



Output Management in SAP S/4HANA

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Public

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Agenda

Our Vision

Getting Started

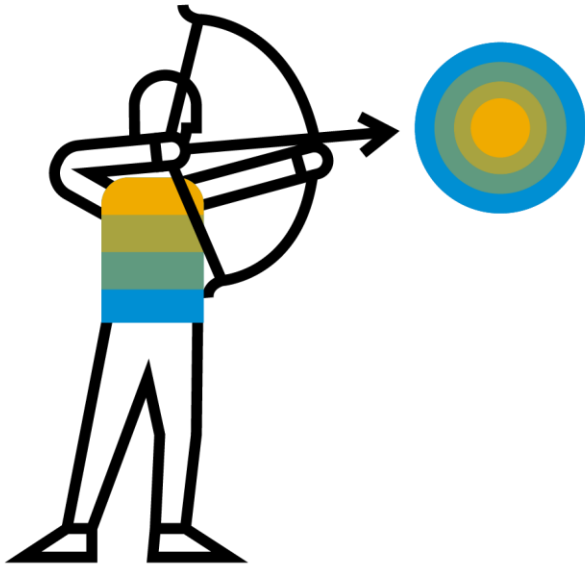
Available Options

Getting Directions

Output Control

Resources

Our Vision



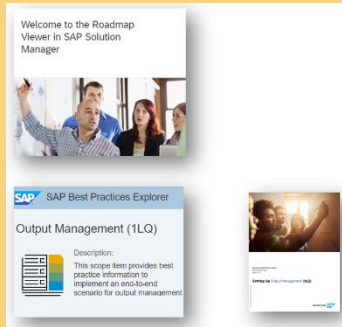
**Enable business users
to perform all relevant
output related-tasks**

Personas involved in Output Management

Project Manager (for S/4 Go-Live)



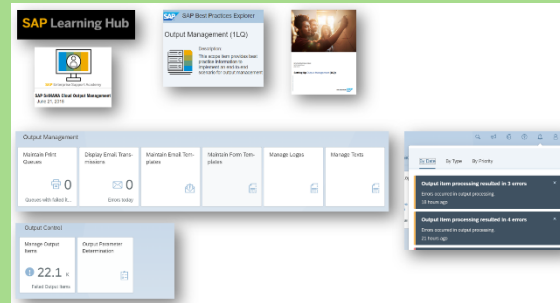
- Identify tasks & skillset
- Assign people



Business Expert



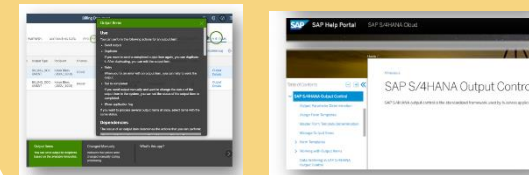
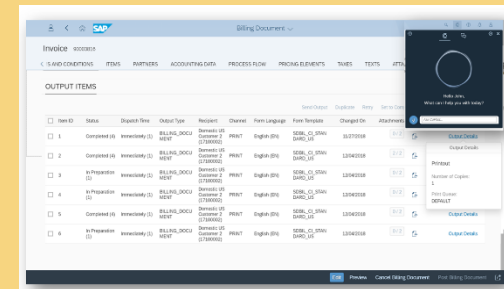
- Set up output channels
- Define business requirements
- Monitor output processing



Business User



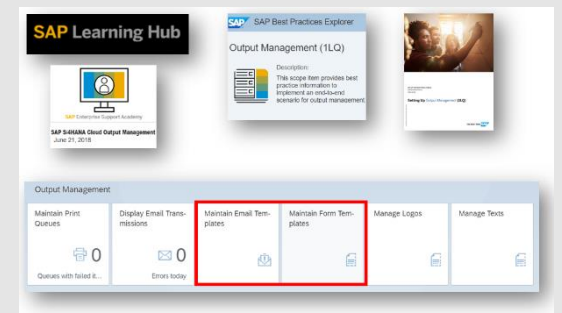
- Process output of business doc.



Developer



- Create custom form templates
- Create custom email templates

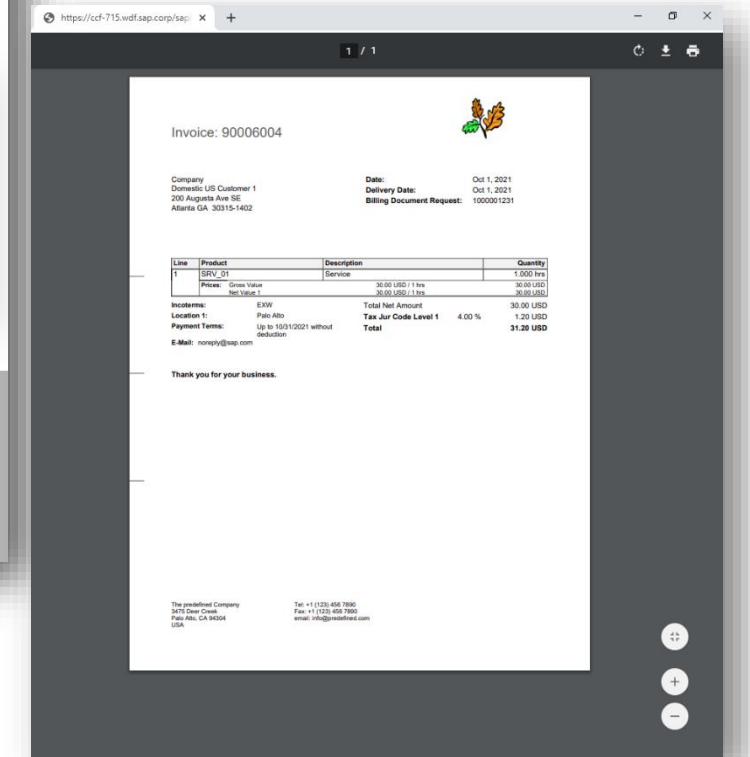


Example – Native integration into business user apps

OUTPUT ITEMS

Send Output Duplicate Retry Set to Completed ⚙️

<input type="checkbox"/>	Item ID	Status	Dispatch Time	Output Type	Channel	Form Template	Attachments	Changed On	Display
<input checked="" type="checkbox"/>	1	Error (5)	Immediately (1)	BILLING_DOCUM NT	PRINT	SDBIL_CI_STANDA RD_US	0 / 2	05/29/2019	Output Details
<input type="checkbox"/>	2	Completed (4)	Immediately (1)	BILLING_DOCUM NT	EMAIL	SDBIL_CI_PROF_S RV_BE	1 / 2	06/13/2019	Output Details
<input type="checkbox"/>	3	Completed (4)	Immediately (1)	BILLING_DOCUM NT	EMAIL	SDBIL_CI_PROF_S RV_BE	1 / 2	06/13/2019	Output Details
<input type="checkbox"/>	4	Completed (4)	Immediately (1)	BILLING_DOCUM NT	EMAIL	SDBIL_CI_PROF_S RV_BE	1 / 2	06/17/2019	Output Details
<input type="checkbox"/>	5	Completed (4)	Immediately (1)	BILLING_DOCUM NT	EMAIL	SDBIL_CI_PROF_S RV_BE	1 / 2	06/17/2019	Output Details
<input type="checkbox"/>	6	Completed (4)	Immediately (1)	BILLING_DOCUM NT	EMAIL	SDBIL_CI_PROF_S RV_BE	1 / 2	06/17/2019	Output Details
<input type="checkbox"/>	7	In Preparation (1)	Immediately (1)	BILLING_DOCUM NT	EMAIL	SDBIL_CI_PROF_S RV_BE	1 / 2	06/17/2019	Output Details



Example – Specialized tools for business experts

Manage Output Items

87.7 K


Failed Output Items









SAP Manage Output Items

Standard* ▼

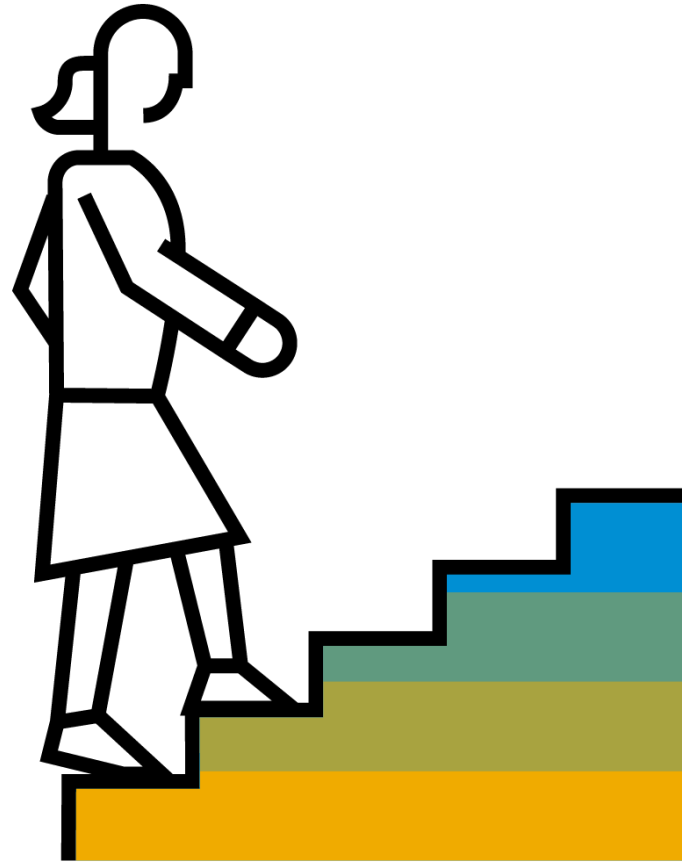
Filtered By (2): Application Object Type, Status

