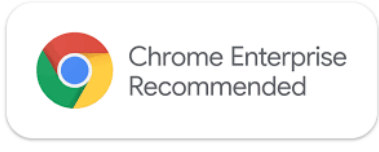


Celiveo 365

Cyber-Secure Cloud Printing, AI extensions

July 2025

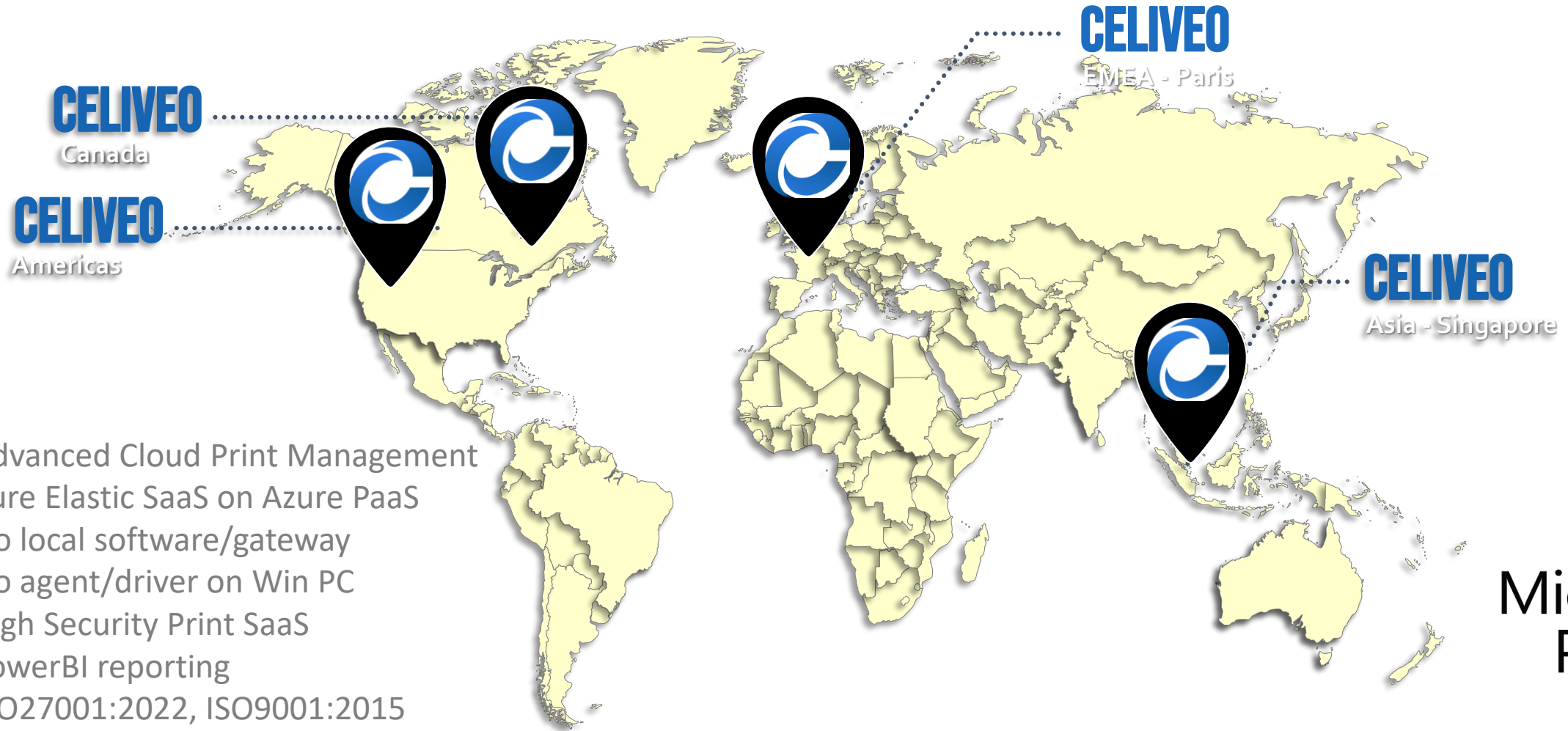


High Security SaaS on PaaS for Pull Print & scan
with Zero-Trust-Access Security, Dual Encryption, Entra ID SSO,
Azure Datacenters in EU, US, Singapore, Mexico



Celiveo at your service

Protecting large corporations' documents and printers since 1994



- Advanced Cloud Print Management
- Pure Elastic SaaS on Azure PaaS
- No local software/gateway
- No agent/driver on Win PC
- High Security Print SaaS
- PowerBI reporting
- ISO27001:2022, ISO9001:2015

Microsoft
Partner

Secure Cloud Printing

Celiveo 365



Home Printers

Home Office
Release on home printers

Printers on VLAN

No local Scout

Corporate Office
Print at HQ and any branch

No VPN needed

G57

Print From Anywhere
Release on Office Printers

No VPN needed

Print @ Shared Office
Release on any IPP Printer

Add High Security Pull Print, PIN/Badges to Microsoft Universal Print

Secure Pull Print for Universal Print with all features expected by Enterprise Companies

Elastic SaaS on Azure PaaS

Adds features to Universal Print

Fast & easy printers onboarding

Friendly UI portal, replaces Azure

Create Universal Print queues



Configure high Security Pull Print

AI-DLP, AI Data Loss Prevention

Power BI reporting on usage, cost

ISO27001:2022 certified company

...

Universal Print
(no agent/driver)

Agent for MacOS

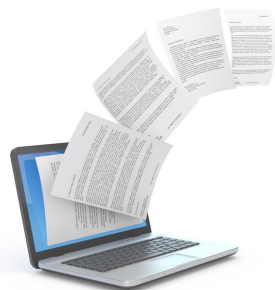
Fast spooling

Entra ID SSO

AES256 crypto

Web mobile print

...



NFC Tap & Release

Pull Print iOS/Android

BYOD WebApp & App

Printer finder

Floor maps

Entra ID SSO support

Print @ home office

...



Universal printers support

Card reader, PIN, NFC, SSO

Follow-me Pull Print

Access Control on MFP

Advanced Print rules

Zero-Trust-Access TLS

Secure scan to OneDrive

Usage & Cost tracking

...



Making printers the natural extension to Microsoft 365 projects

Full Cloud pull printing, SFP/MFP access control, print rules and usage tracking – with Zero-Trust-Access Cyber Security



Cloud print queue natively built into Win 10/11, Windows 365, Azure Virtual Desktop, Google Chromebook Ent. or thin client for Win/MacOS, iOS/Android WebApp & App

No PC, gateway or service between PC, printers and the Microsoft Cloud.



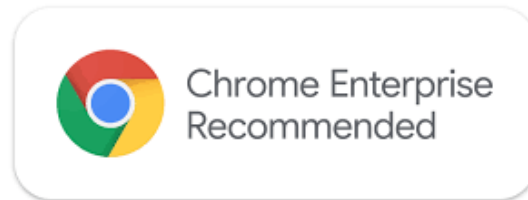
- No VPN ✓
- No Printer Driver ✓
- No Solution Server ✓
- No Cloud VM ✓
- No Local Install ✓

Printing easily from anywhere

Microsoft Universal Print and beyond (MacOS, ERP, legacy print servers...)



