



SAP Build Code Empower ASUG Developers with Generative AI

SAP Build Code



Generative AI **supercharged** development

- Generative AI-powered app development
- Turnkey development solution including SAP best practices
- Guided experiences and templates to quickly build full stack, back-end, and mobile apps



Tailored for SAP development

- Prebuilt integration with SAP and non-SAP systems
- Trusted security for authentication, authorization, and data protection
- Extensibility for SAP S/4HANA and other systems



Enhanced fusion development

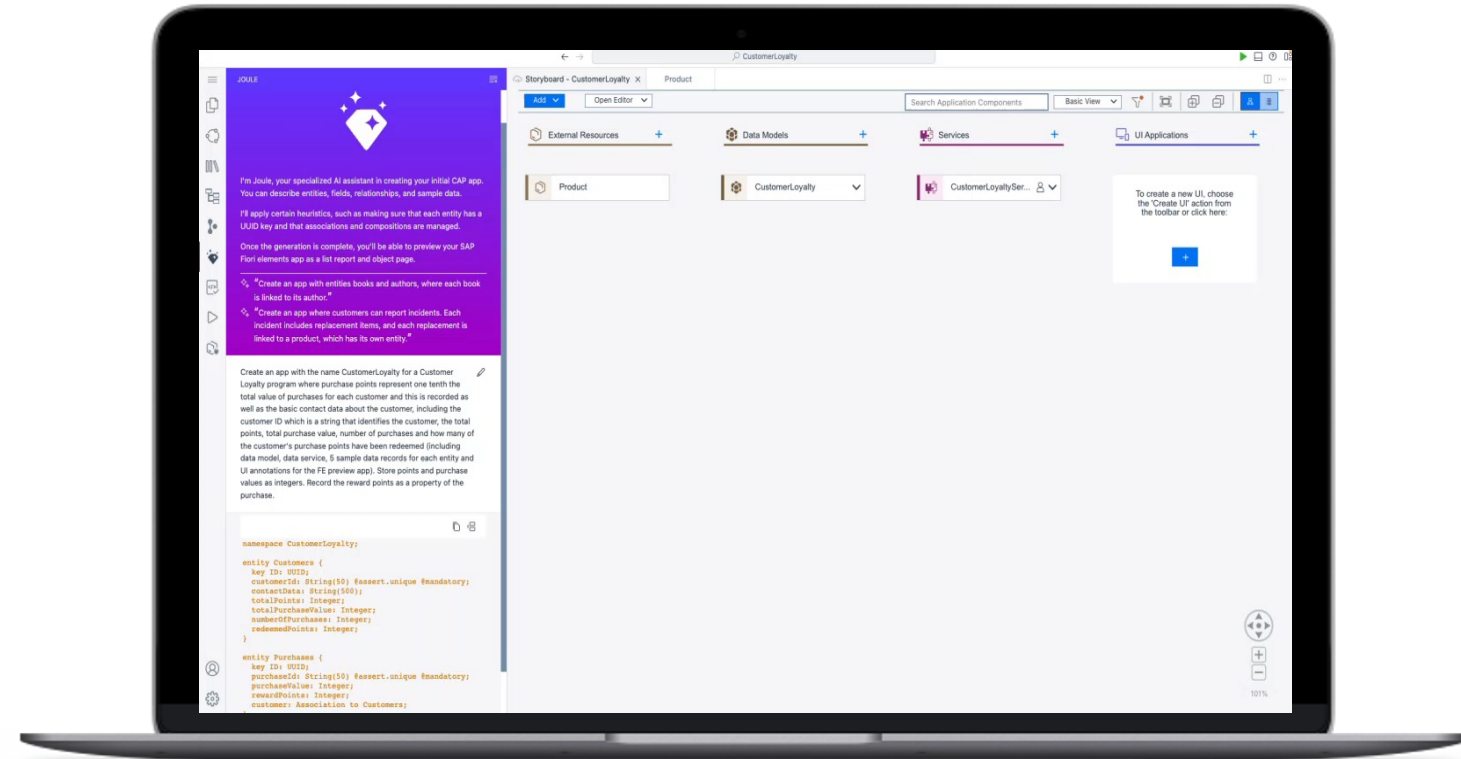
- Secure collaboration between professional and citizen developers
- App composability across SAP Build and ABAP solutions
- Unified governance and simplified application lifecycle management

