

Focused Insights for SAP Solution Manager Document Version: 1.3 – 2019-02-21

Tactical Dashboard 7.2 ST-OST 200 SP03



Typographic Conventions

Type Style	Description		
Example	Words or characters quoted from the screen. These include field names, screen titles, pushbuttons labels, menu names, menu paths, and menu options. Textual cross-references to other documents.		
Example	Emphasized words or expressions.		
EXAMPLE	Technical names of system objects. These include report names, program names, transaction codes, table names, and key concepts of a programming language when the are surrounded by body text, for example, SELECT and INCLUDE.		
Example	Output on the screen. This includes file and directory names and their paths, messages, names of variables and parameters, source text, and names of installation, upgrade and database tools.		
Example	Exact user entry. These are words or characters that you enter in the system exactly as they appear in the documentation.		
<example></example>	Variable user entry. Angle brackets indicate that you replace these words and characters with appropriate entries to make entries in the system.		
EXAMPLE	Keys on the keyboard, for example, F2 or ENTER.		

Document History

Version	Date	Change
1.0	2017-06-15	Initial version
1.1	2017-07-31	Support Package 1 (SP01)
1.2	2018-07-12	Support Package 2 (SP02)
1.3	2019-02-21	Support Package 3 (SP03)

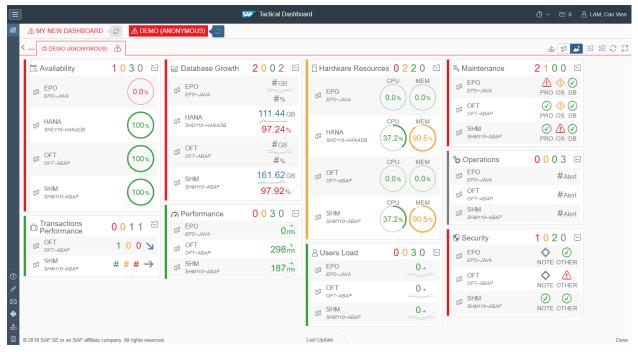
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1 Introduction



Tactical Dashboard UI

The Dashboard allows reporting the status of a selected list of systems and KPI's that can be configured with individual thresholds based on a pre-defined set of Scenarios:

- Performance
- Availability
- Hardware Resources
- Database Growth
- Database Backup
- Users Load
- Transactions Performance
- Maintenance
- Security
- Operations Dashboard Instance
- PI Monitoring

Far from being just a "real time" monitoring tool, the objective of the dashboard is to make it easier for decision makers to take tactical choices. For this purpose, it provides different trend indicators that can be used to understand how the system is behaving or if there are anomalies in specific areas.

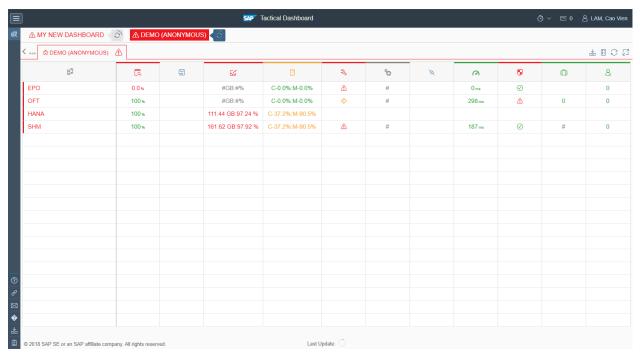
This is done by comparing recent period (e.g. yesterday or last week) with averages calculated on a longer period (e.g. last 6 months or last 12 months).



Performance Trend Calculation

Two views can be used to display information in the Dashboard, "Tabular" and "Tiles".

In Tabular view, the content is organized inside a cross-table with 1^{st} column is the systems, and the subsequence columns are for different scenarios like in image below. The content is also simplified to fit in the table.

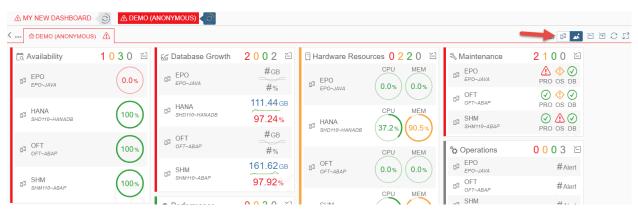


Tactical Dashboard - Tabular View

In Tiles view, the content is organized in tiles. In this view, there are 2 perspectives you can choose: "Systems", or "Scenarios". The Systems view will present each system one tile, and scenarios configured for system as the content of the tile. The Scenarios is just the opposite of the Systems view, where each scenario is a tile, and the systems that have these scenario as the content.



Tactical Dashboard - Tiles View - Systems Perspective



Tactical Dashboard - Tiles View - Scenarios Perspective

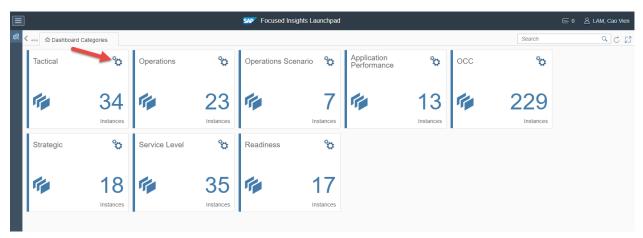
In this view, you can also filter content based on the rating (status). When you filter on status, the entries in the tile which have the color-coded status will remain. Others will be hidden.

Each scenario provides a detailed view that shows additional, more exhaustive KPIs related to the specific area of interest. Detailed view can be accessed just clicking the tile on the name of the scenario.

