

Windows Protected Print “WPP” Entra Id and Universal Print Overview

Microsoft Modern Print Platform

Windows Protected Print (WPP)

One of the pillars of modern print is Windows Protected Print mode. When enabled, WPP communicates directly with the printer from the Windows OS using IPP (Internet Printing Protocol). Printing is executed at the application level, enhancing security by preventing vulnerabilities associated with legacy print drivers. When enabled, conventional print drivers in the system are eliminated. The current line of Sharp MFPs and printers support WPP.

New Security-Enhanced Printing Platform

- Communicates directly with printer using IPP
- Protects against vulnerabilities of legacy printing
- Eliminates 3rd party print drivers

Some advanced features are not supported
Microsoft enabled vendors to develop Print Support Apps (PSA)

Modern print is Windows' preferred means of communicating to printers. Modern print does not require the installation of print drivers, providing a simple, streamlined, and secure printing experience.



WPP (Windows Protected Print) - Timeline

Phase 1: Introduced (Oct 1, 2024)

Released with **Windows 11 24H2**

Optional / opt-in only

Disabled by default

Goal: let orgs start testing driverless, secure printing



Phase 2: Early adoption (2025–2026)

Available in Windows 11 + Server 2025

Still **not enforced**

Vendors (Sharp, HP, Paper Cut, etc.) are:

Updating firmware

Building Print Support Apps (PSA)

Aligning with **IPP + Mopria**

Phase 3: Default ON (target ~2027)

Microsoft plans to enable WPP **by default** in Windows

Legacy print drivers effectively **phased out**

Organizations must be WPP-ready

Future state (~2027 and beyond)

WPP becomes **default ON in Windows**

Microsoft is **ending support for third-party drivers**

Even if you disable WPP

Old drivers may stop being updated.

Be blocked by security controls.

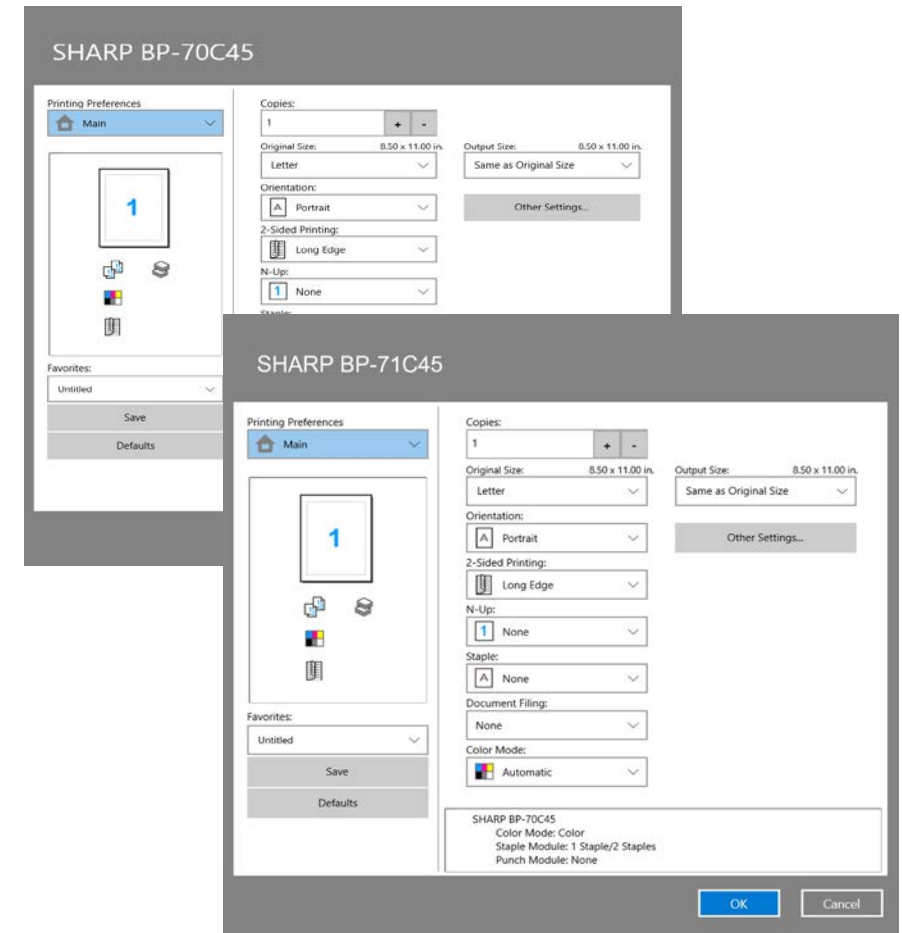
Break with future Windows updates

Windows Protected Print (WPP)

