

WebPal 2.0 – WebPal Viewer

User Guide

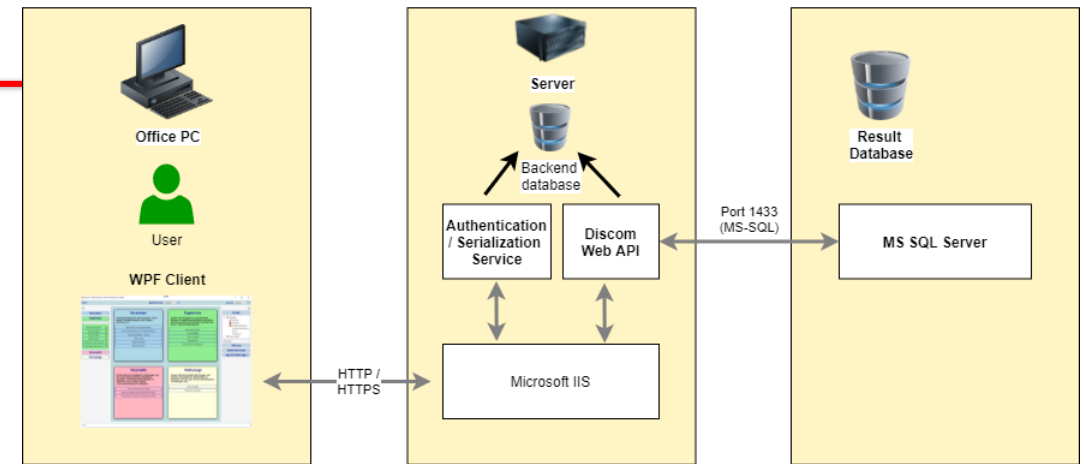
Version 2.3 (2022-10-24)

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I. Introduction

- An overview of WebPal's infrastructure and the single components in it is required in order to understand the WebPal Viewer.
- The WebPal Viewer replaces the Internet Explorer/Silverlight in the new WebPal infrastructure.



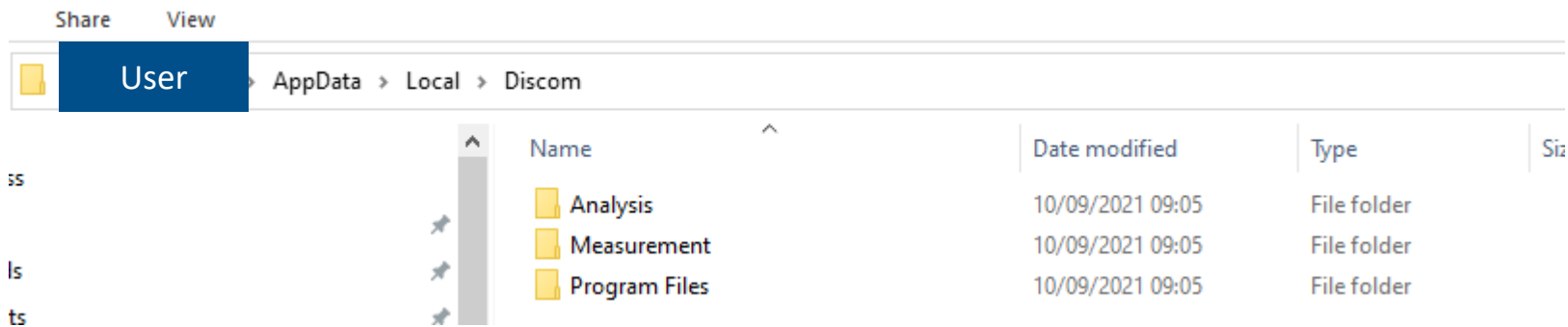
Component	Name	Function
Backend database (SQL Server)	DiscomWebApiBackend	<ul style="list-style-type: none"> • Storage of user requests • Storage of the FactoryModel (formerly AcwProject.xml) • Definition of the PermissionModel in tables
Authentication- and serialization service	Discom.Up.Custodian	<ul style="list-style-type: none"> • Serialization of user requests into the backend database • Provision of an optional authentication service
Data service	Discom.Up.WebApi	<ul style="list-style-type: none"> • Core service: Responsible for the data extraction from the result databases and the archives
Client application	WebPal Viewer	<ul style="list-style-type: none"> • Application on client PCs: Responsible for defining the data request and visualization of the data
Result database	DiscomData_ProdDb	<ul style="list-style-type: none"> • Main database: Responsible for storing meta data, single values and indexing of the archives

II. Installation requirements

- The new client application “WebPal Viewer” is based on .Net Framework 4.7.2
 - ⇒ Support for Windows 7 SP1 and later
 - ⇒ For Windows 7 systems without automatic update, the Framework .NET 4.7.2 might be installed using the Offline Installer: <https://support.microsoft.com/en-us/topic/microsoft-net-framework-4-7-2-offline-installer-for-windows-05a72734-2127-a15d-50cf-daf56d5faec2>
- The new client application “WebPal Viewer” is only available as a 64-bit application
- No admin rights on the client PC are required in order to install the “WebPal Viewer”!

III. Installation via Installer

- Start the installer `WebPal_Viewer_Installer__Rev_xxxxx.exe`
- The installer creates a folder *Discom* in the `...\AppData\Local`-directory of the currently logged in user (and within this folder the following sub folders):

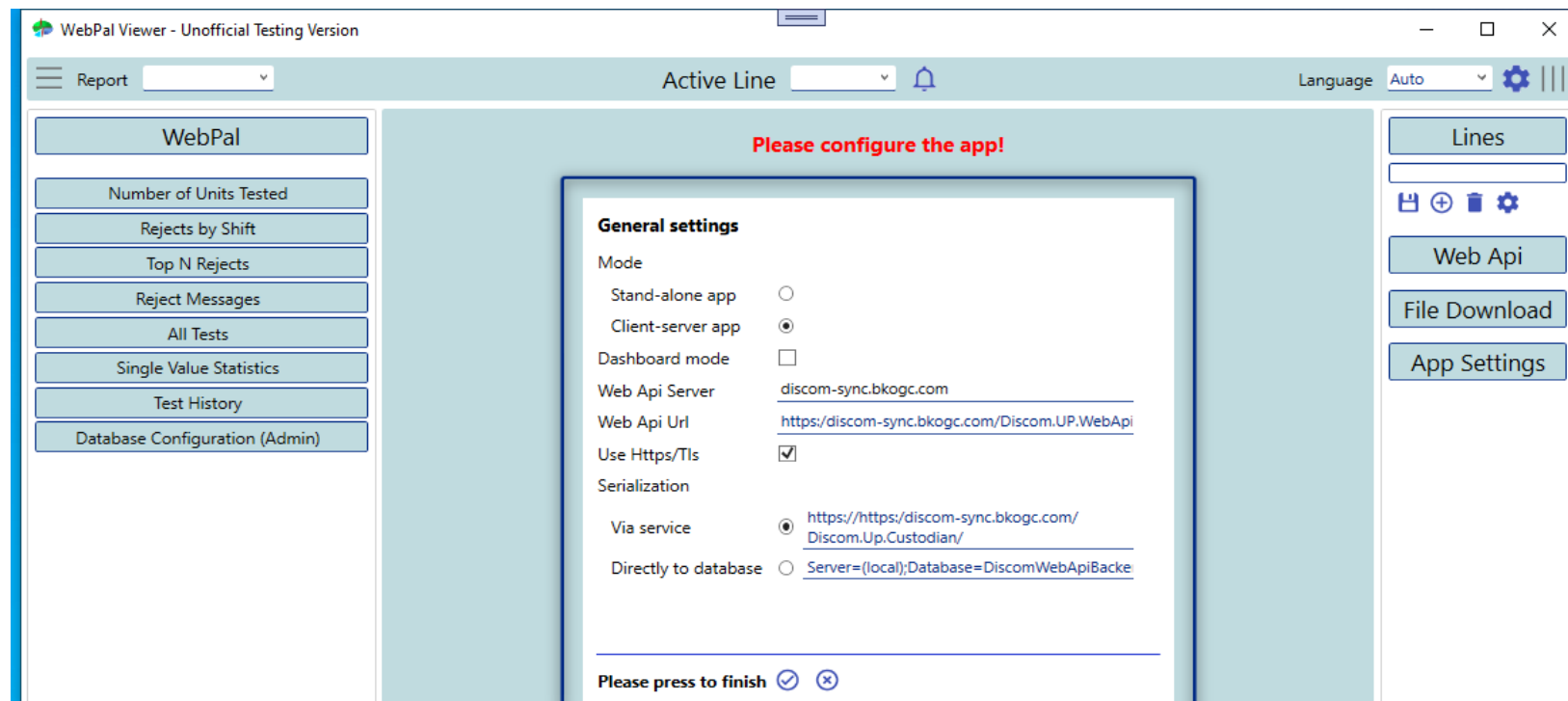


- The configuration files are in the folder `...\Analysis\WebPalViewer` and the program files in the folder `...\Program Files\WebPalViewer`
- Start the app either from the created start menu link or the link within the folder `...\Analysis\WebPalViewer`

IV. Initial configuration

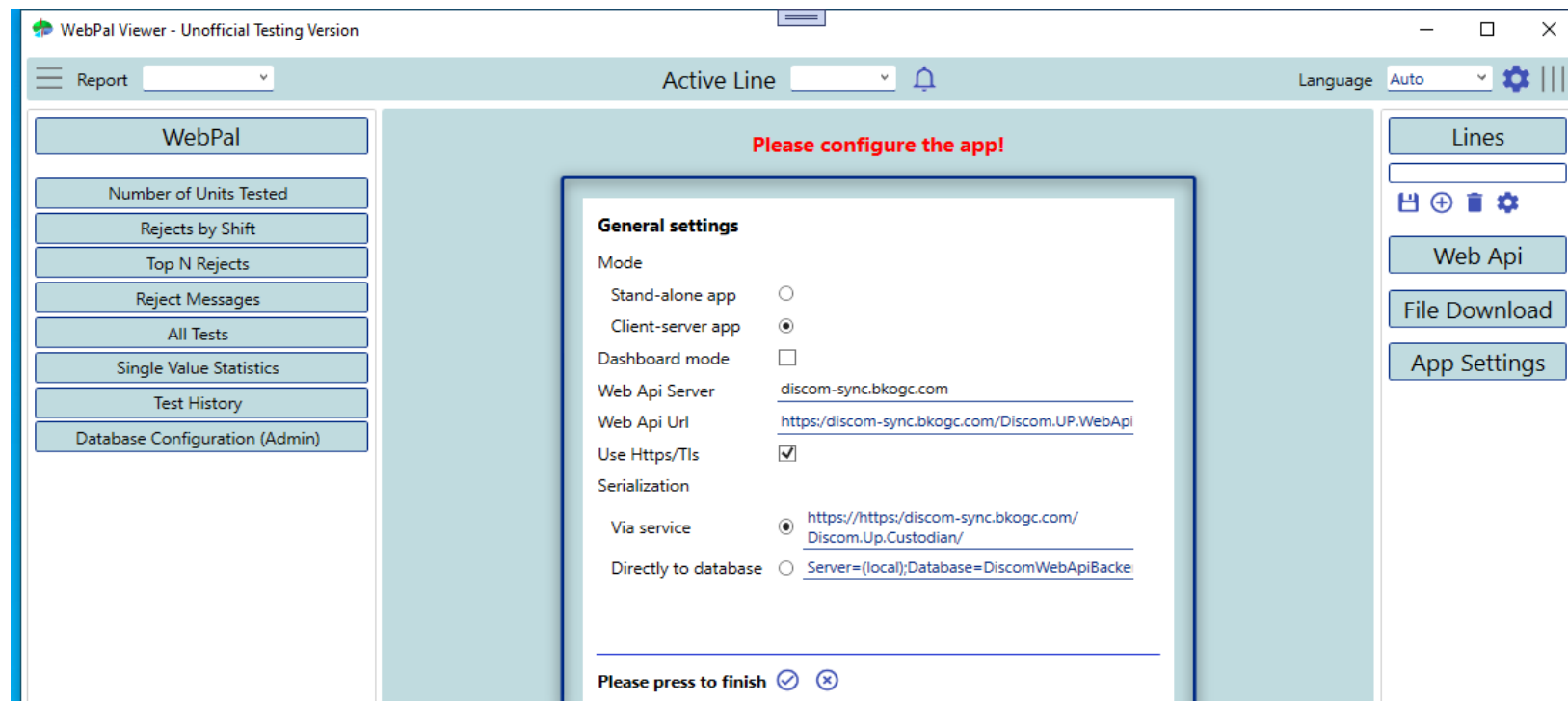
After app start the following configuration menu is displayed

- ⇒ Select the option “Client-server app”, if the WebPal Viewer receives its data from a central web service.
- ⇒ Select the option “Client-server app”, if the WebPal Viewer is installed on a PC which has direct access to the result database(s).



