Microsoft Dynamics 365

Beyond the DRA: Cloud Label Printing

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Moderator(s)/Q&A:
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Sohaib Khan – Senior Program Manager

Meet your presenters

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Senior Solution Architect

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Principal Software Engineer

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Agenda

- What’s new with label printing
- Cloud label printing overview
- Use cases
- Demos
- Q&A

What’s new in label printing

Label layouts

- License plate labels option
- Variables
- Template support

Custom labels

- Data sources
- Print button

Dynamic printer selection

- Label printer setup
- Location/user defaults
- Mobile device menu item

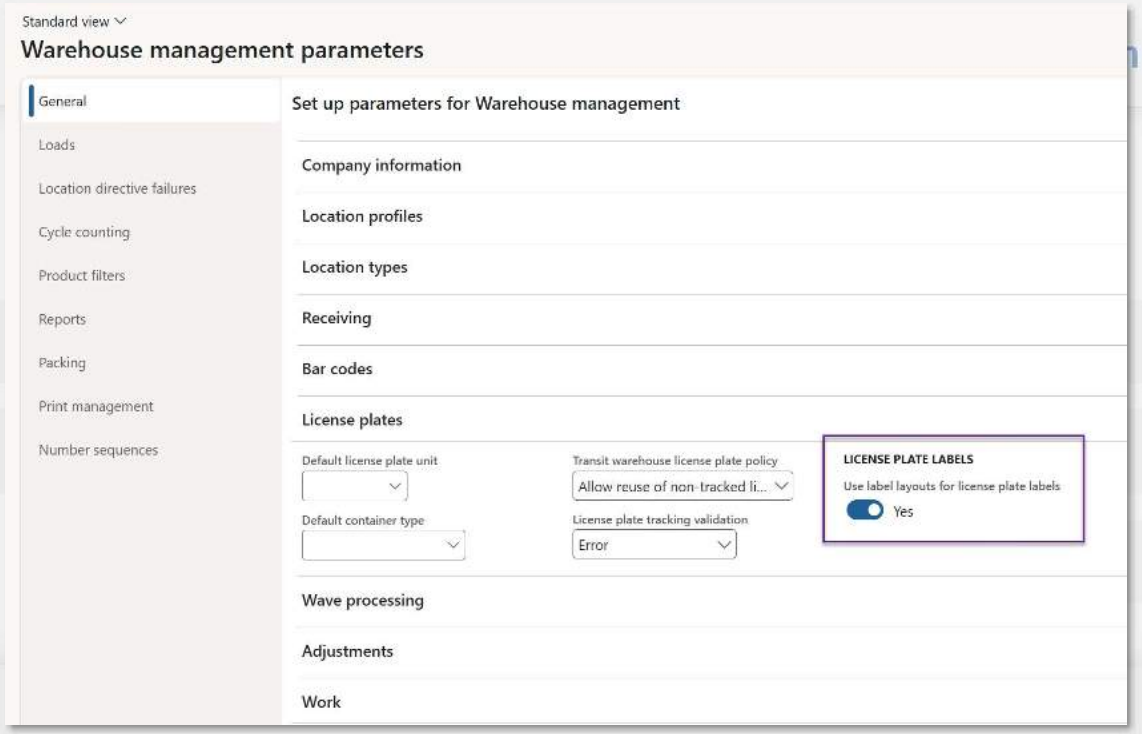
What's new in label printing

Label layouts

License plate labels option

Variables

Template support



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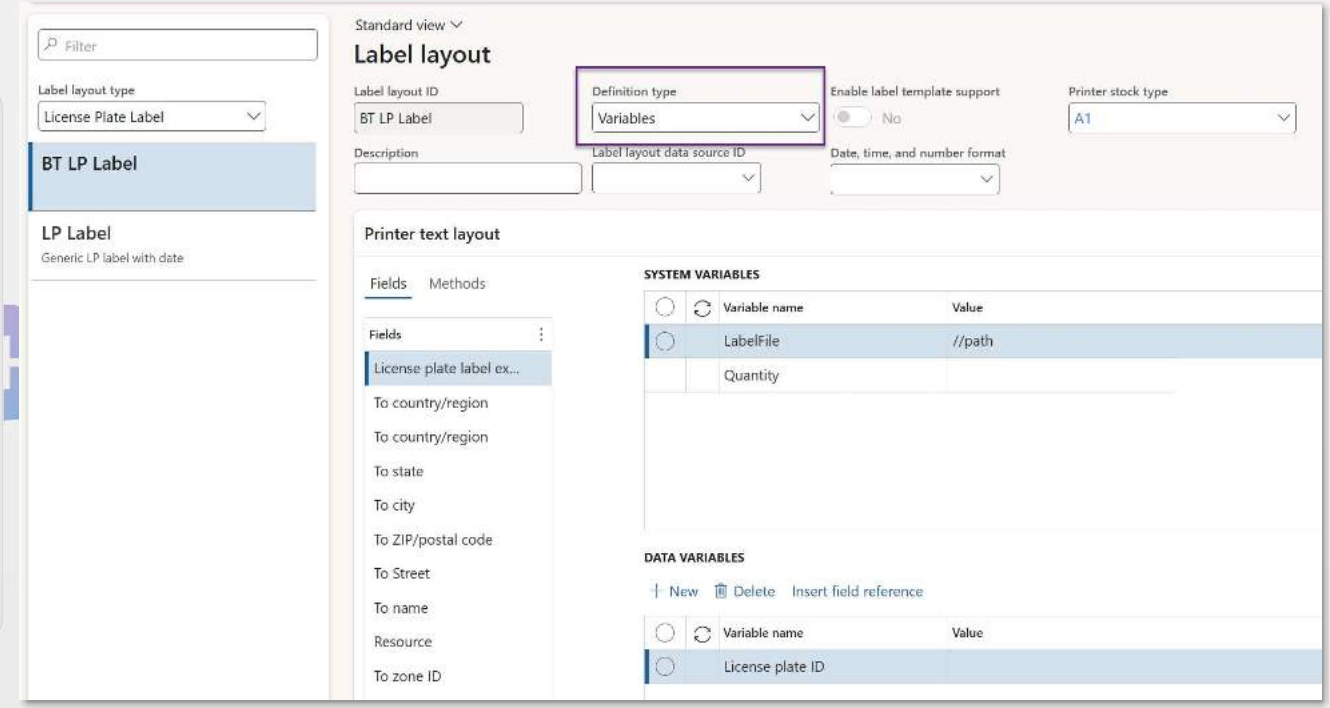

