Tungsten Printix
Implementation Guide

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TUNGSTEN
AUTOMATION

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Preface

This guide walks you through the process of implementing the infrastructure required to deploy the Printix Cloud Print Management Service for your organization.

Training

Tungsten Automation offers both classroom and online training to help you make the most of your product. To learn more about training courses and schedules, visit the Learning Cloud on the Tungsten Automation website.

Getting help with your product

The Knowledge Portal repository contains articles that are updated on a regular basis to keep you informed about our products. We encourage you to use the Knowledge Portal to obtain answers to your product questions.

> ℹ️ The Knowledge Portal is optimized for use with Google Chrome, Mozilla Firefox, or Microsoft Edge.

The Knowledge Portal provides:
- Powerful search capabilities to help you quickly locate the information you need.

  Type your search terms or phrase into the **Search** box, and then click the search icon.
- Product information, configuration details and documentation, including release news.

  To locate articles, go to the Knowledge Portal home page and select the applicable Solution Family for your product, or click the View All Products button.

From the Knowledge Portal home page, you can:
- Access the Community (for all customers).

  On the Resources menu, click the **Community** link.
- Access the Customer Portal (for eligible customers).

  Go to the Support Portal Information page and click **Log in to the Customer Portal**.
- Access the Partner Portal (for eligible partners).

  Go to the Support Portal Information page and click **Log in to the Partner Portal**.
- Access support commitments, lifecycle policies, electronic fulfillment details, and self-service tools.

  Go to the Support Details page and select the appropriate article.

Chapter 1

Printix at a glance

The **Tungsten Printix Cloud Print Management Service** is a cloud-based, multi-tenant subscription service especially designed and structured to provide a complete print infrastructure and secure printing environment that guarantees efficiency, productivity, and cost savings. No on-premise servers and databases are required. The service runs with the Printix Client software installed on users' computers (Windows and Mac).

Microsoft Entra ID
Google Workspace
OIDC, Okta, OneLogin …

TA Printix Printix

Cloud Storage

HTTPS:443

✓ Cloud print
✓ Direct IP printing
✓ Secure print
✓ Mobile print
✓ Home office printing
✓ Document release
✓ Capture and workflow

✓ Cloud Print API
✓ Power BI reports

ASD

BNM
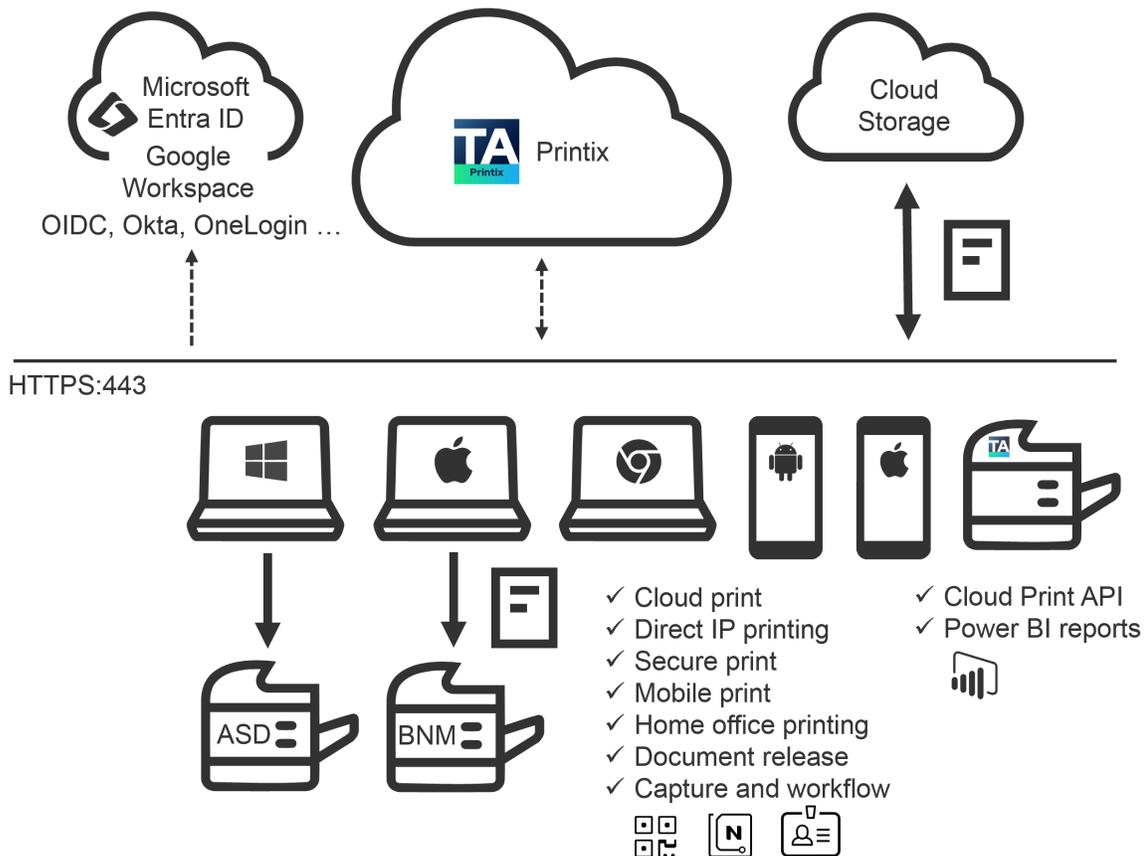
The secure and flexible methods of printing with Printix are achieved by having the Printix Client temporarily store encrypted print data on the computer and notify Printix Cloud about the document. Users can print directly (as usual) or they can release documents from the Printix App on their phone, tablet, or computer. On printers with Printix Go, users can sign in at the printer with

their card or ID code to release documents and access multifunction printer (MFP) operations: Copy, Email, Scan, and more.