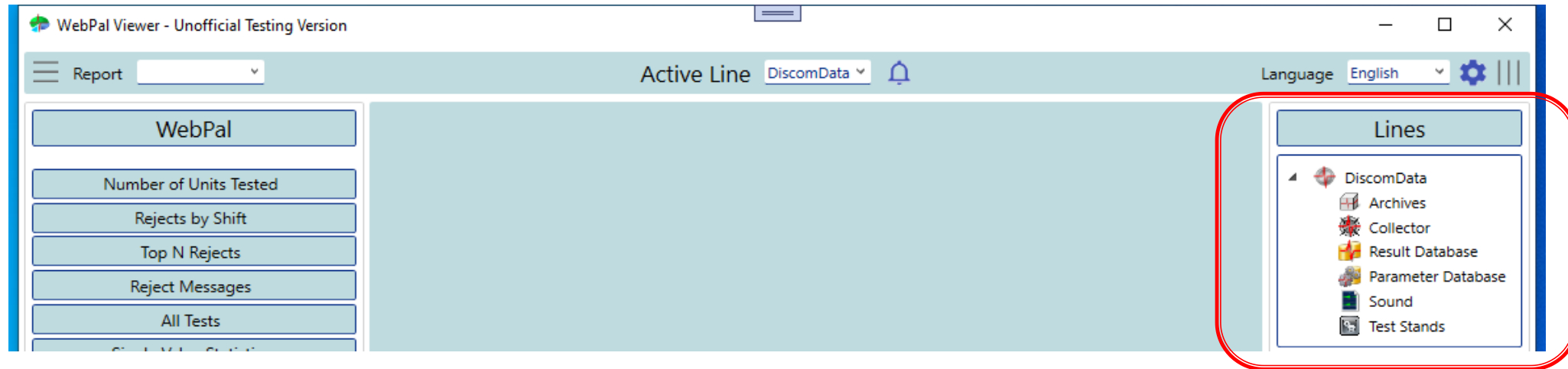
IV. Initial configuration – client-server app

- ⇒ Please replace the name of “Web Api Server” with the name of the server where the new web services are installed.
- ⇒ If the new web services are **not** configured for https communication, then remove the check mark from the check box “Use Https/Tls”.
- ⇒ Finish the configuration with a click on the “Check” button.



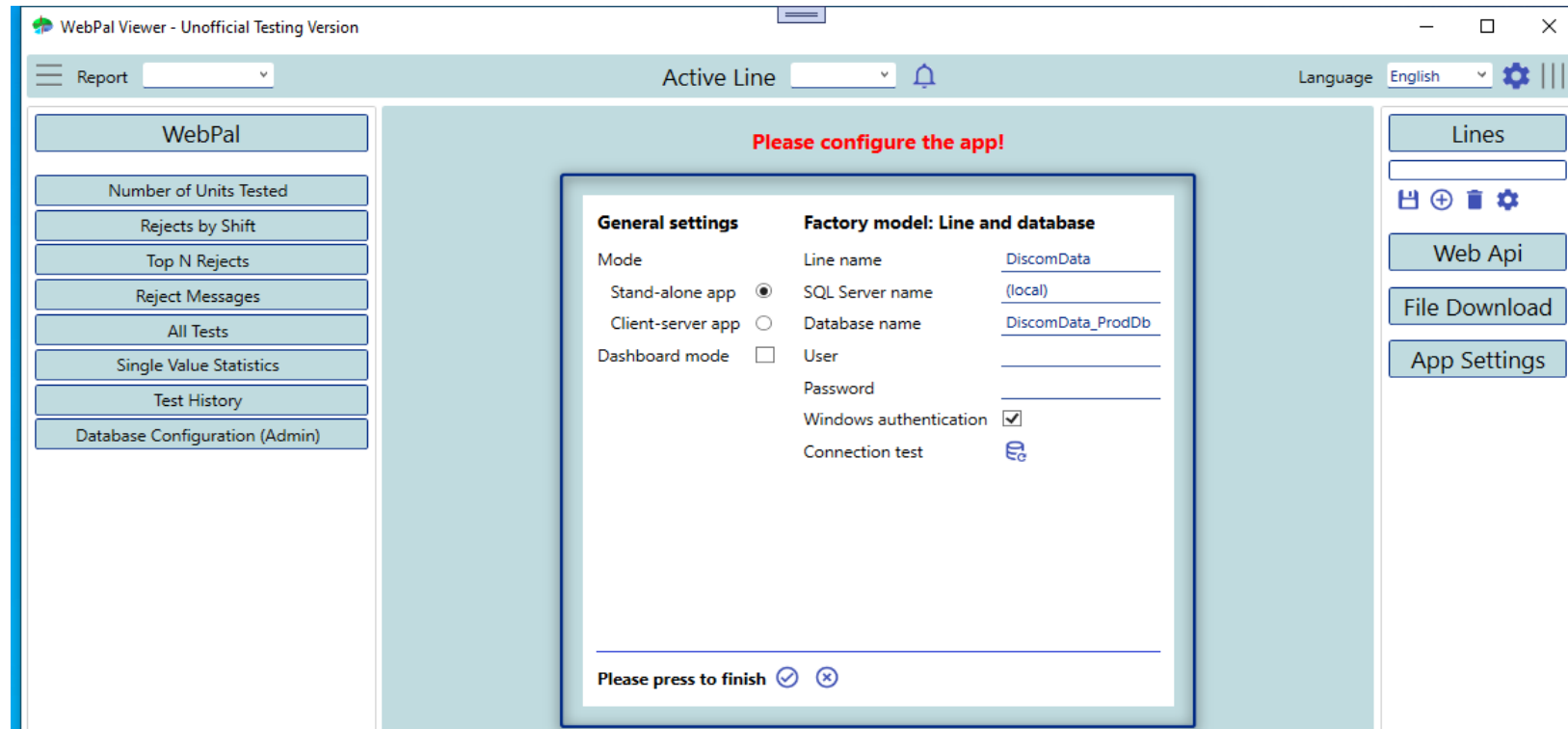
IV. Initial configuration – client-server app

⇒ Unless the web services are configured correctly and available, the available lines will be displayed (see picture).



IV. Initial configuration – stand-alone app

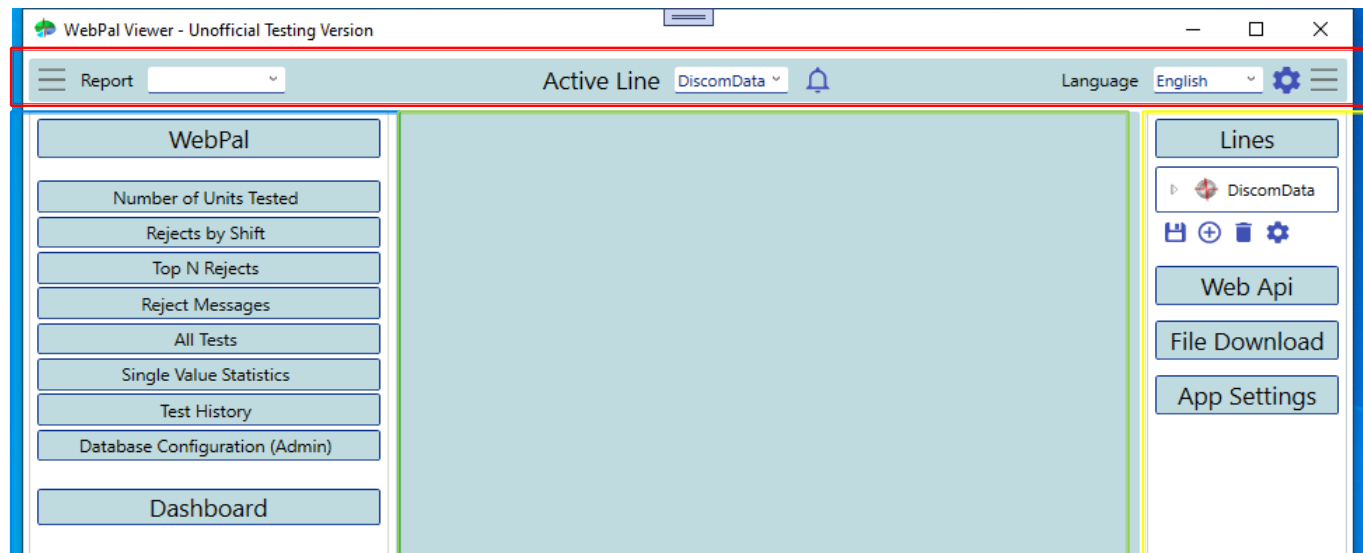
- ⇒ Enter the name of the line with direct database access incl. the connection details.
- ⇒ Test the database connection with a click on “Connction test”.
- ⇒ If the database could be connected, finish the configuration with a click on the “Check” button.



V. Basic design and navigation

The interface of the WebPal Viewer consists of 4 areas:

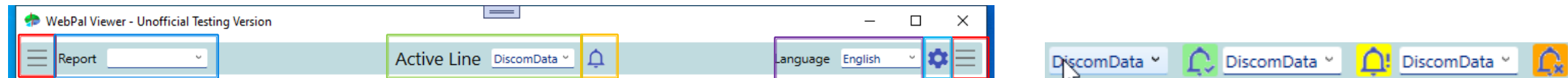
- The action menu (red frame)
- The report menu (blue frame)
- The display area (green frame)
- The settings area (yellow frame)



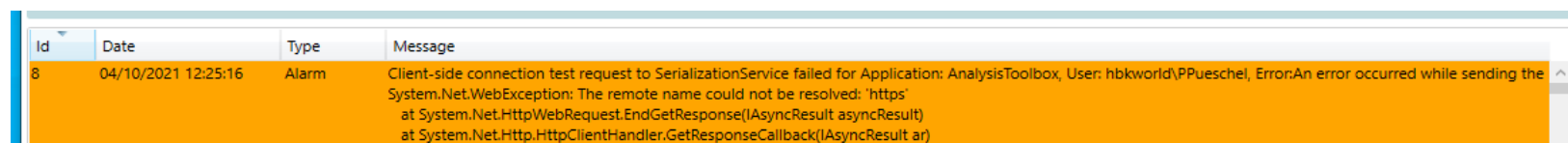
V. Basic design and navigation

The action menu has the following controls:

- Buttons to expand/collapse the report area and the settings area (red frame).
- A selection of WebPal reports (blue frame)
- The selection of the active line (green frame)
- The message bell (orange frame)
- The language selection (purple frame)
- The settings selection (light blue frame)



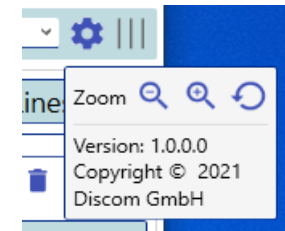
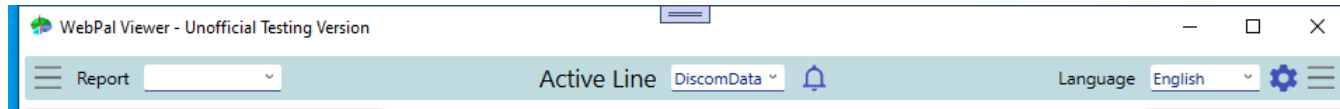
- The message bell informs by background and appearance what kind of messages have been triggered. Clicking the bell opens the message log at the bottom of the app.



