Serverless secure print management for SAP® systems using Printix

BECONEX SAP2Printix

BECONEX

Printing from the SAP® system... without print server?

Documents are the outcome of most business processes; quotations, invoices, salary statements, to name a few, are generated inside the SAP® system. To export and exchange the information contained in said documents, we can email them, send them through workflows, and of course, print them.

- Production orders are commonly handed in paper form at the warehouse to extract material

- Financial reports must be sent to external entities, mostly in physical form

- Declarations of conformity, performance reports, and similar documentation is frequently printed to be signed

That is, **printing is still a crucial functionality for many business processes**.

Though how can you upgrade document printing from the SAP® system? It is likely that migrating to the cloud is part of the **corporate strategy: cloud solutions** contribute to **minimize complexity**, **reduce costs** and **increase flexibility and robustness**.

Whether the motivation is moving the ERP itself to the cloud, or to replace the print infrastructure with a cloud solution, what is needed in the end is a **cloud print management platform** that can both take over office printing, as well as serve as external Output Management Solution for the SAP® system.

BECONEX SAP2Printix - Efficient and secure cloud print management for SAP®

Secure Cloud Print Management with Printix

Eliminate Print Servers

Printix is for IT organizations, who are dedicated to **implementing an all-cloud strategy** and looking to transition their print infrastructure to a cloud service.

We make it possible for customers to install, use and maintain a cloud-managed printing environment **quickly, efficiently**, and, perhaps most importantly **without owning a print server**.

The Printix multi-tenant public cloud solution drastically simplifies the provisioning, management and control of printers and drivers from a cloud-based portal.

Simplify Print Administration

Apart from minimizing the on-premise IT infrastructure to support printing, Printix helps IT managers avoid the hassle and **minimize costs** typically associated with printing and maintaining a print environment.

Printix **removes the administrative complexities** involved in managing diverse hardware, software, computer operating systems and vendor-specific printer requirements.

Orchestrating and automating routine admin tasks, Printix helps discover, define and configure print queues and drivers and automatically distribute the setup, to keep your print environment running and up to date

Optimize Cloud Integration and Implementation

Microsoft Azure, and other cloud computing platforms, allows businesses to be **more efficient** and printing should be one of the most basic business processes, to be simplified with the cloud.

Printix is seamlessly integrated with Azure AD and Google Workspace authentication to enable a true cloud workplace with Single Sign-On via Office 365 or Google Workspace.

Deploying Printix is made easy with Microsoft End-Point Manager, or any other software deployment tool that supports Microsoft Installer (MSI)

Serverless Architecture
Eliminate print servers and create a secure, cloud managed print infrastructure.

Simplify Print Management
Simple to manage and easy to deploy. Automatic updates and self-service provisioning.

Improve Productivity
Intelligent print driver selection and print queue installation by location, group or self-service.

Reduce Costs by 50% or more
Significantly reduce on-premise infrastructure costs, services, support and maintenance fees.

Single Sign-On Secure Access
Single Sign-On and secure access to Printix using Microsoft Azure AD or Google Workspace.

Central Management Console
Centrally manage printers and users. Visual analytics to help transform data into insight.

Supports all Network Printers
Independent and multi-vendor support. Print to any printer from any device.

Capture and workflow
Deliver scanned documents from printer or phone to common workflow destinations.

SAP® Output Management meets Printix

Cloud printing for both On-Prem and Cloud-hosted SAP systems

SAP2Printix enables the integration of Printix as external OMS for the **SAP® NetWeaver Application Server for ABAP** and any system based on it, like SAP® ECC, SAP® SCM, SAP® GTS, etc. This includes **SAP S/4 HANA® On-Prem** and **SAP S/4 HANA® Cloud (private edition)**. As a result, you can get rid of your printing server and manage document printing, both user– and host-initiated, directly in the cloud.

Keep in mind though that the SAP2Printix application is currently not supported for SAP S/4 HANA® Cloud (public edition).