Plug-in to Microsoft Universal Print
Plug&Play for Microsoft Enterprise clients,
Win 10/11/365, Azure Virtual Desktop



The only Zero-Trust-Access certified
Print solution for Chrome-Enterprise



SAP S/4AHANA Cloud print support,
front-end, back-end through
the Microsoft Universal Print connector
(with SAP print job User ID: Q4 2025)



Celiveo Shared Virtual Printer
for Windows 10/11 print servers*,
when Universal Print Queue or Win/Mac
Celiveo agent can't be used and for on-
premises ERPs (ie: JDE, Oracle, and custom
apps



Celiveo Virtual Printer for Windows 10/11,
ideal when Universal Print Queue can't be used



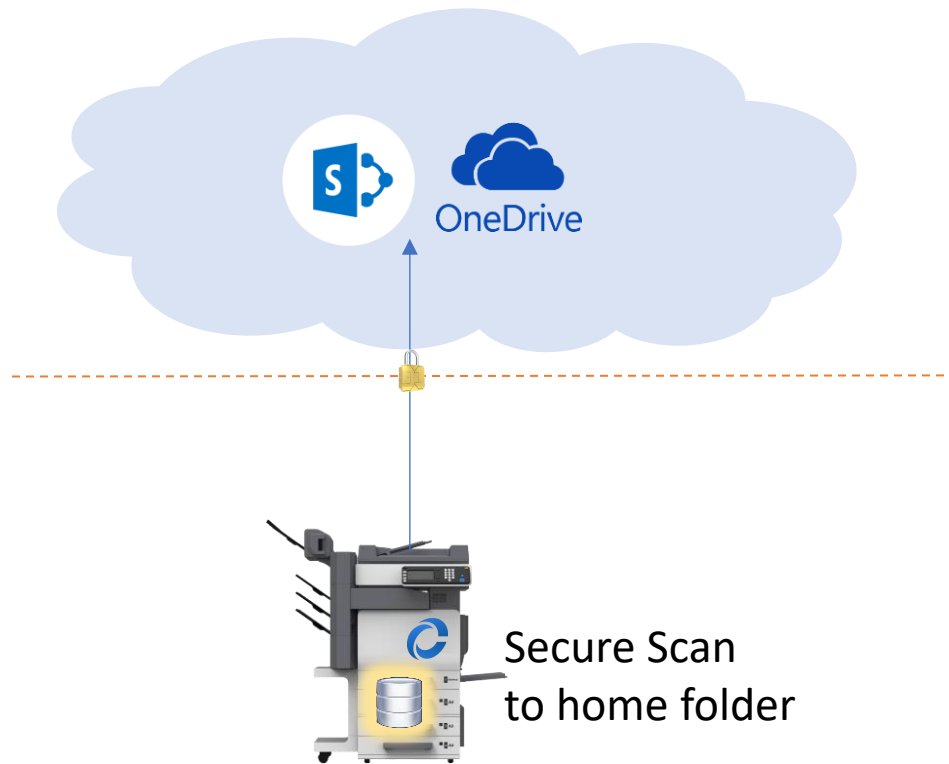
Celiveo Virtual Printer for MacOS,
Ideal when Universal Print Agent can't be used



Sending documents for pull-print
from iOS/Android
App, WebApp and web portal

Celiveo 365: Peer-to-peer Scan to Microsoft 365

No gateways, Certificate-based Zero-Trust-Access, Cyber-Secure, 100% Cloud, Scan to Sharepoint & OneDrive



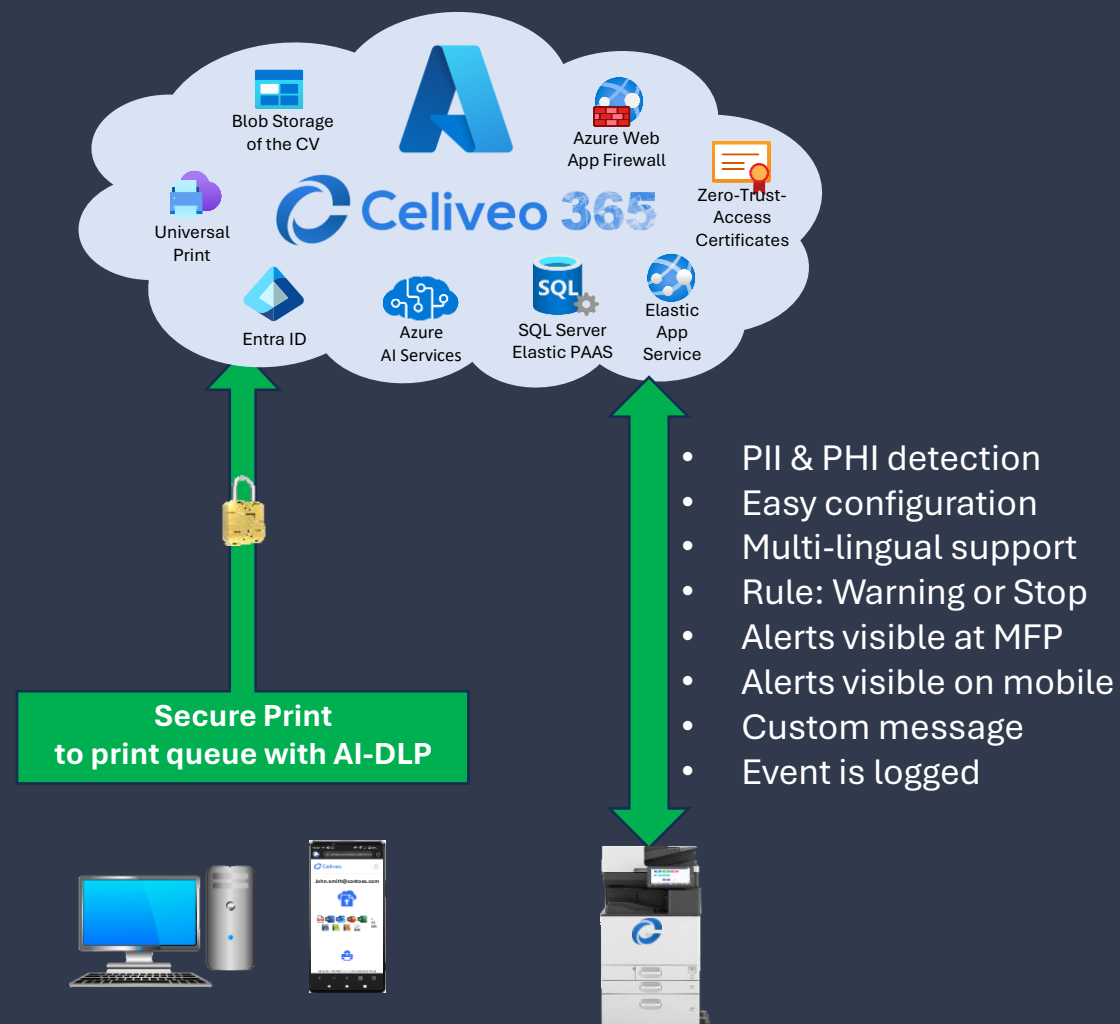
- Direct communication from printer to the end-user OneDrive/Sharepoint
- Celiveo 365 Cloud is not in workflow
- Data stays in the authorized territories
- Microsoft AAD user tokens don't travel, are not shared
- Scan to OneDrive/Sharepoint/MailJet/SMTP

- Embedded agent running inside MFP
- Fast user authentication with IDCode or card
- No software to install locally/run, no solution hardware
- Released: June 2025 on Ricoh MFP
- Further releases: August 2025 on Lexmark MFP

