



The data driven collaboration platform

Deep Dive - SAP EarlyWatch Alert Workspace

Susanne Glänzer
Data Science, Automation & Technology, IDG, SAP SE

PUBLIC



Your Personalized Digital
Support Experience

THE BEST RUN 

Agenda

- Apps & Features in overview - Demo
- Architecture for data transmission & data pipeline& authorizations

Questions & Answers

- Solution Finder Tips & Tricks – Demo
- SAP Fiori, BW KPIs, SQL Performance - Demo

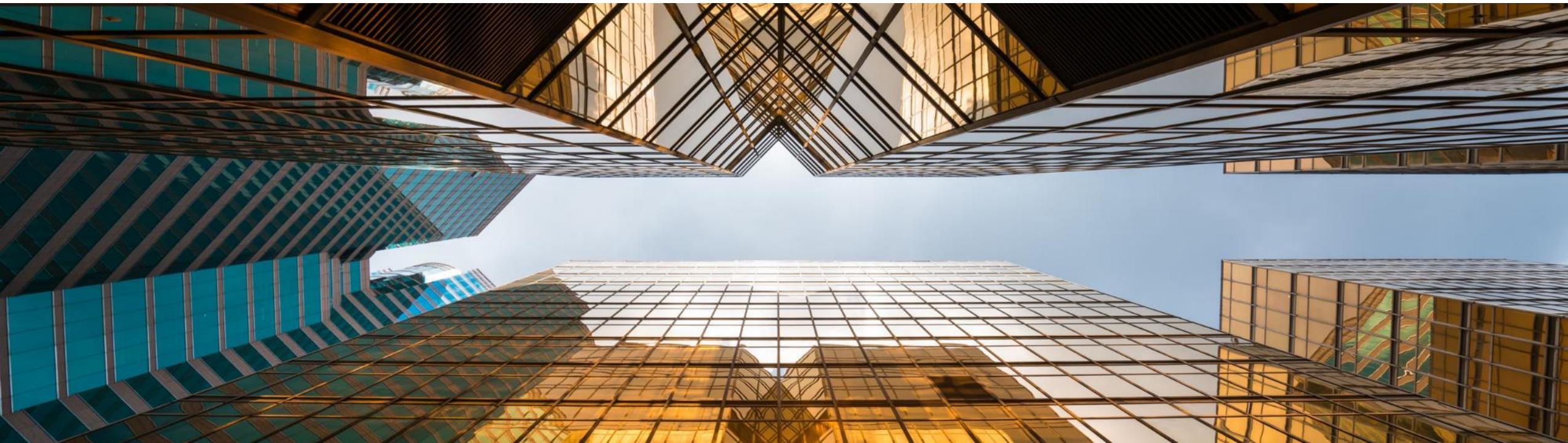
Questions & Answers

- Predictive Analytics: SAP HANA Memory Analysis – Demo
- ABAP Number Range Prediction -Demo

Questions & Answers



Apps & Features in Overview



Configure My Home

The screenshot shows the SAP ONE Support Launchpad interface. At the top left is the SAP logo and the text "ONE Support Launchpad". To the right is a search bar with a dropdown menu labeled "Knowl..." and a search input field containing the placeholder text "Enter search term". Below this is the "My Home" section, which contains a grid of eight tiles. The tiles are arranged in two rows of four. The bottom row of tiles is highlighted with a red border. The tiles in the bottom row are: "Solution Finder" with "SAP EarlyWatch Alert" and "Find Alerts" (1 icon); "Reports" with "SAP EarlyWatch Alert" and "Very critical systems" (3 icons); and "Workspace" with "SAP EarlyWatch Alert" and "New decisive red alerts" (0 icons). The tiles in the top row are: "System Data" with "Favorite systems" (8 icons); "Support Dashboard" with "On Premise" and "Access dashboard" (1 icon); "Service Messages" with "On Premise" and "Service summaries" (1 icon); and "System Overview" with "Productive systems" (1 icon). The "SAP Passport" tile in the second row of the top section shows "Enable Single Sign-On" and "Days to expire" (204 icons).

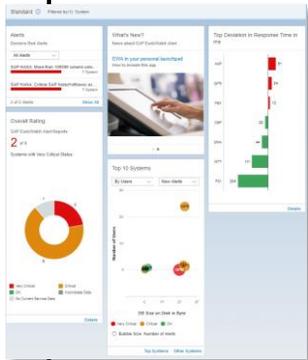
Tile Title	Sub-Title	Icon	Value	Label
System Data		Favorite systems	8	Favorite systems
Support Dashboard	On Premise	Access dashboard	1	Access dashboard
Service Messages	On Premise	Service summaries	1	Service summaries
System Overview		Productive systems	1	Productive systems
SAP Passport	Enable Single Sign-On	Days to expire	204	Days to expire
Solution Finder	SAP EarlyWatch Alert	Find Alerts	1	Find Alerts
Reports	SAP EarlyWatch Alert	Very critical systems	3	Very critical systems
Workspace	SAP EarlyWatch Alert	New decisive red alerts	0	New decisive red alerts

SAP EarlyWatch Alert goes Cloud :

EWA Workspace App advantages compared to classical EWA Report

https://video.sap.com/media/t/1_q01f4lpq/188204803

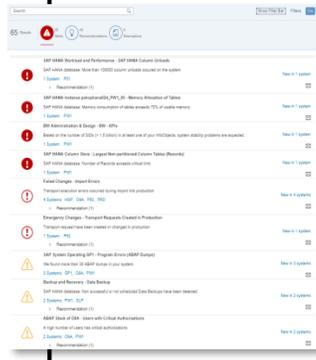
Landscape summary



- Find top risks for business continuity
- Easily identify top improvement actions

Fiori Overview Page
[Link](#)

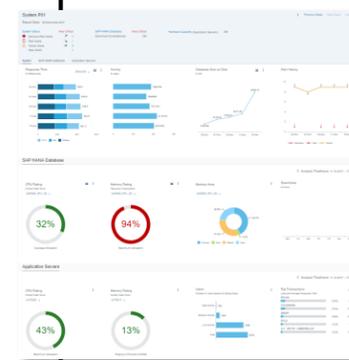
Alert list per landscape



- Aggregated and prioritized alert view
- All report details with time travel
- Export excel with all alerts

Powered by HANA Text Search

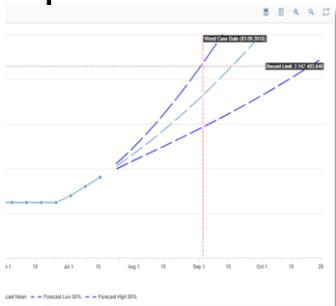
Dashboard per system



- Identify serious bottlenecks
- Find critical trends in KPIs
- 3 years of history

Embedded Analytics via CDS views

Predictive alerts

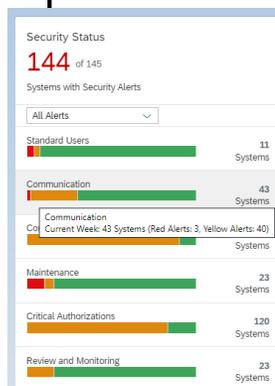


- Timely forecasts of critical situations
- Avoid business downtimes well in advance

Powered by HANA Predictive Analytics Library (PAL)

- 2 Billion Limit SAP HANA, Memory Forecast, Number Range Prediction

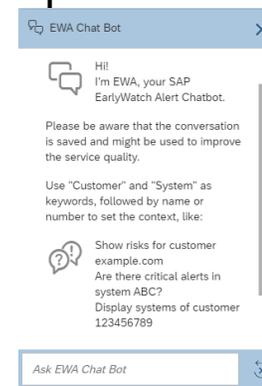
Security risks per landscape



- Get secure and stay secure
- Hardening of security settings
- Perform easy security scans

Fiori Overview Page

Active collaboration at all times



- Get informed about alerts
- Subscribe to new red alerts and predictive alerts

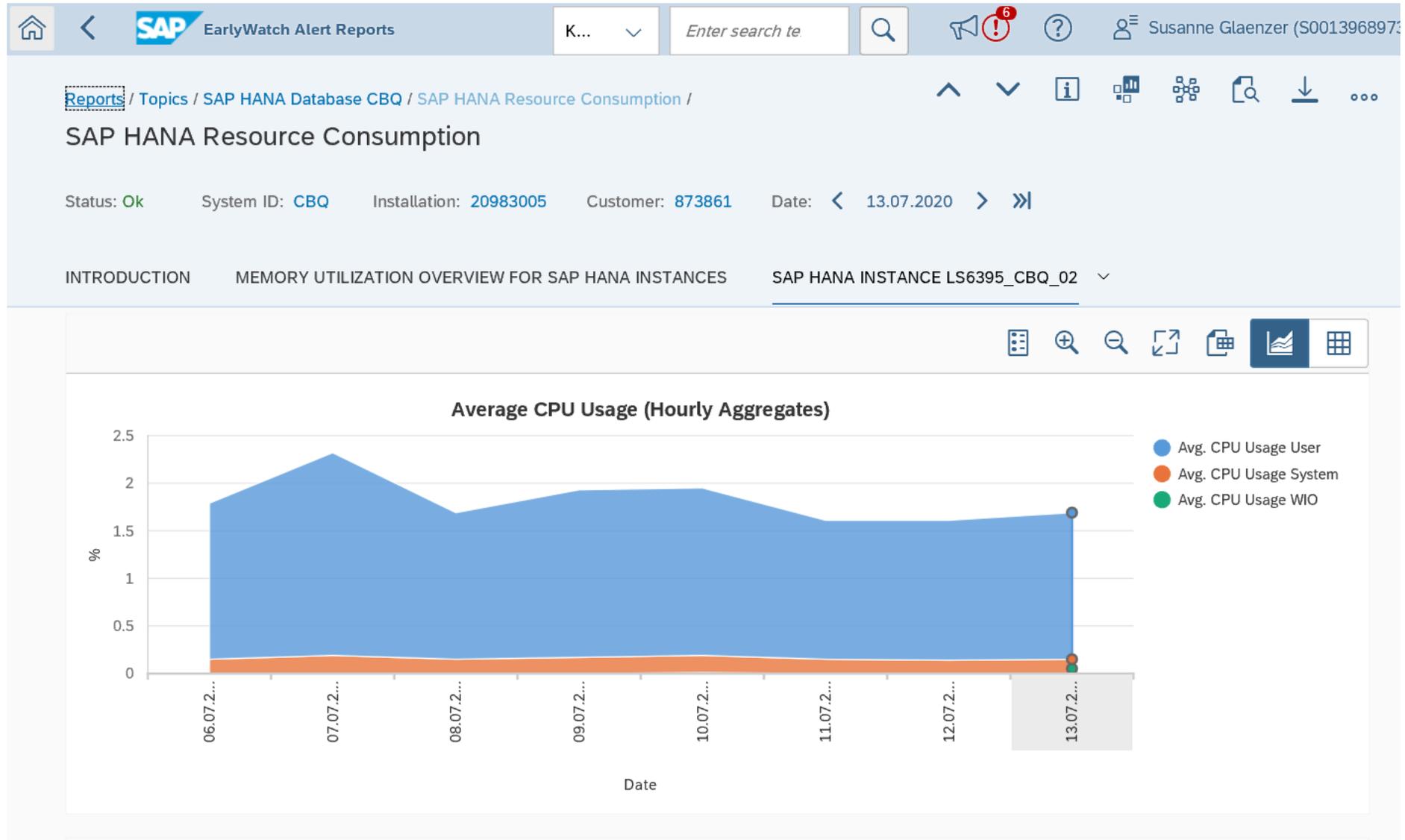
Powered by email notifications

Reports in e-Reader Format

The screenshot displays the SAP EarlyWatch Alert Reports interface. At the top, there is a navigation bar with a home icon, a back arrow, the SAP logo, and the text 'EarlyWatch Alert Reports'. To the right of this bar are a dropdown menu with 'K...', a search input field with the placeholder 'Enter search te', a search icon, a notification bell with a red '6', a help icon, and a user profile icon for 'Susanne Glaenzer (S00139689)'. Below the navigation bar, the breadcrumb 'Reports /' is followed by the main heading 'CBQ Topics'. A status bar below the heading shows 'Status: Critical', 'System ID: CBQ', 'Installation: 20983005', 'Customer: 873861', 'Language: English', and 'Date: < 13.07.2020 > »'. Below the status bar, there are three filter tabs: 'All Topics (66)', 'Favorites (10)', and 'Very Critical (5)'. To the right of these tabs is a search input field with the placeholder 'Search' and icons for search, sort, and filter. The main content area is a table with the following columns: 'Favorite', 'Topic', 'Topic Rating', 'Subtopic', and 'Subtopic Rating'. The table contains five rows of data, each with a star icon in the 'Favorite' column. The first row is 'Service Summary' with a 'Critical' rating. The second row is 'Performance Indicators for CBQ'. The third row is 'Landscape' with subtopic 'Products and Components in current Landscape'. The fourth row has subtopic 'Servers in current Landscape'. The fifth row has subtopic 'Hardware Configuration'. Each row has a right-pointing arrow in the 'Subtopic Rating' column.