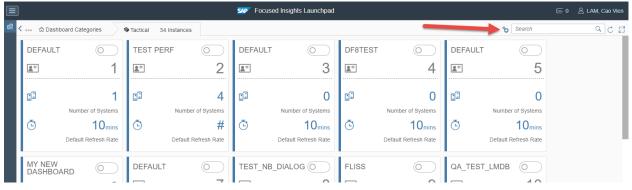
2 Configurations

Like always, before the dashboard can be used, one need to configure the dashboard instance. To access the configuration application, use one of the follow ways:

- Direct link: [protocol]://[domain:port]/sap/bc/webdynpro/stdf/tac_webdynpro
- FI Launchpad:



FI Launchpad First View



FI Launchpad Tactical View

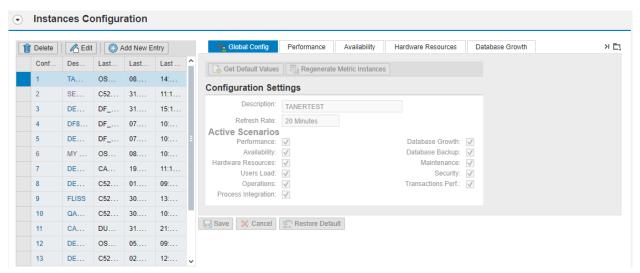
You can configure different instance of the dashboard model to fit your views of monitoring. Each instance is composed of systems. Each system can have different scenarios selected for monitoring.

We will cover on configuration of instance, and system in the next sections.

2.1 Instance Configuration

One of the features of the dashboard is the possibility to configure multiple "instances", each of which is characterized by a configuration ID.

A configuration ID represents a set of systems with specific configurations and thresholds. Different systems with different configurations and active scenarios can be assigned to a Configuration ID. This allows multiple applications of the dashboard that can be geared towards different users, managers or business areas.

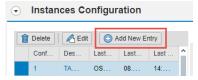


Tactical Dashboard Configuration - Instances Configuration

2.1.1 Add an Instance

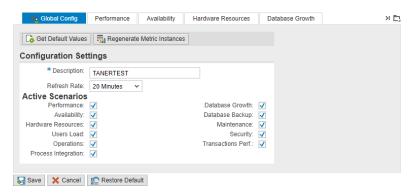
In the Instances Configuration panel, do as follow:

• Select the Add New Entry button to add new temporary instance and enter edit mode.



Tactical Dashboard Configuration - Add Instance Button

• This will take a while as the metric instances are initiated. On the right-hand side:



Tactical Dashboard Configuration - Add/Edit Instance

- o Enter a description.
- o Choose different refresh rate, if needed.
- o Choose scenarios which shall be used in this instance. What we choose here will affect System Configuration as the System Configuration will by default inherit from Instance Configuration.
- Now you can either:
 - o Effectively add new instance by select the save button.
 - Change your mind, and don't want this instance anymore, select the Cancel button.

Clicking on the Dashboard title will open the instance of the dashboard in your default browser.

Scenarios configuration will be shown in upcoming sections.

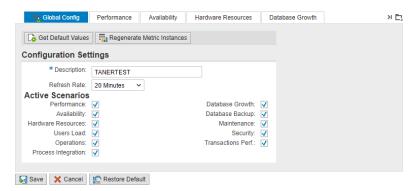


This will still jump to the old template of the dashboard. To jump to the new template, please use the new Focused Insights Launchpad. This behavior will change in ST-OST 200 SP02.

2.1.2 Edit an Instance

In the Instances Configuration panel, do as follow:

- Select an instance in the table.
- Select the A Edit button to enter edit mode.
- You can change what you want in the right-hand side tabs:



Tactical Dashboard Configuration - Add/Edit Instance

- If you want to reset the setting values of the instance to the application default, use the Restore Default button.
- If you want to reset the setting values of the currently selected tab to application default, use the
 Get Default Values button.
- Sometime when a note for application released with a change of metric instances, and the dashboard doesn't show expected results, you can select the Regenerate Metric Instances button to correct the metric instances.
- Now you can either:
 - o Effectively save you changes by select the save button.
 - o Change your mind, and don't want these changes anymore, select the X Cancel button.

2.1.3 Delete an Instance

In the Instances Configuration panel, do as follow:

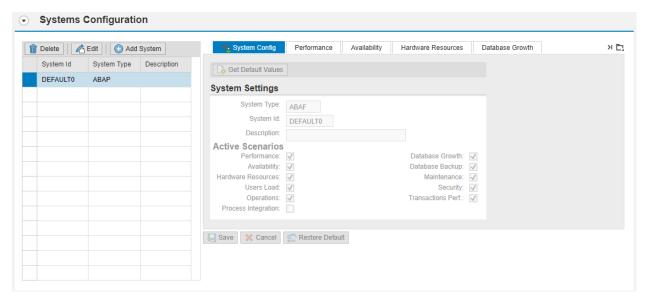
- Select an instance in the table.
- Select the Delete button to delete the instance.
- A popup will show to let you confirm your deletion of instance.



Tactical Dashboard Configuration - Instance Deletion Confirmation

2.2 System Configuration

When an instance is ready, you can proceed to add systems to the instance for monitoring. Before doing anything in the next section, make sure you select the desired instance.



Tactical Dashboard Configuration - Systems Configuration

2.2.1 Add a System

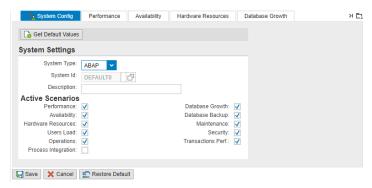
In the Systems Configuration panel, do as follow:

• Select the Add System button to add new temporary system, and enter edit mode.



Tactical Dashboard Configuration - Add System Button

• On the right-hand side:



Tactical Dashboard Configuration - Add/Edit System

- o Choose the system type.
- o Search for the system.
- o Enter a description.

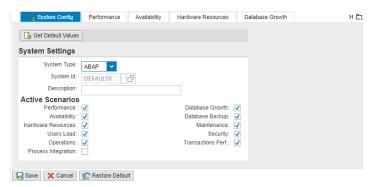
- o Choose scenarios which shall be used in this system.
 - o If in the instance configuration, the scenario is unchecked, the scenario is not available to select here.
 - o JAVA system will not have Transactions Performance scenario.
- Now you can either:
 - o Effectively add new system by select the save button.
 - o Change your mind, and don't want this system anymore, select the ★ Cancel button.

