
AWS
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ENT235

Accelerate business process innovation with the AWS SDK for SAP ABAP

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About me



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Agenda

- Why we built the AWS SDK for SAP ABAP
- About the AWS SDK for SAP ABAP
- Developer experience
- Getting started

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Why we created the AWS SDK for SAP ABAP

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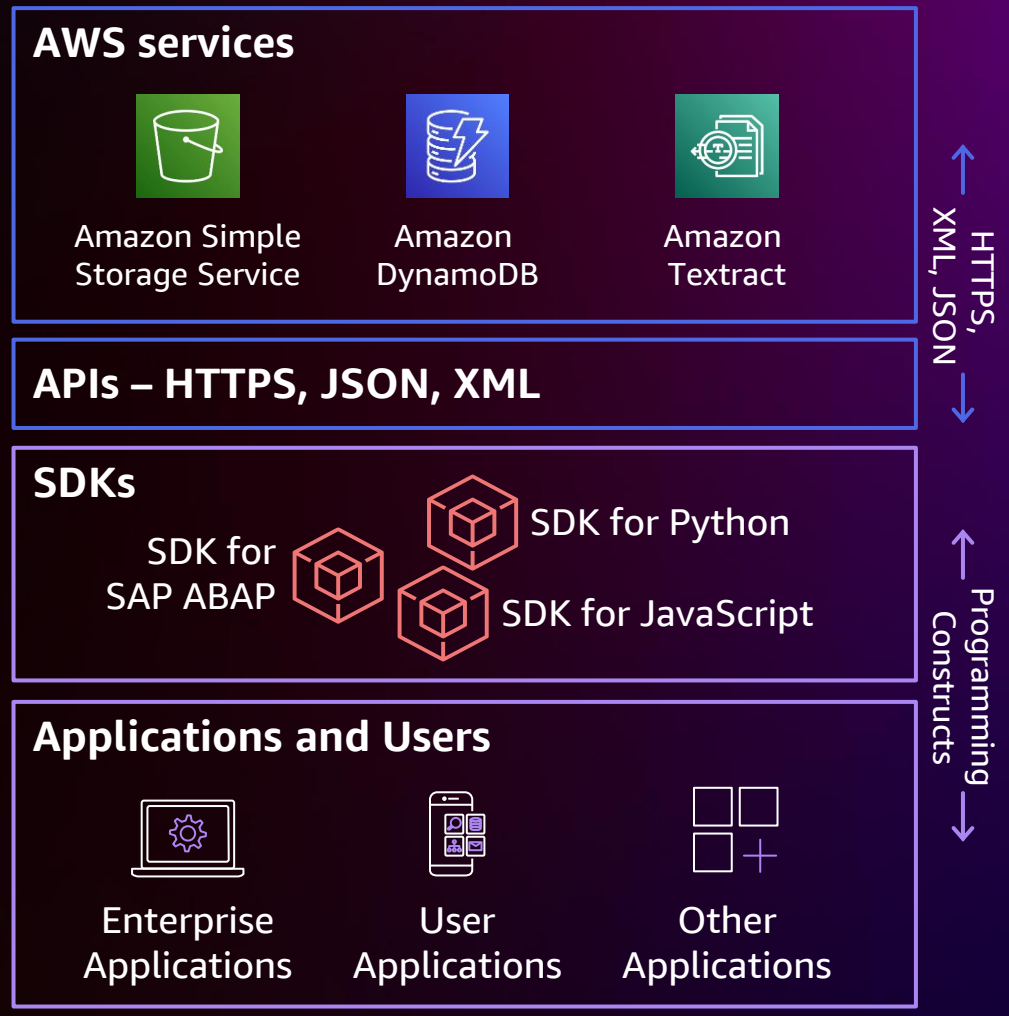
About AWS Software Development Kits (SDKs)

AWS SDKs present the AWS APIs to programmers in various languages, in a way that

- Is idiomatic to the language's particular constructs
- Follows expected approaches for configuration
- Is distributed and patched according to the language's conventions

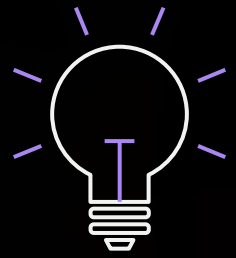
There are 300+ APIs for AWS services!

https://docs.aws.amazon.com/index.html



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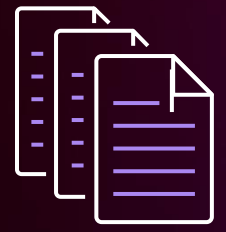
Why customers want to innovate by combining SAP and AWS Services



Business process modernization and re-invention are table stakes



Mission-critical business processes and data reside in SAP



300+ AWS services for nearly every imaginable use case including IoT, AI/ML, analytics, and more

