

# SECURITY FOR SAP RISE AND CLOUD ERP

SECURITY SERVICES AND SOLUTIONS FOR SAP RISE / CLOUD ERP CUSTOMERS

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## **SECURITY FOR SAP RISE / CLOUD ERP**

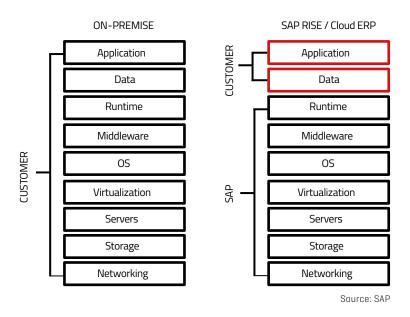
SECURITY SERVICES AND SOLUTIONS
FOR SAP RISE / CLOUD ERP CUSTOMERS

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### INTRODUCTION

In contrast to traditional on-premise SAP landscapes, the responsibilities for security in SAP RISE / Cloud ERP are shared between SAP and customers. SAP is responsible for security at the hyperscaler and network level, as well as security for databases and servers. Customers are responsible for securing the application and data layer. However, customers can purchase optional solutions and Cloud Application Services (CAS) from SAP that are not included in standard agreements for additional support in these areas.



This document compares security solutions and services available from SAP against the capabilities of the Cybersecurity Extension for SAP (CES). CES is a software addon for SAP solutions and certified for SAP S/4HANA. CES delivers more coverage at lower cost than the equivalent SAP solutions and services and provides a unified alternative to multiple SAP RISE / Cloud ERP offerings.

#### **ACCESS RISK ANALYSIS**

Customers are responsible for managing user permissions and ensuring access to critical roles and authorizations is restricted and compliant with the principle of the Segregation of Duties (SoD). SAP offers an optional Cloud Application Service to detect critical access and SoD risks in customer S/4HANA systems using the SAP GRC ruleset. The Cybersecurity Extension for SAP also performs critical access and SoD checks for S/4HANA using a ruleset benchmarked against SAP GRC.

| ACCESS RISK ANALYSIS                                         | SAP RISE / CLOUD<br>ERP STANDARD | SAP RISE / CLOUD ERP<br>OPTIONAL CAS/ SOLUTION <sup>1</sup> | CYBERSECURITY EXTENSION<br>FOR SAP |
|--------------------------------------------------------------|----------------------------------|-------------------------------------------------------------|------------------------------------|
| CRITICAL ACCESS & SOD CHECKS FOR S/4HANA                     | NO                               | YES                                                         | YES                                |
| SCANNING INTERVAL                                            | NONE                             | ON DEMAND                                                   | DAILY                              |
| DETAILED REPORTING INCLUDING RISK ANALYSIS & RECOMMENDATIONS | NO                               | YES                                                         | YES                                |
| REPORT SCHEDULING INCLUDING AUTOMATIC EMAIL DISTRIBUTION     | NO                               | NO                                                          | YES                                |
| DASHBOARD & TREND ANALYSIS INTEGRATION                       | NO                               | NO                                                          | YES                                |
| RULESET CUSTOMIZATION                                        | NO                               | NO                                                          | YES                                |
| SUPPORT FOR USER EXCLUSIONS                                  | NO                               | NO                                                          | YES                                |

<sup>&</sup>lt;sup>1</sup> Advanced Security & Compliance CAS (Segregation of Duties Check)

#### **VULNERABILITY & COMPLIANCE MANAGEMENT**

Customers are responsible for the secure configuration of applications in SAP RISE / Cloud ERP. SAP offers an additional Cloud Application Service not included in stand+ ard RISE services to perform security checks for ABAP and HANA systems using SAP Solution Manager. The Cybersecurity Extension for SAP performs more extensive security checks than the CAS and enables customers to detect compliance gaps with security frameworks. This includes compliance monitoring for security settings mandated by SAP Enterprise Cloud Services (ECS) for SAP RISE / Cloud ERP solutions.

