



SAP BTP Security and Compliance – Exploring the Three Pillars of Security

Jürgen Adolf, SAP SE

SAPinsider
2023

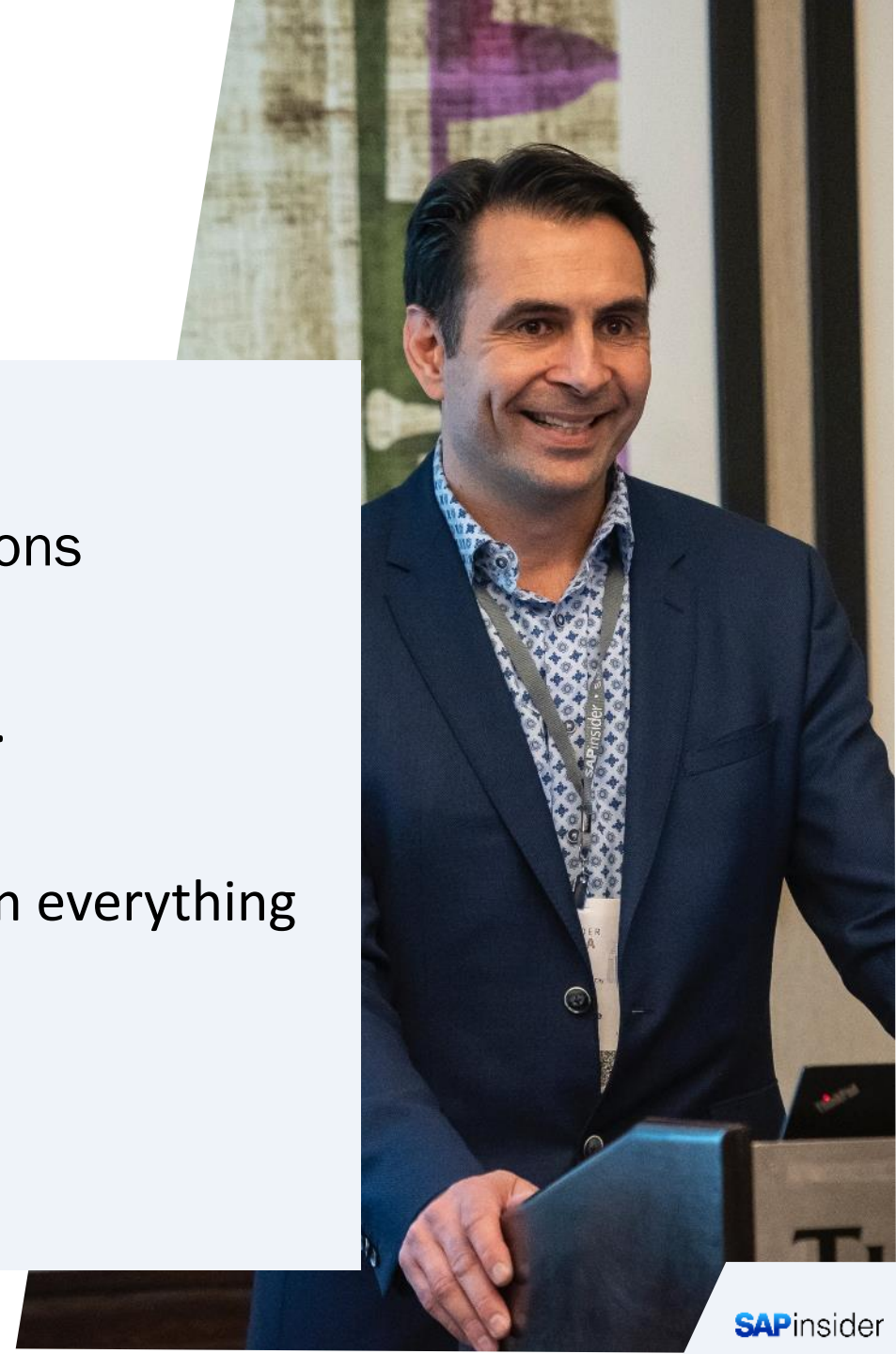


In This Session

- You will learn about best practices, tools, and methodologies employed by SAP to ensure the confidentiality, integrity, and availability of your applications and data within the BTP environment.
- Gain insights into how SAP's security measures align with industry standards and regulations, empowering you to confidently build, deploy, and operate secure solutions on the SAP BTP.

Agenda

- Build securely
 - We build secure-by-design solutions
- Run securely
 - We run cloud operations securely.
- Act Securely
 - We foster a security-first culture in everything we do.



SAP BTP is the foundation of the Intelligent Sustainable Enterprise



1. Build securely

We build secure-by-design solutions.



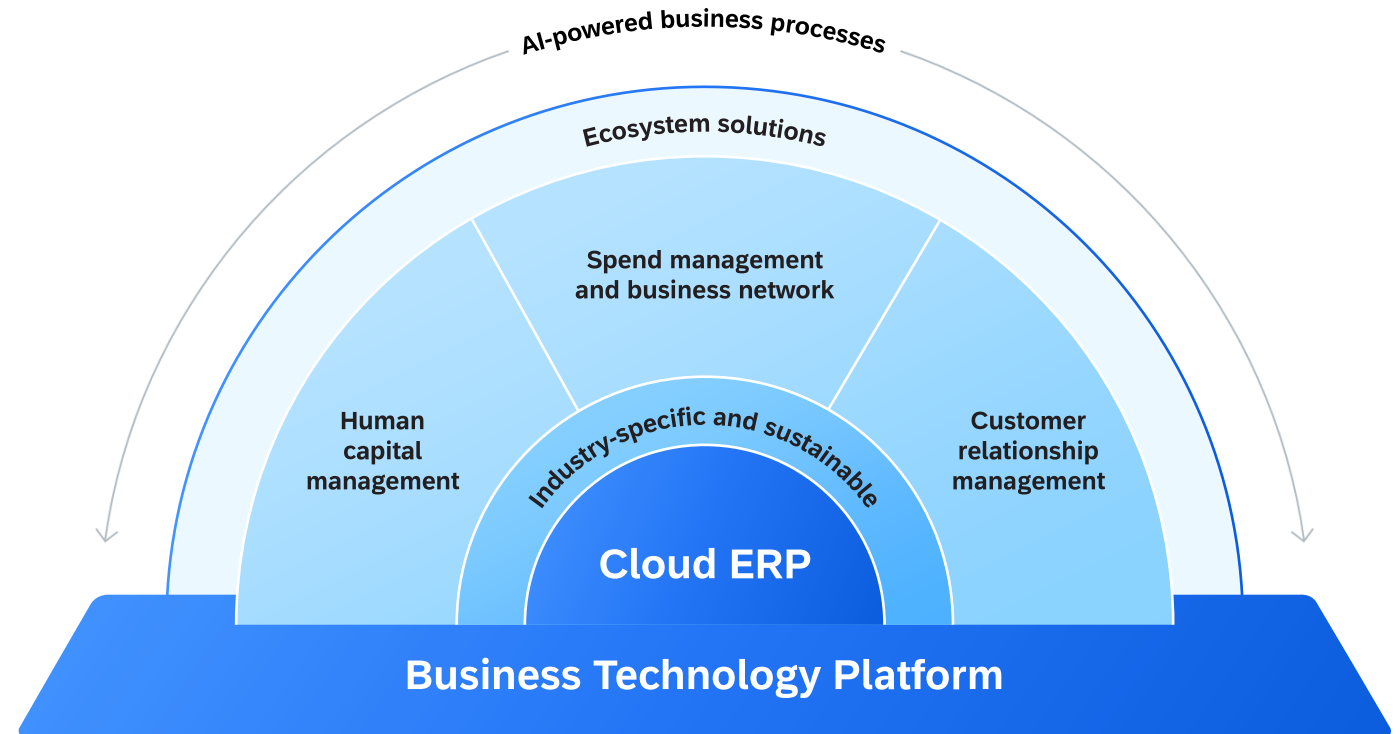
2. Run securely

We run cloud operations securely.



3. Act securely

We foster a security-first culture in everything we do.