Scenarios configuration will be shown in upcoming sections.

2.2.2 Edit a System

In the Systems Configuration panel, do as follow:

- Select a system in the table.
- Select the detail button to enter edit mode.
- You can change what you want in the right-hand side tabs:



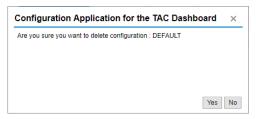
Tactical Dashboard Configuration - Add/Edit System

- If you want to reset the setting values of the instance to the instance configuration values, use the Restore Default hutton.
- If you want to reset the setting values of the currently selected tab to instance configuration values, use the Get Default Values button.
- Now you can either:
 - o Effectively save you changes by select the Save button.
 - Change your mind, and don't want these changes anymore, select the X Cancel button.

2.2.3 Delete a System

In the Systems Configuration panel, do as follow:

- Select a system in the table.
- Select the Delete button to delete the system.
- A popup will show to let you confirm your deletion of system.



Tactical Dashboard Configuration - System Deletion Confirmation

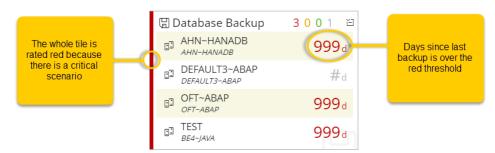
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3 Scenarios

The current version of the Tactical Dashboard supports 11 Scenarios:

- Availability
- Performance
- Hardware Resources
- Database Growth
- Database Backup
- Users Load
- Transactions Performance
- Maintenance
- Security
- Operations
- Process Integration

Each scenario is rated (green, red or yellow) based on the thresholds and options selected in the configuration. The rating of each scenario (or system) is then propagated, using a worst-case rule, to the overall status of the Tile. If one scenario (or system) is red, the whole tile will be rated as red.



Configure a threshold

Same principle is valid for the "Category" Tile, if one of the entries is red, the whole category will be rated as red.

The Dashboard is refreshed automatically every 10 minutes (default value) but the frequency can be changed from 5 up to 30 minutes. The default refresh period can be configured for each instance.

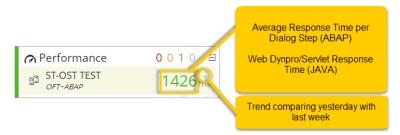
What follows is a detailed description of each scenario including the specific configurations settings needed to adapt the Tactical Dashboard to each customer's need.

3.1 Performance

This Scenario can be used to report values and trends for "Average Response time per Dialog Step" (ABAP) or "WebDynpro/Servlet Response Time" (Java) to make it easier to assess performance degradations in Technical Systems.

3.1.1 Tile and Main View

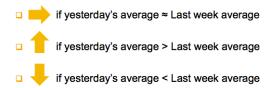
Two different information are shown in the main Tile view, one related to the performances (in milliseconds) and one related to a trend.



Performance Tile and Main View

The trend compares yesterday's average response time with "Last week" response time.

The orientation of the arrow follows these rules:



The Response time, calculated on today, yesterday's or last hour data according to the configuration, is based on different KPI's depending on the type of technical system, ABAP or Java.

For ABAP systems, the Average Response Time is calculated simply dividing the Total Response time by the Total Number of Steps as it is done in transaction ST03N. Different InfoProviders can be used to calculate the Response Time per Dialog Step.

For Java systems, the overall Performance is calculated using a combination of two KPIs, WebDynpro and Servlet Response Time.

3.1.2 Detail view

In the detail view, two different trends are displayed, one from the "Last 30 days" with daily granularity and one for the "Last 8 weeks" with weekly granularity.

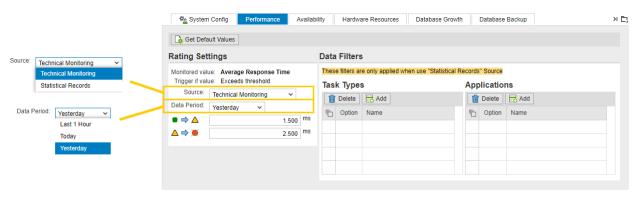
Current Thresholds are visualized clicking on the "Show Thresholds" checkbox for both Java and ABAP Performance Detail.



Performance Detail View

3.1.3 Configuration

The configuration allows the selection of 3 different time periods for the calculation of the average in the main tile: Today, Yesterday (default), and Last Hour. The setup for performance includes two thresholds.



Performance Scenario Configuration



For JAVA system, there is no selection for source, data period, and data filters. These options are only available on ABAP system. The data period for JAVA system will be yesterday.

For ABAP system, if the Source is Statistical Records, you can put filter on task types and applications to refine the data.

3.2 **Hardware Resources**

This scenario shows the status of some OS level KPI's, CPU and Memory Utilizations.

All the metrics refer to the Virtual Hosts of the SAP System as described in the LMDB.

1 Note

In the LMDB "Virtual Hosts "can be either "Physical Hosts" (i.e. bare metal) or Virtual Servers (i.e. VMware, LPARs, WPARs, and so on)

3.2.1 **Tile and Main View**



Hardware Resources: Tile and Main View

The Main Tile shows the average CPU and Memory utilization of all the Physical Hosts used by the Database and the different application servers on which the Technical System (ABAP or Java) is installed.