| VULNERABILITY & COMPLIANCE MANAGEMENT                                                                                                   | SAP RISE / CLOUD<br>ERP STANDARD | SAP RISE / CLOUD ERP<br>OPTIONAL CAS/ SOLUTION <sup>1</sup> | CYBERSECURITY EXTENSION<br>FOR SAP |
|-----------------------------------------------------------------------------------------------------------------------------------------|----------------------------------|-------------------------------------------------------------|------------------------------------|
| SUPPORT FOR ABAP                                                                                                                        | NO                               | YES                                                         | YES                                |
| SUPPORT FOR HANA                                                                                                                        | NO                               | YES                                                         | DAILY                              |
| SUPPORT FOR JAVA                                                                                                                        | NO                               | NO                                                          | YES                                |
| SUPPORT FOR ASE DATABASE                                                                                                                | NO                               | NO                                                          | YES                                |
| SUPPORT FOR LINUX OS                                                                                                                    | NO                               | NO                                                          | YES                                |
| QUANTITY OF SECURITY CHECKS                                                                                                             | NONE                             | LOW                                                         | HIGH <sup>2</sup>                  |
| AUTOMATED COMPLIANCE GAP ASSESSMENTS<br>FOR SECURITY FRAMEWORKS INCLUDING<br>CUSTOM SECURITY POLICIES                                   | NO                               | NO                                                          | YES3                               |
| COMPLIANCE MONITORING FOR SECURITY<br>SETTINGS MANDATED BY SAP ENTERPRISE<br>CLOUD SERVICES (ECS) FOR SAP RISE / CLOUD<br>ERP SOLUTIONS | NO                               | NO                                                          | YES                                |
| REPORT SCHEDULING INCLUDING AUTOMATIC EMAIL DISTRIBUTION                                                                                | NO                               | NO                                                          | YES                                |
| DASHBOARD & TREND ANALYSIS INTEGRATION                                                                                                  | NO                               | NO                                                          | YES                                |
| ALERT INTEGRATION                                                                                                                       | NO                               | YES                                                         | YES                                |
| INTEGRATION WITH CUSTOM CODE<br>SECURITY SCANNING                                                                                       | NO                               | NO                                                          | YES                                |
| SECURITY CHECK CUSTOMIZATION INCLUDING EXCLUSIONS FOR SYSTEMS & USERS                                                                   | NO                               | NO                                                          | YES                                |
| REMEDIATION MANAGEMENT                                                                                                                  | NO                               | YES                                                         | YES                                |

<sup>1</sup> Advanced Security & Compliance CAS (Application Security Monitoring) 2 4000+ system vulnerability checks in Cybersecurity Extension for SAP v5.1

<sup>3.</sup> Supported frameworks include CIS, NIST, GDPR, ISO-27000, PCI-DSS, SOX, SAP S/4HANA Security Guide, SAP Security Baseline, and SAP RISE / Cloud ERP

#### **CUSTOM CODE SECURITY**

Developing and maintaining secure custom applications is the responsibility of customers in SAP RISE / Cloud ERP. This includes custom developments adapted and migrated from SAP ECC to SAP S/4HANA. Customers can license SAP Code Vulnerability Analyzer (CVA) to detect vulnerabilities in custom ABAP programs. CVA is not included in standard RISE solutions. The Cybersecurity Extension for SAP includes a higher number of test cases than CVA and supports security scanning for custom SAPUI5 applications.

| CUSTOM CODE SECURITY                                      | SAP RISE / CLOUD<br>ERP STANDARD | SAP RISE / CLOUD ERP<br>OPTIONAL CAS/ SOLUTION <sup>1</sup> | CYBERSECURITY EXTENSION<br>FOR SAP |
|-----------------------------------------------------------|----------------------------------|-------------------------------------------------------------|------------------------------------|
| SUPPORT FOR ABAP CODE                                     | NO                               | YES                                                         | YES                                |
| SUPPORT FOR SAPUIS CODE                                   | NO                               | NO                                                          | DAILY                              |
| QUANTITY OF SECURITY CODE CHECKS                          | NONE                             | 70+²                                                        | 270+³                              |
| SUPPORT FOR CENTRALIZED SCANNING                          | NO                               | YES                                                         | YES                                |
| INTEGRATION WITH ABAP TEST COCKPIT AND SAP CODE INSPECTOR | NO                               | YES                                                         | YES                                |
| REPORT SCHEDULING INCLUDING AUTOMATIC EMAIL DISTRIBUTION  | NO                               | NO                                                          | YES                                |
| EXTERNAL CALL ANALYSIS FOR CUSTOM PROGRAMS                | NO                               | NO                                                          | YES <sup>3</sup>                   |
| DASHBOARD & TREND ANALYSIS INTEGRATION                    | NO                               | NO                                                          | YES                                |
| SUPPORT FOR EXCLUSIONS                                    | NO                               | YES                                                         | YES                                |

<sup>&</sup>lt;sup>1</sup> SAP Code Vulnerability Analyzer (SAP CVA)