Output Items (6,590)

Duplicate Retry Set to Completed Send  ▼

<input type="checkbox"/>	Status	Application Object Type	Item ID	Application Object ID	Output Type	Channel	Form Template	Receiver	Dispatch Time	Changed On
<input type="checkbox"/>	 ▲ In Preparation (1)	Billing Document (BILLING_DOCUMENT)	1	0090006394	Billing Document (BILLING_DOCUMENT)	Printout (PRINT)	Customer Invoice Standard Form (SDBIL_CI_STANDARD_DE)	Inlandskunde Invoice List (0010100013)	Immediately (1)	11/24/2020, 15:36:53
<input type="checkbox"/>	 ■ Completed (4)	Billing Document (BILLING_DOCUMENT)	1	0090006393	Billing Document (BILLING_DOCUMENT)	Printout (PRINT)	Customer Invoice Standard Form (USA) (SDBIL_CI_STANDARD_US)	Domestic US Customer 1 (0017100001)	Immediately (1)	11/24/2020, 15:18:29
<input type="checkbox"/>	 ■ Completed (4)	Billing Document (BILLING_DOCUMENT)	1	0090006392	Billing Document (BILLING_DOCUMENT)	Printout (PRINT)	Customer Invoice Standard Form (SDBIL_CI_STANDARD_DE)	Inlandskunde Invoice List (0010100013)	Immediately (1)	11/24/2020, 15:15:28
<input type="checkbox"/>	 ■ Completed (4)	Billing Document (BILLING_DOCUMENT)	1	0090006391	Billing Document (BILLING_DOCUMENT)	Printout (PRINT)	Customer Invoice Form Professional Services (SDBIL_CI_PROF_SRV_DE)	Inlandskunde DE 1 (0010100001)	Immediately (1)	11/24/2020, 15:13:30
<input type="checkbox"/>	 ■ Completed (4)	Billing Document (BILLING_DOCUMENT)	1	0090006387	Billing Document (BILLING_DOCUMENT)	Printout (PRINT)	Customer Invoice Standard Form (SDBIL_CI_STANDARD_DE)	Inlandskunde Invoice List Test (0010100012)	Immediately (1)	11/24/2020, 14:47:59
<input type="checkbox"/>	 ▲ In Preparation (1)	Billing Document (BILLING_DOCUMENT)	1	0090006390	Billing Document (BILLING_DOCUMENT)	Printout (PRINT)	Customer Invoice List Form (SDBIL_IL_STANDARD_DE)	PAYER - Zentrale Walldorf (0010100014)	Immediately (1)	11/24/2020, 14:44:51
<input type="checkbox"/>	 ■ Completed (4)	Billing Document (BILLING_DOCUMENT)	1	0090006389	Billing Document (BILLING_DOCUMENT)	Printout (PRINT)	Customer Invoice Standard Form (SDBIL_CI_STANDARD_DE)	Inlandskunde Invoice List Test (0010100012)	Immediately (1)	11/24/2020, 14:44:38
<input type="checkbox"/>	 ▲ In Preparation (1)	Billing Document (BILLING_DOCUMENT)	1	0090006388	Billing Document (BILLING_DOCUMENT)	Printout (PRINT)	Customer Invoice List Form (SDBIL_IL_STANDARD_DE)	PAYER - Zentrale Walldorf (0010100014)	Immediately (1)	11/24/2020, 14:35:17

Getting Started



Output

Management

Basic output features



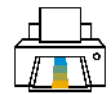
Printing



Email



Forms



Printing



Email



Forms

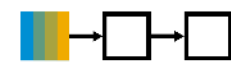
Output Control



User Interface



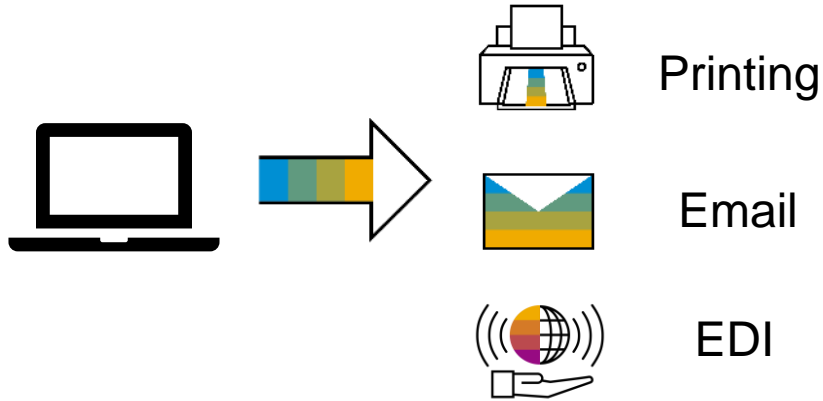
Configuration



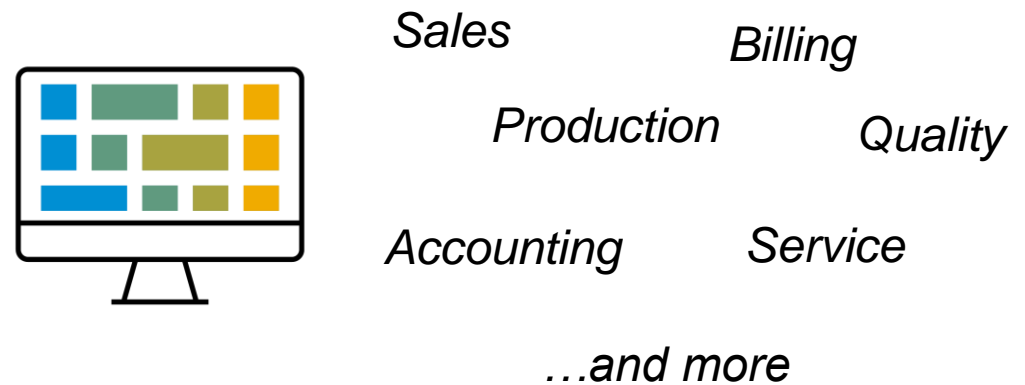
Processing

Scope of SAP S/4HANA output control

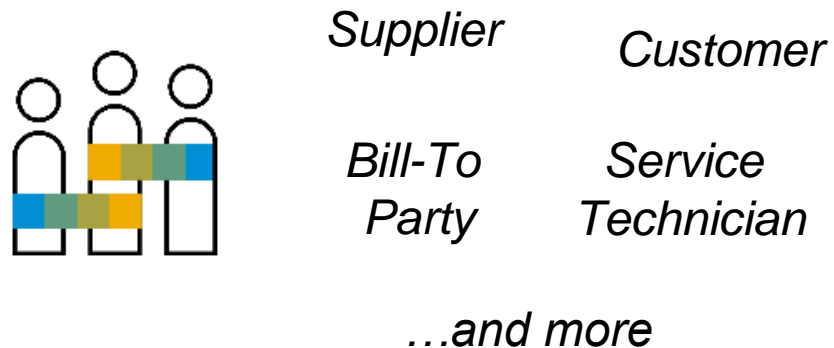
Sending outbound messages



From transactional applications



To business receivers



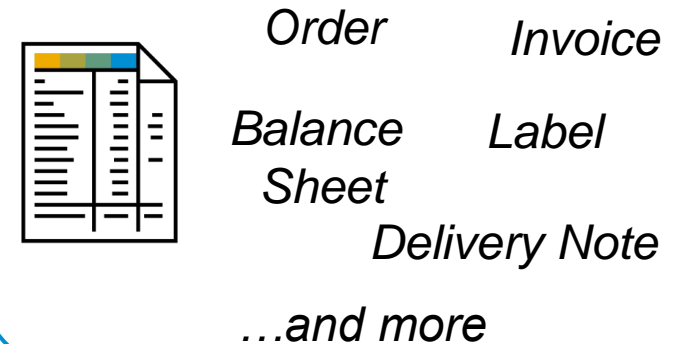
Documenting the output result

Who?

What?

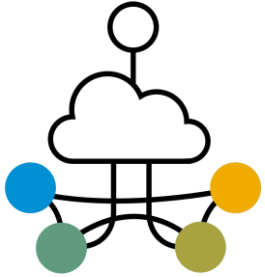
When?

