Printers	
My Print Jo	obs			
	Upload Document To Print Upload Documents include Microsoft Office, OpenOffice, RTF and PDF. For other formats, use Driver Print.	Browse Next »		
Date/Time	Filename	Pages	Status	refresh 🗹
7/15/1011:49 PM 🛛 🖻	Acme 2.0 Documentation.pdf To print this job, select a printer below: Building A, office 11.3 Advanced Number of copies: 1 Print from page 1 to 37	37	Awaiting release	

The user Web portal is accessible per default on <u>http://127.0.0.1:7290</u> or <u>https://localhost:9443</u> for HTTPS/SSL.

External Web Portal Address		
Enter the external address of the Web portal that users access, for example: "http://print.company.com:7290". EveryonePrint defaults run on HTTP port 7290 and HTTPS port 9443. If the Web port has changed, make sure it is updated below.		
External Web Portal URL: https://print.company.com		

Since this Web interface may be accessed from users outside of the local server, provide a Web URL address for the Web interface, that is accessible to users externally.

If SSL has been successfully configured, check the box below to automatically redirect any users accessing the Web portal via non-SSL HTTP to HTTPS/SSL.

☑ Redirect non-SSL users to HTTPS/SSL (Only enable this option, if SSL has been configured successfully.)

If an SSL certificate has been successfully installed and configured, the redirect option can be enabled to automatically redirect users that access the Web portal with non-SSL HTTP to HTTPS/SSL. Before enabling this option, ensure that HTTPS/SSL is fully working.


Web Portal Logo	
Customize the Web portal interfaces with a new logo should not exceed 320 $\times$ 85 pixels.	). Supported formats are gif, jpg and png. Size
Upload new logo file:	Browse
$\square$ Reset logo to default logo	

Customize the Web interfaces easily by uploading a new logo file. The logo uploaded can be a GIF, JPG or PNG file. There are no fixed size restrictions. The logo replaces the EveryonePrint logo in the header.

Check the **Reset logo to default logo** at any time to clear a custom logo and revert back to EveryonePrint logo.



The "My Print Jobs" screen is the main page that users see in the EveryonePrint end-user Web interface. Customize what is displayed in this page by enabling or disabling the options.

### 3.13.1 Customize login text on Web portal

It's possible to customize the login screen of the user Web portal, with a welcome message or special login instructions.

Any text or HTML, including CSS formatting, can be inserted.



Any inserted text or HTML will appear above the login dialog box.



# Welcome To Our Printing System

- 1. Some instruction here
- 2. Another instruction here

And a link here.

To sign in, please enter your username and password below.

Username:	
Password:	

Customization is only relevant if authentication is selected in Printing and Security, so users see the login screen, otherwise it's just ignored.



### 3.13.2 Web Portal single-sign-on

EveryonePrint can be configured to either allow both traditional form login on the EveryonePrint Web Portal as well as single-sign-on in parallel, or allow only single-sign-on, using one of the supported systems.

🗹 Enable single sign on

Sign-in Mode
 Single sign on + normal authentication

 if an unauthenticated user loads EveryonePrint Web portal, user is presented with login form

 Single sign on only

 if an unauthenticated user loads EveryonePrint Web portal, user is redirected to below customer Web address for authentication:
 Authentication URL: https://foo.bar.com/is/cas/login
 (max 255 chars)

If Single-Sign-On only is chosen, a Web URL is entered, and any unauthenticated user accessing EveryonePrint, will be redirected to this URL for authentication by the single-sign-on system.

Specify an optional logout URL where users are redirected after logout.	
Logout URL: https://www.university.edu/sso/logout	(max 255 chars)

It's further possible to specify an optional logout URL to where users are redirected after a logout.

EveryonePrint can support two different single-sign-on systems:

- 1. Internal built in single-sign-on system
- 2. CAS Jasig Central Authentication Service (<u>http://www.jasig.org/cas</u>)



### 3.13.2.1 Internal built in single-sign-on

Built-in EveryonePrint single-sign-on system Choose secret pass key for creating MD5 verification value Single sign-on pass key: asecretvalue

EveryonePrint includes a very simple single sign on system for easy implementation in any programming language and platform.

Implement user authentication in any way required, and pass users to EveryonePrint using either HTTP/S POST or a HTTP header redirection. Two variables are included, the username and an MD5 check hash value consisting of the username and a pass key only known by administrator and EveryonePrint.

When an authenticated user is passed to EveryonePrint, the user is automatically authenticated, and have usual functionality presented to them. To finish the session, the user can press "Log Out" in the navigation or close the browser window, and be logged out of the EveryonePrint session.

Example authentication

Username = john SSO Pass Key = asecretvalue

check = md5("johnasecretvalue")

If user is transferred to EveryonePrint using a Web form:

<form action="https://servername/ssologin.cfm" method="post"> <input type="hidden" name="username" value="john"> <input type="hidden" name="check" value=" 4137e7b6413db3cb3a5b8da9bd5b6e27"> <input name="submit" type="submit" value="continue" /> </form>

If user is transferred to EveryonePrint using HTTP header redirect:

https://servername/ssologin.cfm?username=john&check=4137e7b6413db3cb3a5b8da 9bd5b6e27

Due to browsers caching of URL's, it is strongly recommended that a "301 permanently moved" status code redirect is used for HTTP header redirect, and NOT traditional HTML anchors, ie. <a href="URL">click here</a>.

See below URL for examples of HTTP header redirect:

http://www.stevenhargrove.com/redirect-web-pages

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### 3.13.2.2 CAS Jasig Central Authentication Service

To enable CAS authentication enter the authentication and validation URL's of the central CAS service.

•	Single sign on only - if an unauthenticated user loads EveryonePrint Web portal, user is redirected to below customer Web address for authentication:
	Authentication URL: https://foo.bar.com/is/cas/login
	(max 255 chars)
Si	ngle–Sign–On System
0	Built-in EveryonePrint single-sign-on system
	Choose secret pass key for creating MD5 verification value
	Single sign-on pass key:
$\odot$	CAS Jasic Central Authentication Service single-sign-on
	Validation URL: https://foo.bar.com/is/cas/serviceValidate
	(max 255 chars)

It's only necessary to enter the main URL addresses to login and serviceValidate interfaces. EveryonePrint will append the relevant *service* variables based on *External Web Portal URL* setting configured in **Web Portal Settings**.

When testing CAS single-sign-on, make sure to **enable the debug logging** in General Settings, and both successful and unsuccessful authentication attempts will be written to the main application log file in \logs directory, such as:

12/01/13 14:12.49: error; EOP; ssologincas; Authentication failed ticket: no authenticationsuccess 12/01/13 14:13.53: error; EOP; ssologincas; SSO login failed missing ticket. Source 192.168.0.187

And successful:

```
12/01/13 14:16.49: debug; EOP; ssologincas; Authentication ticket: ST-956-
Lyg0BdLkgdrBO9W17bXS raw response:
<cas:serviceResponse xmlns:cas='http://foo.bar.com/is/cas'>
<cas:authenticationSuccess>
</cas:user>john</cas:user>
</cas:authenticationSuccess>
</cas:serviceResponse>
12/01/13 14:16.49: debug; EOP; ssologin; Successful SSO CAS login. Username: john
```



### 3.13.3 Change default Web ports from 7290 and 9443

The Web interfaces in EveryonePrint, run on TCP ports 7290 (http) and 9443 (https) per default. These can be changed to common HTTP ports 80 and HTTPS port 443 if no other Web server software is running on the server.

Before changing default ports, ensure there are no port conflicts with other software running on the same server.

To change the default HTTP port:

- 1. Open the file C:\Program Files (x86)\EveryonePrint\etc\jetty.xml
- 2. Find the line:

<Set name="port"><SystemProperty name="jetty.port" default="7290"/></Set>

- 3. Change from 7290 to the port of your choice, and save the file.
- 4. Open the file C:\Program Files (x86)\EveryonePrint\eop.xml
- 5. Find the line:

<eopapiendpoint>http://127.0.0.1:7290/api/</eopapiendpoint>

- 6. Change from 7290 to the same port as used in jetty.xml above.
- 7. Restart EveryonePrint Web service

To change the default HTTPS port:

- 1. Open the file C:\Program Files (x86)\EveryonePrint\etc\jetty-ssl.xml
- 2. Find the line:

<Set name="Port">9443</Set>

- 3. Change from 9443 to the port of your choice, and save the file.
- 4. Restart EveryonePrint Web service



## 3.14 Web Print configuration

Web Print is the feature in the user Web portal that allows users to upload a document to print or print by entering a Web URL address.

Upload Document To Print	
	Browse
Supported documents include Microsoft Office, OpenOffice, RTF and PDF. For other formats, use <b>Driver Print</b> .	Next »
Web Address To Print	
Enter for example: www.cnn.com. For printing protected Web pages or other advanced printing, use <b>Driver Print</b> .	Next »

This feature is enabled per default in EveryonePrint.

#### Web Print

Check the box below to enable Web printing in EveryonePrint. When enabled, EveryonePrint will show the Web Print section in user portal, and will accept print jobs uploaded to EveryonePrint via the Web interface.

🗹 Web Print enabled

If Web Print should not be available to users, disable it from the Web Print configuration page in the EveryonePrint Admin.

If Web Print is enabled, optionally select if it should be possible for users to enter Web URL	
addresses to print.	
Veh URL address print enabled	

If Web Print is enabled, it's further possible to enable/disable the Web URL address printing feature. If disabled, the Web Address to Print box will not appear.

Web Proxy	
lf a proxy server e enter details below	exists on the network, which EveryonePrint Web traffic has to go through, please w.
Proxy server:	192.168.0.192
Proxy port:	808
Proxy username:	
Proxy password:	

When users enter a Web URL address to print, EveryonePrint will connect to the Internet to retrieve the contents of the entered address and convert to print data. If EveryonePrint must go through a proxy server to reach the Internet, enter the proxy server details.



Limit the maximum document Web upload size (in MB): 1 MB •

By default the server has no limit to the file sizes that can be uploaded, but a limit can be put in place.

Please note that due to browser limitations, the EveryonePrint server does not know the actual size of the upload until the upload has completed. If the limit is set to 10 MB, a user can still upload a 20 MB job, it will however be deleted and an error be shown, once upload has completed, which ensures no excessive jobs beyond the limit are processed.

### 3.15 Driver Print configuration



https://print.company.com:631

EveryonePrint includes an IPP print server that allows users to print directly from within their programs and applications, on Windows, Mac and Linux, across the network or Internet, to the local EveryonePrint server.

#### Driver Print

Check the box below to enable driver printing in EveryonePrint. When enabled, EveryonePrint will show the Driver Print section in user portal, and will accept print jobs sent to EveryonePrint via driver.

Driver print enabled

In the Driver Print configuration page you can enable or disable this printing method.





☑ Enable "Simple Direct" driver print.

Simple Direct driver print allows users to create a print queue on their local machine that sends print jobs through EveryonePrint and to the output print queue of their choice. This Driver Print option is enabled by default.

It is the network configuration surrounding the EveryonePrint server that determines from where users can print. If the network is opened for communication from outside to the IPP print server in EveryonePrint on the ports used (default TCP 631), then external users can print, which is useful, for example, for students at a university using a public WiFi connection, or corporate employees printing from satellite offices in remote locations or users printing from home.

#### Driver Print Server Settings

When users print from within their applications using a driver on their Windows. Mac or Linux Users. the http/https IPP printing protocol is used.

Per default the IPP print server in EveryonePrint runs on port 631 accessible via http/ipp. Update below address to an IP or DNS address accessible from outside the local server, for example: http://print.company.com:631

Address for Driver Print: http://127.0.0.1:631

The printing protocol used in Driver Print to EveryonePrint, is IPP via HTTP (default port 631) or HTTPS/SSL (default port 9443).

Default address for Driver Print is http://127.0.0.1:631 or https://localhost:9443. But since this is a local address, only usable on the local server, it's necessary to enter an address that is accessible from outside the server, for example: http://print.companyname.com:631

Before using HTTPS/SSL, make sure a valid SSL certificate is created for the Web server by a certified authority, or IPP printing will fail on clients using Windows.



y.com:631

Users on Windows clients, will see the name of the printer as specified in the Driver Print configuration. Choose a relevant descriptive name such as "Secure Printer", "Student Printer" or similar.

http://print.compan : of the printer, as it will appear on Windows clients, for example "Secure Printer". nt Printer" or similar.

Printer name: Secure Printer

To learn more about how to do printing via Driver Print, please see the section "Sending print jobs via Driver Print" elsewhere in this guide.



### 3.15.1 LPD Server

EveryonePrint includes an LPD server which makes it simple to print from workstations in network environments, such as business PC's or workstations.

LPR/LPD is a printing protocol commonly used in TCP/IP networks and is very simple to implement and widely supported on all clients.

#### LPD Server

Use the EveryonePrint LPD server to print from workstations to EveryonePrint print queues, using the LPR protocol. See the documentation for more information about printing from workstations to EveryonePrint via LPR.

✓ LPD print server enabled (Current service status: Started)

**IMPORTANT**: Only one LPD service can run on the server. Make sure that other LPD servers such as Microsoft LPD Server are disabled.

To print to the EveryonePrint server, first enable the LPD server under the Driver Print settings in EveryonePrint Admin, and then add a printer on a client using standard TCP/IP port with LPR protocol.

	LPR printer Properties		×
Printer Details	Security General Sharing		bout   lanagement
Printer ID: (32C61ECE) Printer Description: Building A, office 1.2	LPR printer	Configure Standard TCP/IP Port Mon Port Settings	itor
Output Printer: MFP Acme B-A12	Print to the following port(s checked port. Port Descrip	<u>P</u> ort Name: Printer Name or IP <u>A</u> ddress:	192.168.0.55
Advanced Driver Print Enabling advanced driver print on a print queue, lets user: print driver compatible with the output device, and enablir the device.	COM7: Serial F FILE: Print t- 127.0.0.1 Standa 127.0.0.1_1 Standa 192.168.0.110 Standa	Protocol C Baw Raw Settings Port Introder: 9100	G Tbu
Specify the printer model for users to install the corre Acme MFP S100	✓         192.168.0.55         Standz           ↓         122.0.0.1.620            ▲         Add Port	LPR Settings Queue Name: 32C61	ECE
	<ul> <li>Enable bidirectional support of the su</li></ul>	SNMP Status Enabled	

The **Printer Name or IP Address** is the IP or hostname of the EveryonePrint LPD server.

For LPR **Queue name**, use either the PrinterID or the External ID in parentheses under a printer in EveryonePrint. Make sure **LPR Byte counting Enabled** is **checked**.

Choose a printer driver which is compatible with the output device. Print jobs sent to the LPD server are not modified, the original print data (Postscript, PCL etc) is sent untouched to the output queue, which means that any output settings selected in the driver, duplex, binding etc, are also sent to output device.



# 3.16 Configure Email Print

With EveryonePrint users can send emails from their mobile devices or computers to your mail server. EveryonePrint will then retrieve and process those emails.



The Email Print feature is not enabled per default, as it will only work successfully, if mail server settings, both incoming and outgoing, have been setup correctly.

In the Email Print section in the Admin, you can configure the connection information for EveryonePrint to connect to your email server.

Email Print Address	5	
Enter the email addres	ss to which users can send documents print from computers or mobile d	evices.
Email Print Address:	print@company.com	

Start by providing the email to which users send their email print jobs.

Incoming Mail Serv	er Settings
Mail server type:	IMAP with SSL
Mail server address:	mail.company.com
Tip! Incoming ma POP3 non-SSL: p POP3 SSL: port 9 IMAP non-SSL: p IMAP SSL: 993	95

Enter the server address details of the mail server, including the protocol with or without SSL encryption and server address.

Incoming Mail Server Settings		
Mail server type:	Exchange Web Services 💌	
Mail server address:	https://exchange2010.lab2.local	



For Microsoft Exchange Web Services enter the fully accessible URL including protocol (http or https) to the Exchange Web interface. For Microsoft Exchange MAPI, enter just the server name or IP address (no http or https).

Mail server type:	Exchange MAPI
Mail server address:	exchange2010.lab2.local
Mail domain name:	lab2.local

When Microsoft Exchange is selected, enter also the Mail Domain Name, which is the domain name for email known by the Exchange server.

For Microsoft Exchange:

- EveryonePrint can support Microsoft MAPI via RPC protocol with NTLM authentication, which can be verified with Outlook (2010): Go to the File tab, click Account Settings. On the list of accounts, select an account and click Change, then More Settings on the dialog that appears. On the Connection tab, the "Connect to Microsoft Exchange using HTTP" should be unchecked.
- EveryonePrint can support Microsoft Exchange Web Services over HTTPS with Basic, NTLM, or forms-based authentication, which can be verified by accessing the web service URL. This is typically https://<server>/news/exchange.asmx. Kerberos, ADFS and RPC over http(s) authentication is not supported.
- EveryonePrint can support Microsoft Office365 Outlook online over HTTPS with Oauth2 authentication using client ID and client secret.

Incoming Mail	Account	Settings
---------------	---------	----------

Username:	print@company.com
Password:	•••••

Enter the account login details for the account from which to retrieve email.

Check Mail Frequency
Choose how frequently EveryonePrint should check the above email account for new print jobs. Please refer to the EveryonePrint documentation for recommendations for this value.
Check for new mail every 10 seconds

Choose how frequently EveryonePrint should check for new emails. The default is every 10 seconds, but if the mail server is not on the same internal network, a higher interval, such as every 30 seconds, is recommended.



#### Test Incoming Mail Settings

Check the box below to have EveryonePrint connect using all of the above details to verify that settings are correct, after you click Save Changes below. This test may take a few seconds depending on the responsiveness of the network and mail server.

✓ Test incoming mail settings

Test the entered email settings to ensure that EveryonePrint can connect successfully, by checking the box. When you save the changes, EveryonePrint will make a connection test.

Changes saved successfully. Incoming mail test completed successfully. Your settings appear to be correct.

Important: Before you enable email printing, with modes "Privacy Print", which means that an email is sent to the user with either a release code or authentication request, make sure that you have configured outgoing mail settings!

#### **Email Print**

Check the box below to enable email printing in EveryonePrint. When enabled, EveryonePrint will connect to your mail server to retrieve emails containing print jobs, using your settings below.

🗹 Email print enabled

After having saved and tested your settings, check the box at the top of the Email Print page to enable the retrieval of email print jobs. Remember to save changes after enabling Email Print.

#### Email Print Settings

Enable create print job from email message body, to let users be able to print the message contents of an email in addition to attachments. If unchecked, only the attachments that users email will be available to print, not the email itself.

🗹 Create print job of email message body

Choose if an email should be sent back to user if an unsupported attachment is sent to EveryonePrint.

Send email response for unsupported document formats

Per default when users send an email with attachments to print, both the attachments and the email message itself will be considered a print job. Users may want to print the email message itself. It's possible to disable that the email message itself is made as a print job, but if disabled, users can only print attachments, not the email messages themselves.

It's also possible to send an email from the system back to the user, when an email is received with a document attached, which is not supported.

Ignore image files smaller than 5 💌 KB. This setting will discard small image files, such as logos, typically found in email signatures which do not need printing. Set to 0 to always accept all image files.



If a user sends an email with an email signature containing an image, such as a logo, EveryonePrint can be configured to ignore these suspected small signature images.

□ Show Web release link in release code emails

If using *Privacy with Release Code* mode, emails sent from EveryonePrint containing release codes, by default contain a link the Web release interface. Use this setting to toggle the display of this link in the release code email.

Show Direct Email Print instructions in Web interface when using Privacy with Authentication mode

If using Privacy with Authentication mode, then by default instructions are shown in the Web interface to end-users, how to send print jobs direct to specific printers.

printer to your list. Print Direct To Printer		
Print directly from your mobile device to a specific printer. Click here to learn more	Tip!	

Uncheck this option, to hide these instructions.

Send confirmation email to users upon successfully received and processed email print job

Choose the option to send confirmation email to users, if users should receive an email confirmation when their job has been received and processed by the server, for example being ready to print, or after having been sent to a print management solutions "follow me" queue.

This setting applies to Email Print only and "Privacy with Authentication" and "Direct with Authentication" modes, as "Privacy with Release Code" mode by itself will send an email with release code.

Email Print Permissions
Allow only print jobs from the following domains:
company.eu,company.com,company.co.uk
(separate multiple domains with comma. Leave blank to allow all domain names.)
Do not allow print jobs from the following domains:
(separate multiple domains with comma. Leave blank to allow all domain names.)
The above domain restriction list will apply for all email print jobs regardless of settings in <b>Printing and Security</b> .

Restrict senders to only approved domains, by entering domain names (multiple separated by comma), or blacklist certain domains. Emails not matching the criteria are automatically discarded.



### 3.16.1 Email Authentication

If email printing is enabled and print behavior is set to require authentication under Printing and Security (either Privacy with Authentication or Direct with Authentication), and if Allow Self Registration below is enabled, then the first time an unknown user sends a print job via email to EveryonePrint, they will be asked to register their email address in the system.

Users will visit a simple registration page, included in EveryonePrint, sign in with their username and password, and EveryonePrint will then know that the email address is approved and associated with the right user.

Register your email ad	ldress				
You?re at this page because your email address was unknown by the printing system. To print from your email address, enter your username and password below and dick Continue, then your email address will be an approved sender of print jobs.					
Your email address:					
john.smith@company.com					
Your username:	Your password:				
john	••••				
	Continue »				

If users are known in the system, either because their email address has been manually added or imported from a CSV, or if LDAP email address lookup is enabled, then no registration is necessary.

Lookup Email Addresses
$\square$ Search LDAP for email address to lookup username
For email address lookup in LDAP, LDAP settings must be successfully configured under <b>User</b> Authentication.

Uncheck Allow Self Registration, if the system should only allow print jobs from users that either exist in the internal EveryonePrint users database or in LDAP.

#### Allow Self Registration

Send email registration invitation email to unknown senders (uncheck this to allow only print jobs from users that already exist either in EveryonePrint Users database or LDAP).

☑ Use restrictive email registration system. Allow only users to register email addresses they've tried to print from, and not others.

If the email address used for email printing, eg. print@company.com, is configured to allow external users to email print jobs, then make sure that the Web URL to the registration page is accessible from external computers.

By choosing *Use restrictive email registration system* users can only register email addresses from which they've sent email print jobs.



Email Authentication Address	
If email printing is enabled and print behavior is set to require authentication under I Security, then the first time a user sends a print job via email to EveryonePrint, they v register their email address in the system.	
Users will visit the address below, sign in with their username and password, and Ev then know that the email address is approved and associated with the right user.	eryonePrint will
The registration page is hosted by the EveryonePrint application. Make sure that the registration page is accessible for users externally.	below
Email Printing Authentication URL: https://print.company.com /	registeremail
Preview Of Registration Email	
From: My Company <print@company.com> To: john.smith@company.com Subject: Register email address to print</print@company.com>	
You have sent a print job to My Company via email print@company.com.	
We do not recognize your email address john.smith@company.com. To s print jobs from this address, please visit the registration page below. It o takes a minute to register your email address with the printing system, an you only have to do it once.	inly
Go to:	
https://print.company.com/registeremail /?email=john.smith@company.com	
After you've registered your email address, the print job you sent will be processed automatically, so there is no need to resend your print job.	
Thank you for using EveryonePrint.	
My Company print@company.com	

A user can have an unlimited number of email addresses associated with their account, so a user can print from any of their email addresses.

### 3.16.2 Note when using Exchange MAPI for internal email

If using the Exchange MAPI protocol for Email Print, and using EveryonePrint internally in your organization, Exchange via MAPI does not always share the senders full email address, ie user@domain.com, which will cause email authentication in EveryonePrint to fail.

A workaround to this behavior of Exchange via MAPI, is to let EveryonePrint check the Active Directory via LDAP, for the users email address. Simply configure LDAP authentication under User Authentication, and EveryonePrint will automatically attempt to retrieve the email address of internal company users as needed.



# 3.17 Mobile Print configuration

To enable native printing from supported mobile devices, the EveryonePrint Mobile Gateway must be installed and configured. See the separate documentation for details.

Printer name:	Student Print
---------------	---------------

Configure the name of the main printer as it will appear on users mobile devices, for devices that support printer naming.

In the Mobile Print screen, manage feature behavior for native printing from mobile devices, such as AirPrint on Apple iOS devices (iPhone and iPads) and Android based smartphones and tablets.

Depending on the configuration in Printing and Security, different behavior is available. Choose relevant setting for the current configuration.

For example, are users allowed to only send print jobs to EveryonePrint in general, or are users allowed to send print jobs directly to all devices configured in EveryonePrint.

III TDC	(•	20.38	100% 💶	III TDC	(•	20.40	100% 💶
Printer	Options	Printer		Printer	Options	Printer	_
	<b>.irPrint E</b> veryonePrir	EveryonePrint nt			<b>irPrint</b>   veryonePri	Building A, c	office 10
					<b>irPrint</b> veryonePr	Building B, c	office 3
					<b>irPrint</b> I veryonePr	EveryonePri	nt
	Centra	l EveryonePrint			Also	allowing dire	ect printing



#### Privacy with Authentication

#### **Mobile Print Settings**

Your current configuration is: Privacy with Authentication. Click here to change.

In this configuration, users must authenticate once when printing from their mobile device.

Customize how users can print in this mode:

- Allow authenticated users to send print jobs from mobile devices, print jobs are held in EveryonePrint until release
- O Allow authenticated users to send print jobs from mobile devices, print jobs are held in EveryonePrint until release and also allow authenticated users to send print jobs directly to devices
- $^{
  m O}$  Allow authenticated users to send print jobs directly to devices

#### Privacy with Release Code

#### Mobile Print Settings

Your current configuration is: Privacy with Release Code. Click here to change.

Customize how users can print in this mode:

- Allow users to send print jobs from mobile devices, and receive release code
- O Allow users to send print jobs from mobile devices, and receive release code and also allow users to send print jobs directly to devices without release code
- O Allow users to send print jobs directly to destination devices without release code.

#### **Direct with No Authentication**

#### Mobile Print Settings

Your current configuration is: Direct with No Authentication. Click here to change.

Customize how users can print in this mode:

- Allow any users to send print jobs from mobile devices, print jobs are automatically sent to the following printer queue: Printer 1
- O Allow any users to send print jobs directly to devices

#### **Direct with Authentication**

#### Mobile Print Settings

Your current configuration is: Direct with Authentication. Click here to change.

In this configuration, users must authenticate once when printing from their mobile device.

Customize how users can print in this mode:

- Allow authenticated users to send print jobs from mobile devices, print jobs are automatically sent to the following printer queue: Printer 1
- O Allow authenticated users to send print jobs directly to devices



### 3.17.1 Strict Mobile device authentication

Strict Mobile device authentication applies to Mobile Print using Apple iOS and Android printing.

When enabling strict mobile device authentication:

- Users must authenticate when their mobile device uses a new IP address
- Users have the ability to logout using the EveryonePrint mobile apps
- Users can be forced to re-authenticate after a set period of time (useful for shared iPads or similar)

#### Mobile Print Authentication

Your current configuration is: Privacy with Authentication. Click here to change.

In this configuration, users must authenticate once when printing from their mobile device.

✓ Enable strict mobile device authentication

When enabling strict mobile device authentication:

- Users must authenticate when their mobile device uses a new IP address
- Users have the ability to logout using the EveryonePrint mobile apps
- Users can be forced to re-authenticate after a set period of time (useful for shared iPads or similar)

Users must relogin on mobile devices after 43200 minutes. (Default value is 43200 minutes (30 days). Minimum is 5 minutes.)

### 3.17.2 Mobile App Settings

It's possible to enable and disable various features of the EveryonePrint Mobile Apps from the Mobile Print administration screen.

Enable job release

Allow users to release print jobs held in EveryonePrint, using the Mobile Apps (only relevant if EveryonePrint is configured for a "privacy" mode where jobs are held in EveryonePrint until release)

If EveryonePrint is configured in a Privacy Mode, such as "Privacy with Release Code" or "Privacy with Authentication" where jobs are held in EveryonePrint until release, users can optionally use the Mobile Apps to release print jobs to the printer of their choice.

☐ Show scan QR code Choose if users should be able to scan a printed QR code for easy access to a specific printer

The QR Code Printer Access feature lets users easily access print job submission and print job release on their mobile device. Generate and print QR codes for each printer and place it near the printer. If the "Show scan QR code" feature is enabled, users can then scan the QR code at the printer of their choice using their smartphone.



### 3.18 Wide Area Mobile Print

Wide Area Mobile Print is a highly flexible and powerful alternative to Apple's multicast DNS Bonjour method of announcing printers to Apple iOS devices.

Wide Area Mobile Print uses Unicast DNS-SD, and announcing available printers in EveryonePrint to Apple iOS devices, can be achieved with extreme ease using the Wide Area Mobile Print feature combined with simple standard DNS records created on the DNS server. With Wide Area Mobile Print, AirPrint can be enabled across large and complex networks.



In above example, 2 subdomains have been created, one for each building, Building A and Building B. Mobile devices in each network, query the DNS server, which forwards DNS requests to the EveryonePrint Mobile Gateway. EveryonePrint Mobile Gateway responds with relevant printers for the sub domain(s) available to specific mobile device.

Fi	dnet3	
et this Netwo	ork	
ESS		
DHCP	BootP	Static
SS		192.168.0.119
		132.100.0.113
Mask		255.255.255.0
		192.168.0.1
		192.168.0.112
-		
Domains	buildir	ngb.company.com
C		

*An Apple iOS device with buildingb sub domain specified, see only those printers in that sub domain. Multiple sub domains can be specified as needed.* 

The following assumes that EveryonePrint has been configured and one or more printers have been added to EveryonePrint.



The Wide Area Mobile Print feature is available in EveryonePrint Professional and EveryonePrint Enterprises editions only.

### 3.18.1 Configuration overview

The Wide Area Mobile Print configuration involves the following overall steps:

- 1. Create one or more Wide Area Mobile Print sub domains in EveryonePrint Admin
- 2. Install and configure the EveryonePrint Mobile Gateway
- 3. Configure the network DNS server
- 4. Set search domain on mobile devices

### 3.18.2 Create Wide Area Mobile Print sub domains

Start in the EveryonePrint administrator interface and the section Wide Area Mobile Print, and create one or more sub domains for the printers.

Multiple sub domains can be created, to separate access to printers, for example:

- By location (one sub domain per building, campus, city, department)
- By user access level (one sub domain for teachers, another for students, or one sub domain for employees, another sub domain for guests)

Wide Area Sub Domain		
buildinga.company.com	÷	8
- Building A printer 104		
- Building A printer 106		
- Building A printer 107		
- Building A printer 109		
– Building A printer 111 – Building A printer 117		
- Building A printer 17		
- Building A printer 120		
buildingb.company.com	<b>*</b>	8
- Building B printer 133		
- Building B printer 136		
– Building B printer 140		
- Building B printer 141		
– Building Bprinter 145 – Building Bprinter 147		
- Building B printer 147 - Building B printer 148		
- Building B printer 15		

In this example 2 sub domains have been created, one for each building.

There are no limitations in EveryonePrint as to how the separation can be configured, as it all depends on which of the sub domains created in EveryonePrint that a particular mobile device has access to.

Creating just 1 sub domain for all Wide Area Mobile Print, for example "mobileprint.company.com" containing all the printer(s) that should be available to mobile



devices, is strongly recommended, as it greatly simplifies the later setup of search domain, as will be described in section below.

### 3.18.3 Configure EveryonePrint Mobile Gateway

Install the EveryonePrint Mobile Gateway, either on the EveryonePrint server or on its own server.

Mobile devices will communicate with the Mobile Gateway and not directly to the EveryonePrint server, so the gateway can be placed in a DMZ zone or similar, to further separate mobile devices from the secure printing infrastructure.



EveryonePrint Mobile Gateway installed on the EveryonePrint server



EveryonePrint Mobile Gateway installed on its own server

With EveryonePrint Mobile Gateway installed, open the gateway admin Web interface, configure the server connection details, test and save.

Connection was successfull	
Configuration	
Main server host/IP:	192.168.0.116
Main server port:	7290
Main server SSL port:	9443
IPP server port:	631
Use SSL encrypted connection to main server:	
Enable debug logging:	
How long to authenticate window (minutes):	60
Publish services on NICs (select multiple):	Intel(R) PRO/1000 MT Network Connection - 192.168.0.109
Test connection Save	



### 3.18.4 Configure DNS server

For each created Wide Area Mobile Print sub domain, the DNS requests for those sub domains, should be delegated to the EveryonePrint Mobile Gateway, so EveryonePrint can respond with relevant printer details for the sub domains.