Sharp Print Support App (PSA)

Some advanced printing features are not available in WPP mode. To address this, Microsoft has allowed printer manufacturers to develop Print Support Applications (PSAs). The Sharp PSA enhances the printing experience in Windows by customizing generic IPP class drivers. It provides advanced printing features for a more customized user experience. The Sharp PSA adds features for Sharp MFPs and printers that are not available with the generic IPP class driver, such as advanced paper handling, media selection, and device-specific settings. The Sharp PSA is available for most Sharp models.

- **Sharp PSA**
 - Delivers advanced print capability
 - Offers strong security and easy setup
 - Can be used in WPP mode or with native printing



Sharp Print Support App

Sharp PSA – Printer Service Support App

Sharp PSA = a lightweight Windows app that replaces the traditional print driver.
It works with WPP (Windows Protected Print) IPP printing
It integrates with the Microsoft IPP Class Driver (built into Windows)

Why PSA exists

Under WPP: No third-party print drivers allowed.
Only Microsoft's universal driver (IPP Class)
It enables the WPP future
WPP = no drivers
PSA = only way to extend functionality
It aligns with Microsoft's direction: Microsoft wants Driverless printing

App-based customization
Identity-based access
Cloud-first management, PSA is the **bridge** between Generic Windows printing and Vendor-specific features.
Sharp PSA is the replacement for print drivers, it restores device features in a driverless, WPP-based world.

Microsoft Entra ID

Microsoft Entra ID (formerly **Azure Active Directory / Azure AD**) is Microsoft's **cloud-based identity and access management (IAM) service**.

Think of Entra ID as the system that verifies **who you are** (authentication)

Decides **what you can access** (authorization)

Every print job is tied to a user account

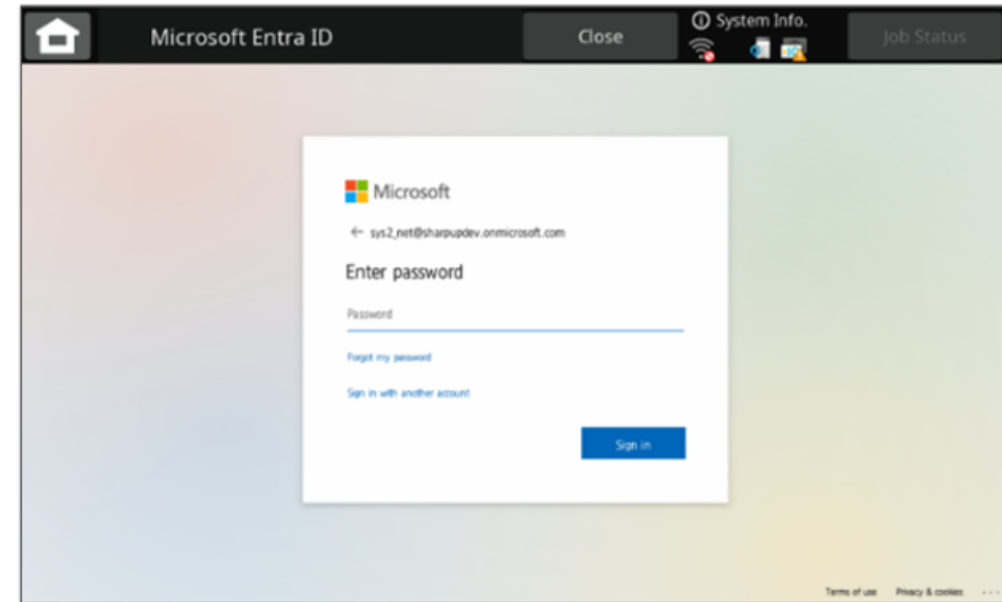
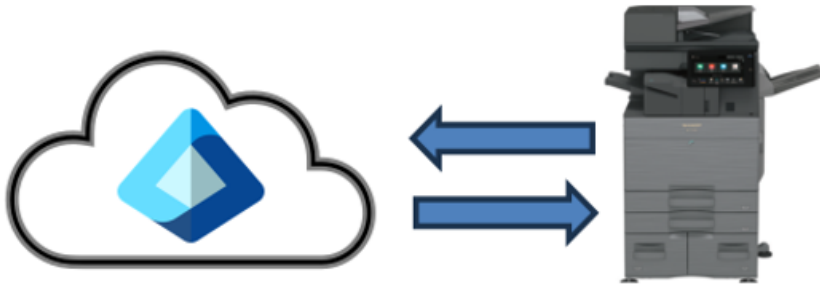
Access to printers is controlled via users/groups

Printers become just another secure resource, like SharePoint or Teams.