Printix also offers the following benefits:

- A new Printix Home (tenant) is created in a few minutes.
- User authentication through Microsoft Entra ID, Google Workspace, Okta, OneLogin, and more.
- Supports multiple Microsoft Entra directories and multiple Google, Okta, and OneLogin domains.
- Single sign-on (SSO) to Printix with users' Microsoft account.
- Microsoft Endpoint Manager can be used to deploy the Printix Client software to users' computers.
- Users on Microsoft Entra joined computers sign in to the Printix Client automatically.
- Microsoft Entra and Google groups can be used to control access to printers and deploy printers based on users' and computers' group membership.
- Print from phones and tablets, Android and iOS/iPadOS, to Printix-managed printers enabled for mobile print.
- Print to Printix-managed printers from Chrome with Printix Chromebook.
- Control access to MFP functions, such as Copy, Email, and Scan.
- Capture and workflow.

See also:

- How Printix works
- Network ports
- Printix Technical Specifications

Product information

- Pricing
- Terms of Service (end-user license agreement)
- Privacy Policy

Chapter 2

Implementation
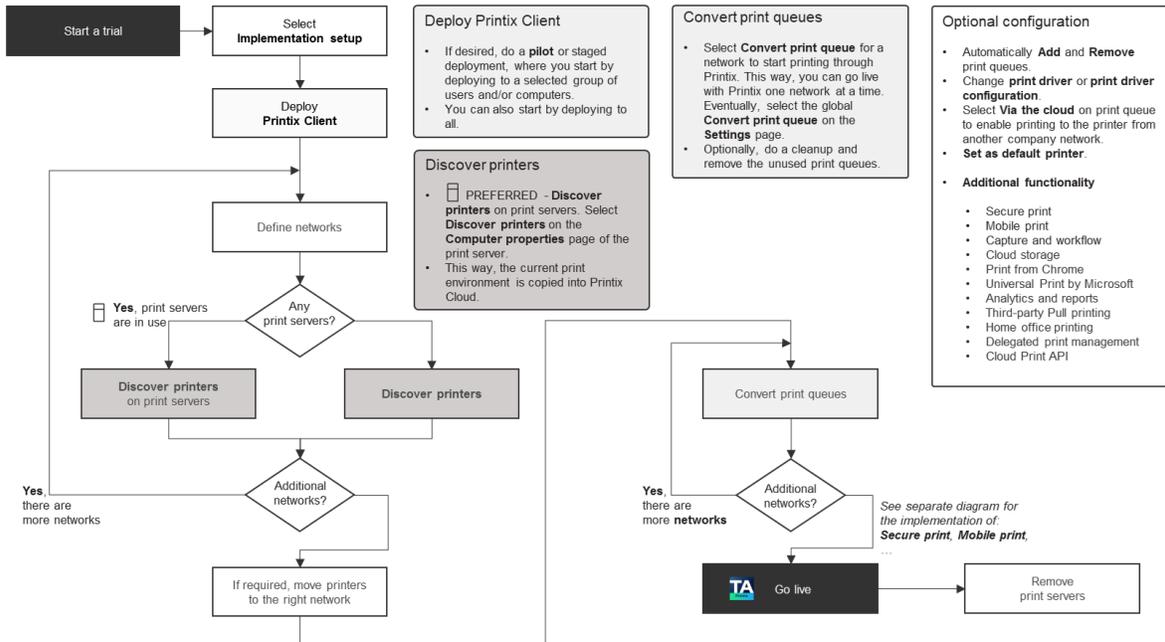
The typical steps to implement the infrastructure:

1. Start a trial.
2. Deploy Printix Client.
3. Define networks.
4. Discover printers.
5. Convert print queues.
6. Install Printix Go.
7. Go live.
   Optionally, implement additional functionality, such as **Secure print** or **Mobile print**.
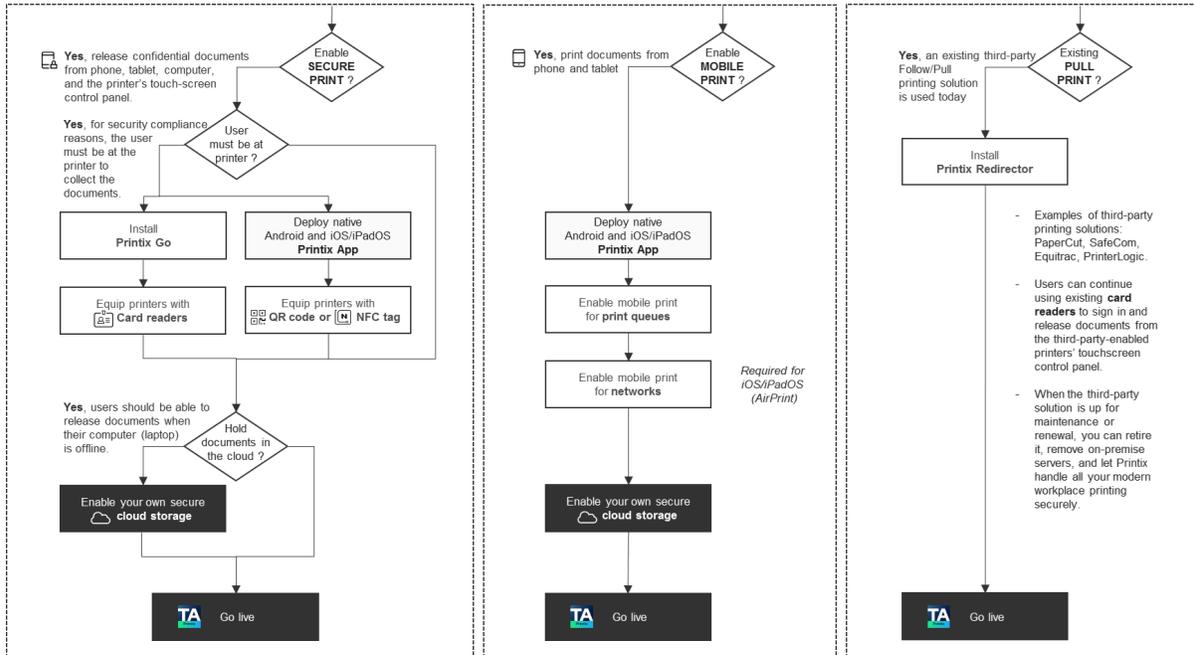
> ℹ️
> - We recommend that you use the Checklist to plan the implementation.
> - If you are a **Printix partner** with access to a customer service account, and you can access computers on the customer's network, you can start a subscription on behalf of the customer. Alternatively, you can visit the customer or conduct a remote session where you guide the customer.

Implementation process

Start a trial

Select **Implementation setup**

Deploy **Printix Client**

Define networks

Any print servers?

Yes, print servers are in use

Discover printers on print servers

Discover printers

Additional networks?

Yes, there are more networks

If required, move printers to the right network

Convert print queues

Additional networks?

Yes, there are more **networks**

See separate diagram for the implementation of:
***Secure print**, **Mobile print**,*
…

TA Go live

Remove print servers

Deploy Printix Client

- If desired, do a **pilot** or staged deployment, where you start by deploying to a selected group of users and/or computers.
- You can also start by deploying to all.

Discover printers

- PREFERRED - **Discover printers** on print servers. Select **Discover printers** on the **Computer properties** page of the print server.
- This way, the current print environment is copied into Printix Cloud.

Convert print queues

- Select **Convert print queue** for a network to start printing through Printix. This way, you can go live with Printix one network at a time. Eventually, select the global **Convert print queue** on the **Settings** page.
- Optionally, do a cleanup and remove the unused print queues.

Optional configuration

- Automatically **Add** and **Remove** print queues.
- Change **print driver** or **print driver configuration**.
- Select **Via the cloud** on print queue to enable printing to the printer from another company network.
- **Set as default printer**.

- **Additional functionality**

  - Secure print
  - Mobile print
  - Capture and workflow
  - Cloud storage
  - Print from Chrome
  - Universal Print by Microsoft
  - Analytics and reports
  - Third-party Pull printing
  - Home office printing
  - Delegated print management
  - Cloud Print API

Additional functionality implementation

Start a trial

Perform the following steps once to create a subdomain (better known as Printix Home):

1. Visit printix.net and select **Free trial**.
2. Proceed with the steps described in Getting started in the *Printix Administrator Help*.

Start your free trial today

Sign up quickly and easily. No credit card needed.

Work email *

Full name *

Phone number

Company name *

Number of employees *

Country *

I am starting this trial as a:
◉ End customer
◯ Service provider

Subdomain *   .printix.net

By submitting this form you agree to the Printix Terms of Service and Privacy Policy.

Start trial

ⓘ Printix partners can also use the **Printix Partner Portal** to create a Printix Home.

Implementation setup

To customize your implementation:
1. Go to the **Settings** ⚏ page in Printix Administrator.
2. On the **Setup** tab:
   - **Allow users to add printers via Printix Client** is cleared.
   - **Print queue naming** is set to **Printer name without printer ID**.
   - **Create default print queue** is cleared.
   - **Convert print queues** is cleared.

3. On the **Secure print** tab:
   - In the **Print Later** section, clear **Enable Print Later**.
   - In the **Print Anywhere** section, delete the Print Anywhere print queues, then clear **Enable Print Anywhere**.

Deploy Printix Client

The Printix Client Microsoft Installer (MSI) package is available on the **Software** ⊚ page.

If preferred, do a pilot or staged deployment, where you start by deploying to a selected group of users and/or computers. You can also start by deploying to all.

See also:
- How to deploy Printix Client with Microsoft Endpoint Manager
- How to deploy Printix Client for Mac with Microsoft Endpoint Manager
- How to deploy Printix Client for Mac with Jamf Pro
- How to deploy Printix Client for Mac with Addigy
- Deploy Printix Client and have sign in postponed until restart
- Sign in issues

Accept Printix for all users

If **Authentication** is set to **Microsoft Entra ID**, select **Accept for all users**, so the automatic sign-in to Printix Client works on Microsoft Entra joined Windows 10 and 11 computers.

