



One Q Technologies A/S

One Q

Cloud Print Management



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The One Q secure print solution includes:

- Pull and Push printing
- Secure copy, scan and fax
- Tracking and reporting
- Rules based printing
- LDAP Integration
- Encryption (SSL/TLS and strong symmetric AES-256 cipher)
- Failover
- Unlimited scalability through real clustering
- Customized solutions

Your benefits

Accounting of your print and copy

The first step in taking control over your print costs is to get a correct picture of what your print/copy activities are. With the built-in job accounting you get this picture. This increased awareness on printing/copying leads to less activities. And it helps you to plan and optimize (decrease) your printer fleet.

Authentication saves printing

The users are shown an overview of print-jobs on the printers display and have the opportunity to delete old, duplicate or not needed print-jobs.

Get paid for printing and copying

As all print- and copy-jobs are tracked and registered, you can use the accounting as a basis for charging clients, projects or simply for cost sharing on department level.

Universities, schools and libraries often need a payment solution, where the users can purchase credits for printing and copying through a standard web shop.

Fewer and better printers needed

Because the system secures confidentiality and you can print from any printer, you can probably manage with fewer and more cost-effective printers. These will typically also have more and better features than the smaller, decentralized printers.

Easier implementation and support

Easy implementation keeps total project costs down. There is no need for any installation on user's PCs in standard solutions, so the printers only need to be setup on the server. The embedded clients on the MFPs (multifunctional printers) can be distributed via the network. The server software itself can be installed in minutes.

Secure pull printing

With pull printing the printed documents are delivered directly in the hands of the right person, after authentication with ID card or PIN-code.

Authentication of users

The users will be authenticated using existing LDAP database, e.g. Active Directory, without insecure redundant user information. This can also be used to give groups or individuals specific rights or limits for printing. It can also be used to enforce print policies or rules. These rights can also be configured to allow an assistant to pick up prints for you.

Solutions

You can get print management benefits via 3 different types of setups – depending on your situation, budget and needs.

1. Push printing with job accounting

This is a simple, low cost solution, which offers tracking of all printing activities. All print-jobs are directed to the cloud server and printed directly without authentication by the user at the MFP. It helps you control print costs with server consolidation in the cloud, stability/availability and traceability/statistics on print activity.

Print drivers are installed once on the server and are not needed on the PCs. This saves resources to installation and support. With this solution, there is no need for embedded clients, card readers or terminals on the printers. This can be used on any networked printer; so, it can also be used for simple and older printers.

2. Release All with ID cards

Release All printing is often set up using existing ID cards to authenticate users and release print-jobs. You get confidential printing, as documents are not released (printed) until the users identifies themselves by the printer. All activities are tracked for security and traceability reasons.

3. Pull printing with clients on MFPs

Pull printing with the user interface on the MFP's screen gives you a full high-end secure print management solution. You get print-job selection, print-job delete, confidential printing, full reporting of tracked activities. At the same time, it is still very easy to install and support.

All 3 solutions are based on the same technology. They are just examples on how the elements in the system can be combined in different ways.

When security matters

With the secure print management you get several unique levels of security. Use this overview as a checklist while considering the security for printing in your organization. What is the cost of poor security? Is it worth avoiding?

1. Secure pull printing

With pull printing the printed documents are delivered directly in the hands of the right person, who first performs authentication with, e.g. an ID card or PIN code.

2. Secure architecture

The unique open platform core of the print management application gives the highest security – this is successfully implemented in many applications for health care, defence, public administration.

3. Clean-up on printers

If the printer hardware allows it, One Q software can make sure that all relics of print-jobs are removed after each print-job and by printer reboot.

4. Never leave an active printer

If the printer hardware allows it, One Q software can make sure that the users ID card must be in or on the card reader, otherwise it will immediately stop and erase everything.

5. Full encryption

SSL/TLS network encryption and strong symmetric AES-256 cipher encryption ensures against intercepting confidential information.

6. Special security features

Even with these security features, some organizations need more security – e.g. in military, finance and health care. The highly flexible open platform architecture is designed for customizing special security features.

Where do you host your One Q solution?

You can choose between our SaaS solution based on Microsoft Azure or to have the software installed at your own server using Windows, Open Platform version (Linux) including IBM System Z and IBM Power – depending on your needs and preferences.

Access methods

When pull printing, scanning or copying the users authenticate themselves. You can choose different methods or combine PIN code and card ID for **two-factor authentication**.

Embedded clients:

One Q software on the MFP embedded in the printer display. You identify yourself with a PIN code or user name/password. This provides access to see print-jobs and delete or release them. You can do that from any MFP in the solution: so, if one printer is unavailable, you can go to another to release the job without printing again.

Hardware terminals:

If your device does not have a display - or otherwise is not able to run the One Q client software, you can attach a display to the printer and use it as the user interface.

ID cards for card readers:

The third option is to use an ID card to authenticate users and release **all** print-jobs. This is the fastest way of authentication for the user. It can also be used in combination with the embedded client shown on the screen.