Celiveo 365 AI-Data Loss Prevention

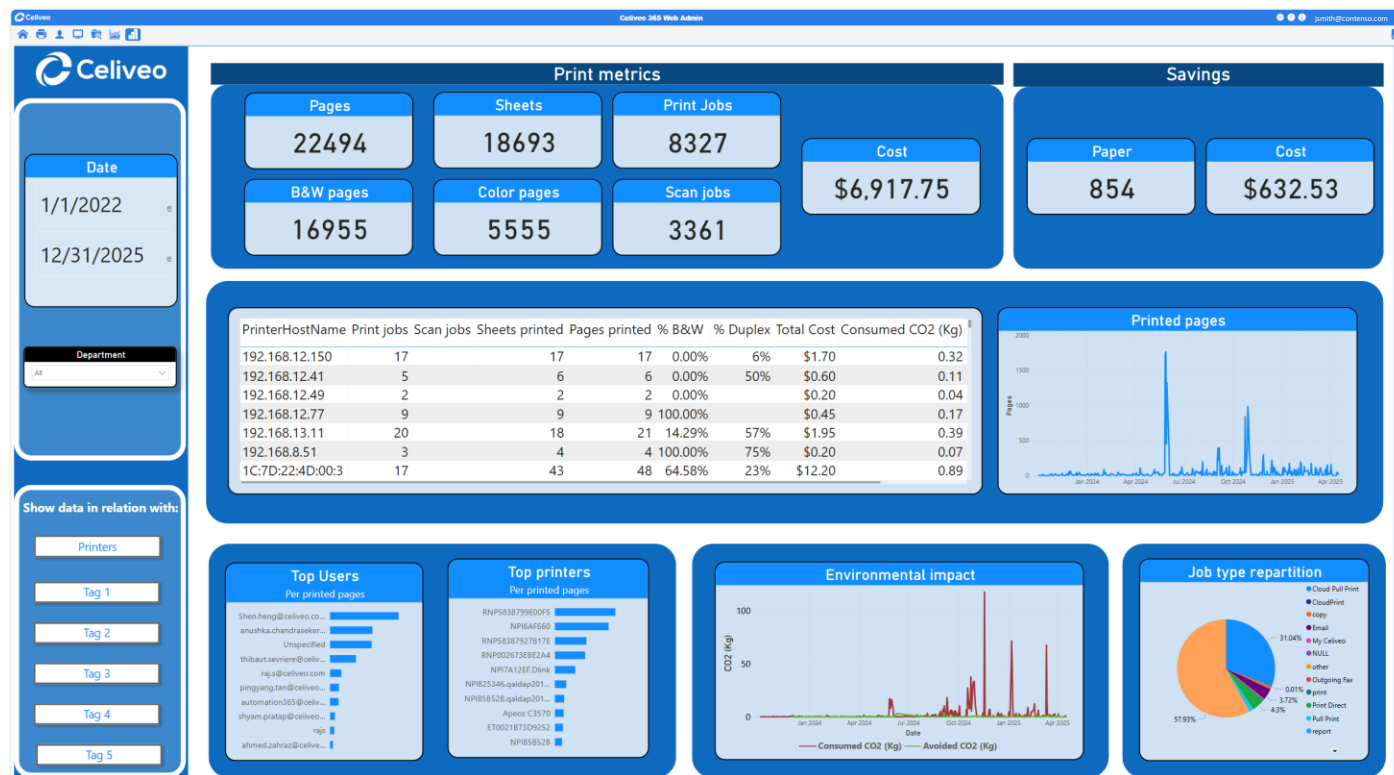
Doc Compliance module

- Reduce **document security risks** associated with malicious activity, employee neglect, and content proliferation
- Apply **AI-Data Loss Protection** to defend against unintentional exposure of confidential or proprietary data in printed documents
- Advanced **cognitive system** capable of analyzing documents using **Azure AI Services**
- Flagged documents are **flagged**, information is logged, and user may or may not override the **freeze**
- Activation is per print queue with **Entra-ID IAM**, 20 pages per user/month, shared across users



Big data Reporting

Using Microsoft Power-BI power to deliver useful report on usage tracking big-data



- Power BI dynamic dashboard
- Analyze print/scan/fax cost and usage
- Environmental impact report
- 5 columns linked automatically to 5 Entra ID attributes, to facilitate bill-back
- Raw data export for on-premises processing

An extensive printer support

A Brand-Agnostic Print Management Solution, PIN, badge, NFC with mobile authentication

SMART PRINTERS, MFP AND LFP

Celiveo Embedded Agent
No software/service required on LAN



HP FutureSmart



Lexmark eSF 5/6/7 compatible



Advanced HP DesignJet/PageWide XL



Ricoh SOP 2.X/3.X

On-Screen, PIN & Card reader

ACTIVE PRINTERS, MFP

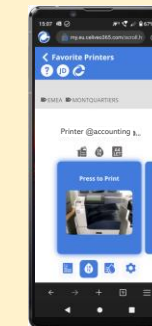
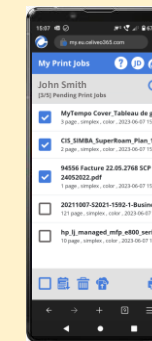
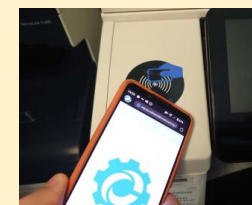
Universal Printer Endpoint IoT service
required on LAN to add Zero-Trust-Access



On-Screen, PIN & Card reader

OTHER LAN PRINTERS

Universal Printer Endpoint IoT service
required on LAN to link to Cloud, high security



And all LAN printers that are IPP 2.0 compliant

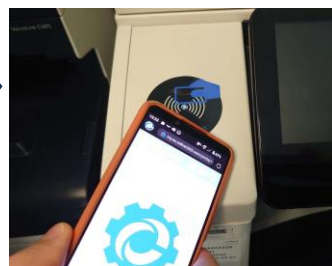
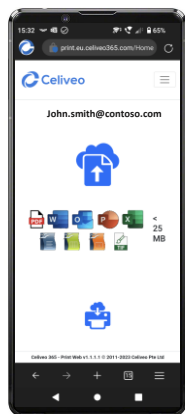
On iOS/Android, NFC, Entra ID

Releasing print jobs using smartphone (no app needed)

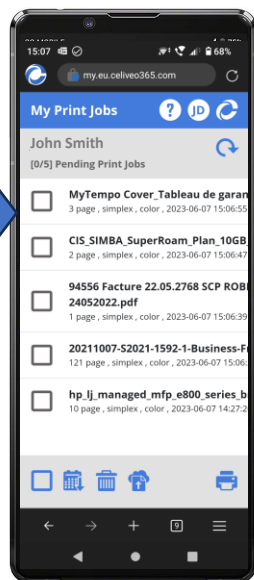
- Use Smartphones to locate printers, list jobs, release print jobs



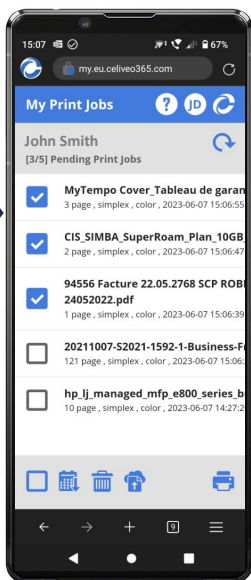
Microsoft
Universal Print,
Celiveo PC agent,
Celiveo Web Portal
or Celiveo Mobile