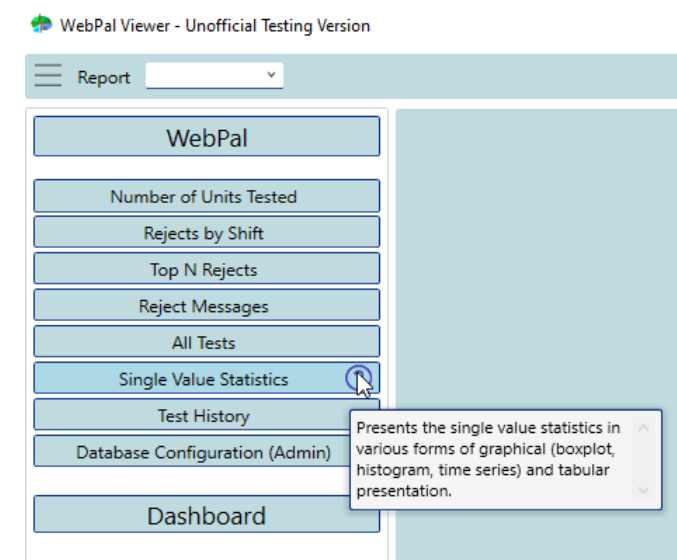
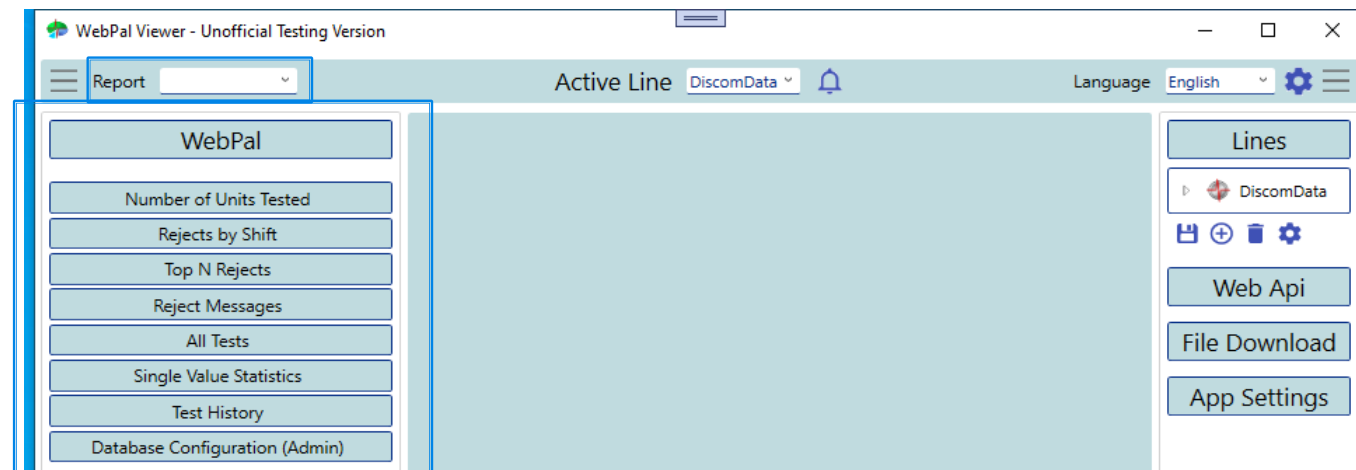
Id	Date	Type	Message
8	04/10/2021 12:25:16	Alarm	Client-side connection test request to SerializationService failed for Application: AnalysisToolbox, User: hbkworld\PPueschel, Error:An error occurred while sending the System.Net.WebException: The remote name could not be resolved: 'https' at System.Net.HttpWebRequest.EndGetResponse(IAsyncResult asyncResult) at System.Net.Http.HttpClientHandler.GetResponseCallback(IAsyncResult ar)

V. Basic design and navigation

- The settings selection informs about the present version and has settings that can be used to enlarge or reduce the content of the app (fonts, controls, etc.).

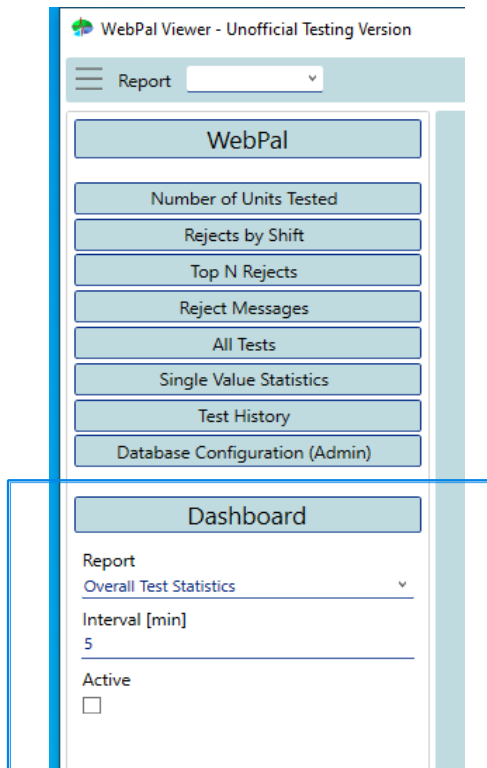


- The WebPal reports are called up either by selection via the action menu or the report area. Important: For a report to be called up, an active line must be selected.



V. Basic design and navigation

- In the report area, there is also the "Dashboard" area. Here you can set the automatic calling of a selected report in a defined interval.
- The lower limit for the interval is set to 2 minutes. The last saved (query) settings of the selected report are always called up.

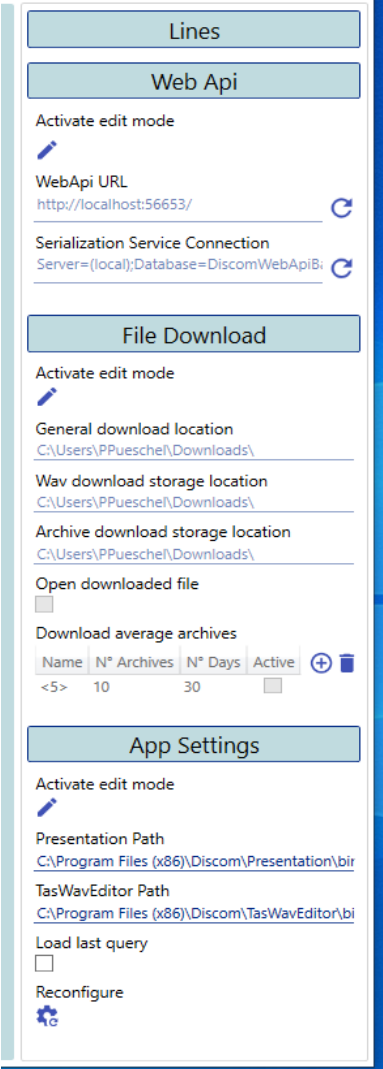


- **Important:** It should be noted that the regular call of certain reports (error reports, single number statistics) in short intervals can lead to increased load on the web services and the associated database servers, depending on the query settings (e.g. time period).

V. Basic design and navigation

In the settings area there are the following areas:

- Lines: Description of available lines including all elements (archives, collector, results database, wav, test benches, etc.). Functions for editing the lines as well as uploading a report logo to the backend database.
- WebApi: URL of the new web services (WebApi and serialization service) with connection test option
- File Download: Settings for file download locations (general, archives, wav files), opening downloaded files, and additional downloading of mean archives
- App settings: Settings for the paths to the "Presentation" and "TasWavEditor" programs, loading the last query when calling up the report and calling up the configuration view again.



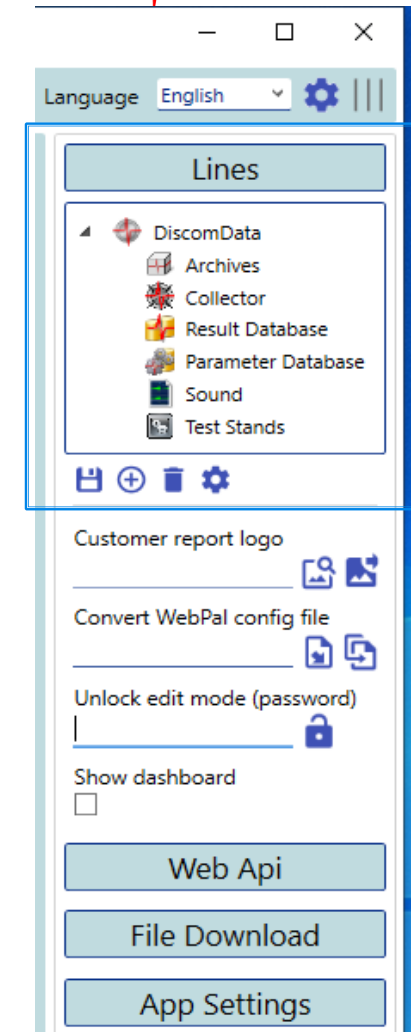
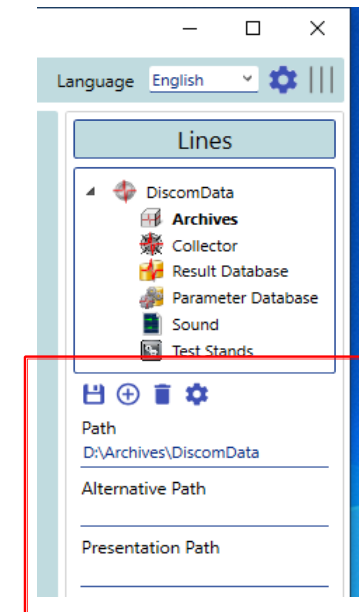
The screenshot displays the DISCOM settings interface, organized into four main sections:

- Lines:** A header section for line configuration.
- Web Api:** Contains an "Activate edit mode" button, a "WebApi URL" field with the value `http://localhost:56653/`, and a "Serialization Service Connection" field with the value `Server=(local);Database=DiscomWebApiB;`.
- File Download:** Includes an "Activate edit mode" button, a "General download location" field with the path `C:\Users\PPuesche\Downloads\`, a "Wav download storage location" field with the path `C:\Users\PPuesche\Downloads\`, and an "Archive download storage location" field with the path `C:\Users\PPuesche\Downloads\`. It also features a checkbox for "Open downloaded file" and a "Download average archives" table with columns for Name, N° Archives, N° Days, and Active. The table shows a value of 10 for N° Archives and 30 for N° Days.
- App Settings:** Includes an "Activate edit mode" button, a "Presentation Path" field with the path `C:\Program Files (x86)\Discom\Presentation\bi`, a "TasWavEditor Path" field with the path `C:\Program Files (x86)\Discom\TasWavEditor\bi`, a checkbox for "Load last query", and a "Reconfigure" button.

V. Basic design and navigation

- In the settings area for the lines there is the line overview incl. the buttons for saving, adding a line, removing a line, further settings
- Further settings: Here a client report logo can be uploaded to the backend database, an existing ACWProject.xml (config file of the old WebPal) can be converted to the line model, as well as the editing mode for the lines can be unlocked with a password (in the mode "Client-Server-App" the editing of the lines is disabled by default).