Favorite	Topic	Topic Rating	Subtopic	Subtopic Rating
★	Service Summary	Critical		>
★			Performance Indicators for CBQ	>
★	Landscape		Products and Components in current Landscape	>
★			Servers in current Landscape	>
★			Hardware Configuration	>

Report Charts as SAP Fiori Diagrams



Dashboard per System

SAP EarlyWatch Alert Dashboard

Knowle... Enter search term

Susanne Glaenger (5001396897)

System CBQ

System SAP HANA Database Application Servers User Experience

Analysis Timeframe: 06.07.2020 - 12.07.2020

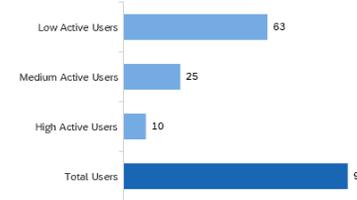
CPU Rating
During Peak Hours
pwdf6845



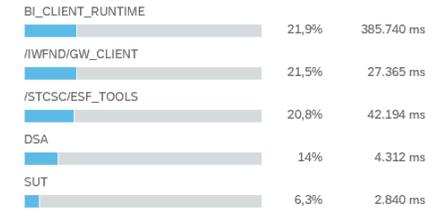
Memory Rating
During Peak Hours
pwdf6845



Users
Number of Users Based on Dialog Steps

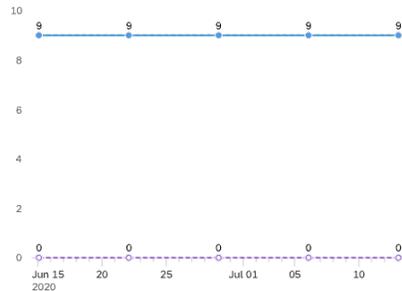


Top Transactions
Load and Average Response Time

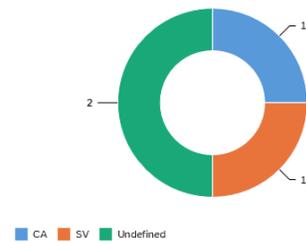


User Experience

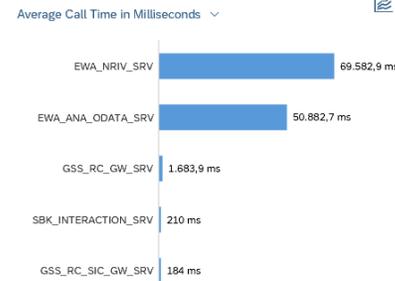
Usable SAPUI5 Applications
No. of correctly configured Apps in the last 5 weeks



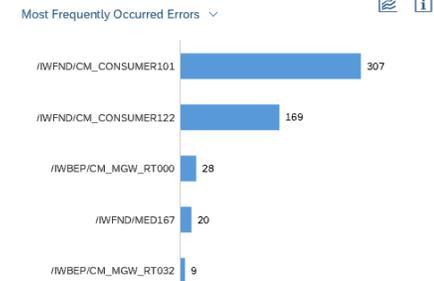
Application Components
Usable SAP Fiori Apps: 4