The rating rule of the main tile works as follows:

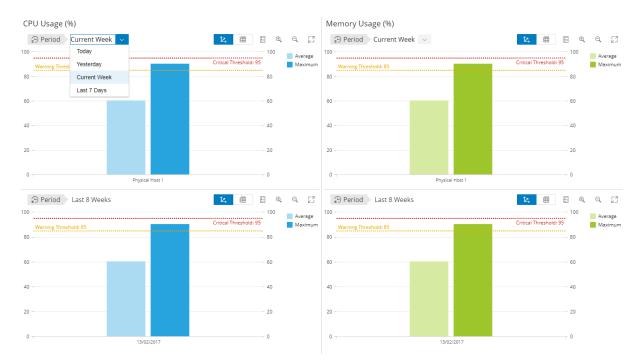
- If CPU = RED or Memory = RED → HW Resources = Red
- CPU/Memory
 - o Green to Yellow Threshold < max(current week) or avg (current week) < Yellow to Red Threshold
 - o Green to Yellow Threshold < max(last 8 weeks) or avg (last 8 weeks) < Yellow to Red Threshold
 - o max(current week) or avg (current week) > Yellow to Red Threshold → Red
 - o max(last 8 weeks) or avg (last 8 weeks) > Yellow to Red Threshold → Red

3.2.2 **Detail view**

The detail view shows two different sets of information, one related to the CPU and one associated with the Memory.

In both KPI's, maximum and average values are shown for each Physical Host in the "Current Week" view. The Last 8 Weeks section shows the data aggregated for all the application servers.

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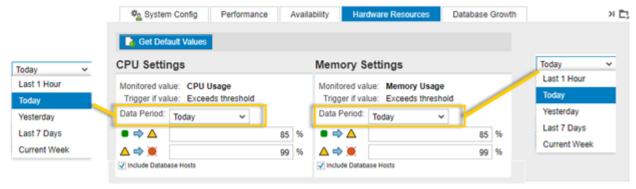


Hardware Resources: Detail view

3.2.3 Configuration

In the configuration application, it is possible to configure two sets of Green to Yellow to Red thresholds, one for the CPU and one for the Memory. Different data period (Last 1 Hour, Today, Yesterday, Last 7 Days and Current Week) can also be selected for the calculation of the average in the main tile.

You can also include Database Hosts in the calculation by check the Include Database Hosts check box.



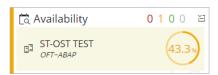
Hardware Resources Configuration

3.3 Availability

This Scenario shows the status of the System Availability; it can be used to evaluate the historical trends in the detailed application.

3.3.1 Tile and Main View

The availability is expressed in percentage and calculated on "Last hour, "Today" and "Yesterday" periods. If the value in the main tile is lower than 100%, the system can be either unavailable or no measurements are collected for this metric (e.g. the agent is offline).



Availability: Tile and Main View

Like any other scenario, availability can be individually configured for several systems.

3.3.2 Detail View

The detail view shows several historical trends with the aggregated distribution on the system availability for selected period:



Availability Detail View

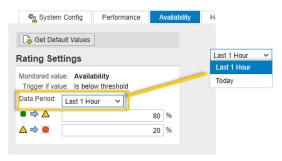
- Last 24 hours with hour granularity.
- Last 7 days with daily granularity.
- Last 30 days with daily granularity.
- Last 12 months with monthly granularity.
- Last 8 weeks with weekly granularity.

There are four statuses for a system: Available, Planned Non-available (for example for a planned downtime), Unplanned Non-Available (unexpected downtime), and No Measurements (if the Agent is not reporting any data).

To be able to discriminate between planned and unplanned non-availability, you need to schedule the related work modes in the Technical Administration Work Center (Work Mode Management).

3.3.3 Configuration

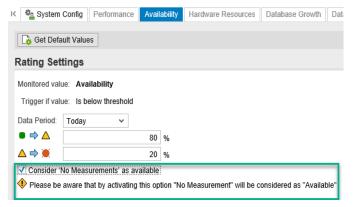
The configuration of this scenario allows specifying two thresholds, Green to Yellow and Yellow to Red:



Availability Configuration

In the example above the rating will be green if the availability (Today or Last 1 Hour according to the Data Period selected) will be higher than 80%, yellow if the availability is between 20% and 80% and red if lower than 20%.

In the system configuration, the user can choose to consider "No measurement" as available by checking the checkbox mentioned in the below screenshot:



In that case, the value displayed in the overview is the sum of the availability and the no measurements.

3.4 Database backup

This scenario reports the status of the Database Backup for each system. A custom table is also provided to allow additional reporting capabilities.

3.4.1 Tile and Main View

This scenario reports the status of the Database Backup for each system. A custom table is also provided to allow additional reporting capabilities.

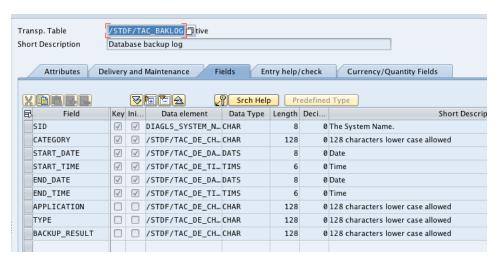


Database Backup: Tile and Main View

3.4.2 Detail View

When enabled in the configuration (see the next section), the detail view displays only the content of the table /STDF/TAC_BAKLOG. The table can be filled periodically with a strategy of your choice.

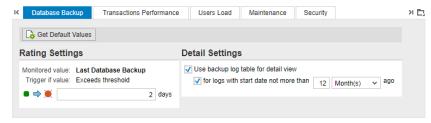
These are the Fields displayed in the Dashboard:



Database Backup - Log Table

3.4.3 Configuration

There is only one threshold for the DB Backup scenario.



Database backup Configuration

The threshold is of type Green to Red so, when the number of days since last successful backup exceeds the configured integer, the scenario will be rated red.

It is possible to activate a flag to enable the detail view. In this case the content of the table /STDF/TAC_BAKLOG is displayed filtering the specific system.



Database Backup - Detail View

How and when to fill the table is customer's responsibility. A possible approach is to execute a periodic job that parses the content of a log file produced by the Backup tool and then writes the new entries in the table.