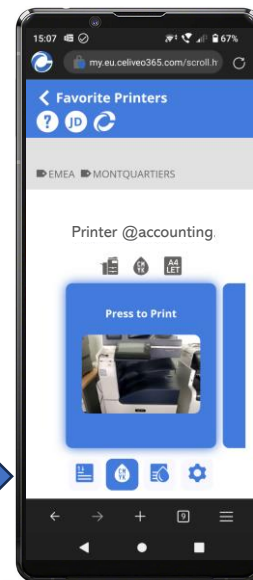
Tap phone on NFC tag
affixed to printer



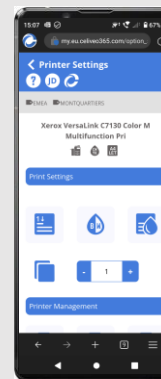
Jobs are listed



Select Print Jobs
to release



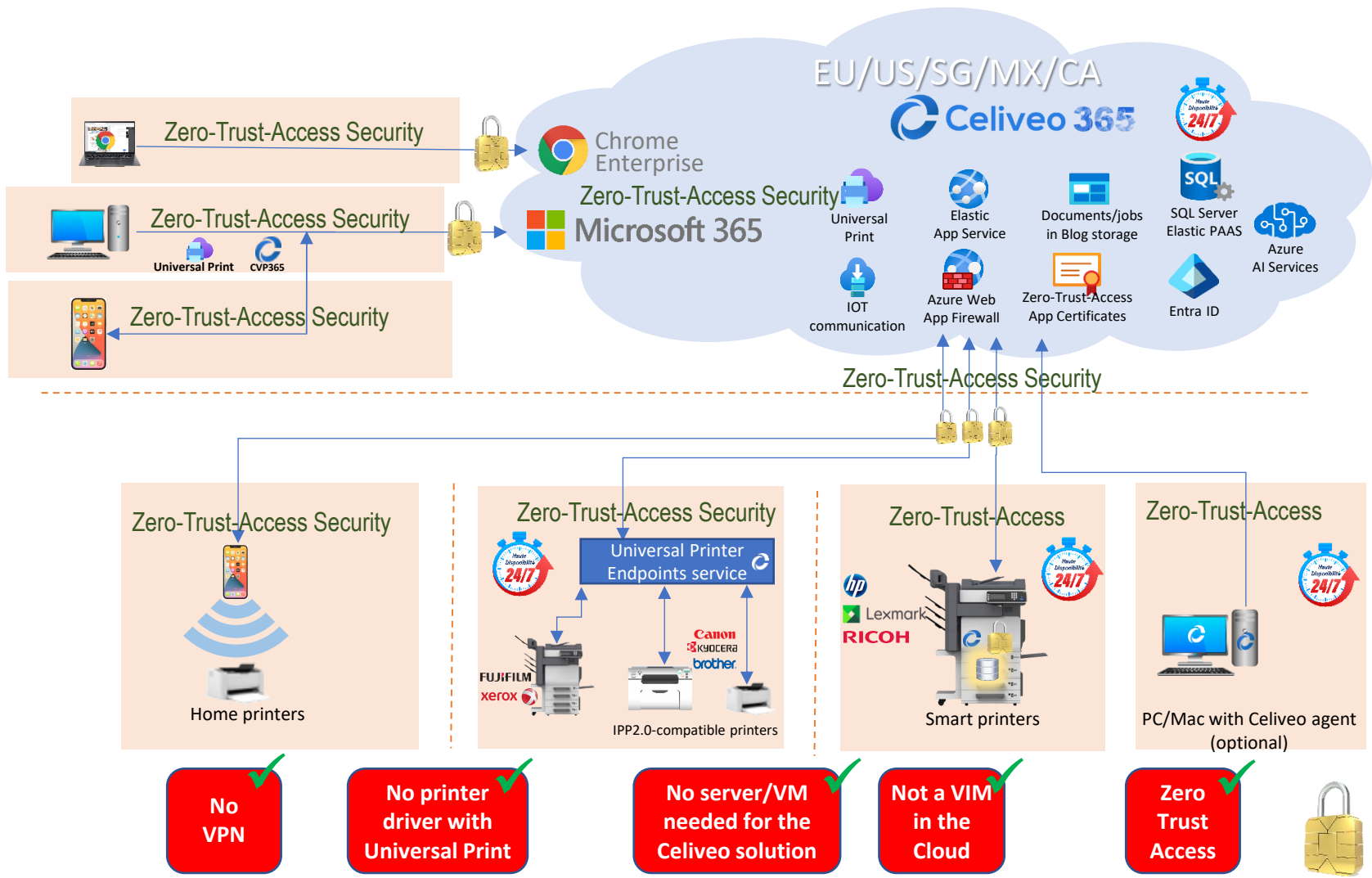
Print options



Architecture

Celiveo 365: CLOUD Print Management, ZERO-SERVER

100% Zero-Trust-Access, 100% Secure, 100% True Cloud, direct from smart printers



- **Secure Print, tracking, access control on MFP**
- **AI-DLP**, Data Loss Prevention on print
- **Not a VM :**
Safer, faster, fully elastic, Cloud in 4 regions
- **OS-less:**
Safer, no OS vulnerability , no OS updates, no OS reboot and unavailability
- **Elastic SQL Server PaaS :**
1 database per client, no transversal attacks
- **Mutual Cert authentication**, certificate-based for Cloud communication
- **TLS Transport encryption** using the Celiveo certificate chain specific to the Cloud endpoints
- **On printer screen** (FujiFilm, HP, Lexmark, Ricoh, Xerox) with PIN/card reader support
- **No application software**, no client software with the Universal Print path
- **Full Access Control**
- Detailed tracking on print, copy, scan, email and fax, **Power BI** reporting
- **High Availability** for models with C365 agent
- **Full PKI encryption** of print jobs data, from PC to printer

Add Universal printer support, without driver

Pull Print on any IPPS 2.0 network printer from the Cloud, using IOT technology (Windows service)

Printer status
Pull Print
Print Tracking



Supports multi-sites,
Supports High-Availability
Automatic failover



Zero-Trust-Access Security
TLS Handshake using Celiveo Certs



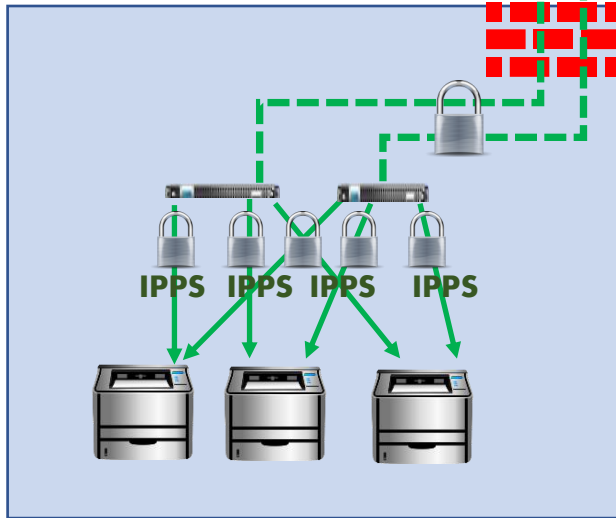
Azure IoT Technology:
No inbound traffic port
to open



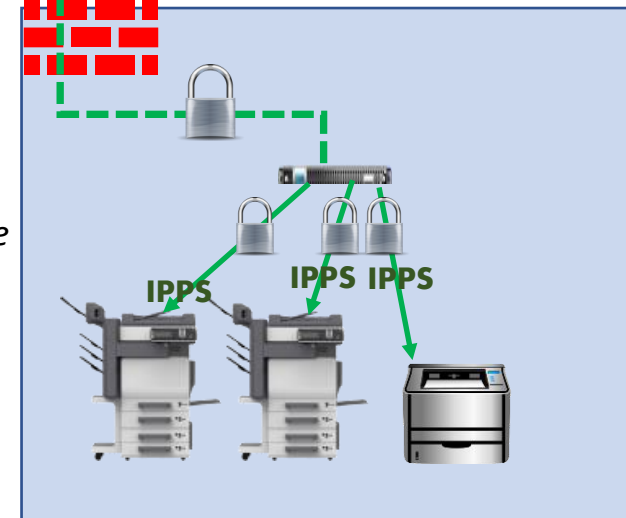
Zero-Trust-Access Security
TLS Handshake using Celiveo Certs