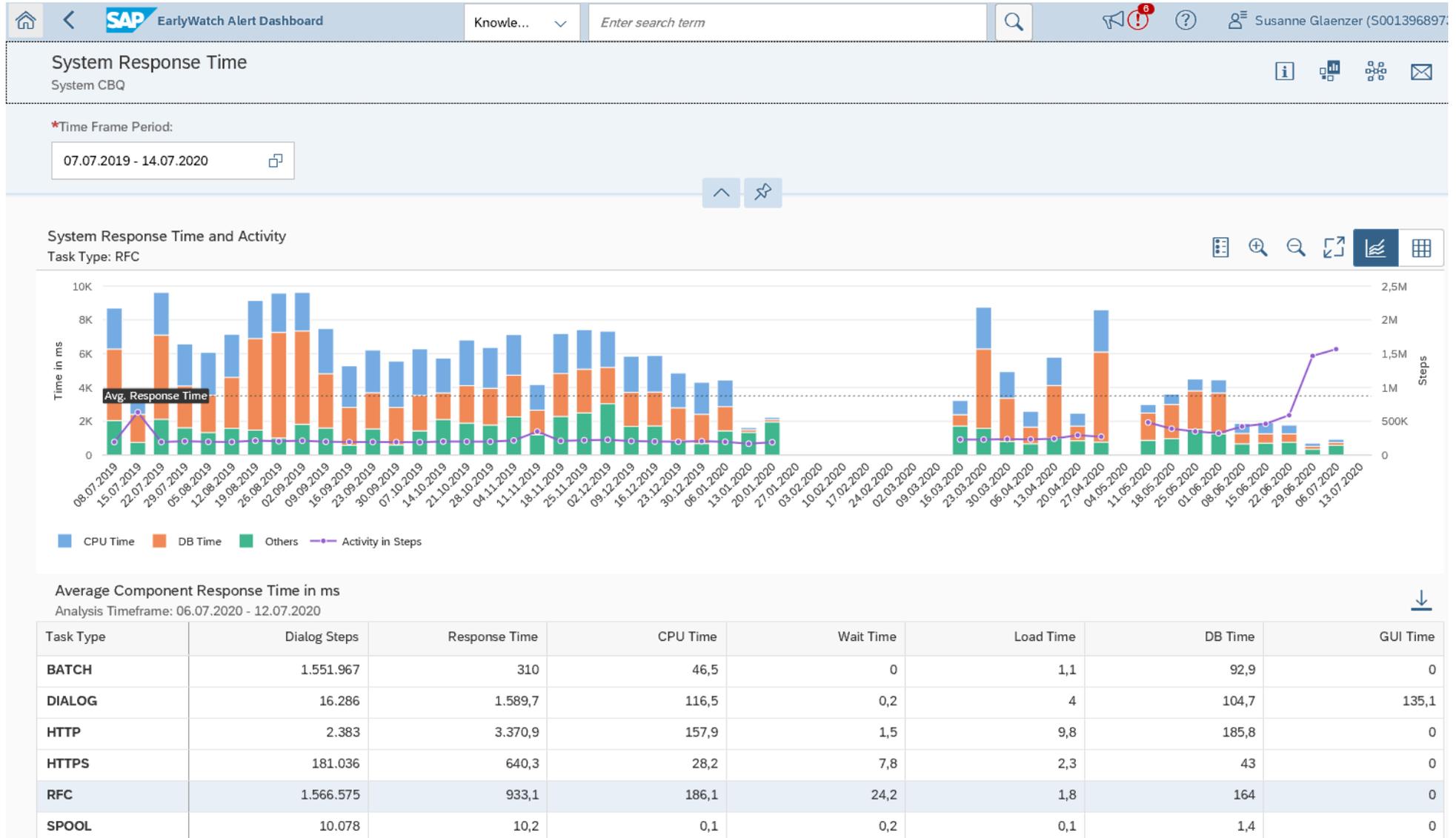
Top OData Service Calls



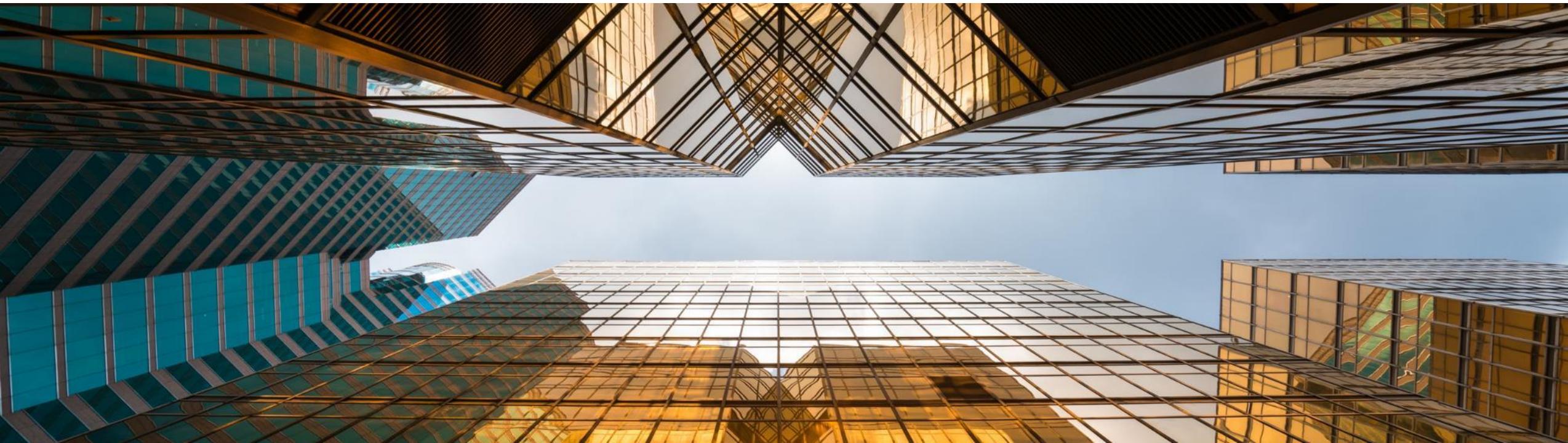
Top Gateway Errors



Average Response Time – Long-term

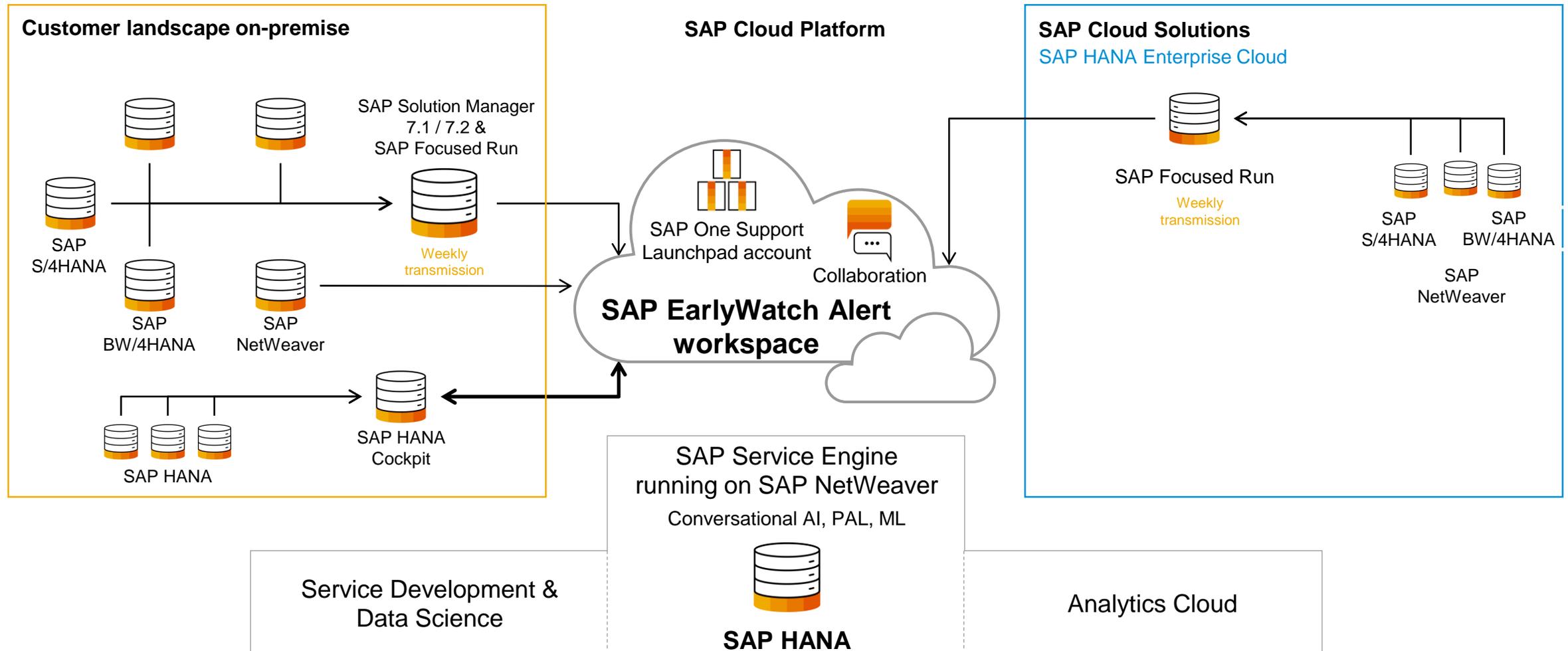


Architecture of Transmission & Data Pipeline

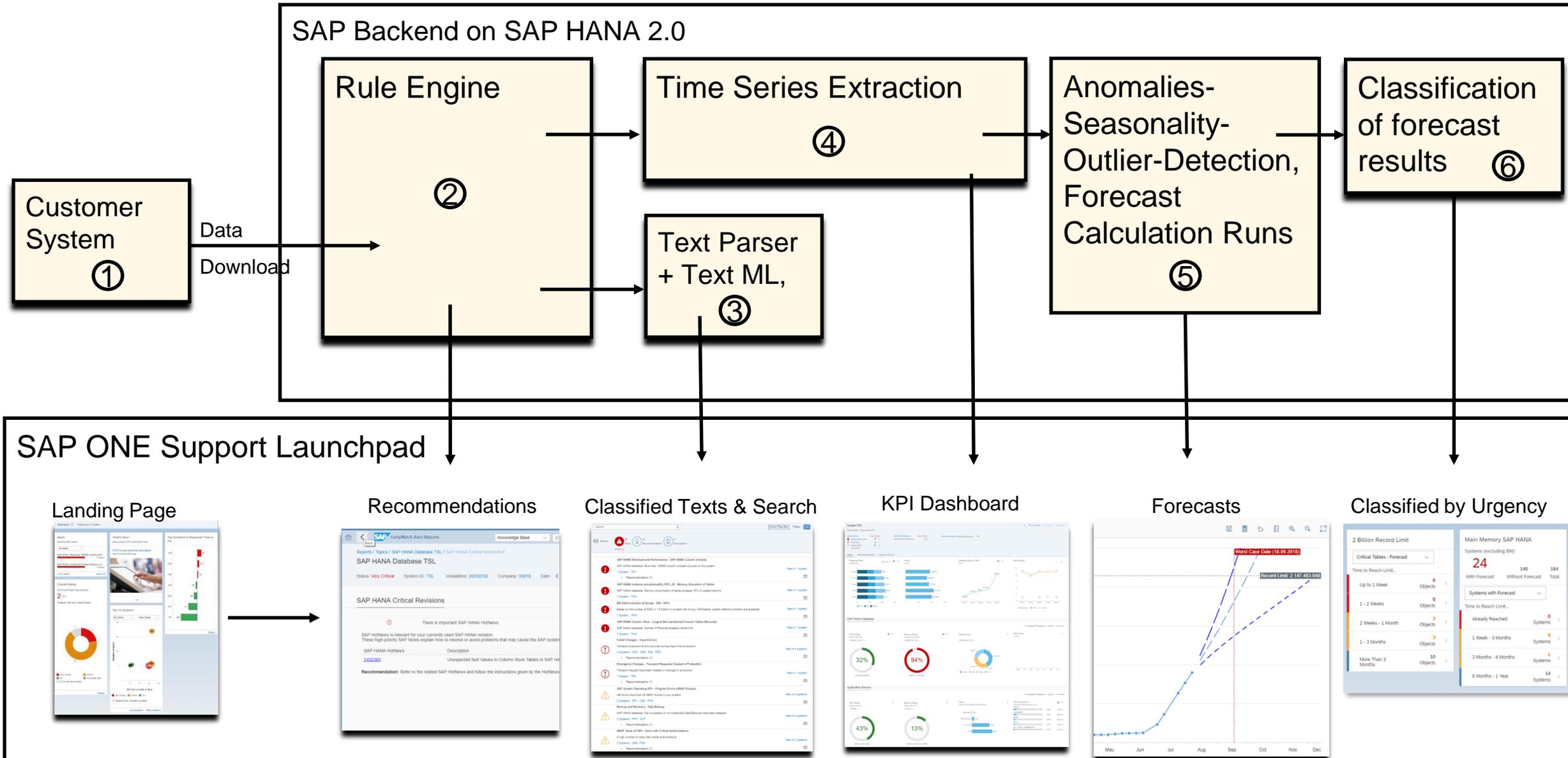


SAP EarlyWatch Alert Workspace

The Center of Data-Driven Collaboration



Service Automation for SAP EarlyWatch Alert Workspace



Prerequisites

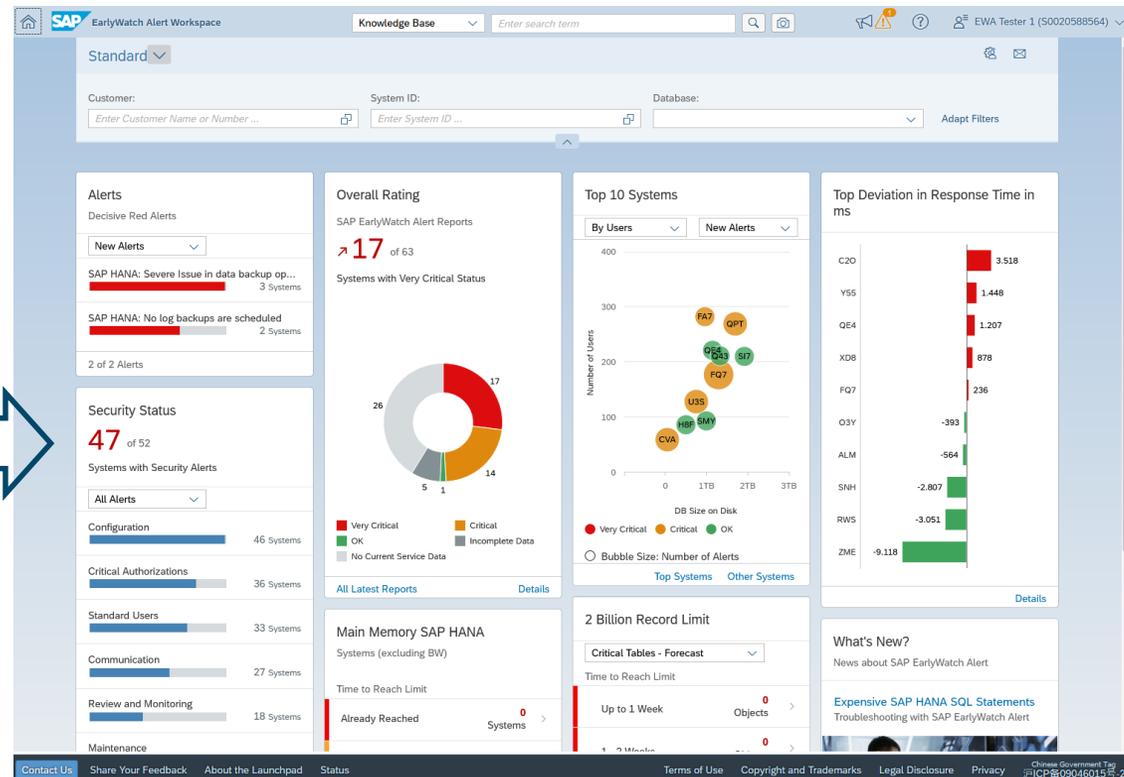
Customer Access: S-User in SAP ONE Support Launchpad with authorizations:

- Service Reports & Feedback
- Display Security Alerts in SAP EarlyWatch Alert Workspace

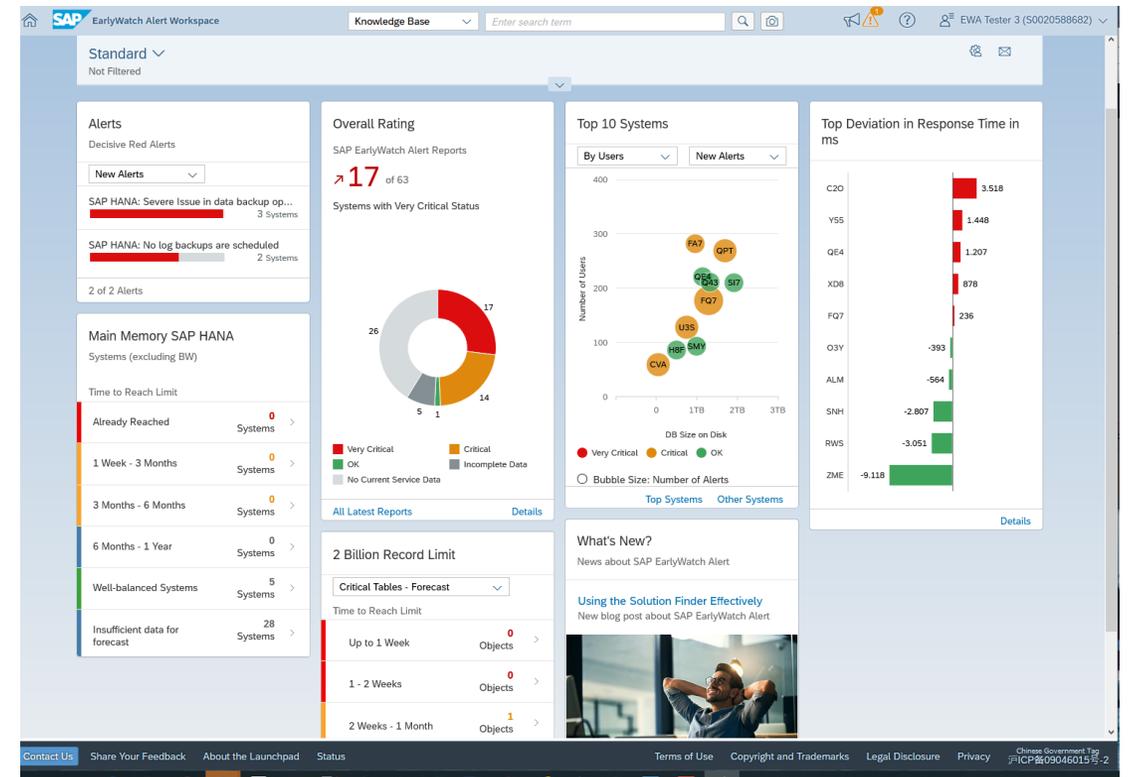
EWA Workspace with / without Security Authorization

Authorization Name = *Display Security Alerts in SAP EarlyWatch Alert Workspace*

With Security Authorization

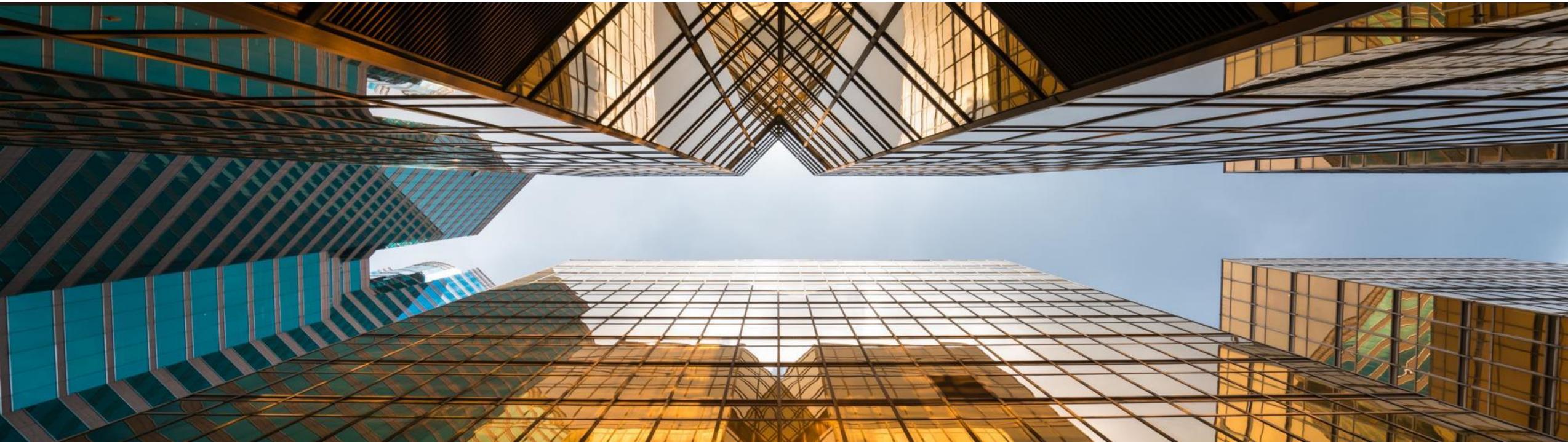


Without Security Authorization



No decisive red security alerts (security alerts don't show up in Alerts card)