For more information about Zone Delegation, refer to the following articles:

http://en.wikipedia.org/wiki/DNS\_zone

http://technet.microsoft.com/en-us/library/cc771640.aspx

http://technet.microsoft.com/en-us/library/cc753500.aspx

For example configurations of the zone delegation, refer to below two sections on Microsoft Windows DNS or BIND (Mac OSX or Linux).

### 3.18.4.1 Configure Windows DNS

To configure zone delegation for the created Wide Area Mobile Print sub domains on Windows DNS, open Windows DNS on the DNS server that mobile devices use.

1. Right-click domain and choose New Delegation.



2. Enter the sub domain name as created in EveryonePrint



New Delegation Wizard				
Delegated Domain Name Authority for the DNS domain you supply will be delegated to a different zone.				
Specify the name of the DNS domain you want to delegate.  Delegated domain: buildinga  Fully qualified domain name (FQDN): buildinga.company.com				
< <u>B</u> ack <u>N</u> ext > C	Cancel			

3. Choose to Add a name server

New Delegation Wizard					
Name Servers You can select one or more name servers to host the delegated zone.					
Specify the names and IP addresses of the DNS servers you want to have host the delegated zone. Name servers:					
Server Fully Qualified Domain Name (FQDN) IP Address					
Add Edit Remove					
< <u>B</u> ack	Next > Cancel				

4. Enter the **server name/hostname** of the EveryonePrint Mobile Gateway server followed by the Wide Area Mobile Print sub domain and Active Directory domain, and then enter the **IP address** of the EveryonePrint Mobile Gateway server.



New	Name Server Record	x		
Enter the name of a DNS server that is authoritative for this zone.				
Server fully qualified domain name (FQDN):	<u> </u>			
mobileserver.buildinga.company.com		<u>R</u> esolve		
IP <u>A</u> ddresses of this NS record:				
IP Address	Validated	Delete		
V 192.168.0.109	ОК	Up		
		Down		
		Down		
	OK	Creat		
	ОК	Cancel		

In this example, the hostname of the EveryonePrint Mobile Gateway server is "mobileserver" and its IP address is 192.168.0.109



5. Repeat for each created sub domain

å	DNS Manager			
<u>File Action View H</u> elp				
🗢 🏟 🙇 🗊 🛱 🖬 🕯	ī			
🚊 DNS	Name	Туре	Data	Timestamp
⊿ ≣ DC2012	📒 (same as parent folder)	Name Server (NS)	mobileserver.buildinga.company.com.	static
🔺 🚞 Forward Lookup Zones				
Image:				
⊿ 🛐 company.com				
Imsdcs				
isites				
⊳ <u> </u>				
buildinga buildingb bildingb b DomainDns∠ones				



### 3.18.4.2Configure BIND

Configure zone delegation for the created Wide Area Mobile Print sub domains on BIND running on Mac OSX or Linux, by adding the sub domains to the domains master zone file.

1. In this example, the sub domains are added to the BIND master zone file for the domain "company.com".

```
; Zone file for company.com
$TTL 360
        IΝ
                S0A
                        ns.company.com. root.company.com. (
(d
                                      ; serial, todays date + todays serial #
                        201404011
                        8H
                                        ; refresh, seconds
                        2H
                                       ; retry, seconds
                        4W
                                       ; expire, seconds
                        1D )
                                        ; minimum, seconds
                                        ; Inet Address of name server
                NS
                        ns
                        192.168.0.139
ns
                А
; Delegation for Wide Area Mobile Print sub domains
$ORIGIN buildinga.company.com.
        IN
                        mobileserver.buildinga.company.com.
0
               NS
mobileserver IN
                     А
                             192.168.0.109
$ORIGIN buildingb.company.com.
                       mobileserver.buildingb.company.com.
0
       IN
               NS
mobileserver IN
                     А
                             192.168.0.109
$ORIGIN buildingc.company.com.
6
       IN
               NS
                      mobileserver.buildingc.company.com.
                             192.168.0.109
mobileserver IN
                     А
```

Now any DNS requests for one of the sub domains to the primary DNS server, will be forwarded to the EveryonePrint Mobile Gateway server.



### 3.18.5 Verifying DNS configuration

To confirm the proper DNS configuration with either Windows DNS or BIND on Mac OSX or Linux, run the nslookup command for each of the sub domains:

```
nslookup -query=ptr _ipps._tcp.buildinga.company.com
```

[root@lab4]ipuydev1 /l# pslookup -query=ptr ipp tcp buildinga company com

If successfully configured, this will return a list of the printers in the sub domain as configured in EveryonePrint.

Administrator: C:\Windows\system32\cmd.exe
C:\Users\administrator.COMPANY>nslookup -query=ptr _ipptcp.buildinga.company.com 112.0.168.192.in-addr.arpa primary name server = localhost responsible mail addr = nobody.invalid serial = 1 refresh = 600 (10 mins) retry = 1200 (20 mins) expire = 604800 (7 days) default TTL = 10800 (3 hours)
Server: UnKnown Address: 192.168.0.112
Non-authoritative answer: _ipp_tcp.buildinga.company.com name = building a printer 106ipp_tcp.buildinga.company.com _ipp_tcp.buildinga.company.com name = building a printer 107ipp_tcp.buildinga.company.com _ipp_tcp.buildinga.company.com name = building a printer 109ipp_tcp.buildinga.company.com _ipp_tcp.buildinga.company.com name = building a printer 111ipp_tcp.buildinga.company.com _ipp_tcp.buildinga.company.com name = building a printer 111ipp_tcp.buildinga.company.com _ipp_tcp.buildinga.company.com name = building a printer 117ipp_tcp.buildinga.company.com _ipp_tcp.buildinga.company.com name = building a printer 12ipp_tcp.buildinga.company.com _ipp_tcp.buildinga.company.com name = building a printer 120ipp_tcp.buildinga.company.com _ipp_tcp.buildinga.company.com name = building a printer 104ipp_tcp.buildinga.company.com
C:\Users\administrator.COMPANY>

Nslookup result from Windows

Server: 192.168.0.139
Address: 192.168.0.139#53
Au1655. 192.100.0.133#35
<pre>Non-authoritative answer: _ipptcp.buildinga.company.com name = Building\032A\032printer\032104ipptcp.buildinga.company.com. _ipptcp.buildinga.company.com name = Building\032A\032printer\032107ipptcp.buildinga.company.com. _ipptcp.buildinga.company.com name = Building\032A\032printer\032107ipptcp.buildinga.company.com. _ipptcp.buildinga.company.com name = Building\032A\032printer\032109ipptcp.buildinga.company.com. _ipptcp.buildinga.company.com name = Building\032A\032printer\032111ipptcp.buildinga.company.com. _ipptcp.buildinga.company.com name = Building\032A\032printer\032117ipptcp.buildinga.company.com. _ipptcp.buildinga.company.com name = Building\032A\032printer\03212ipptcp.buildinga.company.com. _ipptcp.buildinga.company.com name = Building\032A\032printer\03212ipptcp.buildinga.company.com. _ipptcp.buildinga.company.com name = Building\032A\032printer\03212ipptcp.buildinga.company.com.</pre>
Authoritative answers can be found from:
<pre>buildinga.company.com nameserver = mobileserver.buildinga.company.com.</pre>
Nslookup result from Linux

If no printers appear, confirm with telnet that a connection can be established to the EveryonePrint Mobile Gateway ip address on port 53.

Remember that mobile device clients must have access to the EveryonePrint Mobile Gateway server on port 53, to retrieve the printer lists.



### 3.18.6 Set search domains on mobile devices

For Apple iOS mobile devices to retrieve the printers available for Wide Area Mobile Print, the iOS devices must be instructed to query the sub domains, using DNS-SD.

This can be done in one of two ways, depending on one or multiple sub domains having been created in EveryonePrint. Refer to the

### 3.18.7 One Wide Area Mobile Print sub domain

If only one Wide Area Mobile Print sub domain has been created (recommended) the configuration needed to instruct Apple iOS devices to query the domain is simple.



### 3.18.7.1 Single sub domain configuration on Windows DNS

In addition to a delegation DNS record for the single "mobileprint.company.com" sub domain as outlined in section *3.18.4.1 Configure Windows DNS*, create DNS-SD discovery record in Windows DNS.

1. Under the domain (in this case company.com) right-click on \_udp and select **Other new** records..



- 2. Select to insert a Service Location (SRV) record
- 3. In the Service field, type in any characters, and in Protocol enter \_dns-sd

	YONE
	IIIC

		New Resource Record
ſ	Service Location (SRV	)
	Do <u>m</u> ain:	_udp.company.com
	Service:	anything 🗸 🗸
	Protocol:	_dns-sd 🗸
	Pri <u>o</u> rity:	0
	<u>W</u> eight:	0

4. There should now be an \_dns-sd folder under \_udp. Delete the SRV record from within the \_dns-sd folder that was created.

🚊 DNS	Name	Туре	Data
⊿ 🚆 DC2012	anything	Delete	(SRV) [0][0][0]
🔺 🚞 Forward Lookup Zones		Delete	
Image: Second	•	Properties	Г
⊿ [ company.com			
▷ 🛐 _msdcs		Help	
b intes			
⊳ <u> </u> _tcp			
⊿ 🧰 _udp			
⊳ 🧰 _dns-sd			
DomainDnsZones			

- 5. Right-click the \_dns-sd folder and select **Other new records...** and select to insert a **Pointer** (**PTR**) record.
- 6. In *Host IP Address* enter the letter **b** and in *Host Name* enter the Wide Area sub domain such as **mobileprint.company.com**

New Resource Record
Pointer (PTR)
Host IP Address:
Eully qualified domain name (FQDN):
bdns-sdudp.company.com.
Host name:
mobileprint.company.com Browse

7. Create an additional **Pointer (PTR)** record with letters **Ib** also pointing to the same sub domain

The final structure should look like below.



Å			DNS Manager	
<u>F</u> ile <u>A</u> ction <u>V</u> iew <u>H</u> elp				
🗢 🄿 🞽 🗊 🖾 🔒	? 🖬 🗄 🗐 🛱			
DNS	Name	Туре	Data	Timest
⊿ 📱 DC2012	b	Pointer (PTR)	mobileprint.company.com	
⊿	l 🗐 lb	Pointer (PTR)	mobileprint.company.com	
Image: book in the second s				
⊿ 🛐 company.com				
▷ 📑 _msdcs				
▷ ites				
⊳ 🚞 _tcp				
⊿ 🚞 _udp				
🚞 _dns-sd				
b DomainDnsZone				

Now any Apple iOS device with the search domain set to just "company.com", will discover the "mobileprint" sub domain and query the EveryonePrint Mobile Gateway for printers.

### 3.18.7.2Single sub domain configuration on BIND

In addition to a delegation DNS record for the single "mobileprint.company.com" sub domain as outlined in section *3.18.4.2 Configure BIND*, create DNS-SD discovery record in BIND.

1. In the domains master zone file, insert the following two DND-SD records:

b.\_dns-sd.\_udp IN PTR mobileprint.company.com. lb.\_dns-sd.\_udp IN PTR mobileprint.company.com.

(replace "mobileprint.company.com." with the actual sub domain as created in EveryonePrint)

```
; Zone file for company.com
$TTL 360
                        ns.company.com. root.company.com. (
6
       IN
                S0A
                                        ; serial, todays date + todays serial #
                        201404011
                                         ; refresh, seconds
                        8H
                        2H
                                         ; retry, seconds
                        4W
                                         ; expire, seconds
                        1D )
                                         ; minimum, seconds
                NS
                                         ; Inet Address of name server
                        ns
                        192.168.0.139
ns
                А
b. dns-sd. udp IN PTR mobileprint.company.com.
lb. dns-sd. udp IN PTR mobileprint.company.com.
; Delegation for Wide Area Mobile Print sub domains
$ORIGIN mobileprint.company.com.
       IN
                NS
                     mobileserver.mobileprint.company.com.
6
mobileserver IN
                             192.168.0.109
                     А
       Sample BIND zone configuration file for the domain "company.com" with a single
               "mobileprint.company.com" Wide Area Mobile Print sub domain.
```

Now any Apple iOS device with the search domain set to just "company.com", will discover the "mobileprint" sub domain and query the EveryonePrint Mobile Gateway for printers.



### 3.18.8 Multiple Wide Area Mobile Print sub domains

If multiple Wide Area Mobile Print sub domains have been created, access to the sub domains on Apple iOS devices is given, by populating the "search domain" on the mobile device, with the search domain or domains that the particular device should have access to.

	K Wi-Fi	dnet3
Wide Area Sub Domain		
buildinga.company.com	Forget this Network	
– Building A printer 103 – Building A printer 104	IP ADDRESS	
<ul> <li>Building A printer 106</li> <li>Building A printer 107</li> </ul>	DHCP	BootP Static
building A printer 107	IP Address	192.168.0.119
buildingb.company.com	Subnet Mask	255.255.255.0
– Building B printer 145 – Building B printer 147	Router	192.168.0.1
- Building B printer 148 - Building B printer 15	DNS	192.168.0.112
	Search Domains	buildingb.company.com
	Client ID	

This can be done either manually, or by having the DHCP server provide this value, using what is called "DHCP option 119".

See below sections for instructions on how to populate "search domain" using Windows and Linux DHCP.

### 3.18.8.1 Multiple sub domains configuration on Windows DHCP

Microsoft Windows DHCP does not provide a friendly configuration interface for the DHCP option 119.

Configuration of DHCP option 119 on Windows DHCP involves the following steps:

1. If not done previously, first define the DHCP option 119 to the Windows DHCP server by running the following command on the DHCP server

netsh dhcp server V4 add optiondef 119 "DNS Search domains" BYTE 1



2. In the EveryonePrint Administrator interface, go to Wide Area Mobile Print and click the **Windows DHCP Configuration Utility** 



Add New Wide Area Mobile Print network	Windows DHCP Configuration Utility

Wide Area Sub Domain		
wide Area Sub Domain		
buildinga.company.com		8
D 111 A 1 A 100		
- Building A printer 103		
<ul> <li>Building A printer 104</li> </ul>		
- Building A printer 106		
- Building A printer 107		
buildingb.company.com		8
buildingb.company.com	6- <b>3</b> 6	•
- Building B printer 145		
- Building B printer 147		
– suliaina s printer 147		

#### 3. Enter the DHCP scopes IP address

<u>.</u>	
<u>File Action View H</u> elp	
DHCP dc2012.company.com d 2 10/2	Name PV4
▷ Cop [192.168.0.0] rhain Berver Options	Create Windows DHCP Option 119 Command Lines
<ul> <li>☑ Policies</li> <li>▷ ĵĝ Filters</li> </ul>	DHCP Scope IP Address 192.168.0.0
⊳ 👼 IPv6	Sub domains (separate multiple by space):
	buildinga.company.com buildingb.company.com

4. Enter the Wide Area Mobile Print sub domains that should be published to this DHCP scope



Separate multiple sub domains with a space.

5. Click Continue when ready, and the needed commands are shown on screen

Generated Command Lines
Run the following commands on your Windows DHCP server to create the option 119 entries for above DHCP scope and sub domains
netsh dhcp server V4 add optiondef 119 "DNS Search domains" BYTE 1
netsh dhcp server V4 scope 192.168.0.0 set optionvalue 119 BYTE 09 62 75 69 6c 64 69 6e 67 61 07 63 6f 6d 70 61 6e 79 03 63 6f 6d 00 09 62 75 69 6c 64 69 6e 67 62 07 63 6f 6d 70 61 6e 79 03 63 6f 6d 00

6. Copy/paste and run these commands on the DHCP server to create the DHCP entries





7. Confirm the entries appear under Scope Options in the DHCP server (refresh the DHCP server view to show the new settings).

2			DHCP
<u>File Action View H</u> elp			
<ul> <li>DHCP</li> <li>dc2012.company.com</li> <li>ivod dc2012.company.com</li> <li>ivod dc2012.company.com</li> <li>ivod dc2012.168.0.0] main</li> <li>ivod dc2012.168.0.0.0] main</li> <li>ivod dc2012.168.0.0.0.0] main</li></ul>	Option Name 003 Router 006 DNS Servers 015 DNS Domain Name 119 DNS Search domains	Vendor Standard Standard Standard Standard	Value 192.168.0.1 192.168.0.112 company com 0x9, 0x62, 0x75, 0x69, 0x6c, 0x64, 0x69, 0x6e, 0x67, 0x61, 0x7, 0x

8. Mobile devices obtaining a new lease from the DHCP should now show the correct search domains.

DHCP	BootP	Static
IP Address		192.168.0.30
Subnet Mask		255.255.255.0
Router		192.168.0.1
DNS		192.168.0.112
Search Domains	buildinga.compan	y.com, buildingb

### 3.18.8.2 Multiple sub domains configuration on Linux DHCP

To specify search domains for a subnet on Linux DHCP, edit the dhcpd.conf file and insert a **domain-search** option with the sub domains to publish.

```
subnet 192.168.0.0 netmask 255.255.255.0 {
    range 192.168.0.101 192.168.1.199;
    option domain-name "company com";
    option domain-search "buildinga.company.com", "buildingb.company.com";
    option domain-name-servers 192.168.0.139;
    option routers 192.168.0.1;
}
```



# 3.19 Configure Google Cloud Print

With Google Cloud Print support in EveryonePrint, users can print from their Google Chromebook, phone or tablets, Google Apps such as Gmail, Google Docs, Google Sheets, or using any other application or device which supports Google Cloud Print, to the printers you select in EveryonePrint.



Any authentication settings in EveryonePrint *Printing and Security* such as Release Code or Authenticated printing, still applies for Google Cloud Print.

#### Privacy with Release Code

If EveryonePrint is configured for "Privacy with Release Code" and a user prints via Google Cloud Print to EveryonePrint general printer, the user will receive a release code back via email, just as they receive release codes for Email Print.

Users do not receive release codes for jobs sent via Google Cloud Print through EveryonePrint directly to specific printers.

#### Privacy with Authentication or Direct with Authentication

In an Authentication mode, where users are required to authenticate to print, the authentication settings in *User Authentication* apply.

When a user sends a print job via Google Cloud Print, their Google Account email address is "sender" of the job as it arrives in EveryonePrint.

EveryonePrint will first check its internal user database, and if the user is not found there, it will search LDAP, if LDAP search is enabled.



#### Lookup Email Addresses

☑ Search LDAP for email address to lookup username

For email address lookup in LDAP, LDAP settings must be successfully configured under User Authentication.

#### Allow Self Registration

☑ Send email registration invitation email to unknown senders (uncheck this to allow only print jobs from users that already exist either in EveryonePrint Users database or LDAP).

□ Use restrictive email registration system. Allow only users to register email addresses they've tried to print from, and not others.

Email Printing Authentication URL: https://print.acmeuniversity.edu /registeremail

# If the user is not found in LDAP, a self-registration email invitation is sent to the user, if **Allow Self Registration** is enabled.

🗟 Register email address to print - Mozilla Thunderbird	
<u>File Edit View Go M</u> essage <u>T</u> ools <u>H</u> elp	4 <sup>6</sup> 4 5 4 <sub>6</sub> 4
from Acme Customer Name <noreply@acmeuniversity.edu> 🗘</noreply@acmeuniversity.edu>	🔯 reply 🛛 🕸 reply all 🔹 🐼 forward
subject Register email address to print	7/17/2013 11:57 AM
to john.smith@gmail.com 🔐	other actions *
You have sent a print job to Acme University. We do not recognize your email addr To send print jobs from this address, please visit the registration page below. It on register your email address with the printing system, and you only have to do it on	ly takes a minute to
Go to:	
https://print.acmeuniversity.edu/registeremail/?email=john.smith@gmail.com	
After you've registered your email address, the print job you sent will be processed no need to resend your print job.	automatically, so there is
Thank you for using EveryonePrint.	
Acme University noreply@acmeuniversity.edu	
This mail was created July 17, 2013 2:57:07 AM PDT	_
<u>B</u>	

The user must enter their network username and password, to register their Google Account with the system. This is only needed once for the user.

Register your email a	address
	unknown by the printing system. Ime and password below and click Continue, then your email
address will be an approved sender of print jobs. Your email address:	
john.smith@gmail.com	
Your username:	Your password:
studentuserjohn	•••••

In above example, the job sent from john.smith@gmail.com will after processing, be sent to the print queue on the EveryonePrint server as the user "studentuserjohn".



# 3.20 Google Cloud Print configuration summary

Summary of steps included to enable Google Cloud Print support in EveryonePrint:

- 1. Create an organization Google Account
- 2. Enable Google API access on the Google Account
- 3. Register printers from EveryonePrint in Google Cloud Print
- 4. Enable "Public Link" sharing for Google Cloud Print registered printers

Important! The Google Cloud Print service is marked as a BETA software by Google. This means that Google could change anything and everything at anytime, interrupting or breaking the integration between EveryonePrint and Google Cloud Print.

### 3.20.1 Create a Google Account

First create a normal Google Account. This can be done most easily by creating a Google Gmail account.




#### 3.20.2 Enable Google API access on Google Account

With a Google Account created, in order for an external application such as EveryonePrint, to interact with Google services, an authorized API access must be established.

- 1. Start by going to Google Cloud Console at <a href="https://console.cloud.google.com">https://console.cloud.google.com</a>
- 2. Click Create project

≡ Google Cloud Platform	۹
Projects	
Create project You do not have any active projects.	
Projects shut down and pending deletion	

3. Enter a project name, used only internally in the Cloud Console for reference. Google suggests a Project ID, which can be used as is.

Project name	0		
Cloud print			
Your project I	D will be cloud-print-	1253 @ Edit	
roar project i	o min be blodd print	1200 to Care	



4. Depending on your account status, you may be asked to verify your account via SMS

SMS Verific	ation	
	uuon.	
	n create or access a proje	 ione number.
	er a minute and helps us ill NOT be used for solicit	oses.
Continue	Cancel	



5. Under Use Google API's choose Enable and Manage APIs

$\equiv$ Google Cloud Platform	۱ Q	
Home	Dashboard	
Dashboard     Activity	Project: Cloud print ID: cloud-print-1253 (#119402721964)	Use Google APIs Enable APIs, create credentials, and track your usage
	Try Compute Engine Spin up virtual machines using Google Compute Engine, Nodejs, and MongoDB to create a guestbook app in this guided walkthrough.	RP Enable and manage APIs Try App Engine (managed VM
	Get started	environment) Using your favorite language, deploy a sample application using Managed VMs (beta)
	Try App Engine (standard environment)	Managed VM documentation 🖸

6. Choose **Credentials** on the left, then **OAuth consent screen** and fill out a **Product name**. Other details can be entered as well, but are not required. When done, click **Save** at the bottom.

=	Google Cloud Platform	٩
API	API Manager	Credentials
¢\$	Overview Credentials	Credentials OAuth consent screen Domain verification  Email address  Universityacme@gmail.com  Product name shown to users  Cloud Print
		Homepage URL (Optional)



7. In Credentials choose Create credentials and an OAuth client ID

≡	Google Cloud Platform	🤍 Cloud print 👻 🗩 🗊	0	1
API	API Manager	Credentials		
٩	Overview	Credentials OAuth consent screen Domain verification		
0*	Credentials	APIs         Credentials         You need credentials to access APIs. Enable the APIs you plan to use and then create the credentials they require. Depending on the API you need an API key, a service account, or an OAuth 2.0 client ID. Refer to the API documentation for details.         Create credentials         API key         Identifies your project using a simple API key to check quota and acceler or APIs like Google Translate.         OAuth client ID         Requests user consent so your app can access the user's data. For APIs like Google Calendar.         Service account key         Enables server-to-server, app-level authentication using robot account: For use with Google Cloud APIs.		

8. Under Application type choose Other and enter a Name used only internally.





9. The Google account Client ID and Client Secret needed for integration are now created and displayed on screen.

Here is your cli	ent ID
119402721964	-90o8g4bbnaqu50g6o9aeiph7jcnpqe1k.apps.googleusercontent.com
Here is your cli	ent secret
SO-TZDtfVwfo	iv2CfwMY93hF

10. Copy/paste the Client ID and Client Secret into the EveryonePrint Google Cloud Print configuration screen.

Google Account Username:	universityacme@gmail.com
Google Client ID:	119402721964-90o8g4bbnaqu50g6o9aeiph7jcnpqe1k.apps.googleuserc
Google Client Secret:	SO-TZDtfVwfqiv2CfwMY93hF
Save Changes	

The overall connection between Google and Google Cloud Print has now been established, and printers in EveryonePrint can now be registered with Google Cloud Print.



#### 3.20.3 Register printers from EveryonePrint in Google Cloud Print

It's assumed that printers have already been configured in EveryonePrint.

For each of the printers in EveryonePrint, that you would like to make available to users via Google Cloud Print, 3 steps must be performed:

- 1. Register printer in Google Cloud Print
- 2. Authenticate the printer
- 3. Share the printer

First click **Register** for each of the printers that you would like to make available in Google Cloud Print.

Printer Management In this section register the printers installed in EveryonePrint in Goog to users.	gle Cloud Print, that	γou'd like to m	ake available
Printer name	Status	Public Link	refresh 🖸
EveryonePrint global printer (Print jobs sent to this printer are held in EveryonePrint until release)	Not registered		Register
Building A printer 11	Not registered		Register
Building A printer 15	Not registered		Register
Building A printer 17	Not registered		Register

After a few seconds, the status will change to *Awaiting authentication* and a new button will appear. Click **Authenticate** to continue.

Printer name	Status	Public Link	refresh 🖒
EveryonePrint global printer (Print jobs sent to this printer are held in EveryonePrint until release)	Awaiting authentication		Authenticate

A new window will open with a Google Printer registration page. Click the link in the middle of the page.





Finally click the **Finish printer registration** button

+You	Search	Images	Maps	Play	YouTube	News	Gmail	Drive	Calendar	More -		
Go	ogle										٩	acmeuniversity@gmail.com 🔻
		(	Goo	gle	cloud	print <sub>beta</sub>	accour	nt acmeu			with Google Cloud Prin	t for

After 20–30 seconds the *Status* of the printer in the EveryonePrint configuration page will change to **Active**, and the registration of the printer is now complete.

Printer name	Status	Public Link	refresh 🗹
EveryonePrint global printer (Print jobs sent to this printer are held in EveryonePrint until release)	Active	Not shared •	Unregister

All registered printers are visible in the Google Cloud Print Manage Printers page at <a href="https://www.google.com/cloudprint#printers">https://www.google.com/cloudprint#printers</a>

Printer name	Status	Public Link	refresh 🗹
EveryonePrint global printer (Print jobs sent to this printer are held in EveryonePrint until release)	Active	Not shared •	Unregister
Building A printer 11	Not registered		Register
Building A printer 15	Active	Not shared •	Unregister
Building A printer 17	Active	Not shared •	Unregister

+You Search Images	Maps Play YouTube News Gmail Drive Calendar More-	
Google	् ् ्	acmeuniversity@gmail.com 🔻
Cloud Print (beta)	Delete Show Print Jobs Rename C	1–4 of 4 < >
PRINT	Building A printer 15 Owned by me	
Print Jobs	Building A printer 17 Owned by me	
Printers	EveryonePrint Owned by me	
Google Cloud Print Home	Save to Google Drive	

Next it's important to share the printer, otherwise no users have access to the printers.



#### 3.20.4 Enable "Public Link" sharing for printers

When a printer has been added to Google Cloud Print, by default, it's only available to the Google Account owner.

It's strongly recommended to share printers using a Google Cloud Print "Public Link", otherwise users can only print to the printer via Google Cloud Print, if they're explicitly invited to the printer from the Google Cloud Print management pages.

Don't be confused by the term "Public Link". Depending on authentication settings in EveryonePrint, a user attempting to print via Google Cloud Print, will always be authenticated first in EveryonePrint to ensure only authorized users can print.

To create a *Public Link* for a printer:

1. Click the Not shared link next to a printer

Building A printer 12 Active Not shared •	Unregister
---	------------

- 2. Go to Google Cloud Printer Manage Printers page at <a href="https://www.google.com/cloudprint#printers">https://www.google.com/cloudprint#printers</a>
- 3. Select the printer to modify, and click Share

Google	
Cloud Print (beta)	Delete Share Show Print Jobs Rename C
PRINT	Building A office 12 Owned by me Currently offline
Print Jobs	Nexus 7 Owned by me
Printers	Save to Google Drive

Google Cloud Print Home

4. To change from Private access, click Change

Build	ing A office 12 sharing settings	
Who H	nas access:	
â	Private	Change



5. Choose Anyone with the link has access to the printer



6. Change the limit of how much users can print to this printer, by clicking the **15 pages/day** 



7. Choose Unlimited quota

Public pr	inting quota
Online	ited quota (no printing restrictions)
O 15	pages per day
Save	Cancel



8. Finally copy the "Link to share" and insert this link in the printers Public Link page in EveryonePrint and click **Save Changes**.



#### Google Cloud Print For Printer "Building A Printer 12"

It's strongly recommended to share printers using a Google Cloud Print "Public Link", otherwise users can only print to the printer via Google Cloud Print, if they're explicitly invited to the printer from the Google Cloud Print management pages.

Depending on authentication settings in EveryonePrint, a user attempting to print via Google Cloud Print, will always be authenticated first in EveryonePrint to ensure only authorized users can print.

(Show instructions)

This printers Google Cloud Print Public Link: hter.html?printerid=87a85cd8-70d9-e547-915d-9a2603ffb82a&key=503211520



When printers are shared via *Public Link*, a user can log on to the EveryonePrint Web interface, and view printers available to them from the Google Cloud Print page in the end user Web interface in EveryonePrint.

Printer name	Status	Public Link	refresh
EveryonePrint global printer (Print jobs sent to this printer are held in EveryonePrint until release)	Active	Shared 🔹	Unregister
Building A printer 11	Not registered		Register
Building A printer 12	Active	Shared •	Unregister
Building A printer 17	Active	Shared •	Unregister



Only printers which have been shared with Public Link, are listed in this page.

Device groups and device group printer permissions still apply, so on the Google Cloud Print page within EveryonePrint, a user will only see printers listed that they have access to. If no device group permissions are set, users will see all Google Cloud Print printers with a Public Link.

When a user clicks **Add Printer** the printer will be added to their Google account, and they can print from Google Apps, ChromeBook and similar.



#### 3.21 Configure Outgoing Mail

EveryonePrint must be able to send outgoing email, both with friendly error messages, if someone sends a print job in a format which is not supported, a too large email or when sending release codes or authentication requests to users.

Outgoing Mail	Server
Server:	mail.company.com
Port:	465
Use SSL:	Yes 💌
Use TLS:	No 🔽
Tip! Default outg SMTP non-SSL: p SMTP SSL: port 4 SMTP TLS: port 5	65
lf the mail server requ blank.	ires authentication, enter a username and password below, otherwise leave
Username:	print@company.com
Password:	•••••

Under Outgoing Mail Server in Settings, enter the mail servers SMTP settings for outgoing email, including choosing relevant ports and security protocols as needed for the SMTP mail server.

Customer Information				
Emails that are sent from the application, such as emails containing release codes, are branded with your name and email address. Please enter the details below.				
IMPORTANT: Do not enter print@company.com below, use a different email address as sender, such as a support email address or similar.				
Company name:	Our Company name			
Sender email address:	support@company.com			

Enter the details that will appear as "Sender" on the email. It's important to use a different address than the Email Print address, otherwise you risk creating an infinite email print loop.

Send Test E	mail
Check the box be correct.	low to send a test email using all of the above details to verify that settings are
Email recipient:	someone@company.com
🗹 Send test emai	Ι

You can test the settings by entering an email address to receive a test email, and checking the box saying "Send test email". When you click Save changes, a test email will be sent, to confirm



that EveryonePrint can successfully transmit emails to end-users. It's recommended to choose an external test email address, to confirm that EveryonePrint can send emails to all users.

Changes saved successfully.

Test email sent successfully.

**Tip:** If EveryonePrint says email was sent successfully, but no email is received, check the file C:\Program Files (x86)\EveryonePrint\temp\cfmail\mail.log (or alternate install directory) for errors such as:

02/10/11 13:29.27: MailOutFail: To=john.smith@company.com; From=Company <support@company.com>; Subject=Outgoing test mail from EveryonePrint; Server=mail.company.com;25; Size=515 bytes:javax.mail.MessagingException: Could not connect to SMTP host: mail.company.com, port: 25; nested exception is: java.net.ConnectException: Connection timed out: connect

With the above error message in mail.log, EveryonePrint could not successfully deliver the test email to the mail server due to lack of connection. Make sure that no firewalls are interrupting the connection.