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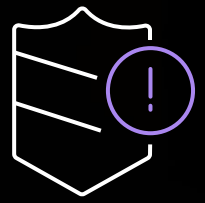
How customers have innovated with SAP + AWS services

moderna	Implemented HA and infrastructure as code for S/4HANA to help scale COVID-19 vaccine to 641M ordered doses across 30+ countries.
Liberty Mutual	Uses AWS services in concert with S/4HANA to do real-time financial closing.
zalando	Uses AWS analytics, AI/ML, and customer engagement services with S/4HANA to improve customer experiences, reduce cost of insight by 30%, and ship 145M orders/year.
ENGIE	Digitally transforming to accelerate their zero-carbon transition with SAP S/4HANA and an S3-based data lake on AWS.
Delivery Hero	Executes month-end close in 90 minutes vs. 20 hours on premises with serverless invoice generation and data extracted from SAP.
origin	Combines data from ECC and other sources in a hybrid data architecture leveraging AI/ML, improving process performance by 30% and reducing infra costs by 50%.

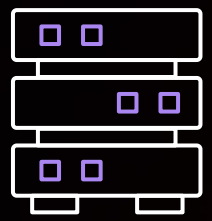
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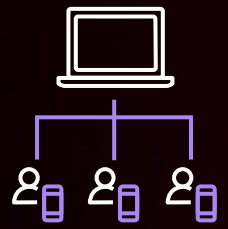
Why has integrating AWS services with SAP ABAP traditionally been difficult?



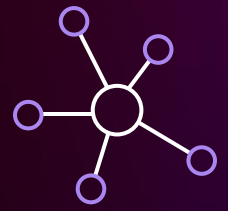
Security and Authentication



Data Formatting



Complex Connectivity



Multiple point to point integration

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Introducing the AWS SDK for SAP ABAP

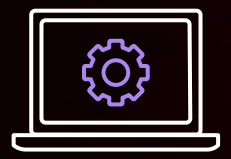


Makes it easy for ABAP developers to extend and transform SAP-based business processes by harnessing the power of AWS services natively using the SAP ABAP language.



Accelerate business process innovation

by giving ABAP developers native access to all 300+ AWS services



Reduce architectural complexity

by eliminating the need to manually create complex integrations between SAP and AWS services



Maintain a strong security posture

by encrypting all payloads with HTTPS and enforcing SAP-level permissions



Upskill ABAP development teams

by making it easy to for them to build cloud-based solutions

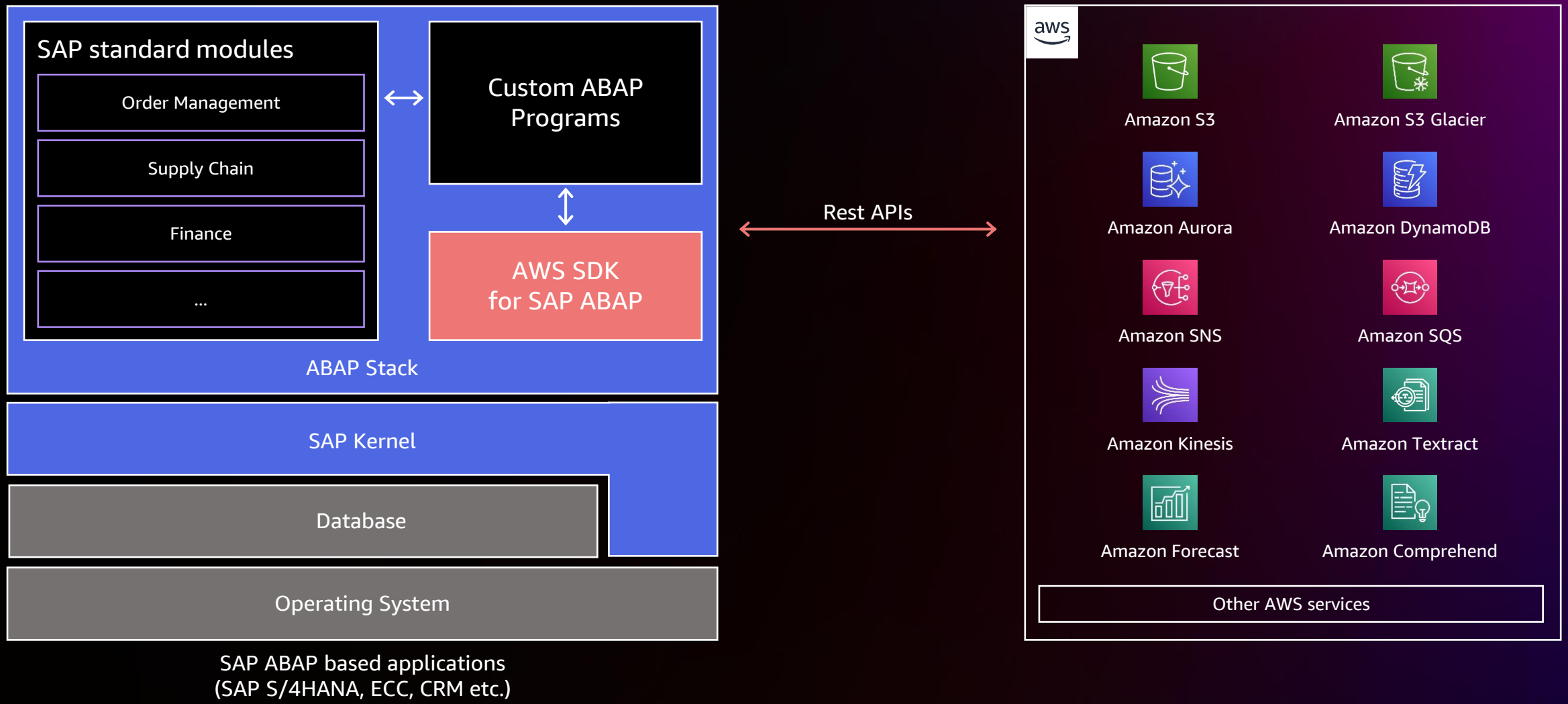
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About the AWS SDK for SAP ABAP