Microsoft Entra ID User Authentication

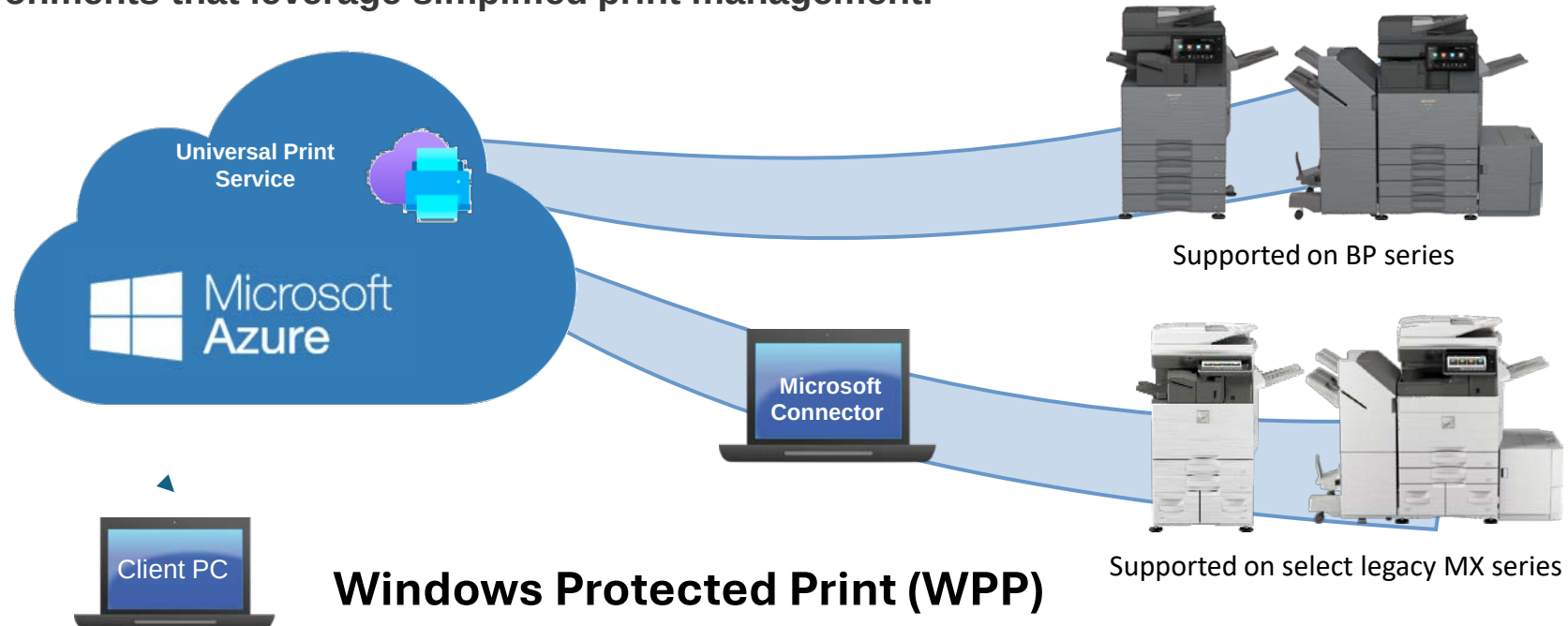
Identity Management for Microsoft Services

- Easy authentication for pure Microsoft Azure environments
- Walk-up access from Sharp MFPs at the panel
- Seamless integration with global address book access to search as a logged-in user



Native Support for Universal Print

Universal Print cloud service makes it easy to integrate with Microsoft 365 environments that leverage simplified print management.



Windows Protected Print (WPP)

No drivers needed for a simple, secure experience.

Sharp Print Support App (PSA)

All current Sharp MFPs and printers support WPP.