Load balancing
And failover

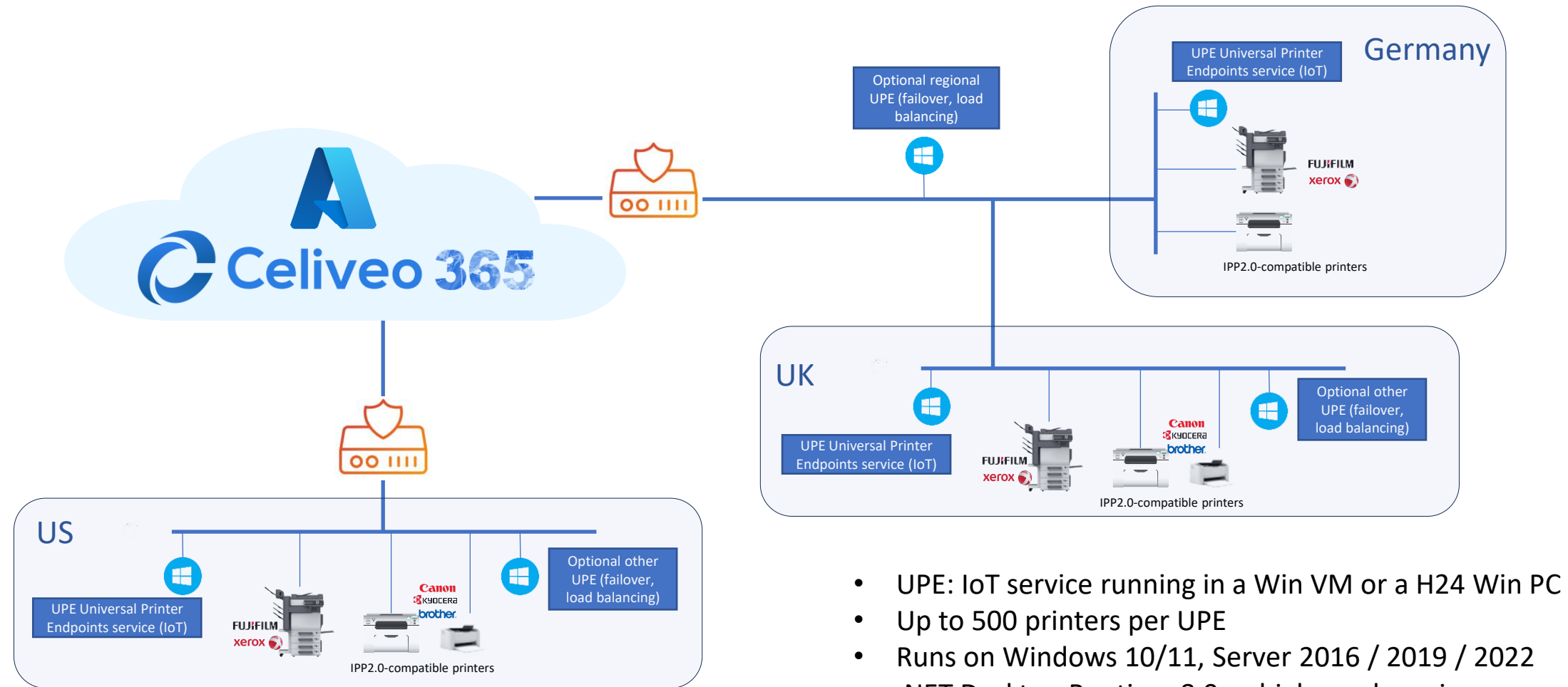


Universal Printer Endpoint
The Celiveo UPE Celiveo mitigates the lack of Cloud compatibility of many printers. It is a Windows Service installed on a VM or PC with TCP-IP access to printer (ports 931, 631). There is no local spooling, It is Zero-Trust-Access-secure and for any IPPS 2.0 printer



Celiveo UPE

Universal Printer Endpoint, fills gaps in printer capabilities/security



- UPE: IoT service running in a Win VM or a H24 Win PC
- Up to 500 printers per UPE
- Runs on Windows 10/11, Server 2016 / 2019 / 2022
- .NET Desktop Runtime 8.0 or higher subversion

Security

Celiveo Quality and Security Management

ISO9001, ISO 27001:2022 with quarterly CREST VAPT

Prod



Since 2025



Since 2008




4 VAPT per year


R&D



Azure Cloud Defender CSPM and CWPP, Azure Sentinel
Cloud security posture management, cloud workload protection platform, 13 daily reports
Since 2021



DevSecOps R&D, with secure pipelines and automated process
SonarQube Enterprise Edition, OWASP ZAP, OWASP Pentest
DevSecOps, vulnerabilities detection and management
Since 2020



Celiveo 365: TRUE ZERO-TRUST-ACCESS FOR SECURE PRINTING

Celiveo 365 implements Zero-Trust through μ -segmentation + Endpoints protection

US/EU/CH/Singapore data centers

Ability to provide daily compliance report with:



- ISO 27001:2022 and ISO 27001:2013
- NIST SP 800 171 R2
- FedRAMP M
- NIST SP 800 53 R5
- FedRAMP H
- HIPAA HITRUST
- CIS Azure Foundations v1.4.0
- SOC TSP
- SOC 2
- New Zealand ISM Restricted
- Microsoft cloud security benchmark
- Canada Federal PBMM
- UKO and UK NHS
- Australian Government ISM PROTECTED
- New Zealand ISM Restricted v3.5

Daily audit by Microsoft Cloud Defender CSPM on the full SaaS infrastructure

Pricing model

Pricing model

Flexible pricing adapted to your project scope

Business Edition

For standard Microsoft 365 clients who need to simplify printing with a High Security Cloud Print SaaS, on shared instance with dedicated DB

\$ 3.00/active user/mo
3.00€/active user/mo

Annual commitment, billed yearly

- ✓ High Security Cloud Print & Scan
- ✓ Mobile Print
- ✓ Authentication with smartphone
- ✓ AI-DLP (20 pages credit per user per month, shareable)
- ✓ Zero-Trust-Access
- ✓ Choose a regional Azure instance
- ✓ Secure Pull Print
- ✓ PIN & badge
- ✓ Entra-ID SSO
- ✓ PowerBI reporting
- ✓ Dedicated Azure SQL database

From 10 users

Enterprise Edition

For large business requiring a High Security Cloud Print SaaS instance with dedicated bandwidth and optional advanced AI features

Pay-As-You-Go

Per document for the best price matching the actual print volume, each month

- ✓ High Security Cloud Print & Scan
- ✓ Mobile Print
- ✓ Authentication with smartphone
- ✓ AI-DLP (50 pages credit per user per month, shareable)
- ✓ Zero-Trust-Access
- ✓ Dedicated instance(s) on any regional Azure data center
- ✓ 24x7 read access to Azure Sentinel, Cloud Defender
- ✓ Multi-region mirroring option
- ✓ Secure Pull Print
- ✓ PIN & badge
- ✓ Entra-ID SSO
- ✓ PowerBI reporting
- ✓ Dedicated Azure SQL database
- ✓ Dedicated bandwidth

From 10,000 users

Enterprise+ Edition

For large business requiring a dedicated High Security Cloud Print instance inside their own tenant so that data never leaves the company

Pay-As-You-Go

Per document for the best price matching the actual print volume, each month

- ✓ High Security Cloud Print & Scan
- ✓ Mobile Print
- ✓ Authentication with smartphone
- ✓ AI-DLP (unlimited pages credit per user per month)
- ✓ Zero-Trust-Access
- ✓ Dedicated instance(s) on the client Azure tenant
- ✓ Monitoring by corporate Azure Sentinel, Cloud Defender
- ✓ Multi-region mirroring option
- ✓ Staging & production instances in isolated Azure subscription
- ✓ Secure Pull Print
- ✓ PIN & badge
- ✓ Entra-ID SSO
- ✓ PowerBI reporting
- ✓ Dedicated Azure SQL database
- ✓ Automatic updates



From 10,000 users

The Microsoft WPP mode

Microsoft: no more printer driver, no more port monitors

Starting in 2025 Microsoft launches WPP, retiring in 2027 the current Windows Print system, forcing all clients to adapt and reconsider why/how they print, and remove old printers

- Enterprise companies will finally secure printing
- The whole print IT architecture must be adapted, most solutions won't be compliant
- Perfect opportunity to migrate to secure Cloud print and scan management, use AI document processing

 **Issa Khoury** · 1st
Principal Program Manager Lead at Microsoft
7mo · Edited · 

Good writeup with info on what Microsoft is doing in Windows for Print support. Summary: moving away from 3rd party print drivers to enhance security, reliability, and performance.


July 2025

July 2027

Microsoft Learn Challenge

Build skills in the latest technologies and earn a digital badge by January 10!

Nov 23, 2024 – Jan 10, 2025

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End of servicing plan for third-party printer drivers on Windows

Article · 12/18/2024 · 3 contributors

[Feedback](#)

Timeline

[Expand table](#)

Timeline *	Plan
September 2023	Announce legacy third-party printer driver for Windows end of servicing plan.
07/01/2025	No new printer drivers will be published to Windows Update. Existing printer drivers on Windows Update can still be updated, but approved on a case-by-case basis.
07/01/2026	Printer driver ranking order modified to always prefer Windows IPP inbox class driver.
07/01/2027	Except for security-related fixes, third-party printer driver updates will no longer be allowed. Existing third-party printer drivers can be installed from Windows Update or users can install printer drivers by using an installation package provided by the print device manufacturer.

SOLUTION OVERVIEW

Celiveo 365 is the first Full Cloud Print Management solution with Zero-Trust-Access security and High Availability.

Clients can decommission their existing print solution servers, plug directly their printers to Internet and benefit from high security and granular PIN/Card access control, encrypted pull print, print rules, mobile print, usage tracking and reporting.

DIRECT BENEFITS

- Simplify and secure all corporate printing
- Print from anywhere on office & home printers
- Reduce cost by decommissioning print management servers and licenses
- Total security thanks to the Zero-Trust-Access foundation based on ECC P-256 certificates
- Move printers to VLAN, away from the IT LAN
- Print solution for mobile users and home office

TYPICAL CLIENT

- Multiple sites, some very large, some smaller
- 10 to 25,000 printers, Smart printers & legacy
- Security-minded, aware of Zero-Trust-Access
- Microsoft 365, Entra ID
- Uses Windows and Mac client PC
- With an existing Cloud and mobility Strategy
- Wants to simplify printing and reduce cost
- Wants multi-tenant or dedicated instance

www.celiveo.com

KEY DIFFERENTIATORS:

• True Cloud SaaS/PaaS

Win/Mac PCs, Celiveo 365 subscription and smart network printers, nothing to install on the client IT system!