Generative AI-based code development with Joule copilot

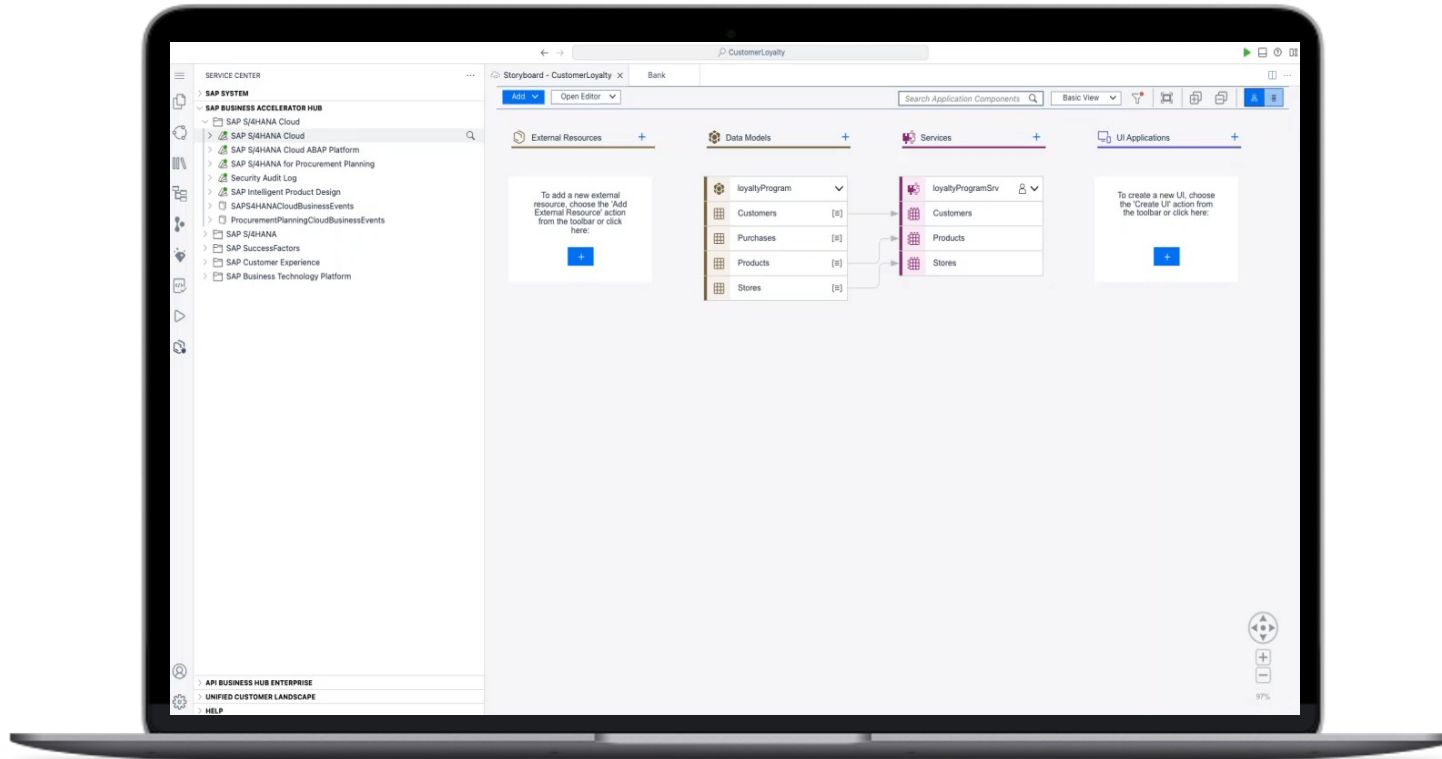
Use AI to generate code and app logic aligned with SAP-centric programming models from natural language descriptions

Create data models and sample data conforming to apps, and produce rapid unit tests with Joule copilot

Leverage guided experiences and prebuilt templates to quickly build full stack, UI, and mobile apps



Tailored for SAP development



Rapid clean core extensibility of SAP S/4HANA and other applications via SAP best practices

Prebuilt integrations, APIs, business services, via the service center

Proven security from SAP BTP for authentication, authorization, and SAP data protection

Achieve Clean Core with SAP Build Code

A **clean core** is a system that is as close to standard as possible, while running cloud-compliant extensions and customizations.

It allows you to **adapt your system** to changing business requirements and to **adopt new capabilities**.