SAP's Approach to Security

Cloud Solutions from SAP

Business Technology Platform SAP S/4HANA Line of Business Solutions



Deliver trusted cloud operations while helping protect customers' SAP applications and data



Build Securely



Software Development
Secure software development and operations lifecycle



Security solutions and features
Features to help ensure security



Cloud Environments
Secure-by-design environments (SAP and cloud service providers)



Run Securely



Automated
Preventive and detective controls



Integrated
Intelligence, operations and response orchestration



Transparent
Attestations and reports into our security processes and controls



Act Securely



Employees
Security is part of our DNA in how we organize, train and protect people and assets



Customers
Feedback loop for continuous improvement



Partners
Vast partner ecosystem to enhance security

Data Security to help protect confidentiality and integrity of data

Business Process Security to support compliance with regulatory requirements

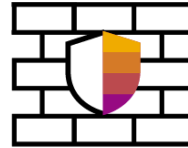
RISK Mitigation with continuous improvement across operations

Zero Trust Architecture

Shared Fate

Frameworks (NIST / ISO)

Pillars of security for SAP BTP



1. Build securely

We build secure-by-design solutions.



Software Development

Secure software development and operations lifecycle



Security solutions and features

Solutions & features to help ensure security



Cloud Environments

Secure-by-design environments (SAP and cloud service providers)

Areas of secure software development for SAP BTP



- SAP's secure development and operations lifecycle



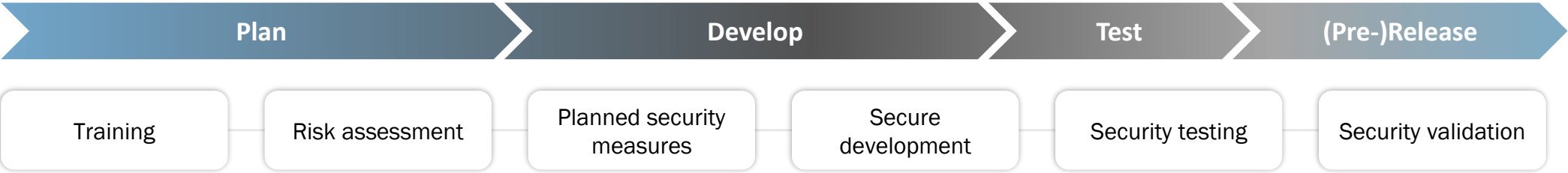
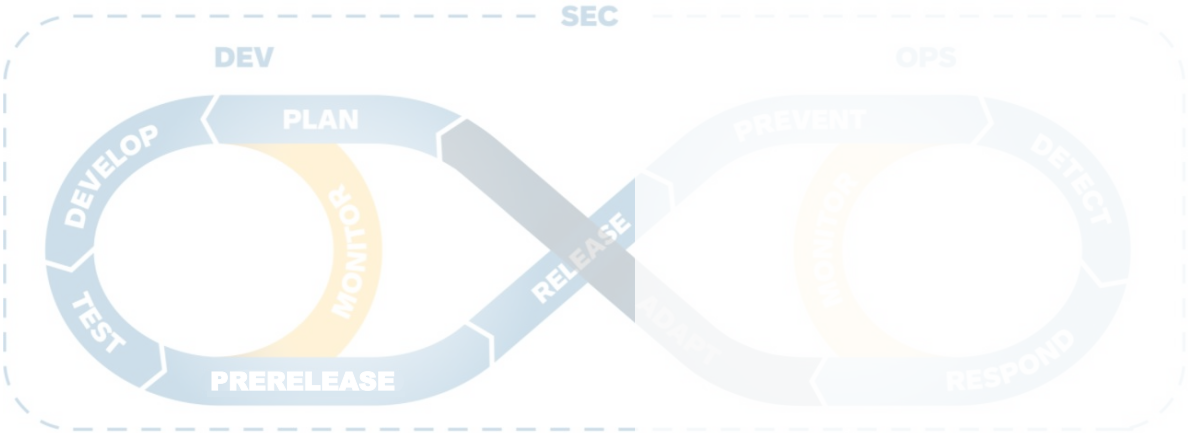
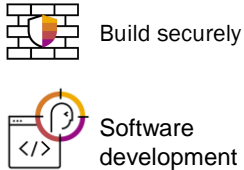
Threat modeling



Security assessment and testing

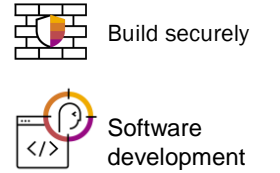
SAP's secure development and operations lifecycle

Continuous improvement and development



Threat modeling

Evaluating threats in the early stages

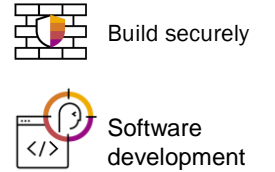


- Mandatory since 2018
- Required for each line of business
- Part of SAP's secure software development and operations lifecycle
- Mitigation steps required depending on risk



Security assessment and testing

Internal and external security assessments including penetration tests



Penetration tests

- Internal and external
- Web applications (SAP BTP, SAPUI5, Web Dynpro, and others)
- SAP Bug Bounty Program



Code scans

- Static application security testing (SAST)
- Dynamic application security testing (DAST)

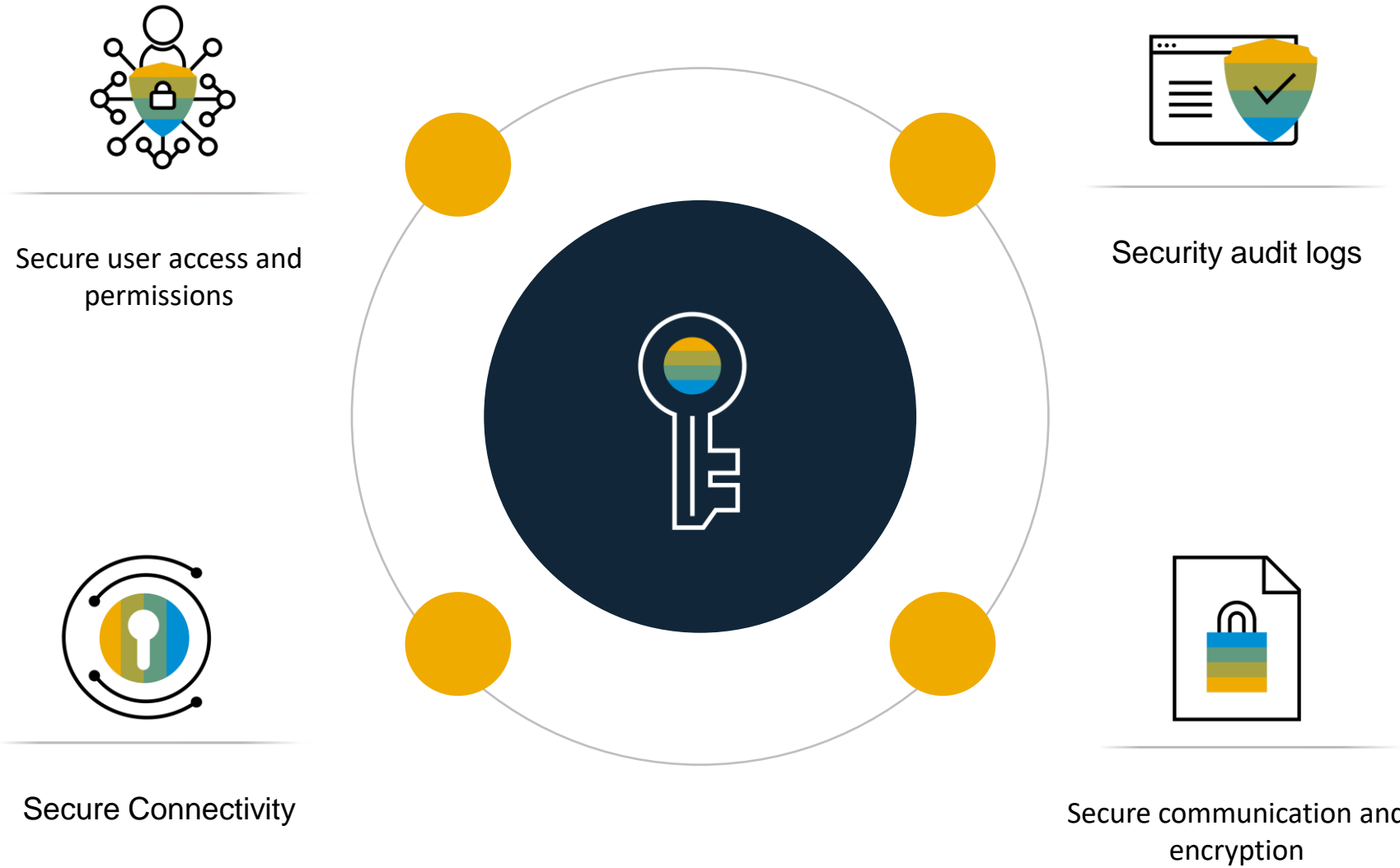


Other application security testing

- Code scan
- Authorization tests end to end
- Virus scans for documents
- Other test methods