• True Cyber-Security

State-of-the-Art Cyber-Security based on Certificate chains authentication

• Universal printers support

Release print jobs on any network printers of any brand, IPP compliant.

• High Availability

Access control, rules and tracking fully work during Internet or WAN outage

• Instant revocation of printers

Removed printers see their connection cloud certificate instantly revoked

• Elastic SaaS on PaaS architecture

Not a VM, not OS-based, Celiveo 365 is built as a native Elastic Azure PaaS

• Compliant with data privacy laws

Regional instances, no user data stored in the Cloud, one database per client.

• Double AES256 data encryption

Certificate-based TLS transport cipher, with dynamic AES256 print data encryption



Your solution ?

True Cloud Solution, SaaS on Azure PaaS	Yes	
Flexible charging model	Yes	
Native OS-less, Elastic App in the Cloud	Yes	
Extension to Microsoft Universal Print	Yes	
No software or hardware to install locally	Yes	
Regional DataCenters, reached directly	EU US APJ AU	
SECURITY		
Pure Entra ID/Certs SSO, no login/pwd or key	Yes	
Dual print jobs data PKI encryption	Yes	
One database per client, full data isolation	Yes	
Zero-Trust-Access Security using certificates	Yes	
Mutual TLS authentication using certs chains	Yes	
No personal data in Cloud (Data Privacy)	Yes	
No user/system credentials processed/stored	Yes	
24x7 ISO27001:2013 / SOC2 automatic audits	Yes	
24x7 protection by Microsoft Defender CSPM	Yes	
FEATURES		
Plugin to Microsoft Universal Print in Azure	Yes	
ID on printer (card, PIN, NFC, QRCode, mobile)	Yes	
High Security Cloud Pull Print	Yes	
iOS/Android mobile Print & Release	Yes	
AI DLP, Data Loss Prevention on print jobs	Yes	
Direct Scan to OneDrive & SharePoint Cloud	Yes	
Usage/Cost Tracking with PowerBI dashboard	Yes	
For Win 10/11/365, macOS, Chromebook	Yes	
Supports 99.9% of network printers	Yes	
Supports home-office printers	Yes	

Q&A

Subscription

Permissions required by Celiveo 365

Read rights on AAD/Entra ID, read/write on print jobs

Application Permissions

Area	API	Permission Name	Access Type	Description	Celiveo Workflow
Entra ID	Graph	Directory.Read.All	Read	Directory Data	Get Role Related Objects
Entra ID	Graph	GroupMember.Read.All	Read	All group membership	User Enrollment, Access Rules
Entra ID	Graph	Organization.Read.All	Read	Organization information	Subscription Portal, WA Customer Validation
Entra ID	Graph	RoleManagement.Read.Directory	Read	Directory RBAC settings	WA MUP Management, WA Access Rights
Entra ID	Graph	User.Read.All	Read	All user's profile	User Enrollment
MUP	Graph	Printer.ReadWrite.All	Read, Write	Read and update printers (print queues)	WA MUP Management
MUP	Graph	PrintJob.Manage.All	Read, Update	Perform advanced operations on print jobs	MUP Printing Workflow
MUP	Graph	PrintJob.ReadWrite.All	Read, Write	Print jobs	MUP Printing Workflow
MUP	Graph	PrintTaskDefinition.ReadWrite.All	Read, Write, Update	Print task definitions	MUP Printing Workflow
MUP	MUP	PrinterProperties.ReadWrite	Read, Write	Property and attribute of printers	WA MUP Management
MUP	MUP	Printers.Read	Read	Read printers	WA MUP Management
MUP	MUP	PrintJob.Read	Read	Metadata and payload of users' print jobs.	MUP Printing Workflow
MUP	MUP	PrintJob.ReadWriteBasic	Read,Write	Metadata of users' print jobs.	MUP Printing Workflow

Permissions required by Celiveo 365

Read rights on AAD/Entra ID, read/write on print jobs

Delegated Permissions

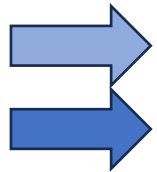
Area	API	Permission Name	Access Type	Description	Celiveo Workflow
Entra ID	Graph	Email	Read, View	Signed in user's email	Celiveo Portal(s) Access
Entra ID	Graph	Group.Read.All	Read	Signed in user's groups	WA Access Rights
Entra ID	Graph	OpenID	N/A	Sign user in	Celiveo Portal(s) Access
Entra ID	Graph	Profile	Read	View users' basic profile	Celiveo Portal(s) Access
Entra ID	Graph	User.Read	Sign in and Read	User's profile	WA Logged in User Attributes
Entra ID	Graph	User.Read.All	Sign in and Read	All User's profile	WA User Admin Management
MUP	Graph	Printer.Create	Create, Write	Printers (Print Queues)	WA MUP Management
MUP	Graph	Printer.ReadWrite.All	Read, Write	Read and update printers (print queues)	WA MUP Management
MUP	Graph	PrinterShare.ReadWrite.All	Read, Write	Read and write printer shares	WA MUP Management
MUP	MUP	Printers.Create	Write	Create new printers	WA MUP Management
N/A	Graph / MASL	Offline_access	Renew Token	Refresh auth token with refresh token	Celiveo Print-Mobile, Print-Web, My Celiveo

Pre-requirement for subscription

Linking Celiveo 365 to your Entra-ID and your Microsoft Universal Print

Technical requirements

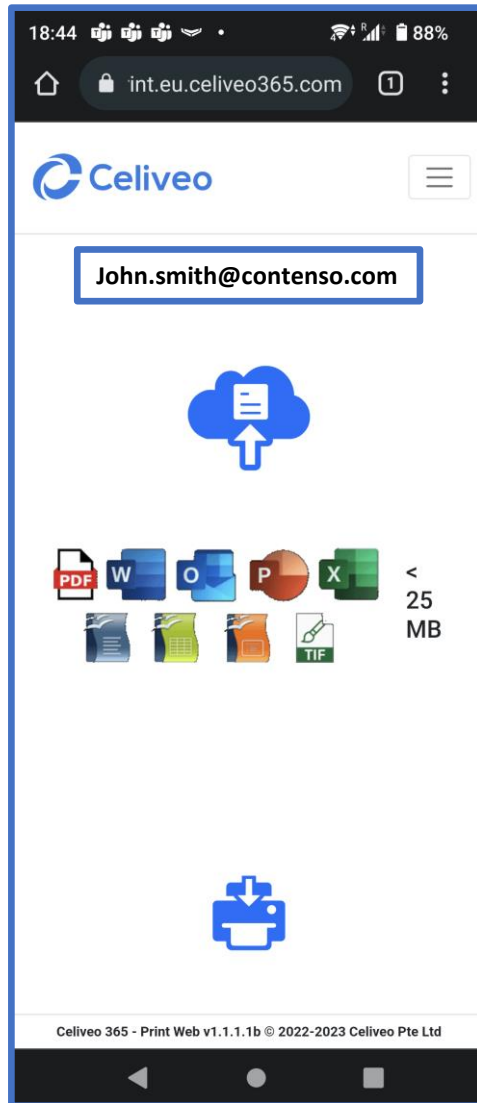
- Internet connection for PC, MacOS and printers
- Any IPP2.0 compatible printer (99% of models) and printers/MFPs supporting the Celiveo 365¹ embedded agent
- For the Celiveo 365 administrators, a Win 10 or 11 PC with .NET Desktop runtime 6.X.X, Edge/Chrome/Firefox browser
- An active Microsoft 365 subscription with Universal Print print credits, if required
- Celiveo Administrators must be Printer Administrator in Entra ID
- At subscription time: the Administrator linking Celiveo 365 to your Microsoft 365 tenant must be either Privilege Role Administrator or Global Administrator to link Celiveo 365 to the corporate tenant and process print jobs, identify users.