<sup>&</sup>lt;sup>2</sup> SAP CVA for SAP Basis 757 SP02

<sup>&</sup>lt;sup>3</sup> Cybersecurity Extension for SAP v5.1

#### **SECURITY PATCHING**

Customers are responsible for identifying and applying application-specific security notes and testing for security notes in SAP RISE / Cloud ERP. SAP offers an optional Cloud Application Service for implementing application-level security notes. However, customers remain responsible for implementing notes with manual corrections and testing security notes. The Cybersecurity Extension for SAP automates the discovery of security notes and supports change impact analysis for test planning.

| SECURITY PATCHING                                                                                             | SAP RISE / CLOUD<br>ERP STANDARD | SAP RISE / CLOUD ERP<br>OPTIONAL CAS/ SOLUTION <sup>1</sup> | CYBERSECURITY EXTENSION FOR SAP |
|---------------------------------------------------------------------------------------------------------------|----------------------------------|-------------------------------------------------------------|---------------------------------|
| CALCULATION OF RELEVANT SECURITY NOTES                                                                        | YES                              | -                                                           | YES                             |
| INTEGRATION WITH ABAP TEST COCKPIT AND SAP CODE INSPECTOR                                                     | NO                               | NO                                                          | YES                             |
| AUTOMATIC CHECK FOR IMPLEMENTATION STATUS OF SECURITY NOTES TO REMOVE INSTALLED NOTES FROM CALCULATED RESULTS | YES                              | -                                                           | YES                             |
| IMPLEMENTATION OF APPLICATION-LEVEL SECURITY NOTES                                                            | NO                               | YES                                                         | NO                              |
| IMPLEMENTATION OF SECURITY NOTES WITH MANUAL CORRECTIONS                                                      | NO                               | NO                                                          | NO                              |
| TESTING FOR SECURITY NOTES                                                                                    | NO                               | NO                                                          | NO                              |
| REPORT SCHEDULING INCLUDING AUTOMATIC EMAIL DISTRIBUTION                                                      | NO                               | NO                                                          | YES                             |
| DASHBOARD & TREND ANALYSIS INTEGRATION                                                                        | NO                               | NO                                                          | YES                             |

<sup>&</sup>lt;sup>1</sup> Application Security Updates CAS

#### THREAT DETECTION & RESPONSE

Monitoring and investigating security incidents in SAP applications is the responsi+ bility of customers in SAP RISE / Cloud ERP. SAP offers managed services using SAP Enterprise Threat Detection (ETD) cloud edition as an optional CAS. The services exclude monitoring of HANA logs. ETD must be licensed by the customer to use the services. The Cybersecurity Extension for SAP includes more detection patterns than ETD and supports monitoring of HANA logs.

| THREAT DETECTION & RESPONSE                              | SAP RISE / CLOUD<br>ERP STANDARD | SAP RISE / CLOUD ERP<br>OPTIONAL CAS/ SOLUTION <sup>1</sup> | CYBERSECURITY EXTENSION<br>FOR SAP |
|----------------------------------------------------------|----------------------------------|-------------------------------------------------------------|------------------------------------|
| SAP ENTERPRISE THREAT DETECTION LICENSE REQUIRED         | NO                               | YES                                                         | NO                                 |
| SUPPORT FOR ABAP                                         | NO                               | YES                                                         | YES                                |
| SUPPORT FOR HANA                                         | NO                               | YES                                                         | YES                                |
| SUPPORT FOR JAVA                                         | NO                               | YES                                                         | YES                                |
| SUPPORT FOR ASE DATABASE                                 | NO                               | NO                                                          | YES                                |
| SUPPORT FOR LINUX OS                                     | NO                               | NO                                                          | YES                                |
| SUPPORT FOR SAPROUTER & SAP WEB DISPATCHER               | NO                               | NO                                                          | YES                                |
| QUANTITY OF PATTERNS                                     | NONE                             | 45+                                                         | 1000+²                             |
| DETECTION OF ACTIVELY EXPLOITED VULNERABILITIES          | NO                               | YES                                                         | YES                                |
| FORENSIC ANALYSIS OF SAP LOGS                            | NO                               | YES                                                         | YES                                |
| CUSTOM THREAT PATTERNS AND ALARMS                        | NO                               | YES                                                         | YES                                |
| SIEM INTEGRATION                                         | NO                               | YES                                                         | YES                                |
| ALERT TUNING INCLUDING EXCLUSIONS                        | NO                               | YES                                                         | YES                                |
| INCIDENT RESPONSE                                        | NO                               | YES                                                         | YES                                |
| REPORT SCHEDULING INCLUDING AUTOMATIC EMAIL DISTRIBUTION | NO                               | NO                                                          | YES                                |
| DASHBOARD INTEGRATION                                    | NO                               | YES3                                                        | YES                                |
| TREND ANALYSIS INTEGRATION                               | NO                               | NO                                                          | YES                                |