#### 3.22 Card server

EveryonePrint includes a card server for network TCP/IP based swipe card readers. This enables card swipe authentication on printers or multi function devices, so a user walks up to a device of their choice, equipped with a reader, then swipe their door access card or similar, at which point the user is authenticated at the device. No need to enter login credentials.



#### Network Card Authentication

☑ Network card server enabled (Current service status: Started)

Card server port: 7292

The card server runs on TCP port 7292 per default. Configure the network card readers to send data to the EveryonePrint servers IP on this port.

Associate the network card reader with a device added in EveryonePrint, by going to the Device enabling card reader, and entering the IP address of the network card reader.

Printer Detail	s		
Printer ID:	192.168.0.11 (3908B457)		
Printer Description:	Building Aprinter 12		
Output Printer:	MFP Acme B-A12		
	Send a test print to printer after saving		
Advanced Dri	ver Print		
Enabling advanced driver print on a print queue, lets users print directly to the print queue using any print driver compatible with the output device, and enabling use of all advanced output features on the device.			
🗹 Enable advanced	driver print		
Specify the prin Acme MFP S10	ter model for users to install the correct driver: 0		
Card Reader			

Card Reader
This device has a network card reader attached
Card reader IP address: 192.168.0.144
Card reader profile: ALL DATA RAW 💌
$\square$ Automatically print all the users jobs when swiping card

Card swipe timeout is the time from when the user swipes their card, and until the swipe authentication expires.



Card swipe timeout (seconds): 30

Per default, the user has 30 seconds from swiping their card to activating the release application on the device.

□ Search LDAP for Card ID For Card ID lookup in LDAP, LDAP settings must be successfully configured under **User** Authentication.

EveryonePrint can lookup usernames by searching the LDAP for card ID numbers. For card ID LDAP lookup to function, the LDAP settings under User Authentication must be configured successfully.

Card Self Registration ☑ Allow users to self-register unknown cards ☑ Show unknown card ID on screen

Card self registration settings are relevant for multi function device terminals, so if a user swipes an unknown card, the user can associate the card with their network username, by authenticating with username and password.

#### 3.23 Card Reader Profiles

Card Reader P	rofile	
Name	ALL DATA RA	AW
Skip front		Number of bytes at start of string that will be skipped by card server
Skip rear		Number of bytes at end of string that will be skipped by card server
Start Byte (HEX):		The start byte (in hexadecimal) where the card server will begin reading the string sent by the reader
Stop Byte (HEX):	0D	The stop byte (in hexadecimal) where the card server will stop reading the string sent by the reader, also known as "string termination character", typically 0D for carriage return
Data Bytes:		The number of data bytes read by the server
Convert Format:	T	Choose if incoming card stream should be converted: (example incoming string: 4f56416b78) – no conversion: string is not converted (4f56416b78) – HEX: string will be converted to HEX (34663536343136623738) – DEC: string will be converted to decimal (340749544312) – ASCII: string will be converted to ASCII (OVAkx)
Convert Case:	•	Choose if card server should convert string sent by reader to UPPER or lower case, or do no conversion
Reverse:		Reverse the string sent by reader back to front
	Save	Changes

There are many different types of cards and card number formats. Use card reader profiles to modify the incoming data stream from the card reader to match a predefined format, for card numbers imported to the EveryonePrint database or stored in LDAP.

If no special card number translation is needed, just use the general ALL DATA profile.



#### 3.24 Administrator Alert Notifications

EveryonePrint includes an administrator notification feature, to alert administrators in case of critical faults, such as licensing errors.

Configure Outgoing Mail settings and then enter the administrators email address.



## 3.25 Change Administrator login

Use the Administrator Login screen in the EveryonePrint Admin to change the default admin password.

Administrator username:	admin
To change the admin password, e	nter both current password and new password twice below.
Current password:	•••
New password:	
New password retype:	

If the password to the admin is lost, it is necessary to contact EveryonePrint support.

# 3.26 Restrict access to administration Web interface based on IP address

Easily restrict access to the EveryonePrint administration Web interface, to only allowed IP addresses.



IP addresses are entered a comma delimited list. Subnet of IP's can be allowed by specifying only parts of the IP address, for example, entering "192.168." will allow access for any IP address starting with "192.168.".

By default, all IP addresses are allowed.



## 3.27 Managing Users

Users in EveryonePrint are users which have an email address or a card associated with them.

If EveryonePrint is configured for an authentication mode in **Printing and Security** then when users send email print jobs the first time, they will be asked to authenticate with the printing system, so EveryonePrint can link their email address together with their username. See section *3.16.1* 



Email Authentication for more information about Email Authentication.

EveryonePrint can also be configured to lookup user email addresses directly in LDAP. See *Email Print* and *User Authentication* settings for more details.

In the **Users** section of the EveryonePrint Admin, you can manage users email address associations.

Users All Users	Users Below are all the users in Ev	veryonePrint.	
User Email Addresses	Username 🔺	Email Addresses	
	jane	jane@school.com	8
	joe	joe@hotmail.com	8
	iohn	ismith@amail.com	8

Click red X to delete an existing email address association.

Under **User Email Addresses** you can manually link an email address to a username, so the user can send email print jobs without registering with the system as per the Email Authentication section above.

## Add New User Email Address

Add an email address manually to a user to allow the user to send email print jobs without having to register the email address first.

Username:	john	
Email Address:	john@hotmail.com	
	Add New Email Address	

#### 3.27.1 Import User Email Addresses from CSV file

To let users print via Email Print from mobile devices without having to register, users email addresses can be imported into EveryonePrint from a comma separated file (CSV) in the following format:

```
username, emailaddress
```

For example:

user1,user1@domain.com user2,user2@domain.com user2,user2@anotherdomain.com

One user can have many email addresses.

#### 3.28 Managing Cards

If using the network card server feature in EveryonePrint for users to authenticate themselves using swipe card on printers, the Cards section of the Admin site, contains the associations between users and their cards.



Username	CardID	
janedoe	7c8f873e9	8
johnsmith	4f56416b78	8

See section *3.22 Card server* for more information about configuring the card server. Card server can be configured to look realtime in LDAP for card ID's.

Card associations can also be imported from a comma separated file (CSV) in the following format:

username,cardid

For example:

user1,8312A780 user2,686C5966 user2,DB0F2148

One user can have many cards.



#### 3.29 Managing Devices

If printers have been added to EveryonePrint, the **Devices** page will automatically list installed printers.

		-
Add	New	Device

Printer ID	\$ Description	•	Output Printer	•		
2	Building C office 4		HP 5400		÷	8

Click the edit icon <sup>(3)</sup>/<sub>(2)</sub> to change settings or send a test print to the selected printer. Click the delete icon <sup>(3)</sup>/<sub>(2)</sub> to delete the printer from EveryonePrint.

Printer ID	¢	Description	*	Output Printer	
2		Building C office 4		Output Printer Advanced Printer Model	چ 🔅
				Advanced Print Enabled Printer Email Alias External Printer ID	

The dropdown will let you view different settings for the listed printers.

<ul> <li>The corresponding Windows print queue</li> </ul>
- The printer model specified under Advanced Driver Print
- If Advanced Driver Print is turned on for the device
- What, if any, printer email address alias has been configured
- The external Printer ID for the device for use in IPP or LPD
print

#### 3.29.1 Advanced Driver Print

When Advanced Driver Print is enabled on a print queue, it's possible to print to the print queue using any printer driver which is compatible with the destination output device.

Adva	anced Driver Print
	ng advanced driver print on a print queue, lets users print directly to the print queue using any Iriver compatible with the output device, and enabling use of all advanced output features on vice.
🗹 Enab	ble advanced driver print
	pecify the printer model for users to install the correct driver: Acme MFP S100

Make sure that the printer model description is accurate, so end users choose the proper printer driver for the output printer.

See section *5 Sending print jobs via Driver* for more information about simple versus advanced driver print.



#### 3.29.2 Associating network card reader with device

If using the built in card server in EveryonePrint with network based card readers, under a Device, associate the network card reader with a device added in EveryonePrint, enabling card reader, and entering the IP address of the network card reader.

Card Reader
🗹 This device has a network card reader attached
Card reader IP address: 192.168.0.144
Card reader profile: ALL DATA RAW 💌
$\square$ Automatically print all the users jobs when swiping card

Checking **Automatically print all users jobs when swiping card** is a useful setting to enable if using card readers on simple network printers. Enabling this, and all the print jobs being held in EveryonePrint, will be released when user swipes their card.



#### 3.29.3 Generate QR codes for easy printer access

Let users easily access print job submission and print job release from their mobile devices, by printing a QR code for each printer and placing it near the printer. Users can then scan the QR code at the printer of their choice using their smartphone.

Generate a QR code for a printer device:

- 1. In EveryonePrint Admin, go to **Devices**
- 2. Choose to **Edit** the device
- 3. Customize any QR text instructions (CSS and HTML can be entered as well)



4. Click the desired print size: small, medium or large

Print size: small - medium - large

Small size contains only the QR code and instructions, medium contains smaller QR code, instructions as well as logo, and large is a full page sheet with logo, large QR code and instructions.



The logo displayed on the QR code sheet, can be customized by uploading a logo under the Web Portal settings.



#### 3.30 Private Print Clouds

With Private Print Clouds, users can print from their laptops or workstations using Advanced Driver Print, to a virtual print queue on the EveryonePrint server. Jobs are held paused in this queue, until the user walks to a device and pull their jobs. Users can release jobs in a number of ways, including from a Web interface, on the panel display of multi function devices, or by swiping a card on a card reader.

Virtual print clouds and pull printing is often referred to as other terms such as follow me printing.



Typical user flow is:

- 1. User prints from their workstation to the virtual print queue (pull queue, follow queue etc) on the EveryonePrint server
- 2. User walks to the device of their choice and logs in with swipe card, release code or entering their username and password, depending on configuration
- 3. User can view waiting jobs on panel display, and can select jobs to print, which are then pulled from virtual cloud queue on the EveryonePrint server and sent to print on the device

A release printer is not required to have a full panel display for release. A network printer can be used with a network attached card reader as an alternative. Print jobs in the private print cloud, can also be released from the EveryonePrint Web interfaces.

#### 3.30.1 Pull print essentials

When a user prints a job on the client workstation or laptop using Driver Print, the print job is rendered using a manufacturer's printer driver, in a print language such as Postscript or PCL. This rendered print data is sent to the EveryonePrint server where it is stored as is, until the user decides to release job. When print job is released, the EveryonePrint server will send the raw print data as delivered from the original printer driver, via the Windows spooler system, to the output printer.



It's essential that users print using a driver which is compatible with the output device. If the user prints using a Postscript driver, but the output device only understands PCL, then the print job will fail.

When you create the Private Print Cloud queue in EveryonePrint, specify what driver that users should use, and if deploying printers via login script or group policies, use the appropriate compatible driver.

If you have a mixed fleet of devices with multiple manufacturers and models, you can create multiple Private Print Cloud queues, with separate drivers.

The same output device can also be associated with multiple Private Print Clouds.

It is strongly recommended to thoroughly test driver compatibility if you have a mixed printer environment.

#### 3.30.2 Create Private Print Cloud

To create a virtual private print cloud, first add output devices with Advanced Driver Print enabled as illustrated in *2.6 Adding Printers to EveryonePrint*.

Then click Private Print Clouds and click to add new queue.

Queue ID: CloudA					
Printer Name: Pull print Building A					
Device model: Acme MFP S100					
Compatible Output Devices Devices selected below, are devices where Not included	print jobs sent to this virtual queue can be released.				
Building B printer 113	Building A printer 100				
Building B printer 116	Building Aprinter 109				
Building B printer 118	Building A printer 11				
Building B printer 120					
Building B printer 125	Building Aprinter 112				
Building B printer 126	Building Aprinter 114				
Building B printer 127	Building Aprinter 115				
Building B printer 13	Building A printer 119				
Building B printer 130 <	Conditing reprinter ratio				
Building B printer 134	Building Aprinter 122				
Building B printer 137	Building Aprinter 124				
Building B printer 14	Building Aprinter 128				

Create a recognizable Queue ID, as this is can later be used for printing to the queue. Enter a descriptive Printer Name and the Device Model for the output devices.

#### 3.30.3 Print to Private Print Cloud

Print to the private print clouds using Driver Print feature in EveryonePrint, either via http/https IPP printing or using the built in LPD server.

Printer ID	\$ Description	External ID	\$	
CloudA	Pull print Building A	BC2E4966	-	8



To print to the queue created above via IPP, make sure Driver Print has been configured and enabled in the EveryonePrint Admin. Then log on to the EveryonePrint end user Web portal, and choose **Driver Print** and **Advanced**.

<b>Configuring Driver Pri</b>	nt On Windows 7
Please choose how you would like to print:	1. Select Destination Printer
C Simple (1) Print as easy as possit configuration	Begin by choosing the printer that you would like to print to, and instructions specific to that printer will be shown.
C Simple Direct (2) Easy setup, no printer queue	Pull print Building A
Advanced (3)     Print using a printer d     of advanced output fe	2. You Have Selected:
driver.	Print queue: Pull print Building A
	Printer model: Acme MFP \$100
	Print jobs sent to this selected print queue will be paused until released on one of the following devices:
	Building A printer 100     Building A printer 109     Building A printer 11
	Building A printer 111     Building A printer 112     Building A printer 114

Select the print queue, and instructions for that queue and operating system will appear.

See section *5 Sending print jobs via Driver* for more information about printing using Driver Print, and more about how to deploy printers to workstations.



# 4. Sending print jobs via Web

A simple way for users to print, is by simply uploading a document to print via the user Web portal.

The user Web portal is accessible per default on <u>http://127.0.0.1:7290</u> or <u>https://localhost:9443</u> for HTTPS/SSL, or as specified in the **Web Portal Configuration** in EveryonePrint Admin.

If the selected mode in Printing and Security is set to authentication, the user will be asked to enter login details.

everyone Print	
To sign in, please enter your username and password below. Username: johnsmith Password: ••••••• Login	
EveryonePrint 2.0.0 © 2003-2010 EveryonePrint All logos, brand and product names may be registered trademarks or trademarks of their respective holders and are hereby acknowled	jed.

The user can either upload a document from the main **My Print Jobs** screen or click on **Web Print** in the top navigation.

every Pri	
	My Print Jobs Web Print Driver Print Email Print My Printers
Web Print	
Use Web Print to print by	uploading a document or entering a Web address.
	Upload Document To Print
	Browse
	Supported documents include Microsoft Office, OpenOffice, RTF and Next » PDF. For other formats, use Driver Print.
	Web Address To Print
	Enter for example: www.cnn.com. For printing protected Web pages <b>Next »</b>
	EveryonePrint 2.0.0 © 2003-2010 EveryonePrint



Users can upload Microsoft Office (doc, docx, xls, xlsx, ppt, pptx), PDF, TXT and RTF documents. Simply select the file locally and click **Next**. The document will be uploaded to the server and processing begin.

Users can also print Web addresses, such as www.cnn.com or http://www.google.com. The addresses entered must be publicly accessible. EveryonePrint cannot access URL's that require authentication or a specific user session, as EveryonePrint will connect to the URL directly as a new user and attempt to retrieve the contents.



It's also possible to print documents by simply entering the Web link to them, so for example, if a user has a link to a document such as www.acmesoftware.com/brochure.docx, instead of the user download and then uploading or printing, the user can simply enter that address in the **Web Address To Print** and EveryonePrint will download and process the document directly.

Your print job ł	nas been added successfully. It will be processed au	itomatic	ally in a moment.	
	Upload Document To Print	D		
	Supported documents include Microsoft Office, OpenOffice, RTF and PDF. For other formats, use <b>Driver Print</b> .	Browse	ext »	
Date/Time	Filename	Pages	Status	refresh 🗹
7/16/10 3:20 PM	Acme 2.0 Documentation.pdf	37	Awaiting release	
	To print this job, select a printer below:			
	Building A, office 11.3			

After uploading or entering a Web address, the user will be redirected to the My Print Jobs page.

Depending on the configuration in **Printing and Security** in EveryonePrint Admin, the print job may or may not be released to a printer immediately. In this example the **Privacy with Authentication** mode has been selected, and prints are therefore held in EveryonePrint until released to a printer.

The user can simply click the button for the printer on which to print the job (or select in dropdown if many printers are installed).



lename	Pages	Status
me 2.0 Documentation.pdf	37	Awaiting release
o print this job, select a printer below:		
Building A, office 11.3		
Number of copies: 1		
Print from page 1 to 37		
Double-sided print (works only if the printer supports duplex):		
O Long-side (most common) O Short-side		

Users can check the box **Advanced** next to a printer to select advanced options, such as duplex, number of copies, printing the job in black/white etc.

Date/Time	Filename	Pages	Status	refresh 🖸
7/16/10 3:25 PM	http://www.google.com	1	Printed	
7/16/10 3:20 PM	Acme 2.0 Documentation.pdf	37	Printed	

Building A office 11.3 - Paused			_			
Document Name	Status	Owner	Pages	Size	Submitted	Port
Acme 2.0 Documentation.pdf		johnsmith	37	44.4 MB	3:24:42 PM 7/16/2010	
🗟 http://www.google.com		johnsmith	1	1.32 MB	3:25:54 PM 7/16/2010	

When clicking the button to print, they are sent to the selected print queue, as configured in **Devices** in EveryonePrint Admin.



# 5. Sending print jobs via Driver

The most efficient method for users that print frequently, is the Driver Print method, that allows users to print directly from within the programs and applications they use, on Windows, Mac and Linux.

It lets users print from anywhere, including securely and encrypted across the Internet, if the network configuration permits it.



Users begin by clicking **Driver Print** in the top navigation of the user Web portal.

Depending on the configuration chosen in **Printing and Security** in the EveryonePrint Admin, the instructions and information in the Driver Print pages will change. In this example **Privacy with Authentication** mode is active, and the instructions therefore include driver setup instructions that include authentication details for the user.

The user first clicks the logo of the platform they're using, whether it's Windows, Mac or Linux. Instructions are included for most common platforms and versions, including Windows, Mac OS X and Linux (most distributions include CUPS for IPP printing per default, otherwise RPMS is available from <u>www.cups.org</u>).



	My Print Jobs Web Print Driver Print Email Print My Printers
Show Driver Print Guide For? Windows 7 Mac OS X Linux	<text><text><text></text></text></text>
	2. Click Add a printer.

Step-by-step instructions are provided for the chosen platform, with information tailored to the specific users authentication information.

Select Printer Secure Printer on http://print.comp	any.com:8631
٠	III
Status: Ready Location: Comment:	Print to file Preferences
Page Range All Selection Current Page Pages:	Number of copies: 1 -

Completing the simple step-by-step instructions should take no more than a few minutes, and is only needed once. The user will now have a printer installed on their computer they can use to print from anywhere.

In this example, an active mode is chosen where prints are released using the Web interface or a release terminal.



Date/Time	Filename	Pages Status refresh 🖸
7/16/10 4:29 PM	Microsoft Word - Some Important Document.doc     To print this job, select a printer below:     Building A, office 11.3     Advanced     Building A, office 3.3     Advanced     Building B, office 1.2     Advanced	12 Awaiting release
7/16/10 3:25 PM	http://www.google.com	1 Printed
7/12/10 9-20 DM	Acms 2.0 Documentation ndf	97 Drintad

Prints sent via Driver Print appear alongside other prints in the Web interface, ready for release.

### 5.1 Simple vs. Advanced Driver Print

Configuring Driver Print On Windows 7				
Please choose how you would like to print:				
Simple (1)	Print as easy as possible, no printer driver to download, just simple configuration			
C Simple Direct (2)	Easy setup, no printer driver to download, but print to a specific print queue			
O Advanced (3)	Print using a printer driver designed for the output printer, allowing use of advanced output features. May involve download and installation of driver.			
	Continue			

With **simple print**, users print using a generic PostScript driver they already have on their computer. Setup is very quick and simple, users can print without downloading and installing special drivers. EveryonePrint will convert the PostScript on the server to PDF and store encrypted. When the user releases the job, the PDF is printed using the correct driver installed on the EveryonePrint server compatible with the output device.

With **advanced print** users use a printer driver which is compatible with the printers they want to print to, which will make it possible to use the advanced features of the output printer, such as binding and stapling. EveryonePrint does not convert or modify the print data stream when sending Advanced. It is forwarded as is to the destination print queue, when released.

Users can create multiple printers on their computer for different print queues in the EveryonePrint system.

#### 5.2 Deploying EveryonePrint printers to workstation PC's

EveryonePrint can be integrated seamlessly as a secure print solution in existing print and workstation environments.

Deploying EveryonePrint print queues to workstations involve:

- 1. Configure device in EveryonePrint with advanced print enabled
- 2. Create IPP or LPR print queue on print server



3. Deploy print queue from print server to workstations using Windows Group Policy or Logon Script

The following outline applies to Windows environments, but similar procedures can be used in other environments.

#### 5.2.1 Configure Device in EveryonePrint

Start by configuring a device in EveryonePrint with Advanced Driver Print enabled.

If using EveryonePrint standalone without a print accounting solution, you have the option to create Private Cloud Print queues, which are virtual printers users can print to, where jobs are held paused, until the user selects a destination printer, either in the Web interface, or on a release terminal at a device and pull print jobs.

Printer ID	\$ Description	*	External ID	\$	
CloudA	Pull print Building A		BC2E4966	÷	8

You can also configure a normal EveryonePrint device for deployment, just by enabling Advanced Driver Print.

Printer Details						
Printer ID:	192.168.0.121 (2E9236A)					
Printer Description:	Building A printer 12					
Output Printer:	MFP Acme B-A12					
	Send a test print to printer after saving					
Advanced Driver Print						
Enabling advanced driver print on a print queue, lets users print directly to the print queue using any print driver compatible with the output device, and enabling use of all advanced output features on the device.						
🗹 Enable advanced driver print						
Specify the printer model for users to install the correct driver: Acme MFP S100						

When users print to this queue, the print jobs will automatically be sent directly to the output queue on the EveryonePrint server, without being paused for release.

#### 5.2.2 Create IPP print queue on print server

To create an IPP based printer to deploy to workstations, ensure that workstation PC's have the Windows IPP print client installed (this may not be installed per default depending on domain policies).

On the Windows print server from where you're deploying printers, choose to add new printer.



and Add Printer	×	
🕝 🖶 Add Printer	and Add Printer	X
What type of printer do you want to install?	🚱 🖶 Add Printer	
Add a jocal printer Use this option only if you don't have a USB printer. (Windows automatically if	No printers were found.	
plug them in.)	Printer Name Address	
Add a network, wireless or Bluetooth printer Make sure that your computer is connected to the network, or that your Blue turned on.		
	Search again → The printer that I want isn't listed	]
	Mext Cancel	

#### Choose Add a network printer and The printer that I want isn't listed.

Printer Details		
Printer ID: 192.168.0.12 (2E92364		
Printer Description: Building Aprinter 12	dd Printer	x
Output Printer: MFP Acme B-A12	🖶 Add Printer	
Send a test print		
	Find a printer by name of TCP/IP address	
Advanced Driver Print	C Browse for a printer	
Enabling advanced driver print on a print print on a print print driver compatible with the output de	Select a shared printer by name	.
the device.	http://192.168.0.107:631/ipp/r/auto/2E9236A	
Enable advanced driver print	Example: \\computername\printername or	
Specify the printer model for users to	http://computername/printers/printername/.printer	
Acme MFP S100	O Add a printer using a TCP/IP address or hostname	

Enter the Advanced Driver Print address, which includes the server name or IP address of the EveryonePrint server, the Driver Print server port (default 631 for http and 9443 for https) and the printer ID at the end:

#### http://{serverip}:{port}/ipp/r/auto/{printerID}

The printer ID can be ID of a specific print queue, or private cloud print queue.

Printer ID	\$ Description	<ul> <li>External ID</li> </ul>	\$			
CloudA	Pull print Building A	BC2E4966		÷	8	
	63 AG	d Printer Add Printer Find a printer by name or TCP/IP address ○ Browse for a printer ○ Select a shared printer by name [http://192.168.0.107.631/ipp/r/aul.p/BC2E4966 Example: \\computername\printername or http://computername/printers/printername or http://computername/printers/printers/printername/or	printer			Browse



#### 5.2.3 Create LPR print queue on print server

To create an LPR based print queue on the server for deployment onto workstations, create a new network printer.

vice	
192.168.0.12 (2E9236A)	
ed driver print on a print queue, lets users print dir patible with the output device, and enabling use of a need driver print <u>printer model for users to install the c</u> orrect driven	
X Add Printer	Configure Standard TCP/IP Port Monitor           Port Seturgs           Port Name:           192168.0.195_1           Printer Name:           192168.0.195
Additional port information required      The device is not found on the network. Be s.      The device is turned on.      The network is connected.      The device is properly configured.      The device is properly configured.      The address on the previous page is correct      If you think the address is not correct, click Ba     address and perform another search on the net     device type below.      Device Type     C Standard	Printer Nameor IP Address: 192168.0.195 Protocol C Rew 3. C LPR Raw Settings Port Number: 9100 LPR Settings Queue Name: 4. 225926A C LPR Settings Queue Name: 4. 225926A C LPR Settings Queue Name: 9100 LPR Status Enabled Community Name: public
	tails  192.168.0.12 (2E9236A)  ion: Building Aprinter 12  IMFP Acme B-A12 Send a test print to printer after saving  Driver Print  ced driver print on a print queue, lets users print di upatible with the output device, and enabling use of nced driver print  certain model for users to install the correct driver  is printer model for users to install the correct driver  Additional port information required  The device is not found on the network. Be ss  1. The device is turned on. 2. The network is connected. 3. The device is turned on. 4. The device is on the previous page is correct  Byou think the address is not correct, click Ba address and perform another search on the ne device type below.

- 1. Enter the IP address or hostname of the EveryonePrint server
- 2. Choose Custom Settings
- 3. Choose LPR printing protocol
- 4. Enter the printer ID of the queue in EveryonePrint
- 5. Check the box LPR Byte Counting Enabled

The printer ID can be ID of a specific print queue, or private cloud print queue.

			Co	nfigure Standard TCP/IP Port Moni	itor	×
			F	Port Settings		
Printer ID	\$ Description	External ID		<u>P</u> ort Name: Printer Name or IP Address:	192.168.0.55	
CloudA	Pull print Building A	BC2E4966		Protocol	192.106.0.55	
				⊂ <u>R</u> aw	使 LPR	
				Row Settings Port Munober: 9100		
				LPR Settings Queue Name: BC2E4	966	
				✓ LPR Byte Counting Enabled		
				SNMP Status Enabled		

LPR printing using the standard TCP/IP port in Windows, is a widely supported method on most Windows workstations from Windows XP and onwards.



#### 5.2.4 Deploy print queue using Group Policy or Logon Script

With print queues created on the print server, deploy to workstation using Windows Domain Group Policy or using Logon Script.

Please consult with Microsoft Windows server documentation for more information about using group policies or logon scripts.



# 6. Sending print jobs via Email

If Email Print is enabled in the EveryonePrint Admin, the user Web portal will include a link to Email Print, containing instructions for the user on how to print via email.

EVERYONE Print My Print Jobs Web Print	Help 💥 Driver Print Email Print
<b>Print From Mobile Devices</b> <b>OUT</b> <b>OUT</b> <b>OUT</b> <b>OUT</b> <b>OUT</b> <b>OUT</b> <b>OUT</b> <b>OUT</b> <b>OUT</b> <b>OUT</b> <b>OUT</b> <b>OUT</b> <b>OUT</b> <b>OUT</b> <b>OUT</b> <b>OUT</b> <b>OUT</b> <b>OUT</b> <b>OUT</b> <b>OUT</b> <b>OUT</b> <b>OUT</b> <b>OUT</b> <b>OUT</b> <b>OUT</b> <b>OUT</b> <b>OUT</b> <b>OUT</b> <b>OUT</b> <b>OUT</b> <b>OUT</b> <b>OUT</b> <b>OUT</b> <b>OUT</b> <b>OUT</b> <b>OUT</b> <b>OUT</b> <b>OUT</b> <b>OUT</b> <b>OUT</b> <b>OUT</b> <b>OUT</b> <b>OUT</b> <b>OUT</b> <b>OUT</b> <b>OUT</b> <b>OUT</b> <b>OUT</b> <b>OUT</b> <b>OUT</b> <b>OUT</b> <b>OUT</b> <b>OUT</b> <b>OUT</b> <b>OUT</b> <b>OUT</b> <b>OUT</b> <b>OUT</b> <b>OUT</b> <b>OUT</b> <b>OUT</b> <b>OUT</b> <b>OUT</b> <b>OUT</b> <b>OUT</b> <b>OUT</b> <b>OUT</b> <b>OUT</b> <b>OUT</b> <b>OUT</b> <b>OUT</b> <b>OUT</b> <b>OUT</b> <b>OUT</b> <b>OUT</b> <b>OUT</b> <b>OUT</b> <b>OUT</b> <b>OUT</b> <b>OUT</b> <b>OUT</b> <b>OUT</b> <b>OUT</b> <b>OUT</b> <b>OUT</b> <b>OUT</b> <b>OUT</b> <b>OUT</b> <b>OUT</b> <b>OUT</b> <b>OUT</b> <b>OUT</b> <b>OUT</b> <b>OUT</b> <b>OUT</b> <b>OUT</b> <b>OUT</b> <b>OUT</b> <b>OUT</b> <b>OUT</b> <b>OUT</b> <b>OUT</b> <b>OUT</b> <b>OUT</b> <b>OUT</b> <b>OUT</b> <b>OUT</b> <b>OUT</b> <b>OUT</b> <b>OUT</b> <b>OUT</b> <b>OUT</b> <b>OUT</b> <b>OUT</b> <b>OUT</b> <b>OUT</b> <b>OUT</b> <b>OUT</b> <b>OUT</b> <b>OUT</b> <b>OUT</b> <b>OUT</b> <b>OUT</b> <b>OUT</b> <b>OUT</b> <b>OUT</b> <b>OUT</b> <b>OUT</b> <b>OUT</b> <b>OUT</b> <b>OUT</b> <b>OUT</b> <b>OUT</b> <b>OUT</b> <b>OUT</b> <b>OUT</b> <b>OUT</b> <b>OUT</b> <b>OUT</b> <b>OUT</b> <b>OUT</b> <b>OUT</b> <b>OUT</b> <b>OUT</b> <b>OUT</b> <b>OUT</b> <b>OUT</b> <b>OUT</b> <b>OUT</b> <b>OUT</b> <b>OUT</b> <b>OUT</b> <b>OUT</b> <b>OUT</b> <b>OUT</b> <b>OUT</b> <b>OUT</b> <b>OUT</b> <b>OUT</b> <b>OUT</b> <b>OUT</b> <b>OUT</b> <b>OUT</b> <b>OUT</b> <b>OUT</b> <b>OUT</b> <b>OUT</b> <b>OUT</b> <b>OUT</b> <b>OUT</b> <b>OUT</b> <b>OUT</b> <b>OUT</b> <b>OUT</b> <b>OUT</b> <b>OUT</b> <b>OUT</b> <b>OUT</b> <b>OUT</b> <b>OUT</b> <b>OUT</b> <b>OUT</b> <b>OUT</b> <b>OUT</b> <b>OUT</b> <b>OUT</b> <b>OUT</b> <b>OUT</b> <b>OUT</b> <b>OUT</b> <b>OUT</b> <b>OUT</b> <b>OUT</b> <b>OUT</b> <b>OUT</b> <b>OUT</b> <b>OUT</b> <b>OUT</b> <b>OUT</b> <b>OUT</b> <b>OUT</b> <b>OUT</b> <b>OUT</b> <b>OUT</b> <b>OUT</b> <b>OUT</b> <b>OUT</b> <b>OUT</b> <b>OUT</b> <b>OUT</b> <b>OUT</b> <b>OUT</b> <b>OUT</b> <b>OUT</b> <b>OUT</b> <b>OUT</b> <b>OUT</b> <b>OUT</b> <b>OUT</b> <b>OUT</b> <b>OUT</b> <b>OUT</b> <b>OUT</b> <b>OUT</b> <b>OUT</b> <b>OUT</b> <b>OUT</b> <b>OUT</b> <b>OUT</b> <b>OUT</b> <b>OUT</b> <b>OUT</b> <b>OUT</b> <b>OUT</b> <b>OUT</b> <b>OUT</b> <b>OUT</b> <b>OUT</b> <b>OUT</b> <b>OUT</b> <b>OUT</b> <b>OUT</b> <b>OUT</b> <b>OUT</b> <b>OUT</b> <b>OUT</b> <b>OUT</b> <b>OUT</b> <b>OUT</b> <b>OUT</b> <b>OUT</b> <b>OUT</b> <b>OUT</b> <b>OUT</b> <b>OUT</b> <b>OUT</b> <b>OUT</b> <b>OUT</b> <b>OUT</b> <b>OUT</b> <b>OUT</b> <b>OUT</b> <b>OUT</b> <b>OUT</b> <b>OUT</b> <b>OUT</b> <b>OUT</b> <b>OUT</b> <b>OUT</b> <b>OUT</b> <b>OUT</b> <b>OUT</b> <b>OUT</b> <b>OUT</b> <b>OUT</b> <b>OUT</b> <b>OUT</b> <b>OUT</b> <b>OUT</b> <b>OUT</b> <b>OUT</b> <b>OUT</b> <b>OUT</b> <b>OUT</b> <b>OUT</b> <b>OUT</b> <b>OUT</b> <b>OUT</b> <b>OUT</b> <b>OUT</b> <b>OUT</b> <b>OUT</b> <b>OUT</b> <b>OUT</b> <b>OUT</b> <b>OUT</b> <b>OUT</b> <b>OUT</b> <b>OUT</b> <b>OUT</b> <b>OUT</b> <b>OUT</b> <b>OUT</b> <b>OUT</b> <b>OUT</b> <b>OUT</b> <b>OUT</b> <b>OUT</b> <b>OUT</b> <b>OUT</b> <b>OUT</b> <b>OUT</b> <b>OUT</b> <b>OUT</b> <b>OUT</b> <b>OUT</b> <b>OUT</b> <b>OUT</b> <b>OUT</b> <b>OUT</b> <b>OUT</b> <b>OUT</b> <b>OUT</b> <b>OUT</b> <b>OUT</b> <b>OUT</b> <b>OUT</b> <b>OUT</b> <b>OUT</b> <b>OUT</b> <b>OUT</b> <b>OUT</b> <b>OUT</b> <b>OUT</b> <b>OUT</b> <b>OUT</b>	

Depending on the configuration chosen in **Printing and Security** in the EveryonePrint Admin, the instructions and information in the Email Print pages will change. In this example **Privacy with Release Code** mode is active, and the instructions therefore include instructions that include release codes sent back to the user via email.