Based on a document centric design



Wide adoption of SAP S/4HANA output control offers

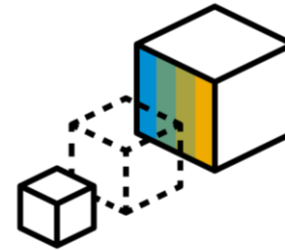
Unified output solution across the product



Native integration into Fiori apps



Ready-to-use output scenarios



Extensibility for configuration and documents



Central monitoring



User notifications



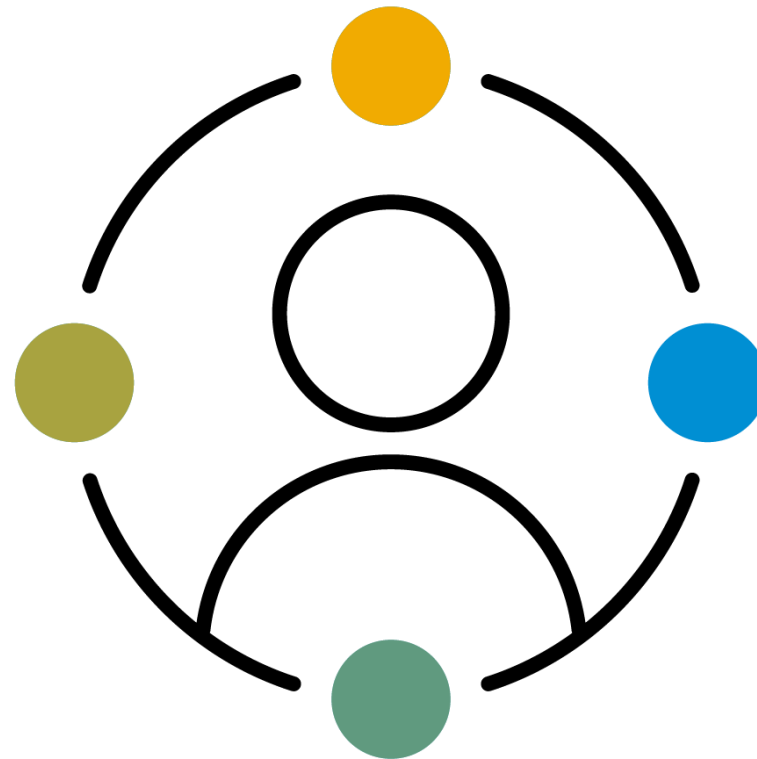
New form template options