The Dashboard will always display the records related to that specific SID.

3.5 Database Growth

The DB Growth Scenario allows monitoring several KPIs related to the growth of the Database over an extended period of time (up to one year). It provides information about the current size of the DB and alerts the user whenever the fill level is close to 100% or if there is an anomaly in the growth of the Database.

The following Databases are supported:

- DB2
- Oracle
- MaxDB
- HANA DB

3.5.1 Tile and Main View



Database Growth - Tile and Main View

Three information are displayed in the main Tile: DB Size, DB Fill level and DB Growth trend. The first two are based on yesterday's values while the trend depends on the configuration (8 weeks or 12 Months).

- DB Size refers to the size of the Database in the file system (i.e. the sum of the size of all data files or Occupied plus Free Memory in the Database).
- The DB Fill level describes the percentage of space which is consumed within the DB (Occupied Memory / (Occupied + Free Memory)).
- The trend shows the DB Growth in the last week or month (depending on the configuration).

The rating of the Scenario is based on two thresholds defined on the DB Fill level (DBFL) and on the DB Growth comparison (DBGC). If one of the two is red, then the DB Growth Scenario is rated as red.



The 2 images below are for example only. They do not reflect the current style of the tile. However, the organization of the content is still correct.

The DB Fill Level has a conventional "green to yellow to red" threshold.



The color of the trend chart in the System Tile is based on the evaluation of a threshold defined for the comparison of the DB Growth (DBG) between Last Week (or Last Month) and Last 8 Weeks (or Last 12 Months).

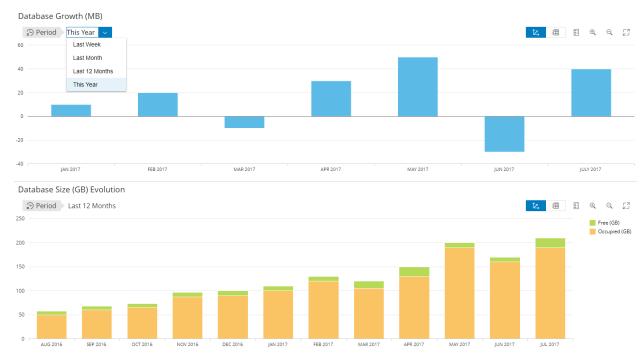


If, for example, the DB Growth Trend Y2R Threshold is set to 50%, then the chart will be red if last week growth is 50% higher than the average in the past 8 weeks.

3.5.2 Detail View

The detail view provides two charts, DB Growth and DB Size. The Database size shows the amount of Occupied and Free memory.

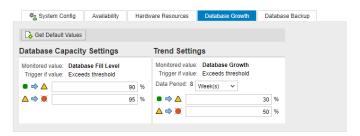
Database Growth is the difference for "Occupied memory" between two different time periods. E.g. if this month the occupied memory in the Database is 300G and last month was 200G, then the Database Growth is 100G.



Database Growth: Detail View

3.5.3 Configuration

As explained before, two thresholds are configurable to assign a rating to the Scenario, one on the DB Fill level and one on the growth comparison.



Database Growth Configuration

The first threshold is used to rate the DB Fill Level percentage in the main tile.

The second one is used to evaluate the color of the DB Growth Trend in the main Tile.

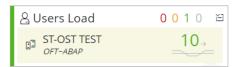
3.6 Users Load

This scenario can be used to evaluate, in every ABAP system, if the average number of connected users per hour is increasing over time or if there are peaks that need to be evaluated.

For Java systems, http sessions are used to display similar information.

3.6.1 Tile and Main View

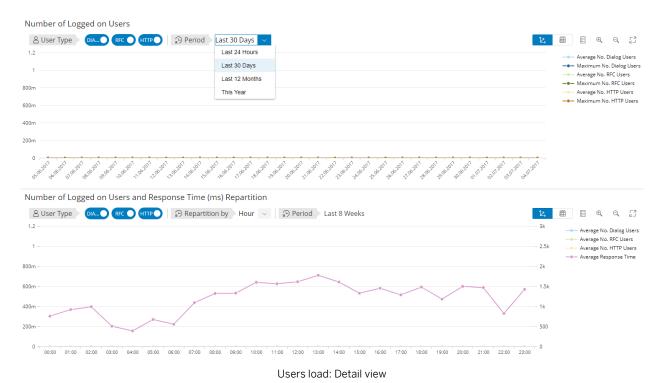
The main tile shows two information: a number representing the average number of connected users per hour (today, yesterday or last 7 days depending on the configuration) and a trend. The trend compares last week (or last month depending on the configuration) with the last 8 weeks.



Users Load: Tile and Main View

3.6.2 Detail View

In the detail application two different areas are displayed.



PUBLIC

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The trend on top shows the average (and maximum) number of connected users in different timeframes: last 24 hours with hourly granularity, last 30 days with daily granularity, and Last 12 month, or "this year" with monthly granularity.

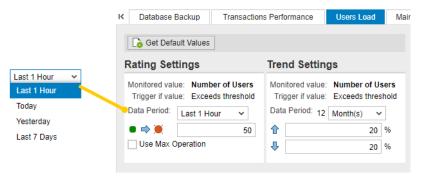
The lower graph shows the distribution of the hourly-connected users during the 24 hours or the days of the week. The distribution is calculated considering the last 2 months. This allows to answer questions like "What is the hour of the day in which more users are connected?" Which day of the week has been busier in the last two months? Additionally, another trend is showed in the same graph, the Response Time per dialog Step (for ABAP) or the Servlet/WebDynpro Response time (for Java). This allows correlating the number of connected users (or HTTP sessions) to possible performance issue.

3.6.3 Configuration

In the Users Load configuration, it is possible to define a threshold on the Maximum number of connected users. This is useful to be alerted, for example, if the maximum number of connected users reaches the limit imposed by the license. Data from today (default), yesterday or last 7 days can be considered for this threshold.