Either from a computer, a mobile device or any other email client, the user can compose or forward an email to the email print address.

💁 Compose: Email with print jobs	
<u>File Edit View Options Tools H</u> elp	() ()
Send Contacts Spell Attach Security AutoZip Save	
- John Smith < John Smith < John Smith@everyoneprint.com > - John Smith@everyoneprint.com	hments:
To: L= pript@company.com	A spreadsheet.xls
	A Word document.doc A pdf file.pdf
Subject: Email with print jobs	
Sending 3 different files to print.	
1	1


The EveryonePrint server will collect this email and depending on the settings in Printing and Security either send back a release code, ask for authentication if it's a new user, process and hold or release to direct print queue.

		it 🖉	Ionitor Devices	Settings		Lo	g Out Help
<b>Print Job</b> Last 20 Print		nitor					
Date/Time	Jobii	D MaillD	User		Filename	Statu	5
5/10/10 5:41 AM	4	1	john.smith@everyor	eprint.com	A_pdf_file.pdf	Await	ing release
5/10/10 5:41 AM	3	1	john.smith@everyor	eprint.com	A_Word_document.doc	Awaiti	ing release
5/10/10 5:41 AM	2	1	john.smith@everyor	eprint.com	A_spreadsheet.xls	Awaiti	ing release
5/10/10 5:41 AM	1	1	john.smith@everyor	eprint.com	EmailMessage.txt	Await	ing release
Last 20 Emai	ils						
Date/Time	MailID	From		Documents		Size	Status
5/10/10 5:20 AM	1	john.smith@	everyoneprint.com	- A_spreadshee - A_Word_docu	.txt (Awaiting release) .t.xls (Awaiting release) ment.doc (Awaiting release) (Awaiting release)	715 KB	Downloaded

The print job will appear in the Monitor in the Admin. In this example the mode is Privacy with Release Code and a release code was sent to the user. The print jobs are now awaiting release.

🗟 Your print job release code - Mozilla Thunderbird	
<u>Eile Edit View Go M</u> essage <u>T</u> ools <u>H</u> elp	
from Demo Customer <support@company.com>۞</support@company.com>	🔯 reply 🛛 🖉 reply all 🔹 🐼 forward
subject Your print job release code	7/11/2010 4:44 PM
to john.smith@everyoneprint.com $\widehat{\boldsymbol{\boldsymbol{\omega}}}$	other actions *
This email contains your release code for the below print jobs you sent to Demo Customer via	email <u>print@company.com</u>
A_spreadsheet.xls (2 pages)	
A_Word_document.dox (1 page)	
A_pdf_file.pdf (23 pages)	
Your release code is: 154520	
Use this code at the release station to send your prints to the printer of your choice, or use the following address:	the Web release interface at
http://print.company.com/release?code=154520	
Thank you for using EveryonePrint.	
Demo Customer	
support@company.com	
This mail was created July 11, 2010 4:44:27 PM CEST	
E	
<u>Ma</u>	



## 6.1 Direct Email Print

EveryonePrint allows for two different methods for sending print jobs directly to a specific output queue.

## 6.1.1 Direct Email Print using mail subject

If EveryonePrint is configured for **Privacy with Authentication**, users can send print jobs from their mobile device via email, directly to a specific printer, just by entering the name of the printer in the subject of the email with documents to print, and EveryonePrint will send the print jobs to the selected queue.

For example:

Subject: P:Building B, office 1

Users can also print directly by giving their favorite printers a shorter personal name.

- 1. Users select their favorite printers under My Printers
- Give their printers a simple name they can remember and easily enter on thei mobile device, for example "x"
- Enter the printer nickname in email subject when sending a job, for example "P:x"

The print job will then be sent to the favorite printer the user called "x".

L.	Building A, office 1.2
	Building A, office 2.4
2	Building B, office 1
₹	Building B, office 2.1
	Building C office 2
	Latti VIRGIN 3G 4:10 PM © 7 ( ) => Cancel P:X Send
1	To: print@domain.com Cc/Bcc, From john.smith@company.com
	Subject: P:x
	Documents to print are attached.
	Sent from my iPhone
	QWERTYUIOP



### 6.1.2 Direct Email Print to Printer Email Alias

EveryonePrint supports email addresses for specific printers, making it possible for users to send print jobs directly to a print queue, simply by emailing a specific email address.

Email forwarding accounts should be created on the email server for each printer, which forwards emails to the central Email Print account.



EveryonePrint will retrieve email from the central Email Print account, and if an email was sent to an alias email address, EveryonePrint will immediately forward the print job to the relevant print queue.

To configure Printer Email Alias:

- 1. Create email accounts for each printer which forward to main email print account
- 2. Add the email address to the devices in EveryonePrint Admin

The configuration of email forwarding addresses vary from mail server to mail server.



### 6.1.2.1 Configuring a mail forwarding account on Microsoft Exchange

Configuring forward accounts on Microsoft Exchange involves creating a standard mailbox, then setting a forwarding address.

Go to the individual printers email account properties, choose **Mail Flow Settings** then **Delivery Options** and finally check the **Forward to** and choose the main Email Print account. Repeat this for all individual printer email addresses.

printer1 Properties	×	
Organization Account Member Of	Delivery Options	×
General User Information Resource Informa Mailbox Settings Mail Flow Settings Properties Delivery Options Message Size Restrictions Message Delivery Restrictions	Send on behalf Grant this permission to: Add	
Description	Forwarding address Forward to: print Deliver message to both forwarding address and mailbox	
Delivery options control delegated permissions and for	Recipiente limite	

Any emails sent to printer1 in the above example, and Exchange will forward to "print" email account.

### 6.1.2.2 Configuring Email Print Alias in EveryonePrint

In the EveryonePrint Admin under each output device, add the email address for each printer.

Direct Email Print Alia	5						
an email forwarding account has ssociated with this printer below		or this s	pecific printer,	enter t	he email address		
This printers direct print em	ail address alias:						
printer1@company.com	Printer ID	÷	Description	*	Printer Email Alias		
	1		Printer 1		printer1@company.com	÷	8
	2		Printer 2		printer2@company.com	÷	•
	3		Printer 3			-	

Any print job now sent to printer1@company.com will be sent to the Printer 1 queue. The usual authentication settings apply.



# 7. Sending print jobs from mobile devices

EveryonePrint supports printing natively from Apple iOS devices (iPhones and iPads) and Google Android based smartphones and tables.

Install and configure the EveryonePrint Mobile Gateway on a server which is hosted in the same sub network as the mobile device clients. This can either be the same server as the EveryonePrint server or a different server, depending on the network configuration.

Once configured, users can print from any app that can support printing.

If EveryonePrint is configured to require users to authenticate or if EveryonePrint is configured for release code print, then users must install the EveryonePrint app from the iTunes AppStore to authenticate their mobile print jobs to the EveryonePrint server.

See the EveryonePrint Mobile Gateway installation guide for further details.





# 8. Releasing Print Jobs (release codes)

If the EveryonePrint server is configured for **Privacy with Release Code** print mode, then users get release codes which they must enter in an EveryonePrint release station, before obtaining their print jobs. This section covers releasing prints in this mode.

If your EveryonePrint server is configured for Direct print, then prints will automatically be sent to the selected Windows print queue, and there is no release in EveryonePrint.

## 8.1 Web release interface

The EveryonePrint server includes a Web interface for releasing print jobs to a printer.



Start the EveryonePrint Web release interface from the shortcut either in the Windows start menu, the desktop icon or by entering the URL below into a Web browser:

http://127.0.0.1:7290/release or https://localhost:9443/release

The Web release interface can be accessed remotely from any client with access to the IP address of the computer hosting the EveryonePrint service, through the URL: http://{server-ip}:7290/release where {server-ip} is the IP address of the server, or https://{server-ip}:9443/release, if the network and firewall configuration permits it.



#### Enter the release code:

of your choice, enter the release code you received below.	or touch-screen to pu the keypad below.		
Enter your release code:	1	2	
154520	4	5	
Continue »	7	8	

The documents related to the entered release code is shown, along with the printers available:

our Print Jobs	
Select jobs to print	<b>2</b> Select destination printer
Document	Location /Description
EmailMessage.t×t	Building A Office 2
A_spreadsheet.xls	C Building B Office 4
A_Word_document.doc	
A_pdf_file.pdf	
Select All Delete Selected	Print Selected »

Select documents to print and the destination device, and click Print Selected.

<b>Printing successful!</b> Your selected print jobs are now being sent to the selected printer.					
Destination printer: Building A Office 2					
Enter New Release Code »					
Important!					
To prevent unauthorized access to your print jobs, please close all open browser windows when you're finished!					

The documents have been sent to the printer successfully.



### 8.1.1 Restrict Access to Web release interface

It's possible to restrict access to the Web release interface to certain IP or IP subnets.

To configure IP access restrictions:

- 1. Stop the EveryonePrint Web Service
- 2. Open the EveryonePrint configuration file eop.xml in an editor such as Notepad
- 3. Find or create the entry <releaseallowediplist></releaseallowediplist>
- 4. Enter either specific IP addresses or partial IP's separated by comma. Subnets can be specified by entering only part of the IP address, for example, entering "192.168.10." will allow access for any IP address starting with "192.168.10.".

Example: 1 address (localhost) and 2 IP subnets: 127.0.0.1,172.1.0.,192.168.10.

Imin<del>allowediplist/> <mebilostriotauth> false </mebilostriotauth> <mebilostriotlogintimeout</del>>43200</mc plist/><releaseallowediplist>127.0.0.1,172.1.0.,192.168.10.</releaseallowediplist></settings>

Save the eop.xml file and start the EveryonePrint Web Service



# 9. Releasing Print Jobs (authentication)

If the EveryonePrint server is configured for **Privacy with Authentication** then a user can log on to the user Web portal to release their print jobs in the **My Print Jobs** page, or release at a release terminal using their username and password.

ever Pri		nail Print My	Printers	
My Print J	obs			
	Upload Document To Print Supported documents include Microsoft Office, OpenOffice, RTF and PDF. For other formats, use Driver Print.	Browse Next »		
Date/Time	Filename	Pages	Status	refresh 🖸
7/15/10 11:49 PM 🛛 🗉	Acme 2.0 Documentation.pdf To print this job, select a printer below:	37	Awaiting release	

The user Web portal is accessible per default on <u>http://127.0.0.1:7290</u> or <u>https://localhost:9443</u> for HTTPS/SSL, or as specified in the **Web Portal Configuration** in EveryonePrint Admin.

The My Print Jobs page contains all the users print jobs sent via Web, Driver or Email, for a simple and consistent experience for the user.

## 9.1 Users selecting favorite printers in My Printers

If using the **Privacy with Authentication** mode in **Printing and Security**, a navigation item in the user portal called **My Printers** appear.



# **My Printers**

Below are all the printers available to you. If you only use a few of the printers below, you can select them as favorite printers, and even add your own nickname for each, for example "Printer in blue building". Then only your favorite printers will show, making it easier to print frequently.

Favorite	Description:	Your printer nickname (optional):
	Building A, office 11.3	
V	Building A, office 3.3	Printer in blue building
	Building B, office 1.2	Printer in yellow building

The My Printers page allows users to select certain printers as their favorite printers, to show only printers relevant to them in the My Print Jobs page.

7/16/10 4:29 PM	Ξ	Microsoft Word - Some Important Document.doc	12	Awaiting release
		To print this job, select a printer below:		
		Printer in blue building		
		Printer in yellow building		

This feature is useful if the printer list includes many printers.

# 10. Using Device Groups

Device Groups in EveryonePrint is a highly useful feature for either grouping devices in a long list, for example by department, location or similar, or to limit what printers are shown and available to users.

This section covers two different configuration examples.

Device Groups are only relevant for Privacy modes, Privacy with Release Code or Privacy with Authentication. If a Direct Print mode is used, the device group settings are ignored, as prints are released directly to a print queue.

## 10.1 Example 1: Grouping devices for more friendly viewing

For better using long list of printers, it can be helpful to users, if printers are grouped by department, location or similar.

Date/Time		Filename	Pages	Status
7/22/10 4:11 PM	-	Acme 2.0 Documentation.pdf	37	Awaiting release
		To print this job, select a printer below:		
		Advanced	Print	»
		Department A Printer A		
		Printer B		
		Printer C		
		Department B		
		Printer C		
		Printer D Printer E		



Create Device Groups by going to **Device Groups** in EveryonePrint Admin, and click **Add New Device Group**.

New Device Gro	oup		
Group Name:	Department A		
External Group Name:			
Not included		Included	
Printer D Printer E	<u> </u>	Printer A Printer B	
Printer F		, Printer C	
Printer G	>>		
Printer H	>		
Printer I			
Printer J Printer K	۲		
	<<		
	~		<b>Y</b>

Enter a friendly name for the group, leave external group name empty for this first example, and select the devices that should be included in the group, and save changes. Repeat for each group.

Name	External name		
Department A			8
– Printer A			
– Printer B			
– Printer C			
Department B		*	8
– Printer C			
– Printer D			
– Printer E			
Department C		-	8
– Printer F			
– Printer G			
– Printer H			
– Printer I			
– Printer J			
– Printer K			

Notice how printers can appear in multiple groups. In above example, Printer C, appears in both Department A and B.

Now when users see printer listings in the EveryonePrint Web interfaces, they are grouped as above.



## 10.2 Example 2: Limit what printers are visible

To limit the visibility of printers to specific users, a simple LDAP attribute can be used where groups are entered as a comma delimited list, or alternatively using the Windows security group membership features in a Windows Active Directory.

### 10.2.1 Using simple LDAP attribute

The following describes using a simple LDAP attribute, with device groups entered as comma delimited list.



In the above example User1 should only be able to view printers in Department A and B, and User2 can view printers in Department C.



To limit what printers are visible when users log on, designate a field in LDAP, for storing group information.

		user2 Properties			<u>?</u> ×
user1 Properties	?	Member Of	Dial-in Envir	onment	Sessions
Member Of Dial-in Environmer	nt Sessions	Remote control	Terminal Service		COM+
Remote control Terminal Services Prof	ile COM+	General Address			Organization
General Address Account Profile Tele	phones Organization	_			Ì
user1		y user2			
		<u>F</u> irst name:	user2	Initials:	
<u>F</u> irst name: <u>user1</u>	nitials:	Last name:	, [		
Last name:		East name.	]		
-		Display name:	user2		
Display name: user1		Description:			
Description:					
Office: depta,deptb	(	Offi <u>c</u> e:	deptc		
laebra, aebro	/				
		Telephone number:			0_ther
Ielephone number:	<u>0</u> ther	E	,		
E-mail:		E- <u>m</u> ail:	1		
		Web page:			Othe <u>r</u>
Web page:	Other				
			ОК	Cancel	Apply
OK Ca	ancel <u>Apply</u>				

In this example in a Windows Active Directory, we have selected the Office field, which we can see using the LDAP Browser from Softerra, is called **physicalDeliveryOfficeName**. Any available field in LDAP can be used.

EN=user1,0U=Students,DC=pcount         Elle       Edit       Yiew       Iools       Help         (⇒ ▼ ⇒ ▼ €)       (), (), (), (), ()       (), ()       (), ()       (), ()         (⇒ ▼ ⇒ ▼ €)       (), (), (), (), ()       (), (), ()       (), ()       (), ()         (⇒ ▼ ⇒ ▼ €)       (), (), ()       (), ()       (), ()       (), ()       (), ()         (⇒ ▼ ⇒ ▼ €)       (), ()       (), ()       (), ()       (), ()       (), ()       (), ()	erlab,DC=local	a 1:- # <b>■</b>   <b>N</b>		
∃…+ Browser root	Name	Value	Туре	Size
🗄 🗐 🔢 pcounterlab.local	💷 objectClass	top	text	3
🔁 🧰 CN=Builtin	💷 objectClass	person	text	6
CN=Computers	objectClass	organizationalPerson	text	20
OU=Domain Controllers	🗉 objectClass	user	text	4
CN=ForeignSecurityPrincipals		user1	text	5
CN=Infrastructure     CN=LostAndFound	DeliveryOfficeName	depta, deptb	text	11
CN=LostAndFound     CN=NTDS Quotas	BewenName	user1	text	5
CN=Program Data	distinguishedName	CN=user1,OU=Students,DC=pcounterlab,DC=local	text	44
OU=Students	instanceType	4	text	1
CN=user1	💷 whenCreated	20100722150724.0Z	text	17
€ CN=user2	💷 whenChanged	20100722153017.0Z	text	17
CN=System	💷 displayName	user1	text	5
CN=Users	💷 uSNCreated	32807	text	5
	💷 uSNChanged	32821	text	5
	💷 name	user1	text	5
	🕮 objectGUID	C9 F4 40 DD 15 D0 59 4B B9 68 4A 8E 81 16 7A E8	binar	16
	💷 userAccountControl	66048	text	5
	💷 badPwdCount	0	text	1
	💷 codePage	0	text	1
	Contraction and the second sec	•	6 A	

Under the LDAP settings in **User Authentication** screen in EveryonePrint Admin, enter this field in **Field containing users device group name**.



LDAP Server IP/hostname:	192.168.197.162
LDAP Server port:	389 (default 389 for non-SSL and 636 for SSL)
Start search DN:	dc=lab3,dc=local
Field containing username:	sAMAccountName
	Typically "sAMAccountName" or "cn" (without the quotes)
Field containing email address:	mail
User object class:	user
Field containing users device group names (leave blank if not used):	physicalDeliveryOfficeName
LDAP administrator username:	administrator@lab3.local
LDAP administrator password:	•••••

To associate the "depta" and "deptb" from LDAP with an actual Device Group in EveryonePrint, either add or edit Device Groups, and enter the relevant group name under **External Group Name**.

Group Name:	Department A		
External Group Name:	depta		
Not included Printer D Printer E Printer F Printer G Printer U	Printer A     Printer B     Printer C	A	
Name	External name		
Department A - Printer A - Printer B - Printer C	depta		Ø
Department B – Printer C – Printer D – Printer E	deptb	*	8
Department C – Printer F – Printer G – Printer H	deptc	*	8



User1 we had given permission to both depta and deptb (separated with comma in LDAP field), and when user1 now logs on, user1 can see only those printers from "depta" and "deptb".

Date/Time	Filename	Pages Status
7/22/10 5:10 PM	Acme 2.0 Documentation.pdf	37 Awaiting release
	To print this job, select a printer below:	
	Advanced	Print »
	Department A	
	Printer A	
	Printer B	
	Printer C	
	Department B	
	Printer C	
	Printer D	
	Printer E	

### 10.2.2 Using Windows Active Directory Group membership

For easier management of users association with different groups, the Windows global security groups can be used.

In this example we will create 3 groups of printers in EveryonePrint, create equivalent Windows groups and make User1 a member of only Department A and Department B, for access only to those department printers.





First we must configure the LDAP authentication to look in the **memberOf** attribute of the LDAP server (Active Directory).

LDAP Server IP/hostname:	192.168.197.162
LDAP Server port:	389 (default 389 for non-SSL and 636 for SSL)
Start search DN:	dc=lab3,dc=local
Field containing username:	sAMAccountName
	Typically "sAMAccountName" or "cn" (without the quotes)
Field containing email address:	mail
User object class:	user
Field containing users device group names (leave blank if not used):	memberOf
LDAP administrator username:	administrator@lab3.local
LDAP administrator password:	•••••

Note that using Windows group memberships for printer grouping, requires that the group membership attribute in LDAP is called *memberOf*. The attribute name can be confirmed with an LDAP browser tool such as Softerra LDAP Browser.

CN=user1,0U=Students,DC=lab3,DC=	=local			
Eile Edit View Tools Help				
I ⇔ • → • 혐  fl fl   X � �	🗶 💽 🔐 🙀 🖻 • 🕒			
📑 🥵 📭 🐨 (objectClass=*)	•			_
I-++++++++++++++++++++++++++++++++++++	Name	Value	Туре	Size
	💷 objectClass	top	text	3
🖻 📲 Idap3	💷 objectClass	person	text	6
E CN=Builtin	💷 objectClass	organizationalPerson	text	20
	💷 objectClass	user	text	4
	En	user1	text	5
CN=ForeignSecurityPrincipals	💷 givenName	student1	text	8
	💷 distinguishedName	CN=user1,OU=Students,DC=lab3,DC=local	text	37
	instanceType	4	text	1
E 🛅 CN=Managed Service Accounts	💷 whenCreated	20121011174230.0Z	text	17
🕀 💼 CN=NTDS Quotas	💷 whenChanged	20130417132856.0Z	text	17
🕀 🧰 CN=Program Data	💷 displayName	student1	text	8
📄 🛄 OU=Students 🗧		16435	text	5
😟 🛄 CN=Department B	💷 memberOf	CN=Department A,DC=lab3,DC=local	text	32
CN=Department C	memberOf	CN=Department B,OU=Students,DC=lab3,DC=local	text	44
E CN=Department D	USNChanged	36916	text	5
CN=user1	💷 name	user1	text	5
	i objectGUID	E9 FC 82 FO 9F 4E 90 4E BC 1A 51 D5 61 97 01 4F	binar	16
CN=System     CN=Users	userAccountControl	66048	text	5
III : IFINIAI CNEUSERS		<u>^</u>	• •	•



Create the groups of devices in EveryonePrint.

Name	External name		
Department A	Department A	÷ 🔅	8
– Printer A – Printer B – Printer C			
Department B	Department B	÷	8
– Printer C – Printer D – Printer E			
Department C	Department C	÷	8
– Printer F – Printer G – Printer H			

Notice that the *External Name* must match the name of the Windows group name. The *Name* is a friendly description that appears to users, and can be different from the external name.

In the Windows Active Directory domain, Windows Global Security Groups are created.

New Object	- Group			x
82	Create in:	lab3.local/		
Group na	me:			
Departn	nent A			
Group na	me (pre- <u>W</u> ind	ows 2000):		
Departm	nent A			
Group	scope		Group type	
O Dor	nain local		• Security	
🖲 🖸	bal		C Distribution	
O <u>U</u> ni	versal			
			OK Cancel	



User1 is made member of Department A and B.

Dial-in	En	vironme	nt Í	Sessions		Remot	e control
Remote Deskto	p Ser	vices Pr	ofile	Personal Virt	uall	Desktop	COM+
	1.		·	í <del>a</del> constant a l	Í Os		Member O
General Address	s   A	ccount	Profile	Telephones		ganization	
	s   A			Domain Servic		_	
Member of:	s   A		Directory			_	
Member of: Name	s   A	Active lab3.lo	Directory	Domain Servic		_	

Now when User1 logs on to EveryonePrint and submits a document, only the printers of selected groups are available.





# 11. Using SSL with EveryonePrint

SSL, or Secure Socket Layer, allows Web browsers and Web servers to communicate over a secured connection using the HTTPS protocol where both the server and the browser encrypt data before transmission.

To establish an SSL encrypted connection between a client browser and the EveryonePrint embedded Web server, the EveryonePrint server must have an SSL certificate configured.

#### What is an SSL certificate?

A certificate is a document which describes a network host's identity. It contains, among others, the DNS name of the host, the name and ID of the certificate issuer, an expiry date and a digital signature.

Certificates are created together with a host's private key. The certificate is either self-signed or signed by a certification authority (CA). Safe communication requires the certificate to be signed by a CA. Basically, a self-signed certificate can never be used to verify the identity of a server, but it can be used to seed the ciphers used to encrypt communication. For this reason, self-signed certificates are often used in test systems, but seldom in production systems.

Official CAs sign public certificates for a certain price. Well-known official CAs are Thawte (http://www.thawte.com/), GeoTrust (http://www.geotrust.com/) and Verisign (http://www.verisign.com/). To obtain a CA signed certificate, a "certificate request" (unsigned certificate) is generated and sent to CA's as part of the SSL certificate purchase process.

All major Web browsers, such as Internet Explorer, Firefox etc, access a local database containing the certificates of the official CAs. CA signed certificates can only be verified by this local database that contains trusted CA certificates.

It is quite possible to set up one's own local CA and use that to sign servers' certificates. Although this avoids the expense of using an official CA, all clients must then have a local copy of your own CA's SSL certificate.

#### What is a certification authority (CA)?

A certification authority (CA) is a trusted third party that two Internet hosts can use to verify the identity of their peers.

Every CA has its own SSL certificate, and this certificate must be known for all applications that use the CA to verify certificates. Most operating systems are bundled with a file containing such certificates, so most PC's and Web browsers already know CA's that can be trusted.

#### What is a private key?

A private key is a string of arbitrary data that is secret for the host on which it was generated. This key is used to encrypt the data sent from the host. No two SSL hosts should share the same private key, as this greatly degrades the level of security. If the private key is compromised, the encrypted link will no longer be safe.

The private key ensures that the data transmitted to and from the host is infeasible to decode even if the algorithms used to produce the cipher are known.



## 11.1 Obtaining an SSL certificate from a trusted Certificate Authority

The following is a step-by-step guide on how to obtain a certificate from a trusted Certificate Authority. In this example the certificate will be created for the EveryonePrint demo server, on the domain demo.everyoneprint.com using GeoTrust as the Certificate Authority.

The free Keystore Explorer tool available at <u>http://keystore-explorer.sourceforge.net</u>, will be used in this guide. For experienced users, the Keytool included in C:\Program Files (x86)\EveryonePrint\jre\bin can also be used, however this guide will focus entirely on the easier GUI based application Keystore Explorer.

This guide will assume that this configuration is done on a working and configured EveryonePrint server.

### 11.1.1 Create new keystore and generate private key

Begin by creating a new keystore that will contain our certificate. Open the Keystore Explorer tool, and choose to create a new keystore of the type JKS (Java Key Store).



Next with an empty keystore open, choose to create new key pair. Choose RSA and key size 2048.





When prompted, choose Version 3, MD5 with RSA and validity of 10 years. This doesn't determine the expiration of the final SSL certificate, but only the validity of the key pair. Choose the Edit Name button.

(	Generate Key Pair C	ertificate	×
	Version:	O Version 1 O Version 3	
	Signature Algorithm:	MD5 with RSA	
	Validity Period:	10 Vear(s)	
	Serial Number:	1327586306	
	Name:		
		Add Extensions	
		OK Cancel	

Enter the details of the SSL certificate.

٢	Name	
	Common Name (CN):	demo.everyoneprint.com
	Organization Unit (OU):	EOP
	Organization Name (O):	EveryonePrint
Locality Name (L):		Copenhagen
State Name (ST):		Denmark
	Country (C):	DK
	Email (E):	support@everyoneprint.com
		OK Cancel

Common name is the FQDN (fully qualified domain name), the exact Web URL that users will use to access the EveryonePrint server. This could be print.company.com or similar. Make sure the CN is correct matching your DNS, or you will have to issue a new certificate.

OU means the department or similar. O is the company name; L is for example the city; ST means the Country or State, C is the country code and finally email is a working email address belonging to the domain.

When clicking OK, enter an "alias" which is just an internal recognizable name for the certificate. Using the CN is best practice.



N	ew Key Pair Entry Alias	×
	Enter Alias: demo.everyoneprint.com	
	OK Cancel	

Finally, you're prompted for a key password. This must be a password that is kept secret, not shared with anyone, used later for the configuration of EveryonePrint.

New Key Pair Entry Password	
Enter New Password:	***
Confirm New Password:	****
ОК	Cancel

You're now ready to create the "Certificate Signing Request" which the Certificate Authority (SSL issuer) will need to create a signed certificate.

Right click the key pair entry and choose Generate CSR.

🚴 Untitled-1 * - KeyS	itore Explorer 4.0	1		
<u>File E</u> dit <u>V</u> iew <u>T</u> ools	s E <u>x</u> amine <u>H</u> elp			
🛍 🧔 🔂	۵ 🍫 🗈	💼   🧏 🧶 🧏	🥺 🕒 🚨 🚨 🔍	3
Untitled-1 * 🗙				
🔽 🖪 🖃 Entry Nam	e	Algorithm	Certificate Expiry	Last Modified
👫 🕑 🥥 demo.eve	🔍 View Details	•	26/Jan/2022 07:18:26 PST	26/Jan/2012 07:20:11 PST
	👆 Cut	Ctrl+X		
	🛅 Сору	Ctrl+C		
	🌭 Export	•		
	📝 Generate CS	R		
	🍪 Import CA R	eply		
	🤱 Append to C	ertificate Chain		
	📝 Sign	•		
	🕜 Unlock			

Under Signature Algorithm, choose MD5 with RSA. Leave Challenge blank, as this is not needed. For CSR, choose where to save the CSR request. In this example we choose to save it to desktop as a txt file as we will need to open and copy text from this later.



C	ienerate CSR	×
	Format:	
	Signature Algorithm:	MD5 with RSA
	Challenge:	
	CSR File:	nts and Settings\Administrator\Desktop\mycsr.txt
		OK Cancel

Clicking OK and a mycsr.txt is created on the desktop. Open the file and you can see the full CSR request as an encrypted string.