Build Securely - Security, data protection, and privacy features



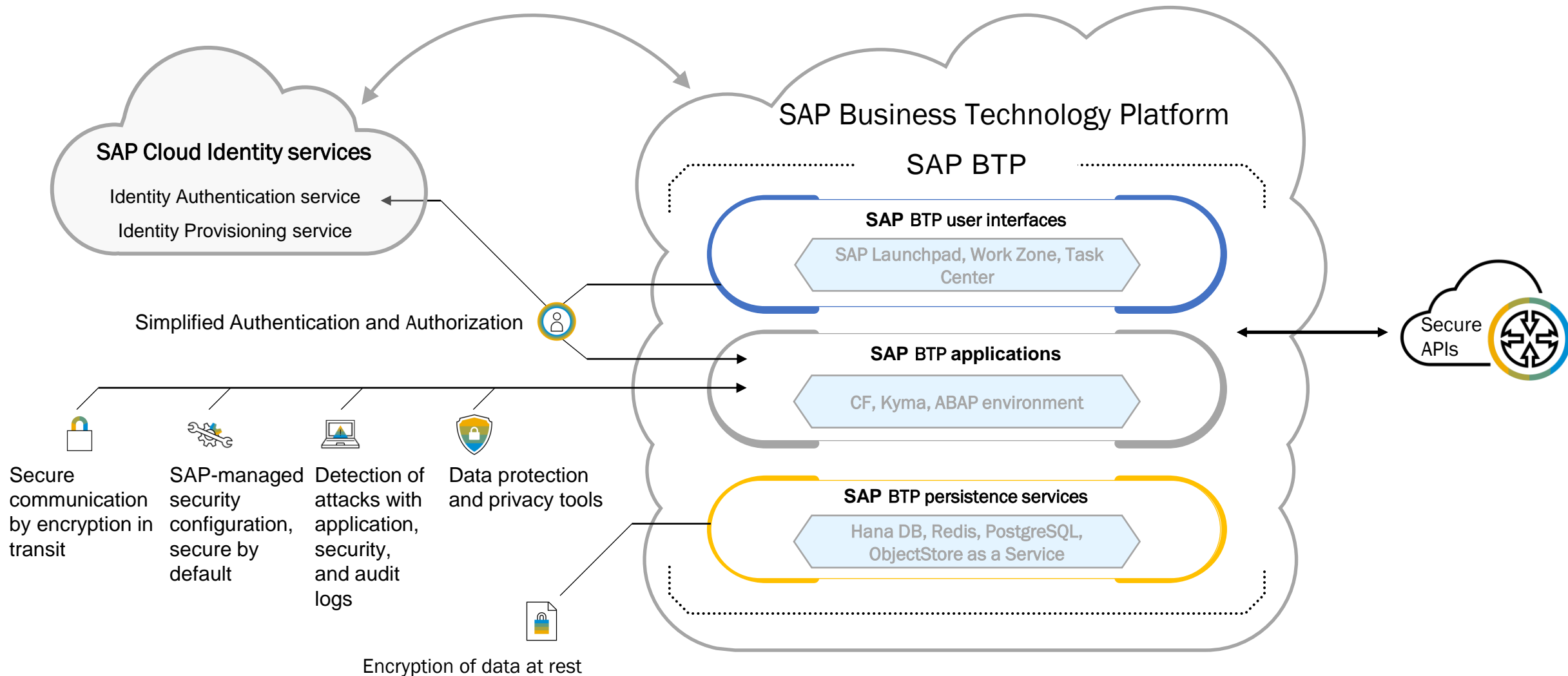


Build securely



Security solutions and features

SAP BTP - Application layer security





Build securely



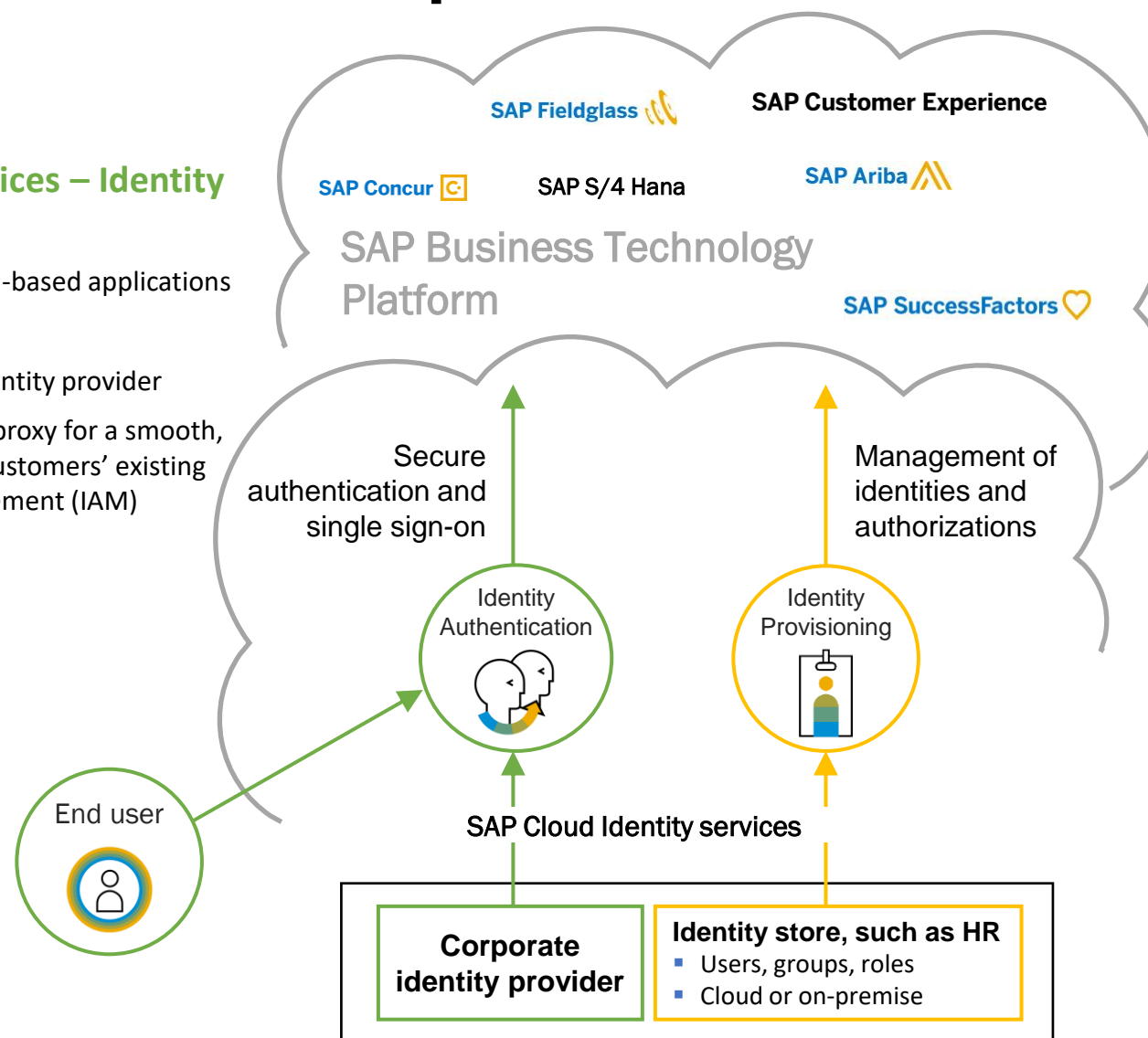
Security solutions and features

Secure user access and permissions

Secure access:

SAP Cloud Identity Services – Identity Authentication

- Single sign-on for SAP's cloud-based applications
- Two usage options:
 - As the landscape-wide identity provider
 - As identity provider (IdP) proxy for a smooth, flexible integration with customers' existing identity and asset management (IAM) infrastructure





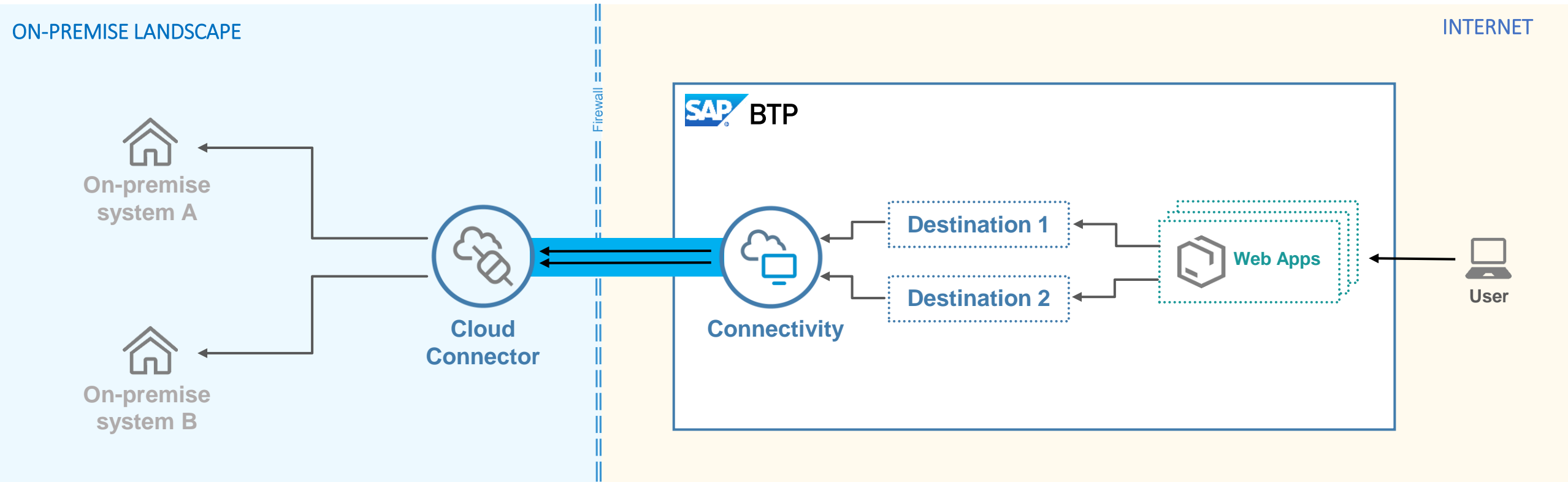
Managing users and permissions:

SAP Cloud Identity Services – Identity Provisioning

- Identity lifecycle management for cloud-based business applications
- Integrated with SAP Identity Management for hybrid landscapes and other IDM solutions
- Simple and agile onboarding of users and applications
- Dedicated connectors for third-party cloud platforms

SAP BTP Connectivity

-  Build securely
-  Security solutions and features



LIGHTWEIGHT
PREMISE AGENT

ON-

SECURE
TUNNEL

FINE-GRAINED
CONTROL

MULTIPLE
PROTOCOLS

PRINCIPAL
PROPAGATION

SAP BTP - APIs to develop secure software



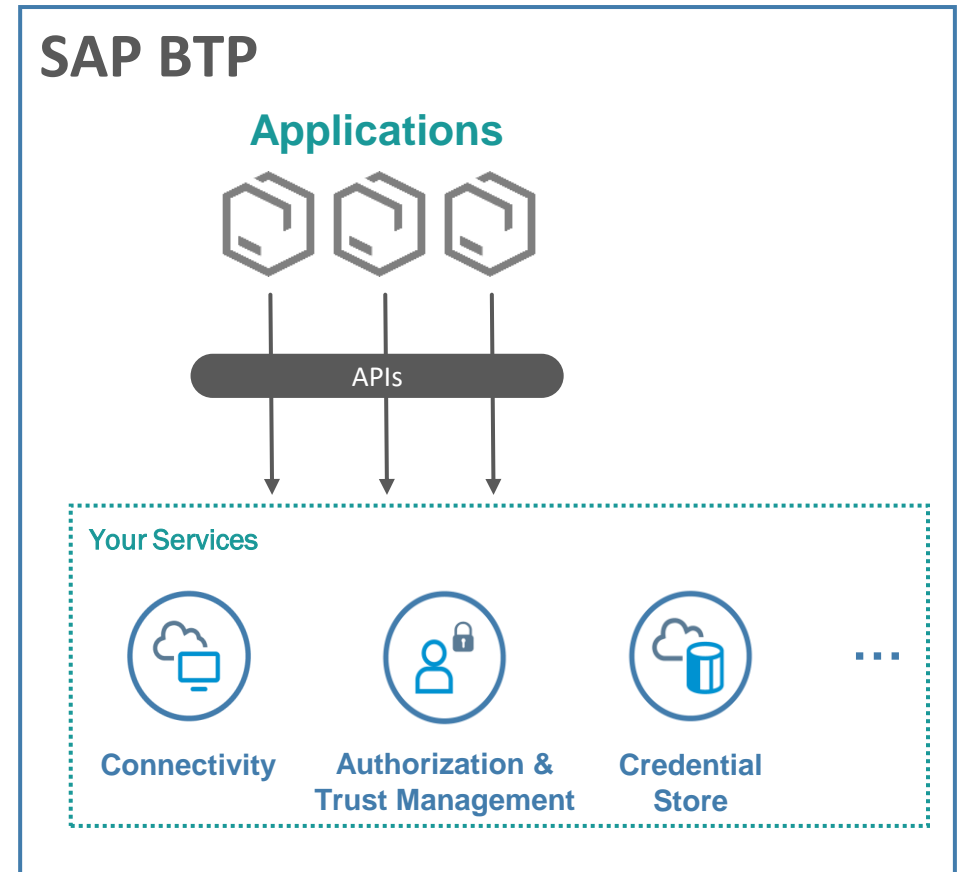
Build securely



Security solutions and features


SAP BTP offers various APIs to develop secure software applications.

- [SAP Cloud Identity Services](#) - A suite of services for user authentication and lifecycle management
- [SAP Authorization and Trust Management Service](#) - Manage application authorizations and trust for SAP BTP
- [Platform Authorizations Management API](#) - Functionality for subaccount members managing
- [SAP Connectivity Service](#) - Manage destinations and securely connect to on-premise systems
- [SAP Credential Store Service](#) - Managing passwords and keys
- [Audit Log Retrieval API](#) - Functionality for retrieving audit logs
- [SAP Malware Scanning Service](#) - Scan business documents uploaded by your custom-developed applications for malware