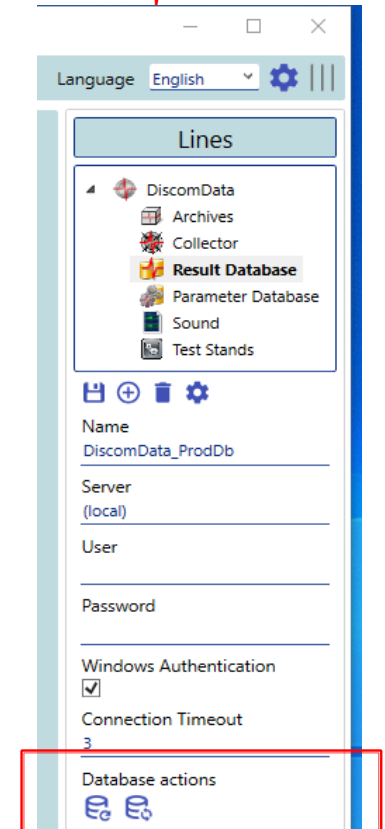
- If an element is selected in the line view, the respective properties of the element appear in the area below the line view (see red frame).
- The properties mainly refer to the access to the resources "Results database", "Archives", "Wav files" (storage locations, access data, etc.).



V. Basic design and navigation



- In the properties area of the result database, in addition to the usual connection data (name of the database, name of the SQL Server instance, etc.), there are also two buttons for the connection test to the database and for updating the database.
- The connection test option is available by default. Updating the database, on the other hand, is available only after unlocking it with a password (in the "Other settings" section).
- **Important:** The new WebPal requires a number of new queries and functions stored in the database. The changes are stored in a SQL script, which can be found in the program directory and can be executed either manually in the SQL Server Management Studio or by the respective function in the WebPal Viewer. For databases on servers that have already been shipped with the new WebPal, no update is required.



VI. Report query

The display area for the reports is characterized by the following sub-areas:

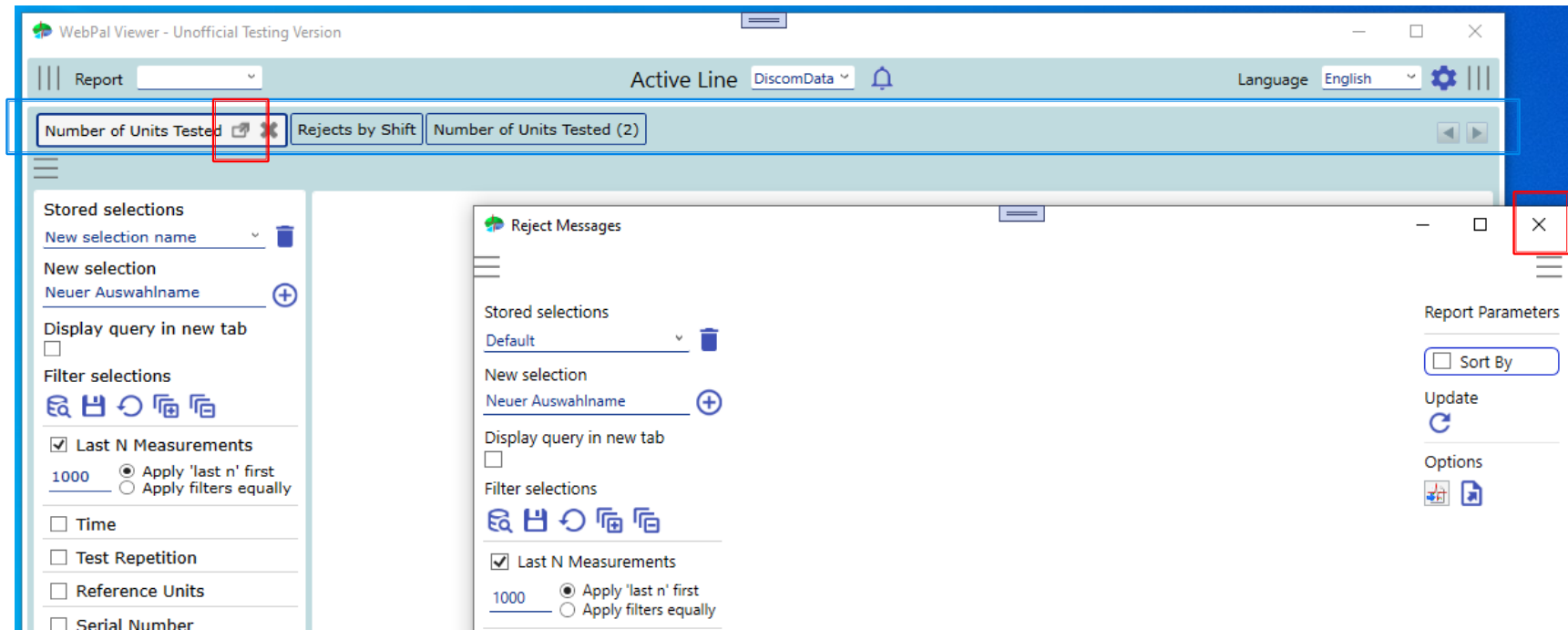
- Tab area (blue frame): reports can be displayed in parallel tabs or outside the main window.
- Query area (red frame): selections for data query (storage of multiple selections)
- Report display (green frame): display of ReportViewer reports known from WebPal
- Report parameters (yellow frame): Report specific parameters with update

The screenshot shows the 'Single Value Statistics' application interface. The window title bar is 'Single Value Statistics'. The interface is divided into several sub-areas:

- Tab area (blue frame):** The top bar contains the window title and navigation controls.
- Query area (red frame):** The left sidebar contains 'Stored selections' (Default), 'New selection' (Neuer Auswahlname), 'Display query in new tab' (checkbox), 'Filter selections' (icons), and 'Last N Measurements' (checkbox, 1000, radio buttons for 'Apply last n first' and 'Apply filters equally').
- Report display (green frame):** The main central area contains a search bar with 'Suchen | Weiter' and a 'Seitenbreite' dropdown.
- Report parameters (yellow frame):** The right sidebar contains 'Sub Report' (Tabelle), 'Report Parameters', 'Sort By' (checkbox), 'Criteria' (Base Type), 'Direction' (Ascending), and 'Update' (refresh icon).

VI. Report query

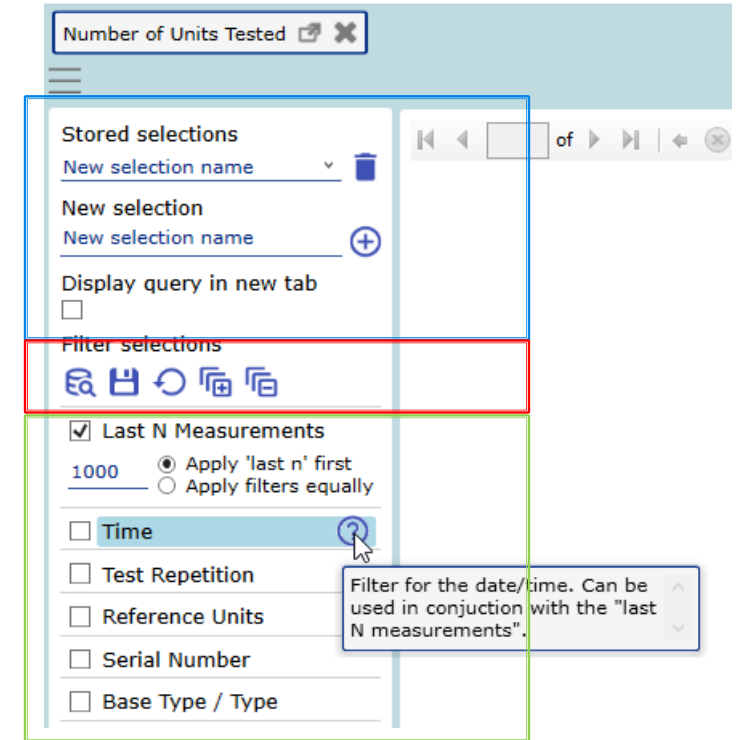
- Tab area: Reports can be displayed in parallel tabs or outside the main window.
- The report can be docked out by clicking on the red framed symbol in the tab. The report can be docked in again by clicking on the "Close" symbol of the window.
- If a report is called several times, the tabs get consecutive numbers (see picture).



VI. Report query

The query area is the area where the data query for the particular report is specified. An overview of the individual areas:

- Selection area (blue frame): list of saved selections, delete a selection, add a new selection.
- Action area (red frame): Submit query, save selection, reset selection to default values, expand selection boxes, collapse selection boxes
- Filter area (green frame): this is where the filter selections specific to each report are located. This includes time-based filters ("Time", "Last N measurements", "Shift times") and non-time-based filters (e.g. "Type", "Test bench", "Serial number").
- Each filter box contains an info icon in its button which, when clicked, briefly and succinctly indicates how the corresponding filter works.

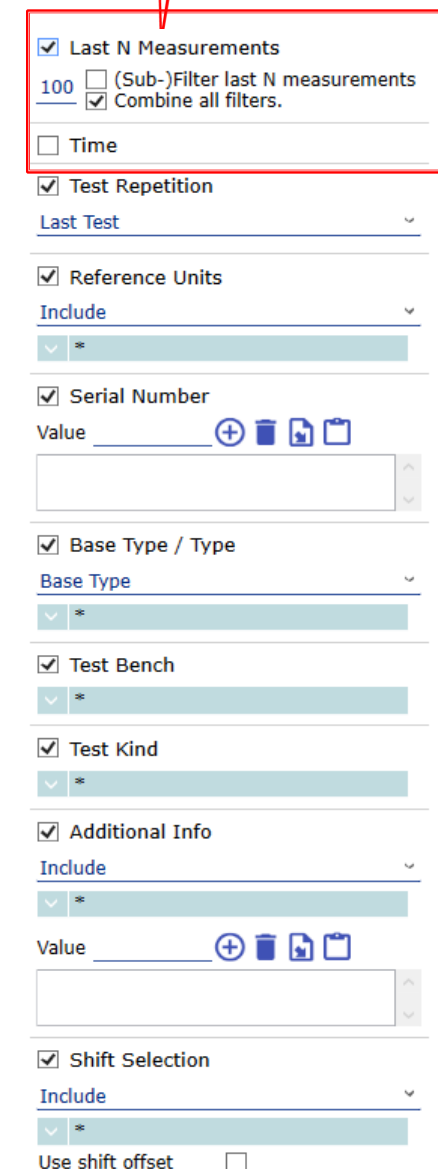


VI. Report query

General: Each filter can be activated/deactivated via the "Check-Box". If a filter is disabled, it will not be included in the query. Each filter can be checked/unchecked via its title button. The filters are always combined with an "AND" link to a query.

The filters at a glance:

- "Last N measurements": Query the last n measurements. If the option "(Sub-)Filter last N measurements" is set, the specified last n measurements are queried first and then all other non-time-based filters are applied to these n measurements. The option "Combine all filters" ensures that the filters are combined, e.g. the last n measurements of test bench 1 and type B. The filter can be combined with the "Time" filter. In this case, the last n measurements before the end date of the "Time" selection are queried.
- "Time": A selection field offers a variety of predefined time periods (e.g. last week, last quarter, etc.). The selection changes the start and end date accordingly. Manual adjustment of the date or time is possible regardless of the selected time period. The filter can be combined with the "Last N measurements" filter.