📙 mycsr.txt - Notepad
<u>File Edit Format View Help</u>
BEGIN CERTIFICATE REQUESTD MIIC6TCCAdECAQAwgaUXHZAdBgNVBAMTFMRIbW8uZXZlcnlvbmVwcmludC5jb20xDDAKBgNVBASTD A0VPUDEWMBQGAIUECHMNRXZlcnlvbmVqcmludDETMBEGAIUEBXMKQ29wZW50rWdlbjEQMA4GAIUED CBMHRGVUbWFyaZELMAKGAIUEBHMCRESXKDAmBgkqhkiG9w0BCQEWGXN1cHBvcnRAZXZlcnlvbmVwD cmludC5jb20wggE1MA0GCSqGSID3DQEBAQUAA4IBDwAwggEKA0IBAQCic5TRPIm+uaKqwKsE3UrLD jL4PtpLcHjYdkgXy043BvvyRB/en8p0rrsdCFd6bybf197joqT7i191+jfpKxjeGh+3awwDzgO+jD UT+juSkO4w38ApUUPdp62r3DVIPN6IRaFPcK6wC/X0UP19ETuymE47cuvAN5SYXkLtPBe7zymORhD A5IqA12hMLq5Jtm0ApvPv17PRJUiU7sD1Byr5Q/IVTJ/+qQv/CkDD4vdvM/IQqgGZFiEV4CXaiekD Iv/i4SkCBY/bT/OD3M0nQ8seT+dLFujwmVyWJ2D97e8CAP9cqWu4tq5vc19GBg1yeMku3H6Wf6moD yR+2swMUTHNK3BsVagMBAAEwDQYJK0ZIhvcNAQEEBQADggEBAH45FP4icFKAhv76wvoaZiUQUP++D iF6rD9fk1Zrgyqe4GF+acxb+PINK09gqx08f5SkQvHzQ3rGSA2GxnzqB+Ji+2IBcCjnxFgpE6H0VD Di5ItVaxAUfy38utVZ+M+a87G5BDqeK+Qxj820zjqq/niecQDeietw5uRqX0y95qhyYahOOHNWYyD lLHt20jgGb3dEUVHjgDkAs70UNqkEwdhJmbaM6g/i3RR7rnGV3Q06JyldkCYBJr60bCeKhFpoowgD i4PnFi5tUpw4MHD+wH09PeVrkc32Yj9KdYQG/b5NKgJV8bB4G9qYbU7am0PfGt+dGF+187+cFaN8B UPCn5diuQZI=DEND_CERTIFICATE_REQUESTD

For this demonstration we're using GeoTrust to create us a 30 day free test SSL certificate (http://www.freessl.com).

As part of the purchasing process, the CSR is supplied, simply by pasting the entire contents of the CSR generated on the server.

I.



#### FreeSSL Enrollment

#### + <u>Ordering</u> + Management

Language English - English

#### Enter CSR -

After generating your server's Certificate Signing Request as described in <u>Generate CSR</u>, paste the CSR in the form below. Please make sure that it contains the complete header and footer "BEGIN" and "END" lines exactly as in the example below.

#### SAMPLE ONLY

SAMPLE ONLY -----BEGIN NEW CERTIFICATE REQUEST-----MIIDCJCCAAMCAQAwdTEZMsCAALUEAXMQaG94C5Kb21haW4ubmFt2TEVM BMGALUECKMMT3jnrW35pemF0aW9uMRUWEwTDVQQKEwxPcmdhbml6YXRpb2 4xDTALBgMVBACTBENpdHxxDjAMBgMVBAGTBXNDYXRIMQswcQTDVQGEwJ UlcCBn2AMBgdhkiG90BAQEFAAOBQAwgYKcQTAw21dYcmQ4jhSr6f G3GYxjS4B837+y3A6XIM9OVXV42nS189n0LHgdksQDpwaQeO2wWeqjfte hJ/S55DPVack+Tqq0t7BMHkXUSUTH6JU30PbAZ642PWWSrduoUI Vnq2AWTDw2ykyxKg6neb2vYT2Rvbct7M578Vvh6P8CAwEAAaCCAXMwGgY KKwYBBAGCNw0CA2KBFG0JLJAWIBSN4yDUGCGAQQBgicCQ4XJ2AI MA4GA1Ud0vE6/wgEawIEBDATBgNVHSUEDDAKBggH8gEF8QcDATCB/QYKK wYBBAGCNw0CA3B7JC6WIBAR5AACAAQ8JAHLMbw2AG8A2QB0ACAAUg BTAEEAIABTAEMAABhAG4AbgBJAGAZ28yA4GJAC83C039psAV+HWMe1 JsG339vonCPQ8d0whp6cHJSPCU3FwQ8SGFEQNyH4HJyG1GFs686c d2t2696y04174/ovLW2WF9nezUMK5M2DP4B1AAAAAAAAAAAQVQYIKo2 IhvdAQEF2QAD7EAq4+QHTw4P5C6HW-GAMKHXL29hT/KUJNHB9CSAF3420BV AGg4A20JaUTwuCAWH9mc2UMK5M2P4B1AAAAAAAAAAAQVQYIKo2 IhvdAQEF2QAD7EAq4+QHTw4P5C6HW-GMKHXL29hT/KUJNHB9CSRfnx+ HxQdFAC9UATWUAWH9ncXCW9FF160/2k2ISkI2KYQdioqTv6p0GEUP Rg/MD522y3bo258F0= ----END NEW CERTIFICATE REQUEST----

Certificate Signing Request \* +3awwDzgO+i UT+ju5kO4w38ApUuPdp62r3DVIpN6IRaFPck6Wc /xOuP19ETuvmE47cuvAN5SYXkLtPBe7zvmORh A5IqA1ZhMLq5Jtm0ApvPv17PRJUiU7sD1Byr5Q/IVTJ/+qQy/CkDD4vdvM /IQqqGZFiEV4CXaiek Iv/i4SkCBY /bt/OD3MOnQ8seT+dLFujwmVyWJ2D97e8CAP9cqWu4tQ5vc19GBg1yeMku3H6Wf6m yR+2swMUTHNK3BsVAgMBAAEwDQYJKoZIhvcNAQEEBQADggEBAH45FP4icFKAhv76w VoaZiUQUP++ iF6rD9fk1ZrgYqe4GF+<u>acxb</u>+PINKo9gqx08f5SkQvHzQ3rGSA2GxnzqB+Ji+z1BcC jnxFgpE6HOV DiSItVaxAUfy38utVZ+M+a87G5BDqeK+QXj8zOzjqq /niecQDeietw5uRqxDy95qhyYahOOHNWYy lLHt2DjgGb3dEUVHjgpkAs70UNqkEwdhJmbaM6g /i3RR7rnGV3Q06Jy1dkCYBJr60bCeKhFpooWg i4PnFiStUpw4MHD+wH09PeVrkc32Yq9KdYQG /b5NKgJV8bB4G9qYbU7am0PfGt+dGF+187+cFaN8 UPCn5diuQzI= ----END CERTIFICATE REQUEST----•

#### RapidSSL.com

SSL Certificate Solutions from the World's fastest growing SSL Provider.	FreeSSL <sup>™</sup>
+ Ordering + Management	FreeSSL Enrollment
Language	Verify Server URL
English - English 💽	The CSR you generated is designed to work with the following URL:
	https://demo.everyoneprint.com
	If this is not the correct URL (computed from the Common name in the CSR), or if any of the CSR Information below is incorrect, then please generate a new CSR and click the Replace CSR button.
	Replace CSR
	CSR Information
	Common Name: demo.everyoneprint.com
	Organization: EveryonePrint
	Org. Unit: EOP
	Locality: Copenhagen

Denmark

DK

State:

Country:

Note: The value for the Common Name must exactly match the name of the server you plan to secure.

Continue

	everyone Print
RapidSSL.com	
SSL Certificate Solutions from the World's fastest growing SSL Provider.	FreeSSL <sup>™</sup>
<u> </u>	FreeSSL Enrollment
Language	Thank you for your FreeSSL certificate request
English - English 📃	Your order number is: 8281663
	An email message has been sent to the selected approver requesting the approval of this certificate request. As soon as the approver receives this email and comes to the approval site, your certificate will be generated and emailed to you. If you have any questions, please contact RapidSSL Support.

Each certificate authority has their own way of validating the request. Some use a phone call verification.

Following approval and completed purchase, the CA will either send the certificate via email, or will let you download the certificate from a Web site.

Most CA's use an intermediate certificate, between their CA root certificate, which is known by the server and client PC, and the certificate issued. All certificates must be chained, in order to establish the trust of the certificate generated for the server. If only the Web server certificate is imported without chain through intermediate certificates, the client browser will see the certificate as invalid/untrusted.



In this example, GeoTrust delivered an intermediate certificate and the Web server certificate, both saved as .cer files on the desktop.

	Ď web server.cer - Notepad
	Eile Edit Format View Help
	BEGIN CERTIFICATE MIIE32CCA8egAwIBAgIDB004MA0GCSqGSIb3DQEBBQUAMDwxCzAJBgNVBAYTA]VT MRcwFQYDVOOKEw5HZW9UcnVzdCwggw5iLiEUMBIGALUEAxMLUmFwaWRTU0wg00Ew HbcNMT
	HhCNMT intermediate.cer - Notepad
web server.cer	VQQKEX Elle Edit Format View Help
intermediat	<pre>MTEwLw +BEGIN CERTIFICATE KTEyMS MIIDITCCAr2gAwIBAgIDAjbRMADGCSqGSIb3DQEBBQUAMEIXCZAJBGNVBAYTAlVT MR8wHQ MRYwFAYDVQQKEwlHZW9UCNVZdCBjbmMuRswGQYDVQDEXJHZW9UCNVZdCBHbG9i AQEFAA YwwgQOEwHhCNMTAwMjESMjIONTALwhCNMjAwMjE4MjIONTALwjA8MQswCQYDVQQG wb78kQ EwJVUZEXMBUGA1UEChMOR2VVVHJ1C3QSIEJUYY4XFDASBGNVBAMTC1JhCGlkU1NM DuMN/A IENBMIIBIjANBGkqhkiG9wOBAQEFAAOCAQ8AMIBEGKCAQEAX3H4Vsce2cylfa0 8pjkYQ l6P70er/LUF9QJraD/w9KSRDXhApmfXvQHLuverfn7ZB9EhLyG7+T1C511v6ktle YEKOBm 6K3z8Buxe037z/3R5fjj3Of1C3/fAUnpjFbBvTfjW761T4uL8NpPx+PdVUdp3/Jb XK1ruL ewdPPewSICHIHXro5/YPOar1b9602U8Q12W08416pV4BcjPtgelaHnnzh8jfyMX8 HWYDVR N8iamte4dsywPuf95ITq319SQXH2V63XEtZ/vNWfCNMFbPqjfWdY3SZiHTGSDH15 HI7PynvBZq+odEj7joLCniyZXHstXzU8WleefDp6EG3yoXhbKlkP2Vw662gzxigd LmV2ZX gtFQiwIDAQAB04HZMIHWMA4GA1UdDwEB/wQEAwIBBjAdBgNVHQ4EFgQUa2K9ahhC ZHNZbC St2PAmU5/TUKhniRFjAwHwYDVR0jBBgwF0AUHHqr312J+6sFZAWRfap92bjKZE4w BBTZWV EgYDVR0TAQH/BAgwBgEEF/WIBADABGBNVHR8EMZAMC4LaArh10dHRwo18VY3JS BD0WOZ Lmd1b3RydXNOLmNVbS9jcmx2L2d0Z2vYMFSLmNybDA0BggrBgEFBQCBAQQ0MCYw b20vcm JAYIKwFBBQUHMAGGGGh0dHA6Ly9VY3NwLmd1b3RydXNOLmNvbTANBgkqhkiG9w0B F1wP54 AQUFAAOCAQEAq7y8C10Y10PBsconTFXwvrSY848HM3PByQkXJYDJ1J8Nq6iL4/x QZEDyQ /torAsMzvcjdSCIrYA+1AXD9d/jQ7Z2nT/3qRyBwVNyDDFV+4ZY1itm121dkvo20 Uzs8d0 SUNjpwx0J4C161tt/qJ/OCjgNqut0aw1YsS3XFgsq10BYKZi26PAX2Ij90dsRu61 BQ]ypw Q4Bq1hPSLT90T+qvjF+00J2brs6vhB6m9j1RRWxNT43XcvNfzC9+S7NIgwV+c5x4 LEL2TxyJeN4mTVVk0WaydWTQBUbHq3tw=END CERTIFICATE</pre>

Certificates must be chained before importing into the keystore created for EveryonePrint server. The easiest way to establish a chain between certificates, is to use the Windows certificate store.

Simply double-click each certificate file you received from the CA. Make sure you choose to import any root and intermediate certificates first, or the web server certificate may not be chained properly!

Certificate	×
General Details Certification Path	
Certificate Information	
This certificate is intended for the following purpose(s):	
Ensures the identity of a remote computer     Proves your identity to a remote computer     Protects e-mail messages	
Ensures software came from software publisher     Protects software from alteration after publication     Allows data to be signed with the current time	
Issued to: RapidSSL CA	
Issued by: GeoTrust Global CA	
Valid from 2/ 19/ 2010 to 2/ 18/ 2020	
Learn more about <u>certificates</u>	
ОК	



Certificate Import Wizard	×
Certificate Store	
Certificate stores are system areas where certificates are kept.	
Windows can automatically select a certificate store, or you can specify a location for the certificate.	
C Place all certificates in the following store	
Certificate store:	
Personal Browse	

Import all certificates like this, ending with the Web server certificate. Confirm that the Web server certificate appear as trusted.

Certificate				
General Details Certification Path				
Certificate Information				
This certificate is intended for the following purpose(s): • Ensures the identity of a remote computer • Proves your identity to a remote computer				
Issued to: demo.everyoneprint.com				
Issued by: RapidSSL CA				
Valid from 1/ 25/ 2012 to 2/ 26/ 2012				
Install Certificate Issuer Statement				
ОК				

Verify that the certificate has the proper chain from Web server all the way up to root.



Certificate	x
General Details Certification Path	
⊂ Certification path	
GeoTrust Global CA	
RapidSSL CA	
<u>Vi</u> ew Certificate	
Certificate status:	í
This certificate is OK.	1
J Learn more about <u>certification paths</u>	
OK	٦.
	_

With the import and chaining complete, we can now export the certificate to a file, which we can import into the keystore file created for EveryonePrint.

Certificate	×	
General Details Certification Path	1	
Show: <all></all>		
Field	Value 🔺	
Version	V3	
🛅 Serial number	04 ed 38	
📴 Signature algorithm	sha 1RSA	
🛅 Signature hash algorithm	sha1	
📑 Issuer	RapidSSL CA, GeoTrust, Inc., US	
Valid from	Wednesday, January 25, 201	
Valid to	Sunday, February 26, 2012 8:	
🚊 Subject	demo.everyoneprint.com, Do 💌	
	lit Properties Copy to File	
Learn more about <u>certificate details</u>		
	OK	

Choose Copy to file.. and as export file format choose .P7B and make sure to check to include all certificates in the path.



С	ertificate Export Wizard	x
	Export File Format Certificates can be exported in a variety of file formats.	
	Select the format you want to use:	
	C DER encoded binary X.509 (.CER)	
	C Base-64 encoded X.509 (.CER)	
	Intersection of the standard - PKCS #7 Certificates (.P7B)	
	Include all certificates in the certification path if possible	
	C Personal Information Exchange - PKCS #12 (.PFX)	
	Include all certificates in the certification path if possible	

Save as .p7b file

Certificate Export Wizard		×
File to Export Specify the name of the file you want to export		
Eile name: C:\Users\Administrator\Desktop\final-certificate.p7b	Browse	

Now return to the Keystore Explorer tool with the private key pair created in the beginning. Right-click this entry and choose **Import CA Reply**.

🐊 demo.everyoneprint.com.p12 - Key	Store Explorer 4.0.1		
<u>File E</u> dit <u>V</u> iew <u>T</u> ools E <u>x</u> amine <u>H</u> elp			
🗅 🥥 🖩 🕼 🗞 🎒	🛍   🧏 🤱 🎘 🥥 🔒	🔍 🚨 🥥 🔍	9
Untitled-1 * 🗙 demo.everyoneprint.com.p	12 🗙		,
📧 🖪 Entry Name	Algorithm	Certificate Expiry	Last Modified
箭 - 🥥 demo.everyoneprint.com	RS 🔍 View Details	8:26 PST	•
	🧤 Cut	Ctrl+X	
	👸 Сору	Ctrl+C	
	i Export	•	
	Generato CSD		
	🖉 🕹 Import CA Reply		
	A mppond to Contificate	Chain	
	📝 Sign	•	
	🕑 Unlock		
	🤎 Set Password		
	🙆 Delete		



Confirm the certificate chain by right clicking and choosing View Certificate.

🎉 keystore2 - Key5tore Explorer 4.0.1			
<u>File E</u> dit <u>V</u> iew <u>T</u> ools E <u>x</u> a	mine <u>H</u> elp		
2 🗐 🗐 🕼 🕲	🌛 🖹 🛍 🐕	🔒 🧏 🥥 🕒 🚨 🛤 🖓 🔃 🥥 👘	
keystore2 🗙	Certificate Details for	r Entry 'demo.everyoneprint.com'	
T C E Entry Name	Certificate Hierarchy:		
🕅 🔒 🍳 demo.everyone	R geotrust global ca	32 1	PST
	rapidssl ca	ryopeprint.com	
		i yonophine.com	
	Version:	3	
	Subject:	CN=GeoTrust Global CA,O=GeoTrust Inc.,C=US	
	Issuer:	CN=GeoTrust Global CA,O=GeoTrust Inc.,C=US	
	Serial Number:	0x23456	
	Valid From:	20/May/2002 21:00:00 PDT	
	Valid Until:	20/May/2022 21:00:00 PDT	
	Public Key:	R5A 2048 bits	
	Signature Algorithm:	SHA.1 with RSA	

Now save the keystore file and set a password on the keystore, if prompted.

The last step is to instruct the EveryonePrint Web server to use the new keystore. This must be modified in 2 files: jetty-ssl.xml and jetty-ssl-terminalapi.xml. Open the xml files stored in the folder C:\Program Files (x86)\EveryonePrint\etc

📄 jetty-ssl.xml - Notepad	_ 🗆 ×
Elle Edit Format View Help	
xml version="1.0"? Configure PUBLIC "-//Mort Bay Consulting//DTD Configure//EN"<br "http://jetty.mortbay.org/configure.dtd">	*
<pre><!--</td--><td></td></pre>	
<pre><call name="addConnector"></call></pre>	



Restart the EveryonePrint Web service, and open up a browser and confirm the SSL certificate is working, by loading the https version of the URL, for example https://demo.everyoneprint.com

😵 EveryonePrint - Login - Mozilla Firefox	<u>_     ×</u>
Eile Edit View History Bookmarks Tools Help	$\begin{smallmatrix} 0 & 0 \\ 0 & 0 \\ 0 & 0 \\ 0 & 0 \\ 0 \end{bmatrix}$
C 🗙 🕜 🔀 https://demo.everyoneprint.com/login.cfm?dest=index.cfm&	ioogle 🔎
everyone Print	*
To sign in, please enter your username and password below. Username: Password: Login	
EveryonePrint 3.0.0 © 2003-2012 Next Print Solutions Aps All logos, brand and product names may be registered trademarks or trademarks of their respective holders and are hereby acknowledged.	
Done	mo.everyoneprint.



## 11.2 Generating a Test Certificate

A keystore containing a public key/private key pair and a certificate for testing SSL can be generated using keytool, a command-line utility provided in the Java JDK. The following instructions allow you to generate a simple key pair and certificate keystore that is valid for three months. This keystore allows you to test that the SSL listener can run, but its certificate is self-signed and is not trusted by the browser.

To generate a test certificate:

- Locate the Java keytool utility. By default, the keytool utility can be found in: C:\Program Files (x86)\EveryonePrint\jre\bin
- 2. Generate a simple key pair and non-trusted certificate into a keystore file named keystore by typing:

keytool -keystore keystore -alias jetty -genkey -keyalg RSA

# A highly recommended graphical user interface alternative to the command line keytool is the free Keystore Explorer available at <u>http://keystore-explorer.sourceforge.net</u>

You are prompted to provide answers to several questions for the certificate. Press the "Enter" key to submit each of your answers.

Command Prompt	×
C:\Program Files\EveryonePrint\jre\bin>keytool -keystore keystore -alias jetty - genkey -keyalg RSA Enter keystore password: Re-enter new password: What is your first and last name? [Unknown]: localhost What is the name of your organizational unit? [Unknown]: EOP What is the name of your organization? [Unknown]: EveryonePrint What is the name of your City or Locality? [Unknown]: London	
LUNKNOWN]: London What is the name of your State or Province? [Unknown]: UK What is the two-letter country code for this unit? [Unknown]: UK	
Is CN=localhost, OU=EOP, O=EveryonePrint, L=London, ST=UK, C=UK correct? [no]: y	
Enter key password for <jetty> (RETURN if same as keystore password): Re-enter new password:</jetty>	
C:\Program Files\EveryonePrint\jre\bin>	-

Note: When prompted for "What is your first and last name?" enter the fully qualified domain name of the EveryonePrint server machine, ie. "localhost" or "print.company.com"

Note the two passwords that you enter. In the next section, "Configuring EveryonePrint with the Test Certificate," you enter these passwords to configure the SSL functionality. If you answer these questions accurately for the test certificate, the certificate that you generate can be used as the basis of your trusted certificate that you obtain from a certificate authority.



The generated keystore file is located in the directory in which you ran the keytool. If connections to EveryonePrint come only from inside your organization, a nonexpiring, self-signed certificate that is added to each internal user's Web browser certificate store may be adequate. See the options for keytool to generate a nonexpiring, self-signed certificate.

### 11.2.1 Configuring EveryonePrint with the Test Certificate

To configure EveryonePrint with the test certificate you just generated, you will copy the keystore into the EveryonePrint directory structure, make a configuration change in a Web configuration file, then restart EveryonePrint Web services.

- Copy the keystore file, keystore, to EveryonePrint\etc. (C:\Program Files (x86)\EveryonePrint\etc)
- 2. Open the configuration file jetty-ssl.xml located in the folder \etc (C:\Program Files (x86)\EveryonePrint\etc)

🚺 jetty-ssl.xml - Notepad
File Edit Format View Help
xml version="1.0"? Configure PUBLIC "-//Mort Bay Consulting//DTD Configure//EN" "http://jetty.mortbay.org/o</th
<pre><!-- configure SSL for the Jetty Server--> <!-- Configure SSL for the Jetty Server--> <!-- this configuration file should be used in combination with--> <!-- other configuration files. e.g--> <!-- java -jar start.jar etc/jetty.xml etc/jetty-ssl.xml--> <!-- configure id="Server" class="org.mortbay.jetty.Server"--></pre>
<pre><call name="addConnector"></call></pre>

- 3. Change the password, keyPassword and trustPassword values to the passwords chosen when generating the certificate.
- 4. If you want the port to be something other than 9443, change the Port value.
- 5. Save the file and restart EveryonePrint Web service.

If you are already running a Web server with SSL encryption enabled on the same server on which EveryonePrint is installed, it will be necessary to change the port on which SSL is running for either EveryonePrint or the other Web service. SSL default listens on port 9443. Change to a different port in jetty-ssl.xml and restart EveryonePrint Web services if there is a port conflict.

### 11.2.2 Verifying the Test Certificate

Now that you have reconfigured EveryonePrint to accept HTTPS requests and restarted it, verify that you can log in to EveryonePrint using HTTPS.

1. Open a browser and type the following URL. Use the fully qualified domain name for host that you specified when you generated the keystore. Replace 9443 with the HTTPS port number you configured.



#### https://localhost:9443/admin

2. Because you generated the certificate yourself, a dialog box appears, warning that the EveryonePrint Web site is certified by an unknown authority. Choose to accept this certificate temporarily for this session and select OK. The login page for EveryonePrint Admin is displayed.

### 11.3 Import SSL certificates for LDAPS or mail servers

The following describes a very simple way to import SSL certificates from remote LDAP or mail servers.

If you'd like to connect to an LDAP/Active Directory or mail server over SSL, and the certificate is not issued by a trusted Certificate Authority, then the connection will fail with an SSL error, that typically looks like:

Authentication test using test user account failed. Error details: General Runtime Error javax.naming.CommunicationException: simple bind failed: dc1:636 [Root exception is javax.net.ssl.SSLHandshakeException: sun.security.validator.ValidatorException: PKIX path building failed: sun.security.provider.certpath.SunCertPathBuilderException: unable to find valid certification path to requested target]; ROOT CAUSE=sun.security.validator.ValidatorException: PKIX path building failed: sun.security.provider.certpath.SunCertPathBuilderException: unable to find valid certification path to requested target]; ROOT CAUSE=sun.security.validator.ValidatorException: PKIX path building failed: sun.security.provider.certpath.SunCertPathBuilderException: unable to find valid certification path to requested target		
LDAP Server IP/hostname:	dc1	
LDAP Server port:	636 (default 389 for non-SSL and 636 for SSL)	

To establish a trusted SSL connection to the remote LDAP/AD or mail server, the SSL certificate from the remote server must be imported into the SSL Keystore in EveryonePrint.

EveryonePrint uses Java keystores, so any Keystore management tool, can be used, but EveryonePrint includes 2 simple command line scripts, that makes it very easy to import remote certificates.

The scripts below work identical for LDAPS and mail server certificates, just enter the corresponding port:

LDAPS SSL: port 636 POP3 SSL: port 995 IMAP SSL: 993 Exchange Web Services: 443

First, on the EveryonePrint server, open a command as administrator and change to the EveryonePrint directory





Run SSLTest to confirm if a successfully trusted SSL connection can be established with the existing keystore.

C:\Program Files (x86)\EveryonePrint>ssltest dc1 636
Testing "dc1" port "636"
javax.net.ss1.§SLHandshakeException: sun.security.validator.ValidatorException:
PKIX path building failed: sun.security.provider.certpath.SunCertPathBuilderExce
ption: unable to find valid certification path to requested target
at sun.security.ssl.Alerts.getSSLException(Unknown Source)
at sun.security.ssl.SSLSocketImpl.fatal(Unknown Source)
at sun.security.ssl.Handshaker.fatalSE(Unknown Source)
at sun.security.ssl.Handshaker.fatalSE(Unknown Source)
at sun.security.ssl.ClientHandshaker.serverCertificate(Unknown Source)
 · · · · · · · · · · · · · · · · · · ·

In this example, the connection fails with the untrusted error message, so let us import the certificate.

Run SSLImport {server} {port} and the tool will connect to the remote server and retrieve a list of all certificates available.



In this example, 1 certificate is listed. There may be multiple certificates, including root CA, intermediate etc.

Server sent 1 certificate(s):	
1 Subject CN=DC1.lab2.local Issuer CN=lab2-DC1-CA, DC=lab2, DC=local	
sha1 9a ca 22 0d bf 76 9d 07 3d e7 7d b2 0b 74 b4 64 ab 12 db 6b md5 f3 07 b8 90 2f 31 60 67 2b 1d c2 5c 89 2f 1a 11	
Enter certificate to add to trusted keystore or 'q' to quit: [1]	-

In this example, we will enter "1" to import the listed certificate. If multiple certificates are listed, import them one by one, starting with number 1.

			3 JC E8 62			.=.K(<.bV./89j			
			5 CB 80 80		E4 F0 A9 10	usv=0			
00B0:	D6 4B 3	543F'	7 ØD D6 AE	FB 04 29 05	EE 7E ØC 95	.K5C>			
0000:	64 01 9	B D8 93	3 85 5B 52	32 05 51 93	F5 29 96 13	d[R2.Q)			
00D0:	F6 2B 8	Ø DD D:	2 CE 6C E5	9C CE E3 CE	F8 24 18 FØ	.+\$			
00E0:	97 13 9	B 37 D'	7 00 3F 37	39 85 C1 57	9E 77 2A 13	7?79W.w*.			
00F0:	10 84 2	C E9 23	3 C1 Ø4 62	56 BA C4 B5	12 4B C2 9A	,.#bVK			
1									
Added certificate to keystore 'cacerts' using alias 'dc1-1' IMPORTANT: If a new SSL certificate was imported, remember to restart services									
C:\Program Files (x86)\EveryonePrint>									

The certificate is imported to keystore successfully.



Restart the EveryonePrint Web service, for the certificate keystore to be reloaded. This can be done either via Windows services or via the command line:

C:\Program Files (x86)\EveryonePrint>net stop eopweb The EveryonePrint Web service service is stopping.... The EveryonePrint Web service service was stopped successfully. C:\Program Files (x86)\EveryonePrint>net start eopweb The EveryonePrint Web service service is starting.. The EveryonePrint Web service service was started successfully.

Now the SSL connection can be established successfully.

Authentication test using test user account completed successfully.

LDAP Server IP/hostname:

LDAP Server port:

dc1 636 SSL)

(default 389 for non-SSL and 636 for


# 12. Printing to remote print servers

It's a common configuration, that EveryonePrint is added to an existing print environment, perhaps with a print accounting or print management system already in place.



In the above diagram, EveryonePrint is installed on its own server, in a DMZ zone separated from the print servers by a firewall. Print jobs can be transferred from the EveryonePrint print server to the print server queues within the firewall, via LPR printing protocol, communicating on TCP port 515.

**On the remote print server**: configure an LPD server, either as part of the print accounting system, or using Microsoft's LPD server. Consult Windows or print accounting solutions documentation for more information on how to install and configure LPD server on the remote print server.



- 1. Add the Print and Document Services role
- 2. Add LPD Server role service



**On the EveryonePrint server**: create LPR printer queues, which point to equivalent queues on the remote print server.

add Printer 🥔	×	
🌀 🖶 Add Printer		Configure Standard TCP/IP Port Monitor
🚱 🖶 Add Printer	Add Printer  Additional port information required  The device is not found on the network. Be sure  The device is turned on. The device is turned on. The network is connected. The network is connected. The device is properly configured. The address on the previous page is correct.	Port Settings           Port Name:           192.168.0.195           Printer Name or IP Address:           192.168.0.195           Protocol           C Baw           3.           Port Nomber:           9100
	If you think the address is not correct, click Back: address and perform another search on the netw device type below. Device Type © Standard Generic Network Card © Custom Settings 2.	

- 1. Enter the IP address/hostname of the remote print server with LPD server
- 2. Choose custom settings
- 3. Choose LPR print protocol
- 4. Enter the print queue name on the remote server (avoid spaces or special characters)
- 5. Select LPR byte counting enabled

Choose the same driver on this LPR print queue, as on the remote print server print queue.

The created LPR print queue on the EveryonePrint server, can then be added to EveryonePrint via the EveryonePrint Admin -> Devices. When users print to this queue, it will be spooled and then transferred via LPR to the remote print server.



# 13. Installing document support applications

The following sections apply to those not using the built-in conversion engines, but wish to use external applications for specific formats, such as the Microsoft Office engine for converting and printing Office documents, Word, Excel and PowerPoint.

## 13.1 Install Microsoft Office 2007, Office 2010 or Office 2013

If using Microsoft Office for conversion, Office 2007 SP2, Office 2010 or Office 2013 must be installed.

#### 13.1.1 Install Microsoft Office 2007, Office 2010 or Office 2013

The following section refers to Office 2013, but the same instructions apply to Office 2007 and 2010.

First, install Microsoft Office 2007 SP2, 2010 or 2013 with at least Word, Excel and PowerPoint. By default all necessary programs are installed, but the installation can be customized to only install programs to use.

٥	Microsoft Office Professional Plus 2013	x
	Choose the installation you want	Ø
	Please choose your preferred type of Microsoft Office Professional Plus 2013 installation below.	
	Install Now	
	Customize	

There is no need to install any other Office suite programs, such as OneNote, Access or similar.



If you customize the installation, make sure that *Fonts* and *Additional TrueType Fonts* under *Office Shared Features* are installed, for broadest font support. And make sure that *Visual Basic for Applications* is also installed.



#### 13.1.2 Open Microsoft Word

After installation it is necessary to open Microsoft Word, as it shows a dialog which will otherwise prevent printing.

**Print** 



	⊔າ ະ ເປັ ະ			Docum	nt1 - Microsoft Wo	ord			-
Но	me Insert	Page Layout	References	Mailings Review	View				
	Calibri (Body)	* 11	* A * 🕙	[] + ] = + <sup>*</sup> <sup>2</sup> , − = [	₣₽₽₽₽	AaBbCcDc AaBbCcD	AaBbC	A	A Find +
Paste 🚽	B <i>I</i> <u>U</u> -	abs × Welco	me to the 2007 M	licrosoft Office syste	n		?≍	Change Styles *	Select -
Clipboard 5		Fo	Privacy Opt	tions			23	G	Editing
			Get online	Help					
			When you sea Online.		ffice can downloa	m connected to the Interne d that content from Microsc			
			Download a fi	le periodically that hel wnload a file that help	s determine syster track and solve cra	<b>m problems</b> ashes, hangs and system fai es with Office installation.	lures.		
			Make Office	e better					
			Sign up for the	e Customer Experience	Improvement Prog	gram			
				use most frequently. Th		roblems, system configurati nt to Microsoft to help us in			

Uncheck all Privacy Options.



To avoid Office restarting and doing server reboots on its own, disable automatic update service.

Now exit and reopen Word. If Word opens to a blank page, you have completed the Office installation.

For any issues with Microsoft Office conversion, refer to the troubleshooting section, at the end of this guide, for step-by-step troubleshooting tips.

#### 13.2 Install OpenOffice 3.x

Installing OpenOffice is optional, it is only needed if OpenOffice should do the conversion and printing of OpenOffice documents (odt, ods and odp).