Additional solutions from SAP for Securing Applications and Data

Visit sap.com/grc for more information



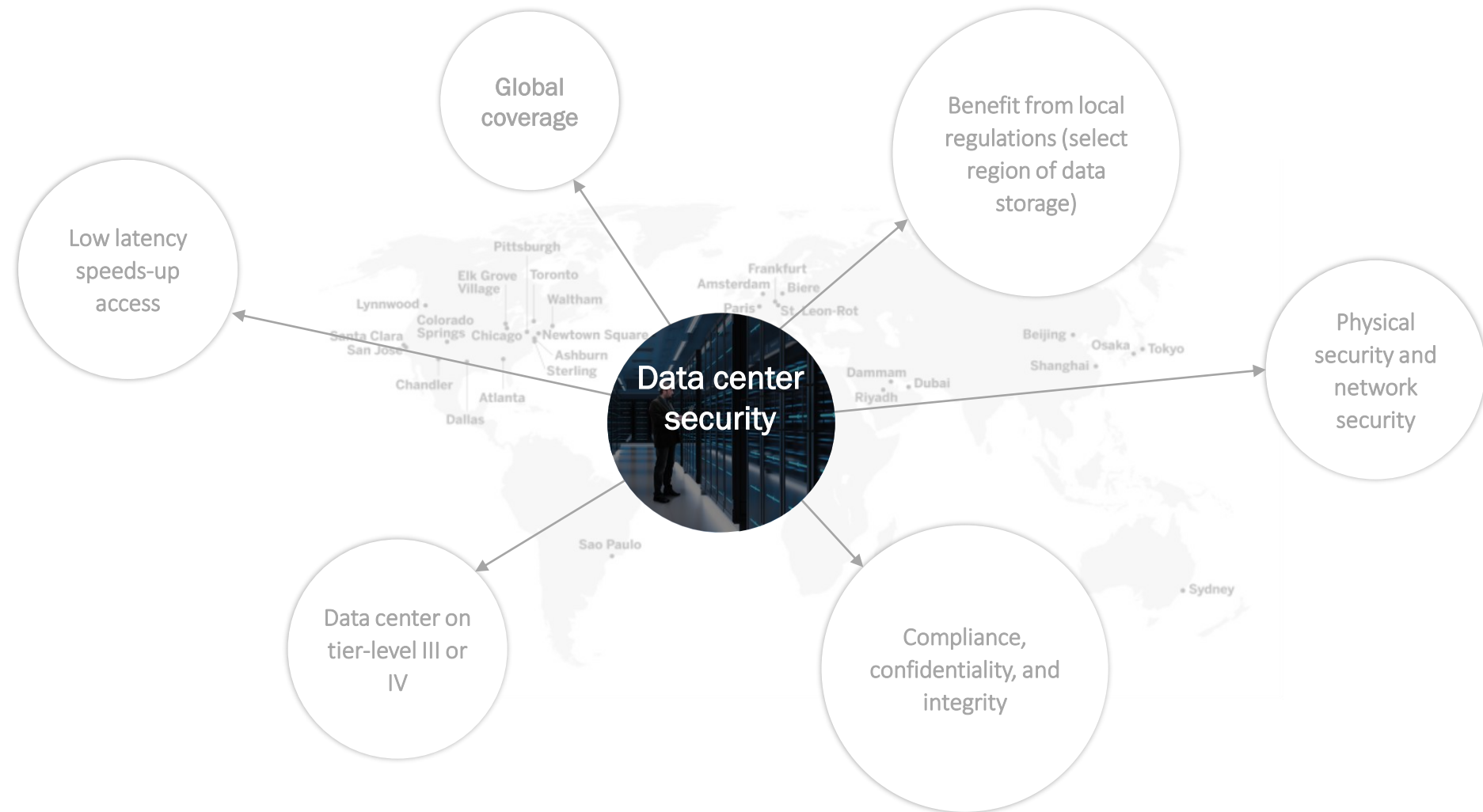
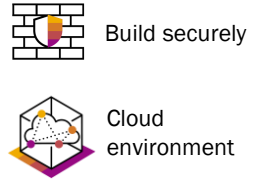
Build securely



Security solutions and features



Secure-by-design cloud environments



Pillars of security for SAP BTP



2. Run securely

We run cloud operations securely.



Automated
Preventive and
detective controls

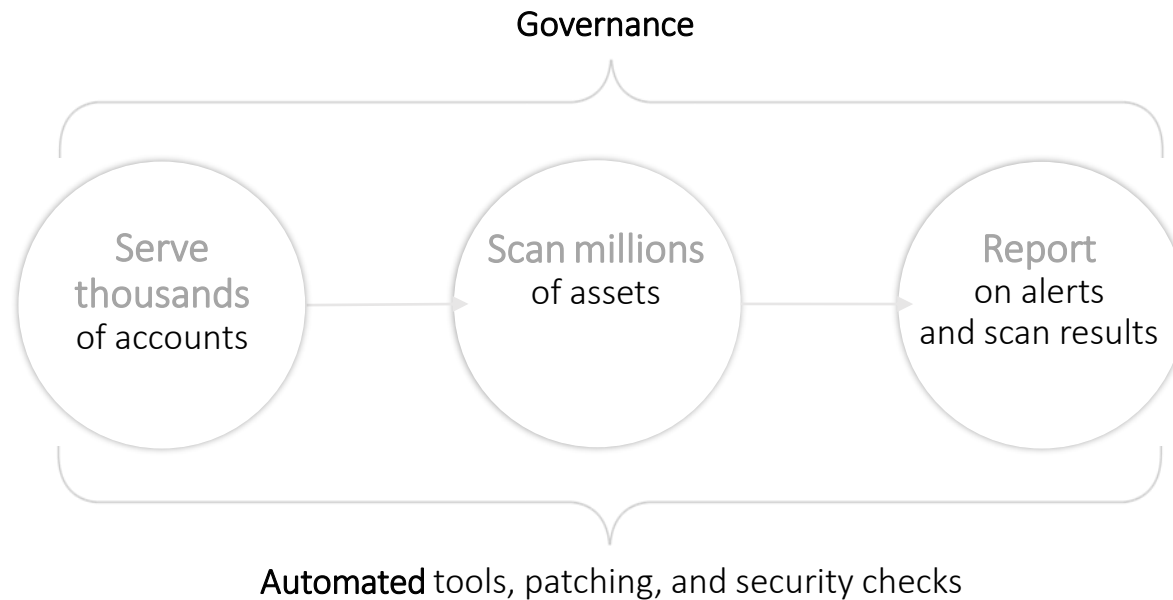
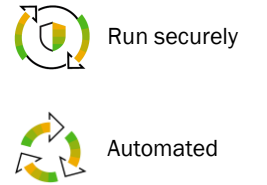


Integrated
Intelligence, operations and
response orchestration

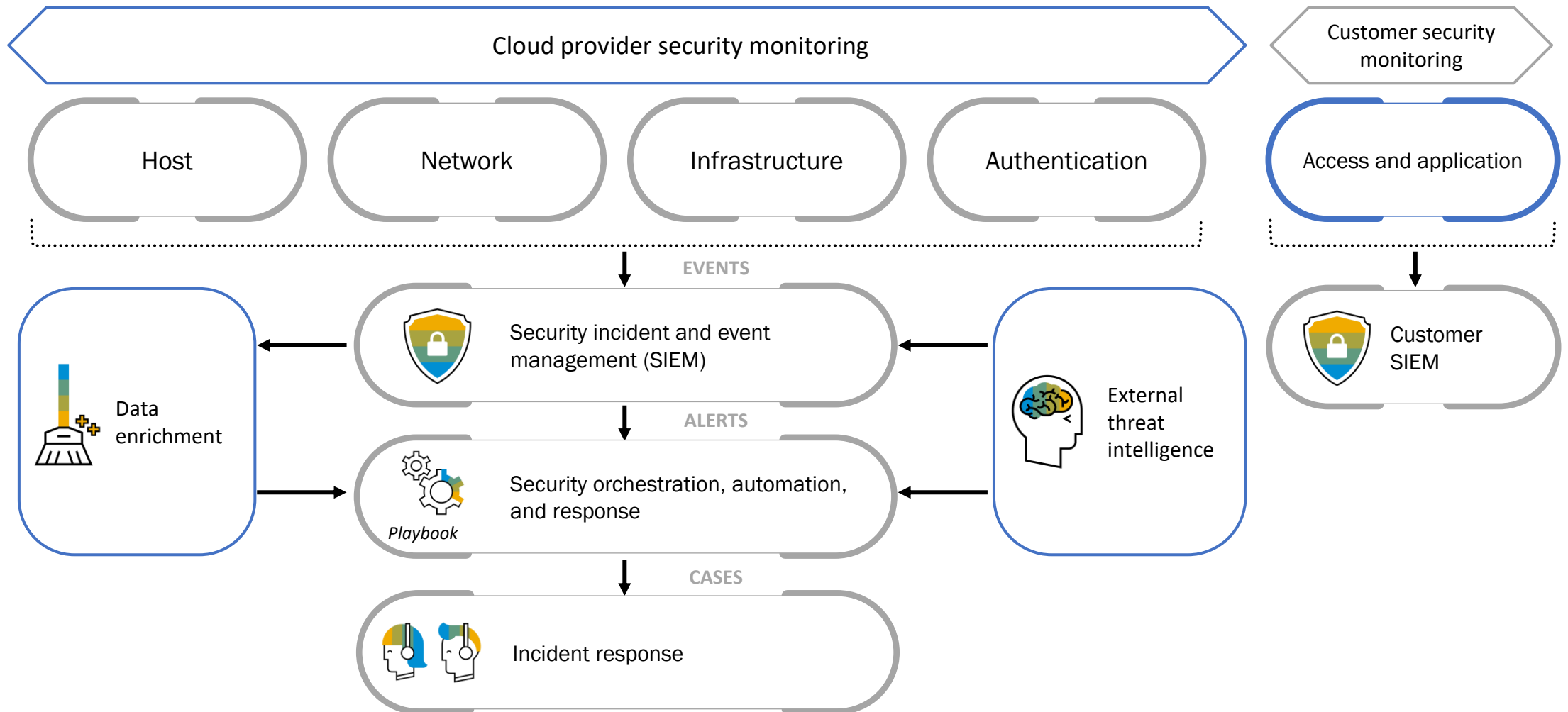
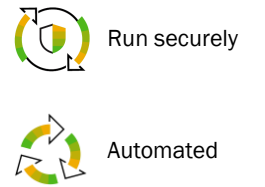