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High-level architecture



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What can you build with ABAP SDK?



Amazon S3

Use Amazon S3 buckets to exchange files with external systems and partners



Amazon Translate

Translate work orders for a bilingual team



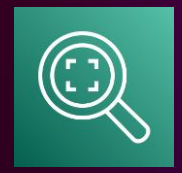
Amazon Location Service

Clean up addresses, calculate shortest route between locations



Amazon Textract

Extract data from scanned invoices using Amazon Textract



Amazon Rekognition

Identify and classify images using Amazon Rekognition and Amazon SageMaker

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Developer experience

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Developer experience

EXAMPLE: PULLING A FILE FROM AN AMAZON S3 BUCKET

```
TRY.
  DATA(lo_file) = lo_s3->getobject(
  iv_bucket = iv_bucket_name
  iv_key = iv_object_key
  ).
  parse_excel( lo_file->get_body( ) ).
  CATCH /AWS1/CX_S3_INVALIDOBJECTSTATE INTO DATA(lo_ex).
  " need to pull from glacier first
  CATCH /AWS1/CX_S3_NOSUCHKEY INTO DATA(lo_ex2).
  " handle file not found
ENDTRY.
```

Pull an file from Amazon S3 with a simple ABAP method call

Process the data using your own business logic

Handle errors in an idiomatic way, with ABAP exceptions

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Team roles and responsibilities



IAM Admin

Create IAM Roles granting SAP access to AWS APIs



Basis Admin

Import SDK Transports

Technical Prerequisites



SAP Security

Map SDK Profiles to IAM Roles

Authorize SDK profiles in PFCG Roles

Assign PFCG Roles to Users



SAP ABAP Dev

Enhance business processes using ABAP and the SDK



AWS SDK for SAP ABAP

ABAP Code invokes SDK Profiles

SAP Security checks (PFCG Roles)

SAP Trace Files

AWS security checks (IAM Roles)

AWS service invocation

AWS telemetry

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Getting started

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About the Developer Preview

WE ARE RELEASING THE ABAP SDK FOR PUBLIC DEVELOPER PREVIEW

Purpose

To give customers a chance to develop proofs of concept, explore the capabilities of the SDK, and provide feedback

Eligibility

All AWS customers are welcome to apply to join the developer preview

Scope

With very few exceptions, all AWS services are included in the SDK

Support

Customers participating in the preview will receive support directly from the AWS engineering team!

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Product roadmap

- Developer Preview launched on Nov 17, 2022
- Developer Preview extends through Q2 2023
- During the preview, additional features of the SDK will be released
  - Developer features such as Waiters and Paginators
  - Support for non-commercial regions such as GovCloud
  - Support for streaming services
  - And improvements based on feedback from you!
- General Availability is tentatively scheduled for late Q4 2023

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Demos: Language translation and address correction

Created by Jon Friesen

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Language translation



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Address correction

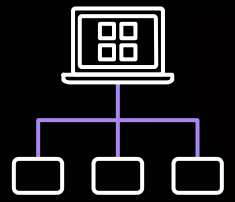
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What's new for SAP on AWS?



Migration

- Migration Hub Orchestrator
- Improvements to Migration Acceleration Program for SAP workloads



Infrastructure

- Intel Ice Lake based EC2 instances (X2i, R6i,M6i and C6i)
- AMD Milan based EC2 instances (R6a, M6a and C6a)
- Virtualized 18TB and 24TB High Memory instances
- Amazon FSx for NetApp ONTAP (FSxN)
- Support for SAP HANA host auto-failover with FSxN
- AWS Backup Service support for SAP HANA



Innovation

- Bi-directional data flows with AppFlow
- AppFlow ODP Support
- AWS SDK for SAP ABAP



Management and Operations

- Launch Wizard improvements
  - Scale deployments
  - Clone deployments
  - Solution Manager
- AWS Systems Manager support for SAP
- Observability for NetWeaver using AppInsights

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Next steps

- Apply to join the Developer Preview
- Receive your welcome letter
- Download the SDK and install it in your sandbox SAP system
- Develop a proof of concept
- Answer our survey and provide feedback



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Thank you!

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Please complete the session survey in the **mobile app**

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