Last N Measurements
100 (Sub-)Filter last N measurements
 Combine all filters

Time

Test Repetition
Last Test

Reference Units
Include

Serial Number
Value

Base Type / Type
Base Type

Test Bench

Test Kind

Additional Info
Include

Shift Selection
Include
Use shift offset

VI. Report query

- "Test repetitions": Since DUTs (unique serial number) are sometimes measured several times, these test repetitions can be filtered. The options are "first test", "last test", "all tests", "current rejects", "direct test".
- "Reference units": User-defined lists of reference units can be created in the results database (by type and by serial number). The filter defines whether these reference units should be included or excluded in the query.
- "Serial number": filter by one or more serial numbers. A list of serial numbers can be imported from a CSV file or from the cache (clipboard). Using the % character, the occurrence of a specific character sequence can be filtered (e.g. a %123 filters all serial numbers ending with 123). If the option 'parse serial for number' is checked, the serial numbers specified will be parsed according to the start and length parameters. With this option, a value range (e.g. 10-20) can be added (using the separator '-').
- "Base type/type": after selecting the base, the combined filter will return the respective list of types/base types in the selection field.
- "Test bench": Filter by test bench.



Last N Measurements
100 (Sub-)Filter last N measurements
 Combine all filters.

Time

Test Repetition
Last Test

Reference Units
Include

Serial Number
Value
 Exclude
200-500

Parse serial for number
Start Length

Base Type / Type

Test Bench

Test Kind

Additional Info

Shift Selection
Include

Use shift offset

VI. Report query

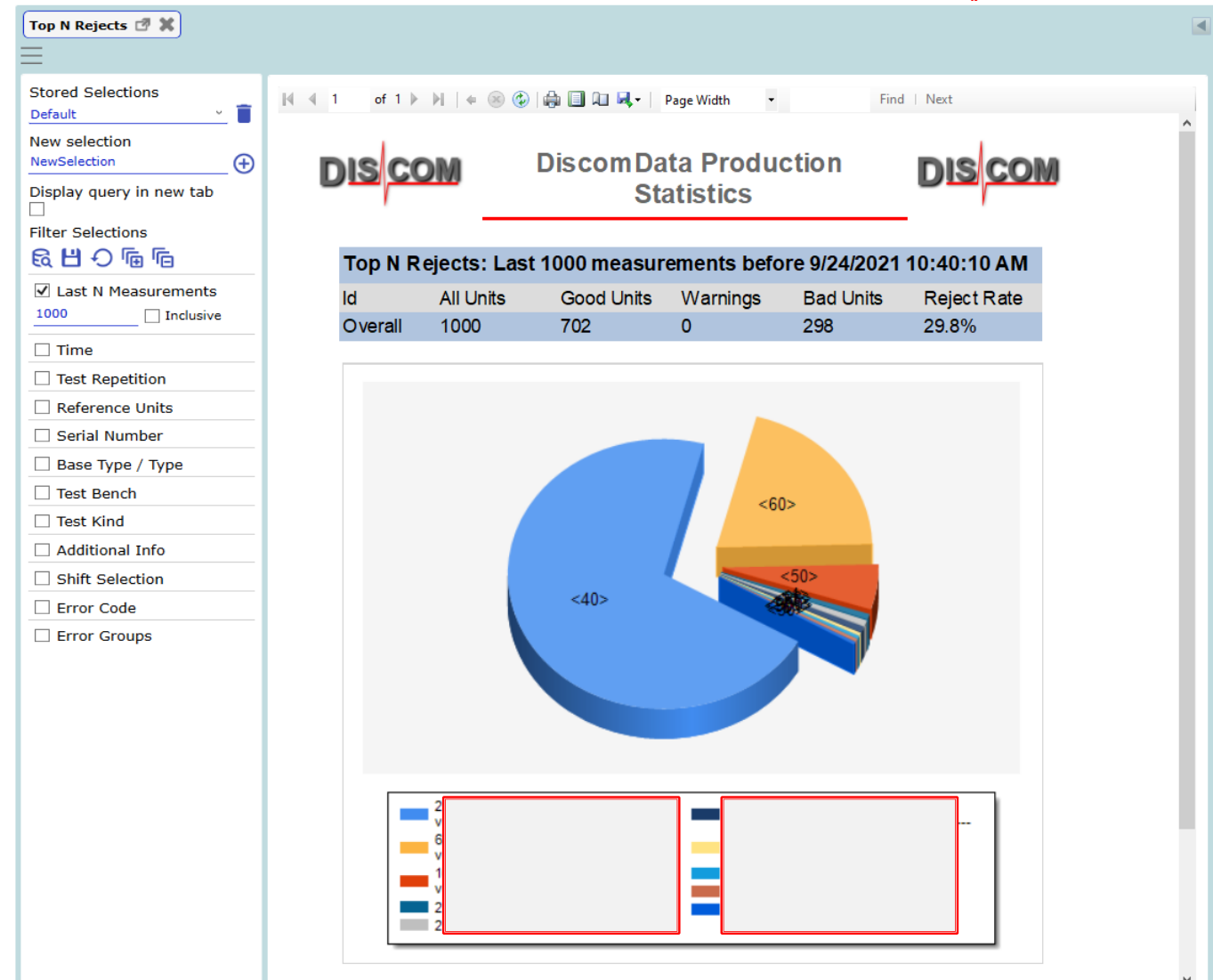


- "Test kind": The kind of test can be defined in the TasAlyser (or set by the test bench). This info is stored in the archives or the results database and can be filtered accordingly.
- "Additional info": In the TasAlyser, any additional info can be defined (or set by the test bench). These are "key-value" pairs that are associated with a measurement and stored in the archives or the results database. In the filter, first select the keys and then specify a list of values to filter by. The list can be imported from a CSV file or from the cache (clipboard). In addition, it is possible to define whether the list should be excluded or included in the query.
- "Shift selection": Line-specific shift times can be defined in the results database. The filter allows filtering according to these shift times. In addition, the option "Shift times offset" can be used (if a shift runs over the day change, e.g. from 22:00 of the previous day to 06:00 of today, the offset corresponds to the number of hours from the previous day to midnight). This offset is then applied to the current time selection (i.e. start and end dates are shifted accordingly by this offset). Only meaningful for the "Today", "Yesterday", "Day" time options.

A screenshot of the DISCOM filter configuration interface. The interface is a vertical list of filter settings. Each setting has a checkbox on the left, a dropdown menu, and a text input field. The settings are: "Last N Measurements" (checked, value 100, with sub-options for filtering and combining filters), "Time" (unchecked), "Test Repetition" (checked, dropdown "Last Test"), "Reference Units" (checked, dropdown "Include", text input "*"), "Serial Number" (checked, dropdown "Value", text input, and icons for adding, deleting, and importing), "Base Type / Type" (checked, dropdown "Base Type", text input "*"), "Test Bench" (checked, dropdown "Value", text input "*"), "Test Kind" (checked, dropdown "Value", text input "*"), "Additional Info" (checked, dropdown "Include", text input, and icons for adding, deleting, and importing), and "Shift Selection" (checked, dropdown "Include", text input, and a "Use shift offset" checkbox). The "Additional Info" and "Shift Selection" sections are highlighted with a red border.

VI. Report visualization

- The report display in WebPal Viewer is analogous to the old WebPal based on Microsoft's ReportViewer.
- The functionality (export and printing of the report, zoom, etc.) and layout have therefore remained the same.
- The main difference is that the reports are now generated client-side by the WebPal Viewer. This relieves the web server and has the advantage that the reports can be updated - without a new data request to the server (e.g. changed axis scaling).
- The "Update" button is located for selected reports in the "Report parameters" area (see page [17](#)).



VII. Report overview: Number of Units Tested



- The report contains an overview of the OK/NOK numbers or the NOK rate. The text of the NOK rate (see yellow frame) links the "Top N Rejects" report, i.e. a click on the NOK rate evokes the "Top N Rejects" report, - parameterized with the base type/test bench combination of the clicked NOK rate.

WebPal Viewer - Unofficial Testing Version

Report: Number of Units Tested

Active Line: DiscomData

Language: English

DiscomData Production Statistics

Test Result Overview: Last 1000 measurements before 10/5/2021 11:54:42 AM

Detail	Total										
	Base Type	N	%	N	%	N	%	N	%	N	%
Total		1000	29.8%	296	29.4%	230	30.4%	257	27.2%	217	32.7%
		1000	29.8%	296	29.4%	230	30.4%	257	27.2%	217	32.7%

Report Filter | Setting

VII. Report overview: Rejects by Shift

- The report contains an overview of the NOK numbers or the NOK rate, - broken down by shift time, base type/type and error text. In addition to the general filters, the report allows filtering by error code and error group.
- In addition, the report contains an overview of the overall statistics for the selected time period.

WebPal Viewer - Unofficial Testing Version

Report Active Line DiscomData Language English

Rejects by Shift

Stored selections: Default

Filter selections:

- Last N Measurements: 1000 (Apply 'last n' first)
- Time
- Test Repetition
- Reference Units
- Serial Number
- Base Type / Type
- Test Bench
- Test Kind

DiscomData Production Statistics

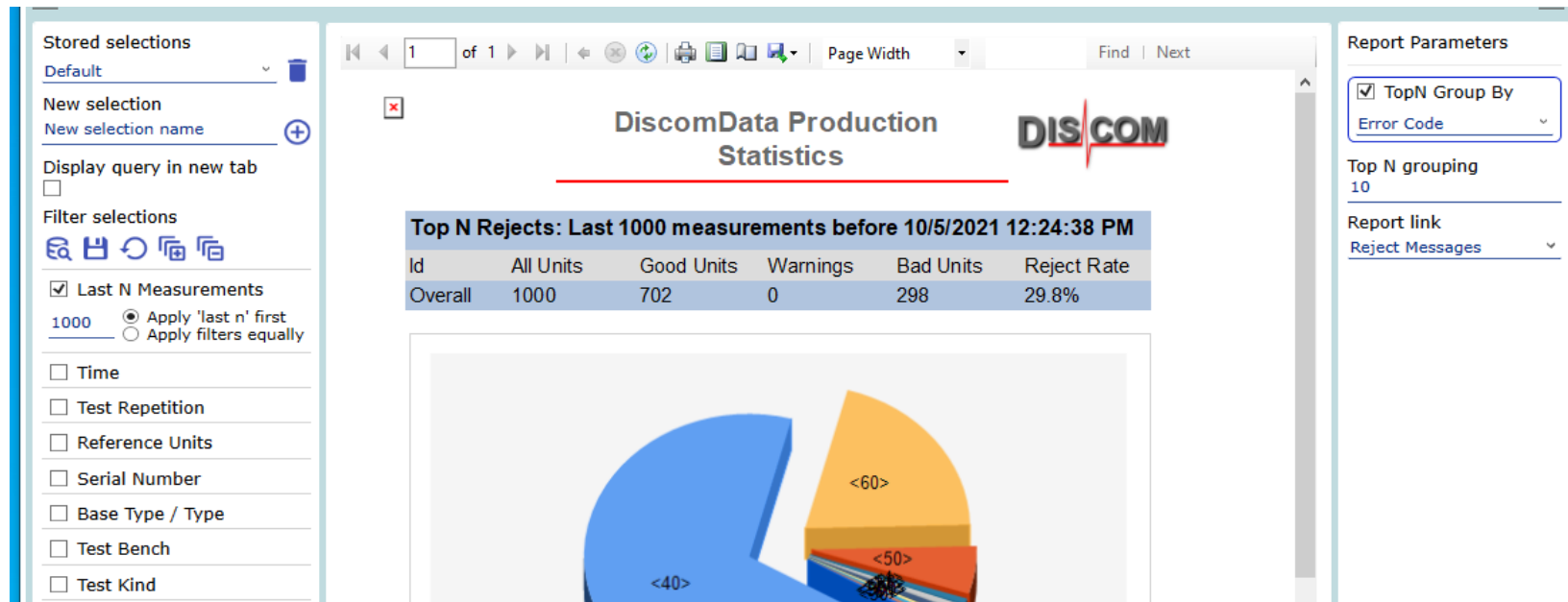
Shift Rejects: Last 1000 measurements before 10/5/2021 11:55:20 AM

Id	All Units	Good Units	Warnings	Bad Units	Reject Rate
Overall	1000	702	0	298	29.8%

Reject Count	Error Message	Base Type
Morning		
153		
99		
35		

VII. Report overview: Top N Rejects

- The report contains an overview of the distribution of errors, - grouped by error code, base type/type, test bench, etc. By default, the distribution by error code is set. In addition, the "Top N" can be set. In addition to the general filters, the report allows filtering by error code and error group.
- A click on a pie slice links the "Reject Messages" report (error code grouping) or the top N Rejects (grouping by base type/type, test bench, etc.), - parameterized with the error code or the group element of the clicked pie slice (e.g. test stand A).