#### 13.2.1 Installing OpenOffice 3.3.0

It is recommended to install the standard version of OpenOffice which includes JRE (Java Runtime Engine). Filename of downloaded installer file is for example: **OOo\_3.4.0\_Win\_x86\_install-wJRE\_en-US.exe**. Make sure the installation is done as a local administrator user.



During installation, choose **Custom** setup type.

🙀 OpenOffice.org	3.2 - Installation Wiz	zard		×
Setup Type Choose the set	up type that best suits y	our needs.		
Please select a				
C <u>C</u> omplete				
	All program features wil space.)	l be installed. (Red	quires the most disk	s.
• Eustom	Choose which program will be installed. Recomm			e they
OpenOffice.org 3.2		< <u>B</u> ack	Next >	Cancel

Under OpenOffice Program Modules, select to install only Writer, Calc and Impress.

🙀 OpenOffice.org 3.2 - Installation Wizard	×
<b>Custom Setup</b> Select the program features you want installed.	OpenOffice.org
Click on an icon in the list below to change how a fea	ture is installed.
●       ●       OpenOffice.org Program Modules         ●       ●       OpenOffice.org Writer         ●       ●       ●         ●       ●       ●         ●       ●       ●         ●       ●       ●         ●       ●       ●         ●       ●       ●         ●       ●       ●         ●       ●       ●         ●       ●       ●         ●       ●       ●         ●       ●       ●         ●       ●       ●	List of all installable OpenOffice.org modules. This feature requires 0KB on your hard drive. It has 3 of 6 subfeatures selected. The subfeatures require 17MB on your hard drive.
Install to:	
C:\Program Files\ OpenOffice.org 3.2	
Help Space < B	ack <u>N</u> ext > Cancel

Under Optional Components scroll to the bottom and for the component **Quickstarter**, choose **This feature will not be available**, so the Quickstarter is not installed.



🙀 OpenOffice.org 3.	2 - Installation W	izard		×
Custom Setup Select the program	features you want ir	nstalled.		OpenOffice.org
× ·	XSLT Sample Filters Legacy Filters Python-UNO Bridge Online Update Mobile Device Filter	5 <b>A</b> 9 175	Feature Descrip Loads basic con system start to	nponents on accelerate start nOffice.org 3.2. quires OKB on
Install to:	This feature will be This feature, and a This feature will no			al hard drive.
OpenOffice.org 3.2	Space	< <u>B</u> ack	<u>N</u> ext >	Cancel

Continue the rest of the installation with default settings.

These are installed with the standard installation. Other OpenOffice programs are not supported and therefore not needed, but can be installed.

#### 13.2.2 Open Writer

After installation it is necessary to open OpenOffice Writer, as a dialog is shown on first launch, which will otherwise prevent proper conversion.

🍣 Welcome to OpenOffi	ce.org 3.2	
Steps	Online Update	
1. Welcome	OpenOffice.org searches automatically at regular intervals for new versions. In doing so online update does not transfer personal data.	
2. User name	As soon as a new version is available, you will be notified.	
3. Online Update	You can configure this feature at Tools / Options / OpenOffice.org / Online	
4. Registration	Update.	
	Check for updates automatically	
	<< Back Next >> Einish Cancel	

During the setup wizard, uncheck the option Check for updates automatically and choose to not register.



🍣 Welcome to OpenOffic	e.org 3.2
Steps	OpenOffice.org Registration
1. Welcome 2. User name 3. Online Update 4. Registration	You now have the opportunity to support and contribute to the fastest growing open source community in the world. Help us prove that OpenOffice.org has already gained significant market share by registering. Registering is voluntary and without obligation. I want to register now I want to register later I do not want to register
	We hope you enjoy working with OpenOffice.org. To exit the wizard, click 'Finish'. << Back Next >> Einish Cancel

Now open and close OpenOffice. Then re-open OpenOffice Writer and the following dialog will show.

OpenOffice.org Improvement Program
Improvement Program
We invite you to join our OpenOffice.org Improvement Program to help optimize the quality of OpenOffice.org.
If you are willing to participate, we will collect anonymous statistics about how you use OpenOffice.org. The data is used to identify usage patterns.
The OpenOffice.org Improvement Program will not collect any personal data, or document content.
C Yes, I am willing to participate in the OpenOffice.org Improvement Program
No, I do not wish to participate
ОК

Choose **No, I do not wish to participate** and click **OK**, and OpenOffice will open. Close and the installation of OpenOffice is complete.



# 14. EveryonePrint clustering for high-availability and high scalability

With the EveryonePrint clustering features, it's possible to configure EveryonePrint for enterprise scalability through load balancing, multi-server deployments and high-availability through failover and redundancy.

The cluster configuration options are many, some typical configuration would be:



1. High availability redundancy with multiple servers in failover cluster

Primary servers in a failover cluster configuration, with 1 active primary server and any number of passive standby server node(s) in case the active fails.

2. High scalability with many additional servers for load balancing and job processing





A single primary server and any number of additional secondary servers for load balancing and job processing for very high print job volumes.



#### 3. High availability and high scalability combining both failover clustering and load balancing.

A configuration for highest availability and redundancy, and highest scalability for very large job processing, with multiple primary servers in a failover cluster and multiple secondary servers for scalability behind a load balancer.

The configuration possibilities with high availability and scalability are endless, and these examples and guides are for common configurations only. For the best configuration for a particular project, please contact your EveryonePrint specialist for guidance and recommendation.

## 14.1 Cluster Servers Overview

When an EveryonePrint server starts up and connects to the EveryonePrint database, it will register itself in the EveryonePrint system.

Server name	Description	Address	Configuration		
LONDON1	Server 1 in failovercluster A	• 192.168.0.11	primary shared	÷	8
LONDON2	Server 2 in failovercluster A	• 192.168.0.12	primary shared	÷	8
ASIA1	Secondary server in remote region	• 192.168.0.16	secondary local	÷	8
LONDON3	Additional server for load balancing	• 192.168.0.13	secondary shared	÷	8
LONDON4	Additional server for load balancing	• 192.168.0.14	secondary shared	÷	8
MAIL1	Dedicated server to just downloading emails	• 192.168.0.15	secondary local	١	8
NEWYORK1	Secondary server in remote region	• 192.168.0.10	secondary local	÷	8



Servers are continually checked for status. If a server fails, an alert is shown in the view and a notification email is sent to the administrator notification email address, if configured.



Clicking the address of the server, will open a new browser window with the destination servers administration interface.

#### 14.1.1 Server Types

There are 2 types of servers:

**Primary Servers** – Primary servers run all the EveryonePrint Web, Print and Database services, and manages overall internal processes as well as licensing when using Enterprise licenses. A single EveryonePrint server installation will always run as a primary server.

IMPORTANT! There must only be 1 active primary server in a cluster configuration, as the primary server run essential database and management tasks.

**Secondary Servers** – Secondary servers run the EveryonePrint Web and Print services, and are designed to be additional servers for load balancing, additional job processing and printing, or additional servers configured for specific roles, such as servers dedicated to downloading emails and similar.

Functions possible	Primary	Secondary
Web services	Yes	Yes
Print Service	Yes	Yes
Database Service	Yes	No
Job conversion and printing	Yes	Yes
Web Print	Yes	Yes
Driver Print	Yes	Yes
Email Print	Yes	Yes
Mobile Print	Yes	Yes
Google Cloud Print	Yes	No
Management of Devices	Yes	No
Configuration of Wide Area Mobile Print	Yes	No

Google Cloud Print services run only from the Primary server.



## 14.1.2 Configuration types

An EveryonePrint server in a cluster configuration can use either its own configuration, or it can use a configuration shared by multiple servers.

#### Local configuration

Server Description:	Dedicated server to just downloading emails
The server MAIL1 is	a:
O Primary se	rver 🕄
Secondary	server 🕕
With its co	nfiguration stored:
Eccally	y on MAIL1 server only
⊖ Share	d on remote path:

A local configuration means the server uses its own configuration stored locally on the server. It will use printers from the central system database, but all other settings, such as email or authentication configuration, are set locally. This is useful in cluster configuration, if adding additional secondary servers which perform a dedicated role, such as downloading email from a mail server.

#### Shared configuration

Server Description: Server 1 in failovercluster A			
The server LONDON1 is a:			
Primary server 1			
With its configuration stored: O Locally on LONDON1 server only			
Shared on remote path: \\sharedstorage\mobileprintcluster			

A shared configuration means that the configuration is stored in a shared location such as a network file share or similar, and shared between multiple servers. Configuration can be set from any of the shared servers, using that same shared configuration.

In a cluster configuration with many servers with different roles, different groups of servers can share different configurations, for example, a group of secondary servers dedicated to job processing can share their own specific configuration.

Server Description: Additional server for load balancing			
The server LONDON3 is a:			
O Primary server 🛈			
Secondary server 1			
With its configuration stored: O Locally on LONDON3 server only			
Shared on remote path: \\sharedstorage\secondaryservers			



## 14.2 Prerequisites for a cluster configuration

For a successful EveryonePrint cluster configuration, all servers in the cluster must have stable and fast network connections.

- High speed network, such as 1 Gigabit Ethernet
- Highly available shared storage, such as NAS or SAN
- Firewall ports open for servers:
  - Primary server type:
    - HTTP tcp port (default): 7290 or
    - HTTPS tcp port (default): 9443
    - Database server port 7291
    - Secondary server type:
      - HTTP tcp port (default): 7290 or
      - HTTPS tcp port (default): 9443

Secondary servers connect to the primary server for job information, licensing validation and similar. The primary server connect to the secondary server for regular status checks.



## 14.3 Configuring a primary server

A primary server in a cluster configuration is a standard EveryonePrint server, running all the usual EveryonePrint Web, Print and Database services. An existing single EveryonePrint can automatically be a primary server for other secondary servers in a cluster configuration.

Install a primary server simply by running the EveryonePrint installer, and choose to install **Server** as part of a cluster configuration.





And then This server will run the database service.

Installation type You have selected to install this server in	n a cluster configuration
Choose if this server will run the database (This server will run the database se This server will connect to an existing	
Existing database server IP/hostname: Port (default 7291):	7291

This will install a server with the standard Web, Print and Database services, as a standard single EveryonePrint server.

#### 14.3.1 Open firewall on primary server

Since secondary servers will communicate with the database running on the primary server, ensure that any firewalls allow incoming traffic on default database TCP port 7291.

EveryonePrint includes a command line script for easily configuring the Windows firewall on the server.

The script is located in the tools sub folder of the EveryonePrint installation folder, typically  $C:\Program Files (x86)\EveryonePrint\tools$ 

🕌 tools							
G v ↓ • Computer		Program Files (x86) 🔻 EveryonePri	int 🕶 tools			•	4
Organize 🔻 📆 Open Pr	rint New folder						
☆ Favorites	Name *		Date modified	Туре	Size		
Desktop Downloads	🔯 Open Windov	Open Edit	6/11/2015 3:32 AM	Windows Command		14 KB	
ibraries i Documents ↓ Music i Pictures	L	Run as administrator     SkyDrive Pro     Troubleshoot compatibility     Restore previous versions     Send to					

Run this cmd line script as Administrator.

Choose option 1 to open ports for server.



<b>C</b> 1	C:/V	Vindow	s\system32\cmd.exe	
				·
I			Open Firewall ports for services	
I		1	Open ports for Server	
		2	Open ports for Driver print	
I		3	Open ports for Mobile Gateway	
		X	Exit	
Ŝe	elec	t an	option to use [1,2,3,X]?_	

This will create the necessary rules in the local Windows firewall.

#### 14.3.2 Configure shared spool

Aside from the normal configuration of EveryonePrint, such as creating and adding print queues to EveryonePrint, it's necessary to configure the spool directory where EveryonePrint stores files that have been received from users, are being processed and stored until printing.

Open the EveryonePrint Administrators interface and go to General Settings. Under **Application Settings** change the **Application spool folder** to a highly available shared storage, accessible by all servers in the cluster.

Application spool folder:	Nsharedstorage\mobileprint\spool	
Important: Changing spool folder will NOT move any pending files presently in spoo		n spool

This must be entered as a full path to the directory, either a network share UNC path, eg  $\fileserver\spool$  or a local mapped drive and folder, eg. x:\spool.

Confirm that the user account under which the EveryonePrint Web service is running has read and write rights to the shared path.

#### 14.4 Configuring additional secondary servers

Secondary servers run the EveryonePrint Web and Print services, and are designed to be additional servers for load balancing, additional job processing and printing, or additional servers configured for specific roles, such as servers dedicated to downloading emails and similar.

Install a secondary server simply by running the EveryonePrint installer, and choose to install **Server as part of a cluster configuration**.



Then choose **This server will connect to an existing database** and enter the server IP/hostname of the primary server or primary server failover cluster IP address.

Installation type You have selected to install this server in a cluster configuration	R.
Choose if this server will run the database service or connect to an existing database This server will run the database service This server will connect to an existing database	2
Existing database server IP/hostname:     192, 168.0, 116       Port (default 7291):     7291	

When clicking **Next** a connection is attempted to the database service, which may take a few seconds.



If a connection cannot be made and an error is shown, it is possible to either go back and change the parameters or continuing. However, the secondary EveryonePrint server will not function without a working connection to the primary database.

#### 14.4.1 Configure shared spool

After installation, open the EveryonePrint Administrators interface on the secondary server, and go to General Settings. Under **Application Settings** change the **Application spool folder** to the same shared storage, as the primary server.



Application spool folder: Usharedstorage\mobileprint\spool
Important: Changing spool folder will NOT move any pending files presently in spool

Confirm that the user account under which the EveryonePrint Web service is running has read and write rights to the shared path.

#### 14.4.2 Modify secondary servers cluster configuration

In the EveryonePrint Admin to go Clustering and choose to edit the new servers entry.

```
OFFICE2010
```

127.0.0.1 secondary local



Enter the secondary servers hostname or IP address and port on the network, so other servers in the cluster can communicate with the server. For your own reference, enter a server description as well.

Modify Clustering Server	
The server OFFICE2010 address on the network (for communication between servers):	
Host: 192.168.0.169 Port: 9443 Use SSL 🗹	
Verify that the hostname/IP address and port is accessible from all servers.	
Server Description: An additional server for job processing	
Administrator: C:\Windows\system32\cmd.exe	
C:\Users\Administrator\Desktop>ipconfig	<u> </u>
Windows IP Configuration	
Ethernet adapter Local Area Connection:	
Connection-specific DNS Suffix .: P-2812HNU-F1 Link-local IPv6 Address	
Tunnel adapter isatan P-2812HNU-F1:	

Choose whether the seondary servers configuration is local to the server, or if it should use a shared configuration.

Secondary server 1	
With its configuration stored: Cocally on OFFICE2010 s	
C Shared on remote path:	

Specify the parent server, as a specific primary server if there are no failover cluster configuration or external load balancers included in the configuration.

Specify parent server:	
Specific parent server:	
Parent server: LONDON1 (192.168.0.11)	-

Or specify the parent server, if the primary server is behind a central failover cluster IP address/hostname or an external load balancer.



$\odot$	Server address (relevant if using an	external clustering/load ba	lancing	g configura	tion)
	Parent server cluster hostname/IP:	192.168.0.116	Port:	9443	Use SSL 🗹

#### 14.4.3 Replicate printers from primary

Printers that exist on the primary server, must be replicated to the secondary server.

See the section 14.7 Replicate printers across all servers for more information about replicating printers.



#### 14.5 Installing EveryonePrint in a Windows failover cluster

For high availability and redundancy, EveryonePrint can be installed in a Windows active/passive failover cluster, using Windows clustering services.



This guide does not cover the core setup and configuration of a Windows cluster, as comprehensive literature already exist on the subject, but assumes that Windows clustering services have been successfully installed.

#### 14.5.1 Validate cluster

Begin by validating the cluster.

Eile       Action       Yiew       Help         Image: Provide the state of	Cluster Cluster01.lab2.local Summary of Cluster Cluster01 Cluster01 has 0 clustered roles and 2 nodes. Name: Cluster01.lab2.local Current Host Server: WIN2012R2-01 Recent Cluster Events: None in the last 24 hours Witness: None
	Configure Configure high availability for a specific clustered role, add one or more servers (nodes), or copy roles from Configure Role      Aud road      Copy Cluster Roles      Custer-Aware Updating

Choose to run all tests.



<b>N</b>	Validate a Configuration Wizard	x
Testing (	Options	
Before You Begin	Choose between running all tests or running selected tests.	
Testing Options Review Storage Status Confirmation Validating Summary	The tests examine the Cluster Configuration, Hyper-V Configuration, Inventory, Network, Storage, and System Configuration. Microsoft supports a cluster solution only if the complete configuration (servers, network, and storage) can pass all tests in this wizard. In addition, all hardware components in the cluster solution must be "Certified for Windows Server 2012 R2."	
	Run <u>a</u> ll tests (recommended)     Run only tests I <u>s</u> elect	

Include all cluster storage devices in the validation tests.

<b>N</b>	Validate a Configuration Wizard				
Review Storage Status					
Before You Begin Testing Options	You can select additional storage to validate from the list below.           Name         Assigned To				
Review Storage Status	🗹 📇 Cluster Disk 1	Available Storage			
Confirmation					
Validating					

The tests must complete successfully without errors for EveryonePrint to run successfully in a failover cluster configuration.

Before You Begin Testing Options Review Storage Status	However,	as completed successfully. The you should review the report b he highest availability.			
Confirmation	Node:	WIN2012R2-01.la	2.local	Valio	dated _
Validating	Node:	WIN2012R2-02.la	2.local	Valio	dated
		ıster Configur	ation Result	Description	
	List Cluster C	Core Groups		Success	
	List Cluster N	etwork Information		Success	
	List Cluster R	esources		Success	
	List Cluster V	olumes		Success	~
	To view the repor To close this wiza	t created by the wizard, click V rd, click Finish.	îew Report.	<u>V</u> iew F	Report



#### 14.5.2 Install EveryonePrint on first active node

EveryonePrint must be installed on the active node. To make sure that EveryonePrint is installed on the active node, ensure that the current host is the current host owner.



Confirm that the current active node has access to all relevant cluster disk storage.

趨				Failover Cluster Mar	nager		
<u>File Action View Help</u>							
<ul> <li>Bailover Cluster Manager</li> <li>▲ Pailover Cluster Manager</li> <li>▲ Cluster01.lab2.local</li> <li>■ Roles</li> </ul>	Disks (1) Search				_		
Nodes	Name	Status	Assigned To	Owner Node	Disk N	Number	Ci
✓ Construction of the second seco	긢 Cluster Disk 1	(👚) Online	filecluster01	WIN2012R2-01			1

Now run the installer, choosing any local directory on the server. Next choose Server as part of a cluster configuration.



Then choose that this server will run the database service.

	nt
Installation type You have selected to install this server in a cluster configuration	
Choose if this server will run the database service or connect to an existing database This server will run the database service This server will connect to an existing database	
Existing database server IP/hostname: Port (default 7291): 7291	

#### 14.5.3 Change service logon accounts

After installer finishes, open the Windows services and change the logon account of the EveryonePrint Web service and the EveryonePrint Data service, <u>not</u> the EveryonePrint Print Service, the EveryonePrint Print Service must always run as localsystem.

The service logon account used must have full read/write rights to the shared cluster storage.



Restart services to confirm that the services can successfully start under the new accounts, then stop all services (start and stop of services will be controlled by the cluster services).

9		Se	rvices			_ <b>0</b> ×
<u>File Action V</u> iew	<u>H</u> elp					
<	) 🕞 🛛 📷 🕨 🔳 🕪					
🔍 Services (Local)	Name 🔺	Description	Status	Startup Type	Log On As	^
	端 Encrypting File System (EFS)	Provides the		Manual (Trig	Local System	
	🌼 EveryonePrint Data service	The data st.		Automatic	administrator@lab	
	🔍 EveryonePrint Print Service			Automatic	Local System	
	🔍 EveryonePrint Web service	The Web se		Automatic	administrator@lab	
	🔍 Extensible Authentication P	The Extensi		Manual	Local System	
	🖄 Function Discovery Provide	The FDPHO		Manual	Local Service	

#### 14.5.4 Move database to shared storage

As the database will be run by any of the nodes in the cluster, the database must be placed in a shared storage or cluster disk, accessible to all nodes in the failover cluster.

With services confirmed stopped, move the \data subfolder in the EveryonePrint installation folder, by default C:\Program Files (x86)\EveryonePrint to the shared storage, eg  $\data = 1$ 



💽 🚺 =		EveryonePrint		🖳   🕞 🛄 =	mc
File Home Shar	re View			File Home Share View	
€ ⊚ - ↑ 🌗 •	This PC 🔸 Local Disk (C:) 🕨 Prog	gram Files (x86) 🔸 EveryonePrint			
☆ Favorites	Name	Date modified	Туре	★ Favorites Name	Da
Desktop	📗 apps	6/11/2015 10:35 AM	File fe		
鷆 Downloads		6/11/2015 10:35 AM	File fe		
💹 Recent places	🌗 data	6/11/2015 10:35 AM	File fo		
	📜 deploy	6/11/2015 10:35 AM	File f		
🖳 This PC	🌗 eop	6/11/2015 10:35 AM	File fo	🖳 This PC	
	퉬 etc	6/11/2015 10:35 AM	File fe		
📬 Network	퉬 ippspool	6/11/2015 10:35 AM	File fo		
	鷆 ips	6/11/2015 10:35 AM	File fo	Move to mobile	print
	퉬 jre	6/11/2015 10:35 AM	File fe		
	鷆 lib	6/11/2015 10:35 AM	File fe		
	퉬 logs	6/11/2015 10:35 AM	File fe		
	퉬 ntsrv	6/11/2015 10:35 AM	File fo		
	<b>ma</b>				

Next in the folder ntsrv under EveryonePrint open the file eopdata.conf in an editor such as Notepad.



Modify the following entry from:

wrapper.java.additional.1=-Dderby.system.home=../data

To the absolute path of the new location of the data folder, for example:

 $wrapper.java.additional.1 {=} {-} Dderby.system.home {=} \backslash dc1 \backslash mobileprint \backslash data$ 

Or another shared cluster disk path, such as z:\mobileprint\data



Save the file.

If the overall EveryonePrint cluster configuration is planned to include additional secondary role servers, make sure that the firewall on the primary node has been configured to allow for incoming connections on the database port 7291 (default). See section above on configuring Windows firewall with a script.



Repeat the above steps on all additional nodes:

- 1. Run installer, choose server is part of cluster and that the server will run the database service
- 2. Change logon account on EveryonePrint Web and Database to the same service account
- 3. Stop all EveryonePrint services
- 4. Edit the ntsrv\eopdata.conf to have the EveryonePrint Data service use the shared \data folder.

When all nodes have the EveryonePrint services installed, it's time to configure the EveryonePrint cluster resource in the Windows cluster services.

On the current cluster owner node, open Windows Failover Cluster manager, choose the cluster and **Configure Role**.



Choose to create a Generic Service.

ès 🛛	High Availability Wizard	I		x
Select Ro	ble			
Before You Begin Select Role	Select the role that you want to configure for high availab	lity:		
Select Service Client Access Point Select Storage Replicate Registry Settings	DFS Namespace Server DHCP Server Distributed Transaction Coordinator (DTC) File Server Generic Application		Description: You can configure high availability for some services that were not originally designed to run on a cluster. For more information, see <u>Configuring Generic</u> <u>Applications</u> , <u>Scripts</u> , and <u>Services</u> .	r 🛛
Confirmation Configure High Availability Summary	Generic Service	~		

Select the EveryonePrint Web service and click Next.

		₹¢.	<b>Print</b>
Select Se	ervice		
Before You Begin Select Role	Select the service you want to use from the list:		
Select Service	Name	Description	~
Client Access Point	Encrypting File System (EFS)	Provides the core file encryption technology us	
	EveryonePrint Data service	The data storage for the EveryonePrint service	
Select Storage	EveryonePhint Phint Service		
Replicate Registry	EveryonePrint Web service	The Web service for the EveryonePrint service	
Settings	Extensible Authentication Protocol	The Extensible Authentication Protocol (EAP) s	
Confirmation	Function Discovery Provider Host	The FDPHOST service hosts the Function Disc	
Configure High	Function Discovery Resource Publication	Publishes this computer and resources attache	
Availability	Group Policy Client	The service is responsible for applying settings	
Summary	Health Key and Certificate Management	Provides X.509 certificate and key managemen	
ounnury			

Enter a descriptive name for future reference, and the address for the EveryonePrint primary cluster as it will be accessed by users and other secondary EveryonePrint servers.

87		High Availability Wizard				
Client Ac	cess Point					
Before You Begin Select Role Select Service Client Access Point Select Storage Replicate Registry Settings Confirmation Configure High Availability Summary	Name:	lients will use when accessing this clustere PrimaryCluster1  the is limited to 15 characters. One or more or each network to be used, make sure the Networks  ✓ 192.168.193.0/24  < <u>Pre</u>	PIPv4 addresses could not be configured			

Select any storage as needed for the cluster configuration.

<b>8</b> 0	Hig	gh Availability Wiza	rd	x
Select St	orage			
Before You Begin Select Role	Select only the storage volu You can assign additional st		n to this clustered role. after you complete this wizard.	
Select Service	Name	Status		
Client Access Point	🔲 🗆 📇 Cluster Disk 1	① Online		
Select Storage	Volume: (Q)	File System: NTFS	9.95 GB free of 10.00 GB	
Replicate Registry Settings	Volume: (Z)	File System: NTFS	9.82 GB free of 9.87 GB	
Confirmation				
Configure High Availability				
Summary				



Skip the section on Windows registry replication, as EveryonePrint does not store values in the registry.

80	Н	igh Availability Wizard		x
Summary				
Before You Begin Select Role Select Service	High availability wa	s successfully configured for the role.		_
Client Access Point Select Storage		Generic Service	^	
Replicate Registry Settings Confirmation Configure High	Service: Network Name: OU: IP Address:	EveryonePrint Web service (EOPWeb) PrimaryCluster1 CN=Computers,DC=lab2,DC=local 192.168.193.75		
Availability Summary	Parameters:	-s "C:\Program Files (x86) \EveryonePrint\ntsrv\eopweb.conf"	~	,
	To view the report created To close this wizard, click F	by the wizard, click View Report. inish.	<u>V</u> iew Report	
			<u>F</u> inish	]

With the cluster resource created and first service added, it's time to add the two other services, EveryonePrint Data and EveryonePrint Print Services, to the cluster resource.

Under the **Roles** section, right-click the cluster resource, choose **Add Resource** and **Generic Service**.

灎																		
File Action View Help																		
🗢 🏟 🙎 📰 🚺																		
📲 Failover Cluster Manager	Roles (1)																	
⊿ 📲 Cluster01.lab2.local	Search																	
Roles							1											
Nodes	Name		Status	Туре		Owner Node	Priority	Infor										
Storage	RimaryCluster1	6	Start Role			WIN2012R2-02	Medium											
Networks		1	Stop Role															
			Move		•													
		۹	Change Startup	Priority	•													
		-	Information Deta	ils														
													Show Critical Eve	ents				
		盏	Add Storage															
		<b>P</b>	Add Resource		•	Client Access Point												
			More Actions		•	Generic Application	н. — — — — — — — — — — — — — — — — — — —											
		×	Remove															
			Properties			Generic Service												
			Properties		_	More Resources	•											
1																		



			'
Select Se	ervice		
Service	Select the service you want to use from the list:		
ation ure Generic	Name	Description	^
ry	Distributed Link Tracking Client DNS Client	Maintains links between NTFS files within a co The DNS Client service (dnscache) caches Do Prevideo the core file encryption to choole gy upon	
	EveryonePrint Data service	The data storage for the EveryonePrint service	Π
	EveryonePrint Print Service Extensible Authentication Protocol	The Extensible Authentication Protocol (EAP) s The FDPHOST service hosts the Function Disc	
	Function Discovery Provider Host		

Repeat for the EveryonePrint Print Service, and confirm that all services have been added by selecting the cluster group and viewing the resources, and bring all services online.

PrimaryCluster1		
Name	Status Information	
Roles		
🔛 EveryonePrint Data service	Online	
EveryonePrint Print Service	Online	
EveryonePrint Web service	Online	
Server Name		
🖃 🔩 Name: PrimaryCluster1	Online	
📲 IP Address: 192.168.193.75	(r) Online	

The EveryonePrint Web interface should now be accessible on the cluster IP address. If not accessible, confirm that there are no firewalls blocking access on the current active node, otherwise check logs on the active node.

#### 14.5.5 Modify primary cluster nodes configuration

Next it's necessary to configure the primary nodes to share the same configuration, so when the active node changes, everything remains the same.

Confirm the current active node and go to EveryonePrint Admin interface and Clustering section, and click to edit the current active node.

Server name	Description		Address	Configuration	_	
WIN2012R2-01		٠	127.0.0.1	primary local	٠	8
WIN2012R2-02		•	127.0.0.1	secondary local	÷	8

Enter the cluster IP address under Host, a description and choose to store configuration in a location accessible by all nodes in the cluster. This shared location can either be a network share, or a cluster disk which moves with the active node.

EVERYONE



Host: 192.168.193.75	Port: 7290 Use SSL
Verify that the host	tname/IP address and port is accessible from all servers.
erver Description: Node 1	in PrimaryCluster01
he server WIN2012R2-01	is a:
Primary server 1	)
Primary server With its configuration	
With its configurati	

Repeat for all other primary cluster nodes.

Server name	Description	Address	Configuration	
WIN2012R2-01	Node 1 in PrimaryCluster01	• 192.168.193.75	primary shared 🏼 🎲	8
WIN2012R2-02		• 127.0.0.1	secondary local 👹	8

Write the cluster host, description, choose it's a Primary server and to use the same shared configuration.

The server WIN2012R2-02 address on the network (for communication between servers):	
Host: 192.168.193.75 Port: 7290 Use SSL	
Verify that the hostname/IP address and port is accessible from all servers.	
Server Description: Node 2 in PrimaryCluster01	
The server WIN2012R2-02 is a:	
Primary server 1	
With its configuration stored:	
C Locally on WIN2012R2-02 server only	
Shared on remote path: 1\\dc1\mobileprint	

#### Save changes.

When returning to the list, a warning will be shown saying that only 1 primary server can run at the same time. With the failover configuration in place, Windows will start and stop services as necessary, so there exist only 1 active node.

#### 14.5.6 Change the primary servers spool folder

It's important that the spool directory of EveryonePrint, where print jobs are held while being processed, awaiting release etc, is located in a shared storage, such as network share or cluster disk volume that moves with the active node.

Create a dedicated folder, such as \\dc1\mobileprint\spool and then go to General Settings. Under **Application Settings** change the **Application spool folder** to the shared storage.

Application spool folder:	\\dc1\mobileprint\spool	
Important: Chang	ing spool folder will NOT move any pending files presently i	in spool



Confirm that the user account under which the EveryonePrint Web service is running has read and write rights to the shared path.

The cluster configuration is now complete. It is strongly recommended to thoroughly test failover, by simulating failures and changing the active node several times, confirming in between each switch, that EveryonePrint is functioning correctly.

Name	Status	Туре	Owner Node	Priority	Information
🔅 PrimaryCluster1	🕥 Rypping	Generic Service	WIN2012R2-01	Medium	
	6	Start Role			
	1	Stop Role			
		Move	🕨 📝 🛛 Best	Possible Node	
	۹	Change Startup Priority	😨 Sele	ct Node	
		Information Details			
		Show Critical Events			

IMPORTANT! Make sure that all printers created on the active primary server are replicated across all nodes in failover cluster, or printing will fail, when nodes failover.

## 14.6 Adding external load balancer for high front-end scalability

EveryonePrint clusters can be combined with external load balancing, to achieve very high scalability and redundancy.



Use an external load balancer, when many users will access the front-end interfaces, such as Web Print, Driver Print or Mobile Print, to balance the requests between many servers behind the load balancer.



Configure primary and secondary servers as needed, as described above, then add an external load balancer, such as F5 (<u>https://f5.com</u>) or Zen (<u>http://www.zenloadbalancer.com</u>) which be either a physical appliance or a software based load balancer, or Windows NLB (<u>https://technet.microsoft.com/library/hh831698.aspx</u>).

The configuration possibilities with high availability and scalability are endless, and these examples and guides are for common configurations only. For the best configuration for a particular project, please contact your EveryonePrint specialist for guidance and recommendation.

#### 14.7 Replicate printers across all servers

Since any server in a cluster configuration can be sending print jobs to printers, all servers are required to have all print queues installed.