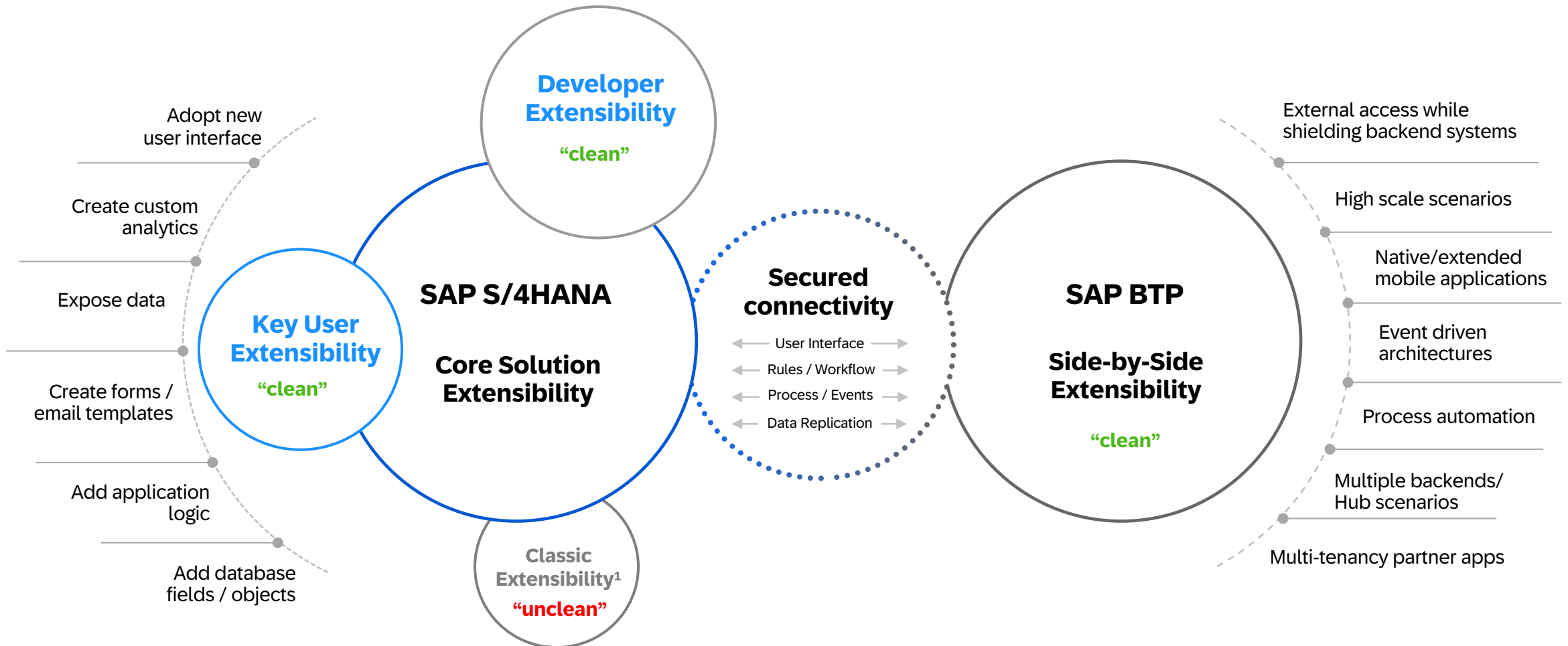
Extend

Integrate

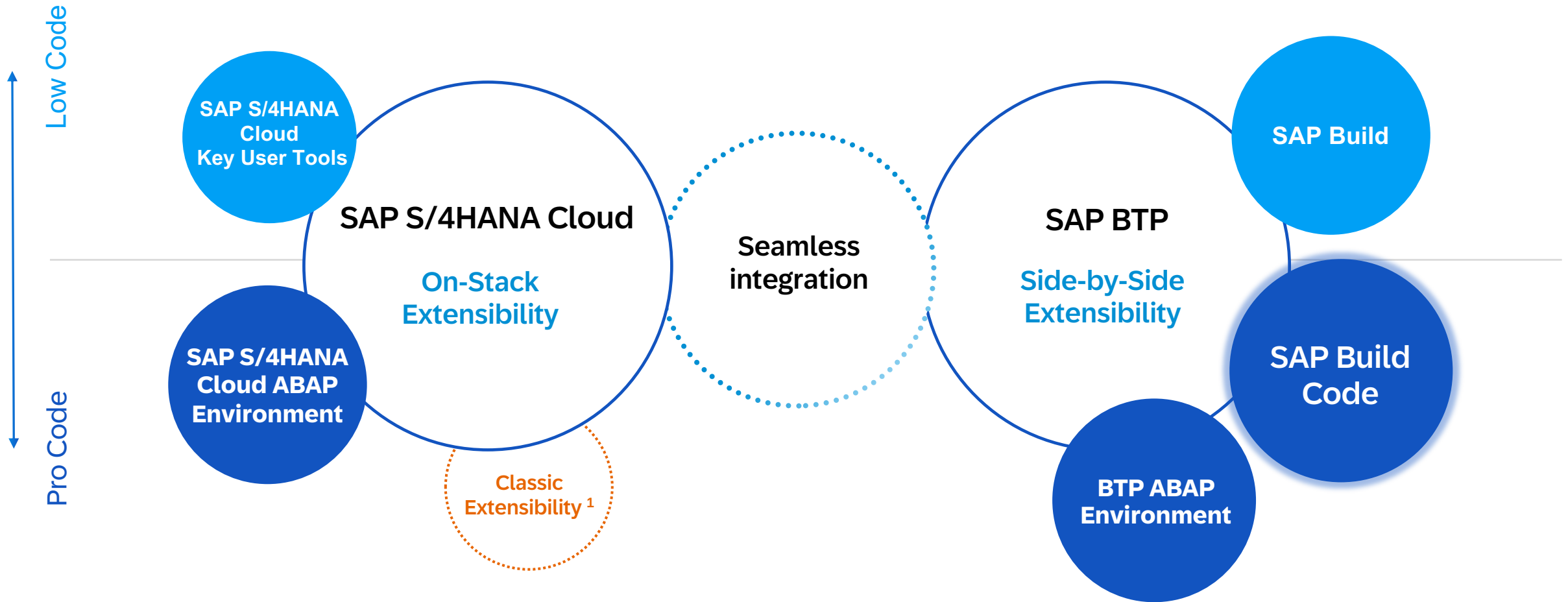
Innovate

SAP S/4HANA extensibility: when-to-use-what

Core Solution Extensions ← → Side-by-Side Extensions