When the threshold is exceeded, the number in the main tile becomes red.

The Trend thresholds (in %) can be used to modify the buffer used to control the sensibility of the trend arrow. In the example below, if the average last week is 20 more than the average in the last two months, the orientation of the arrow is up.



Users Load: Configuration

There's cases where you want to see the maximum number of users log on to system, instead of just average, for example, the data period last 1 hour. You can select the check-box *Use Max Operation* for this purpose.

3.7 Maintenance

The maintenance scenario can be used to keep under control the status of the systems from the Software Level point of view. For each technical system, it shows the current software/patch level of the installed Product, Software Components, Kernel, Operating System and Database as well as the latest available version, age or end of maintenance. The status of the Main Tile can be used to, for example, to evaluate if the End of Maintenance for the Product is too close.

The main data source for this scenario is the Early Watch. It follows that the configured system must be included in a Solution and that the latest Early Watch alert session has been calculated correctly.

Tile and Main View 3.7.1

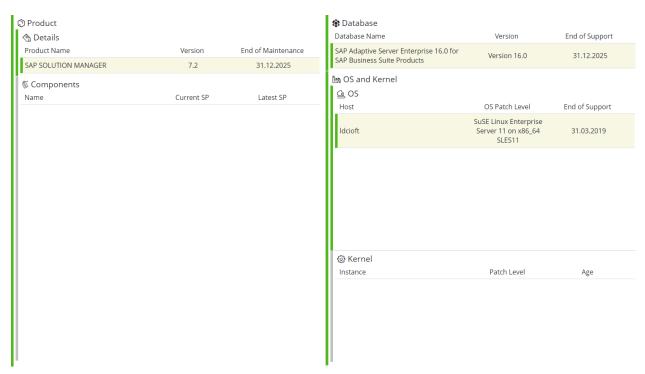
The main Tile shows the status of the Product, OS (Patch level and Kernel) and Database. If one of the thresholds configured for the different areas is exceeded, the status is propagated to the Main Tile.



Maintenance: Tile and Main View

3.7.2 **Detail View**

The detailed application offers an overview of all the relevant areas: Product, Software Components, Database, OS and Kernel.



Maintenance: Detail View

The "Components" area shows the current SP level for each software component installed on the system and the latest available SP level in the products catalog. A specific threshold can be setup for the main software component of the relevant Stack (sap_basis for abap and J2EE for Java) to calculate the rating based on the difference between the latest available and the current SP.

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3.8 Security

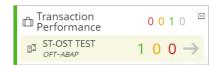
For Security Scenario and related troubleshooting refer to the document "Security Scenario CV Configuration for Tactical Dashboard ST-OST.pdf".

3.9 Transactions Performance

Response time per dialog step and total number of steps are the key indicator for transactions performance evaluation in ABAP Systems. Users want to verify for each system if a selected subset of Transactions are performing under the expected SLAs or if their trend is worsening.

The Transaction Performance scenario can be used to report the status of critical transactions for every ABAP System configured in the Tactical Dashboard.

3.9.1 Tile and Main View



Transactions Performance - Tile and Main View

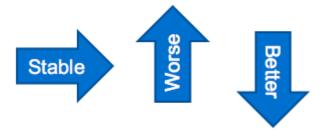
The main tile displays the number of transactions exceeding the performance threshold (based on Average Response time per dialog step).

Users can configure a different threshold for each transaction. Thus, each transaction will be rated and placed in a Green, Yellow or Red area set. The rating is performed using Last Hour, Yesterday or Last 7 Days data.

The blue arrow shows the trend of the worst transaction among the ones configured for the system.

A trend is calculated for each transaction comparing the performances of yesterday (last hour or last 7 days depending on the configuration) with the last 8 weeks (or 12 months according to the configuration).

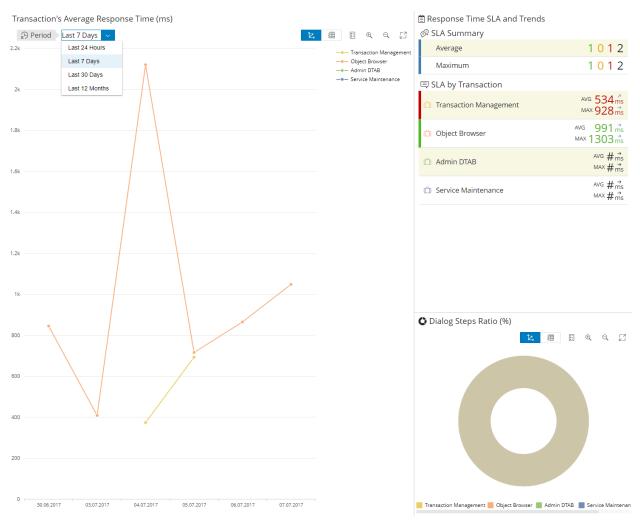
If the difference between yesterday (last hour or last 7 days) and last 8 weeks (12 months) exceeds a specific, configurable threshold (in %) then the orientation of the arrow will change accordingly.



3.9.2 Detail View

The detail view will provide additional information for each transaction:

- Last 24h/Last 7 days/Last 30 Days/Last 12 Months Trend Graph for each transaction
- Pie chart representing within each sector different transactions steps compared with the all the other transactions in the system
- List of Transactions out of SLAs (Green/Yellow/Red/No Data)
- List of all the transactions Trends and specific SLAs (Maximum and Average response time plus trend)

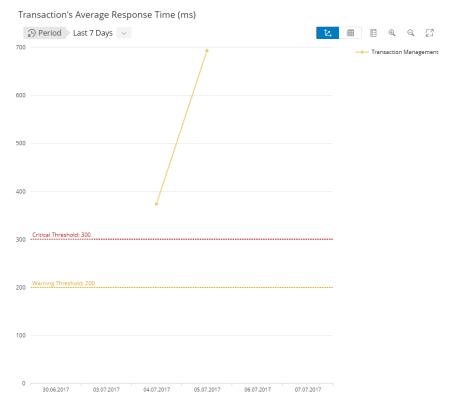


Transactions Performance: Detail View

The data in the Pie Chart, SLA Summary and Transaction Trends is calculated based on the selected period in the trend graph.