Single-tenant and multi-tenant Printix environments

There are occasions in which an organization can end up having more than one Printix tenant, as is the case of merges and acquisitions between companies that had the solution already implemented.
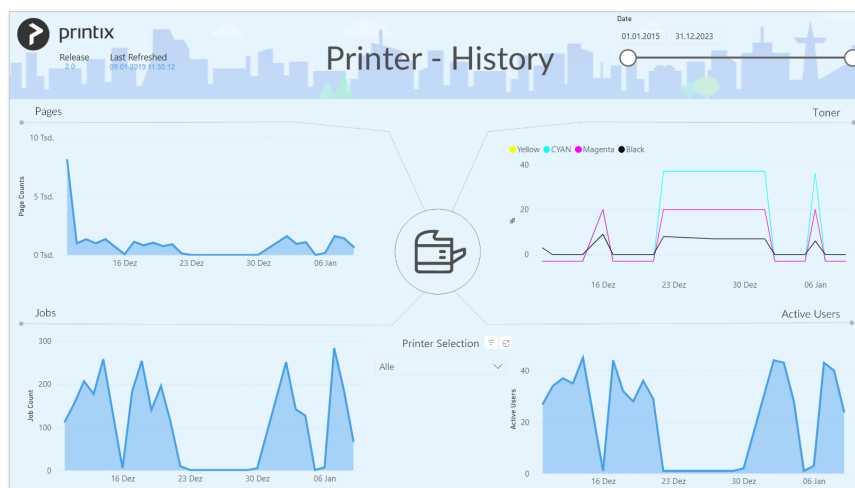
Also in these cases is possible to use the SAP2Printix application to print documents from the SAP® system, as it is compatible with both **single-tenant and multi-tenant** configurations of the Printix solution.

Printix tenants can be customized, added or removed for each SAP® system. Once a tenant is configured in the system, any of its printers can be created as SAP-printer with only a few clicks.

Printing scenarios and other features of SAP2Printix

SAP2Printix enables you to use the Printix Secure Cloud Print Management Software to manage all SAP® print jobs in the cloud. Both "**direct print**" and "**print anywhere**" scenarios can be used from the SAP® system. Other features include:

- Device synchronization for easy retrieval and update of SAP-printers from the Printix tenant.

- Management of Printix tenants as external OMS and tenant specific customizing.
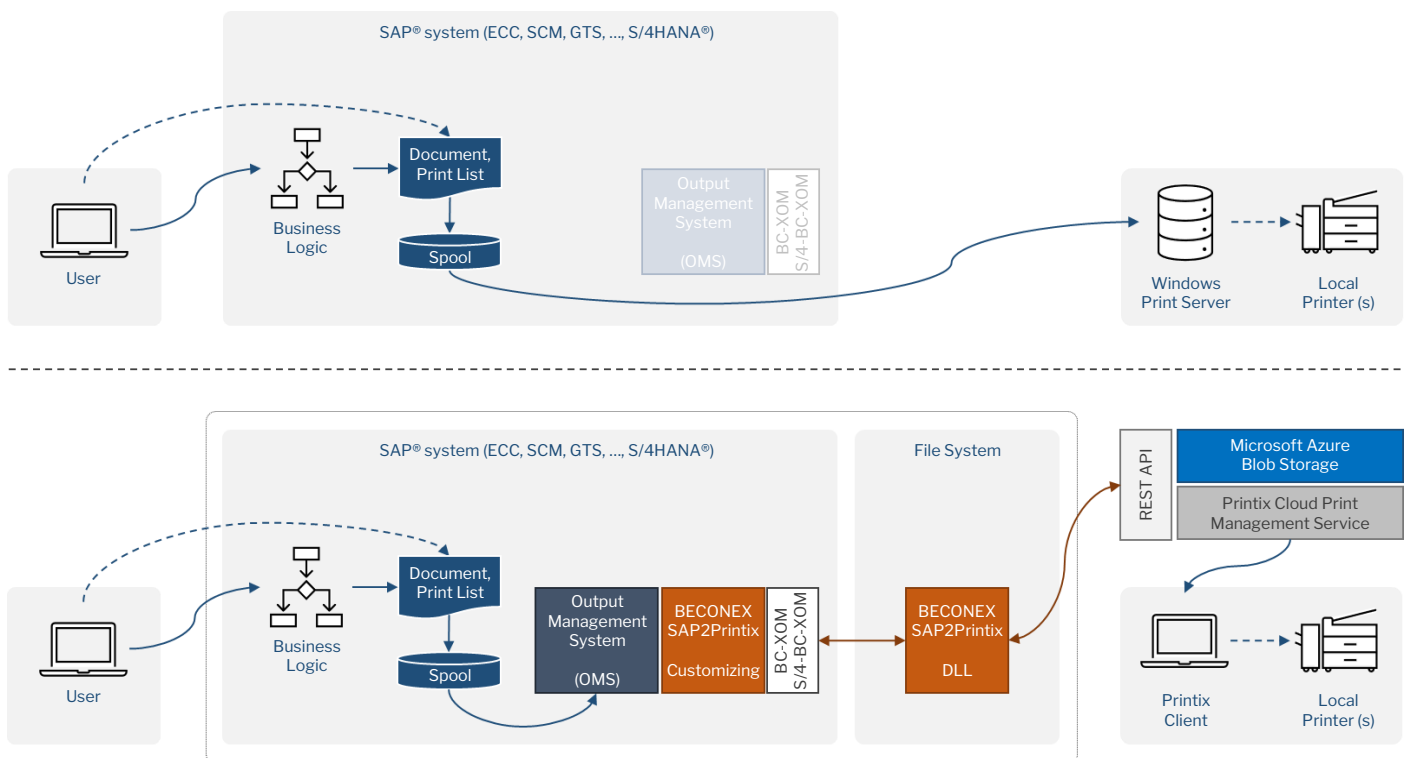
- Monitoring and logging of print jobs

