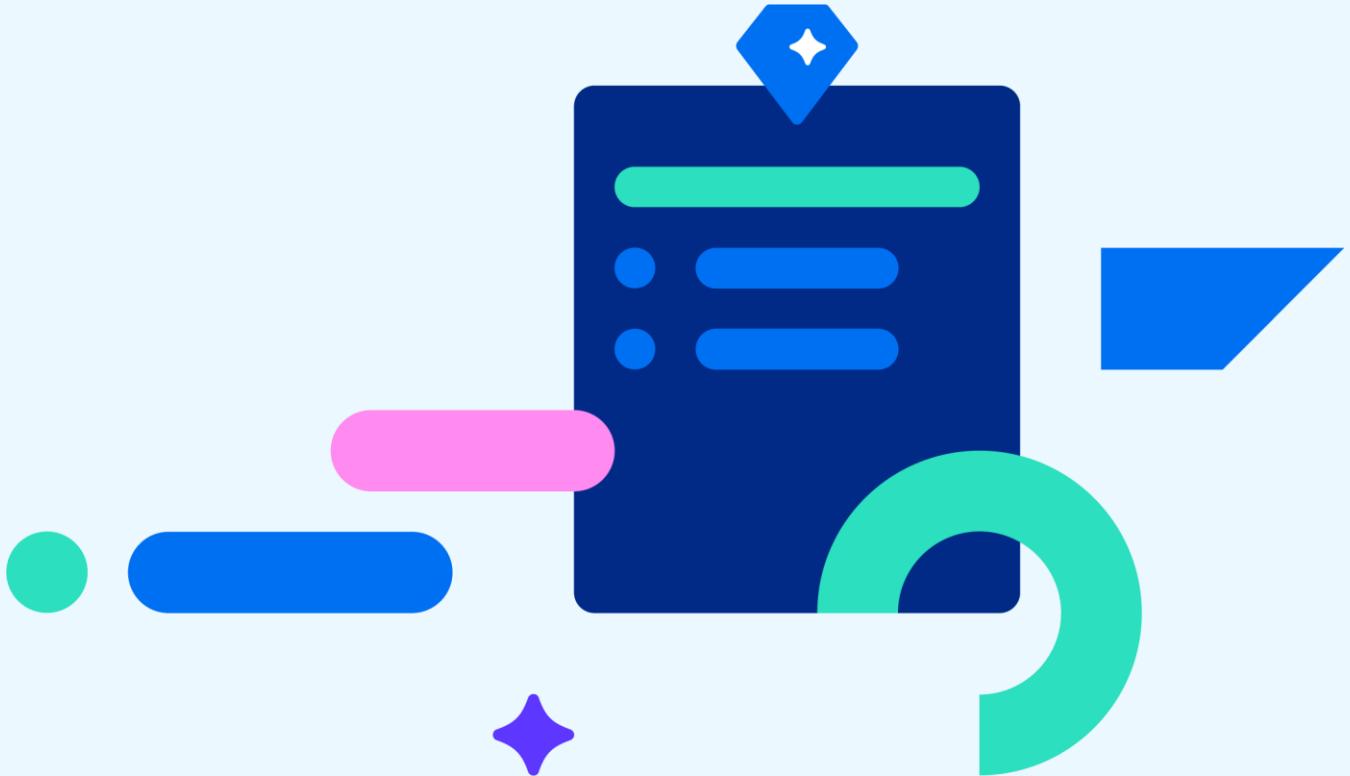


CA163  
**Hands-on experience  
with SAP Enterprise  
Threat Detection**

Arndt Lingscheid, Isabelle Thurau, Kevin  
Schwab, Michael Schmitt, SAP SE

November 2025



# Agenda

1. Introduction SAP Enterprise Threat Detection, cloud edition
2. SAP Enterprise Threat Detection, (public ) cloud edition for Private/Public Cloud SAP Landscapes
3. Short Demo/Preview
  - Starting UI
  - Dashboards (preview)
  - Alerts
  - Forensics



# **Introduction**

## **SAP Enterprise Threat Detection**

### **Cloud Edition**



# What is SAP Enterprise Threat Detection

SAP Enterprise Threat Detection raises alerts in (near-) real-time, if security/compliance relevant suspicious activities happen in the application layer of your SAP landscape.