The screenshot displays the "DiscomData Production Statistics" report interface. The main content area shows a table titled "Top N Rejects: Last 1000 measurements before 10/5/2021 12:24:38 PM". The table has the following data:

Id	All Units	Good Units	Warnings	Bad Units	Reject Rate
Overall	1000	702	0	298	29.8%

Below the table is a 3D pie chart showing the distribution of errors. The largest slice is blue and labeled "<40>". Other slices are yellow and orange, labeled "<60>" and "<50>".

The interface includes a left sidebar with "Stored selections" (Default), "New selection" (New selection name), and "Filter selections" (Last N Measurements, Time, Test Repetition, Reference Units, Serial Number, Base Type / Type, Test Bench, Test Kind). The "Report Parameters" panel on the right shows "TopN Group By" set to "Error Code", "Top N grouping" set to 10, and "Report link" set to "Reject Messages".

VII. Report overview: Reject Messages

- The report lists the measurements with errors or warnings including the detailed information of the errors/warnings. In addition to the general filters, the report allows filtering by error code, error sequence and error group.
- The report allows dynamic sorting and exporting as a CSV file or as a config file for the Presentation (“Report parameters” section).

The screenshot displays the 'DiscomData Production Statistics' interface. The main content area shows a 'Reject Report: Last 1000 measurements before 10/5/2021 12:24:11 PM'. The report is organized into three sections, each corresponding to a different instrument ID: 5792140312, 5805140312, and 5802140312. Each section contains a table of measurements with columns for Code, Nr, Mode, Instrument, Location, Param, Channel, Pos., Value, Limit, and U. The first section shows a single measurement with a '1/1 NOK' status. The second section shows three measurements, all with '1/1 NOK' status. The third section shows a single measurement with a '1/1 NOK' status. The interface also includes a left sidebar with filter selections (e.g., Last N Measurements, Time, Test Repetition) and a right sidebar with report parameters (e.g., Sort By, Criteria, Direction).

Code	Nr	Mode	Instrument	Location	Param	Channel	Pos.	Value	Limit	U
40	0		5792140312				184.0	82.41	76.49	-
68	0		5805140312				224.0	87.33	84.00	-
68	1						224.0	88.12	84.00	-
60	2						224.0	92.44	91.97	-
			5802140312							

VII. Report overview: Reject Messages

In addition, the report contains a number of links:

- Click on the test bench name: Download of the corresponding archive file.
- Click on the error code: Calling up the single value statistics report (time series) - parameterized with the measured variable of the error.
- Click on the serial number: Calling up the "All tests" report - parameterized with the serial number.
- Click on the "Download Wav file" label: Download of the corresponding Wav file.
- Click on the "Value" field: Calling up the "All measured values" report for all measurements of the serial number.
- Click on the colored field of the measurement repetitions (e.g. 1/1 NOK): Calling up the "All measurement types" report for this measurement.

The screenshot displays a software interface for viewing measurement results. On the left, there is a 'Filter-Auswählen' (Filter Selection) panel with several options: 'Letzte N Messungen' (checked), 'Zeit', 'Messwiederholungen', 'Referenzeinheiten', 'Seriennummer', 'Basistyp / Typ', 'Prüfstand', and 'Art der Prüfung'. The main area shows a table titled 'Fernbericht: Letzte 1000 Messungen vor 03.10.2021 11:07:27'. The table has columns for 'Code', 'Nr', 'Pr.Zust', 'Instr.', 'Ort', 'Param.', 'Kanal', 'Pos.', 'Wert', and 'Grenze E'. Three rows of data are visible, each with a red box highlighting the 'Pr.Zust' and 'Instr.' columns. The first row shows '3-S' and '5792140312' with a '1/1 NOK' status. The second row shows '3-S', '4-S', and '5-S' for '5805140312' with a '1/1 NOK' status. The third row shows '3-S' and '5802140312' with a '1/1 NOK' status. A sidebar on the right contains an 'Optionen' (Options) menu with icons for print and download.

VII. Report overview: All Tests

- The report lists all measurements including the detailed information of potential errors/warnings. In addition to the general filters, the report allows filtering by error code, error sequence and error group.
- The report allows dynamic sorting and exporting as a CSV file or as a config file for the Presentation (“Report parameters” section).

ID	Date/Time	Status
5721140312	12/3/2021 1:15 PM	1/1 OK
5784140312	12/3/2021 1:12 PM	1/1 OK
5795140312	12/3/2021 1:12 PM	1/1 OK
5781140312	12/3/2021 1:11 PM	1/1 OK
5772140312	12/3/2021 1:10 PM	1/1 OK

VII. Report overview: Single Value Statistics (Table)



- The report lists all measurement results (result, value, limit) for the selected measurement variables. In addition to the general filters, the report allows filtering by instrument, instrument parameter, mode, location, instance (channel and signal).
- The report allows dynamic sorting and exporting as a CSV file (Report parameters section).

WebPal Viewer - Unofficial Testing Version

Report Active Line DiscomData Language English

Single Value Statistics

Stored selections: Default

Filter selections: Last N Measurements (1000), Base Type / Type, Test Bench

DiscomData Production Statistics

Single Value Time History: Last 1000 measurements before 10/5/2021 12:21:36 PM

Id	Test Stand	Model	Mode	Instrument	Param	Location	Channel	Sensor
0								VS

Id	Time	Serial Number	Test Stand	Model	Base Model	Result	Value	Limit
0	10/9/2020 7:45:28 AM	xxx				def.	5.57	20.0
0	9/20/2020 12:31:33 PM	5766132009				ok	5.56	20.0
0	9/20/2020 12:28:38 PM	5788132009				ok	5.25	20.0
0	9/20/2020 12:25:41 PM	5783132009				ok	6.37	20.0
0	9/20/2020 12:22:52 PM	5789132009				ok	5.60	20.0
0	9/20/2020 12:20:07 PM	5776132009				ok	5.28	20.0
0	9/20/2020 12:17:19 PM	5772132009				ok	5.34	20.0
0	9/20/2020 12:13:29 PM	5777132009				ok	6.01	20.0
0	9/20/2020 12:10:41 PM	5773132009				ok	5.60	20.0
0	9/20/2020 12:07:54 PM	5788132009				ok	6.54	20.0

VII. Report overview: Single Value Statistics (Boxplot)



- The report presents the distribution of measurement results in the form of a boxplot, - grouped by a specific filter (e.g. test benches).
- The report allows dynamic restriction of the displayed boxes, Y-axis scaling, as well as export as a CSV file ("Report parameters" area).

The screenshot shows the 'WebPal Viewer - Unofficial Testing Version' interface. The main report area displays 'DiscomData Production Statistics' with a boxplot titled 'Single Value Time History: Last 1000 measurements before 10/5/2021 12:22:06 PM'. The boxplot shows four data series with medians around 6-7 and ranges from approximately 4 to 18. The left sidebar contains filter settings: 'Last N Measurements' (1000), 'Base Type / Type' (selected), and 'Test Bench' (checked). The right sidebar shows 'Report Parameters' with 'Show limit' checked, 'Top N boxes' set to 10, and 'Y auto scale' checked. Below the chart is a table with columns: Category, Instrument, Param, Location, Channel, Sensor.

Category	Instrument	Param	Location	Channel	Sensor
	Crest	-	Prim	Mix	VS

VII. Report overview: Single Value Statistics (Time series)



- The report presents the time series(es) of the measurement results. Multiple selection is possible (max. 10 curves).
- The report allows dynamic modification of a large number of parameters (see figure), as well as exporting the time series as a CSV file ("Report parameters" area).

DiscomData Production Statistics

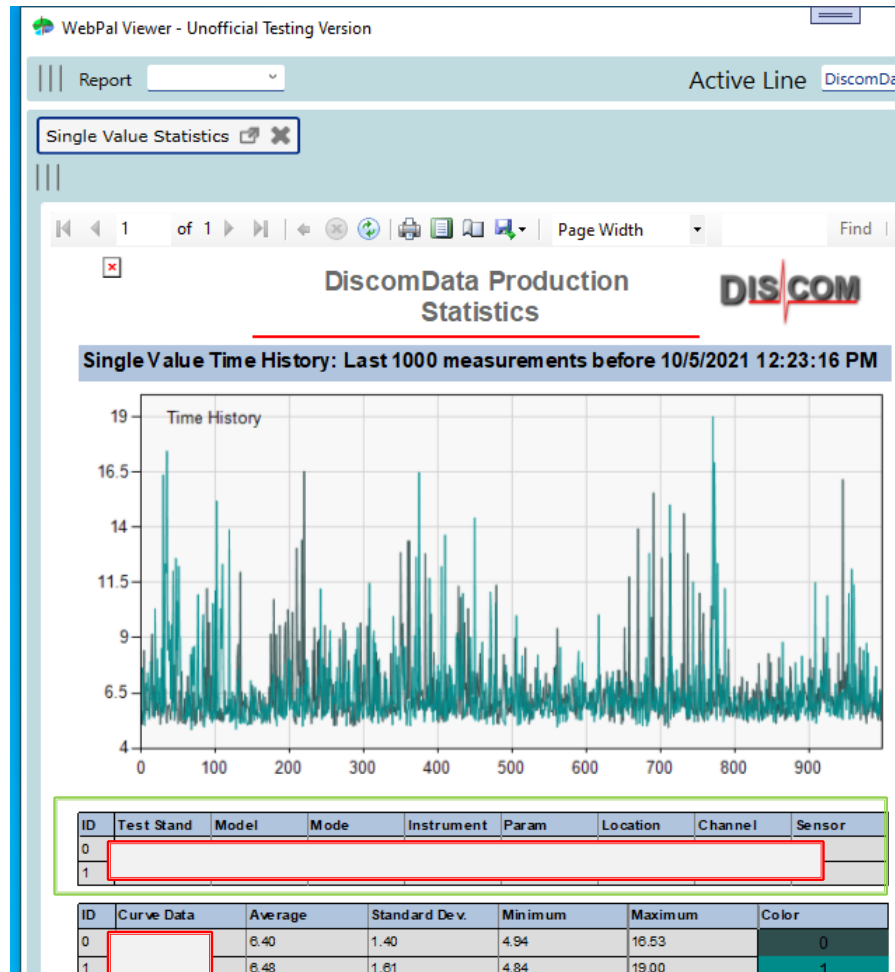
Single Value Time History: Last 1000 measurements before 10/5/2021 12:23:16 PM

ID	Test Stand	Model	Mode	Instrument	Param	Location	Channel	Sensor
0								
1								

ID	Curve Data	Average	Standard Dev.	Minimum	Maximum	Color
0		6.40	1.40	4.94	16.53	0
1		6.48	1.61	4.84	19.00	1

VII. Report overview: Single Value Statistics (Time series)

- The report presents the time series(es) of the measurement results. Multiple selection is possible (max. 10 curves).



- The display range of the curves differs according to the number of curves.
- The representation of a single curve additionally contains the limit in the diagram, as well as a histogram of the measured values incl. the distribution function.
- The representation of multiple curves contains - for reasons of clarity - no limits, no histogram representation and no further curves (e.g. average values).
- Multiple selections are identified by a unique ID, whose unique selections are displayed in an overview list (see green frame).
- Multiple display is only possible for the x-axis options "Index" and "Time".