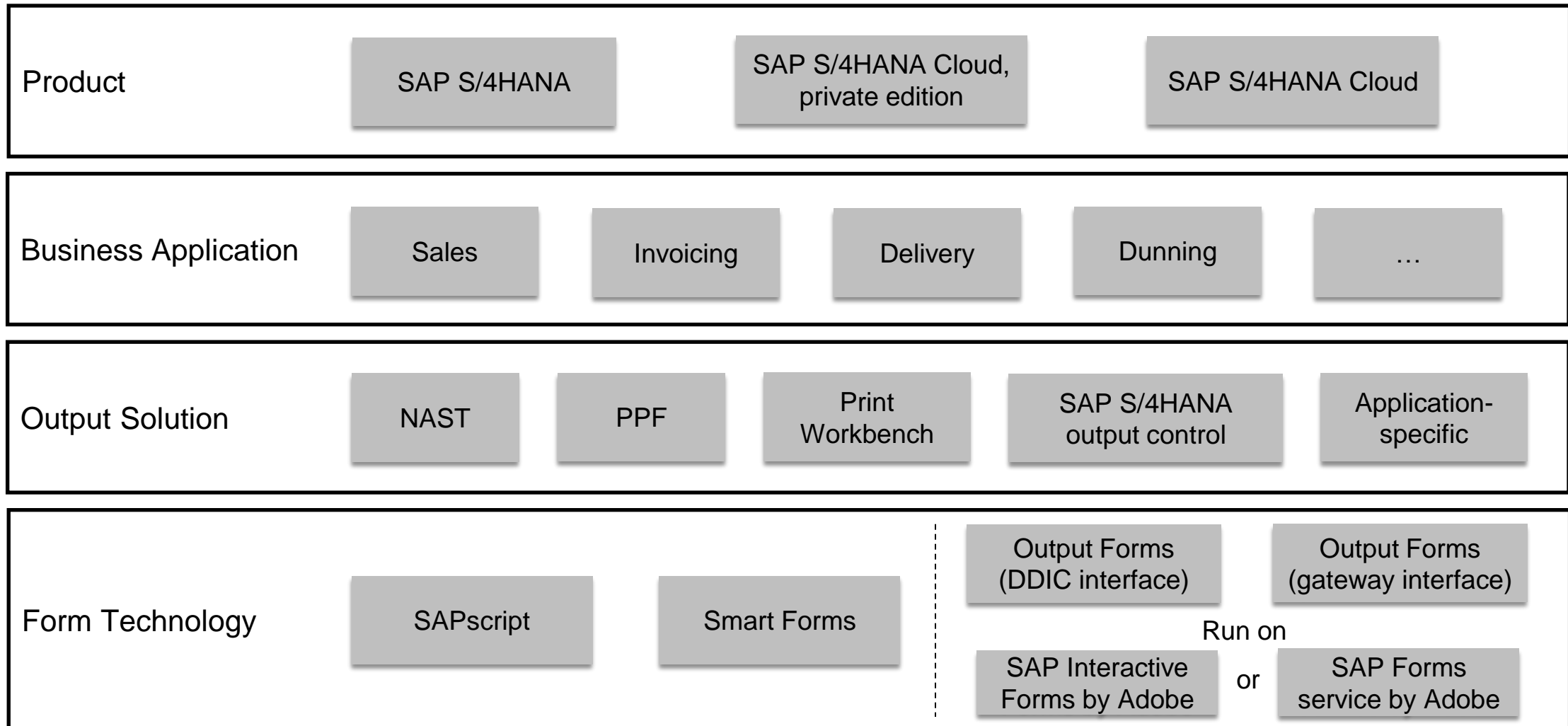
Runs in cloud and on-premise



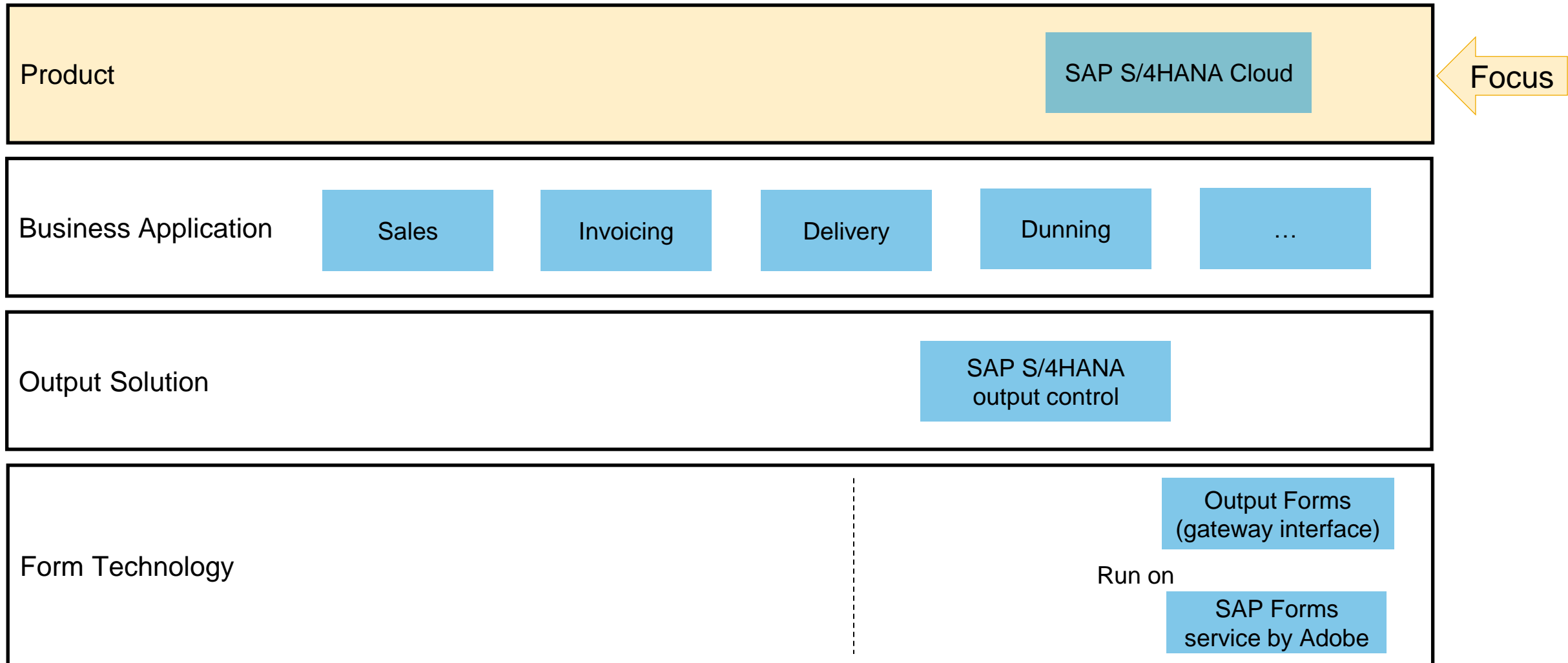
Available Options



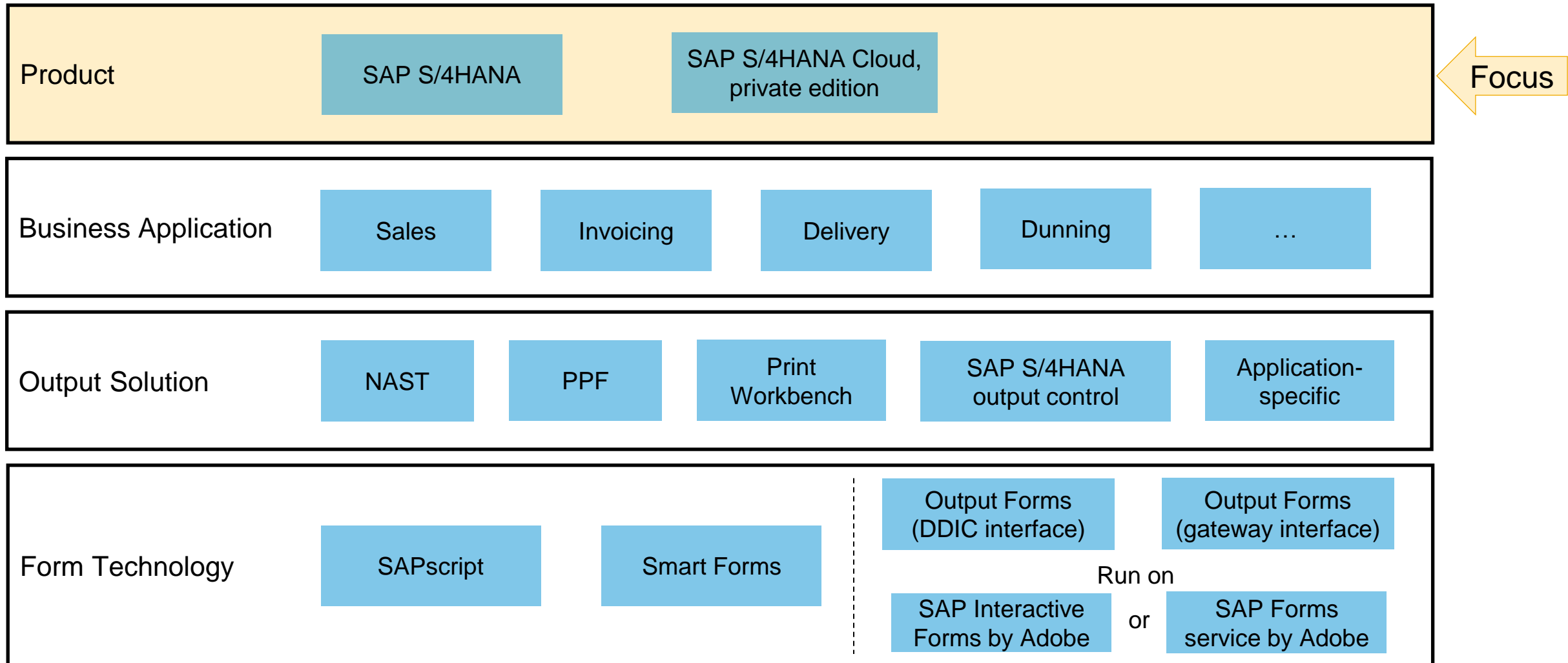
Available options across all SAP S/4HANA editions



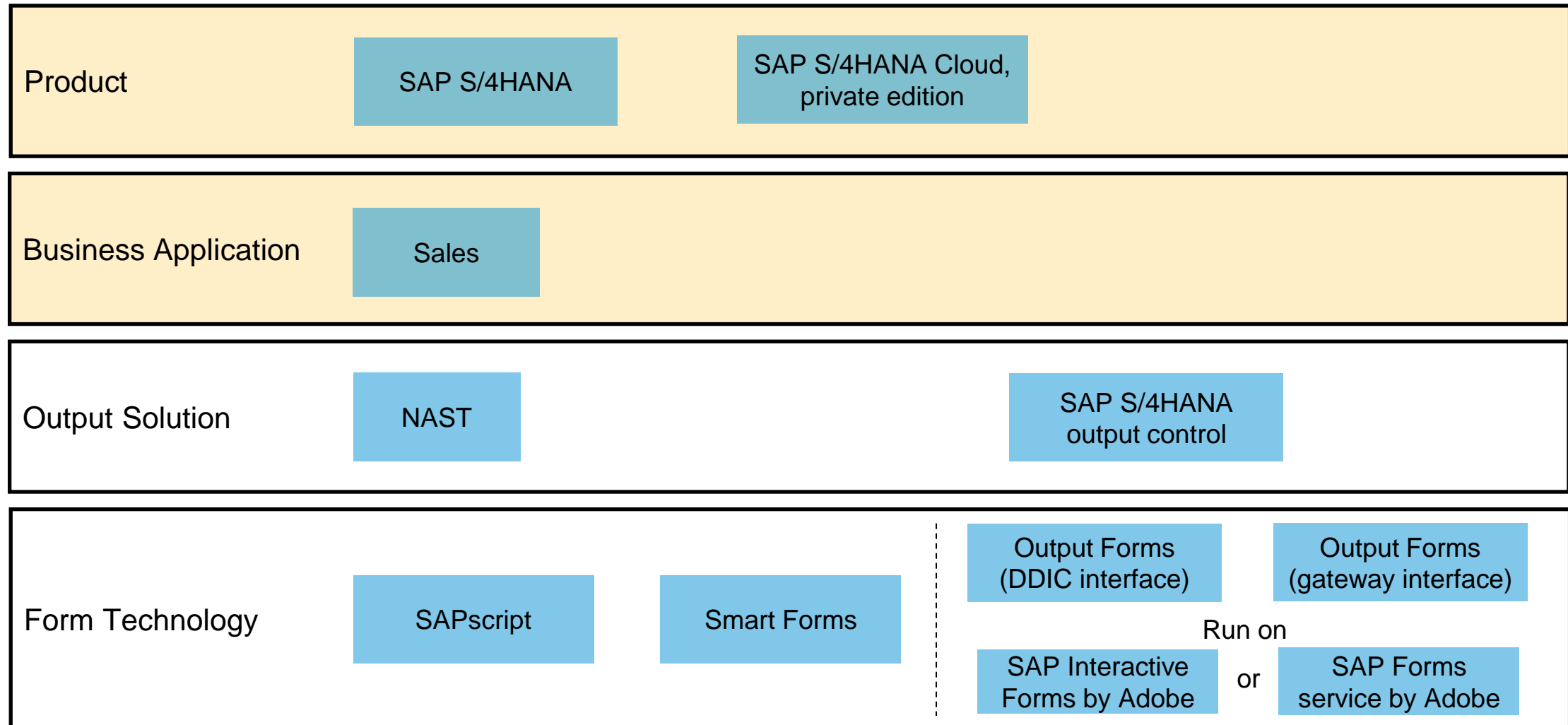
Available options in *SAP S/4HANA Cloud*



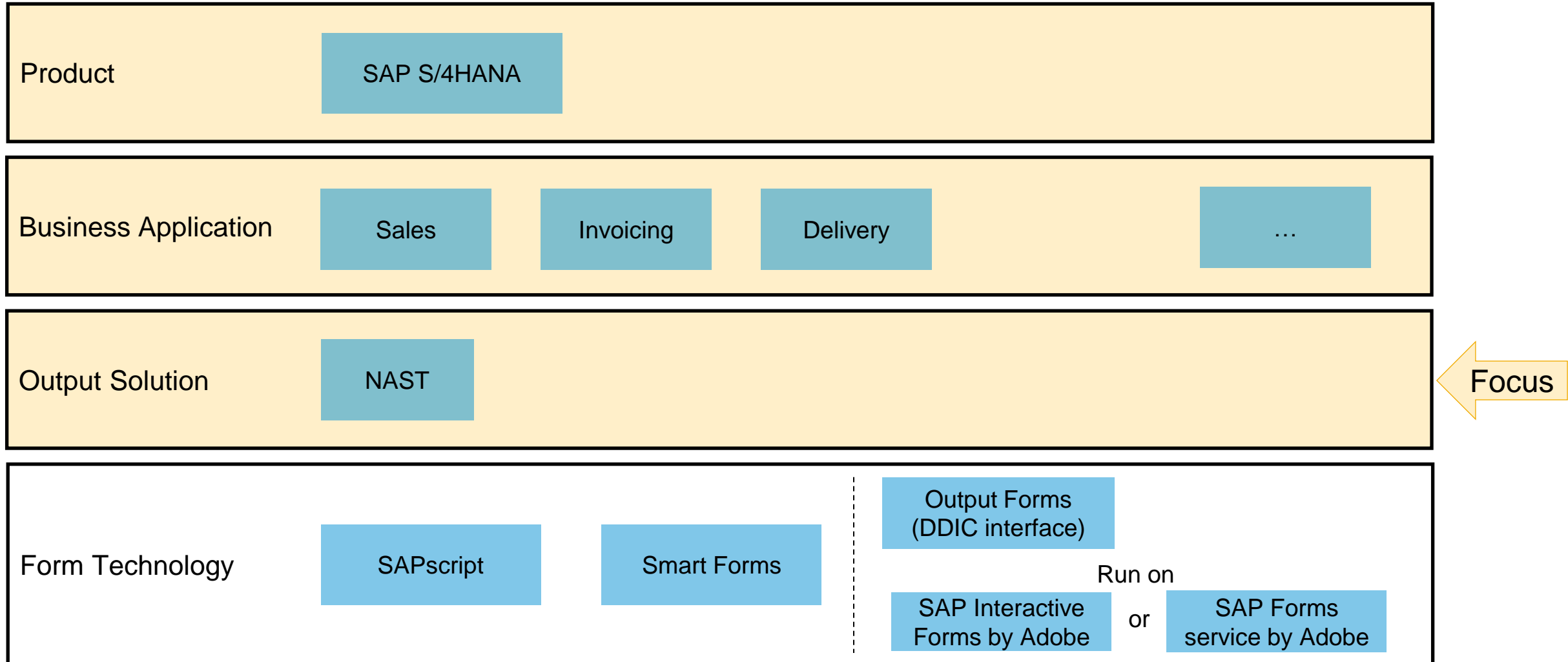
Available options in *SAP S/4HANA* & *SAP S/4HANA Cloud, private edition*