Printix as external Output Management System for SAP®

When printing documents from an SAP® system that still uses a Windows print server, the system generates a spool request that is then handed over to the server. From there, the spool file is sent to the corresponding printer. How does this look when working with Printix as external OMS?

The first part of the procedure is the same: a spool request is created for every print job in SAP®. Instead of sending the request directly to the print server, it is sent through the SAP® standard interface for external Output Management Systems (BC-XOM or S/4-BC-XOM) to SAP2Printix. From here, SAP2Printix takes over:

- First, the application receives the spool file from the interface, together with the information that will be used to print the document (target printer as configured in SAP®, job ID, etc.)

- It also gets the "Logon Data" for the corresponding Printix tenant and other information to perform a "Printer Mapping". This is necessary because printers have different IDs in the SAP® system and in the Printix platform

- With this information, the application can send the spool file to Printix via a REST call, and the Printix Client sends the job to the corresponding printer

- Once the print job is created in Printix, the application performs a "Spool Mapping" to link the SAP® spool ID with the Printix spool ID. That way, it is possible to both monitor the status of print jobs and log the process in the SAP® database.

Printing from the SAP® system using (1) an On-Prem Windows server versus

(2) the cloud-based Printix solution as external Output Management System

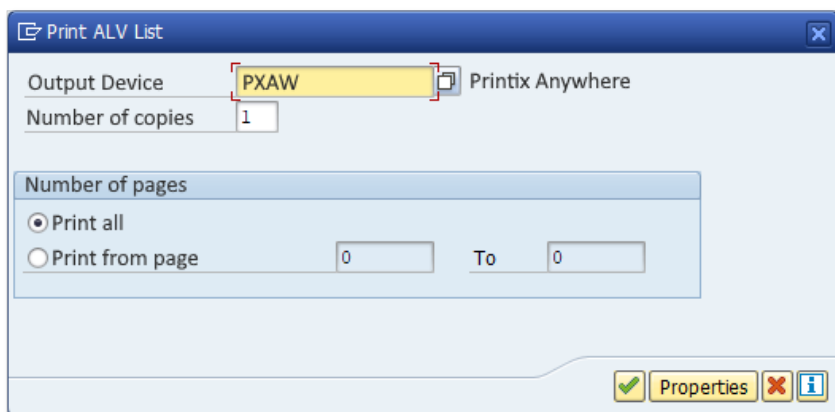# "Direct Print" and "Print Anywhere" using SAP2Printix

The SAP2Printix application makes it possible to print documents using two of the available methods of the Printix solution: "direct print" and the secure-print method "print anywhere".