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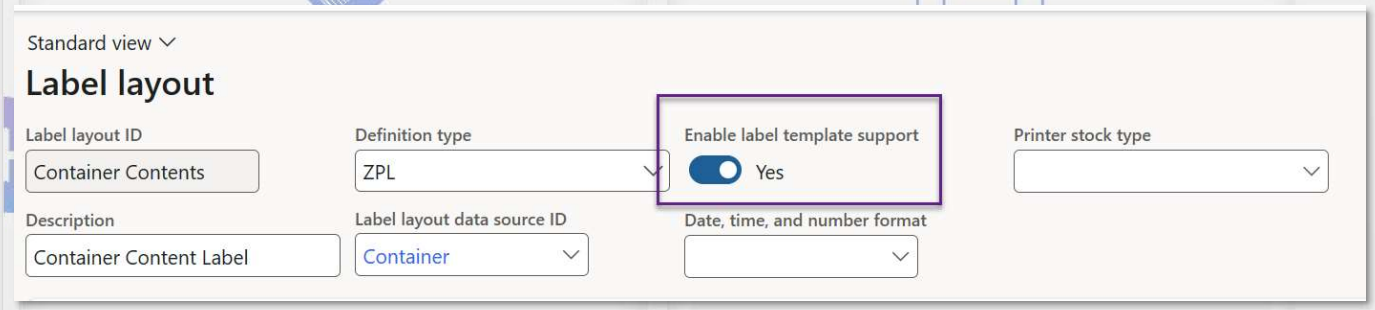

Mobile device menu item

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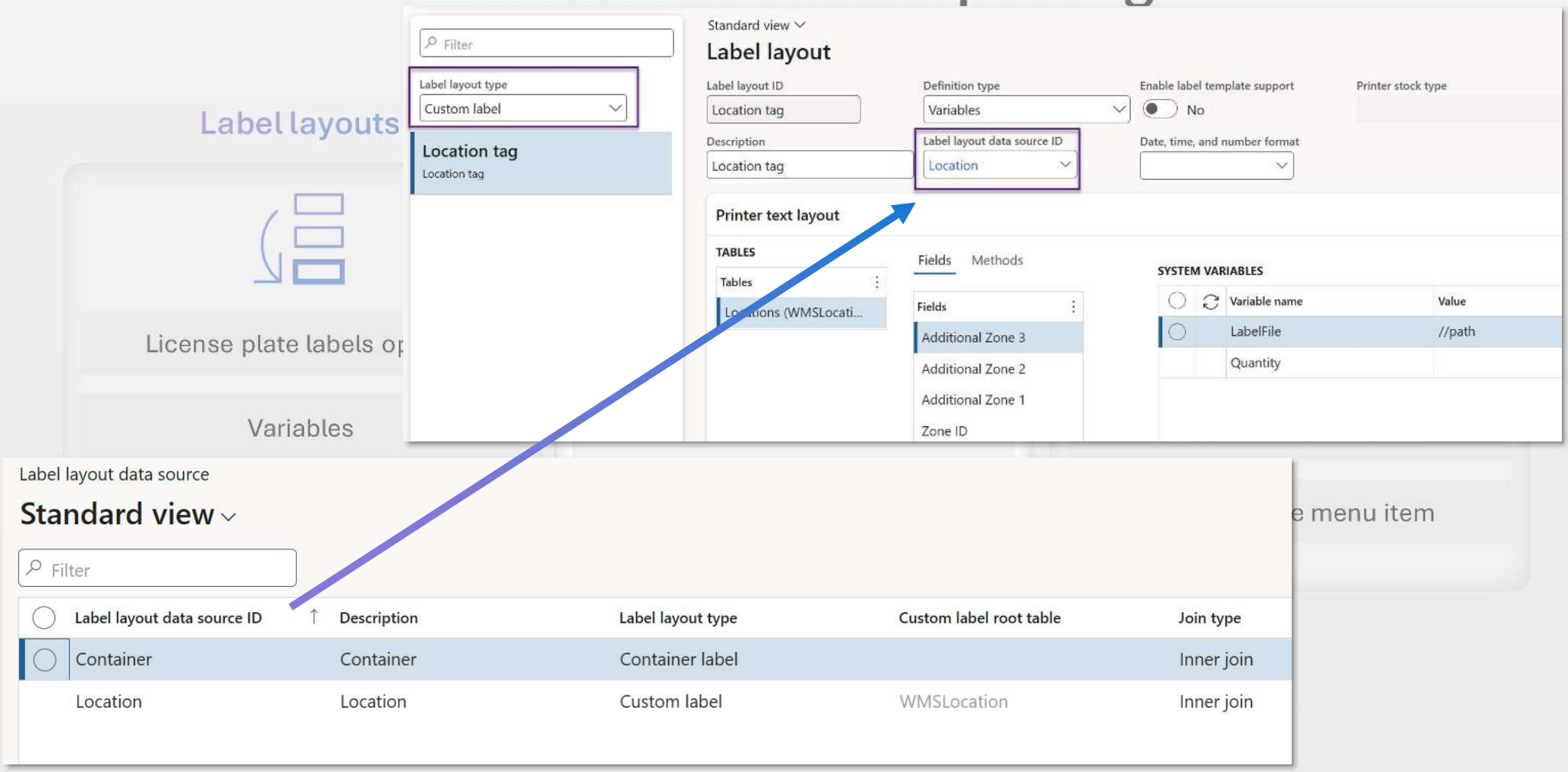