SAP Enterprise Threat Detection uses HANA technology to digest mass data log volumes, and run highly efficient automated processes to track hacker activity using SAP's predefined and easy customizable use cases.



# Use case categories



## Use of critical resource

- Execution of critical functions, reports and transactions
- Change, manipulation or spy out of business data
- Change or manipulation of critical configuration



## User Manipulation

- Critical authorization assignment
- User role create, drop or manipulation
- Reference user assignment
- User morphing by changing type or probable identity theft



## Debugging

- Debugging with change of control flow while debugging
- Debugging with change of variable values during debugging
- Debugging in critical systems
- Debugging in systems assigned to critical roles



## System Access

- Failed logon with too many attempts
- Failed Logon with too many password logon attempts
- Logon with SAP standard users, or high privileged users



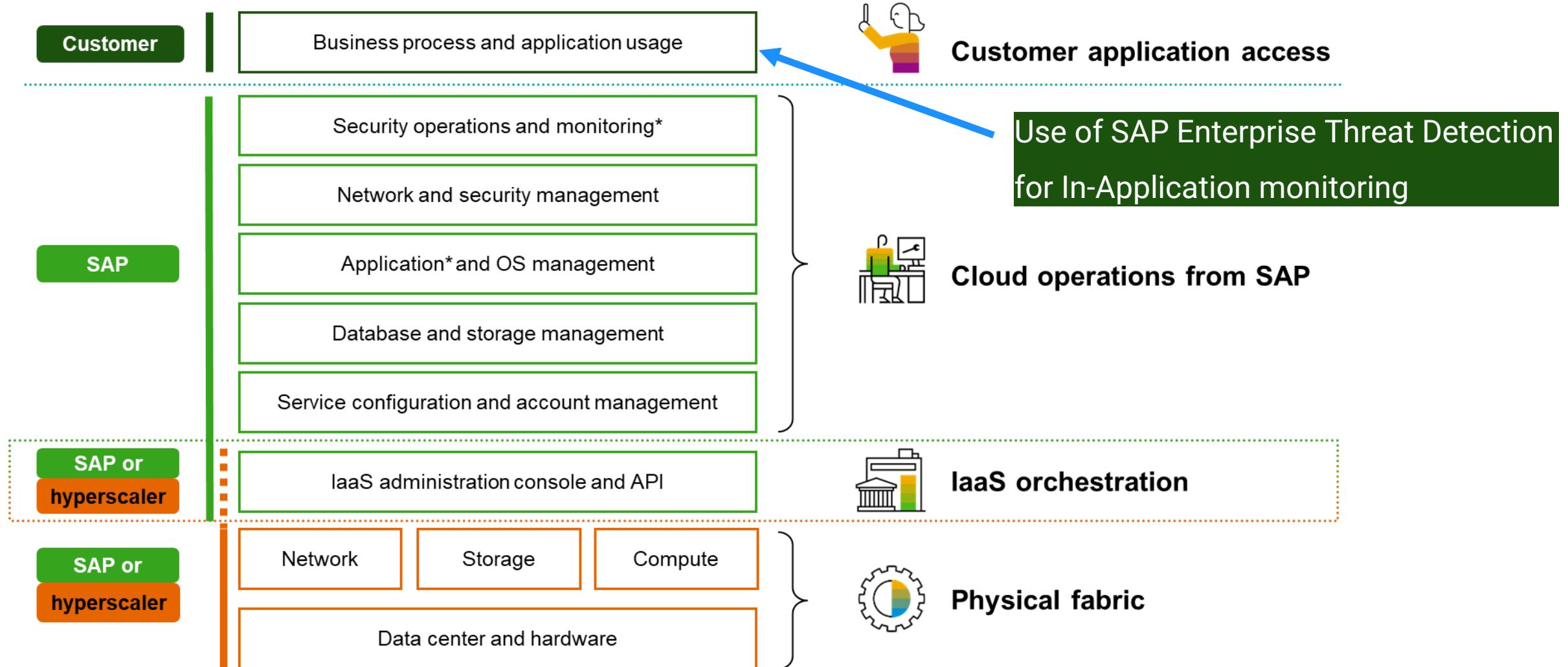
## Suspicious Actions

- Dynamic program execution, download
- Dynamic code and system changes

# SAP Enterprise Threat Detection, (public) cloud edition for Private/Public Cloud SAP Landscapes



# SAP S/4HANA Private/Public Cloud: Shared responsibility



# Short Demo/Preview



# Security Analyst View/Partner View

## The Security Analyst

- does alert processing, deep dive analysis, new use case creation, ...
- has a lot of tools at hand to do his job

The screenshot displays the SAP Security Analyst View interface. At the top, there is a navigation bar with the SAP logo, a 'Home' dropdown, and a search bar. Below the navigation bar, there are two tabs: 'Enterprise Threat Detection: Cross-Tenant Applications' (selected) and 'Enterprise Threat Detection: Tenant Applications'. The main content area is divided into several sections:

- Enterprise Threat Detection: Cross-Tenant Applications:** Contains three buttons: 'Select Tenant' (with a cursor icon), 'Manage Alerts for All Tenants', and 'Manage Investigations for All Tenants'.
- Enterprise Threat Detection: Tenant Applications:** Contains nine buttons arranged in two rows:
  - Manage Settings, Manage Value Lists, Analyze Log Events, Manage Alerts, Monitor Pattern Executions, Manage Patterns, Manage Investigations, Record of Actions, Download Investigation Reports.
  - Forensic Lab, Monitor Incoming Logs, Resolve User Identity.

# Hands-on goes through

**SAP Home**

Enterprise Threat Detection: Cross-Tenant Applications   Enterprise Threat Detection: Tenant Applications

Select Tenant   Manage Alerts for All Tenants   Manage Investigations for All Tenants

Enterprise Threat Detection: Tenant Applications

Manage Settings   Manage Value Lists   Analyze Log Events   Manage Alerts   Monitor Pattern Executions   Manage Patterns   Manage Investigations   Record of Actions   Download Investigation Reports

Forensic Lab   Monitor Incoming Logs   Resolve User Identity

**Investigation 143**  
Workshop Demo Customer

Subset 2

Service, Access Name	Access Names Indicating Debugging Method
In value list	

Subset 2

System Role, Actor	DebuggingCriticalSystemRoles
In value list	

Subset 2

System ID, Actor	DebuggingCriticalSystems
In value list	Count: 2

Subset 3

System Role, Actor	DebuggingCriticalSystemRoles
In value list	

Subset 3

System ID, Actor	DebuggingCriticalSystems
In value list	Count: 7

Mass Status Change

Range(2025/10/12 14:44:11 PM GMT+02:00 - 2025/10/13 14:44:11 PM GMT+02:00), Trigger Value 1(S4H).