Clean Core Extensibility Options for SAP S/4HANA Cloud

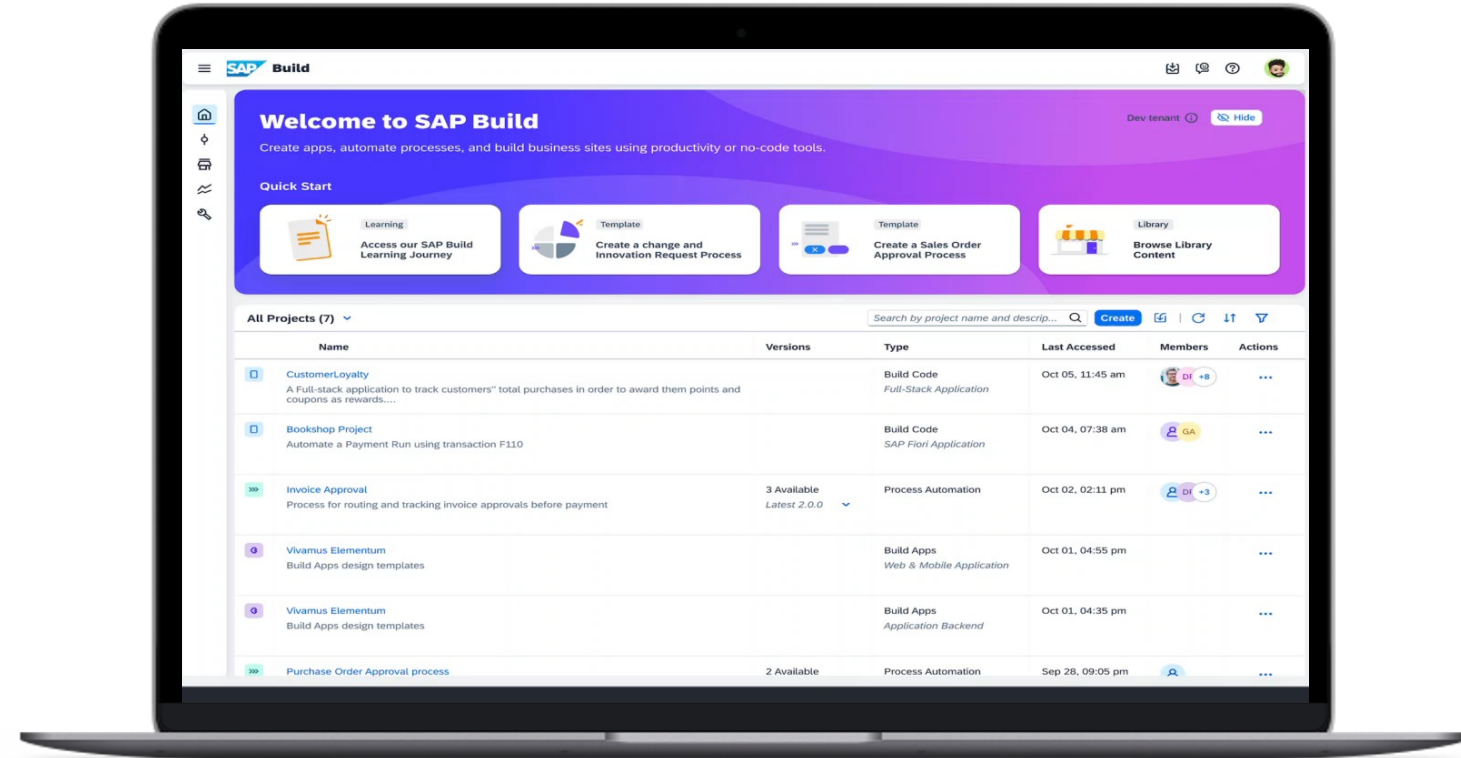


Enhanced fusion development

Collaboration between professional developers and business experts.