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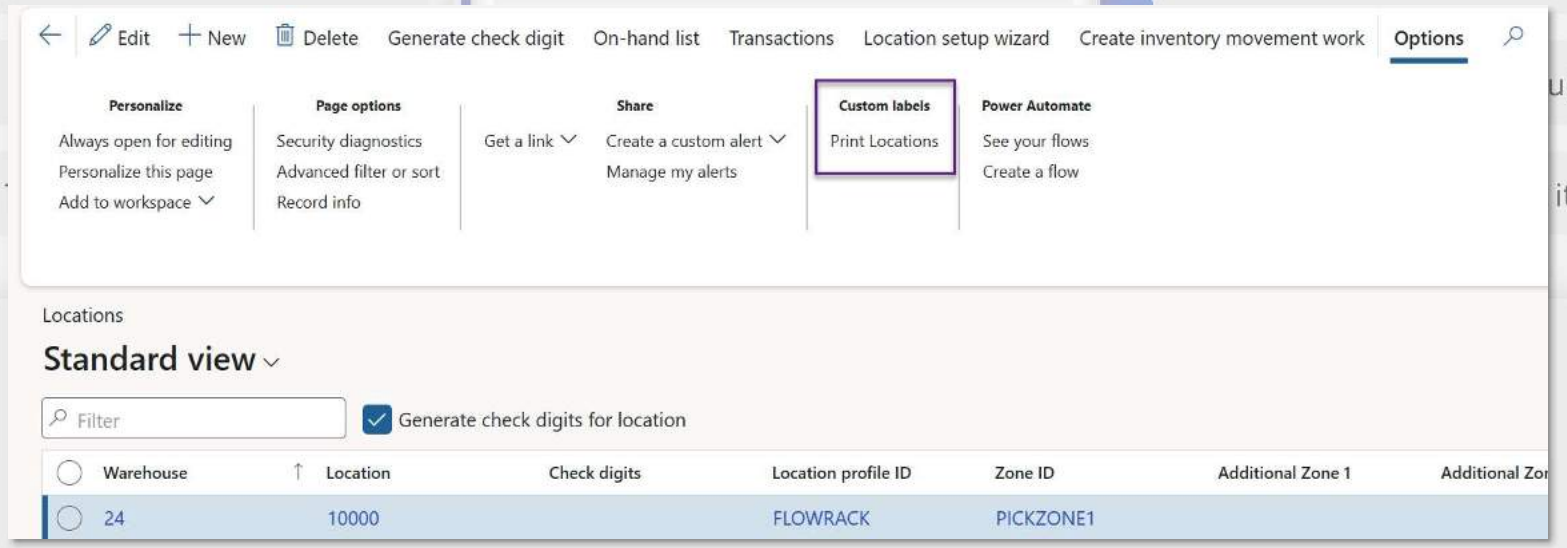

Wh ng

Label layouts

Dynamic printer selection

License plate labels option

Label printer setup

Standard view

Warehouse management parameters

General
Loads
Location directive failures
Cycle counting
Product filters
Reports
Packing
Print management
Number sequences

Set up the information for the reports

Bill of lading
Picking list
Load report
Hazardous materials report parameter
Custom labels

Display custom label print buttons
Never
Never
On all forms

Edit | New | Delete | Generate check digit | On-hand list | Transactions | Location setup wizard | Create inventory movement work | Options

Personalize
Always open for editing
Personalize this page
Add to workspace

Page options
Security diagnostics
Advanced filter or sort
Record info

Get a link

Share
Create a custom alert
Manage my alerts

Custom labels
Print Locations

Power Automate
See your flows
Create a flow

Locations

Standard view

Filter

Generate check digits for location

Warehouse	Location	Check digits	Location profile ID	Zone ID	Additional Zone 1	Additional Zor
24	10000		FLOWRACK	PICKZONE1		

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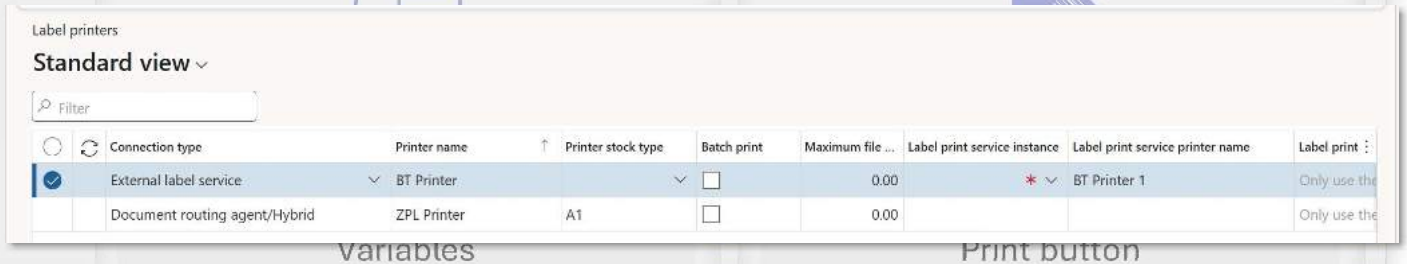

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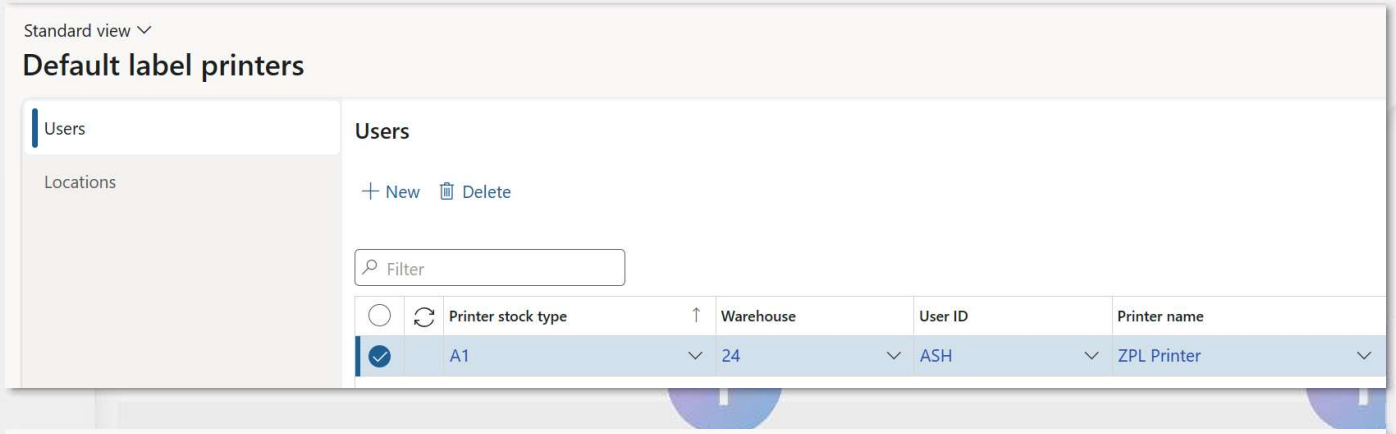