> ℹ️ You must have the global administrator role in Microsoft Entra ID to accept Printix for all users.
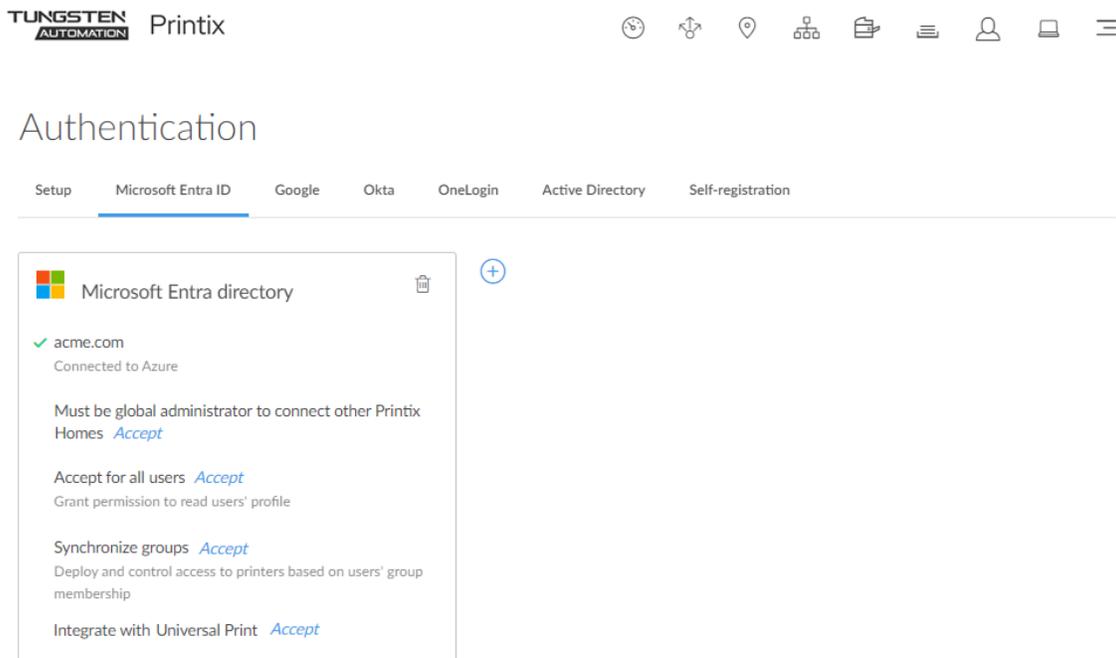
Define networks

As users sign in to the Printix Client, computers are registered and you can start to build your network structure by adding networks.

1. Select ☰ **Menu** > **Networks** ⊹.
2. Select **Unknown networks**.

   The gateway with the most computers is at the top and is probably the one you want to work with.

> ℹ️
> - To see diagrams and get a good understanding of networks, we recommend that you read Understanding networks.
> - If a CSV file with gateway IP and MAC addresses can be provided, Printix Configurator can be used to add networks. That way, you can add networks before computers are on them.

How to add a network/gateway from the computer properties page

This alternative method is useful if many unknown networks exist.

This method assumes you know of a computer that is on the network you want to add.

1. If you know the name of the computer, go to step 5. Otherwise, **Search** for the user whose computer is on the unknown network.
2. Enter part of the user's name or email.

   The search is not case-sensitive.
3. Select ⋮ and **Info** to see information about the user.
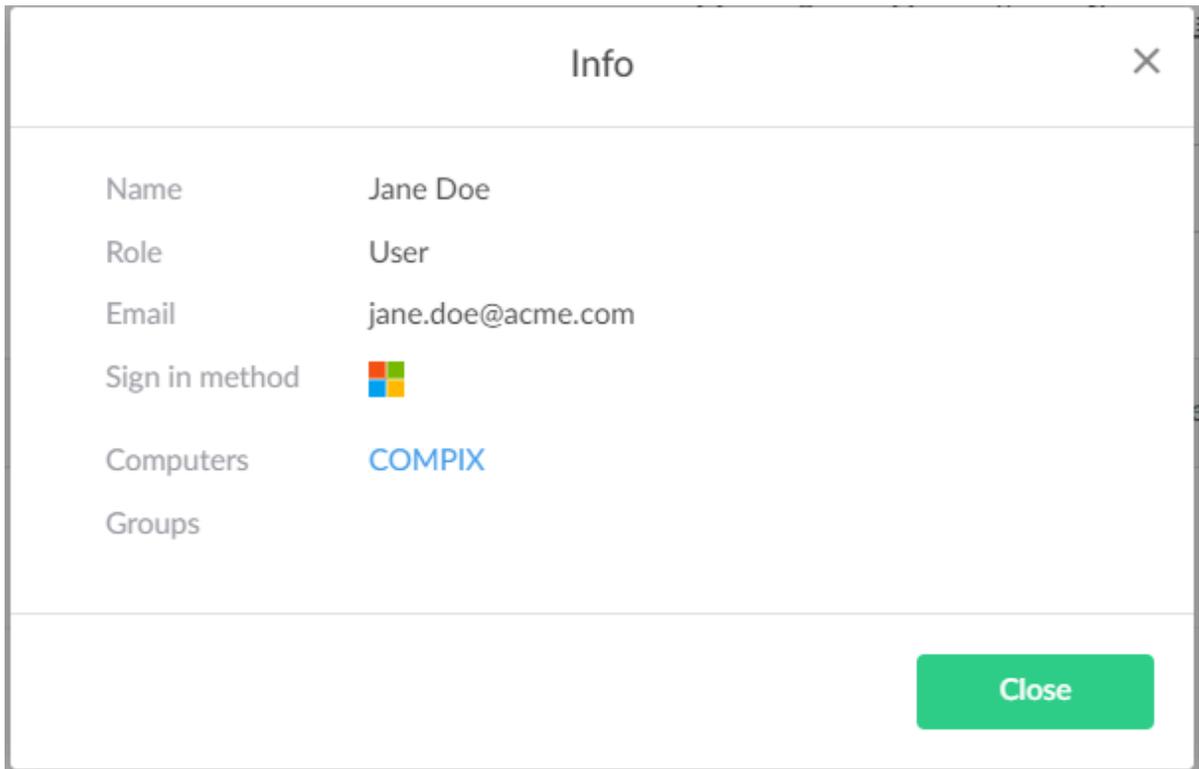
4. Select the **Computer** (COMPIX) link to open the **Computer properties** page.