The **direct print method** allows the user to **select or predefine the target printer** and to **trigger the print job immediately**:

- As a user, open the item you wish to print from the SAP® system, select the **target printer** and create the spool request.
- To predefine the target printer as part of the business logic, declare in the condition record of your output solution. The spool request will be created automatically when the conditions are met.

If so configured, a periodically scheduled job will send the accumulated spool requests to print. Otherwise, they may be printed immediately.

As explained in the previous section, SAP2Printix will map the SAP® printer to its corresponding printer ID in Printix, and send the spool file to the Printix platform. The file is then sent to the target printer.
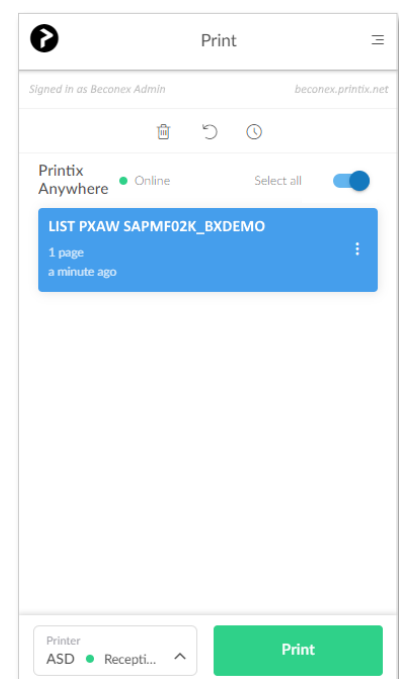

Selecting the "Printix Anywhere" printer form the Print ALV List in the SAP® system

"**Print Anywhere**", on the other hand, allows to create a print job and send it to the Printix platform, but **choose the target printer at a later time** using the Printix mobile app:

- In the SAP® system, open the item you wish to print
- Select the **"Printix Anywhere" printer** and create the spool request.

This will temporary store the spool file in the Microsoft Azure Blob Storage, until the target printer is selected and the print job can be triggered. To select the target printer:

- Open the Printix app in your mobile device
- Select the "Print Anywhere" document. The mobile app will dynamically look for available printers based on the availability of the document
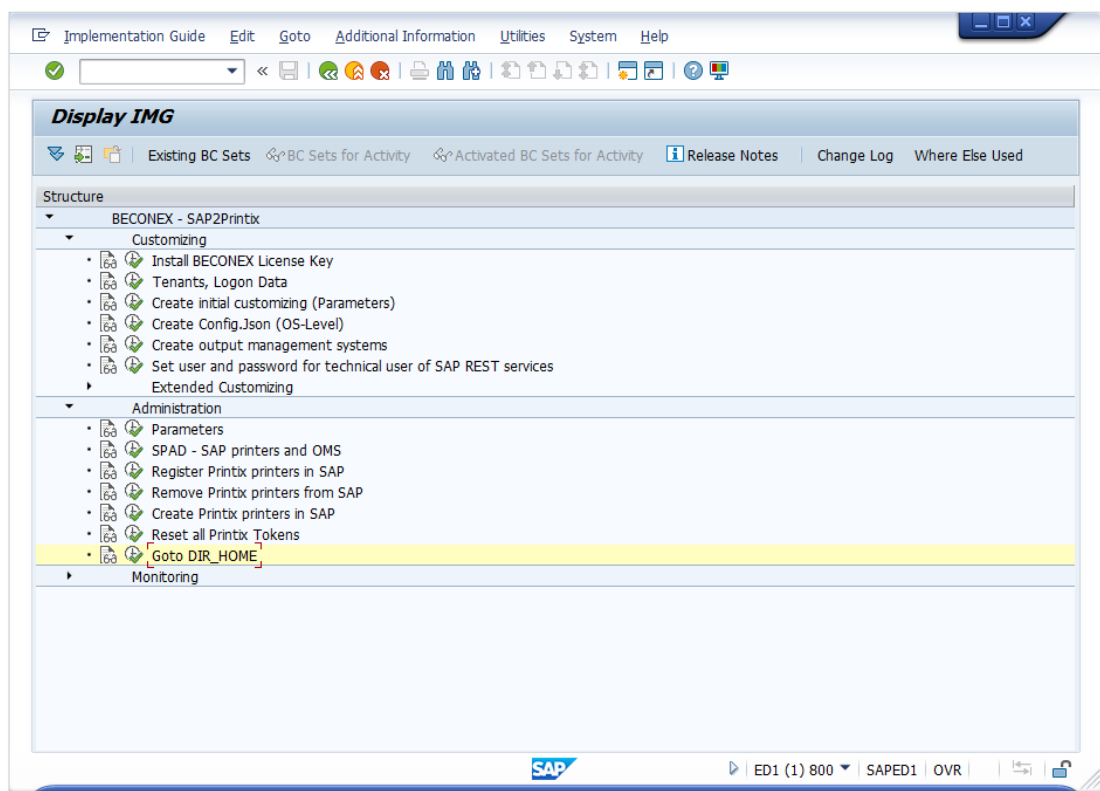- Select Print at the bottom right of the page.