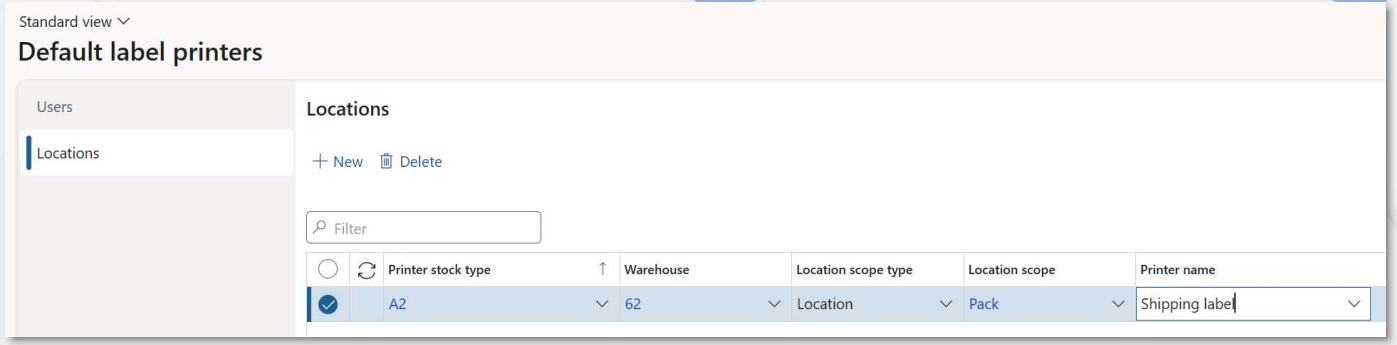

Dynamic printer selection

Label printer setup

Location/user defaults

Mobile device menu item

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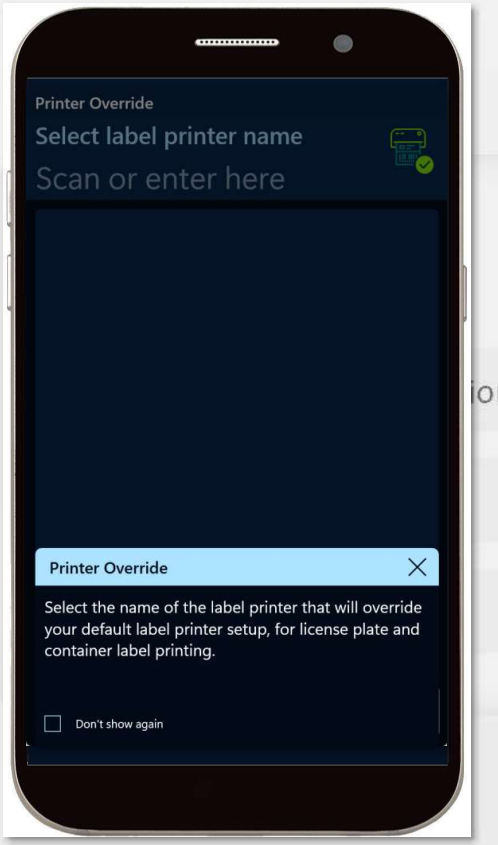
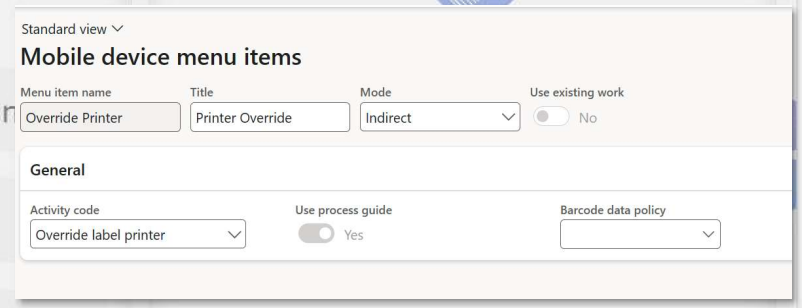