Microsoft Universal Print

Sharp integrate **Microsoft Universal Print**:

- No local print servers needed
- Printers are managed in the cloud
- Authentication handled by Entra ID

Benefits

- Less infrastructure to support
- Easier deployments across sites
- Works remotely/hybrid
- Users don't need separate credentials for printers.
- Same login as: Windows, Outlook / M365
- Sometimes even **password-less login via phone/device code**
- Faster and fewer support calls - Better user experience

Sharp MFPs integrate Entra ID because:

They support **Microsoft Universal Print (cloud printing)**

Enterprises already using Entra ID - **no need for separate printer accounts**

Fits **Zero Trust and cloud-first environments**

Printers now use Entra ID because printing is no longer just a device function, it's part of an organization's identity and security ecosystem.

SHARP®

Registering a device in Universal Print

Must be done via Device Web interface

Status

Address Book

Document
Operations

User Control

System
Settings

Network Settings

Quick Settings

Network Name Setting

Interface Settings

Services Settings

Print Port Settings

External Print Services
Settings

AirPrint Settings

Universal Print Settings

LDAP Settings

Active Directory Settings

Public Folder / NAS Setting

Proxy Setting

Wireless Settings

Easy Connection Setting

Bluetooth Setting

Device Web Page Setting

Universal Print Settings

Submit(U)

Update(R)

 Back to Menu List

Universal Print:

Enable 

Status:

Not Registered

Printer Name:

SHARP BP-70M31 (2501654800) (Up to 63 characters)

Register with Universal Print

Execute(J) 

Submit(U)

Update(R)

Go to System Settings / Network Settings / Universal Print.
Select execute.

- Status
- Address Book
- Document Operations
- User Control
- System Settings

- Network Settings
 - Quick Settings
 - Network Name Setting
 - Interface Settings
 - Services Settings
 - Print Port Settings
 - External Print Services Settings
 - AirPrint Settings
 - Universal Print Settings
 - LDAP Settings
 - Active Directory Settings
 - Public Folder / NAS Setting
 - Proxy Setting
 - Wireless Settings
 - Easy Connection Setting
 - Bluetooth Setting
 - Device Web Page Setting

Universal Print Settings

[Submit\(U\)](#) [Update\(R\)](#)

[Back to Menu List](#)

Universal Print:

Enable ▼

Status:

Registering

Printer Name:

SHARP BP-70M31 (2501654800) (Up to 63 characters)

Registration Code:

HKZMLE2V4

To complete the registration, go to the following URL and enter the registration code.

<https://login.microsoft.com/device>

Registration code is valid for 15 minutes.

[Submit\(U\)](#) [Update\(R\)](#)

Step two select link

Step one Copy code

Step two, proceed through customers Microsoft authentication.



Enter code to allow access

Once you enter the code displayed on your app or device, it will have access to your account.

Do not enter codes from sources you don't trust.

HKZMLE2V4|

Next

Step one, Enter Copied Code and choose Next.



Pick an account

You're signing in to **SHARP Universal Print Hardware Client** on another device located in **Canada**. If it's not you, close this page.



Jones, Craig
JonesCr@sharp.ca
Signed in



bsd@sharptechsupport.onmicrosoft.com



craig@sharptechsupport.onmicrosoft.com



JonesCr@sharpsec.com



Use another account

Back

After successful Microsoft Authentication



SHARP Universal Print Hardware Client

You have signed in to the SHARP Universal Print Hardware Client application on your device. You may now close this window.

Status

Address Book

Document
Operations

User Control

System
Settings

Network Settings

Quick Settings

Network Name Setting

Interface Settings

Services Settings

Print Port Settings

External Print Services
Settings

AirPrint Settings

➤ Universal Print Settings

LDAP Settings

Active Directory Settings

Public Folder / NAS Setting

Proxy Setting

Wireless Settings

Easy Connection Setting

Bluetooth Setting

Device Web Page Setting

Universal Print Settings

Submit(U)

Update(R)

Back to Menu List

"Your request was successfully processed."

Universal Print:

Enable ▼

Status:

Registered

Printer Name:

SHARP BP-70M31 (2501654800)

(Up to 63 characters)

Delete from Universal Print

Execute(J)

Submit(U)

Update(R)

Submit to complete, may take a moment to
show registered.

View of Registered Printers in Microsoft Azure Universal Print

Microsoft Azure

Search resources, services, and docs (G+ /)

Copilot

🔔

⚙️

?