Pattern	Trigger
Sensitive Data Download via Blocklisted Reports	Measurement 1 exceeded threshold 1 for ('Resource Name' = 'C:\Users\026896\Documents\SAP\SAP GUI\ddemo01.txt', 'Service,...'
Logon from external with SAP standard users	Measurement 1 exceeded threshold 1 for ('Event (Semantic)' = 'User, Logon, Failure', 'Network, Hostname, Initiator' = '10.79.59.150', 'System ID, Actor' = 'S4H/100', 'User Pseudonym, Acting' = 'LUOZ_16971')
Debugging in systems assigned to critical roles	Measurement 2 exceeded threshold 1 for ('Network, Hostname, Initiator' = 'W-PF37QJMN', 'System ID, Actor' = 'S4H/100', 'System Type, Actor' ...)
Authorization assignment by non-admin-group user	Measurement 2 exceeded threshold 1 for ('System ID, Actor' = 'S4H/100', 'User Pseudonym, Acting' = 'LUOZ_16971', 'User Pseudonym...')
Blocklisted transactions in productive system	Measurement 15 exceeded threshold 1 for ('Service, Transaction Name' = 'SE16', 'System ID, Actor' = 'S4H/100', 'User Pseudonym, Acting' = ...)
Blocklisted transactions in productive system	Measurement 8 exceeded threshold 1 for ('Service, Transaction Name' = 'SU01', 'System ID, Actor' = 'S4H/100', 'User Pseudonym, Acting' = ...)
Blocklisted Data Download in Transactions	Measurement 1 exceeded threshold 1 for ('Service, Transaction Name' = 'SE16', 'System ID, Actor' = 'S4H/100', 'User Pseudonym, Acting' = ...)
Debugging with Manipulations in Critical Systems	Measurement 2 exceeded threshold 1 for ('System ID, Actor' = 'S4H/100', 'User Pseudonym, Acting' = 'LUOZ_16971')
Debugging in systems assigned to critical roles	Measurement 1 exceeded threshold 1 for ('Network, Hostname, Initiator' = 'W-PF37QJMN', 'System ID, Actor' = 'S4H/100', 'System Type, Actor' ...)
Debugging in Critical ABAP Systems	Measurement 5 exceeded threshold 1 for ('System ID, Actor' = 'S4H/100', 'User Pseudonym, Acting' = 'LUOZ_16971')
Generic access to critical database tables	Measurement 4 exceeded threshold 1 for ('Event Code' = 'DU9', 'Generic, Action' = 'Table Access', 'Resource Name' = 'USR02', 'System...')
Critical DB access	Measurement 4 exceeded threshold 1 for ('Resource Name' = 'USR02', 'System ID, Actor' = 'S4H/100', 'User Pseudonym, Acting' = ...)
Successful logon from same Terminal ID with different users	Measurement 3 exceeded threshold 2 for ('Network, Hostname, Initiator' = '10.79.59.150', 'System ID, Actor' = 'S4H/100', 'User Pseudonym, Acting' = ...)

Description: A successful or unsuccessful logon external attempt... Show More

Base Measurement On: COUNT(DISTINCT All)

Group By: User Pseudonym, Target, System ID, Actor, Event (Semantic), Network, Hostname, Initiator

User Pseudonym, Target: LUOZ\_16971

System ID, Actor: S4H/100

Event (Semantic): User, Logon

Network, Hostname, Initiator: 10.79.59.150

User, Logon, Failure: S4H/100

Logon from external with SAP standard users

# Processor View

## The Processor

- is another persona than the Security Analyst
- mainly consumes the results of the analysis

The screenshot shows a SAP application interface titled "Enterprise Threat Detection". At the top left is the SAP logo and a "Home" dropdown menu. Below the title, there are four rounded rectangular cards, each containing a function name and a small icon:

- Download Investigation Reports**: Represented by a document icon.
- Manage Value Lists**: Represented by a list icon.
- Manage Patterns**: Represented by a puzzle piece icon.
- Monitor Incoming Logs**: Represented by a log file icon.

# Hands-on goes through

SAP Home ▾

**Enterprise Threat Detection**

<a href="#">Download Investigation Reports</a>	<a href="#">Manage Value Lists</a>	<a href="#">Manage Patterns</a>	<a href="#">Monitor Incoming Logs</a>
--	------------------------------------	---------------------------------	---------------------------------------

Completion Timestamp: 2025/09/11 16:51:16 PM GMT+02:00

Closing Remarks: [REDACTED]

Investigator: [REDACTED]

Report Severity: Very High

Report Status: Open

Timestamp of Download: The report has not been downloaded yet.