Custom labels



Dynamic printer selection

- Label printer setup
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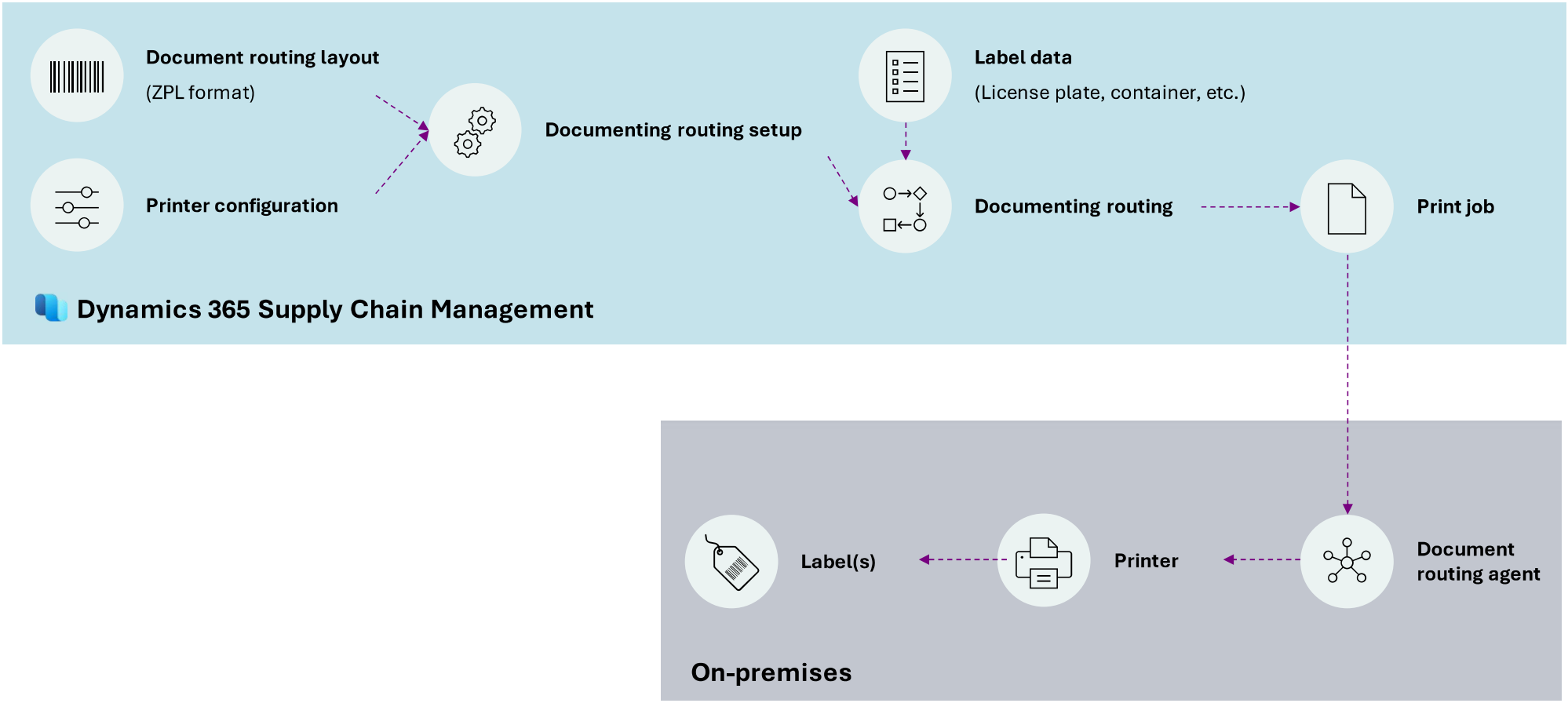
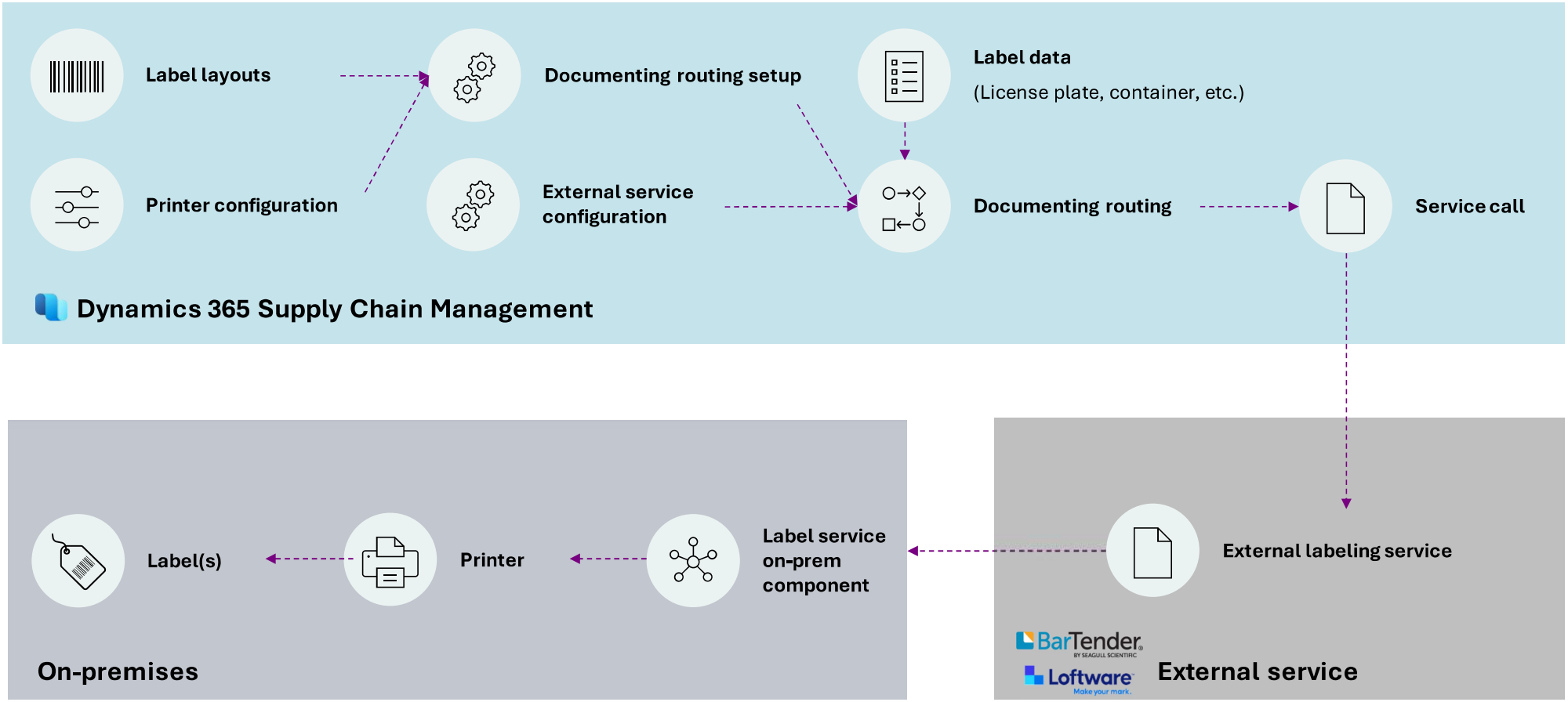
Cloud Label Printing Overview

Classified as Microsoft Confidential

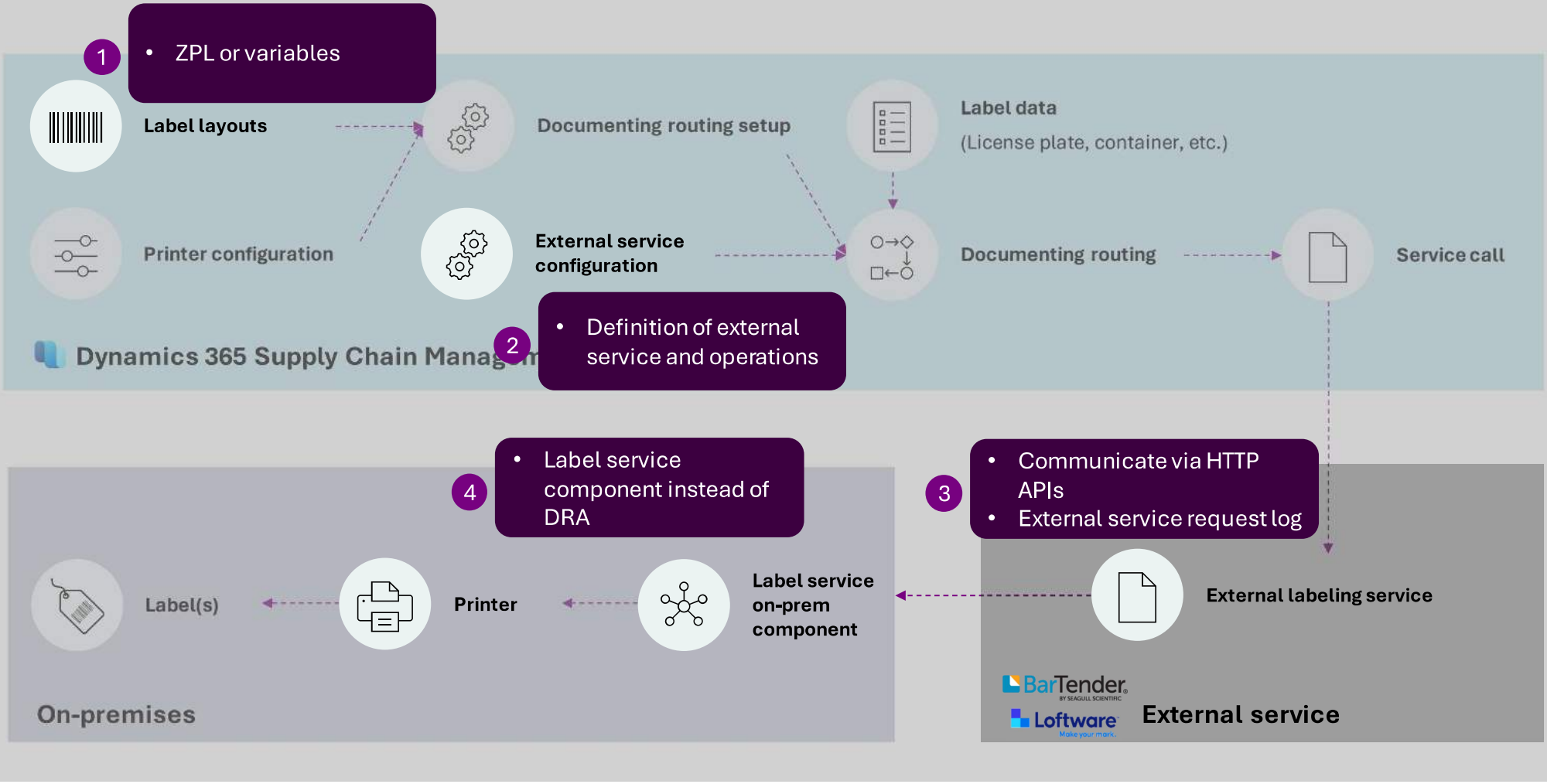
Printing labels via the Document Routing Agent (DRA)