In many cases, customers using a single "follow me" print queue, this is trivial, since there has to be only a single print queue on each server. But for customers with thousands of printers, it's impractical to manually create and manage print queues across servers.

Fortunately, it's very simple to script print replication across many servers using the Windows Print Migration tools.

#### 14.7.1 Using Windows Print Migration Printbrm.exe command-line tool

The Windows print migration tool, printbrm.exe, is an excellent tool for replicating printers across multiple servers.

For detailed information about print migration on Windows servers, see:

https://technet.microsoft.com/en-us/library/cc722360.aspx

https://technet.microsoft.com/en-us/library/jj134237.aspx

The migration tool is included in the Print Management Windows tools that come with the Print Server role service on Windows servers.

For Print Migration to work using printbrm.exe, at least 1 printer must be created <u>and</u> shared on all servers involved in replication.

Begin by adding the Print and Document Services Role on all servers.



2	Add Roles and Features Wizard	_ <b>□</b> X
Select server role Before You Begin	S Select one or more roles to install on the selected server.	DESTINATION SERVER WIN2012R2-01.lab2.local
Installation Type	Roles	Description
Server Selection		Print and Document Services
Server Roles	Application Server	enables you to centralize print server
Features Print and Document Servi Role Services Confirmation Results	DHCP Server DNS Server Fax Server Fax Server File and Storage Services (2 of 12 installed) Hyper-V Natural Palies and Assoc Context	and network printer management tasks. With this role, you can also receive scanned documents from network scanners and route the documents to a shared network resource, Windows SharePoint Services site, or e-mail addresses.
ILESUILS	Print and Document Services       Remote Access       Remote Desktop Services       Volume Activation Services	

Only the **Print Server** role service is required.

<b>a</b>	Add Roles and Features Wizard	_ <b>□</b> X
Select role service	25	DESTINATION SERVER WIN2012R2-01.Jab2.local
Before You Begin	Select the role services to install for Print and Document Services	;
Installation Type	Role services	Description
Server Selection	Print Server	Print Server includes the Print
Server Roles	Ustriputed scan server	Management snap-in, which is used for managing multiple printers or
Features	Internet Printing	print servers and migrating printers
Print and Document Servi	LPD Service	to and from other Windows print servers.
Role Services		SCIVEIS.
Confirmation		

Create at least 1 print queue on all servers and share this queue, even if it's a dummy queue. Choose to not publish the shared printer in the domain directory, to avoid users printing to the queue directly.

With the Print Management tools installed, we can replicate printers. First open a command prompt as administrator, as a user with administrative rights on source and destination server on the source server, containing all the printers to replicate.

Backup the printers using the command line:

```
Printbrm.exe -b -s \\servername -f printers.printerexport
```



C:\temp>C:\Windows\System32\spool\tools\printbrm -b -s \\win2012r2-01 -f printer s.printerexport
Target server: \\win2012r2-01 Target file path: C:\temp\printers.printerexport. Queue publish mode: none Overwrite mode: keep existing settings
LISTING PRINT QUEUES RICOH Aficio MP C4501A PCL 6 KONICA MINOLIA C554SeriesPCL Kerox A4 Office PCL6 Color Class Driver V1.2 LISTING PRINTER DRIVERS Xerox A4 Office PCL6 Color Class Driver V1.2, Windows x64, None RICOH Aficio MP C4501A PCL 6, Windows x64, RICOH Language Monitor2 KONICA MINOLIA C554SeriesPCL, Windows x64, C554SeriesPCL Language Monitor IP Output Gateway PS, Windows x64, None IP Output Gateway, Windows x64, None Microsoft enhanced Point and Print compatibility driver, Windows x64, None Microsoft enhanced Point and Print compatibility driver, Windows NT x86, None LISTING PRINT PROCESSORS KOAYTJ_P Windows x64 KOAYTJ_P.dll tpwinprn Windows x64 KOAYTJ_P.dll 1STING PRINTER PORTS 192.168.193.2, TCP
Saving Print Queues Saved print queue RICOH Aficio MP C4501A PCL 6 Saved print queue KONICA MINOLTA C554SeriesPCL Saved print queue Xerox A4 Office PCL6 Color Class Driver V1.2 Saving Print Processors Saved print Processor KOAYIJ_P, Windows x64, KOAYIJ_P.dl1 Saved print processor tpwinprn, Windows x64, TPWinPrn.dl1 Saved printer Drivers Saved printer Drivers Saved printer driver Xerox A4 Office PCL6 Color Class Driver V1.2, Windows x64,
A Saved printer driver RICOH Aficio MP C4501A PCL 6, Windows x64, 3 Saved printer driver KONICA MINOLTA C554SeriesPCL, Windows x64, 3 Saved printer driver TP Output Gateway PS, Windows x64, 3 Saved printer driver TP Output Gateway, Windows x64, 3 Saved printer driver Microsoft enhanced Point and Print compatibility driver, Wi ndows x64, 3 Saved printer driver Microsoft enhanced Point and Print compatibility driver, Wi ndows NT x86, 3 Saved printer Ports Saved printer port 192.168.193.2, TCP
Successfully finished operation.

Now in the same command line window, run the command to restore the backup file to the new destination server.

```
Printbrm.exe -r -s \\newserver -f printers.printerexport
```



C:\temp>C:\Windows\System32\spool\tools\printbrm -r -s \\win2012r2-02 -f printer s.printerexport Operation mode: restore Target file path: C:\temp\Printers.printerexport. Queue publish mode: none Overwrite mode: keep existing settings Queue ACL mode: restore ACLs from backup LISTING PRINT QUEUES RICOM Aficio MP C4501A PCL 6 KOMICA MINOLTA C5548eriesPCL LISTING PRINTER DRIUERS Kerox A4 Office PCL6 Color Class Driver U1.2, Windows x64, None RICOM Aficio MP C4501A PCL 6. Vindows x64, None RICOM Aficio MP C4501A PCL 6. Vindows x64, None RICOM Aficio MP C4501A PCL 6. Vindows x64, None RICOM Aficio MP C4501A PCL 6. Vindows x64, None RICOM Aficio MP C4501A PCL 6. Vindows x64, None RICOM Aficio MP C4501A PCL 6. Vindows x64, None Hicrosoft enhanced Point and Print compatibility driver, Windows NT x86, None LISTING PRIMTER PORT 192.168.193.2, ICP LISTING Printer Drivers... Restored printer driver Xerox A4 Office PCL6 Color Class Driver U1.2, Windows x64 A Actored printer driver NCOM Afficio MP C4501A PCL 6. Vindows x64, 3 Restored printer driver RICOM Afficio MP C4501A PCL 6. Vindows x64, 3 Restored printer driver NCOM Affice PCL6 Color Class Driver U1.2, Windows x64 A Actored printer driver NCOM A Office PCL6 Color Class Driver U1.2, Windows x64 Bestored printer driver NCOM A Office PCL6 Color Class Driver U1.2, Windows x64 Bestored printer driver NCOM A Office PCL6 Color Class Driver U1.2, Windows x64, 3 Restored printer driver Microsoft enhanced Point and Print compatibility driver, Windows X64, 3 Restored printer Ports... Restored print Processor Windows x64, TPWinPrn.dll, tpWinPrn Restored pr

Printers will now exist on destination server, identical to the source.

The above commands can be included in a BAT or CMD file and be scheduled using Windows Task Manager, for example:

@echo off C:\Windows\System32\spool\tools\printbrm -b -s \\primary -f c:\temp\printer s.printerexport C:\Windows\System32\spool\tools\printbrm -r -s \\secondary1 -f c:\temp\printer s.printerexport C:\Windows\System32\spool\tools\printbrm -r -s \\secondary2 -f c:\temp\printer s.printerexport

#### 14.8 Licensing in clustered configurations

EveryonePrint Clustering features are available in Trial, Professional and Enterprise license levels.

No license key required to deploy an EveryonePrint cluster during the initial trial license.

If using a Professional license, a Professional license key must be entered on each server in the cluster configuration.



If using an Enterprise license, an Enterprise license key is only needed on the first primary server. All other servers in the cluster configuration will validate its license from the parent server, the primary server containing the Enterprise license, and it's not necessary to enter any license keys on additional servers.

# 14.9 EveryonePrint clustering in high-availability virtual configurations

Virtual server platforms such as VMWare, Hyper-V and Xen offer features to achieve very high availability and very quick disaster recovery of individual virtual servers, and are generally recommended as part of a disaster recovery policy.

EveryonePrint can work seamlessly with virtual machine platforms, as the use of a virtual server is transparent to the EveryonePrint server application. This includes Windows print servers with Hyper-V high availability.

The high availability features offered by the virtual platforms, generally only apply to the individual virtual server instance as a whole, and does not in itself provide an application level redundancy, so a multi-server EveryonePrint cluster configuration is still recommended, if high application availability or redundancy is required.

# 15. Backup EveryonePrint data

To backup EveryonePrint settings, copy the following files or directories to a safe location:

C:\Program Files (x86)\EveryonePrint\eop.xml

C:\Program Files (x86)\EveryonePrint\printers.xml

If you have changed Web port configuration or configured SSL certificates, backup this folder:

# 16. Upgrading or Uninstalling EveryonePrint

Before upgrading to a new version, verify that your license has valid maintenance for access to software updates! If maintenance has expired and a new version is installed, the program will cease to function until the license is renewed or upgraded.

Before uninstalling or upgrading EveryonePrint, make sure to backup any existing data and configuration files in EveryonePrint.

To upgrade EveryonePrint, simply download and run the installer with the latest version of EveryonePrint. The installer will update your existing installation.

After upgrading an existing installation, confirm your settings in EveryonePrint, and if necessary re-active the Driver Print and Email Print in the EveryonePrint Admin.



During an update, the jre folder may be overwritten, including any imported SSL certificates from mail or LDAP servers. It may be necessary to re-import SSL certificates from LDAP and mail servers after an update.

# 17. EveryonePrint API

EveryonePrint includes an API to allow third parties to interact with the EveryonePrint server from scripts or other applications, performing many of the functions available in the administrative UI's.

#### 17.1 API licensing requirements

Certain API functions in the EveryonePrint API require a valid EveryonePrint Enterprise license. A licensing note will appear under the API function description below, if an Enterprise license is required.

#### 17.2 Communicating with EveryonePrint API

The EveryonePrint API is a REST HTTP/HTTPS based API, which accepts Web GET/POST/PUT/DELETE commands with URL parameters, and returns either JSON or XML.

For example calling:

GET http://127.0.0.1:7290/api/rest.cfm/ServerVersion

Could return:

{"currentversion":"3.7.0"}

The API uses standard HTTP status codes, ie 200 for success, 401 for unauthorized and so on.

## 17.3 Securing API calls

Under Settings and API Access, specify the API authentication token, which must be supplied with each API call from third parties.

Authorization token: 735C4CF5-B21E-40E9-8C055F248D7AC046

Further specify any IP addresses which are permitted to access the API.

API Interface IP Access Restriction
Restrict access to the API interface, to only allowed IP addresses. Enter IP addresses as a comma delimited list. Subnet of IP's can be allowed by specifying only parts of the IP address, for example, entering "192.168." will allow access for any IP address starting with "192.168.".
Examples:
Localhost only: 127.0.0.1 2 addresses and an IP subnet: 127.0.0.1,172.1.0.1,192.168.
Your current IP address is: 127.0.0.1
Allowed IP Addresses: 127.0.0.1



If blank, any IP address is allowed to access the API.

#### 17.4 Note about SSL and non-SSL communication

The EveryonePrint server fully supports HTTPS/SSL communication. A default self-signed SSL certificate for "localhost" is included in the EveryonePrint server, which allows for secure SSL communication such as:

https://localhost:9443/api/rest.cfm/ServerVersion

See the main documentation on how to create your own certificate.

By default EveryonePrint listens for non-SSL http traffic on port 7290 and SSL https on 9443, but please note that these ports may be changed by the EveryonePrint server administrator.

In this API documentation, we refer to the non-secure for consistency and simplicity.

It is strongly recommended to ONLY use SSL communication whenever possible, to reduce the risk of compromising authentication tokens and other similar sensitive data.

#### 17.5 Logging and Troubleshooting

All errors produced by interaction with the API are logged to the central EveryonePrint log "eopapp.log" located per default in C:\Program Files (x86)\EveryonePrint\logs

The EveryonePrint Web server in addition writes a request log, logging all HTTP/HTTPS requests, also found in the  $\log$  directory.

For troubleshooting, enable "Debug Logging" in the EveryonePrint admin interface, and the eopapp.log becomes very detailed with all API calls and responses.

#### 17.6 Define return type format

By default the response format is JSON for any API calls which return data. The API can return either JSON or XML, which is controlled by specifying the Accept HTTP header in the request.

#### Example JSON (default):

curl.exe -X GET -i -H "X-EOP-AuthToken: xyz" -H "Accept: application/json" http:// 127.0.0.1:7290/api/rest.cfm/ServerVersion

HTTP/1.1 200 OK Content-Type: application/json

{"currentversion":"3.7.0"}

#### Example XML:

curl.exe -X GET -i -H "X-EOP-AuthToken: xyz" -H "Accept: application/xml" http://1 27.0.0.1:7290/api/rest.cfm/ServerVersion


HTTP/1.1 200 OK Content-Type: application/xml

<apiresponse><currentversion>3.7.0</currentversion></apiresponse>

# 17.7 Examples with curl

In the documentation we provide examples of each function for use with curl.

Curl is a free command line tool used to simplify the interaction with API's such as the EveryonePrint API. Download curl from <u>http://curl.haxx.se</u>

### 17.8 API Functions and Methods

All calls must include the HTTP header X-EOP-AuthToken containing the API authentication token password as specified in the administrative interface.

### 17.8.1 Get Server Version

Returns the current version of the EveryonePrint server.

### **Request:**

GET http://127.0.0.1:7290/api/rest.cfm/ServerVersion

### Parameters:

(none)

### **Response:**

		-
currentversion	String (50)	The current server version

### Example request:

curl.exe -X GET -i -H "X-EOP-AuthToken: xyz" http://127.0.0.1:7290/api/rest.cfm/ServerVersion

### Example response (success):

HTTP/1.1 200 OK Content-Type: application/json

{"currentversion":"3.7.0"}

### Example response (failure):

HTTP/1.1 401 Unauthorized Content-Type: application/json



"Invalid AuthToken"

### 17.8.2 Add all printers from server

Add all print queues present on the host server to the EveryonePrint server.

### **Request:**

PUT http://127.0.0.1:7290/api/rest.cfm/printers

### Parameters:

(none)

### Response:

success	Boolean	Returns true if import was successful
printersadded	Numeric	Returns the number of printers added
		to the EveryonePrint server

### Example request:

curl.exe -X PUT -i -H "X-EOP-AuthToken: xyz" http://127.0.0.1:7290/api/rest.cfm/printers

### Example response (success):

HTTP/1.1 200 OK Content-Type: application/json

{"success":true,"printersadded":5}

### Example response (failure):

HTTP/1.1 401 Unauthorized Content-Type: application/json

"Invalid AuthToken"

### 17.8.3 Get all printers from server

Retrieve all printers from server.

**Request:** 

GET http://127.0.0.1:7290/api/rest.cfm/printers

Parameters:



(none)

### Response:

An array of printers with each printer being a structure within the array.

printerid	String (50)	The ID of the printer.
Printername	String (255)	The printers friendly name
Printerpath	String (255)	The printers associated output print
		queue
PrinterEmailAlias	String (255)	The printers direct email alias address
altprinterid	String (50)	The printers external ID for use in IPP
		print queues, QR codes or similar

### **Example request:**

curl.exe -X GET -H "X-EOP-AuthToken: xyz" -k http://127.0.0.1:7290/api/rest.cfm/printers

### Example response (success):

HTTP/1.1 200 OK Content-Type: application/json

[{"altprinterid":"A0877B6D","printeremailalias":"printer1@company.com","printerid":1,"pri ntername":"Printer 1","printerpath":"printer1"},{"altprinterid":"36203EBF","printeremailalias":"printer2@comp any.com","printerid":2,"printername":"Printer 2","printerpath":"printer2"},{"altprinterid":"332F4AD5","printeremailalias":"printer3@comp any.com","printerid":3,"printername":"Printer 3","printerpath":"printer3"}]

### Example response (failure):

HTTP/1.1 401 Unauthorized Content-Type: application/json

"Invalid AuthToken"

-X GET -H ""X-EOP-AuthToken: xyz"" -k http://127.0.0.1:7290/api/rest.cfm/printers

### 17.8.4 Delete all printers from server

Delete all printer device entries in the EveryonePrint server.

### **Request:**

DELETE http://127.0.0.1:7290/api/rest.cfm/printers

### Parameters:



(none)

#### Response:

success Boolean	Returns true if deletion was successful
-----------------	---

#### Example request:

curl.exe -X DELETE -i -H "X-EOP-AuthToken: xyz" http://127.0.0.1:7290/api/rest.cfm/printers

### Example response (success):

HTTP/1.1 200 OK Content-Type: application/json

{"success":true}

### Example response (failure):

HTTP/1.1 401 Unauthorized Content-Type: application/json

"Invalid AuthToken"

### 17.8.5 Get UserID Hash

Returns the UserID hash for a given username for use with EveryonePrint IPP Driver Print feature, ie http://127.0.0.1:631/ipp/{useridhash}

### **Request:**

GET http://127.0.0.1:7290/api/rest.cfm/useridhash/?username=johnsmith

#### Parameters:

username	String (255)	The username for which to return hash
		ID

**Response:** 

username	String (255)	The username for which returned hash ID
useridhash	String (50)	Returned UserID hash

### Example request:

curl.exe -X GET -i -H "X-EOP-AuthToken: xyz" -k http://127.0.0.1:7290/api/rest.cfm/useridhash/?username=johnsmith



### Example response (success):

HTTP/1.1 200 OK Content-Type: application/json

{"username":"johnsmith","useridhash":"570ec1806068989"}

### Example response (failure):

HTTP/1.1 400 Bad Request Content-Type: application/json

"Username parameter missing"

### 17.8.6 Add Email Address To Username

Adds an email address to a user. This function returns true if the email address was added successfully.

### Request:

PUT http://127.0.0.1:7290/api/rest.cfm/useremails

#### Parameters:

Username	String (255)	The username on which to add the email address
EmailAddress	String (255)	The email address to add

#### **Response:**

success Boolean	Returns true if adding was successful
-----------------	---------------------------------------

### Example request:

curl.exe -X PUT -i -H "X-EOP-AuthToken: xyz" "http://127.0.0.1:7290/api/rest.cfm/u seremails/?username=johnsmith&EmailAddress=john@gmail.com"

### Example response (success):

HTTP/1.1 200 OK Content-Type: application/json

{"success":true}

### Example response (failure):

HTTP/1.1 401 Unauthorized Content-Type: application/json





### 17.8.7 Delete Email Address From Username

Deletes an email address from a user. This function returns true if the email address was deleted successfully.

### **Request:**

DELETE http://127.0.0.1:7290/api/rest.cfm/useremails

### Parameters:

Username	String (255)	The username on which to delete the email address
EmailAddress	String (255)	The email address to delete

#### **Response:**

success	Boolean	Returns true if delete was successful
---------	---------	---------------------------------------

### Example request:

curl.exe -X DELETE -i -H "X-EOP-AuthToken: xyz" "http://127.0.0.1:7290/api/rest.cfm/u seremails/?username=johnsmith&EmailAddress=john@gmail.com"

### Example response (success):

HTTP/1.1 200 OK Content-Type: application/json

{"success":true}

### Example response (failure):

HTTP/1.1 401 Unauthorized Content-Type: application/json



### 17.8.8 Submit print job file or URL for printing

Submit a file, Word document, PDF, image or other supported file type, to EveryonePrint as a user print job, for further processing.

Submit a Web address to print. EveryonePrint retrieves the content of the Web page and registers as a user print job, for further processing.

### **Request:**

POST http://127.0.0.1:7290/api/rest.cfm/printjob

### Parameters:

Туре	String (5)	Whether the print job is a file or URL to
		print. Possible values:
		file = a file will be uploaded in
		PrintJobFile
		url = a Web address is provided in
		URLToPrint
ClientlPAddress	String (50)	The IP address of the sending client.
Username	String (50)	The username of the user which the
		ClientIPAddress belongs to
		(required for privacy-authentication
		and direct-authentication modes)
PrintJobTitle	String (255)	The originating jobs document name or
		title, can be the same as URLToPrint in
		case
PrinterID	String (50)	The PrinterID of the destination printer
	_	(optional)
MimeType	String (50)	The mimetype of the submitted
		document file (optional)
PrintJobFile	String (255)	The multipart form field containing the
		document to submit. Only if type=file
URLToPrint	String (255)	The Web address URL to print, ie
		"http://www.google.com". Only if
		type=url
AdvOptCopies	Numeric	Optional. Number of copies (default 1)
AdvOptPageFrom	Numeric	Optional. Page to print from
AdvOptPageTo	Numeric	Optional. Page to print to
AdvOptDuplex	Numeric	Optional. Possible values:
		1 = None/Simplex
		2 = Duplex/Long-side (most common)
		3 = Duplex/Short-side
AdvOptPrintBW	Numeric	Optional. Print in black/white even if
		document contains color.
		0 = leave as is, ie color
		1 = Force BW
		,



### Response:

success	Boolean	Returns true if submitting job was successful
jobreleasecode	String(50)	If privacy-releasecode mode, the release code is returned for the submitted job.

### Example request (submitting a file):

curl.exe -X POST -v -H "X-EOP-AuthToken: xyz" -F PrintJobFile=@C:\ test.pdf -F "type=file" -F "ClientIPAddress=1.2.3.4" -F "Username=johnsmith" -F "PrintJobTitle=Test page" -k http://127.0.0.1:7290/api/rest.cfm/printjob

### Example request (submitting a Web address):

curl.exe -X POST -v -H "X-EOP-AuthToken: xyz" -F "URLtoprint=www.everyoneprint.com" -F "type=url" -F "ClientIPAddress=1.2.3.4" -F "Username=q" -F "PrintJobTitle=www.everyoneprint.com" -k http://127.0.0.1:7290/api/rest.cfm/printJob

### Example response (success):

HTTP/1.1 200 OK Content-Type: application/json

{"success":true}

### Example response (success with release code):

HTTP/1.1 200 OK Content-Type: application/json

{"success":true,"jobreleasecode":234056}

### Example response (failure):

HTTP/1.1 401 Unauthorized Content-Type: application/json

"Invalid AuthToken"

### MimeTypes:

.xls mimetype: application/vnd.ms-excel .xlsx mimetype: application/vnd.openxmlformats-officedocument.spreadsheetml.sheet .doc mimetype: application/msword



.docx mimetype: application/vnd.openxmlformatsofficedocument.wordprocessingml.document .ppt mimetype: application/vnd.ms-powerpoint .pptx mimetype: application/vnd.openxmlformatsofficedocument.presentationml.presentation .ods mimetype: application/vnd.oasis.opendocument.spreadsheet .odt mimetype: application/vnd.oasis.opendocument.text .rtf mimetype: application/rtf .txt mimetype: text/plain .html mimetype: text/html .pdf mimetype: application/pdf .jpg mimetype: image/jpeg .png mimetype: image/png .tiff mimetype: image/tiff



### 17.8.9 Add a printer

Add a printer to the server.

This API function requires a valid EveryonePrint Enterprise or evaluation license.

### **Request:**

POST http://127.0.0.1:7290/api/rest.cfm/printer

### Parameters:

	1	
printerid	String (50)	(Optional) The ID of the printer to add.
		Could be IP address, serial number or
		similar. If omitted (default), a numeric
		ID is generated automatically by server.
Printername	String (255)	The printers friendly name and
		description as it appears in end-user
		interfaces
Printerpath	String (255)	The printers associated output print
		queue
PrinterEmailAlias	String (255)	(Optional) The printers direct email
		alias address
BulkAdd	Boolean	(Optional) Default is false. When set to
		true, the server does not write the new
		printer to the configuration file,
		dramatically speeding up adding large
		imports of printers. If bulkadd is used,
		have the last printer use
		bulkadd=false, to make sure all the
		newly added printers are written to the
		configuration file.

### Response:

success	Boolean	Returns true if successful

### Example request:

curl.exe -X POST -H "X-EOP-AuthToken: xyz" -d "printerid=1&printername=Printer 1&printerpath=printer1&PrinterEmailAlias=printer1@company.com&AltPrinterID=XYZ" k http://127.0.0.1:7290/api/rest.cfm/printer

### Example response (success):

HTTP/1.1 200 OK Content-Type: application/json



{"success":true}

### Example response (failure):

HTTP/1.1 401 Unauthorized Content-Type: application/json

"Invalid AuthToken"

### 17.8.10 Get a printer

Retrieve specific printer(s) from the server, as array of results with each returned printer as a structure

This API function requires a valid EveryonePrint Enterprise or evaluation license.

**Request:** 

GET http://127.0.0.1:7290/api/rest.cfm/printer

### Parameters:

printerid	String (50)	(Optional) The ID of the printer to
		retrieve.
Printername	String (255)	(Optional) The name of the printer to retrieve
PrinterEmailAlias	String (255)	(Optional) The printers direct email
		alias address of the printer to retrieve

### Response:

An array of printers with each printer being a structure within the array.

printerid	String (50)	The ID of the printer.
Printername	String (255)	The printers friendly name
Printerpath	String (255)	The printers associated output print
		queue
PrinterEmailAlias	String (255)	The printers direct email alias address
altprinterid	String (50)	The printers external ID for use in IPP
		print queues, QR codes or similar

### Example request:

curl.exe -X GET -H "X-EOP-AuthToken: xyz" -k http://127.0.0.1:7290/api/rest.cfm/printer?printerid=1

### Example response (success):

HTTP/1.1 200 OK



Content-Type: application/json

[{"altprinterid":"XYZ","printeremailalias":"printer1@company.com","printerid":1,"printerna me":"Printer 1","printerpath":"printer1"}]

### Example response (failure):

HTTP/1.1 400 Bad Request Content-Type: application/json

"Error occurred while retrieving printer No valid query "

### 17.8.11 Update a printer

Update an existing printer. All values must be supplied.

This API function requires a valid EveryonePrint Enterprise or evaluation license.

### Request:

PUT http://127.0.0.1:7290/api/rest.cfm/printer

### Parameters:

		-
printerid	String (50)	The ID of the printer to update.
Printername	String (255)	The printers friendly name
Printerpath	String (255)	The printers associated output print
		queue
PrinterEmailAlias	String (255)	(Optional) The printers direct email
		alias address
BulkUpdate	Boolean	(Optional) Default is false. When set to
		true, the server does not write the
		changed printer to the configuration
		file, dramatically speeding up updates
		of large number of printers. If
		BulkUpdate is used, have the last
		printer use BulkUpdate=false, to make
		sure all the newly updated printers are
		written to the configuration file.

### Response:

success	Boolean	Returns true if successful
---------	---------	----------------------------

### Example request:

curl.exe -X PUT -H "X-EOP-AuthToken: xyz" -d "printerid=1&printername=Printer 1 edited&printerpath=printer1edited&PrinterEmailAlias=printer1edited@company.com" -k http://127.0.0.1:7290/api/rest.cfm/printer



### Example response (success):

HTTP/1.1 200 OK Content-Type: application/json

{"success":true}

### Example response (failure):

HTTP/1.1 401 Unauthorized Content-Type: application/json

"Invalid AuthToken"

### 17.8.12 Delete a printer

Deletes an existing printer.

This API function requires a valid EveryonePrint Enterprise or evaluation license.

### **Request:**

DELETE http://127.0.0.1:7290/api/rest.cfm/printer

### Parameters:

Printerid	String (50)	The ID of the printer to delete.
BulkDelete	Boolean	(Optional) Default is false. When set to
		true, the server does not write the
		changes to the configuration file,
		dramatically speeding up updates of
		large number of printers. If BulkDelete
		is used, have the last printer use
		BulkDelete=false, to make sure all the
		changes are written to the
		configuration file.

### Response:

success Boolear	Returns true if successful
-----------------	----------------------------

### Example request:

curl.exe -X DELETE -H "X-EOP-AuthToken: xyz" -d "printerid=1" -k http://127.0.0.1:7290/api/rest.cfm/printer

### Example response (success):



HTTP/1.1 200 OK Content-Type: application/json

{"success":true}

### Example response (failure):

HTTP/1.1 401 Unauthorized Content-Type: application/json

"Invalid AuthToken"

### 17.8.13 Add a device group or a printer to a device group

Add a device group or add a printer to an existing device group

This API function requires a valid EveryonePrint Enterprise or evaluation license.

Request:

POST http://127.0.0.1:7290/api/rest.cfm/printergroups

### Parameters:

PrinterGroupID	Numeric	(Optional) Include the printergroupid if
		adding printers to an existing device
		group.
PrinterGroupName	String (50)	(Optional) Required if adding a new
		device group. Is not used if
		PrinterGroupID is supplied
ExternalGroupName	String (50)	(Optional) The device group external
		name in LDAP attribute or Windows
		membership security group
PrinterIDs	String (1024)	(Optional) Comma delimited list of the
		ID's of printers to add to the group.
		Required if adding printers to a device
		group.

### Response:

success	Boolean	Returns true if successful
---------	---------	----------------------------

### Example request adding a device group:

curl.exe -X POST -H "X-EOP-AuthToken: xyz" -d "PrinterGroupName=group1&ExternalGroupName=group1ext&printerids=1,2" -k http://127.0.0.1:7290/api/rest.cfm/printergroups



### Example request adding a printer to existing device group:

curl.exe -X POST -H "X-EOP-AuthToken: xyz" -d "PrinterGroupID=1&printerids=2,3" -k http://127.0.0.1:7290/api/rest.cfm/printergroups

### Example response (success):

HTTP/1.1 200 OK Content-Type: application/json

{"success":true}

### Example response (failure):

HTTP/1.1 401 Unauthorized Content-Type: application/json

"Invalid AuthToken"

### 17.8.14 Get a device group

Retrieve all or a specific device group.

This API function requires a valid EveryonePrint Enterprise or evaluation license.

**Request:** 

GET http://127.0.0.1:7290/api/rest.cfm/printergroups

Parameters:

PrinterGroupID	String (50)	(Optional) The ID of the printer group
		to retrieve. If omitted all groups are
		returned

**Response:** 

An array of device groups with each group being a structure within the array.

PrinterGroupID	Numeric	ID of group
PrinterGroupName	String (50)	Name of group
ExternalGroupName	String (50)	The device group external name in LDAP attribute or Windows membership security group
PrinterIDs	String (1024)	Comma delimited list of the ID's of printers in the group.

Example request:



curl.exe -X GET -H "X-EOP-AuthToken: xyz" -k http://127.0.0.1:7290/api/rest.cfm/printergroups?PrinterGroupID=1

### Example response (success):

HTTP/1.1 200 OK Content-Type: application/json

[{"externalgroupname":"","printergroupid":19,"printergroupname":"Group 2 ","printerids":"1,3"},{"externalgroupname":"group1ext","printergroupid":54,"printergroup name":"group1","printerids":"1,2"}]

### Example response (failure):

HTTP/1.1 401 Unauthorized Content-Type: application/json

"Invalid AuthToken"

### 17.8.15 Edit a device group

Update an existing device group name or external name.

This API function requires a valid EveryonePrint Enterprise or evaluation license.

### **Request:**

PUT http://127.0.0.1:7290/api/rest.cfm/printergroups

### Parameters:

PrinterGroupID	Numeric	The printergroupid of group to update
PrinterGroupName	String (50)	Name of group
ExternalGroupName	String (50)	(Optional) The device group external
		name in LDAP attribute or Windows
		membership security group

### **Response:**

success	Boolean	Returns true if successful
---------	---------	----------------------------

### Example request:

curl.exe -X PUT -H "X-EOP-AuthToken: xyz" -d "PrinterGroupID=1&PrinterGroupName=group1edited&ExternalGroupName=group1exte dited" -k http://127.0.0.1:7290/api/rest.cfm/printergroups



### Example response (success):

HTTP/1.1 200 OK Content-Type: application/json

{"success":true}

### Example response (failure):

HTTP/1.1 401 Unauthorized Content-Type: application/json



### 17.8.16 Delete a device group or remove a device from group

Delete a device group or delete a printer from an existing device group

This API function requires a valid EveryonePrint Enterprise or evaluation license.