Many types of ID cards can be used. Often organizations implement their print management with a card already in use - e.g. for access to the building. The secure cloud print management system can even adapt to cards customized to your company. If you have network printers without available USB socket, you can use an IP connected card reader.

One Q solution features and options

You can select several features and options to configure your own secure cloud print management solution to fit your needs.

Pull printing: If this method is used, the users click "print", go to any printer and authenticate themselves. Here they can decide to delete or release print-outs. With the identification of the users during print, it is possible to track print activity per user and groups for compliance and statistical purposes.

Push printing: With push printing the user's workstation sends the print-job to the server, where it is registered (for compliance and statistics) and redirected with the right driver to the relevant printer and printed directly.

Tracking and reporting: This is the central option that registers all print, copy and scan activities. It gives you security, compliance (traceability), statistics and control of your print costs via customizable reports. It is also the basis for setting up limits, rules, the billing feature and direct



payment option. The tracking and reporting features are enabled no matter if you copy, scan, push print or pull print.

LDAP Integration: The print management solution can handle users in its own database: but when users are already registered and administrated in an LDAP like Active Directory or Domino, it is easier to just integrate with this user database.

Mobility Printing: If you need mobility and would like to print from mobile devices like smartphones, tablets, iPad, iPhone, laptop etc. or even print from your home offices – our Mobility Printing solution work as a fully integrated module you can buy as add-on to the One Q solution.

SSL/TLS encryption: The encryption secures the traffic over the network.

Passphrase end-to-end encryption: Encryption from workstation to printer using strong symmetric AES-256 cipher encryption.

Print rules: With this option, you can configure rules to make the system enforce certain print policies – such as printing emails in b/w or forced duplex. You can setup rules to improve your print service and/or save costs.

Client Billing: You can use the tracking of print-jobs to register billable prints so you can invoice your clients. When printing for a client or project you just indicate client code and optional matter code and the job is counted as a job for that client. After a period, you get a full account of activity for that client – and can use that to invoice the client or project.

Payment solution: Another way of getting your costs covered is by letting the users buy credits to pay for print and copy. The users can access the payment system directly and pay with credit card, payment card, PayPal, etc. This should be integrated with a financial service in your country.

One Q Print Monitor: Software installed on users' workstations, if special actions are needed before sending the print-jobs to the cloud. It has several optional features:

- Motivating black/white and duplex printing
- Handling secure push printing when cloud/server connection is down
- Keeping print-job locally and only sending metadata to the cloud
- Enabling tracking of local USB printers
- Handling multiple users on one workstation
- Entering client codes
- Failover servers and load balancing

One Q cloud solution resiliency Failover

This solution setup ensures continued uninterrupted service and backup of print-jobs if a primary cloud server fails. The print-jobs are sent from the user's workstation by One Q Print Monitor. This ensures that the print-jobs are executed by the backup server immediately for the user if the primary server fails. The backup server automatically takes over and the printers/MFPs are

automatically switched to the backup server. The switch will be seamless and unnoticeable for the user.

Clustered printing – load balancing and multiple clouds

One Q Cluster Printing offers printing to a private cluster to balance load and to provide secure access from all locations and mobile units in the organization or company, no matter which cloud their network is connected to.

The users can request their print-jobs for release on any printer/MFP at any given location in the organization. The solution is designed to generate minimal network traffic. The print-jobs are only being sent between the clouds when they are released from another location than where they were initiated. All users and information of print-jobs initiated are available throughout the cluster for all locations and connected printers/MFPs.

The One Q Cluster is a secure and convenient way of offering unlimited scalability besides availability and mobility.

Google Cloud Pull Printing – GDPR compliant

One Q makes Google Cloud Print a secure part of your company's print solution

- Google only guarantees security to the cloud
- One Q ensures security from the cloud to the printer

Savings inherited from Print Management

- Pull Printing saves 30%

Fully integrated with One Q

Secure Print Management Server

- Embedded in all One Q Solutions
- Print from any mobile device
- Both Pull and Push Printing
- Full accounting and traceability
- Cloud or on-premise solutions
- No extra license cost

Google Cloud Print from

- PC
- Mac
- Chromebook
- Phones

- Tablets

Part of the infrastructure and adding security - use Google Cloud Print as is

Use the free Google Cloud Print service without any changes. Simply print to Google Print Cloud and go to the company printer of your choice and collect your print-out, as if it was printed from your workstation.

Google Cloud Print together with One Q Print Management makes the entire print solution embedded in your company's infrastructure

- Introduces Pull Printing to Google Cloud Print
- Full traceability makes the print solution **GDPR compliant**
- Optimization through rules and reporting
- Accounting for cost sharing
- Savings typically 30% on toner, paper and power consumption

Shields printers and network

Google Cloud Print without One Q will insecurely print to your printers and at the same time expose your internal network for security breaches.

Customize your solution

It is possible to combine the services to reflect customer's infrastructure, different sites and different network capacities to ensure that the solution always is available for the users.