5. On the **Computer properties** page, you can, for the gateway you want to add, either:
   - Select **Select network** to add the gateway to an existing network.
     - Select network. Optionally, enter part of the network name to **Search** for it. Select **Select network**.
   - Select **Create new network** to create a new network with this gateway.
     - Enter **Network name** and select **Create new network**.

> ℹ️ A computer with multiple network interfaces (Wi-Fi and LAN) is listed with a gateway for each of these.

Discover printers
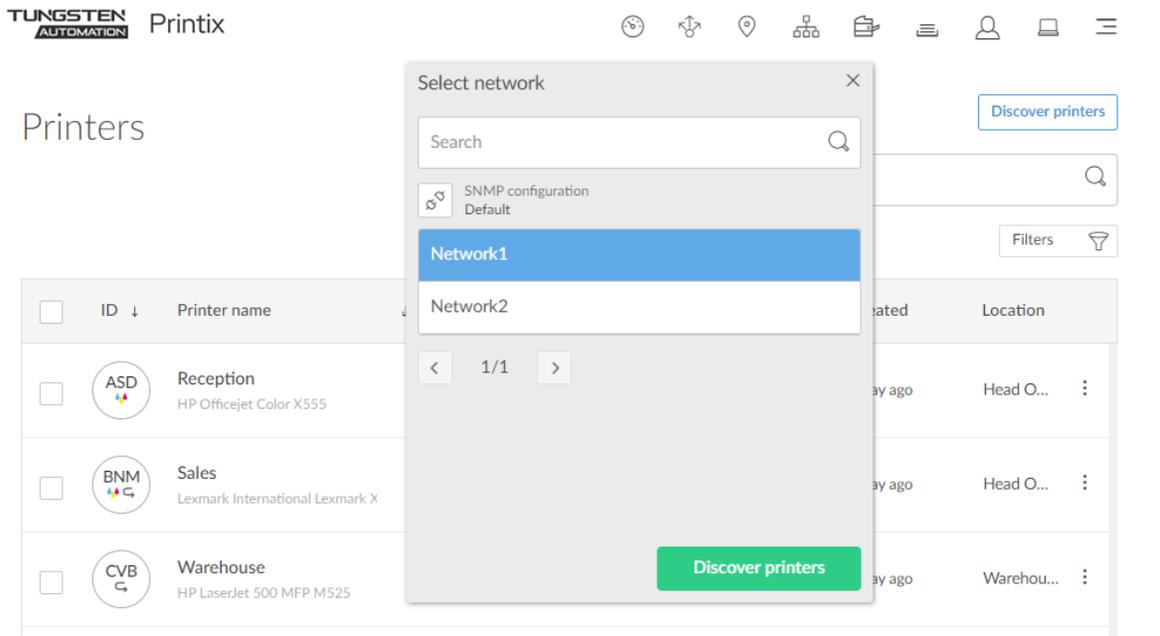
When you add networks, you can use **Discover printers** to add printers on that network.

For a printer to be registered, it must be online with **SNMPv1** enabled on the printer, and **Community name** must be set to public. If printers use a non-default SNMP configuration, add an SNMP configuration that matches the printer's and try to register the printer again.

ℹ️ If **Discover printers** reports "Found no new printers," your printers may be on a different subnet than the computer that performs the discovery. On the **Printers** 🖨 page, select **Add printer** ⊕ to manually add a printer from that subnet, and then do another discovery to find additional printers on that subnet.

See also:
- Printer registration issues
- Can I use label printers?