Request:

DELETE http://127.0.0.1:7290/api/rest.cfm/printergroups

### Parameters:

PrinterGroupID	Numeric	ID of group to delete or to delete printers from.
PrinterIDs	String (1024)	(Optional) Comma delimited list of the ID's of printers to delete from the group. Required if deleting printers from a device group.

### Response:

success Boolean	Returns true if successful
-----------------	----------------------------

### Example request deleting a device group:

curl.exe -X DELETE -H "X-EOP-AuthToken: xyz" -d "PrinterGroupID=1" -k http://127.0.0.1:7290/api/rest.cfm/printergroups

### Example request deleting a printer from an existing device group:

curl.exe -X DELETE -H "X-EOP-AuthToken: xyz" -d "PrinterGroupID=1&printerids=2,3" - k http://127.0.0.1:7290/api/rest.cfm/printergroups

### Example response (success):

HTTP/1.1 200 OK Content-Type: application/json

{"success":true}

### Example response (failure):

HTTP/1.1 401 Unauthorized Content-Type: application/json



### 17.8.17 Add a Wide Area Sub domain or printers to a sub domain

Add a Wide Area Subdomain or add printers to an existing Wide Area Subdomain.

This API function requires a valid EveryonePrint Enterprise or evaluation license.

### **Request:**

POST http://127.0.0.1:7290/api/rest.cfm/wideareas

### Parameters:

name	String (255)	The Wide Area sub domain name.
PrinterIDs	String (1024)	The ID's of printers to add to the sub
		domain
BulkAdd	Boolean	(Optional) Default is false. When set to
		true, the server does not write the
		changes to the configuration file,
		dramatically speeding up large imports
		of printers. If bulkadd is used, have the
		last printer use bulkadd=false, to make
		sure all the newly added printers are
		written to the configuration file.

### **Response:**

success Boolean	Returns true if successful
-----------------	----------------------------

### Example request:

curl.exe -X POST -H "X-EOP-AuthToken: xyz" -d "name=test.name&printerids=1,2" -k http://127.0.0.1:7290/api/rest.cfm/wideareas

### Example response (success):

HTTP/1.1 200 OK Content-Type: application/json

{"success":true}

### Example response (failure):

HTTP/1.1 401 Unauthorized Content-Type: application/json



### 17.8.18 Get a Wide Area Sub domain

Retrieve all or a specific wide area sub domain.

This API function requires a valid EveryonePrint Enterprise or evaluation license.

**Request:** 

GET http://127.0.0.1:7290/api/rest.cfm/wideareas

#### Parameters:

name	String (255)	(Optional) The name of the sub domain to retrieve. If omitted all domains are
		returned.

### **Response:**

An array of wide area sub domains with each domain being a structure within the array.

name	String (255)	Name of subdomain
PrinterIDs	String (1024)	Comma delimited list of the ID's of
		printers in the sub domain.

### Example request:

curl.exe -X GET -H "X-EOP-AuthToken: xyz" -k http://127.0.0.1:7290/api/rest.cfm/wideareas?name= test.name

### Example response (success):

HTTP/1.1 200 OK Content-Type: application/json

[{"name":"building1.lab2.local","printerids":""},{"name":"test.name","printerids":"1,2,3"}]

### Example response (failure):

HTTP/1.1 401 Unauthorized Content-Type: application/json



### 17.8.19 Edit a Wide Area Sub domain

Update an existing Wide Area sub domain name.

This API function requires a valid EveryonePrint Enterprise or evaluation license.

**Request:** 

PUT http://127.0.0.1:7290/api/rest.cfm/wideareas

#### Parameters:

name	String (255)	The name of the sub domain to change.
NewName	String (255)	The new name for the sub domain

### Response:

success Boolean	Returns true if successful
-----------------	----------------------------

### Example request:

curl.exe -X PUT -H "X-EOP-AuthToken: xyz" -d "name=test.name&newname=newname.test" -k http://127.0.0.1:7290/api/rest.cfm/wideareas

### Example response (success):

HTTP/1.1 200 OK Content-Type: application/json

{"success":true}

### Example response (failure):

HTTP/1.1 401 Unauthorized Content-Type: application/json



### 17.8.20 Delete a Wide Area Sub domain

Delete a wide area sub domain or delete a printer from a sub domain

This API function requires a valid EveryonePrint Enterprise or evaluation license.

### Request:

DELETE http://127.0.0.1:7290/api/rest.cfm/wideareas

### Parameters:

name	String (255)	The Wide Area sub domain name.
PrinterIDs	String (1024)	The ID's of printers to add to the sub
		domain
BulkDelete	Boolean	(Optional) Default is false. When set to
		true, the server does not write the
		changes to the configuration file,
		dramatically speeding up large
		changes. If bulkdelete is used, have the
		last printer use bulkdelete=false, to
		make sure all the deleted printers are
		written to the configuration file.

### Response:

success Boolean	Returns true if successful
-----------------	----------------------------

### Example request deleting a device group:

curl.exe -X DELETE -H "X-EOP-AuthToken: xyz" -d "PrinterGroupID=1" -k http://127.0.0.1:7290/api/rest.cfm/printergroups

### Example request deleting a printer from an existing device group:

curl.exe -X DELETE -H "X-EOP-AuthToken: xyz" -d "PrinterGroupID=1&printerids=2,3" - k http://127.0.0.1:7290/api/rest.cfm/printergroups

### Example response (success):

HTTP/1.1 200 OK Content-Type: application/json

{"success":true}

### Example response (failure):

HTTP/1.1 401 Unauthorized



Content-Type: application/json



# 18. Troubleshooting and other tips

## 18.1 Collecting log files for support

If you have encountered an issue in EveryonePrint and want to supply your support representative with recent log and configuration files of your EveryonePrint server, use the Collect Log Files feature in the Admin interface Help screen.

- 1. Log on to EveryonePrint Admin
- 2. Make sure that debug logging is enabled in General Settings, and repeat the issue if necessary
- 3. Click Help in upper right corner
- 4. Click the Create Zip File For Support button

A zip file will be generated in the temp folder under your EveryonePrint installation folder containing most common log and configuration files.

### 18.2 Check and verify Microsoft Exchange email support

EveryonePrint includes support for native Microsoft Exchange protocols Microsoft MAPI via RPC protocol with NTLM authentication and Microsoft Exchange Web Services over HTTPS with Basic, NTLM, or forms-based authentication. Kerberos, ADFS and RPC over http(s) authentication is not supported.

### 18.2.1 Microsoft Exchange MAPI

Support for Microsoft Exchange MAPI can be verified with Outlook (2010).

File Home Send	d / Receive Folder View
🐼 Save As	Account Information
Info	Microsoft Exchange
Open	Account Settings
Print Help	Account See Modify settin additional co
Options	Account Settings E-mail Data Files RSS Feeds SharePoint Lists Internet Calendars Published Calendars A
🔀 Exit	Account Settings         Add and remove accounts existing connection setting         O Deligate Access
	Give others permission to I student1@lab2.local Microsoft Exchange (send from this ac

Go to the File tab, click Account Settings. On the list of accounts, select an account and click Change, then More Settings on the dialog that appears.



Change Account X Server Settings Enter the information required to connect to Microsoft Exchange or a compatible service.			
Type the server name for yo account provider. Server:	ur account. If you don't know the server name, ask your EXCHANGE2010-2.lab2.local		
	Microsoft Exchange	×	
Type the user name for you	General Advanced Security Connection	1	
User Name	Connection Use these settings when connecting to Microsoft Exchange when working offline:	me	
	<ul> <li>Connect using my Local Area Network (LAN)</li> </ul>		
	C Connect using my phone line		
	C Connect using Internet Explorer's or a 3rd party dialer		
	Modem		
	Use the following Dial-Up Networking connection:		
	The second secon	More Settings	
	Properties Add	Next > Cancel	
	Outlook Anywhere	Curicer	
	Connect to Microsoft Exchange using HTTP		
	Exchange Proxy Settings		

On the Connection tab, the "Connect to Microsoft Exchange using HTTP" should be unchecked.



# 18.2.2 Microsoft Exchange Web Services

Support for Microsoft Exchange Web Services can be verified using Internet Explorer by accessing the Web service URL. This is typically https://<server>/ews/exchange.asmx

This should show a login prompt for username and password. If using Internet Explorer and no authentication prompt appears, go to *Internet Options -> Security* and choose **Custom Level** for the current zone. Then scroll to *User Authentication Logon* and choose **Prompt for user name and password**. Close and reopen all Internet Explorer Windows and access the Web services URL again.

Internet Options	<u>? × </u>
General Security Privacy Content Connections	Security Settings - Local Intranet Zone
Select a zone to view or change security settings.	<ul> <li>○ Disable</li> <li>● Enable</li> <li>② Enable XSS filter</li> <li>③ Disable</li> <li>○ Enable</li> <li>③ Scripting of Java applets</li> <li>○ Disable</li> </ul>
found on your intranet.      Security level for this zone     Allowed levels for this zone: All      Appropriate for websites on your loc         (intranet)     Most content will be run without pro     Unsigned ActiveX controls will not be     Same as Medium level without prom;	
Enable Protected Mode (requires restarting 1     Custom level      Reset all zone	Reset custom settings Reset to: Medium-low (default) Reset
	OK Cancel

A prompt for username and password should appear.

Windows Security	X
Connecting to Exchange2010-2.lab2.local.	
print         ••••         Domain: LAB2         Remember my credentials	
OK Cancel	

Notice the Domain value, this will be used in the Email Print configuration in EveryonePrint.



Changes saved successfully. Incoming mail test completed successfully. Your settings appear to be correct.		
	c below to enable email printing in EveryonePrint. When enabled, EveryonePrint will ar mail server to retrieve emails containing print jobs, using your settings below.	
Please refer to incoming mail	nt Server Settings o the EveryonePrint Documentation for more information about configuration of the server settings. mended to restart the EveryonePrint service after changing the below mail	
Email Print a Enter the ema	ngs. This is not required for all mail servers, but generally recommended. Address uil address to which users can send documents print from computers or mobile devices ddress: print@lab2.local	
<b>Incoming M</b> Mail server ty	ail Server Settings	
Mail server a	ddress: https://192.168.0.140	
Mail domain	name: LAB2	
POP3 no POP3 SS	oming mail server ports used: on-SSL: port 110 JL: port 995 n-SSL: port 143 L: 993	
Incoming M	ail Account Settings	
Username:	print	
Password:	••••	

Going to the /ews/exchange.asmx the Exchange server with a successful configuration will show a WSDL page similar to below. If this appears, the Exchange Web Services are confirmed accessible.





# 18.3 Common LDAP authentication error codes

Configuring Lightweight Directory Access Protocol (LDAP) can be complex. Included in EveryonePrint is a testing function, but before using the test function, you will need to obtain the path and settings for the internal LDAP system. With the path we recommend using a LDAP browser to view the directory to gain a better understanding of how LDAP is implemented at your company.

### Using a LDAP browser

One example of a free LDAP Browser is available from Softerra. If you can connect with the Browser, you can navigate through the tree to see where the users are stored. When you find the directory with the users, look at the top bar of the LDAP Browser to get your Start Search DN path. Groups can be found similarly.

Using the LDAP Browser, you can verify a user's information. Typically you will use "sAMAccountName" or "cn".

### Log files

When configuring LDAP authentication, it is useful to enable debug logging in **General Settings**. This will ensure that any relevant details are logged to file. Log files are located in  $\log s$  subdirectory of the EveryonePrint installation.

### LDAP Specific Errors

1. Error: com.server.exception.DBException: Error in bind() from LDAP source: [server]:[port]

Cause: This is a very general error, and it means something went wrong when trying to bind to LDAP/AD. Check to see if the LDAP/AD server name and/or port number you have specified is incorrect or an incorrect DN was specified as the administrator username.

2. Error: javax.naming.CommunicationException: [server]:[port] [Root exception is java.net.ConnectException: Connection refused: connect]

Cause: The port name you have specified for the LDAP/AD server is incorrect.

3. Error: javax.naming.CommunicationException: [server]:[port] [Root exception is java.net.UnknownHostException: [server]]

Cause: The LDAP/AD server name you have specified is incorrect.

4. Error: javax.naming.NamingException: Cannot parse url: [protocol]://[server]:[port] [Root exception is java.net.MalformedURLException: Not an LDAP URL: [protocol]://[server]:[port]]

Cause: The protocol you have specified is not correct.

5. Error: javax.naming.AuthenticationException: [LDAP: error code 49 - Invalid Credentials]

Cause: The DN path or password which you have specified for the administrator is invalid. Any of the below will result in this error:



- \* Pointed to non-user DN
- \* Pointed to a non-existent user, but in existing DN
- \* Pointed to non existent DN
- \* Pointed to an existing user, but non existing DN
- \* Pointed to an incorrect admin DN, uid instead of cn
- \* Pointed to a non administrator user
- \* Pointed to a valid admin but password is incorrect

6. Error: com.server.exception.DBException: Error in searchForUserList from LDAP plugin: [LDAP: error code 32 - No Such Object]

Cause: Very general error when there is a problem finding the users in LDAP/AD. Could be that the DN pointing to the users is pointing to the wrong place or is just incorrect and does not exist.

7. Error: javax.naming.NameNotFoundException: [LDAP: error code 32 - No Such Object]; remaining name '[DN]'

Cause: The DN path which points to where the users are located in the directory is invalid.

8. Error: com.server.exception.DBException: Error in searchForUserList from LDAP plugin: [LDAP: error code 2 – Bad search filter]

Cause: Invalid search filter passed to the LDAP/AD server.

9. Error: javax.naming.directory.InvalidSearchFilterException: Missing 'equals'; remaining name '[DN]'

Cause: The filter specified is wrong or CPS constructed a bad filter.

10. Error: javax.naming.directory.InvalidSearchFilterException: Unbalanced parenthesis; remaining name [DN]

Cause: You did not have correct opening and closing of parenthesis in your search filter.

11. Error: Error in bind from LDAP source: [LDAP: error code 49 - Invalid Credentials] javax.naming.AuthenticationException

Cause: Could not authenticate the user trying to login. This can be the result of an incorrect username or password, or an incorrect prefix and/or suffix specified in the LDAP Authentication screen, depending on the type of LDAP/AD system. Could also mean the authentication type is incorrect.

12. Error: Error in bind from LDAP source: [LDAP: error code 34 - invalid DN] javax.naming.InvalidNameException

Cause: This is caused by a bad prefix specified in the LDAP Authentication screen, on most LDAP/AD systems. This could mean you did not specify a prefix at all, which means the LDAP/AD server did not receive a full DN from EveryonePrint or that you did not specify a correct prefix, such as CN instead of UID, which results in the LDAP/AD



server not receiving a correct DN from EveryonePrint. Can also be caused by a missing comma at the beginning of the suffix or an extra comma at the end of the suffix. This error could also mean the authentication type is incorrect.

13. Error: NoSuchAttributeException

Cause: This is caused by providing a name for an attribute which is not correct or does not exist.

### **Active Directory Specific Errors**

1. Error: com.server.exception.DBException: Error in bind() from LDAP source: [LDAP: error code 49 - 80090308: LdapErr: DSID-0C09030F, comment: AcceptSecurityContext error, data 525, vece] javax.naming.AuthenticationException

Cause: The administrator domain name, username, and or password is incorrect in the LDAP Authentication screen.

2. Error: com.server.exception.DBException: Error in searchForUserList from LDAP plugin: [LDAP: error code 32 - 0000208D: NameErr: DSID-031001C6, problem 2001 (NO\_OBJECT), data 0, best match of: '[DN]' ] javax.naming.NameNotFoundException

Cause: A non-existent DN specified in the Start Search field.

3. Error: javax.naming.PartialResultException [Root exception is javax.naming.CommunicationException: [server]:[port] [Root exception is java.net.UnknownHostException: [server]]]

Cause: An incorrect DN was specified in the Start Search field.

4. Error: com.server.exception.DBException: Error in searchForUserList from LDAP plugin: [DN]: [LDAP: error code 34 – 0000208F: NameErr: DSID-031001B3, problem 2006 (BAD\_NAME), data 8350, best match of: '[DN],' ] javax.naming.InvalidNameException

Cause: An incorrectly formatted DN was specified.

5. Error: javax.naming.NameNotFoundException: [LDAP: error code 32 - 0000208D: NameErr: DSID-03100198, problem 2001 (NO\_OBJECT), data 0, best match of: "]; remaining name "

Cause: This error appears if you do not have Group settings filled in, but have User Search filled in. Some systems do not care, while some systems experience problems with the empty DN.

6. Error: Error in bind from LDAP source: [LDAP: error code 49 - 80090308: LdapErr: DSID-0C09030F, comment: AcceptSecurityContext error, data 52e, vece ] javax.naming.AuthenticationException

Cause: Could not authenticate the user trying to login. This can be the result of an incorrect username or password, or an incorrect prefix and/or suffix specified in the LDAP Authentication screen, depending on the type of LDAP/AD system. Could also mean the authentication type is incorrect. Also an incorrect username attribute or



incorrect name attribute can cause this. Common cause of this error is a user trying to login with DOMAIN login instead of just login.

7. Error: javax.naming.NamingException: [LDAP: error code 1 - 000020D6: SvcErr: DSID-03100690, problem 5012 (DIR\_ERROR), data 0 ];

Cause: The DN specified in the Start Search tab is incorrect, wrong, or incorrectly formatted.



### 18.4 Troubleshooting Microsoft Office conversion

The following section outlines possible steps to handle Microsoft documents that fail to process, resulting in jobs becoming "Expired" in EveryonePrint.

This section applies in particular to installations of EveryonePrint on Microsoft Windows Server 2012, which introduced a more restrictive permission system. Depending on the Windows domain security configuration in place, the below steps may be required for your Windows 2012 installation.

1. Microsoft Office Test and Diagnostics tool

EveryonePrint includes a "self-test" Office test and diagnostics tool, which can be used to confirm if Office document processing works, and if not, return any error messages to help troubleshooting.



First make sure that .Net Framework 3.51 SP1 or later is installed. This is required for the Office Test and Diagnostics tool.

Choose the tests to run and click Run Office Tests.

Description	Test to run
Test 1: Microsoft Word .doc test converstion	
Test 2: Microsoft Word .docx test converstion	
Test 3: Microsoft Excel .xls test converstion	
Test 4: Microsoft Excel .xlsx test converstion	
Test 5: Microsoft PowerPoint .ppt test converstion	
Test 6: Microsoft PowerPoint .pptx test converstion	



If a test fails, the error codes returned may not be friendly and helpful, so if a test fails, proceed with the below troubleshooting steps. If the problem persists, after following the steps below, contact your EveryonePrint support representative.

Test Run	Test Result
Test 1: Microsoft Office Word .doc	Not run
Test 2: Microsoft Office Word .docx	Success
Test 3: Microsoft Office Excel .xls	Success
Test 4: Microsoft Office Excel .xlsx	Not run
Test 5: Microsoft Office Powerpoint .ppt	Not run
Test 6: Microsoft Office Powerpoint .pptx	Failure

supported. at System.Security.Util.StringExpressionSet.CanonicalizePath(String

2. Confirm that the EveryonePrint Web service runs as a local administrative user.

Q	Services				-
<u>F</u> ile <u>A</u> ction <u>V</u> iew <u>H</u> elp ← → <b>□</b> □ □ <b>□</b> □ → <b>□ □ □ □ □</b>					
Services (Local) Name	Description The data st	Status Running Running	Startup Type Automatic Automatic	Log On As Local System Local System	
EveryonePrint Web service     Extensible Authentication Protocol     Extensible Authentication Protocol     Enction Discovery Provider Host	The Web se The Extensi The FDPHO	Running	Automatic Manual Manual	.∖administrator Locai System Local Service	

- 3. Log on the server with the EveryonePrint service account, and start each of the Office applications, Word, Excel and PowerPoint, and activate if prompted.
- 4. Confirm that the Windows Printer Spooler Service is running and at least one local printer queue is installed on the server.
- 5. Confirm that *Visual Basic for Applications* is installed as part of the Office Installation.





- 6. Disable Protected Mode in Office 2010 or Office 2013
  - a. Open Microsoft Word 2010 and go to File and Options
  - b. Choose Trust Center and Trust Center Settings

Word Options		<u>? ×</u>
General Display	Help keep your documents safe and your computer secure and healthy.	
Proofing	Protecting your privacy	
Save Language Advanced Customize Ribbon Quick Access Toolbar	Microsoft cares about your privacy. For more information about how Microsoft Word helps to protect your privacy please see the privacy statements. <u>Show the Microsoft Word privacy statement</u> <u>Office.com privacy statement</u> <u>Customer Experience Improvement Program</u> <u>Microsoft Office Feedback "Send a Smile" Privacy Statement</u>	,
Add-Ins	Security & more	
Trust Center	Visit Office.com to learn more about protecting your privacy and security. Microsoft Trustworthy Computing	
	Microsoft Word Trust Center The Trust Center contains security and privacy settings. These settings help keep your computer secure. We recommend that you do not change these settings.	JS

c. Choose Protected View and uncheck all options on the right



- d. Repeat these steps for each of the Office applications, Word, Excel and PowerPoint.
- 7. Try running EveryonePrint Web Service using a different account with local Administrator rights. Make sure to log in using that account and launch each Office application once. Restart the EveryonePrint Web service after changing the logon account.



- 8. Change DCOM permissions for Office programs
  - a. Open Component Services, by opening a command prompt as administrator and type:

mmc comexp.msc

If you're using a 64 bit operating system, such as Windows 2008 R2 or Windows 2012, but a Microsoft Office 32 bit, type:

mmc comexp.msc /32



b. Navigate to Component Services -> Computers -> My Computer -> DCOM Config



c. For each of the entries:

"Microsoft Word 97 – 2003 Document" "Microsoft Excel Application" "Microsoft PowerPoint Slide"

Right click and choose Properties

( <del>)</del>	Component Servi	ces	
💩 File Action View Window Help			
🗢 🔿 🙇 🗮 🗙 🛱 🙆 📘 🛄			
A Microsoft WMI Provider Subsy			Actions
▷ 쓸 Microsoft WMI Provider Subsy ▷ 쓸 Microsoft Word 97 - 2003 Doc	<u> </u>		Microsoft Word
<ul> <li>MICrosset word by 2005 bee</li> <li>MMC Application Class</li> <li>MSDAINITIALIZE</li> </ul>	View New Window from Here	•	More Actions
<ul> <li></li></ul>	Properties Help		]
P ar Nap Agent Service P ar Nap Elevated COM class			

Under **Identity** choose **This user** and specify the same service account with local administrative rights, as used on the EveryonePrint Web Service.



Microsoft Word 97 - 20	003 Document Properties ? ×
General Location Security	Endpoints Identity
Which user account do you	want to use to run this application?
O The interactive user.	
○ The <u>l</u> aunching user.	
This <u>u</u> ser.	
Us <u>e</u> r:	administrator <u>B</u> rowse
Password:	•••••
Confirm password:	••••••

If only a single document type failed to convert in the Office Test and Diagnostics in step 1 above, such as Word documents (doc and docx), then you can change only DCOM permissions for that relevant application that failed.

After setting DCOM permissions, either reboot the server, to ensure any new Office instances are launched with the proper rights, or confirm with Task Manager that no instances of Word, Excel and PowerPoint are running for any user on the server.

9. Repair Microsoft Office installation. If setting DCOM permissions did not resolve the Office processing errors, try and repair the Office installation, by running the Office installer again and choosing **Repair this installation** in the Office setup program.

### 18.5 Outgoing email are not received

If EveryonePrint says email was sent successfully, but no email is received, check the file C:\Program Files (x86)\EveryonePrint\temp\cfmail\mail.log (or alternate install directory) for errors such as:

02/10/11 13:29.27: MailOutFail: To=john.smith@company.com; From=Company <support@company.com>; Subject=Outgoing test mail from EveryonePrint; Server=mail.company.com;25; Size=515 bytes:javax.mail.MessagingException: **Could not connect to SMTP host: mail.company.com, port: 25;** nested exception is: java.net.ConnectException: Connection timed out: connect

With the above error message in mail.log, EveryonePrint could not successfully deliver the test email to the mail server due to lack of connection. Make sure that no firewalls are interrupting the connection between the EveryonePrint and the specified SMTP mail server.



# 18.6 Customize release code, username and password generation formatting

If using EveryonePrint in Privacy with Release Codes, by default EveryonePrint will generate a 6digit numeric release code for the user.

If using EveryonePrint with an accounting solution, where EveryonePrint can create user accounts, by default, EveryonePrint will create numeric username and password for the user.

It's possible to customize the format of created release codes, usernames and passwords, for example to have a shorter or longer string, or one that also contains letters.

To modify the format of the generated release code, username or password, do the following:

- 1. Stop the EveryonePrint Web service
- 2. Backup the settings file EveryonePrint\eop.xml
- 3. Open the eop.xml in a text editor such as Notepad
- 4. Modify the relevant configuration:

<genreleasecode>numeric,6,0,0,,</genreleasecode> <genusername>numeric,6,0,0,,</genusername>

<genpassword>numeric,6,0,0,,</genpassword>

5. Save the eop.xml and start EveryonePrint Web service

genreleasecode	The format for release code generation
genusername	The format for username generation
genpassword	The format for password generation

Each type, release code, username and password can have its own definition.

The configuration is stored as a comma delimited string in the format of:

 $format, length, numeric {\tt Prefix}, numeric {\tt Suffix}, fixed {\tt Prefix}, fixed {\tt Suffix}$ 

format	Whether to generate numeric, string, alphanumeric
length	The length of the key to generate
numericPrefix	Number of random digits to start the key with (the rest of the key will be whatever the 'format' is)
numericSuffix	Number of random digits to end the key with (the rest of the key will be whatever the 'format' is)
fixedPrefix	A prefix prepended to the generated key. The length of which is subtracted from the 'length' argument



fixedSuffix A suffix appended to the generated key. The length of which is subtracted from the 'length' argument

### Examples:

Definition	Description	Examples
numeric,6,0,0,,	Default. Numeric with length	190615
	of 6.	409881
numeric,12,0,0,guest-,	Length of 12 overall with a	guest-696217
	prefix of "guest-"	guest-940040
string,6,2,0,,	String of 6 with 2 leading	38tepa
	numbers	51uuaj
alphanumeric,8,0,0,,	Alphanumeric string of 8	cemfywf9
		kw6h48nv

As an example, the following configuration:

<genusername>numeric,12,0,0,guest-,</genusername> <genpassword>numeric,4,0,0,,</genpassword>

Would create a user such as:

Username: guest-940040 Password: 6701

### 18.6.1 Customize the time release code is retained for users

For user convenience, EveryonePrint will remember a users release code by default for 3 months, so if the user comes back within 3 months and sends another Email Print job, EveryonePrint will use and send back the previously used release code.

This time window can be changed from default 3 months (131487 minutes) to any value.

To modify the time EveryonePrint retains the release code for users, do the following:

- 1. Stop the EveryonePrint Web service
- 2. Backup the settings file EveryonePrint\eop.xml
- 3. Open the eop.xml in a text editor such as Notepad
- 4. Modify the genreleasecodemailtime value (in minutes)

<genreleasecodemailtime>131487</genreleasecodemailtime>

5. Save the eop.xml and start EveryonePrint Web service

The above only applies to Email Print. For Web Print, mobile print and similar, a new release code is assigned with each new session, or with Driver Print, based on the print queues configuration.



# 18.7 Selectively delete all users, print job history, emails and printers

EveryonePrint includes the possibility for administrators to selectively delete data from the EveryonePrint server, for example, to clean up test users and test print jobs before deploying a server in production, or for a reseller to clean prior to a demo for a customer.

Choose Data To Delete
Delete all users and all user related data (email addresses, printer groups etc)
Delete all emails
Delete all print jobs
Delete all printers, printer groups
Yes, I understand that I will now permanently delete the above selected data

Access the reset feature by loading the below page:

http://127.0.0.1:7290/admin/reset.cfm

Or equivalent URL should the port or IP/hostname of the server have changed.



# 18.8 Configure Email Print with Microsoft Oauth2 Modern Authentication

To enable EveryonePrint to retrieve emails from a Microsoft Office365 accounting using modern Oauth2 authentication, a configuration must be created to allow a service such as EveryonePrint to connect and collect emails in the background.

Make sure the following steps are created using an Azure administrative account with proper rights.



1. In Azure Active Directory Dashboard choose 'App registrations'



2. Create new app and select name.

*	Dashboard > EveryonePrint >		
🖾 Dashboard	Register an application		
⊟ All services			
<b>★</b> FAVORITES	* Name		
<ul> <li>Azure Active Directory</li> <li>Users</li> <li>Enterprise applications</li> <li>* Name</li> <li>The user-facing display name for this application (this can be changed later).</li> <li>My-OAuth2-app</li> <li>Supported account types</li> <li>Who can use this application or access this API?</li> <li>Accounts in this organizational directory only (EveryonePrint only - Single tenant)</li> <li>Accounts in any organizational directory (Any Azure AD directory - Multitenant)</li> </ul>			
Lusers	My-OAuth2-app		
Enterprise applications			
	Supported account types		
	Who can use this application or access this API?		
	Accounts in this organizational directory only (EveryonePrint only - Single tenant)		
	O Accounts in any organizational directory (Any Azure AD directory - Multitenant)		
	Accounts in any organizational directory (Any Azure AD directory - Multitenant) and personal Microsoft accounts (e.g. Skype, Xbox)		
	Personal Microsoft accounts only		
	Help me choose		
	Redirect URI (optional)		
	We'll return the authentication response to this URI after successfully authenticating the user. Providing this now is optional and it can be changed later, but a value is required for most authentication scenarios.		
	Web        e.g. https://myapp.com/auth		

3. Notice the Application Client and Directory Tenant ID for later

Dashboard > EveryonePrint >				
₩ My-OAuth2-app 🖉				
	🔟 Delete 🌐 Endpoints 💀 Preview features			
Overview	∧ Essentials			
Quickstart	Display name : My-OAuth2-app			
🚀 Integration assistant   Preview	Application (client) ID :			
······	Directory (tenant) ID :			
Manage	Object ID :			
🔤 Branding				
Authentication	i Welcome to the new and improved App registrations. Looking to learn he			
📍 Certificates & secrets				
Token configuration	Starting June 30th, 2020 we will no longer add any new features to Azure longer provide feature updates. Applications will need to be upgraded to			
->- API permissions				



### 4. Select 'API permissions'

	Ma	nage		
	www	Branding		
	€	Authentication		
	1	Certificates & secrets		
	Ш	Token configuration		
	<del></del>	API permissions		
	<u></u>	Expose an API		
<ul> <li>Authentication</li> <li>Certificates &amp; secrets</li> <li>Token configuration</li> <li>API permissions</li> </ul>				
<ul> <li>Certificates &amp; secrets</li> <li>Token configuration</li> <li>API permissions</li> <li>Expose an API</li> <li>Select 'Add a permission'</li> <li>+ Add a permission</li> <li>✓ Grant admin consent for EveryonePrint Add a permission</li> </ul>				
			Туре	Description

✓ Microsoft Graph (1)

User.Read

Delegated Sign in and read user profile



6. Choose 'Microsoft Graph', 'Delegated permission' and filter for 'EWS'. Select 'EWS.AccessAsUser.All' permission.

<ul> <li>✓ All APIs</li> <li>Microsoft Graph https://graph.microsoft.com/ Docs ♂</li> <li>What type of permissions does your application require?</li> </ul>		
Delegated permissions Your application needs to access the API as the signed-in user.	Application permissions Your application runs as a signed-in user.	
Select permissions		
Permission		
EWS.AccessAsUser.All ① Access mailboxes as the signed-in user via Exchange Web Services		

### 7. Click Grant admin consent.. and grant access.

+ Add a permissio ✓ Grant admin consent for EveryonePrint		r EveryonePrint			
API / Permissions name	Туре	Description	Admin consent req	Status	
✓ Microsoft Graph (2)					•••
EWS.AccessAsUser.All	Delegated	Access mailboxes as the signed-in user via Exchange	-	🤣 Granted for EveryonePrint	•••
User.Read	Delegated	Sign in and read user profile	-	🤣 Granted for EveryonePrint	

### 8. Click on Authentication

Manage

- Branding
   Authentication
- 📍 Certificates & secrets
- Token configuration
- API permissions
- - ·-·



9. Choose Yes under Allow Public Workflows and click Save to save changes.

Advanced settings

Allow public client flows 🛈

Enable the following mobile and desktop flows:



- App collects plaintext password (Resource Owner Password Credential Flow) Learn more
- No keyboard (Device Code Flow) Learn more
- SSO for domain-joined Windows (Windows Integrated Auth Flow) Learn more