Printix mobile app

Set up a printing environment in just a few clicks

Customizing SAP2Printix in the SAP® system

- To set up SAP2Printix in a productive SAP® system, start by **licensing** the application.

- You can then **register Printix tenants** using the "Printix tenant ID", a "Printix Client ID", and its corresponding secret. You can get this information from the Printix Cloud Print API of your Printix tenant.

- Next, create the "**initial customizing**", "**config JSON**", and "**output management systems**". The fields for each of these activities are populated automatically by the SAP® system.

- Finally, you need a **technical SAP® user** for the application to perform the communication between SAP® and Printix.
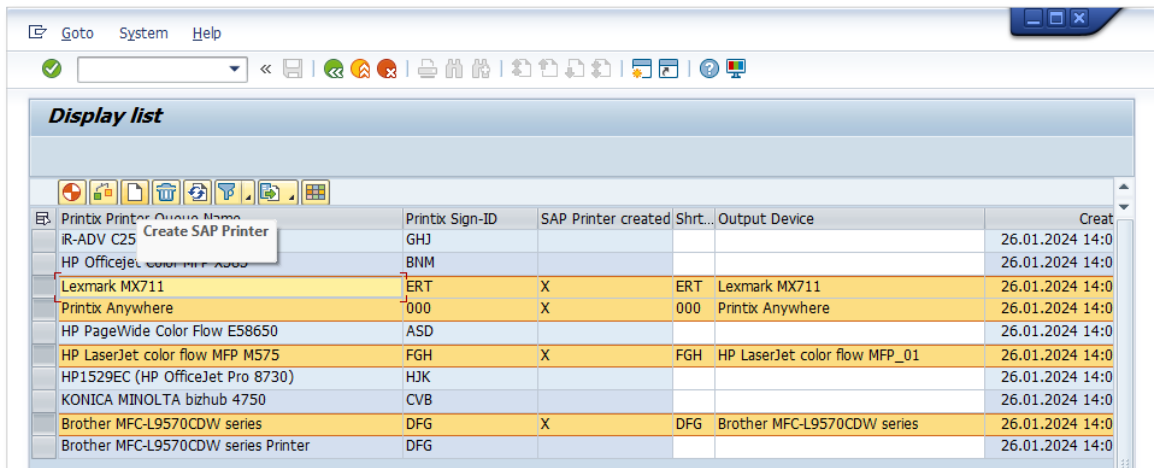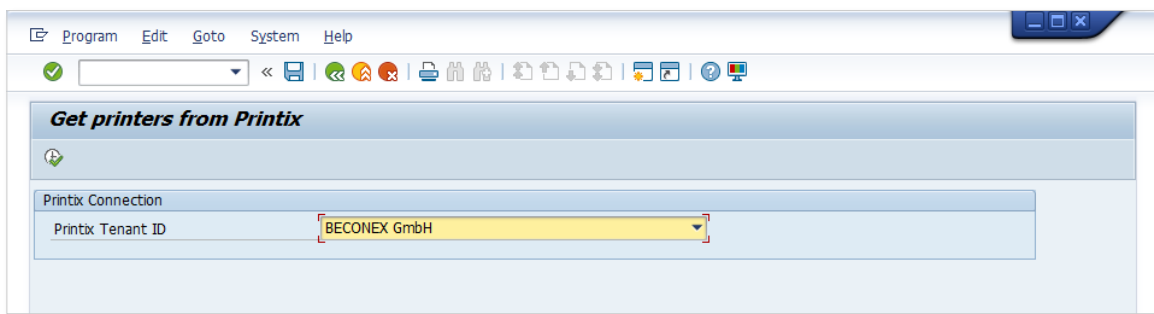