To start discovery from a specified computer (print server):

1. Open the **Computers** 🖥 page.
2. Select the computer (print server) and select **Modify**. Optionally, **Filter** on **Type** and select **Server**.
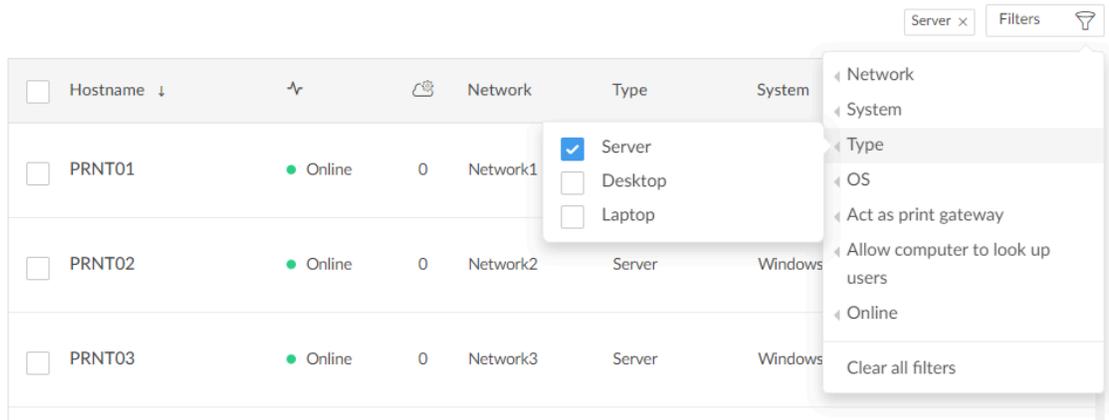
3. On the **Computer properties** page, scroll to the **Discover** section. Optionally, select an **SNMP configuration**.
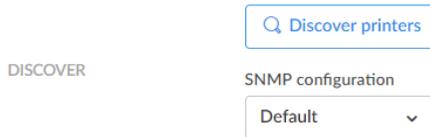
4. Select **Discover printers**.
5. Select **Confirm**.

> ℹ Printers discovered via a print server are assigned to the network of the print server. You can later move them to their actual network.

How to keep a record of your print server migration

If you need to migrate multiple print servers, we recommend that you keep a record of this with a table, such as the one below.

Print server	Discover printers	Printers migrated	If required, move printers to the right network	Remove print server	Comments
AMSPS01	Completed	Completed	Completed	Completed	
AMSPS02	Completed	Completed	Completed	Awaits upgrade of legacy application next month	

Print server	Discover printers	Printers migrated	If required, move printers to the right network	Remove print server	Comments
BERPS01	First run	8 out of 12 printers registered			Need to check SNMP configuration on remaining 4 printers
CPHPS01					Migration will start next week

- **Print server**

  Enter the hostname of the print server.

- **Discover printers**

  This must be started from the specified print server. If some printers are offline during the discovery, they will appear as unregistered. Then, you may have to try again. Also, a printer may appear as unregistered if it requires an SNMP configuration.

- **Printers migrated**

  Check that all the print server's print queues are now registered in Printix with the expected print driver and a print driver configuration. Windows 10 and 11 are set up the same as the print server.

- **If required, move printers to the right network**

  The printers discovered from the print server are assigned to the network of the print server. If the printers are actually on another network, you have to move the printers to that network. You can do that by selecting the printers on the **Printers** page and the select **Modify**.

- **Remove print server**

  Before removing the print server, you should verify that the print server's shared printers can be paused without causing inconvenience to any users. You should also verify that the server does not have additional roles, such as Domain Controller and File Server. Take the server offline. Unplug the network cable and leave it that way for a week or so: If no users complain, it is safe to decommission the print server.

Convert print queues

Check **Convert print queues** for a network to start printing through Printix. This way, you can go live with Printix one network at a time. Eventually, check the global **Convert print queue** on the **Settings** page.

Optionally, do a cleanup and remove the unused print queues.

ⓘ You can also [test conversion of print queues on a single computer](#).

During conversion, the port settings are modified to use an Internet port and allow printing through Printix.

- Network printers are converted if they are set up with a standard TCP/IP port or WSD port.
- Shared network printers are converted.

  Example: **Reception on PrintServer** becomes **Reception ASD**, **ASD Reception**, or **Reception** depending on the choice of **Print queue naming**.

  See Why is the shared print queue not converted right away?.
- Locally connected printers (USB) are not converted.
- No printers are converted on servers.

> ⓘ After deployment, do you see additional, unknown print queues in Printix Administrator? See Why are there additional print queues?.

Install Printix Go

Printix Go integrates with your printer's touchscreen control panel, offering secure print release, copy control, card-based authentication, and more.

- Printix Go supported printers and MFPs
- Install Printix Go
- How to install Printix Go on multiple printers

> ⓘ Printix Go on a printer can only be used with one Printix Home. If multiple companies need to use the same printer, another option is to add multiple Microsoft Entra directories or multiple Google domains.

Go live

Before you decide to go live, review these control questions:

- Were all the print queues, including print driver configurations, migrated from the printer servers?
- Are the proper print queues active?
- Should any print queues be added automatically?
- Are users' group memberships used correctly to deploy and control access to printers?
- Are the correct paper trays and paper sizes used?
- Should some print queues be deleted and/or updated?

You should consider the optional configuration:

- **Automatically add and remove print queues.**
- Configure print queues.