Questions & Answers



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- Apps & Features in overview
- Architecture for data transmission & data pipeline& authorizations

Questions & Answers

- Solution Finder Tips & Tricks – Demo
- SAP Fiori, BW KPIs, SQL Performance

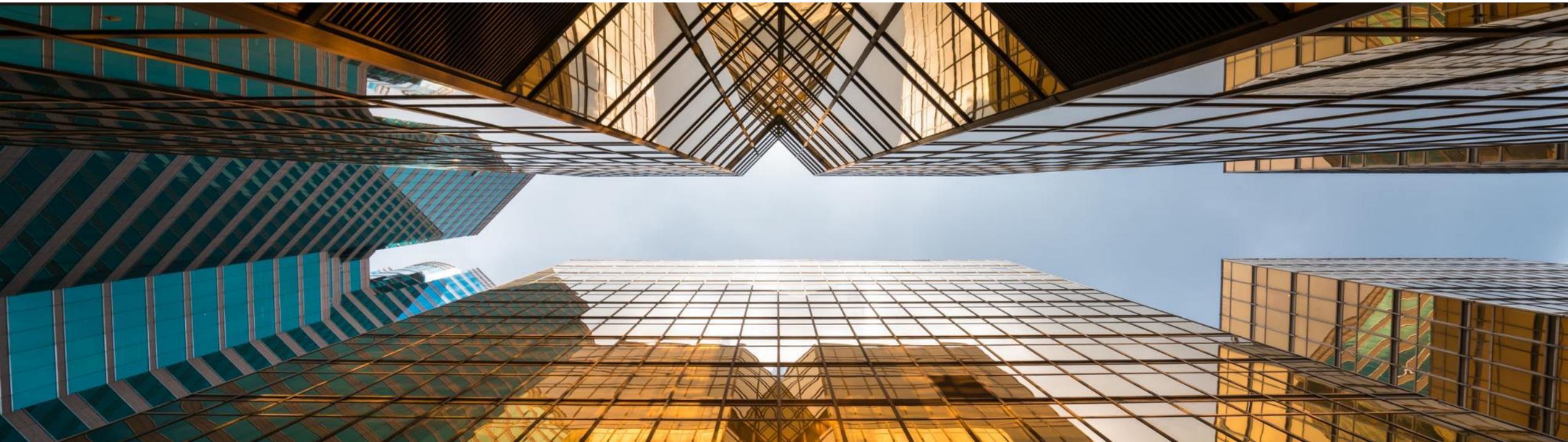
Questions & Answers

- Predictive Analytics: SAP HANA Memory Analysis – Demo
- Outlook: ABAP Number Ranges

Questions & Answers



Solution Finder – Trips & Tricks



Solution Finder

Home < SAP EarlyWatch Alert Solution Finder K... Enter search te Search

Enter Search Term ...

Filtered by (2): System, Age

Performance Evaluation (Performance Overview)

Based on response times in your ABAP system performance problems may occur.

2 Systems: CBD, CBQ

Performance → Others
New in 2 systems

SAP Application Release - Maintenance Phases (Software Configuration)

Mainstream maintenance for your SAP product version has ended or will end in the near future.

1 System: AAS

> Recommendation (1)

Software Maintenance → Others
New in 1 system

Program Errors (ABAP Dumps) (SAP System Operating)

We found more than 30 ABAP dumps in your system.

1 System: AAS

Stability → Others
New in 1 system

Known Issue (Statement)

Check the mentioned SAP Note(s) for the recommendation concerning the statement and apply the recommendation if applicable.

3 Systems: AAS, CBD, CBQ(2)

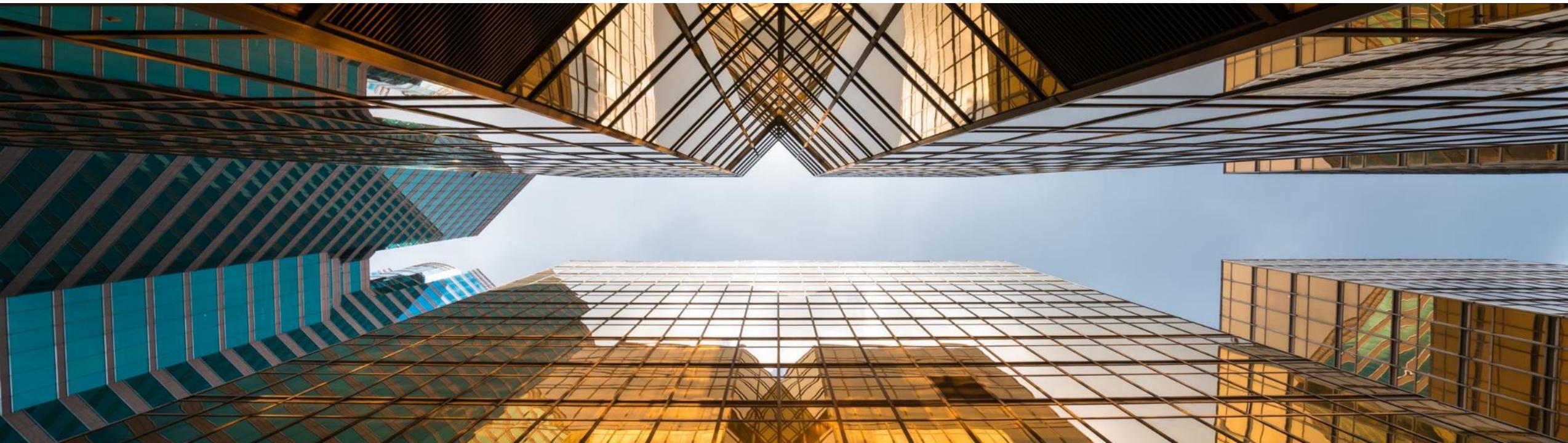
New in 3 systems

Service Readiness

Service Readiness → SAP Backbone Connectivity (0)

Service Readiness → Service Data (0)

SAP Fiori

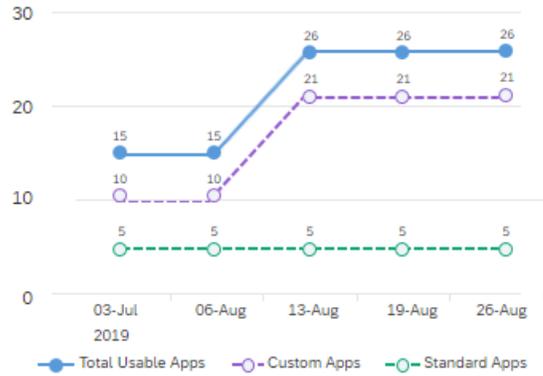


User Experience

Analysis Timeframe: 20.08.2018 - 26.08.2018

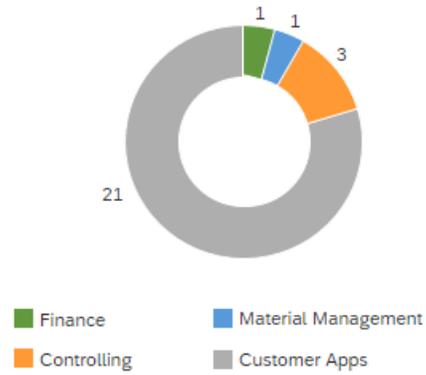
Usable SAPUI5 Applications

Number of correctly configured Apps in the last 5 weeks



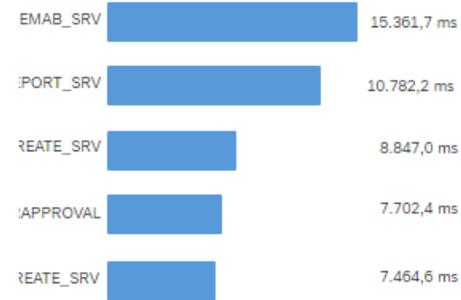
Application Components

Usable SAP Fiori Apps: 26



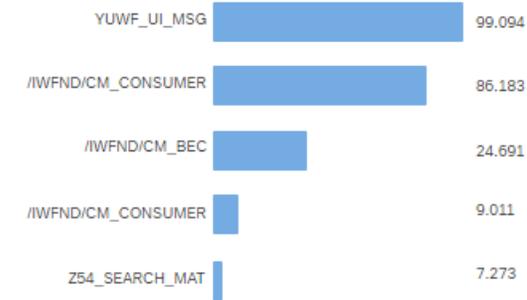
Top OData Service Calls

Average Call Time in milliseconds



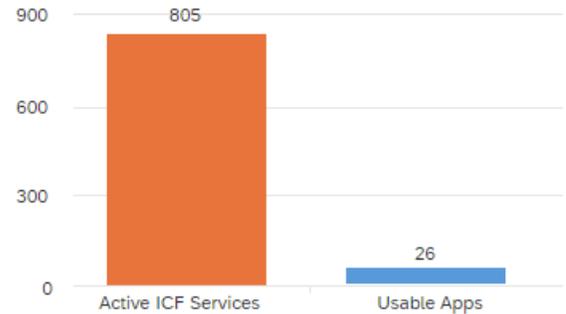
Top Gateway Errors

Most frequently occurred errors



ICF Security

Activated vs. Usable Applications



Fiori Launchpad Usage

Number of Launchpad Loads in the last 5 weeks



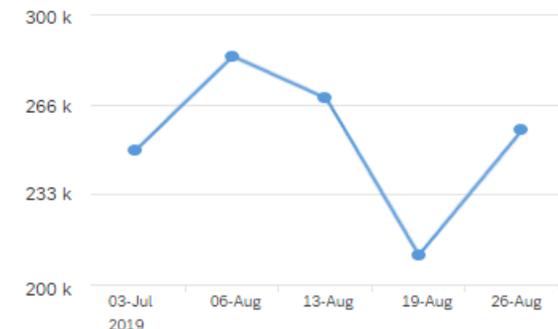
OData Requests

Average Time of all OData calls in the last 5 weeks



Gateway Errors

Total Number of Gateway Errors in the last 5 weeks



Navigate from the OVP card to the *Details View*

Analysis Timeframe: 25.06.2018 - 01.07.2018

Top OData Service Calls

Total number of Calls

Call time T-Codes

Service	Number of Calls
SMART_BUSINESS_RUNTIME_SRV	812
CATALOGSERVICE	705
MM_PUR_CTRITEM_MNTR_SRV_01	600
MM_PUR_SCHEDG_AGRMT_SRV	350
FAR_MY_DUNNING_PROPOSAL_SRV	290

OData Requests

System XYZ

OData Service Requests Analysis Timeframe: 25.06.2018 - 01.07.2018

Service	Operation	Entity Set or Function	Total Calls	Average Duration (ms)
<input checked="" type="checkbox"/>	MM_PUR_CTRITEM_MNTR_SRV_01	read \$count	524	89
<input checked="" type="checkbox"/>	MM_PUR_SCHEDG_AGRMT_SRV	read \$count	321	3.633
<input type="checkbox"/>	CATALOGSERVICE	read stream	319	530
<input type="checkbox"/>	INTEROP	read entry	222	56
<input type="checkbox"/>	INTEROP	create	211	59
<input type="checkbox"/>	SMART_BUSINESS_RUNTIME_SRV	read feed	98	284
<input type="checkbox"/>	SMART_BUSINESS_RUNTIME_SRV	read stream	94	188
<input type="checkbox"/>	SMART_BUSINESS_RUNTIME_SRV	read \$count	90	1.028
<input type="checkbox"/>	FAR_MY_DUNNING_PROPOSAL_S...	batch	82	4.102
<input type="checkbox"/>	MM_PUR_PR_PROCESS_SRV	batch	54	747
<input type="checkbox"/>	BILLOFMATERIALV2_SRV	batch	52	3.017
<input type="checkbox"/>	FAR_BS_ITM_REPROC_SRV	read \$count	50	407
<input type="checkbox"/>	MM_PRC_OVP	metadata	39	203