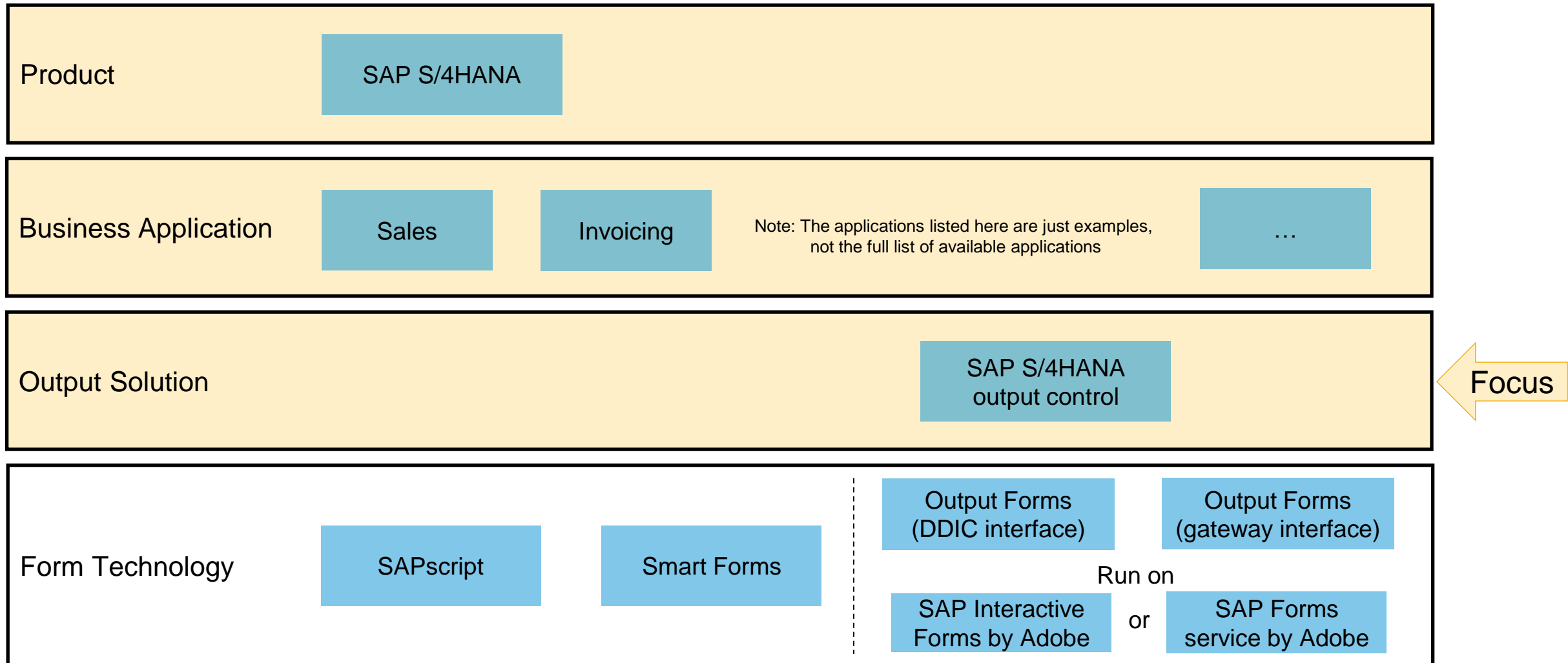
Available options in *SAP S/4HANA* & *SAP S/4HANA Cloud, private edition* for *Sales*



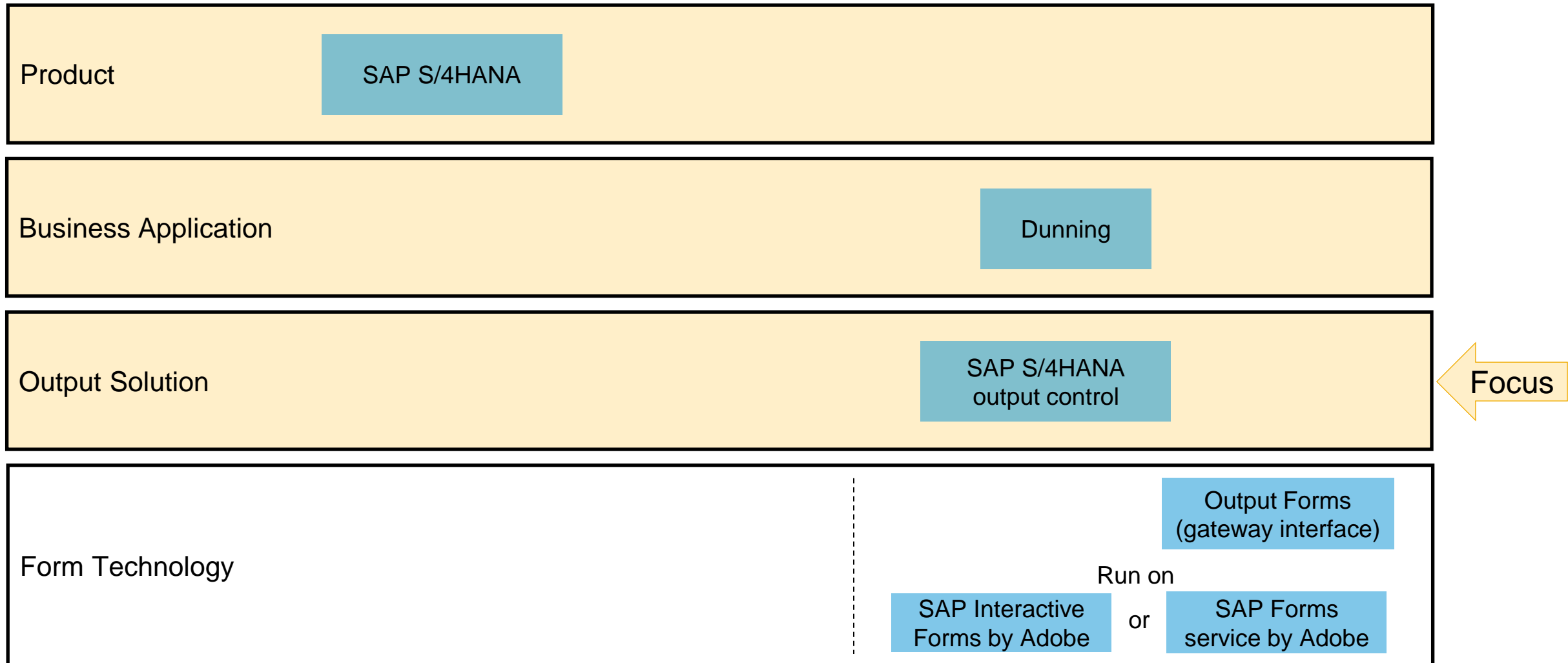
Available options in SAP S/4HANA with NAST



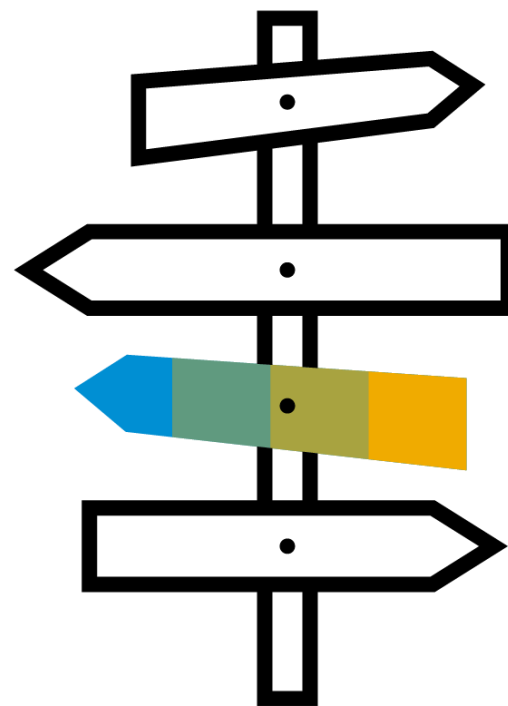
Available options in SAP S/4HANA with SAP S4/HANA output control



Available options in *SAP S/4HANA* with *SAP S4/HANA output control* for *Dunning*



Getting Directions



Output solutions for *existing business applications*¹

Edition	Available output solutions	Default	Switchable?
SAP S/4HANA	<ul style="list-style-type: none">Existing output solution (e.g. NAST)SAP S/4HANA output control	NAST	Yes ²
SAP S/4HANA Cloud, private edition	<ul style="list-style-type: none">Existing output solution (e.g. NAST)SAP S/4HANA output control	NAST	Yes ²
SAP S/4HANA Cloud	<ul style="list-style-type: none">SAP S/4HANA output control (OC)	S/4 OC	No

¹ Applications exists before S/4HANA

² If business application allows it

Output for existing applications in SAP S/4HANA

- There are **no mandatory actions** for customers regarding output management in on-premise.
- The entire output management **scope of the SAP Business Suite is still available**
- Currently, there are **no plans to deprecate** functionality.
- **Existing** output solutions are **in maintenance mode**.
- SAP has introduced a **new** output solution which is **optional** for existing applications.
- **New features** will **only** be provided via SAP S/4HANA output management/output control.

Should I switch from existing output solution to SAP S/4HANA Output Control?