- Revoke some of the changes that were made as part of the **Implementation setup** on the **Settings** ⚙ page:
  - Select **Allow users to add printers via Printix Client**.
  - Select **Convert print queues**. Remember, you can control this per network. You can also test conversion of print queues on a single computer.
- Select **Via the cloud** on print queue to enable printing to the printer from another company network.
- Additional functionality implementation.
- Remove print server.

Configure print queues

ℹ If you have signed in through the Printix Partner Portal, your partner user account is not really part of the tenant, so you cannot add and work with print driver configurations or test printing.

See also:
- How to create print queues

- How to activate a print queue
- How to add print queues to computer
- How to add a print queue to computers
- How to set the default printer
- How to add groups to a print queue
  - How to enable Azure AD groups
  - How to enable Google groups
- How to change the print driver
- How to add a print driver
- How to see uploaded print drivers
- How to work with print driver configurations
- How to configure multiple print queues
- How to update print queues on computers
- Why are there additional print queues?

Additional functionality implementation
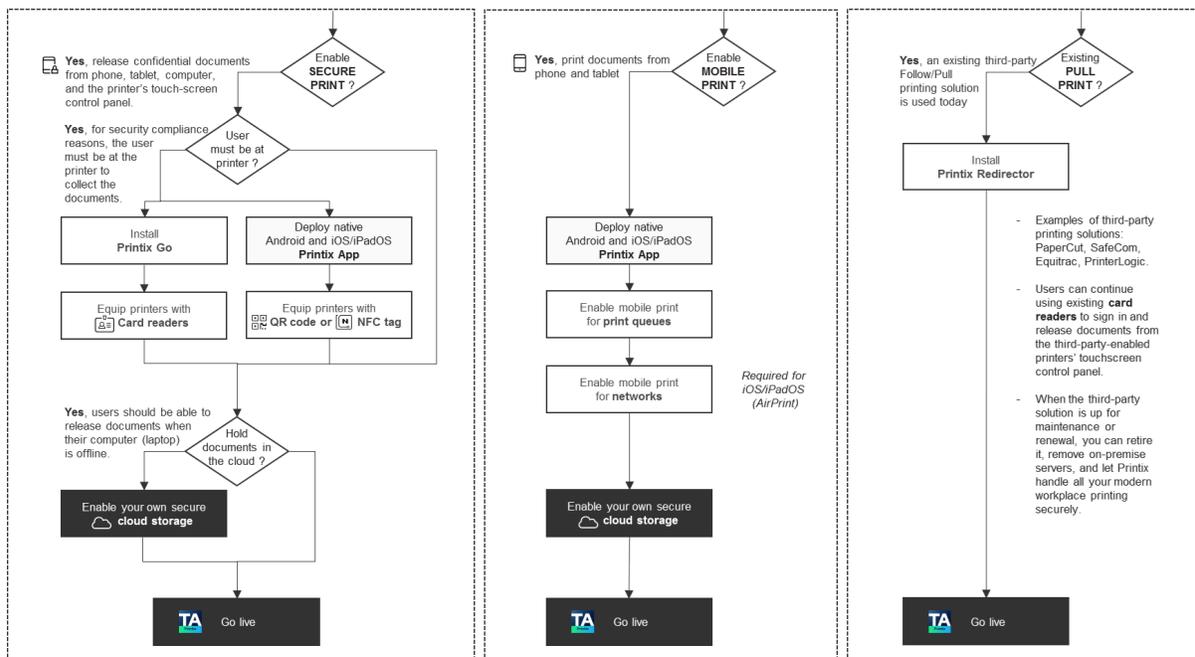
- Enable Print Later
- Enable Print Anywhere
  - How to add Azure Blob Storage
  - How to add Google Cloud Storage
- Enable mobile print
  - Print Anywhere documents can be released only to printers that have a print queue with **Via the cloud** selected.

- Enable third-party Pull printing

Remove print server

Before removing the print server, you should verify that the print server's shared printers can be paused without causing inconvenience to any users. You should also verify that the server does not have additional roles, such as Domain Controller, File Server, and so on.

Take the server offline. Unplug the network cable and leave it that way for a week or so. If no users complain, it is safe to decommission the print server.

Checklist

Use the checklist below to plan and track the progress of your Printix implementation.

Customer details

- **Company name**:
- **Contact person**:
- **Project timeline**
  - Date for **Implementation start**:
  - Date for **Go live**:
- **Motivation**
  - **Current pain point**:

Subscription

- **Billing frequency**: [Monthly | Annual]
- **Solution**
  - **Printix for Business**: [Yes | No]
    Number of users:
  - **Printix for Education**: [Yes | No]
    Number of staff:
- **Printix Implementation Pack**: [Yes | No]

  Priority Implementation Support, up to 2 hours and 12 months of Priority Support, and Technical Assistance. For two hours, within the first 90 days from the start of your Printix subscription service, an assigned expert will assist with the technical setup associated with Printix software.

Configuration details

Network ports and Internet endpoints that must be open
- See the *Printix Administrator Help* for a list of ports and Internet endpoints that must be unblocked. This is particularly relevant if a web proxy is used.

Printix Home

- **Printix Home**:

  The Printix web address (acme.printix.net). Use only: A-z,0-9,-

Authentication

- **Microsoft Entra ID**: [Yes | No]

  Users sign in with their **Microsoft** work or school account. Passwords are handled entirely by Microsoft Entra ID.