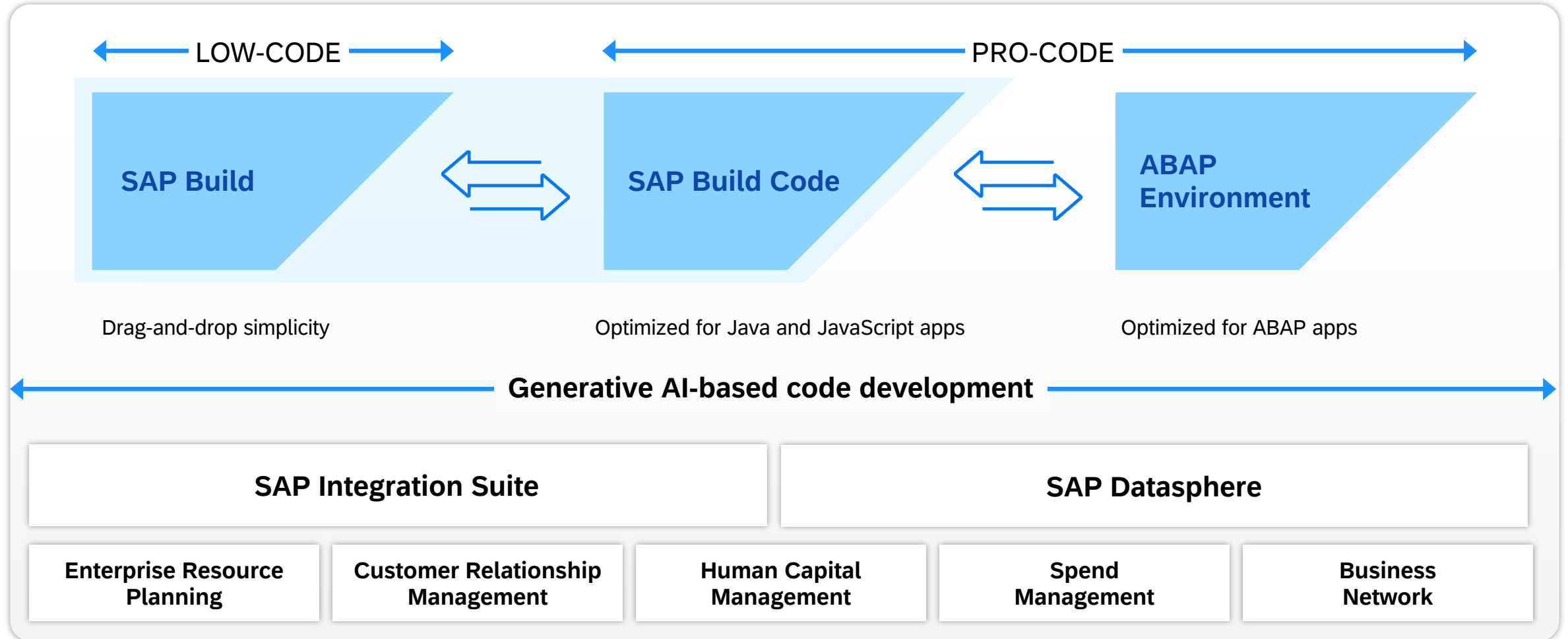
App composability across SAP Build low-code solutions, SAP Build Code for Java/JavaScript, and ABAP Environment