Average Duration Time in ms

Time Frame Period: 12.02.2018 - 01.07.2018

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Questions & Answers

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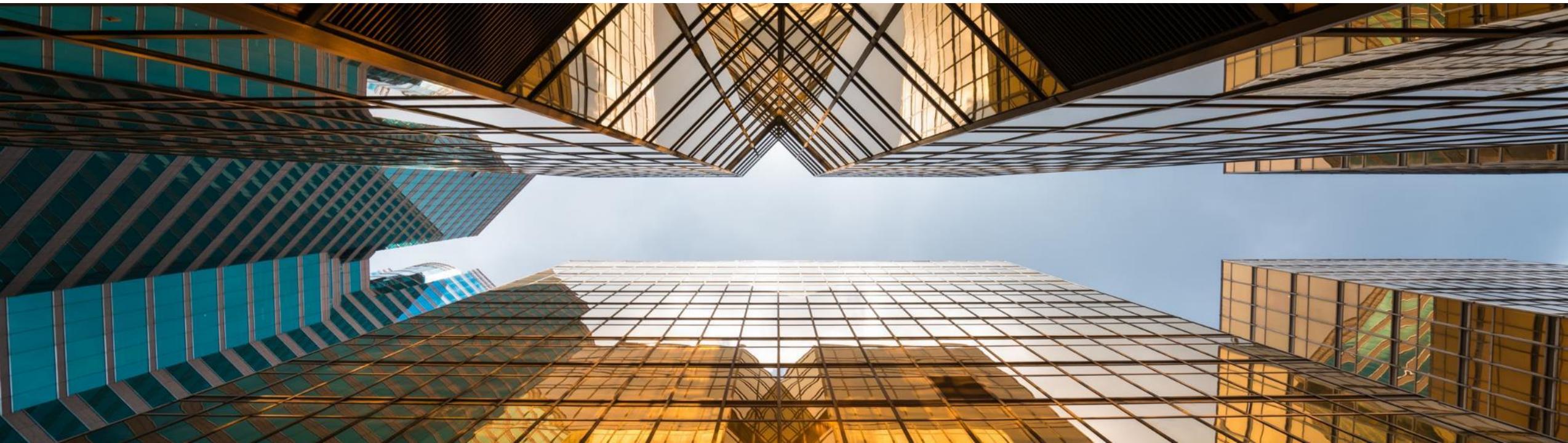
Questions & Answers

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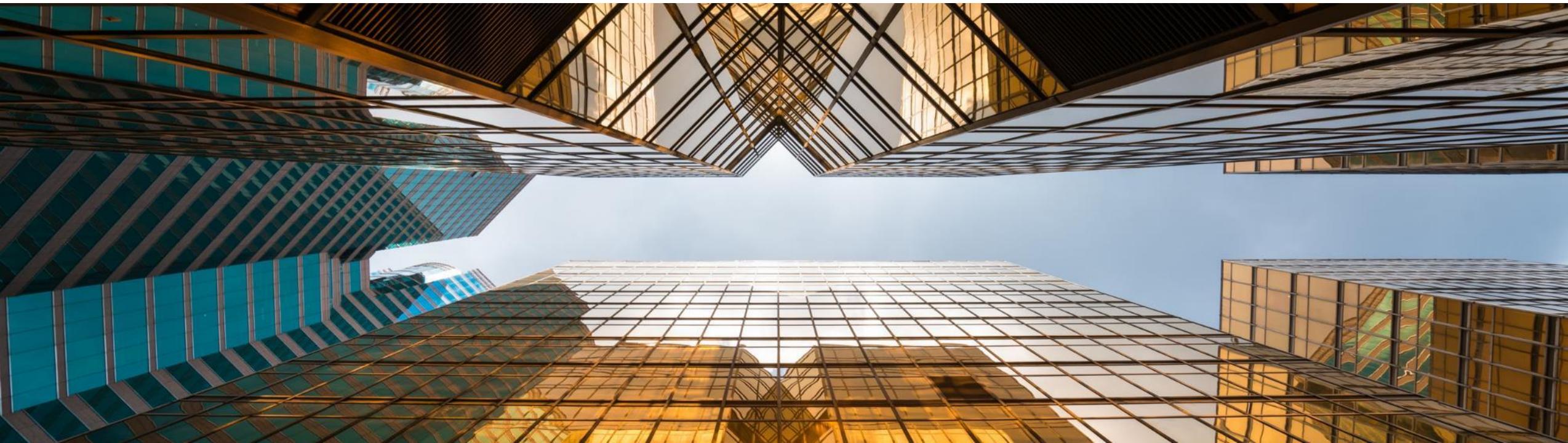
Questions & Answers



Questions & Answers



Predictions

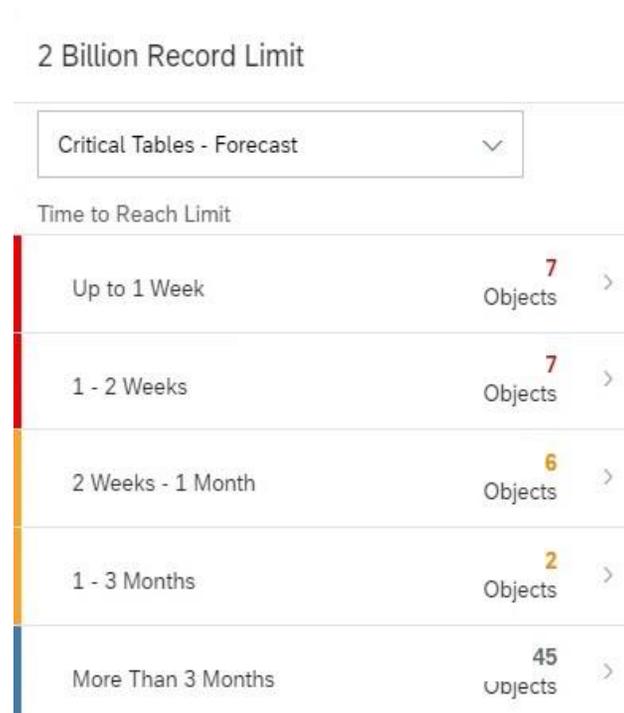


Use Cases Using SAP HANA Predictive Analytics Library (PAL)

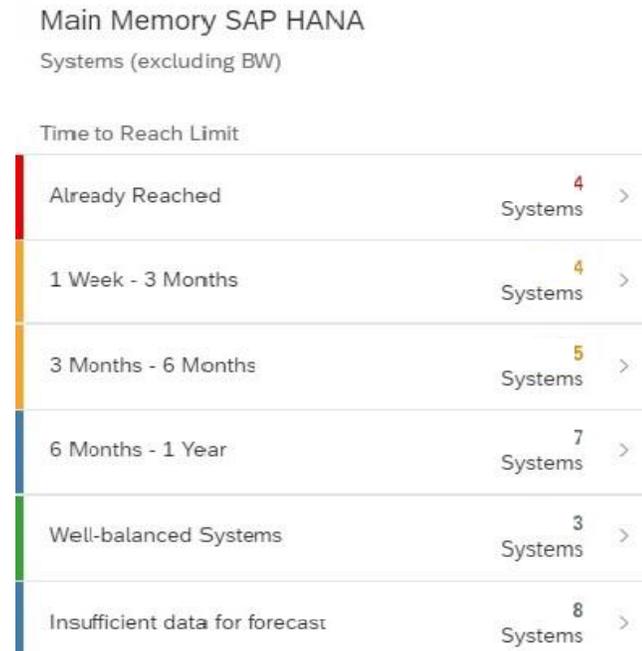
	Two Billion Records	Indexserver Memory Consumption	Data Footprint	Critical Number Ranges in ABAP
Motivation	Prevention of downtime of business processes caused by SAP HANA database tables that exceed the maximum of about 2 billion records	Prevention of out-of-memory-dumps caused by reaching a system's Effective Allocation Limit (EAL)	Support the customer in his IT budget planning by estimating the size of his database	Prevent business downtime due to number range interval exhaustion
Goal	Prediction of date when 2 billion limit is reached	Prediction of date when EAL is reached	Prediction of database growth (row store and column store) within 12-48 months	Predict when interval will be 100% used

Predictive Cases Using SAP HANA PAL

Two Billion Records

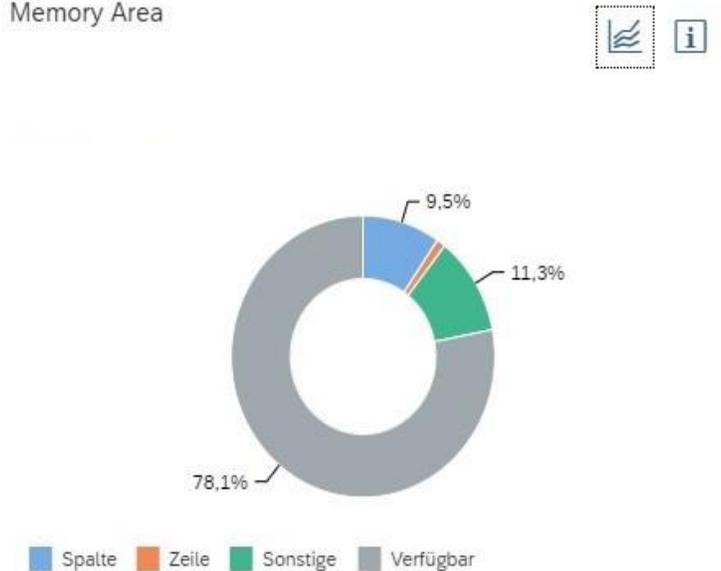


Indexserver Memory Consumption



Data Footprint

Memory Area

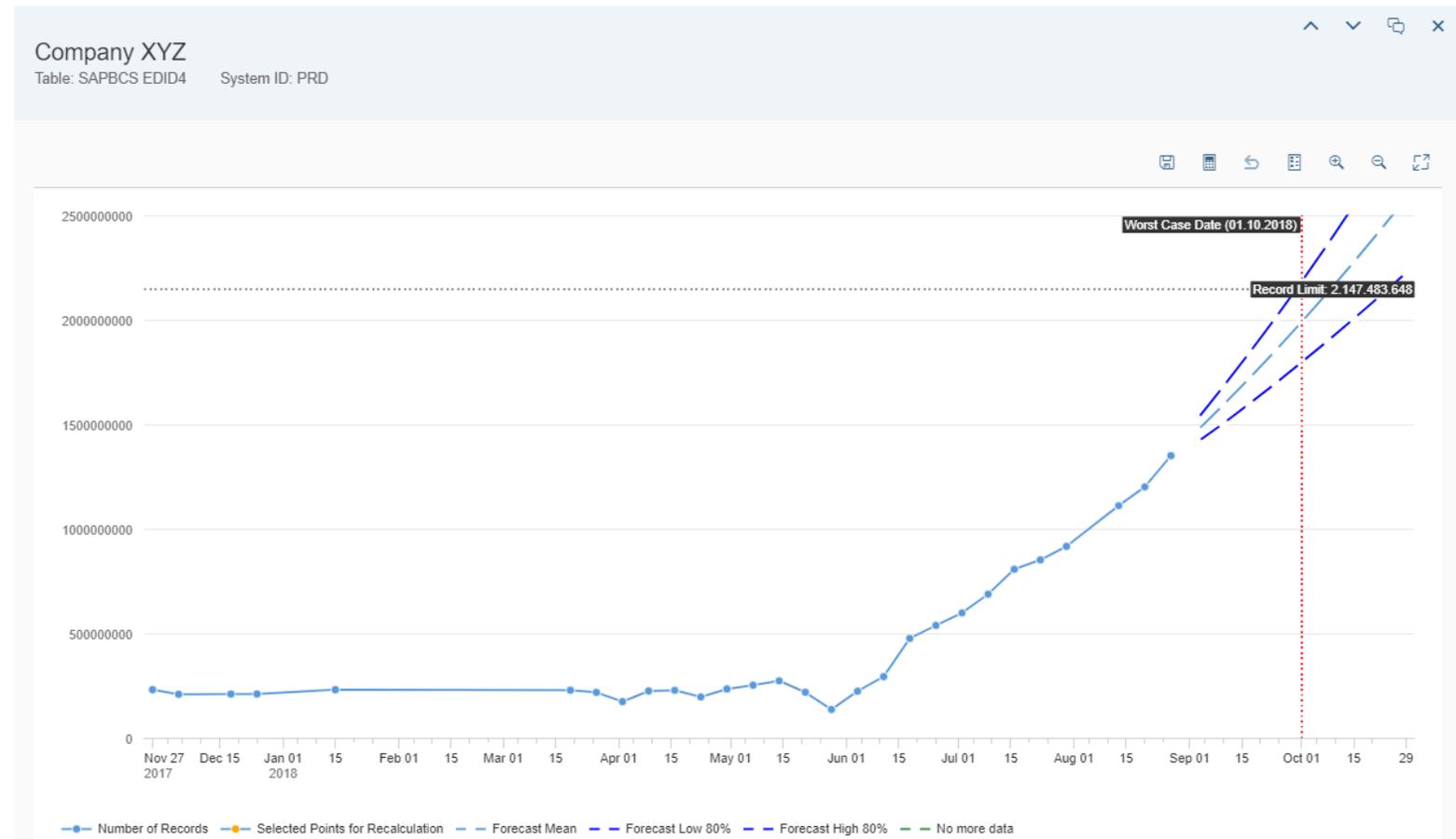


First Predictive Use Case: SAP HANA 2 Billion Record Limit

2 Billion Record Limit		
Critical Tables - Forecast		
Time to reach limit...		
Up to 1 Week	↗ 8 Objects	>
1 - 2 Weeks	↗ 6 Objects	>
2 Weeks - 1 Month	↗ 23 Objects	>
1 - 3 Months	↗ 130 Objects	>
More Than 3 Months	↗ 107 Objects	>