Mobile Print, Print jobs management

Print easily from smartphone/tablet

Zero-trust-access, Entra ID SSO, with and without app to install/load



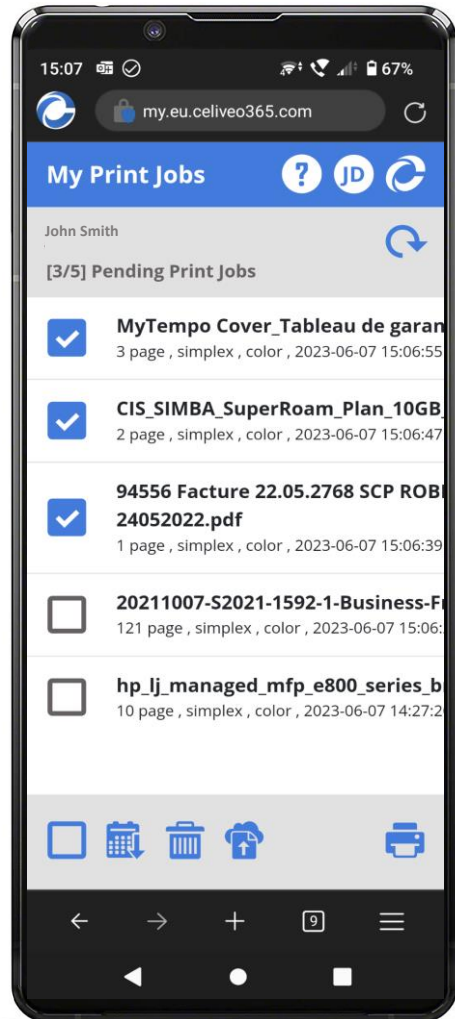
BYOD compliant: no app required

Supported formats:

- pdf, doc, docx (unprotected)
- xls, xlsx, xlsm (unprotected)
- pps, ppsx, ppt, pptx (unprotected)
- odp, ods, odt (unprotected)
- epub, eml, msg
- htm, html, md
- JPG/PNG

Manage print jobs from iOS/Android and any browser

Zero-trust-access, Entra ID SSO, with and without app to install/load



BYOD compliant: no app required

Allows end users to:

- Locate available printers using geo-tags and on floor maps with actual printer status¹
- Display pending print jobs list
- See print jobs details
- Easily delete pending print jobs
- Push print jobs on any authorized printer¹

1: with the Universal Printer Endpoint IoT service on network

Universal printer support

Secure print release, tracking

Release with smartphone on any IPP printer

Technical requirement



Celiveo 365 subscription

to add IPP 2.0 printers to Celiveo 365 portal and allow Cloud Print



IPP 2.0-compatible printers

to print jobs



Celiveo 365 Universal Printer Endpoint IoT service, local or in a private Cloud with VPN

It needs to be able to access printers through SNMP and IPPS ports



Android or iOS smartphone for administrator

to program NFC tags



NFC adhesive tags (or label to print QRCode, as a fast solution yet not as user-friendly)

to release print jobs at printer using smartphone



Android or iOS smartphones or tablets for end-users

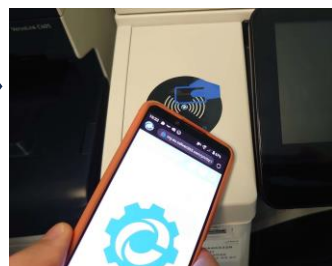
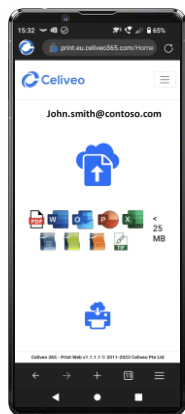
to authenticate and release print jobs at printers, upload and manage print jobs

Releasing print jobs using smartphone (no app needed)

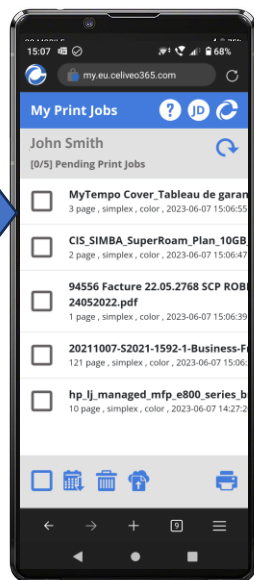
- Use Smartphones to locate printers, list jobs, release print jobs



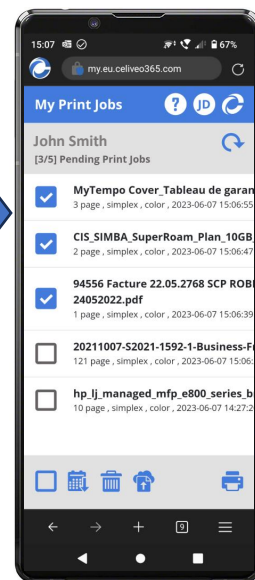
Microsoft Universal Print, Celiveo PC agent, Celiveo Web Portal or Celiveo Mobile



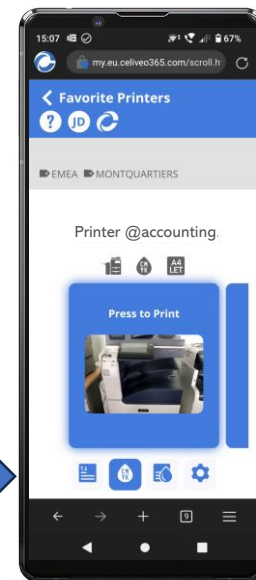
Tap phone on NFC tag affixed to printer



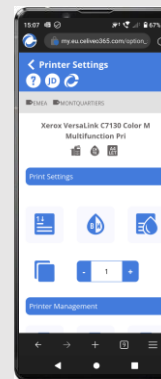
Jobs are listed



Select Print Jobs to release



Print options



Security

Celiveo 365 administration relies on Entra-ID roles & groups

Reduce the Cost of Management, improve security

Once the subscription process is done the access to the portal at <https://subscribe.celiveo365.com/> is available to users with the following roles:

Role	Access Type	Subscription Details	Active Users	Payment and Invoices	Billing Information
Print Administrator	Read Only	•	•		
Billing Administrator	Read and Write to Billing			•	•
Privilege Role Administrator	Read and Write to Subscription and Billing	•	•	•	•
Global Administrator	Read and Write to Subscription and Billing	•	•	•	•

Client data is fully secure

Stealth MODE, in case of hack all data is useless

No PII stored in Celiveo 365 database (Azure SQL PaaS).

Authentication PII is located at the printer level and in Entra-ID, in the local authentication cache (encrypted database on encrypted drive).

Actual data:

id_User	lab_date	lab_idCard	lab_domain	lab_login	lab_department	lab_email	lab_fullname	lab_homedirectory	lab_doublefactor
1	2024-03-15 08:59:39.650		NA	NA	NA	NA	NA	NA	
2	2023-12-01 12:55:53.963	0e45417dbb4901801df88aab9b6535d00888188b08f9f898c67121...	NA	NA	NA	NA	NA	NA	
3	2022-12-08 09:31:51.947		NA	NA	NA	NA	NA	NA	

lab_lastactivity	lab_usemights	lab_enrollment	lab_idCardSecondary	lab_UPN	lab_Attribute1	lab_Attribute2	lab_Attribute3	lab_Attribute4
2024-03-15 08:59:44.730	NA	NA	514e830391320b3aa28e6df60a9a7951a603d8418e948c42...	NA	NA	NA	NA	NA
2023-12-01 12:55:57.213	NA	NA	7bc74860bbb140008e55813f4948450f934ec7ba1ab97cd9...	NA	NA	NA	NA	NA

bute4	lab_Attribute5	lab_DistinguishedName	lab_NetBiosPlusLoginName	Tag0UID	lab_TrackingLogin	UserAadIdenti	SecDbfac	Stat	UpdAtOcc
1	NA	NA	NA	D102A771-8D9C-42F3-ACB9-927114AF6A6A	NA	9FE2CDFD-1B6D-4DBC-B839-0D4E93247400		1	1
2	NA	NA	NA	D102A771-8D9C-42F3-ACB9-927114AF6A6A	NA	C1AD4983-9795-4F2E-A460-5D836E01446C		1	1



One SQL Server PaaS database for each Celiveo 365 customer, to ensure a maximal security and remove any risk of transversal attack.