Unified governance and simplified application lifecycle management



SAP BTP application development & automation

Integrated solutions with generative AI-based code development



SAP Build Code Demo



```
CPU: 100% Tasks: 246, 237 thr: 9 running
Mem: 1422/9732M Load average: 2.44 4.08 3.02
Swap: 4320/16320K uptime: 00:13:14

# ps -ef | grep netcon
netcon 20 0 6531 24200 10940 0 12.5 2.4 119.00 /usr/lib/gnome-
44280 netcon 20 0 24280 2812 1256 0 0.2 0.3 0:01.33 ckey -k
880 root 20 0 3950 44880 14160 5 3.9 4.5 1:00.00 /usr/lib/eng/fo
4523 netcon 20 0 11531 30200 13844 5 2.0 1.6 0:20.57 complx
32216 netcon 20 0 30832 4720 2970 0 0.7 0.5 0:01.45 btwp
41994 netcon 39 17 30832 932 816 5 0.7 0.1 0:00.15 cnetrix -b
4209 netcon 20 0 3501 2004 1772 5 0.7 0.3 0:01.79 /usr/bin/ins-da
4512 netcon 20 0 4940 4744 3840 5 0.7 0.5 0:01.39 /usr/bin/functa
32406 netcon 39 17 33816 3368 3800 5 0.0 0.3 0:00.36 lman --show-all
32254 netcon 20 19 40940 37256 4720 5 0.0 1.2 0:00.92 /usr/bin/pschm
32286 netcon 39 17 19720 2944 2420 5 0.0 0.3 0:00.19 /bin/bash /usr/b
4207 netcon 20 0 3501 2004 1772 5 0.0 0.3 0:02.44 /usr/bin/ins-da
4295 netcon 20 0 2931 304 20 5 0.0 0.0 0:00.79 /usr/lib/ins/fb
4779 netcon 20 0 6420 3550 580 5 0.0 0.4 0:00.03 /usr/bin/unity-s
4628 netcon 20 0 6531 24200 10940 0 0.0 2.4 0:00.20 /usr/lib/gnome-
4577 netcon 20 0 4400 4360 1972 5 0.0 0.4 0:01.02 /usr/bin/ins/fb
4297 netcon 20 0 2931 304 20 5 0.0 0.0 0:00.05 /usr/lib/ins/fb
32196 netcon 20 0 37044 2092 2020 5 0.0 0.2 0:00.10 /bin/bash /usr/b
32477 netcon 39 17 4776 1920 1512 5 0.0 0.2 0:00.09 /bin/sh /usr/bi
32430 netcon 39 19 4580 1616 1420 5 0.0 0.2 0:00.02 /bin/sh /usr/bi
32327 netcon 20 19 4580 1592 1404 5 0.0 0.2 0:00.01 /bin/sh /usr/bi
32489 netcon 39 19 4580 1596 1472 5 0.0 0.2 0:00.05 /bin/sh /usr/bi
4730 netcon 20 0 5831 7300 3440 5 0.0 0.7 0:00.02 update-motif
3381 root 20 0 1501 2864 1730 5 0.0 0.0 0:00.00 /usr/bin/functa
4281 netcon 20 0 4400 4360 1972 5 0.0 0.4 0:00.06 /usr/lib/ins/fb
32320 netcon 20 19 4580 1616 1470 5 0.0 0.2 0:00.00 /bin/sh /usr/bi
32523 netcon 20 0 4580 1620 1460 5 0.0 0.2 0:00.02 /bin/sh /usr/bi
32416 netcon 39 19 19704 2976 2300 5 0.0 0.3 0:00.04 /bin/bash /usr/b
4137 netcon 20 0 5531 8184 4040 0 0.0 0.0 0:00.00 /usr/lib/ins-da
4426 netcon 9 1 4311 6396 4784 5 0.0 0.0 0:00.21 /usr/bin/ins-