Transparent
Attestations and reports into our
security processes and controls

Automation enables a scalable approach to security

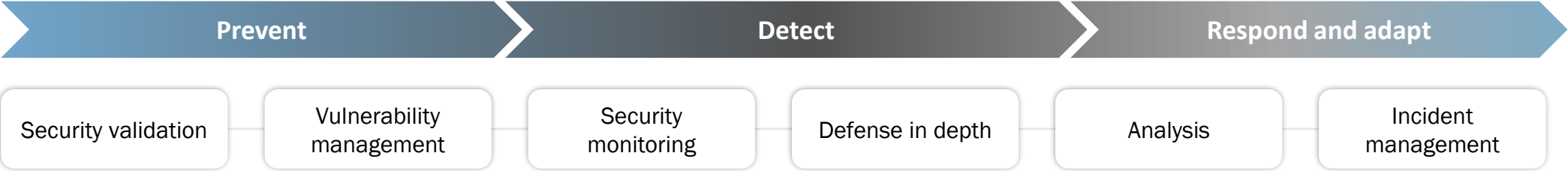
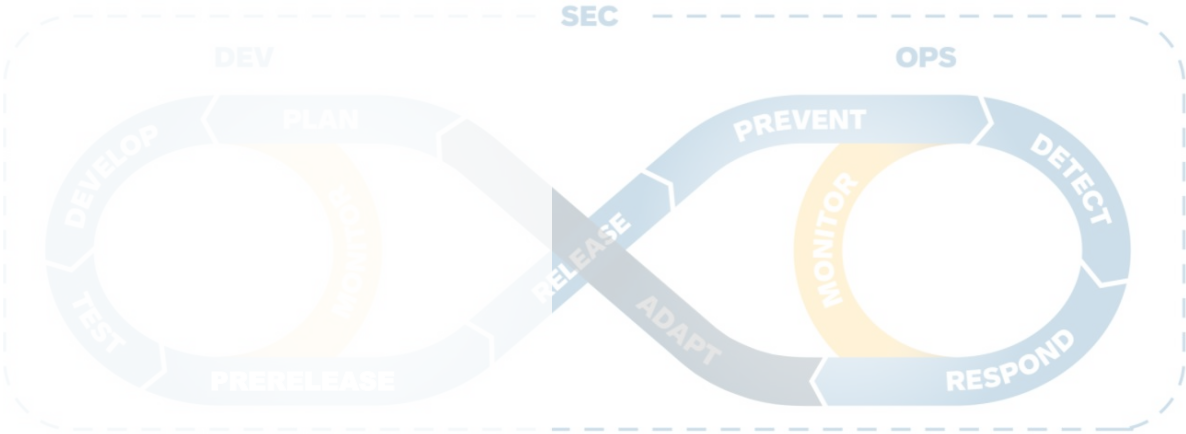
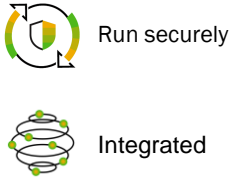


Security monitoring: Detection, protection, and response

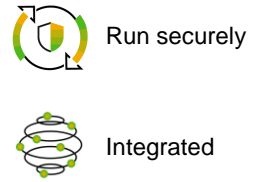


SAP's secure development and operations lifecycle

Continuous security monitoring and operations



SAP's Cyber Fusion Center



Our Cyber Fusion Center integrates cyberthreat intelligence with security and technology operations and response. This integration drives the proactive, defensive actions that protect critical technology and data assets.



Comprehensive contracts and independent audits



Service-level
agreements



Independent audits,
certifications, and attestations

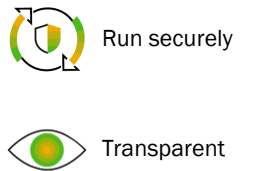


Security framework
description



Applicable local
regulations globally

Security, data protection, and privacy safeguards



Authentication

Standard authentication capabilities



Physical access control

Preventing unauthorized persons from gaining access to data processing systems



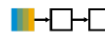
Disclosure control

Ability to document all access to personal data with logging features



Pseudonymization

Changing the data in a way that the data subject is not identifiable without using secret key or information.



Job control

Data controller required to ensure that the data processor is following their instructions and guidelines; this organizational task has some technical aspects such as system audit



Authorizations

Standard authorization concepts fine-tuned



Technical and organizational measures (TOMs)