- New card on SAP EarlyWatch Alert Workspace

- Historic and predicted growth in one chart



Notification Example

2 Billion Record Limit Forecast (View SAP IT Business Systems)

Critical object in system I3P detected.

The forecast detected an issue with priority 2: SAPI3P.EDID4 might reach the maximum number of entries. The calculated worst-case date is 24.08.2020. For details, see [App URL](#).

Definition of priority:

The worst-case date is the result of an unfavorable, yet possible forecast - with a probability of 80% the limit is reached later. The priority depends on the period until this worst-case date is reached:

Priority Period

- | | |
|---|--------------------------------------|
| 1 | less than 30 days |
| 2 | for the first time less than 60 days |
| 3 | for the first time less than 90 days |

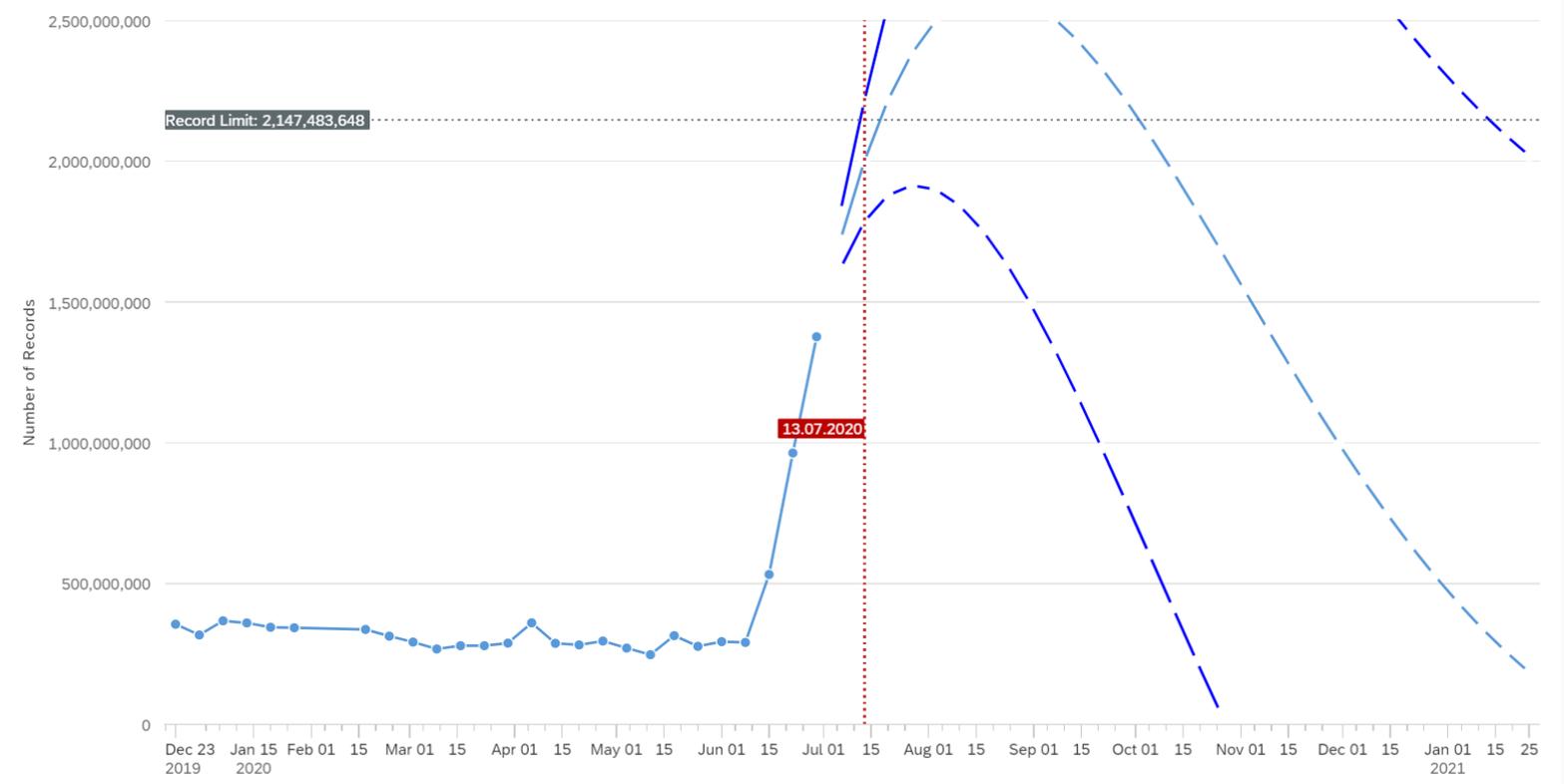
Filtered By (3): Customer, System, Time Range

- Objects (145) Any Date
- Customer
 - SAP IT Business System (0000028643)**
 - System ID: **IOP**
 - Installation Number: 0020120938
 - System Number: 000000000850441349
 - Object: SAPIOP ZKPID_AAPPSTAT Partition 9
 - Prediction: Worst-Case Date: 13.07.2020 (in 2 weeks)
 - Records: 1,376,561,031
 - SAP IT Business System (0000028643)
 - System ID: **IOP**
 - Installation Number: 0020120938
 - System Number: 000000000850441349
 - Object: ITOA_ADMIN ZKPID_SYBMONDEVSPACEUSAGE
 - Prediction: Worst-Case Date: No Worst-Case Date
 - Records: 16,408,137
 - SAP IT Business System (0000028643)
 - System ID: **IOP**
 - Installation Number: 0020120938
 - System Number: 000000000850441349
 - Object: ITOA_ADMIN ZKPID_SYBMONSEGMENTIO
 - Prediction: Worst-Case Date: No Worst-Case Date
 - Records: 25,520,757

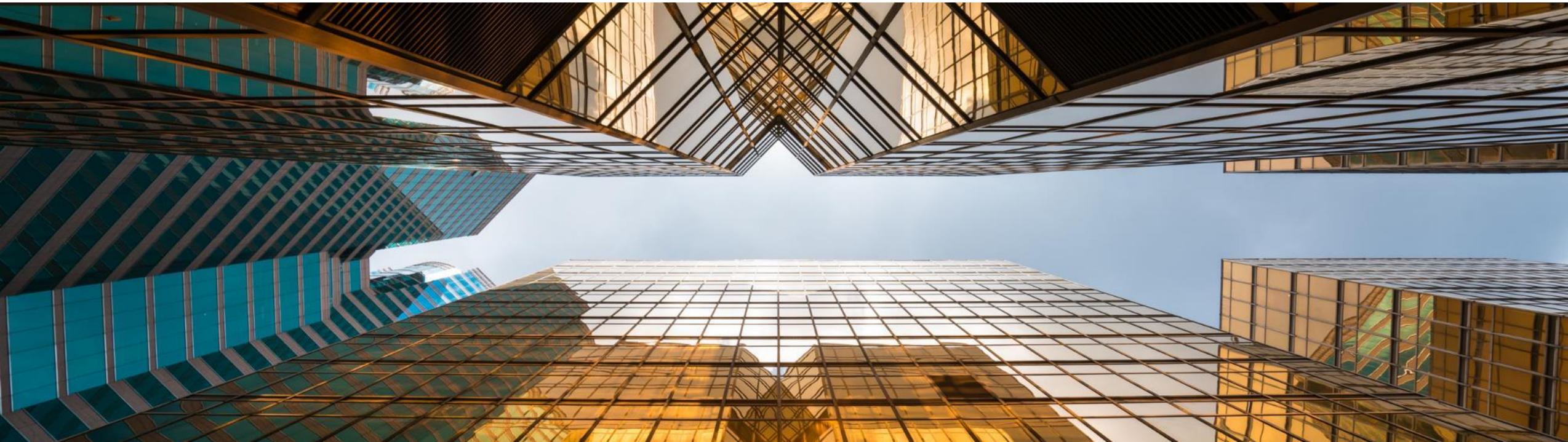
SAP IT Business Systeme

Scheme: SAPIOP Table: ZKPID_AAPPSTAT Partition 9 System ID: IOP Installation Number: 0020120938 System Number: 000000000850441349 [Partition Details](#)