 $<sup>^1</sup>$  SAP Enterprise Threat Detection Cloud Edition & Advanced Security & Compliance CAS (SAP ETD)  $^2$  Cybersecurity Extension for SAP v5.1

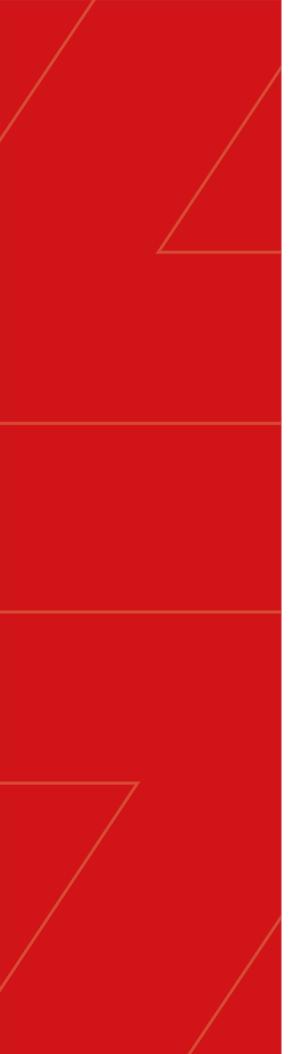
<sup>&</sup>lt;sup>3</sup> SAP Cloud Analytics LOB Business Content Package

#### **SECURITY DASHBOARD**

Standard RISE solutions and services do not include a dashboard for monitoring security KPIs. RISE customers can subscribe to a Cybersecurity dashboard available in SAP Analytics Cloud. However, the data sources for the dashboard include SAP ETD, SAP Focused Run and SAP Risk Management. The solutions must be licensed from SAP to use the dashboard. The Cybersecurity Extension for SAP includes an interactive dashboard, trend analysis and threat map for monitoring security KPIs.

| SECURITY DASHBOARD                                                                                               | SAP RISE / CLOUD<br>ERP STANDARD | SAP RISE / CLOUD ERP<br>OPTIONAL CAS/ SOLUTION <sup>1</sup> | CYBERSECURITY EXTENSION<br>FOR SAP |
|------------------------------------------------------------------------------------------------------------------|----------------------------------|-------------------------------------------------------------|------------------------------------|
| SAP ANALYTICS CLOUD REQUIRED                                                                                     | NO                               | YES                                                         | NO                                 |
| SAP ENTERPRISE THREAT DETECTION REQUIRED                                                                         | NO                               | YES                                                         | NO                                 |
| SAP FOCUSED RUN REQUIRED                                                                                         | NO                               | YES                                                         | NO                                 |
| SAP RISK MANAGEMENT REQUIRED                                                                                     | NO                               | YES                                                         | NO                                 |
| DRILLDOWN FROM SUMMARIZED RESULTS TO DETAILED RISKS, ALERTS AND SECURITY NOTES                                   | NO                               | NO                                                          | YES                                |
| INTERACTIVE STACKED CARDS FOR VIEWING CRITICAL RISKS, ALERTS AND SECURITY NOTES                                  | NO                               | NO                                                          | YES                                |
| CREATE AND PUBLISH MULTIPLE DASHBOARDS<br>WITH UNIQUE FILTER SETTINGS FOR BUSINESS<br>UNITS AND SECURITY DOMAINS | NO                               | NO                                                          | YES                                |
| THREAT MAP FOR ANALYZING RESULTS BY GEOGRAPHICAL LOCATION                                                        | NO                               | YES                                                         | YES                                |
| TREND ANALYSIS FOR ANALYZING CHANGES IN SECURITY RESULTS                                                         | NO                               | NO                                                          | YES                                |

<sup>&</sup>lt;sup>1</sup> SAP Analytics Cloud LOB Business Content Package





Layer Seven Security is an industry leading provider of security solutions and services for SAP systems. It's Cybersecurity Extension for SAP performs advanced vulnerability management, compliance management, threat detection and custom code security to secure SAP systems from cyber attack. The software is certified for SAP S/4HANA and SAP RISE / Cloud ERP solutions.

#### **CONTACT US**

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