The analysis can be focused on a specific transaction by clicking on the name in the Trend Graph legend like in image below. Click the legend again to go back to full view.

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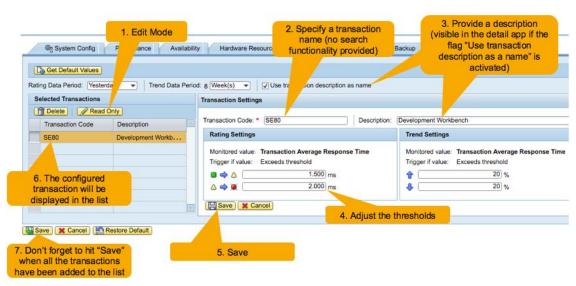


Transactions Performance: Detail View - By Trend

3.9.3 Configuration

The configuration of the transactions performance scenario is quite simple. It is sufficient to select the proper scenario and system in edit mode.

And then add the necessary transaction following the procedure described below.



Transactions Performance - Configuration

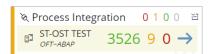
3.10 PI Monitoring

The PI Scenario in the Tactical Dashboard allows the monitoring of PI messages (errors, scheduled and successful) on a PI domain.

- The Error Status groups messages of a particular PI domain which are in any error status
- The Scheduled Status consider messages of a particular PI domain in any non-final status, including currently scheduled, waiting, pending, or currently processed
 - o e.g. if the adapter engine is consuming all the threads, the messages are hanging causing a backlog situation

3.10.1 Tile and Main View

The main tile shows the successful messages in green and the number of scheduled and error messages in yellow and red. The trend compares the number of errors between yesterday and the average in the past 7 days.



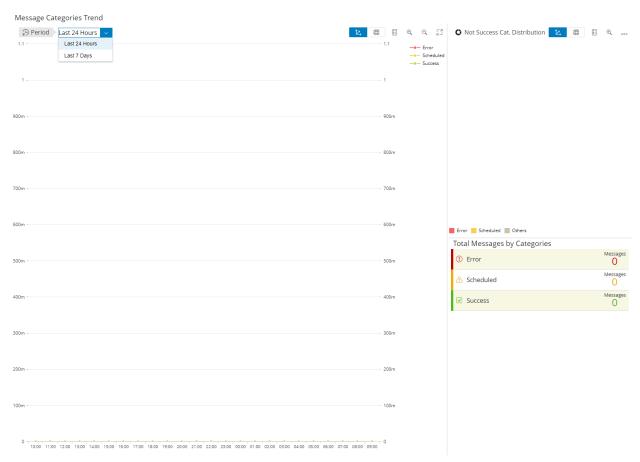
PI Monitoring: Tile and Main View

3.10.2 Detail View

Like any other scenario in the Tactical Dashboard, the user can access a more detailed view by clicking on the system entry in the Main Tile.

The detailed view will provide additional information:

- Last 24h*/Last 7 days Trend Graph for messages in error, in status scheduled, and total number of successful messages.
- Trend summary for the different categories of message.
- Pie chart showing the share of message in error and scheduled.



PI Monitoring: Detail View

3.10.3 Configuration

The configuration of the PI Monitor scenario relies on the setup of the standard Solution Manager PI Monitoring application in the "Integration Monitoring" area of Technical Monitoring (for the details on the configuration activities refer to the official TechMon Wiki, for Solution Manager 7.1

https://wiki.scn.sap.com/wiki/display/TechOps/Central+PI+Monitoring+with+SAP+Solution+Manager+7.1, and for Solution Manager 7.2 https://wiki.scn.sap.com/wiki/display/TechOps/Process+Integration+Monitoring).

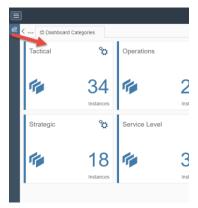
4 Dashboard

Once the configuration has been done, you can access the dashboard to see what you have configured. To access the dashboard based on the view, please follow section 4.1.

4.1 Access Dashboard

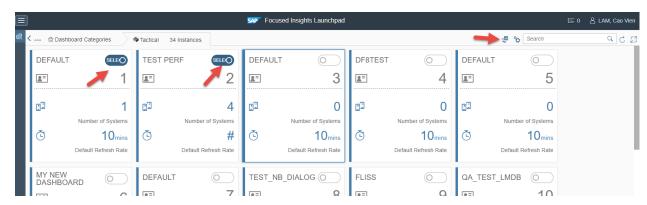
You can access it by using Focused Insights Launchpad as follow:

• Select Tactical tile.



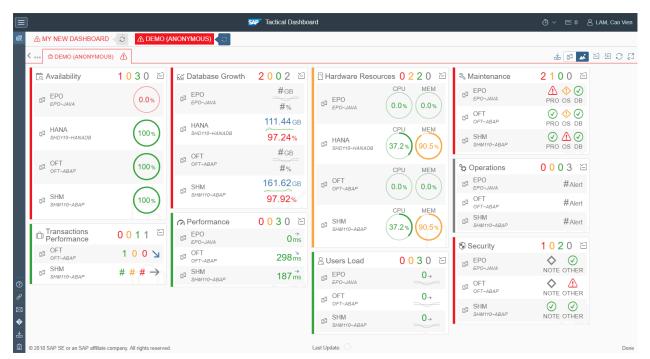
Select Tactical Tile

• Select the instance you want to go to, and select button Go to Dashboard.