Printing labels via an external service (cloud label printing)



Printing labels via an external service (cloud label printing)



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Use cases

Use cases

Document routing agent

- ▲ Cost effective
- ▲ Simple
- ▼ Scalability
- ▼ Label design

Cloud label (external service)

- ▲ Specialized labeling
- ▲ Scalability
- ▼ Additional cost
- ▼ Architecture considerations

Scenario

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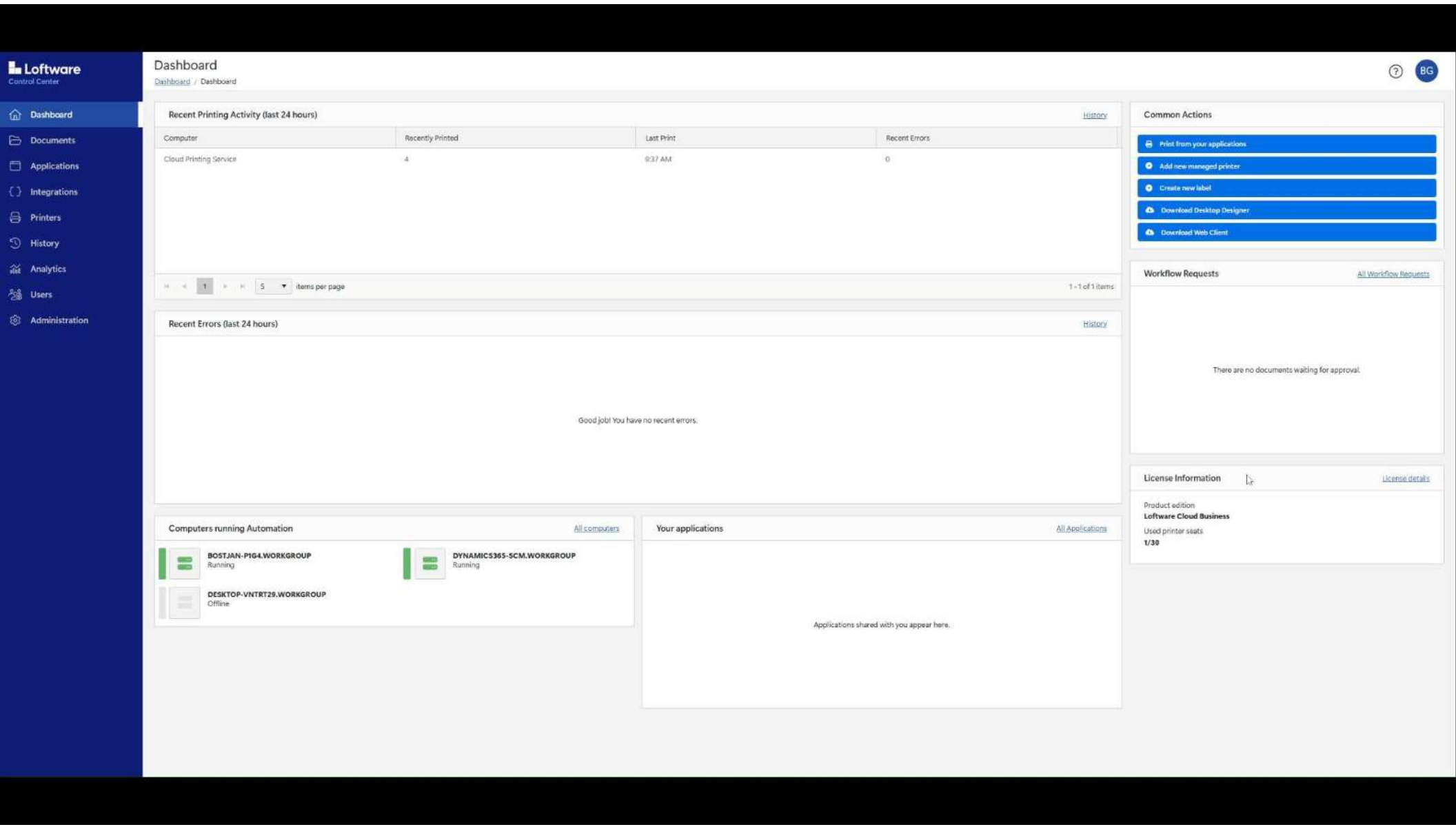
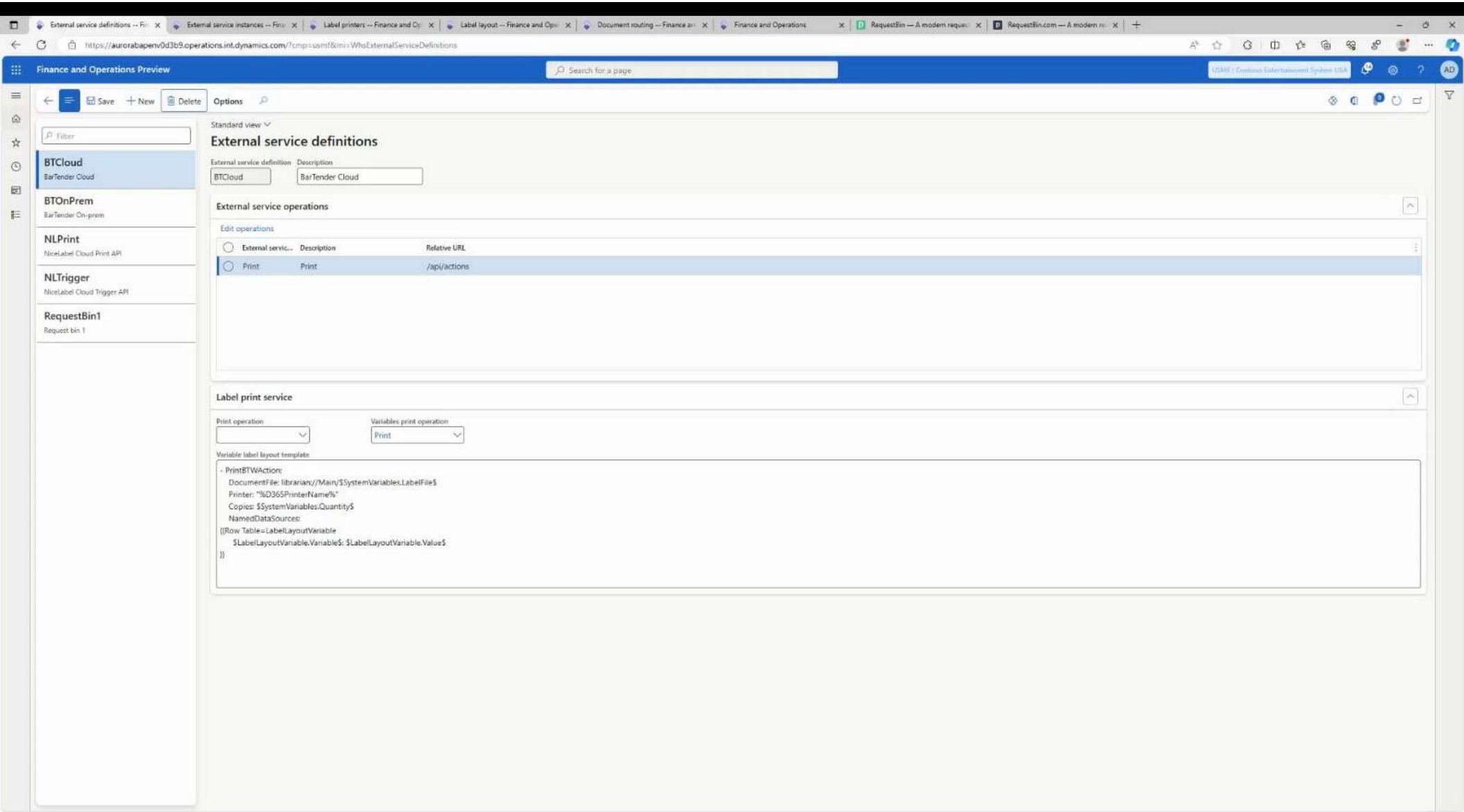
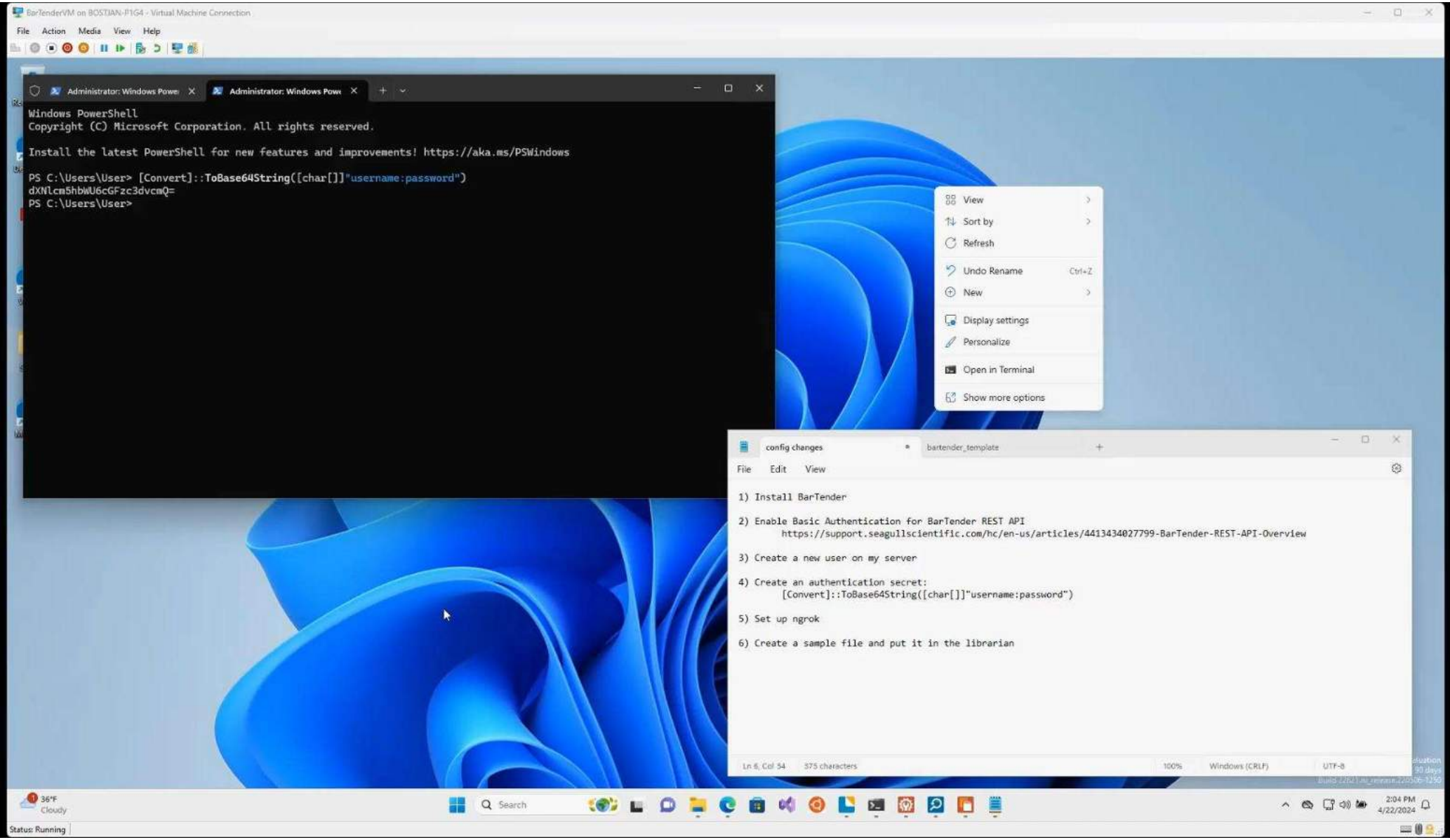
Demo