🗨️

JonesCr@sharp.ca
SHARP ELECTRONICS CORPORAT...

Home > Universal Print

Universal Print | Printers

🔍 Search

🔗 Share

✕ Unregister

🔄 Refresh

🔧 Edit columns

⬇️ Download

🗨️ Give feedback

Overview

Manage

Printers

Printer shares

Pull-print printers
(Universal Print anywhere)

Connectors

Monitor

Usage and reports

Configure

Settings

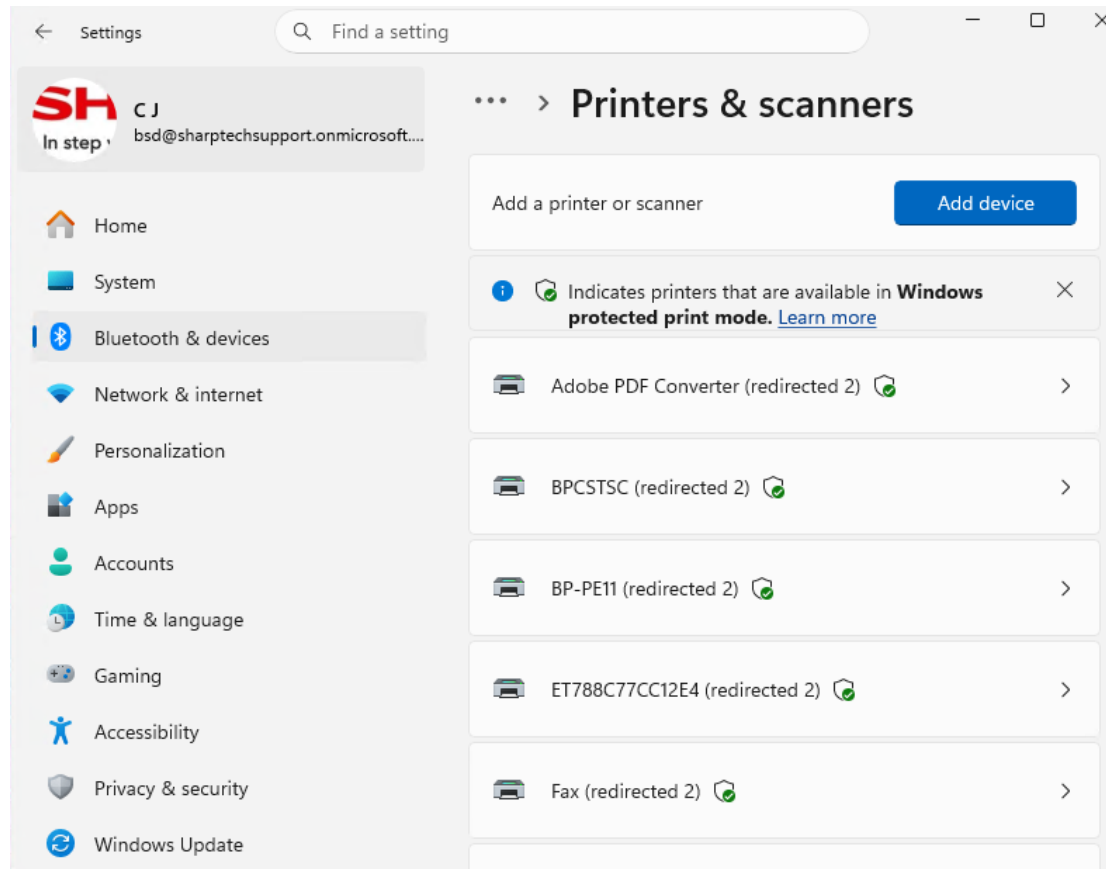
Support & feedback

Add Filter

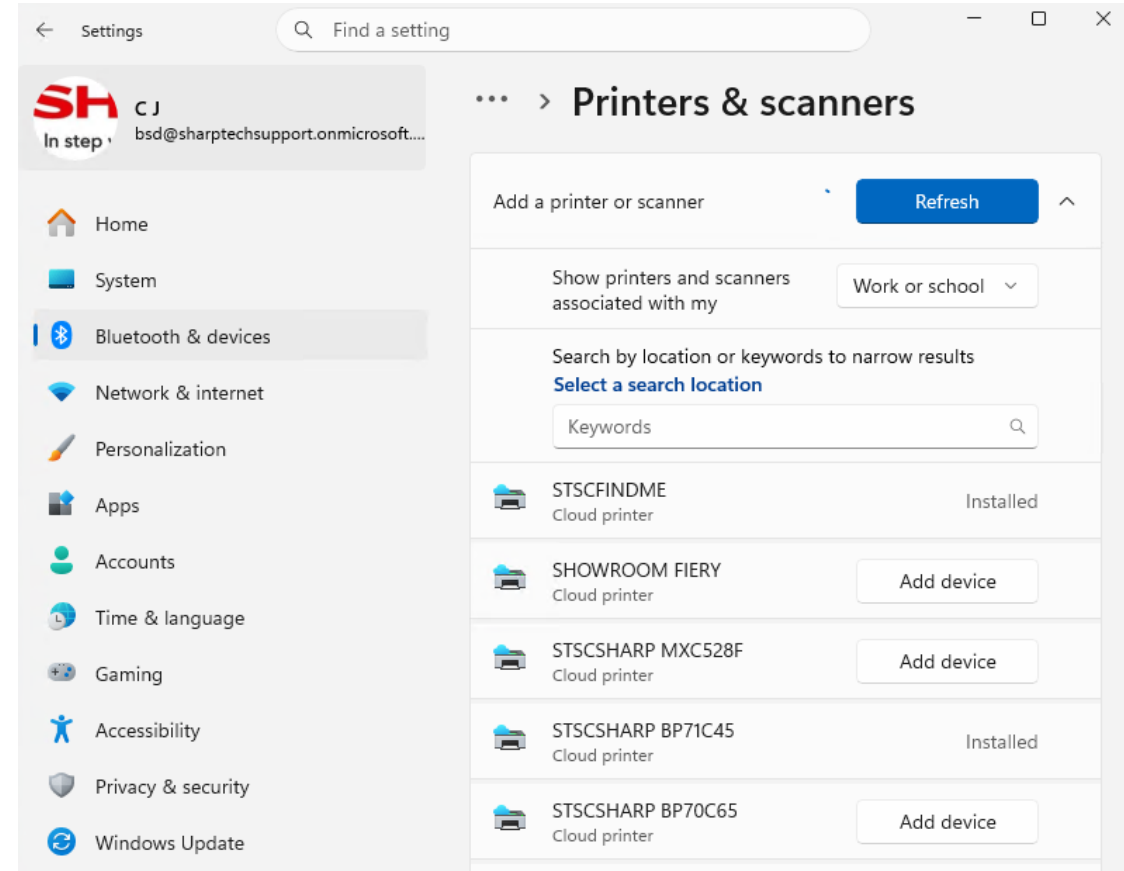
🔍 Search by printer name, manufacturer, or model

☐	↕ Name	↕ Printer Status	Share Status	Share Name	Last Seen
☐	SECL 4070N	🟢 Ready	🟢 Shared	SECL 4070N PCL6	
☐	SHARP BP-71C55 (5507911800)	⚠️ Warning	🔴 Not shared		1 minute ago
☐	Sharp MX-6070V 95128901 (Dynabook Americas)	🟢 Ready	🟢 Shared	Sharp MX-6070V 95128901 (Dynabook Americ...	1 minute ago
☐	SHASECL RP BP-70C55 (2513207800)	⚠️ Warning	🟢 Shared	SECL BP-70C55 (2513207800)	
☐	Sharp MX-4070N 5508581Y (Irvine Near Rear Exit Door)	🟢 Ready	🟢 Shared	Sharp MX-4070N 5508581Y (Irvine Near Rear E...	1 minute ago
☐	SHARP BP-70M31 PCL6	🟢 Ready	🟢 Shared	SHARP BP-70M31 PCL6	
☐	MX-4070N	🟢 Ready	🟢 Shared	MX-4070N	1 minute ago
☐	Sharp MX-3570N 65119281 (SEC OC Lab)	🟢 Ready	🟢 Shared	Sharp MX-3570N 65119281 (SEC OC Lab)	1 minute ago
☐	BP-50C26	🟢 Ready	🟢 Shared	BP-50C26	1 minute ago
☐	SECL 70C55	🟢 Ready	🟢 Shared	SECL 70C55 Share	