VII. Report overview: Single Value Statistics (Time series)

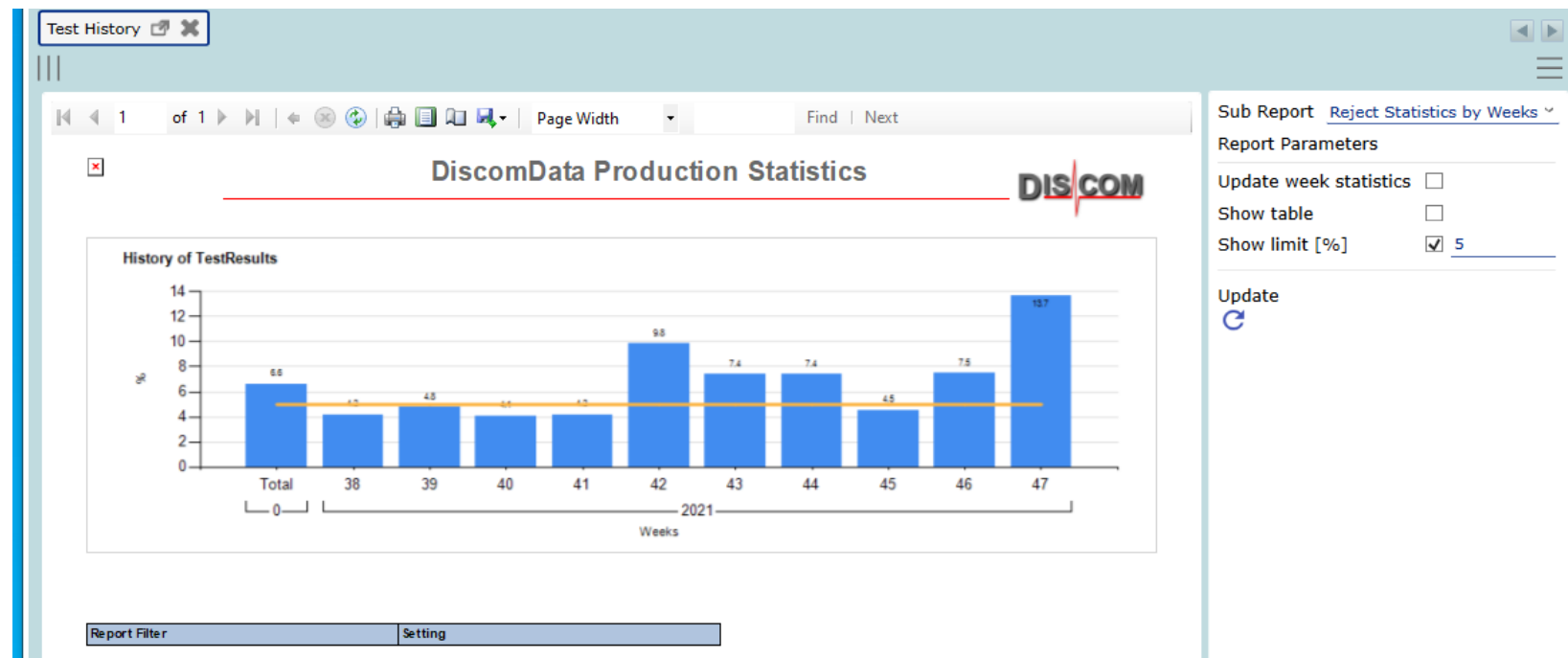
- The report presents the time series(es) of the measurement results. Multiple selection is possible (max. 10 curves).



- The "Report parameters" section contains a large number of parameters.
- Most of the parameters are mainly related to the scaling of the axes, the color selection of the curves, as well as the additional display of curves.
- Additional curves are mean value curves and distribution curves for histogram display (distribution function, cumulative distribution function, distribution model).

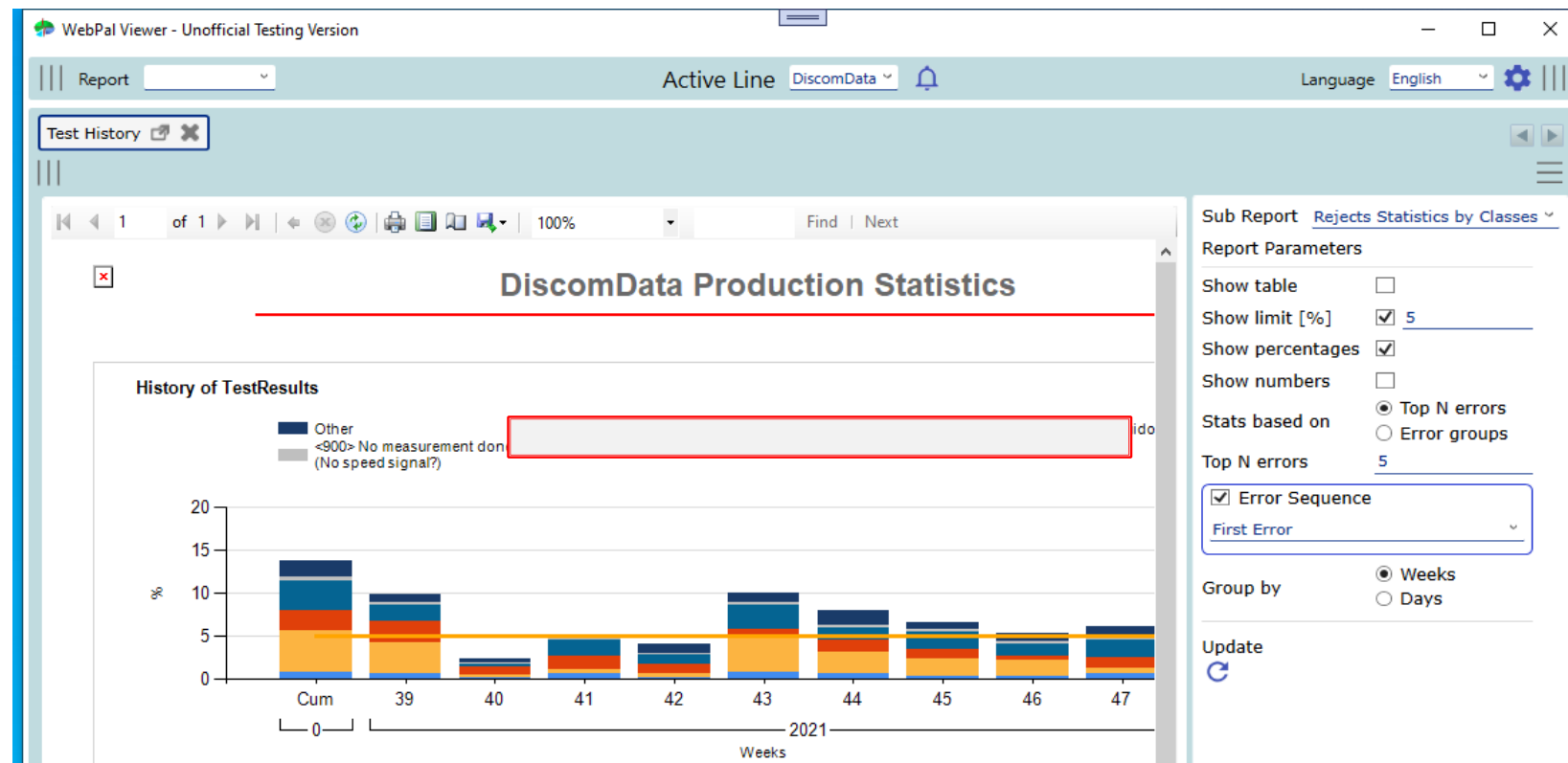
VII. Report overview: Test History (Weekly rejects)

- The report contains an overview of the OK/NOK figures or the NOK rate grouped by calendar week. The presentation of the figures can additionally be displayed in table form. The query accesses a database table in which the statistics are grouped by weeks, type, test stand and test repetition type. This table is updated by the SQL Server Agent job "FillWeeklyResultsDetails" at a regular interval. For past periods, the update can be triggered manually (check the "Update weekly statistics" box). **Important:** For large time periods this is a time-consuming operation.



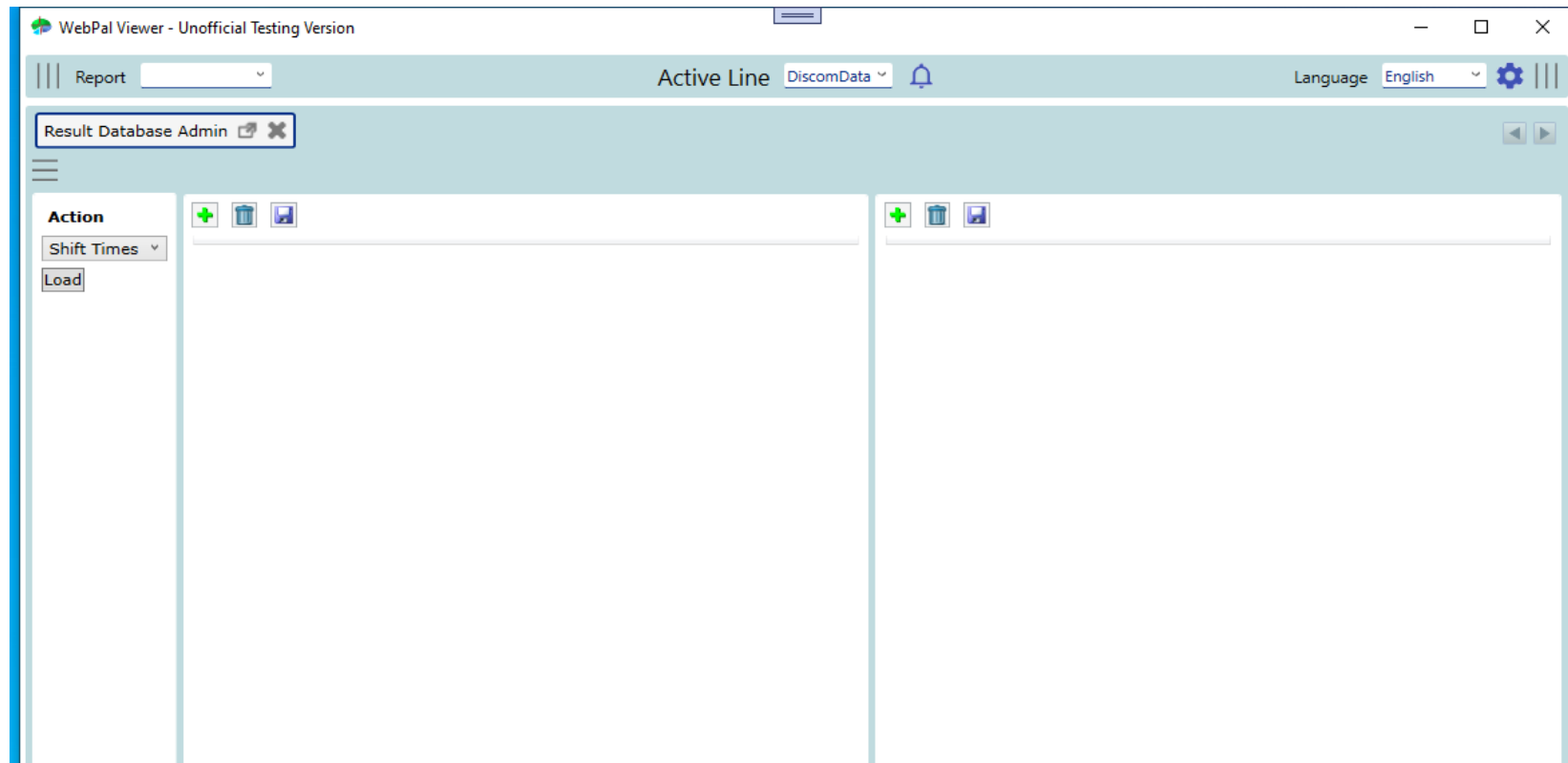
VII. Report overview: Test History (Rejects by classes)

- The report contains an overview of the OK/NOK numbers or the NOK rate grouped by error classes (either based on the top N classes or the user-defined error groups). The presentation of the numbers are additionally presentable in tabular form.
- Grouping is possible on the basis of calendar weeks or of days.