- It is not **mandatory** for customers to switch to SAP S/4HANA output control.
- Default is still the existing output solution.
- The scope of SAP S/4HANA output control includes **output only functionality**.
- Switching business applications from specialized or generic frameworks to SAP S/4HANA output control **might lead to loss of functionality**.
- Customers can **test out SAP S/4HANA output control** for existing applications.
- Productive usage shall only be considered if scope and functionality of SAP S/4HANA output control fits to the customer requirements.

Output solution for *new business applications*¹

Edition	Available output solutions	Default	Switchable?
SAP S/4HANA	<ul style="list-style-type: none"><li data-bbox="708 444 1633 501">• SAP S/4HANA output control (OC)	S/4 OC	No
SAP S/4HANA Cloud, private edition	<ul style="list-style-type: none"><li data-bbox="708 595 1633 652">• SAP S/4HANA output control (OC)	S/4 OC	No
SAP S/4HANA Cloud	<ul style="list-style-type: none"><li data-bbox="708 816 1633 873">• SAP S/4HANA output control (OC)	S/4 OC	No

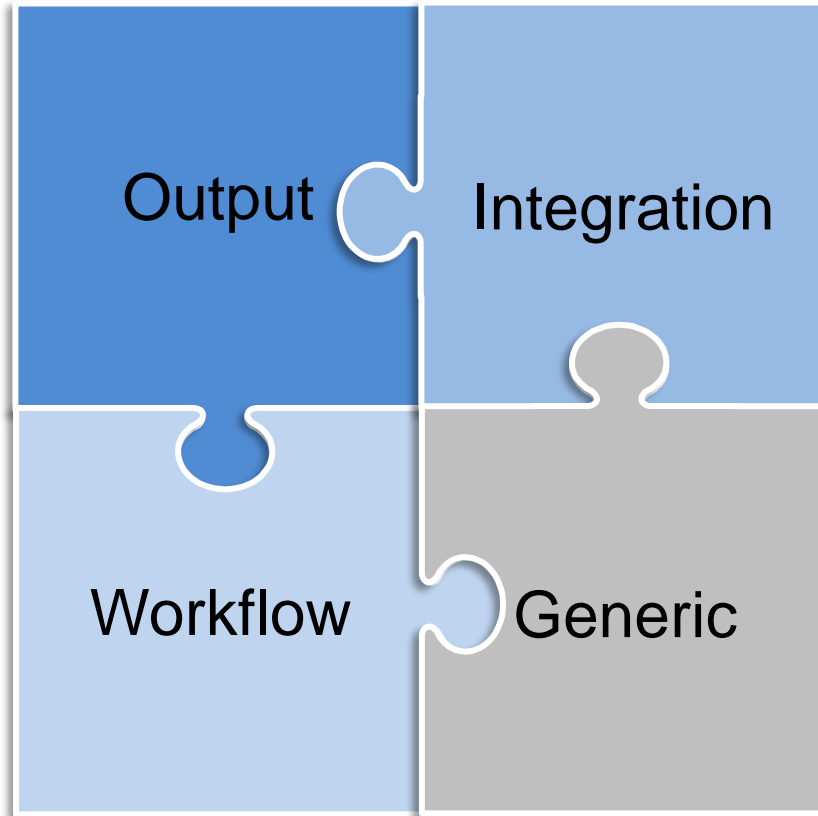
¹ Applications newly implemented with S/4HANA

Output for new applications in SAP S/4HANA

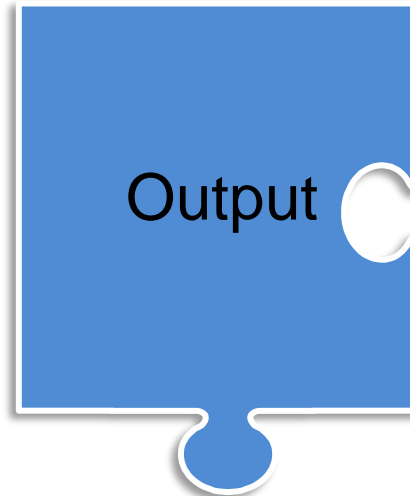
- New applications use mainly SAP S/4HANA output control as output solution.
- The standard form technology is *Output Forms (gateway interface)*
- This requires usage of either *SAP Interactive Forms by Adobe* (on-premise) or *SAP Forms service by Adobe*
- Support of other form technologies needs to be enabled specifically by the business application (except applications which used NAST before)