SAP® customizing view for the SAP2Printix application

Administration of printers

On completion of the customizing steps, you can fetch the available printers from each of the registered Printix tenants. Afterwards, the only remaining step is to create the SAP-printers:

- **Select the Printix tenant** from which you wish to create the SAP-printer

- Choose one or more printers from the table.

- Click on "**Generate SAP Names**". The "Printer Name" column is filled with the description obtained from the Printix tenant, making it easier to identify the desired printers

- Click on "**Create SAP Printers**". A marker will appear in the "SAP created" column as confirmation. Done!
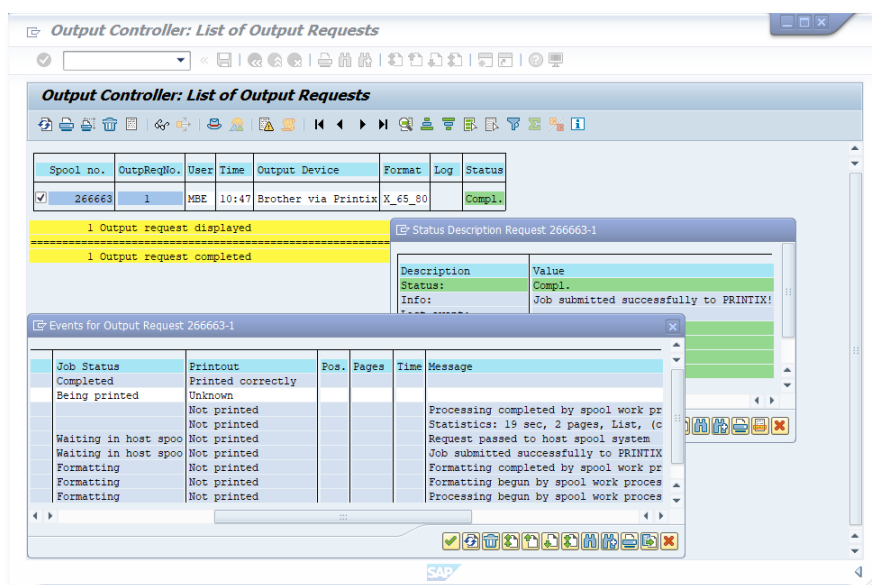
(1)Fetch printers from registered Printix tenants, and (2) Create SAP® printers

<u>Monitoring spool requests</u>

The monitoring and logging data is collected for every print job and can be visualized directly from the SAP® system. It includes the print job parameters, the history of REST calls and responses between SAP®, the application and Printix, as well as other error and debugging information.

Example of a Status Output Request in the SAP® system

System requirements and installation

SAP2Printix is supported for all systems based on the SAP® NetWeaver ABAP platform

- SAP® ECC, SAP® SCM, SAP® GTS, SAP® EWM, etc.

- SAP S/4HANA® On-Prem.