4439 netcon 10 0 4311 6396 4784 5 0.0 0.0 0:00.20 /usr/bin/ins-
32313 netcon 20 0 4580 1584 1474 5 0.0 0.2 0:00.00 /usr/bin/ins-
720 root 20 0 2911 2840 2092 5 0.0 0.0 0:00.00 /usr/bin/ins-
4369 netcon 20 0 3601 2300 1340 5 0.0 0.0 0:00.00 /usr/bin/ins-
4386 netcon 20 0 6400 1982 864 5 0.0 0.0 0:00.00 /usr/bin/ins-
891 root 20 0 3571 1680 1210 5 0.0 0.0 0:00.00 /usr/bin/ins-
4091 netcon 20 0 3901 800 0 5 0.0 0.0 0:00.00 /usr/bin/ins-
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4714 netcon 20 0 6301 1136 4 5 0.0 0.0 0:00.00 /usr/bin/ins-
4017 netcon 20 0 2571 112 0 5 0.0 0.0 0:00.00 /usr/bin/ins-
4527 netcon 20 0 11531 30200 13844 5 2.0 1.6 0:20.57 complx
4382 netcon 20 0 5401 2380 1480 5 0.0 0.0 0:00.00 /usr/bin/ins-
4785 netcon 20 0 41356 140 0 5 0.0 0.0 0:00.00 /usr/bin/ins-
32381 netcon 39 17 4580 1528 1424 5 0.0 0.0 0:00.00 /usr/bin/ins-
4003 netcon 20 0 3501 2004 1772 5 0.0 0.3 0:02.44 /usr/bin/ins-
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[SAP.com/Build-Code](https://www.sap.com/build-code)

SAP Build Code



SAP Build Code

Application development for all key extension use cases in SAP environments



Extend SAP Solutions



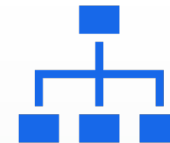
Build Fiori web apps with
SAPUI5 and SAP Fiori elements



Build and run
mobile apps

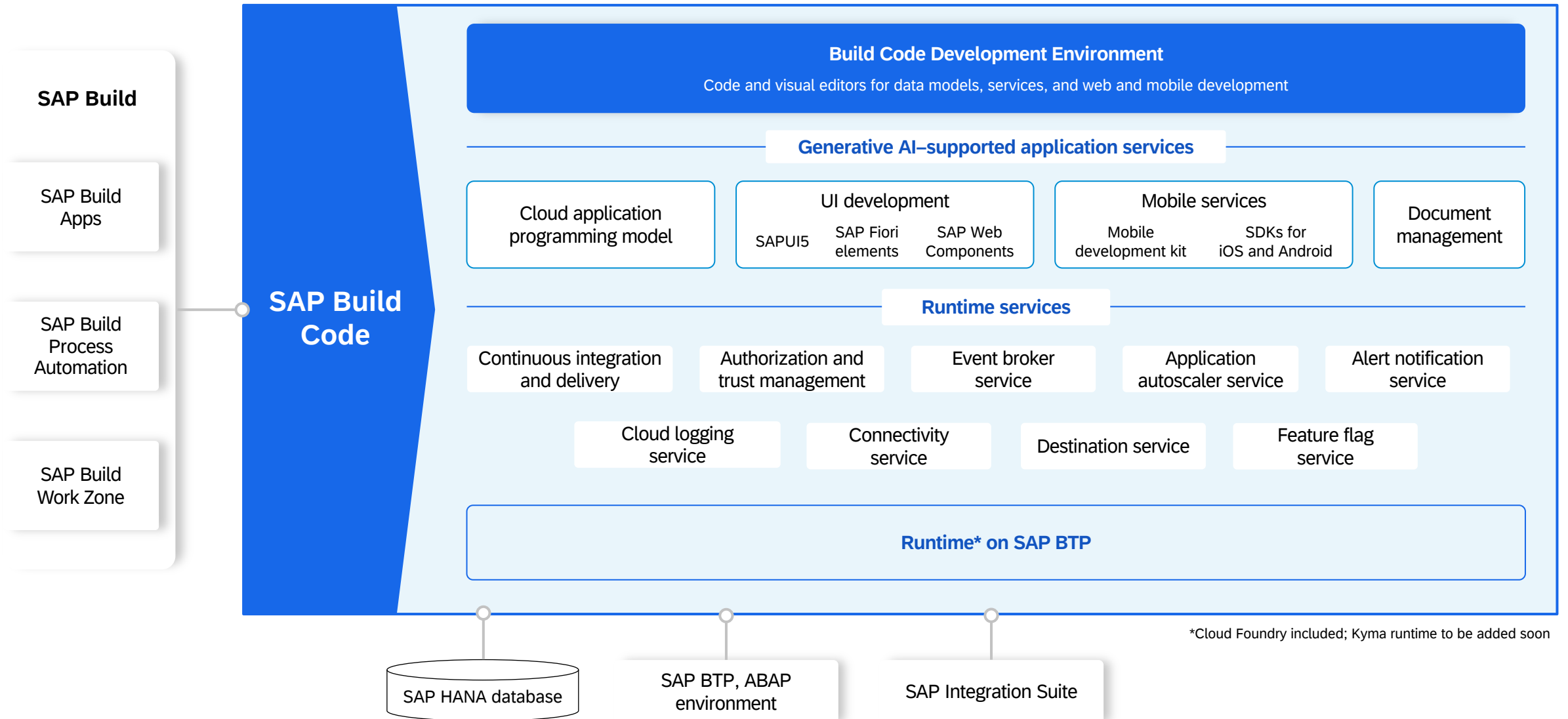


Develop SAP HANA
Native applications



Build multi-tenant
SaaS applications

SAP Build Code: What you need to follow best practices of SAP



Benefit using SAP's programming models in SAP Build Code

Increased developer productivity and future-proof IT investments

- Focus on application domain
- Reduce boilerplate code
- Leverage enterprise best practices
- Future proof app development projects
- Minimize risks associated with technology changes
- No lock-in effect through abstraction layer

Frontend SAPUI5 & SAP Fiori elements

Consistent and enterprise-ready UX based on SAP Fiori Design System

- Responsive to all platforms
- Hundreds of enterprise UI elements
- Accessibility
- Translation support
- Easy to integrate and extend

Backend SAP Cloud Application Programming Model

Intrinsic Cloud Qualities

- Multitenancy
- Extensibility
- Cloud Security
- Scalability
- Messaging
- Observability
- Resilience

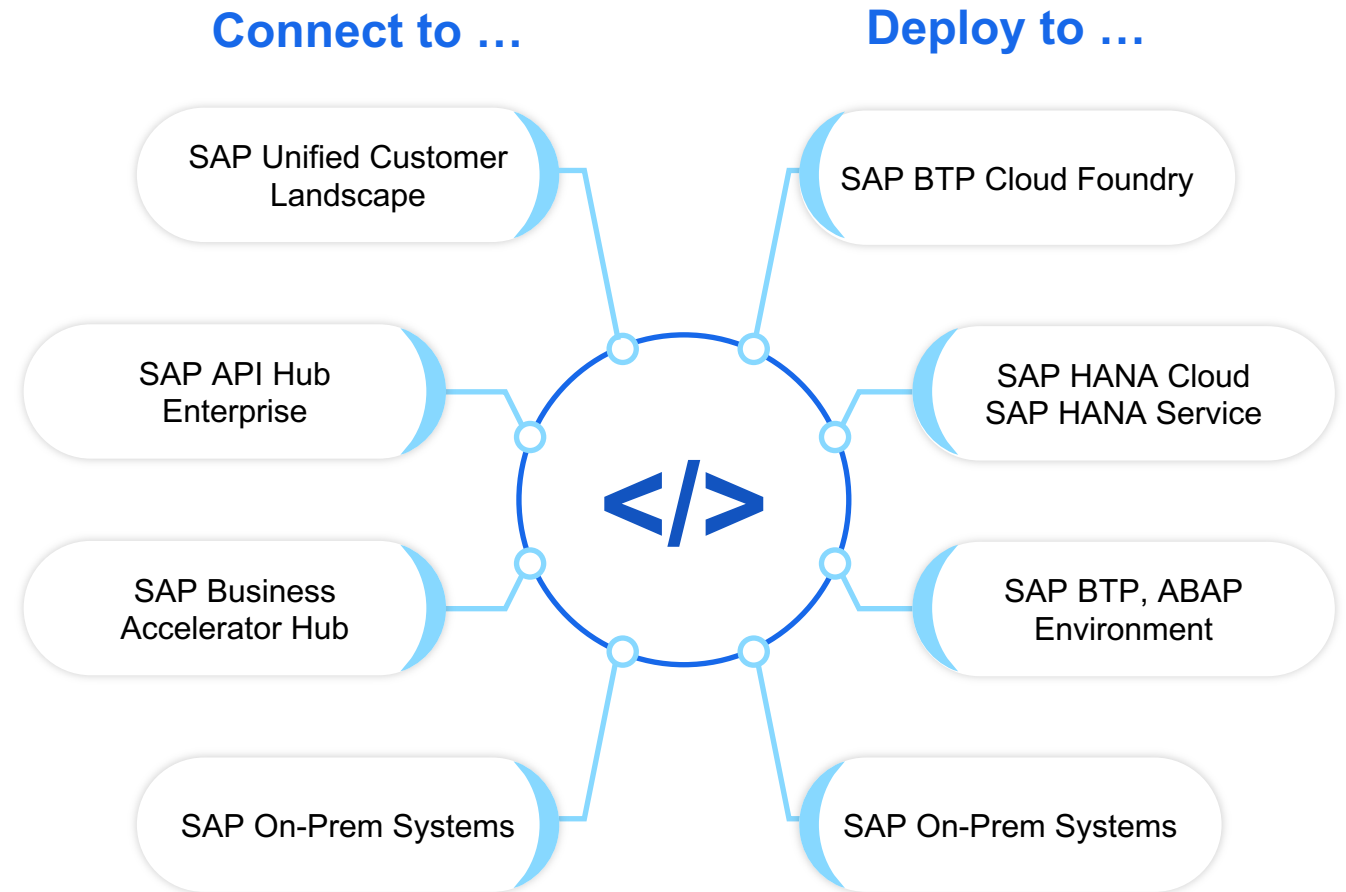
Integrate & Deploy