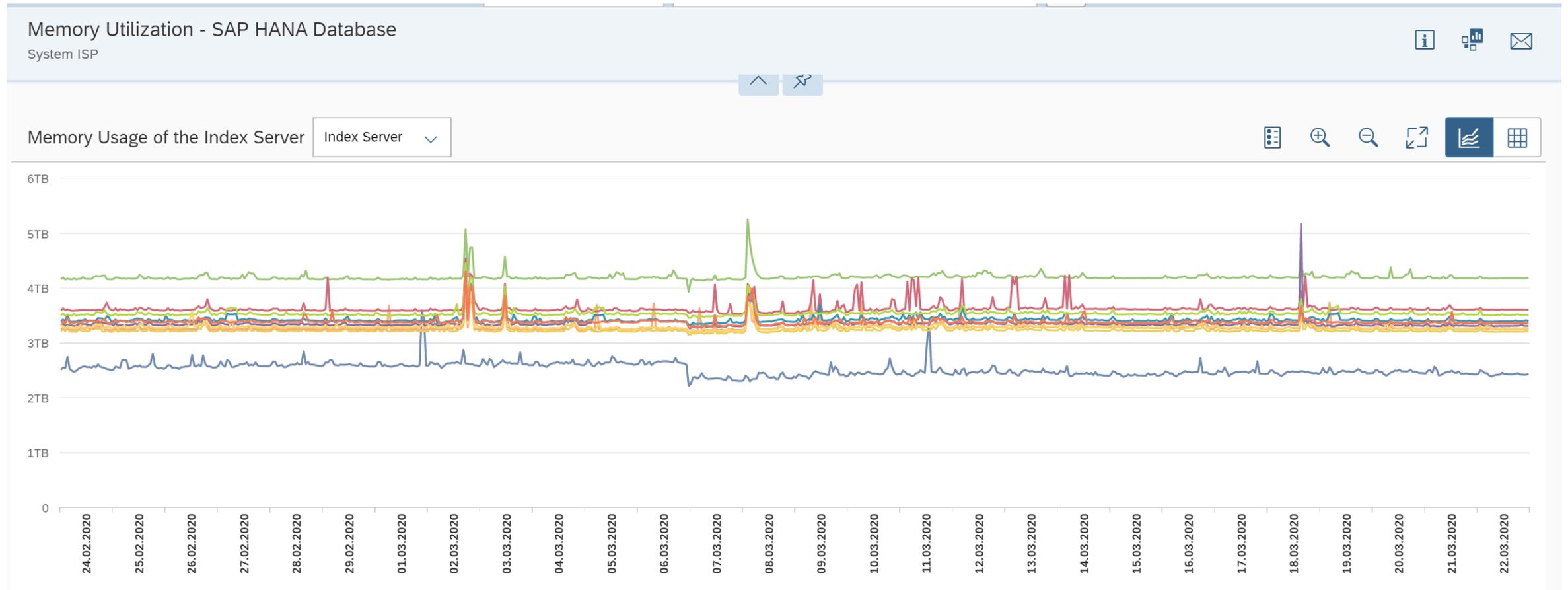
Last 1.5 Years



SAP HANA Memory Analysis

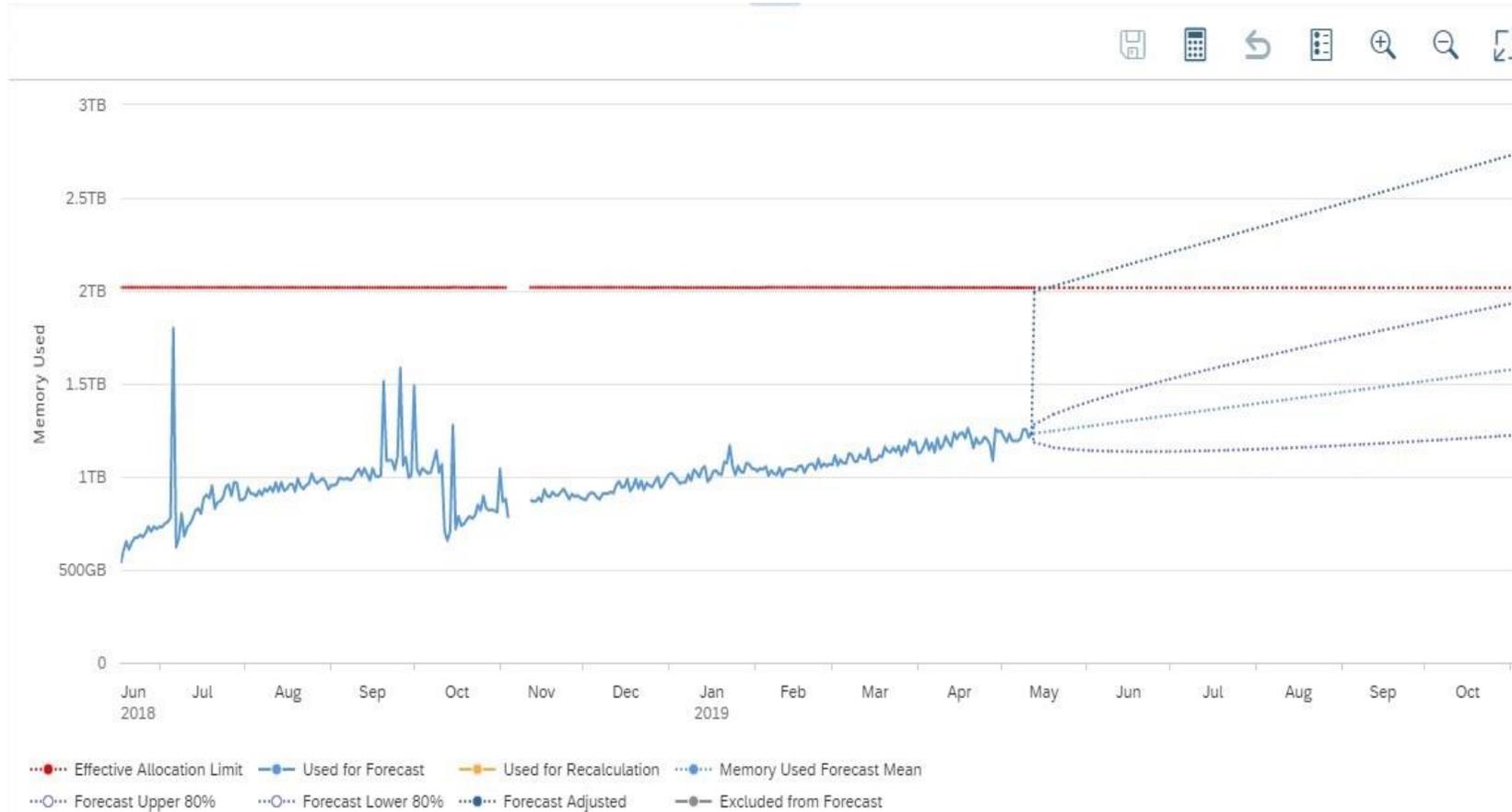


SAP HANA Scale-out: View all nodes in one chart



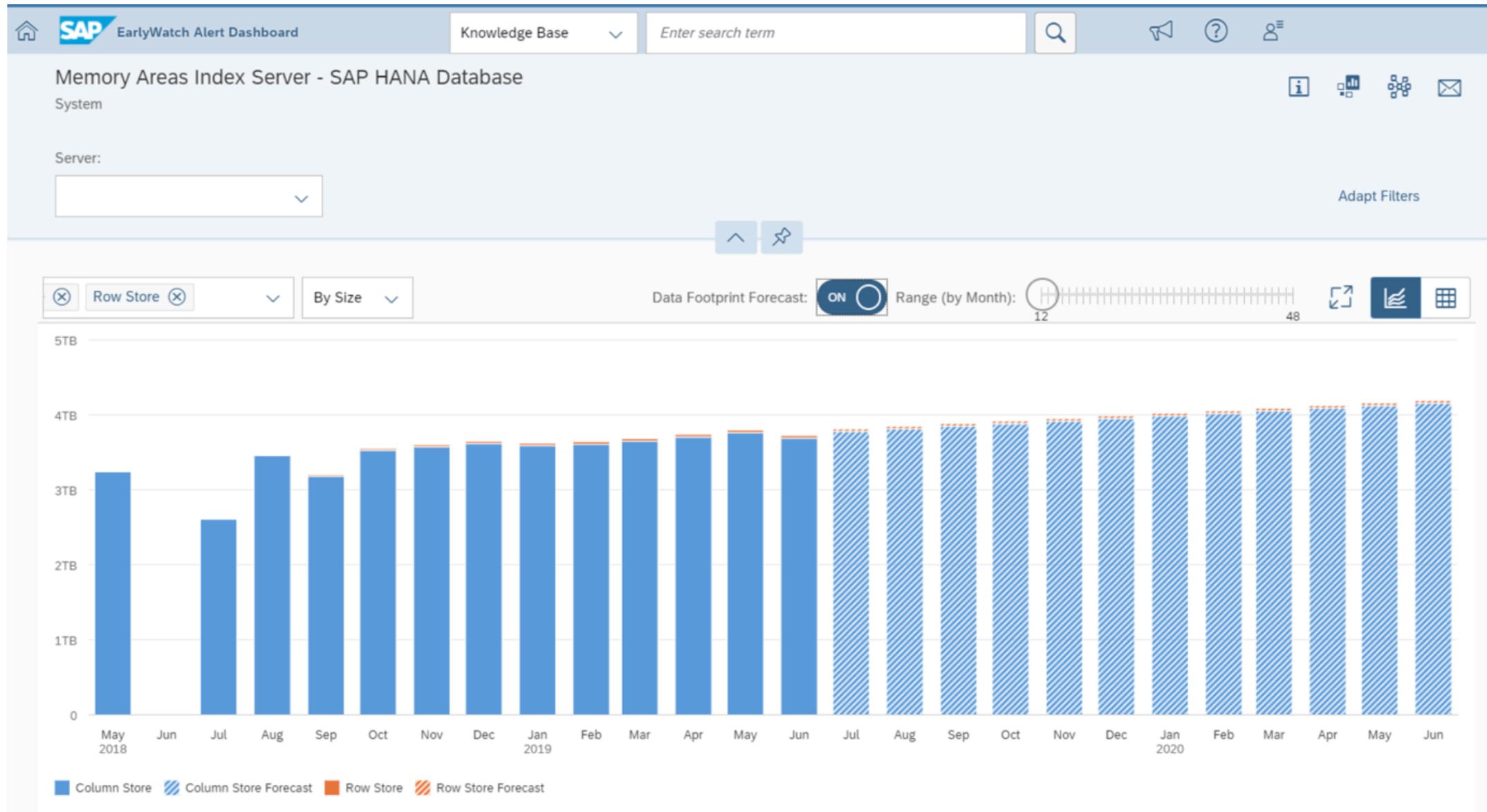
Indexserver Memory Consumption Use Case

Results:

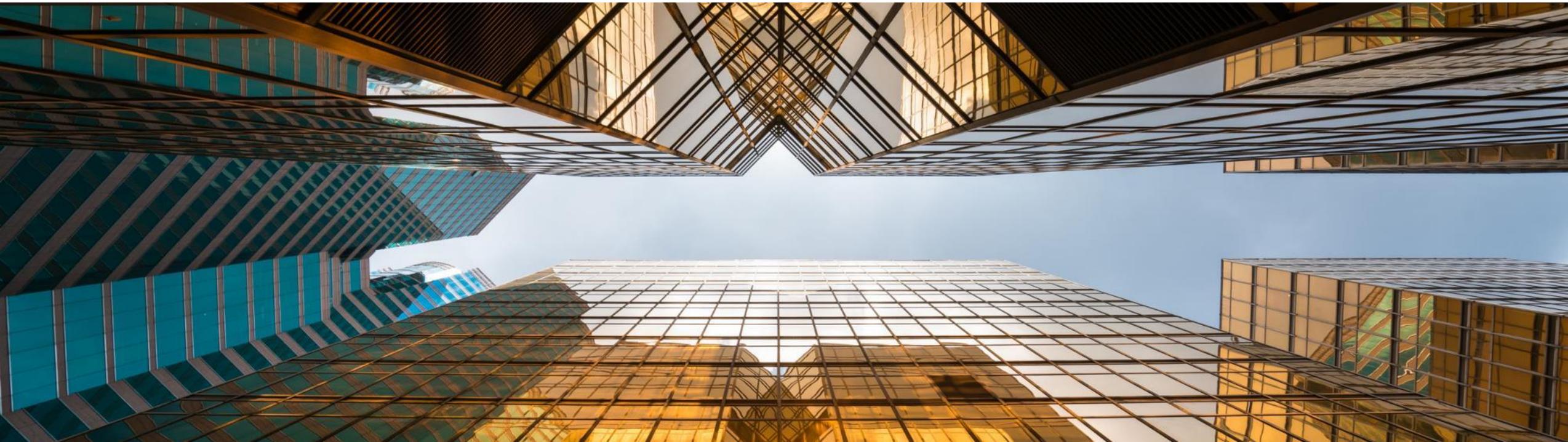


- Forecast Mean
- 80% Prediction Interval
- Date on which limit is reached
- Forecast Adjusted (consideration of past highest peaks)

Data Footprint Use Case



Number Range Prediction



New OVP card “Number Range Limit”

The screenshot displays a comprehensive SAP OVP dashboard with the following components:

- System Status List:**
 - Note (HotNews) exists: 453 Systems
 - early full: 252 Systems
 - exist or are expected: 211 Systems
 - in data backup operation: 165 Systems
- HANA Section:**
 - 126 Systems
 - 622 Systems
 - 388 Systems
 - 1.690 Systems
 - 6.801 Systems
 - 7.305 Systems
- Donut Chart:**
 - Total: 29122
 - Very Critical: 11487
 - Critical: 20534
 - OK: 1412
 - Incomplete Data: (unlabeled)
 - No Current Service Data: (unlabeled)
- Bubble Chart:**
 - Y-axis: Number of Users (120K to 200K)
 - X-axis: DB Size on Disk (0 to 20TB)
 - Legend: Very Critical (Red), Critical (Orange), OK (Green)
 - Bubble Size: Number of Alerts
 - Systems shown: PRD, W72, W71, ERP, PC1, PP1, ERP1, SDP
- Bar Chart:**
 - Systems: SP2, PSO, SMP, BWP, CWP, SNB, PIP
 - Values: 840.015.797, 653.072.039, -492.802.748, -1.521.726.069, -1.584.331.199, -5.108.901.496, -9.844.093.892
- 2 Billion Record Limit Card:**
 - Forecast: Critical Tables - Forecast
 - Time to Reach Limit:
 - Up to 1 Week: 74 Objects
 - 1 - 2 Weeks: 29 Objects
 - 2 Weeks - 1 Month: 87 Objects
 - 1 - 3 Months: 541 Objects
 - More Than 3 Months: 1.358 Objects
- What's New?**
 - News about SAP EarlyWatch Alert
 - Expensive SAP HANA SQL Statements
 - Troubleshooting with SAP EarlyWatch Alert
- Number Range Limit Card:**
 - Forecast: Critical Number Ranges - Forecast
 - Time to Reach Limit:
 - Up to 10 days: 88 Objects
 - 10 Days - 1 Month: 325 Objects
 - 1 Month - 6 Months: 1.091 Objects
 - 6 Months - 1 Year: 1.488 Objects
 - More Than 1 Year: 2.123 Objects