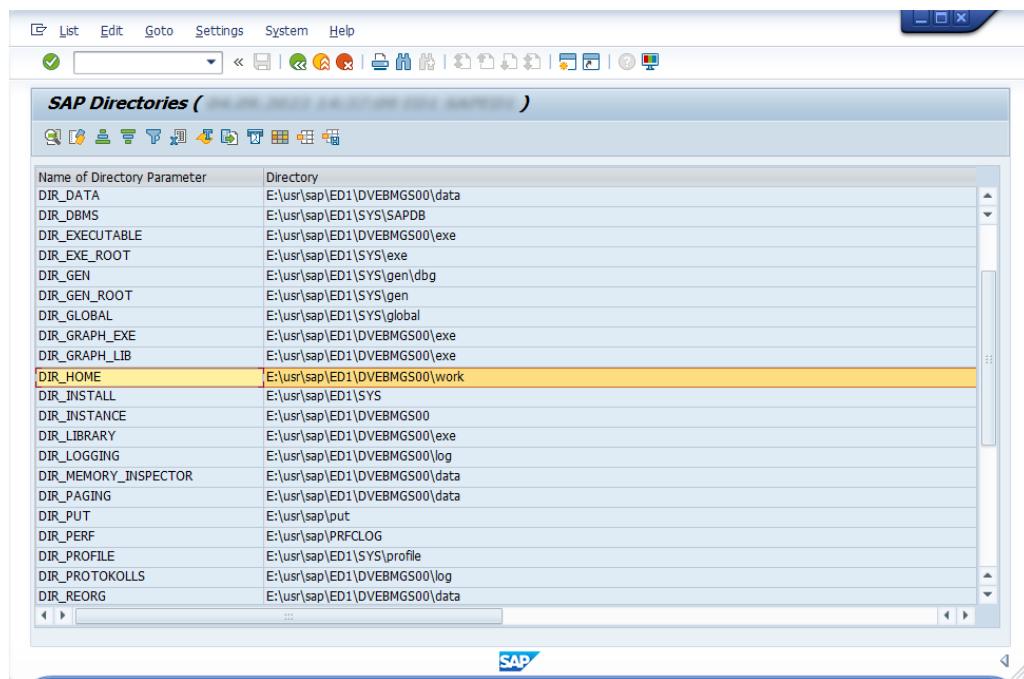- SAP S/4HANA® Cloud (private edition).

Additionally, it is a prerequisite to install the following software:

- .NET Runtime 7.0.5 (x64) for Windows or for Linux in case of a SAP S/4HANA® system.

The installation is performed on the SAP® application server

- The executable files need to be copied in the `DIR_HOME` directory of the SAP® system, execution rights must be granted.

- A set of transport request must be imported in the SAP® system.

After performing these steps, you can proceed to customize and set up the application, as described in the previous section.

`DIR_HOME` in SAP Directories

BECONEX SAP2Printix in a nutshell

Thanks to SAP2Printix you can:

Use the Printix Secure Cloud Print Management Software to manage all SAP® and office print jobs directly in the cloud, no more need for servers! This allows you to completely migrate your system to the cloud without loosing any functionality, and to profit from the flexibility and robustness of cloud-based solutions.

Integrate your SAP® system, regardless of On-Prem or Cloud-based, with the Printix solution for cloud print management, in both single-tenant or multi-tenant configuration.

Supported systems include SAP® ECC, SAP S/4 HANA® On-Prem, as well as SAP S/4 HANA® Cloud (private edition).

Set up a printing environment, configure SAP printers, and manage print jobs with just a few clicks. Thanks to its user-friendly interface, SAP2Printix makes the administration and monitoring simple and efficient.

Both "direct print" and the secure method "print anywhere" can be used directly from the SAP® system!

Got questions?

We are happy to make an appointment to answer your questions and to show you the SAP2Printix solution from BECONEX in action!

Request demo

BECONEX GmbH

https://beconex.com/en/home

(+49) 89 200 739 16

Bretonischer Ring 18

85630 Grasbrunn