Information about users is encrypted then stored inside each printer, on the encrypted HDD, after conversion to SHA256 of information such as card or PIN number, or cached in API linked to Entra-ID.

Here is the only data stored in Azure SQL PaaS database for enrolled users:

- SHA256 of PIN code and/or card number
- GUID for user Entra-ID record
- Date/time of enrollment and last usage

Data in the print jobs tracking table:

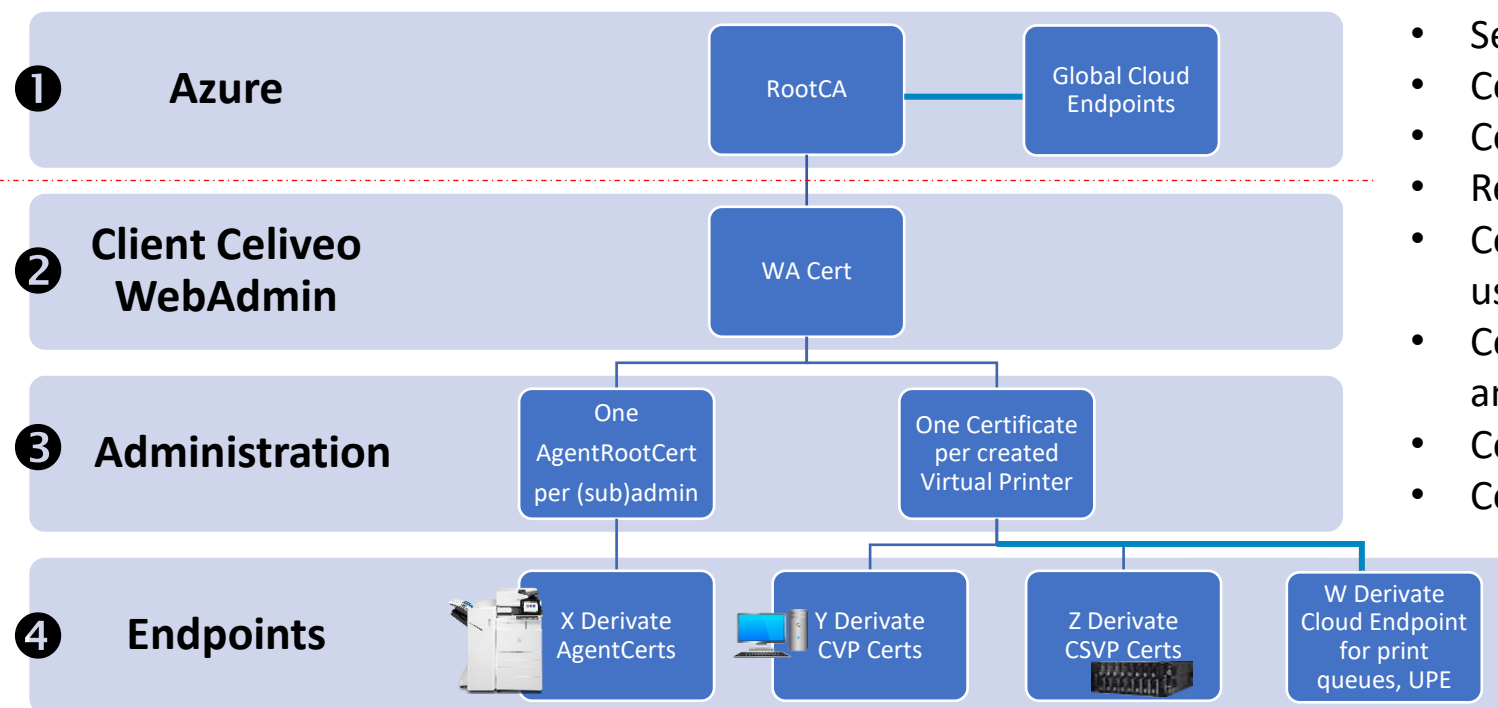
- The print jobs and/or user names can be masked (for all users), then the 5 AAD attribute can be used to perform bill-back anonymously

In the highly hypothetical case the Microsoft PaaS SQL Servers would be compromised, the data would have no value .

Celiveo 365 – Security through certificate chains

Verify all Identities for every communication segment

Elliptic Curve Certificates (P256)



The only true Security for any Cloud and SaaS solution

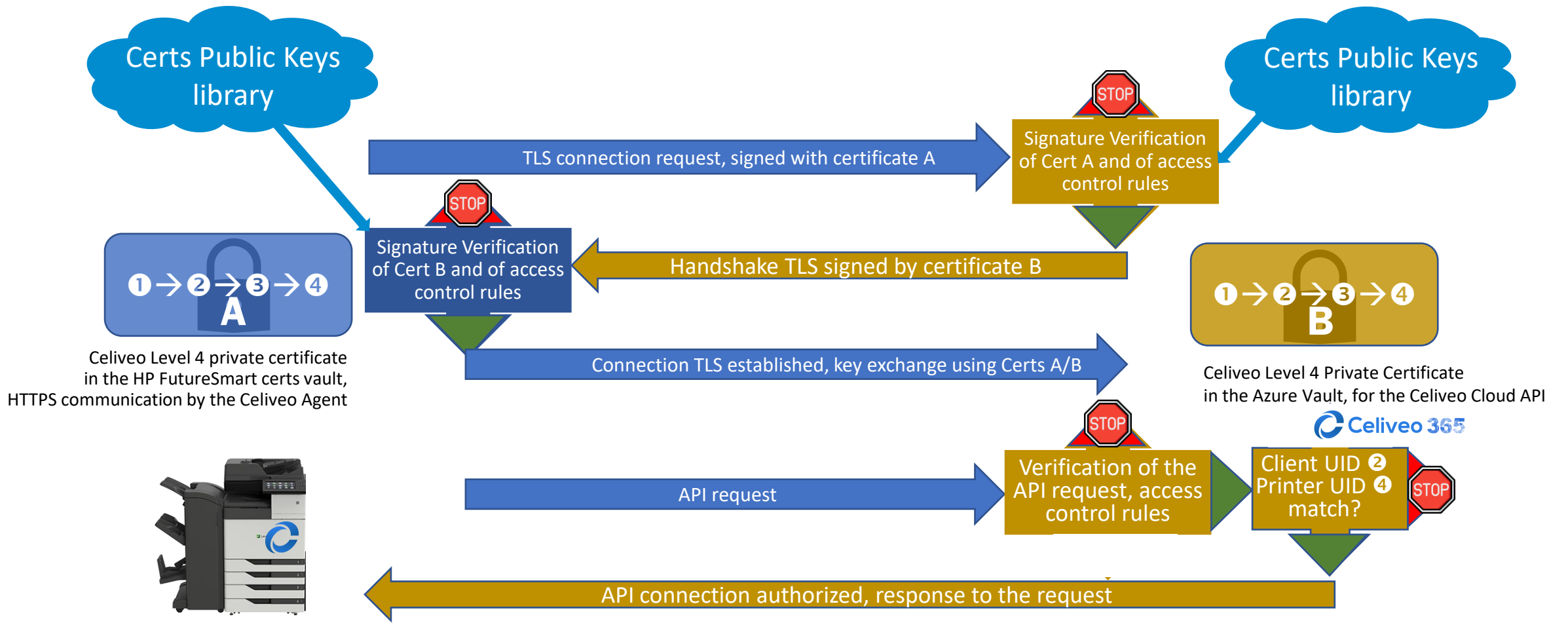
- Automatic certificate ④ creation for any new endpoint
- Secure storage of the public key in the Cloud
- Certificate chain based on the ①②③④ filiation
- Celiveo keeps no customer-related private key
- Real time revocation, automatic at printer removal
- Cert chain instant validation against spoofing / MiIMA, using public keys stored in the Cloud
- Cert chain used by TLS connection handshake between any two endpoints, printer, PC, cloud API etc.
- Certs used to encrypt data between endpoints
- Certs attributes used to detect abnormal requests

Traceability for forensics:

- Certificate Chain contain who added the printer to the trusted system

The Celiveo 365 ZeroTrustAccess on smart printers

Real zero-trust-access security thanks to the 4-level cert chains authentication, plus authorization



Documents data encryption

Securing Microsoft Universal Print and documents