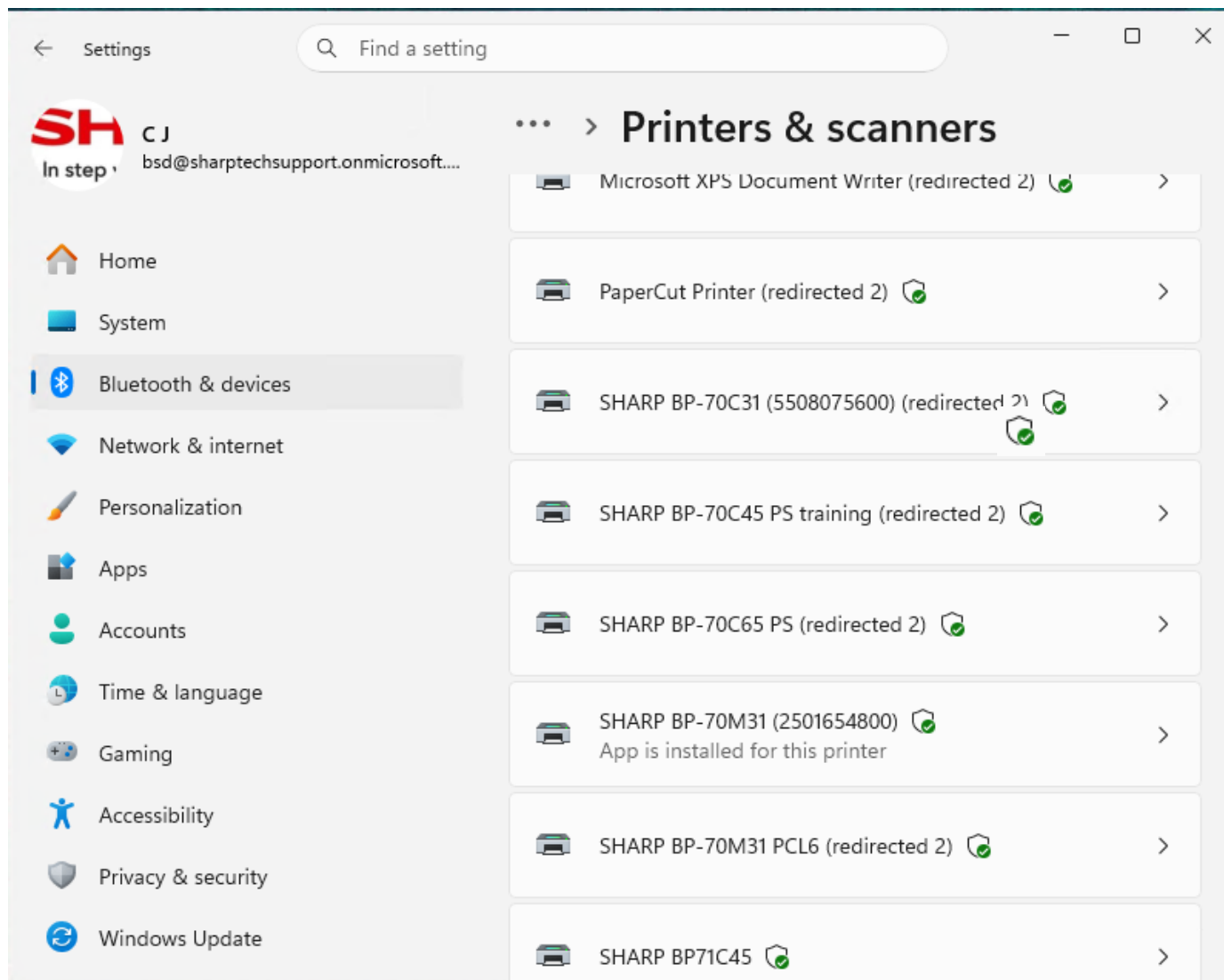
Adding Universal Printers or WPP Supported Printers



From Printers and Scanners Select add device

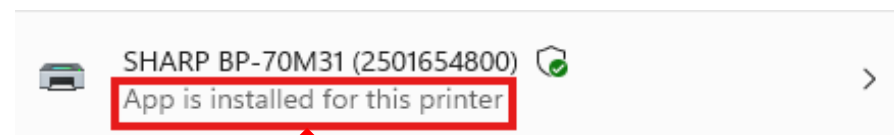


Universal Printers have a Cloud above the Printer Icon



New icons and Information messages

Printer is supported when WPP is enabled



The Sharp PSA App is installed for this printer.