One-click deploy: Deploy the complete project, including database schema, data sources, sample data, user interfaces to your Cloud Foundry environment with ease.

One-click preview: Fast development iterations with fully mocked development environment setup

Discover SAP APIs: Explore SAP APIs from the different SAP data providers, public and customer APIs, Sync and A-Sync, including live preview

Integrate SAP APIs: One-click consumption of the APIs into the application, including all boilerplate coding and services metadata needed



Out-of-the-box CI/CD pipelines for IT governed app deployments

Centralized monitoring and feedback dashboard

for monitoring Continuous Integration and Delivery pipelines (CI/CD), quick insights into build and deployment status, facilitating faster troubleshooting.

Flexible tests and qualifications

Configure build tools, unit tests, lint check and malware scan
Configure Sonar scan, Webdriver IO Test.

Centralized application lifecycle

Release and deploy applications through the different organization landscapes (dev-test-prod)

The screenshot shows the 'Job Configuration' interface. On the left, a sidebar contains navigation links: 'Job Details', 'Git Repository', 'Build, Test & Scan', 'Compliance', and 'Release'. The 'Compliance' section is active, displaying the following configuration:

- Compliance**: Configure your project to be analysed with static code check tool.
- SonarQube Scan**: Yes No
- Mode ***: SonarCloud
- URL ***: https://sonarcloud.io
- Organization ***: my-org
- Project Key ***: my-proj-key
- SonarCube Scan Credentials ***: my-credential

The screenshot shows the 'CI/CD Builds' dashboard. It displays a list of builds for two jobs: 'job1' and 'job2'. A dropdown menu is open over the first job, showing 'Filter builds' and '+ Create new job' options.

Job Name	Branch	Build ID	Timestamp	Status
CapEx Branch: cicdpanel	job1 Repository: ...	Build 124	April 13, 2022, 10:12:12 AM	RUNNING
		Build 124	April 13, 2022, 10:12:12 AM	FAILURE
		Build 125	April 13, 2022, 10:34:12 AM	SUCCESS
Bookshop Branch: master	job2 Repository: repo2	Build 125	April 13, 2022, 10:34:12 AM	SUCCESS
		Build 124	April 13, 2022, 10:12:12 AM	SUCCESS
		Build 124	April 13, 2022, 10:12:12 AM	SUCCESS

For all builds, go to the [SAP Continuous Integration and Delivery service](#).