  - Multiple Microsoft Entra directories. Enter **Microsoft Entra directories**:

- **Google**: [Yes | No]

  Users sign in with their **Google Workspace** account (not gmail.com). Passwords are handled entirely by Google.

  - Multiple Google domains. Enter **Google domains**:

- **OIDC**: [Yes | No]

  Users sign in with their **OpenID Connect** account. Passwords are handled entirely by OIDC.

  - Multiple OIDC domains. Enter **OIDC domains**:

- **Okta**: [Yes | No]

  Users sign in with their **Okta** account. Passwords are handled entirely by Okta.

  - Multiple Okta domains. Enter **Okta domains**:

- **OneLogin**: [Yes | No]

  Users sign in with their **OneLogin** account. Passwords are handled entirely by OneLogin.

  - Multiple OneLogin domains. Enter **OneLogin domains**:

- **Email**: [Yes | No]

  Users must register and create a password, which is handled by Printix.

- Other methods

  - [Vertical | …] – Contact Product Support.

Groups

- Deploy and control access to printers based on users' and computers' **Group membership**: [Yes | No]

  Nested groups are not supported. To use this option, groups must be enabled:

  - Microsoft Entra groups

    A Microsoft Entra ID account with the global administrator role is required to enable groups.

  - Google groups

    A Google Workspace administrator account is required to enable groups.

Sites

- **One site**: [Yes | No]
- **Multiple sites**: [Yes | No]
  - **Number of sites**:
- **Delegate print management to site managers**: [Yes | No]

  To use this option, groups must be enabled:

  - Microsoft Entra groups

A Microsoft Entra ID account with the global administrator role is required to enable groups.

- Google groups

    A Google Workspace administrator account is required to enable groups.

Networks

- **Single network**: [Yes | No]
- **Multiple networks**: [Yes | No]
- **Zero trust networks**: [Yes | No]
    - Can CSV file with gateway IP and MAC addresses be provided: [Yes | No]

        To be used with **Printix Configurator**.

Print servers

- **One print server**: [Yes | No]
- **Multiple printer servers**: [Yes | No]
    - **Number of print servers**:

> ℹ️ If the print server's Windows Server OS is 2012 or older and has not been updated for a while, a Windows update should be scheduled during off-peak processing hours.

Printers

- **All printers use default SNMP configuration**: [Yes | No]
- **Some printers use non-default SNMP configuration**: [Yes | No]
    - **Name of person** to contact for additional information:
- Are there label printers: [Yes | No]

Computer operating systems

- **Windows**: [Yes | No]
- **macOS**: [Yes | No]
- **Chrome OS** (**Printix Chromebook**): [Yes | No]
- Other
    - **Azure Virtual Desktop**: [Yes | No]
    - **Citrix**: [Yes | No]
    - **Remote Desktop Services (RDS)**: [Yes | No]

Printix Client deployment method

- **Microsoft Endpoint Manager**: [Yes | No]
- **Alternative deployment of MSI file**: [Yes | No]
    - **Name of deployment system**:
- **Download link** (Example: acme.printix.net/download): [Yes | No]

Additional functionality

Secure print
- **Enable Print Later**: [Yes | No]
- **Enable Print Anywhere**: [Yes | No]
- **Printix App**: [Android | iOS/iPadOS | Web]
- Printer ID sign with **QR code** mounted on printers: [Yes | No]
- Register printers with **NFC tag**: [Yes | No]
- Install **Printix Go** so users can sign in at printers with ID code or card to release documents: [Yes | No]
  - Sign in with **ID code**: [Yes | No]
  - Sign in with **Card**: [Yes | No]
  - **Card reader model**:
  - **Printer models**:

> ℹ️
>
> - Printix Go on a printer can only be used with one Printix Home. If multiple companies need to use the same printer, another option is to add multiple Microsoft Entra directories or multiple Google domains.
> - Printix Go is available for selected models from Epson, HP, Konica Minolta, Lexmark, Ricoh, and Xerox. Make sure to check the requirements.

Capture and workflow
- **How to get started with capture and workflow**
  - Want to capture at the printer: [Yes | No]
  - Want to capture with mobile: [Yes | No]
  - **Email** ✉ as workflow destination: [Yes | No]
  - **Microsoft OneDrive** ☁ as workflow destination: [Yes | No]
  - **Microsoft SharePoint Online** 🗊 as workflow destination: [Yes | No]
  - **Printer models**:

Cloud storage
- Store pending documents in the customer's **Cloud storage**: [Azure Blob Storage | Google Cloud Storage]

Mobile print
- **Enable mobile print** to allow printing from Android and iOS phones and tablets: [Yes | No]
  - Printix Anywhere: [Yes | No]
  - Additional print queues. Enter **Name of print queues**:

Universal Print by Microsoft
- **Integrate with Universal Print**: [Yes | No]

Third-party Pull printing

- **Printix Redirector**: [Yes | No]

  Enable printing to so-called Follow/Pull print queues from PaperCut, SafeCom, Equitrac, PrinterLogic, and similar third-party printing solutions.

Cloud Print API

- **Printix Cloud Print API**: [Yes | No]

  Push print jobs in printer-native or PDF format into a Printix print queue.