Data separation

Purpose-based personal data separation



Change control

Ability to document all changes to personal data with standard change logging



Encryption

Standard encryption of personal data during transit and at rest



Availability control

Procedures such as backup, disaster recovery, and business continuity

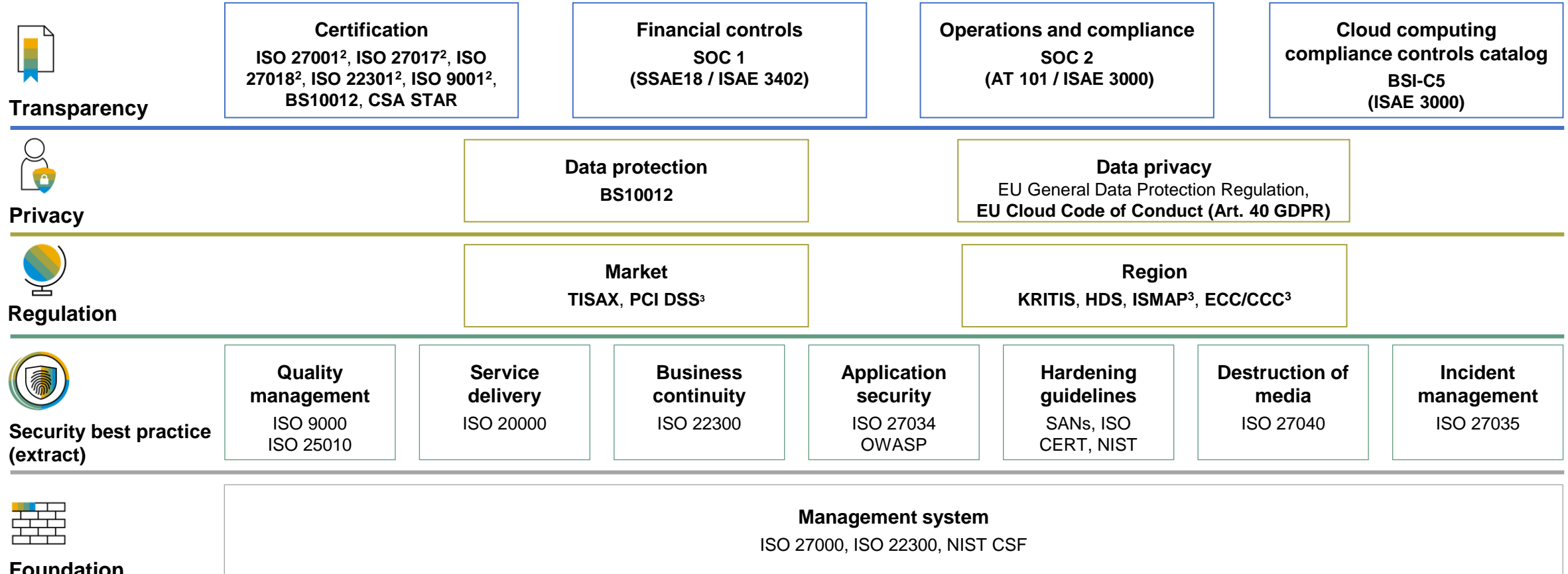


Transmission control

Transmission control of personal data such as through encryption



Management system, regulation and best practices¹



SAP BTP Cloud standards and best practices

1. The management systems are used across all SAP Cloud Secure services, execution of independent certification, and audit depend on service and organizational unit respectively. Details are available at www.sap.com/about/trust-center/certification-compliance.html.
2. Component of the Integrated Information Security Management System (IISMS) of SAP.
3. Limited product scope

Pillars of security for SAP BTP



3. Act securely

We foster a security-first culture in everything we do.



Our Employees

Security is part of our DNA in how we organize, train and protect people and assets



Our Customers

Feedback loop for continuous improvement




Our Partners

Vast partner ecosystem to enhance security

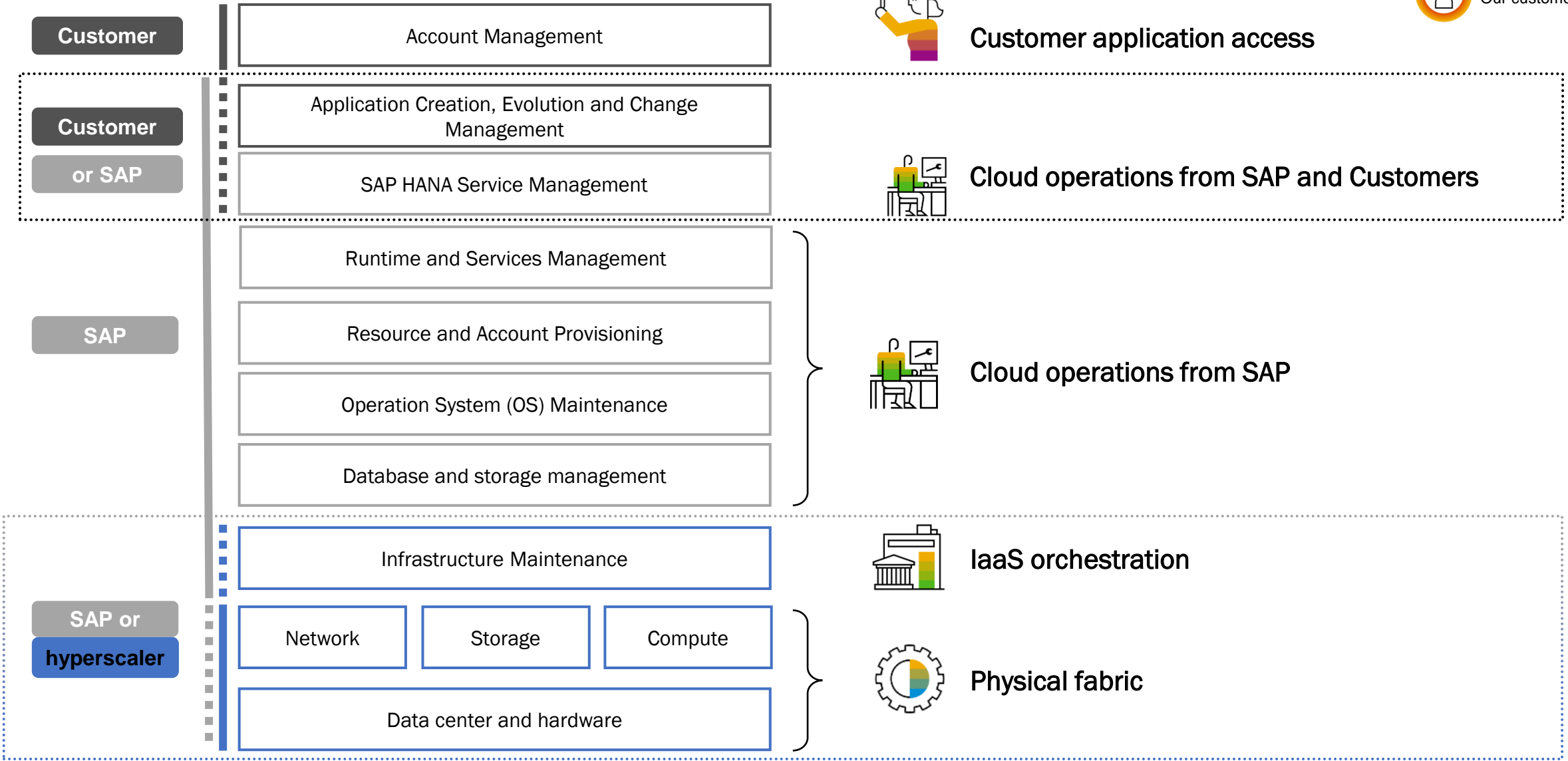
Security is part of our DNA

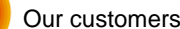
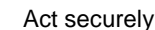


SAP BTP shared responsibility model

 Act securely

 Our customers





Protect Your SAP BTP environment

Learn about SAP BTP security

Help Portal (Documentation)

Browse by Product
Learning Journeys
What's New
Explore SAP

Search

Home > SAP Business Technology Platform (SAP BTP) > SAP Business Technology Platform > Security

SAP Business Technology Platform

English

This document
Search in this document

Advanced Search

SAP Business Technology Platform

Basic Platform Concepts
Getting Started
Development
Extensions
Administration and Operations
Security

SAP Authorization and Trust Management Service in the Cloud Foundry Environment
Default Role Collections of SAP BTP Cloud Foundry Environment (Feature Set B)
Trusted Certificate Authentication
Principal Propagation
Data Protection and Privacy
Security in the Kyra Environment

Getting Support
Glossary

Previous

Favorite
Download PDF
Edit
Feedback
Share
Next

Security

Use the security features and functions of SAP BTP to support the security policies of your organization.

Security Recommendations

We provide a list with our recommendations for the configuration of our services. These recommendations help you to meet your compliance goals and secure your business.

See [SAP BTP Security Recommendations](#).

Our customer success organization, uses these recommendations as a base to create a security baseline template.

For more information, go to <https://support.sap.com/sos> and choose **Media Library** > **SAP CoE Security Services - Security Baseline Template**.

User Model

SAP BTP distinguishes between **platform users** (account management, custom development, and operations) and **business users** (for the applications).

See [User and Member Management](#).

Authorizations

You can configure authorizations using **roles** and **role collections** for your global account, subaccount, directory, or individual applications.

See [Security Administration: Managing Authentication and Authorization](#).

Identity Providers

All users of SAP BTP are stored in identity providers, either in the default or in a custom identity provider. SAP BTP needs a copy of the user, sometimes called a shadow user. You assign the shadow user authorizations to access resources in SAP BTP. When a user authenticates, SAP BTP forwards the request to the identity provider.

For more information, see [Trust and Federation with Identity Providers](#).

On this page

- Security Recommendations
- User Model
- Authorizations
- Identity Providers
- Default Identity Provider
- Identity Authentication Service
- Transport Layer Security (TLS) Connectivity Support
- Audit Logging
- Credential Store
- Malware Scanning
- Related Information


Was this page helpful?