Downloaded By: The report has not been downloaded yet.

Severity	ID	Report Creation Date	Description	Customer Notification
<input type="checkbox"/> High	142	2025/09/29 11:23:00 AM GMT+02:00	Critical user activities	No
<input type="checkbox"/> High	141	2025/09/26 14:11:51 PM GMT+02:00	Sensitive Data download	No
<input type="checkbox"/> High	140	2025/09/26 10:18:28 AM GMT+02:00	Critical Data Download	No
<input type="checkbox"/> High	138	2025/09/25 21:57:56 PM GMT+02:00	Critical Data download	No
<input type="checkbox"/> High	133	2025/09/22 17:13:32 PM GMT+02:00	USER is doing critical business manipulation	No
<input type="checkbox"/> High	132	2025/09/15 16:22:38 PM GMT+02:00	Standard User Manual Logon from different systems	No
<input type="checkbox"/> Medium	131	2025/09/11 17:36:59 PM GMT+02:00	Critical access abc Test	No
<input type="checkbox"/> High	130	2025/09/11 16:48:16 PM GMT+02:00	User Miss-Use on same terminal ID	No
<input type="checkbox"/> Medium	127	2025/09/10 16:43:55 PM GMT+02:00	Test9	Yes
<input type="checkbox"/> Medium	121	2025/09/10 15:12:22 PM GMT+02:00	huubui	No
<input type="checkbox"/> Medium	117	2025/09/03 09:53:52 AM GMT+02:00	User TMSADM failed with logons	No
<input type="checkbox"/> Medium	113	2025/08/05 08:55:13 AM GMT+02:00	TestReportWorkflows	No
<input type="checkbox"/> Very High	93	2025/07/16 09:59:17 AM GMT+02:00	User KOJG_68809 highly suspicious activities	No

SAP Download Investigation Reports ▾

**Investigation Report 130** DATA LOSS MGMT\_INFORMED

Completion Timestamp: 2025/09/11 16:51:16 PM GMT+02:00

Closing Remarks: [REDACTED]

Investigator: [REDACTED]

Report Severity: Very High

Report Status: Open

Timestamp of Download: The report has not been downloaded yet.

Downloaded By: The report has not been downloaded yet.

**Comments (3)** Download History

Enter your comment here

[REDACTED] created a comment.  
2025/10/13 16:35:04 PM GMT+02:00  
Result 3: Management was informed about the incident

Date	Comment	Reaction	Severity	Owner	Tags
2025/09/15 16:23:32 PM GMT+02:00	[REDACTED]	In Process	Medium	remark 1	LOB1
2025/09/11 17:37:58 PM GMT+02:00	[REDACTED]	No Reaction Needed		False positive, see ticket 423	
2025/09/11 16:51:16 PM GMT+02:00	[REDACTED]	Open	Very High		MGMT_INFORMED DATA LOSS
2025/09/10 16:45:18 PM GMT+02:00	[REDACTED]	No Reaction Needed	Low	Was acknowledged by ticket 158	
2025/09/10 15:48:13 PM GMT+02:00	[REDACTED]	Closed			
2025/09/03 09:57:15 AM GMT+02:00	[REDACTED]	In Process	Medium	checking	TMSADM SystemADMIN
2025/08/05 08:55:46 AM GMT+02:00	(Unassigned User)	Closed	High	Remediated by HCM department	LOB HCM BOARD
2025/07/16 10:23:24 AM GMT+02:00	(Unassigned User)				

## Contact information:

Michael Schmitt  
Product Manager  
[m.schmitt@sap.com](mailto:m.schmitt@sap.com)

Arndt Lingscheid  
Solution Owner GRC & Security products  
[a.lingscheid@sap.com](mailto:a.lingscheid@sap.com)

# Thank you!



**SAP** Bring out your best.