Example: *NAST* vs. *SAP S/4HANA Output Control*

Scope of *NAST* framework

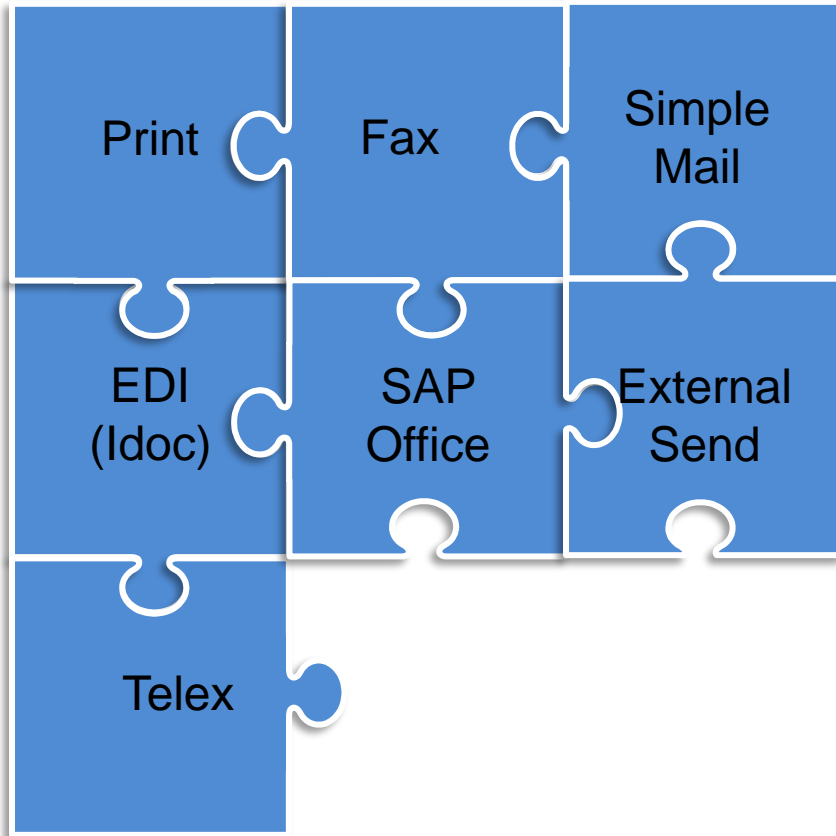


Scope of *Output Control*

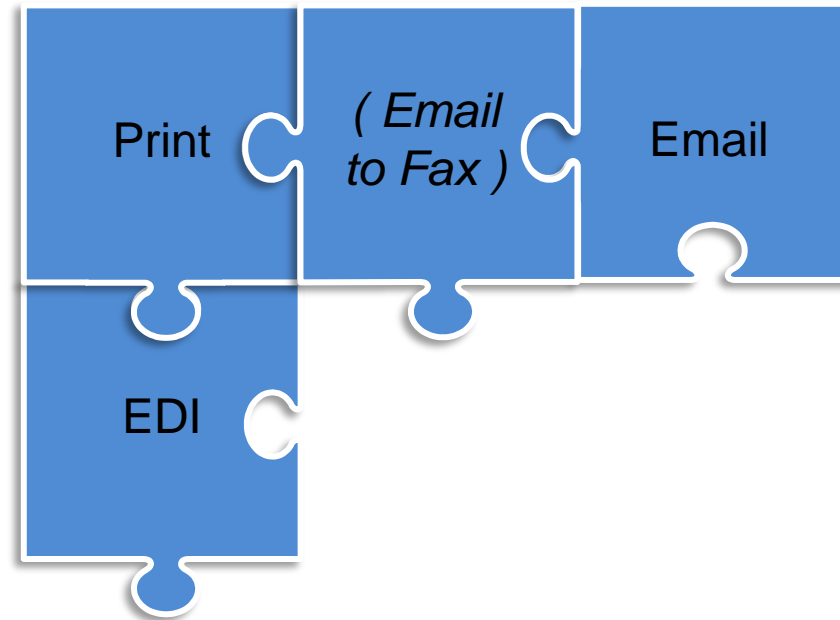


NAST vs. SAP S/4HANA Output Control

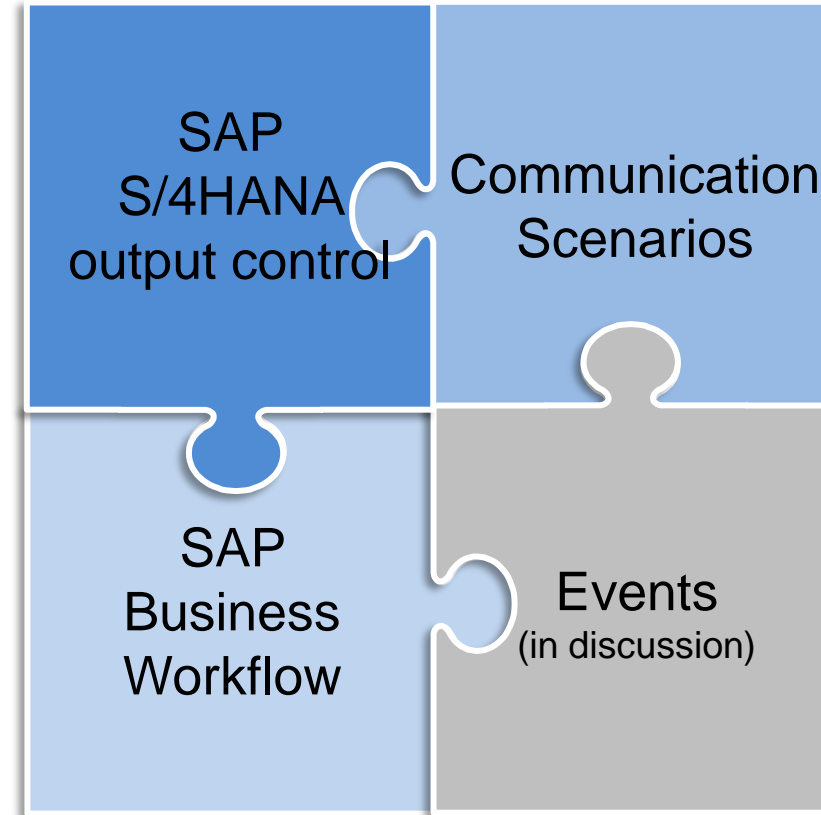
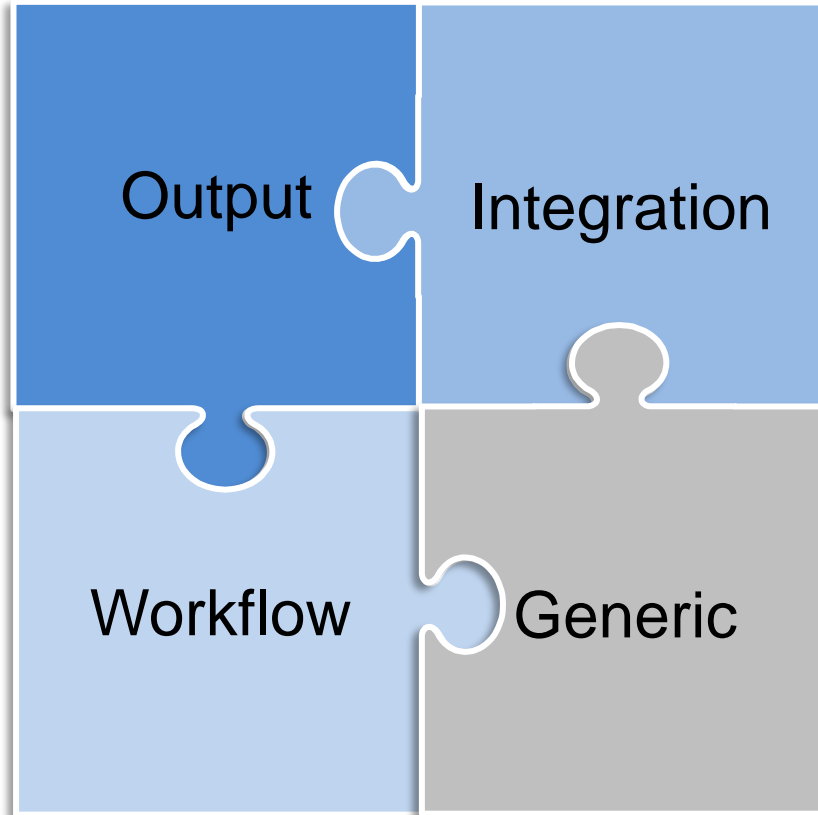
Output channels in *NAST*



Output channels in *Output Control*



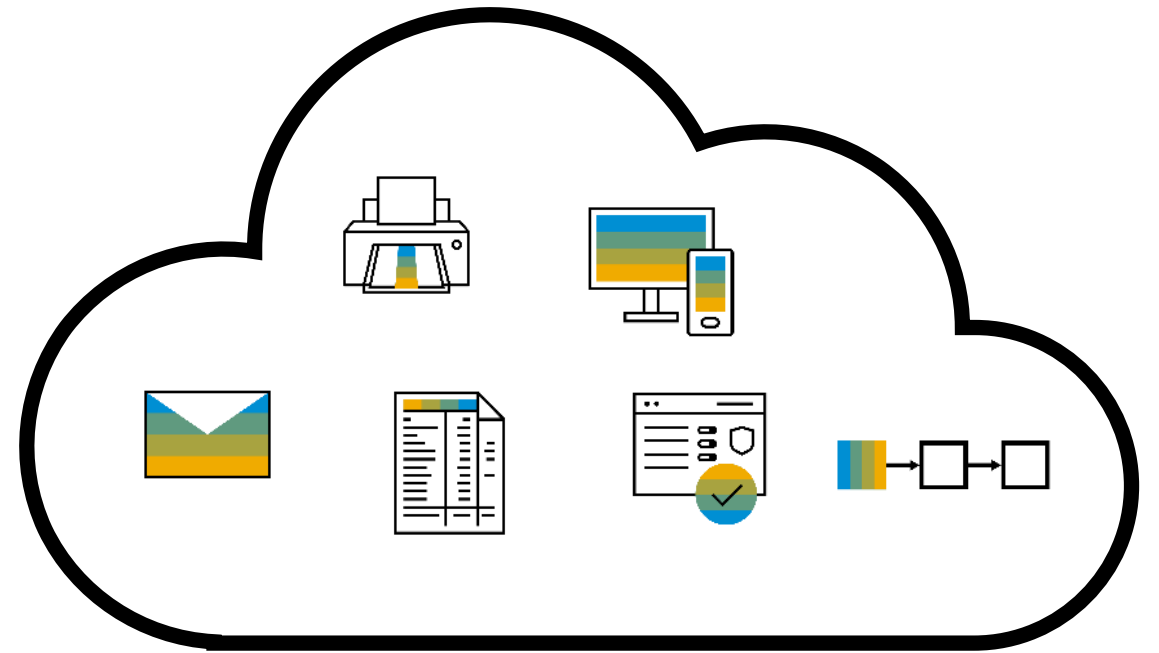
Replacing the *NAST* framework



NAST vs. SAP S/4HANA Output Control

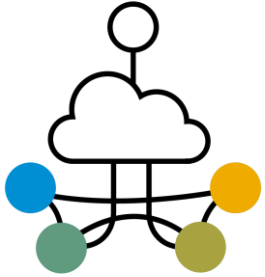
- SAP S/4HANA output control is not designed to completely replace NAST.
- It will only cover the output part of NAST (print, email, partly EDI).
- The rest – like system integration, workflow, or special function – is not (and will not be) in the scope of SAP S/4HANA output control.
- Hence, business applications need to cover these parts differently, but nearly none of them is completely achieving this at the moment.
- Therefore, customers will lose all these features from NAST when switching on SAP S/4HANA output control.
- **This means using SAP S/4HANA output control for applications previously using NAST only makes sense in exceptional cases.**
- Only when you have verified that the current functionality of SAP S/4HANA output control matches your requirements, you should enable it productively.

Output Control



SAP S/4HANA output control

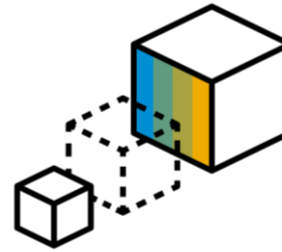
Unified output solution across the product