Loftware
Control Center
Dashboard
Documents
Applications
Integrations
Printers
History
Analytics
Users
Administration
Dashboard
Dashboard / Dashboard
BG
Recent Printing Activity (last 24 hours)
History
Computer
Recently Printed
Last Print
Recent Errors
Cloud Printing Service
4
9:37 AM
0
items per page
1 - 1 of 1 items
Recent Errors (last 24 hours)
History
Good job! You have no recent errors.
Computers running Automation
All computers
BOSTJAN-P1G4.WORKGROUP
Running
DYNAMICS365-SCM.WORKGROUP
Running
DESKTOP-VNTRT29.WORKGROUP
Offline
Your applications
All Applications
Applications shared with you appear here.
Common Actions
Print from your applications
Add new managed printer
Create new label
Download Desktop Designer
Download Web Client
Workflow Requests
All Workflow Requests
There are no documents waiting for approval.
License Information
License details
Product edition
Loftware Cloud Business
Used printer seats
1/30


External service definitions -- Fin
External service instances -- Fina
Label printers -- Finance and Op
Label layout -- Finance and Oper
Document routing -- Finance an
Finance and Operations
RequestBin — A modern reques
RequestBin.com — A modern re
https://aurorabapenv0d3b9.operations.int.dynamics.com/?cmp=usmf&mi=WhsExternalServiceDefinitions
Finance and Operations Preview
Search for a page
USMF | Contoso Entertainment System USA
AD
Save
New
Delete
Options
Filter
BTCloud
BarTender Cloud
BTOnPrem
BarTender On-prem
NLPrint
NiceLabel Cloud Print API
NLTrigger
NiceLabel Cloud Trigger API
RequestBin1
Request bin 1
Standard view
External service definitions
External service definition
BTCloud
Description
BarTender Cloud
External service operations
Edit operations
External servic...
Description
Relative URL
Print
Print
/api/actions
Label print service
Print operation
Variables print operation
Print
Variable label layout template
- PrintBTWAction:
DocumentFile: librarian://Main/$SystemVariables.LabelFile$
Printer: "%D365PrinterName%"
Copies: $SystemVariables.Quantity$
NamedDataSources:
{{Row Table=LabelLayoutVariable
$LabelLayoutVariable.Variable$: $LabelLayoutVariable.Value$
}}


BarTenderVM on BOSTJAN-P1G4 - Virtual Machine Connection
File Action Media View Help
Administrator: Windows Powe
Administrator: Windows Powe
Windows PowerShell
Copyright (C) Microsoft Corporation. All rights reserved.
Install the latest PowerShell for new features and improvements! https://aka.ms/PSWindows
PS C:\Users\User> [Convert]::ToBase64String([char[]]"username:password")
dXNlcm5hbWU6cGFzc3dvcmQ=
PS C:\Users\User>
View
Sort by
Refresh
Undo Rename Ctrl+Z
New
Display settings
Personalize
Open in Terminal
Show more options
config changes
bartender_template
File Edit View
1) Install BarTender
2) Enable Basic Authentication for BarTender REST API
https://support.seagullscientific.com/hc/en-us/articles/4413434027799-BarTender-REST-API-Overview
3) Create a new user on my server
4) Create an authentication secret:
[Convert]::ToBase64String([char[]]"username:password")
5) Set up ngrok
6) Create a sample file and put it in the librarian
Ln 6, Col 54
375 characters
100%
Windows (CRLF)
UTF-8
36°F
Cloudy
Search
2:04 PM
4/22/2024
Status: Running

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Q&A

FAQs

Question	Answer
In this Loftware integration, does it support multiple types of barcode printing, including GS1 and QR code scanning?	A complete list of Loftware capabilities are not in scope of this documentation however, D365 simply sends the external service the variable values. Loftware can then translate into the appropriate barcode type.
Is it planned to have cloud label printing for wave labels as well?	There is no commitment at this time.
Do custom labels include data that would allow us a retailer to generate product hangtag labels with pricing? Is it extensible if we needed to add data elements that might not be available in the core product?	Yes, the custom label feature allows you to access fields from data sources like products. You can also join related tables in the data source definition. Any custom fields may require additional development.
If we use Lasernet or StreamServe ExStream to handle our printing needs what advantage would this solution give us?	Lasernet has its own D365 integration which can be used in place of the feature covered in this session. The scope of this solution is only for pre-built Bartender and Loftware integration.
Will this work as well in Production floor execution or only on warehouse management?	License plate labels are supported by this feature which are used in both warehouse management and production RAF processes.
Are there any plans to equip the Custom label print dialog with a user-defined quantity of labels? If so, what is the ETA? This is high on the ideas.	There is no commitment at this time.
As a company that prints 40,000 labels a day, what is the recommended solution? We have over 30 DRAs and over 1500 printers. It is not cost-effective or simple running a servers per DRA client at that scale, and cloud label printing will add additional costs based on the number of labels we print. Is there a plan yet to improve the DRA framework to reduce the need to have a separate server per DRA client?	There is no commitment for future DRA work. If the DRA solution is not meeting your printing needs, please look into the cloud label solution.
Is this valid for check printing or only label printing?	This is only for label printing.
Is there an option to periodically purge the external label service log?	Not yet, but we are working on adding purging to all logs that are still missing the function.
If external service is down, how will D365FO handle the prints in queue?	There is no retry from D365FO side. It's up to the service to have a HA configuration. You can use existing reprint options in case the label wasn't printed.
Is it possible to use Azure Application Proxy to connect to on prem Bartender? Or would something more specific like Azure APIM be needed?	With Azure Application Proxy, you may run into authentication problems however we have seen this work successfully with Azure APIM.
How does Loftware know which variable to be overridden from D365FO values? Do we need to put placeholder in the label?	In F&O, we need to define the variables in the label layout form. In Loftware, you should add placeholders in the label design and at runtime it will replace placeholders with the variable values.
How do we map cloud printers to local printers?	For local printers, please use the DRA or an on prem component of your external service. For cloud printers, connect directly to the cloud.

Additional resources

- Microsoft Learn documentation
- Dynamics 365 Ideas – Warehouse management
- D365 WHS TMS Community
- Warehouse management app Community
- TechTalk Series: Warehouse & Transportation Management in Dynamics 365 Supply Chain Management
- Improve Labelling Processes blog post

Dankie Faleminderit **Shukran** Chnorakaloutioun Hvala Blagodaria

Děkuji **Tak** Dank u Tänan Kiitos **Merci** Danke Ευχαριστώ A dank

Mahalo תודה **Dhanyavād** Köszönöm Takk Terima kasih **Grazie** Grazzi

Thank you!

감사합니다 Paldies Choukrane Ačiū **Благодарам** ありがとうございました

谢谢 Баярлалаа **Dziękuję** Obrigado Mulţumesc **Спасибо** Ngiyabonga

Ďakujem Tack Nandri Kop khun **Teşekkür ederim** Дякую Хвала Diolch

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