Yes
No

[Help Portal: SAP BTP Security](#)

Security Recommendations

Configuring security settings in SAP BTP


Help Portal (Documentation)

[Browse by Product](#)
[Learning Journeys](#)
[What's New](#)
[Explore SAP](#)

[Home](#) > [SAP Business Technology Platform \(SAP BTP\)](#) > [SAP BTP Security Recommendations](#) > [SAP BTP Security Recommendations](#)

SAP BTP Security Recommendations

This document

SAP BTP Security Recommendations

[Explanation of Table Headings](#)
[Displaying Security Recommendations](#)

SAP BTP Security Recommendations

These recommendations help you evaluate the security of the configuration of SAP BTP services in your landscape.

Remember

As part of the [cloud shared responsibility model](#), you're responsible for determining if any of these recommendations are relevant for your environment and to what extent.

Note

Not all SAP BTP services are listed yet. We've started with core security services and are extending this list service by service.

If your service is missing, see also the [Security](#) section of the service documentation on the [SAP Help Portal](#).

See also [Explanation of Table Headings](#).

Security Recommendations

Service	Priority	Secure Operations Map	Topic	Default Setting or Behavior	Recommendation	More Information	Last Update
Filter: [No Selection]	Filter: [No Selection]	Filter: [No Selection]	Filter: [No Selection]				Search column
Identity Authentication	Critical	Authentication and Single Sign-On	Default Authentication of Administrators	The default authentication method for the administration console is user name and password.	Always protect the administration console application with multifactor authentication.	Configure Risk-Based Authentication for an Application	2023-04-12
Identity Authentication	Recommended	Authentication and Single Sign-On	Password Policies	The service supports	If password-based authentication is	Configure Custom Password Policy	2023-04-12

[Help Portal: SAP BTP Security Recommendations](#)

Report security incidents

Proven way for SAP customers and security researchers



Security Issue Management

SAP is committed to identifying and addressing security issues that affect our software and cloud solutions.

Report a security issue

SAP is committed to identifying and addressing security issues that affect our software and cloud solutions. We are continuously working on improving our security processes. To report a potential security issue, choose from the options below.



SAP customers

Report a customer security issue to find a solution and get real-time support from an expert.

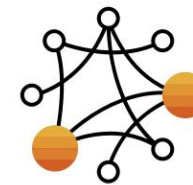
[View the launchpad >](#)



Security researchers

Inform the SAP Product Security Response Team of a security issue by completing and submitting the security vulnerability form.

[Access the form >](#)



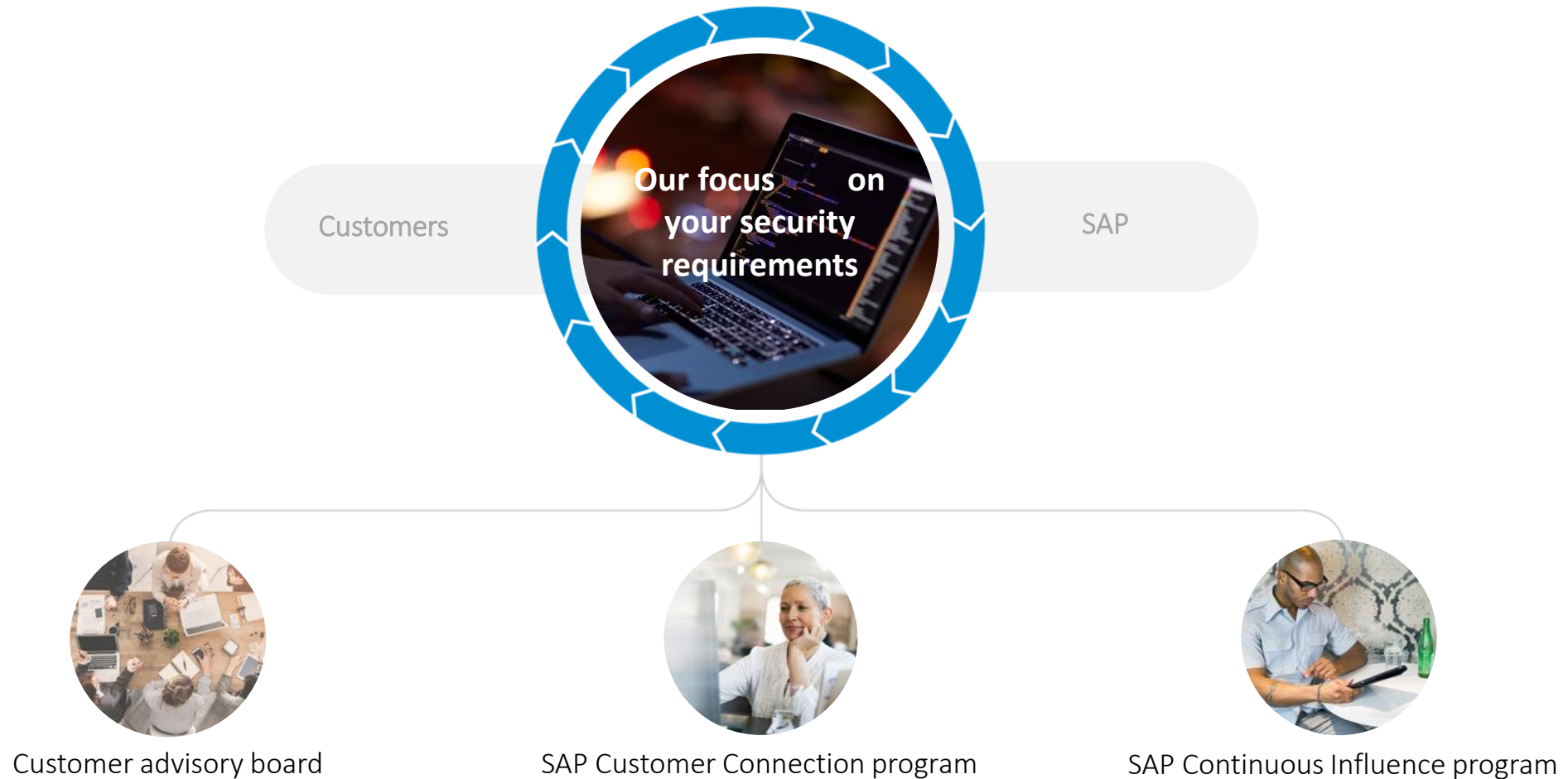
Suppliers

Inform the SAP Product Security Response Team of a security issue by submitting the form.

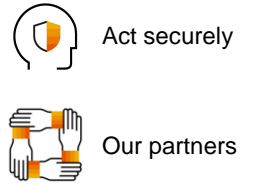
[Access the form >](#)

www.sap.com/about/trust-center/security/incident-management.html

Partnership with customers supports continuous feedback and improvement



Ecosystem Partnerships for Enhanced Security



Where to Find More Information

- SAPinsider.org
- [SAP BTP – Documentation including security](#)
- [Community](#)
- [Roadmap](#)
- [The Secure Software Development Lifecycle at SAP](#)
- [Shared Responsibility Model Between You and SAP](#)
- [SAP BTP Security Recommendations](#)
- [SAP Trust Center, certifications and attestations](#)
- [Cloud Services: Reference Guide](#)
- [Guide to Customer Content](#)

Key Points to Take Home

- Use SAP BTP security services when developing new applications or extending existing ones
- Get familiar with the shared responsibility model
- Adapt the security recommendations for your cloud services
- Visit the Trust Center
- Engage with us via the Customer Influence requests

Jürgen Adolf

Please remember to complete
your session evaluation.

SAPinsider



SAPinsider.org

PO Box 982Hampstead, NH 03841
Copyright © 2023 Wellesley Information Services.
All rights reserved.

SAP and other SAP products and services mentioned herein as well as their respective logos are trademarks or registered trademarks of SAP SE (or an SAP affiliate company) in Germany and other countries. All other product and service names mentioned are the trademarks of their respective companies. Wellesley Information Services is neither owned nor controlled by SAP SE.

SAPinsider comprises the largest and fastest growing SAP membership group worldwide, with more than 750,000 global members.