Select Tactical Instances to Jump to

Once inside the dashboard with selected instances, you will see as below:



Tactical Dashboard - Instances View

The dashboard is showing each instance in the instance selection header



You can switch between instance by clicking the title of the instance. The default view when you access the dashboard will be Tiles view, with Scenarios perspective. The number of scenarios showing up will be based on the configuration of the instance as shown previously.

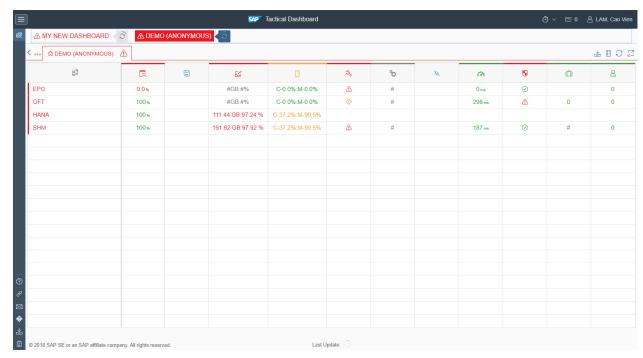
4.2 Dashboard Layout

When you enter the application, the loading screen, where all the initialization is happening, will be the first thing you see.



Tactical Dashboard - Loading Screen

When no error is found in the initialization step, you will enter the dashboard with the provided existing instances.



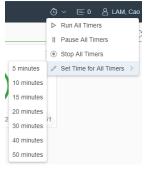
Tactical Dashboard - Tabular View

4.2.1 Header



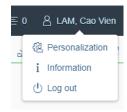
The header is composed of (from left to right):

- Side pane toggle button.
- SAP Logo.
- Dashboard Model Name: Operations Dashboard.
- Instances' timer settings (in case multiple instance is used), which manipulates all instances' timer.



Instances' Timer Settings

- Notification button.
- User Settings button with user name as label. When chosen, it pops up a menu:



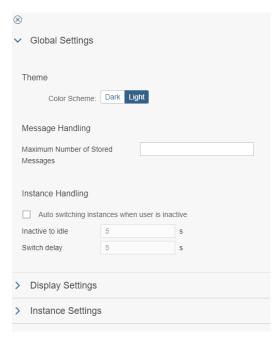
User's Menu

o Choose Information to open Basic Information Dialog.



Basic Information Dialog

- o Choose Log out in case you don't want to work anymore.
- Choose Personalization will open up Personalization pane.
 In this pane, there are 3 groups of settings: Global Settings, Display Settings, and Instance Settings.
 Global Settings



Personalization Pane - Global Settings

You can choose the theme



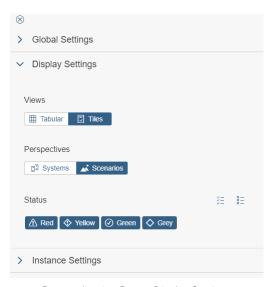
Tactical Dashboard - Dark Theme

- o The maximum number of messages to store in the message dialog.
- o The Auto Switching of Instances feature if checked:
 - By setting the inactive time for the dashboard to determine user is idle to activate the function.
 - And time waiting between switch of instances

Display Settings

You can switch between views (tabular and tiles), and perspectives (systems or scenarios, only available in tiles view).

You can also filter entries in tiles based on statuses.



Personalization Pane - Display Settings

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Instance Settings

You can set individual timer of the instance here. To set time, hover above timer



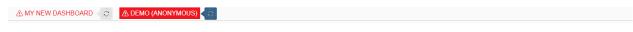
Personalization Pane - Instance Settings



Settings are not persisted as of the time this document is created. It may change in the future where it will be persisted by user. Number of settings may different also in the future.

4.2.2 Instances Selection Header

This header allows you to switch between instances manually.



Instance Selection Header

Each instance will have its own refresh timer, which shows as a circle with refresh icon inside next to the instance name. You can click on the refresh icon to manually refresh the data of the instance. This will not reset the time of the timer. If you want to change the time for a specific instance, you need to select it, and go to Personalization Pane.

4.2.3 The Footer



The footer contains:

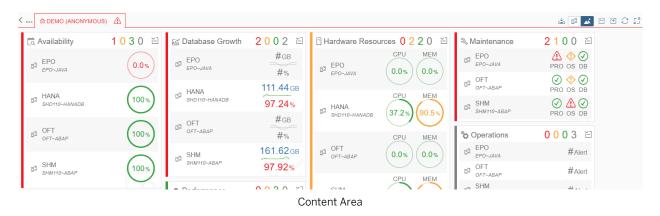
- Copyright in the left area.
- Global latest update of the instance in middle area.
- The background task information in the right area.

4.2.4 The Content Area

The content area is in the middle-center of the dashboard. This is where you see the content of the selected instance.

This area is covered by the navigator which contains:

- The side panes toggle button ≡ .
- The message inbox button $\stackrel{1}{=}$.
- The full screen button which allows you to show only the content area. The previous toggle state of side panes is kept. For example, if they are hidden prior to full screen, when you go back from full screen, they will be hidden.



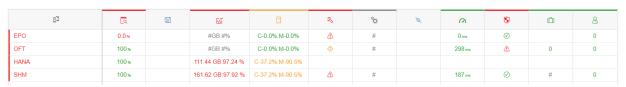
4.3 Content Navigation

In the Tiles view, you can select on the entries of the tile to navigate to the details view of the respected system, and scenario.



Tile View - Click Entry to Navigate

In the Tabular view, you can select the cell to navigate to the details view of the respected system, and scenario.



Tabular View - Click Cell Item to Navigate

While navigating down, the navigator will keep track of where you are, and where you were by navigating items. You can go back 1 level by select the left arrow button. You can also click to any navigating item to go back to that level. In case the screen size is small, so not all the navigating items are shown. You can select the "..." button to open the list of now shown levels.



Navigator - Navigating Items



The image above is from Operations Dashboard model. But the elements of navigation are the same for Tactical Dashboard.



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Click here to enter text.