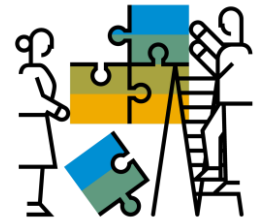
Native integration into Fiori apps



Ready-to-use output scenarios



Extensibility for configuration and documents



Central monitoring



User notifications



New form template options

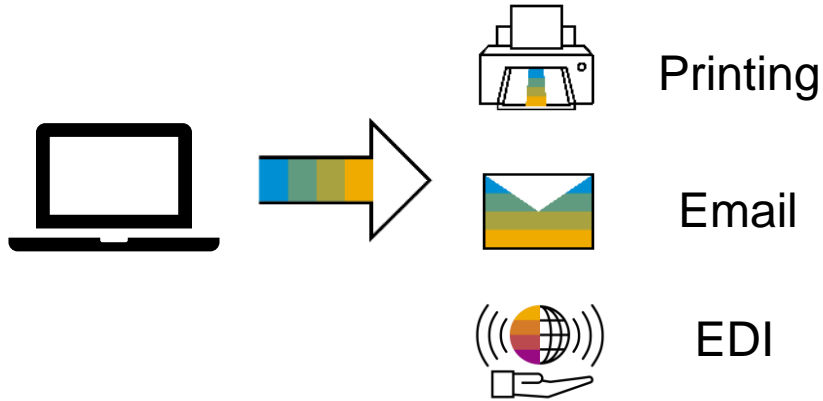


Runs in cloud and on-premise

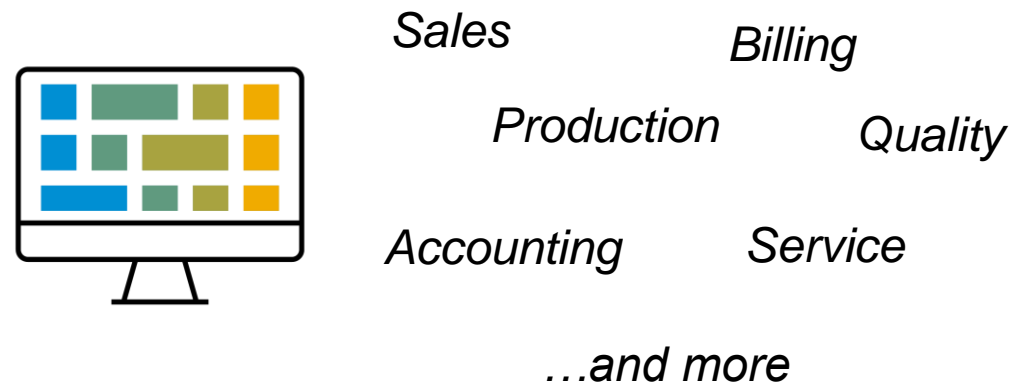


Scope of SAP S/4HANA output control

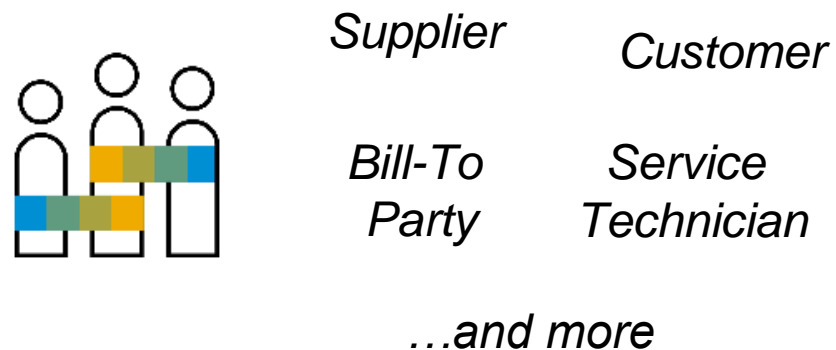
Sending outbound messages



From transactional applications



To business receivers



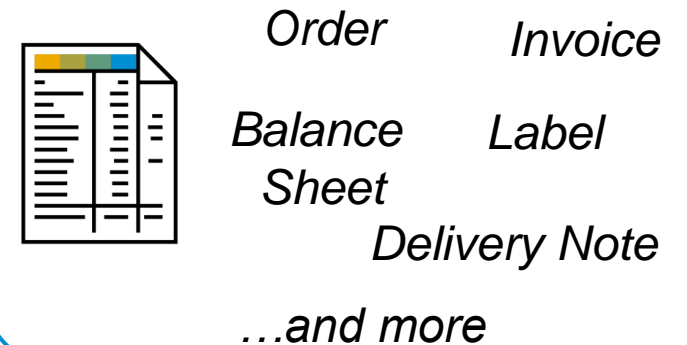
Documenting the output result

Who?

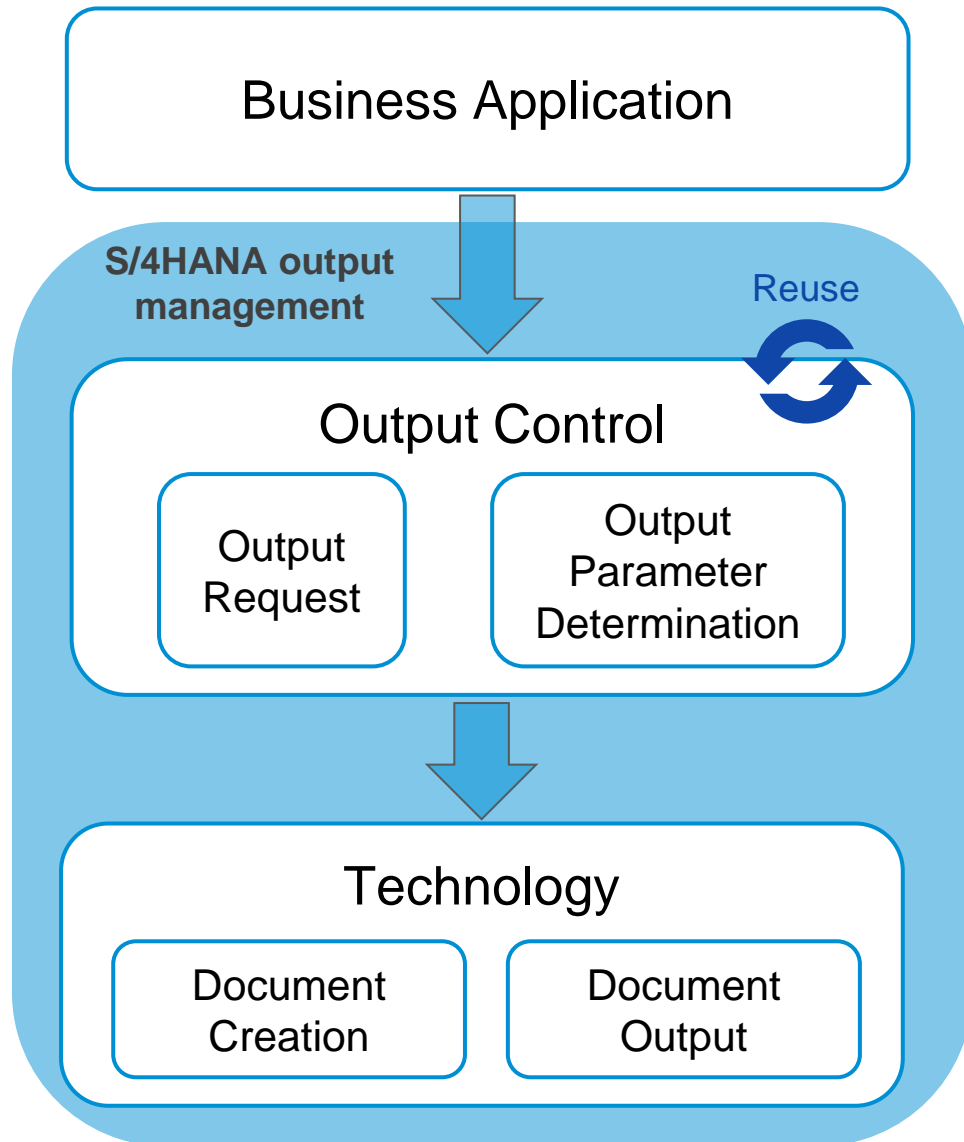
What?

When?

Based on a document centric design



Output Control reuse service



Business Applications

Need a solution for all output-related tasks

Output Control

Offers a unified solution
(UI, configuration, processing)

Exposes the low-level functionality
to its consumers

Adds new features on top

Technology

Document Creation via Adobe Document Services

Document Output via Print Queue/Print Manager,
Business Communication Services (Email),
Communication Arrangement (EDI)

Output Control - Key features & functions (1/2)

Output channels	Printer – Print Queues (Cloud) / Spool (on premise) Email – Allows flexible configuration of sender and recipient(s) (TO, CC, BCC) EDI – Electronic Data Interchange (SOAP, IDoc, Ariba Network)
Attachments	Printing attachments and sending attachments via email , including automatic selection and sorting
Form Technology	Output forms (gateway based) running on SAP Forms service by Adobe (with/without fragments) on-premise: + SAPscript, + Smart Forms, + SAP Interactive Forms by Adobe
Master Form Templates	Allow flexible branding of print forms by separating static layout parts like header, footer, logos from application content. (Only available for form technology <i>Output forms (gateway based)</i>).
Email Templates	Allow predefining email subject and email body (including variables for dynamic content)
Output Parameter Determination	Allows sending multiple messages to multiple recipients using multiple channels at the same time Flexible definition of business rules (no implementation needed) Easily extensible with SAP standard fields and customer fields
Situation Handling	Notifications for users/teams

Output Control - Key features & functions (2/2)

Dispatch Times	Immediately (when saving) or Scheduled (via batch job)
Batch Output	Synchronous mass processing for <ul style="list-style-type: none">• Initial output• Retry of erroneous output• Creating and sending duplicates of successful outputs
Generic Sorting	Sort batch output using output-specific fields and/or business application-specific fields
Bundling of Printouts (Cloud only)	Bundle printouts into one print job when using batch output and get a massive performance boost when printing via SAP Cloud Print Manager.
Data Retention / Archiving	Use ILM and archiving class APOC_OR to archive the output request and dependent objects (message log, stored documents in KPRO)
Country-specific Settings (SAP internal)	Define the allowed number of original documents , the watermarks for originals, duplicates and previews as well as PDF protection per country. (Only available for form technology <i>Output forms (gateway based)</i>).
Enhancement Spots (SAP internal)	Application-specific checks for output parameter determination Output Item Creation/Validation Setting the document name (print queue item description, PDF file name)
UI Technologies	Fiori , WebGUI (+ SAPGUI for on-premise)

Resources

[Output Management in SAP S/4HANA](#) (blog)

[Output Management in SAP S/4HANA - SAP Note 3097507](#)

[SAP Roadmap Viewer](#)

[SAP Best Practices Explorer - Output Management \(1LQ\)](#)

Output Management Setup Guide [cloud](#) / [on-premise](#)

SAP Help Portal – Output Control [cloud](#) / [on-premise](#)

Guided Answer for Output Management in SAP S/4HANA [cloud](#) / [on-premise](#)

SAP Learning Hub - Meet-The-Expert Sessions (on premise)

- [Output Management in SAP S/4HANA – Part 1](#) - from Apr 17th 2019 – [blog](#)
- [Hands-on on SAP S/4HANA Output Management- Part 2](#) from May 8, 2019 – [blog](#)
- Tutorials: [Hands-on SAP S/4HANA Output Management](#)

Reminder: To access the SAP Learning Hub, edition for SAP Enterprise Support, a one-time registration is required. A detailed step-by-step guidance can be found [here](#).

Thank you.

Contact information:

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