Details - List Page

Number Range Limit

Knowledge Base

🔍
🔊
?
👤
Renate Mustermann
▼

Customer
System ID
Time Range
Number Range Object

Critical: Up to 10 Days
▼

▼

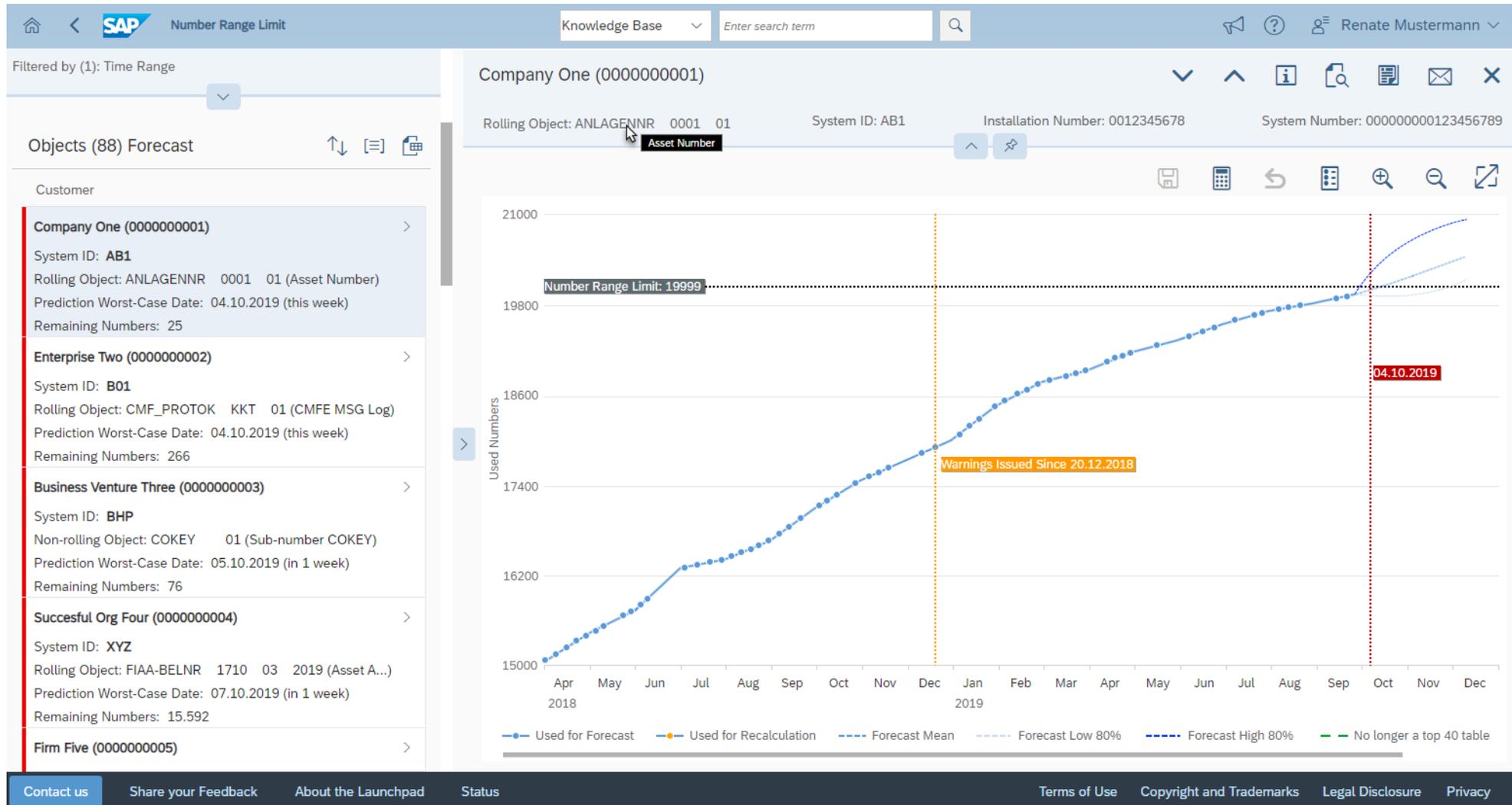
Objects (88) Forecast

 ↑↓ [≡] 📄

Customer	System ID	Object	Prediction: Worst-Case Date	Remaining Numbers
Company One (0000000001)	AB1 <small>Installation Number: 0012345678 System Number: 000000000123456789</small>	Asset Number <small>Rolling Object: ANLAGENNR Subobject: 0001 Interval: 01</small>	04.10.2019 (this week)	25 >
Enterprise Two (0000000002)	B01 <small>Installation Number: 0012345678 System Number: 000000000123456789</small>	CMFE MSG Log <small>Rolling Object: CMF_PROTOK Subobject KKT Interval: 01</small>	04.10.2019 (this week)	266 >
Business Venture Three (0000000003)	BHP <small>Installation Number: 0012345678 System Number: 000000000123456789</small>	Sub-number COKEY <small>Non-rolling Object: COKEY Interval: 01</small>	05.10.2019 (this week)	76 >
Successful Org Four (0000000004)	XYZ <small>Installation Number: 0012345678 System Number: 000000000123456789</small>	Asset Accounting <small>Rolling Object: FIAA-BELNR Subobject: 1710 Interval: 03 Year: 2019</small>	07.10.2019 (in 1 week)	15.592 >
Firm Five (0000000005)	ABC <small>Installation Number: 0012345678 System Number: 000000000123456789</small>	Official Documents <small>Rolling Object: J_1AOFFDOC Subobject: TH0101 Interval: 11</small>	09.10.2019 (in 1 week)	18 >
Six Limited (0000000006)	BCD <small>Installation Number: 0012345678 System Number: 000000000123456789</small>	Material ledger doc. <small>Rolling Object: ML-BELEG Subobject: 08 Year: 9999</small>	11.10.2019 (in 1 week)	6.844 >
Seven Inc. (0000000007)	CDE <small>Installation Number: 0012345678 System Number: 000000000123456789</small>	SAPoffice: object <small>Rolling Object: SO_OBJ_USR Interval: 01 Year: 2019</small>	11.10.2019 (in 1 week)	1.233 >

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Details with Line Chart



Critical Number Range Intervals

Number Range Limit Knowledge Base Renate Mustermann

Customer: System ID: Time Range: Number Range Object:

Objects (88) Forecast

Customer	System ID	Object	Prediction: Worst-Case Date	Remaining Numbers
Company One (0000000001)	AB1 Installation Number: 0012345678 System Number: 000000000123456789	Asset Number Rolling Object: ANLAGENNR Subobject: 0001 Interval: 01	04.10.2019 (this week)	25 >
Enterprise Two (0000000002)	B01 Installation Number: 0012345678 System Number: 000000000123456789	CMFE MSG Log Rolling Object: CMF_PROTOK Subobject KKT Interval: 01	04.10.2019 (this week)	266 >
Business Venture Three (0000000003)	BHP Installation Number: 0012345678 System Number: 000000000123456789	Sub-number COKEY Non-rolling Object: COKEY Interval: 01	05.10.2019 (this week)	76 >
Successful Org Four (0000000004)	XYZ Installation Number: 0012345678 System Number: 000000000123456789	Asset Accounting Rolling Object: FIAA-BELNR Subobject: 1710 Interval: 03 Year: 2019	07.10.2019 (in 1 week)	15.592 >
Firm Five (0000000005)	ABC Installation Number: 0012345678 System Number: 000000000123456789	Official Documents Rolling Object: J_1AOFFDOC Subobject: TH0101 Interval: 11	09.10.2019 (in 1 week)	18 >
Six Limited (0000000006)	BCD Installation Number: 0012345678 System Number: 000000000123456789	Material ledger doc. Rolling Object: ML-BELEG Subobject: 08 Year: 9999	11.10.2019 (in 1 week)	6.844 >
Seven Inc. (0000000007)	CDE Installation Number: 0012345678 System Number: 000000000123456789	SAPoffice: object Rolling Object: SO_OBJ_USR Interval: 01 Year: 2019	11.10.2019 (in 1 week)	1.233 >

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Did you know?

The SAP EarlyWatch Alert Workspace in SAP ONE Support Launchpad offers the new possibility to get informed automatically by email on critical findings in your SAP system landscape.

Notify

It offers personalized alerts which will inform you about new very critical findings in general and predictive alerts for the SAP HANA which provides an early warning on important optimization potential.

Customize

You can specify all systems or only a selection of systems of your choice.

Select

There are additional checks available in the SAP EarlyWatch Alert Workspace compared to the classical EarlyWatch Alert report.

- Forecast for SAP HANA 2 Billion Limit
- Forecast for SAP HANA Memory Consumption
- Forecast for SAP HANA Memory Footprint of Column und Row Store
- Forecast for Number Ranges
- Notifications on Prediction Results and new very critical alerts by email
- Time travel on chapter level in eReader
- Aggregation per system landscape for topic alerts

Enhanced



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https://video.sap.com/media/t/1_9mb5bgwgw



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References

EWA WORKPLACE

Access the EWA workspace:
<https://launchpad.support.sap.com/#/ewaworkspace>

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WHAT'S NEW

Stay Informed About New SAP EarlyWatch Alerts You Are Interested In:
<https://blogs.sap.com/2020/09/15/stay-informed-about-new-sap-earlywatch-alerts-you-are-interested-in/>

How to Subscribe to
SAP EarlyWatch Alert
Notifications in
SAP ONE Support Launchpad



First Predictive Use Case:
SAP HANA 2 Billion Record Limit



Third Predictive Use Case:
Data Footprint

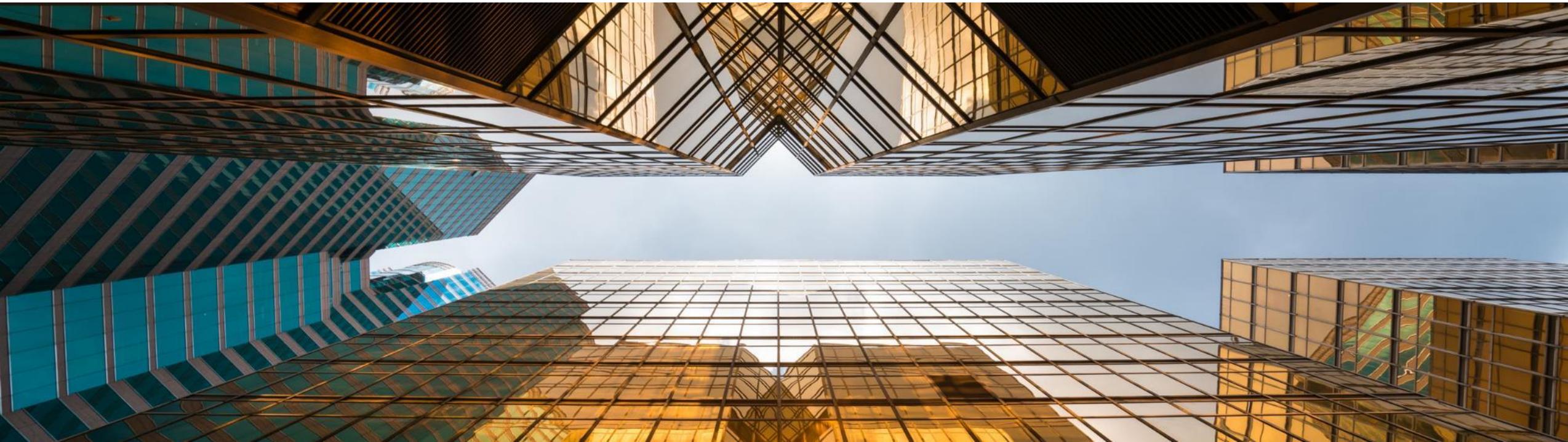


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Questions & Answers



Thank you!

Susanne Glänzer

Data Science, Automation and Technology, IDG

SAP SE

Susanne.glaenzer@sap.com