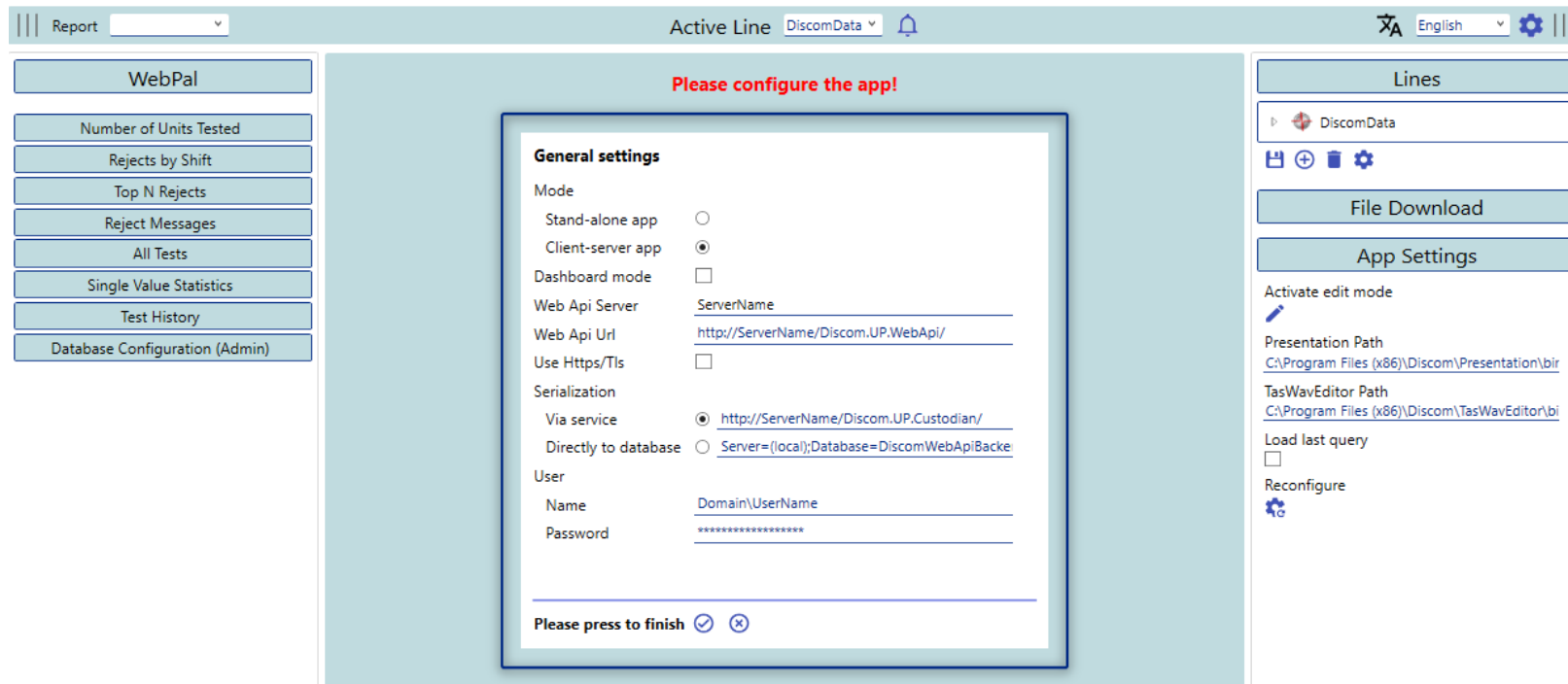
VII. Report overview: Result database admin

- Formerly "WebPalAdmin": Via this "Report" shift times, reference units, error groups can be edited for the selected database.
- Requires the activation of the editing mode in the area of the lines.



IX. New functions (version 0.0.27.825)

- User credentials can be entered when configuring the viewer. When sending requests to the web services, these will be passed instead of the credentials of the user currently running the viewer.
- Use case: The viewer is installed on a PC which has no access to the domain controller (and therefore cannot be run using a domain user). Background: In case Windows authentication is active, only requests from domain users will be accepted.



Report Active Line DiscomData English

Please configure the app!

General settings

Mode

Stand-alone app

Client-server app

Dashboard mode

Web Api Server

Web Api Url

Use Https/Tls

Serialization

Via service

Directly to database

User

Name

Password

Please press to finish

WebPal

Number of Units Tested

Rejects by Shift

Top N Rejects

Reject Messages

All Tests

Single Value Statistics

Test History

Database Configuration (Admin)

Lines

DiscomData

File Download

App Settings

Activate edit mode

Presentation Path

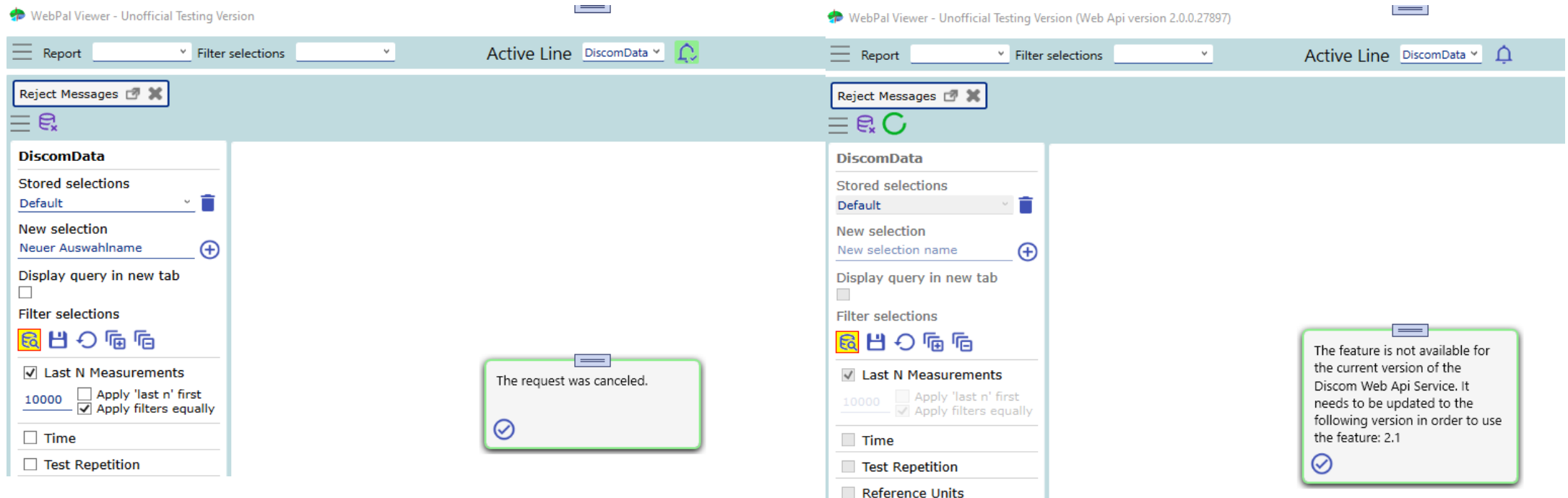
TasWavEditor Path

Load last query

Reconfigure

IX. New functions (version 2.1.0)

- The cancellation of data requests (data from the result database as well as the archive and wav file download) is available from version 2.1.0 or higher. This requires an update of the Discom Web Api service to the corresponding version (or higher). In case the Web Api is outdated, an info message will be displayed.



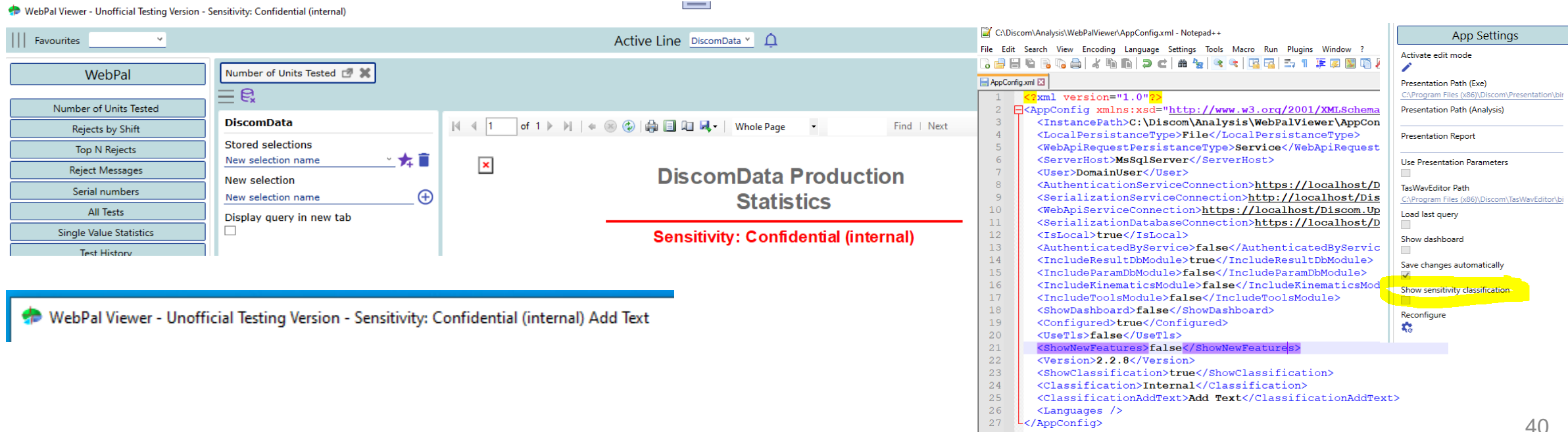
The image displays two side-by-side screenshots of the WebPal Viewer interface, illustrating the cancellation of data requests and the resulting messages.

Left Screenshot: The interface shows the "WebPal Viewer - Unofficial Testing Version" with the "Active Line" set to "DiscomData". A message box in the center states "The request was canceled." The left sidebar contains the "DiscomData" panel with options for "Stored selections", "New selection", "Display query in new tab", "Filter selections", "Last N Measurements" (checked, 10000), "Apply 'last n' first", "Apply filters equally" (checked), "Time", and "Test Repetition".

Right Screenshot: The interface shows the "WebPal Viewer - Unofficial Testing Version (Web Api version 2.0.0.27897)". A message box in the center states "The feature is not available for the current version of the Discom Web Api Service. It needs to be updated to the following version in order to use the feature: 2.1". The left sidebar contains the "DiscomData" panel with options for "Stored selections", "New selection", "Display query in new tab", "Filter selections", "Last N Measurements" (checked, 10000), "Apply 'last n' first", "Apply filters equally" (checked), "Time", "Test Repetition", and "Reference Units".

IX. New functions (version 2.2.0)

- From version 2.2.0 or higher the option to display sensitivity classification labels is available. These labels show in the title bar as well as on every report. The default classification is *internal*.
- These labels can be hidden and or the classification level changed, by adjusting the values for the entries *ShowClassification* and *Classification* in the AppConfig.xml. Starting with version 2.2.9 the visibility can be set in the program.
- Available classification levels are: *Internal*, *External*, *Unrestricted*. At program runtime these will be translated depending on the chosen language. In addition, starting with version 2.2.9 free text can be dynamically added (entry *ClassificationAddText*).



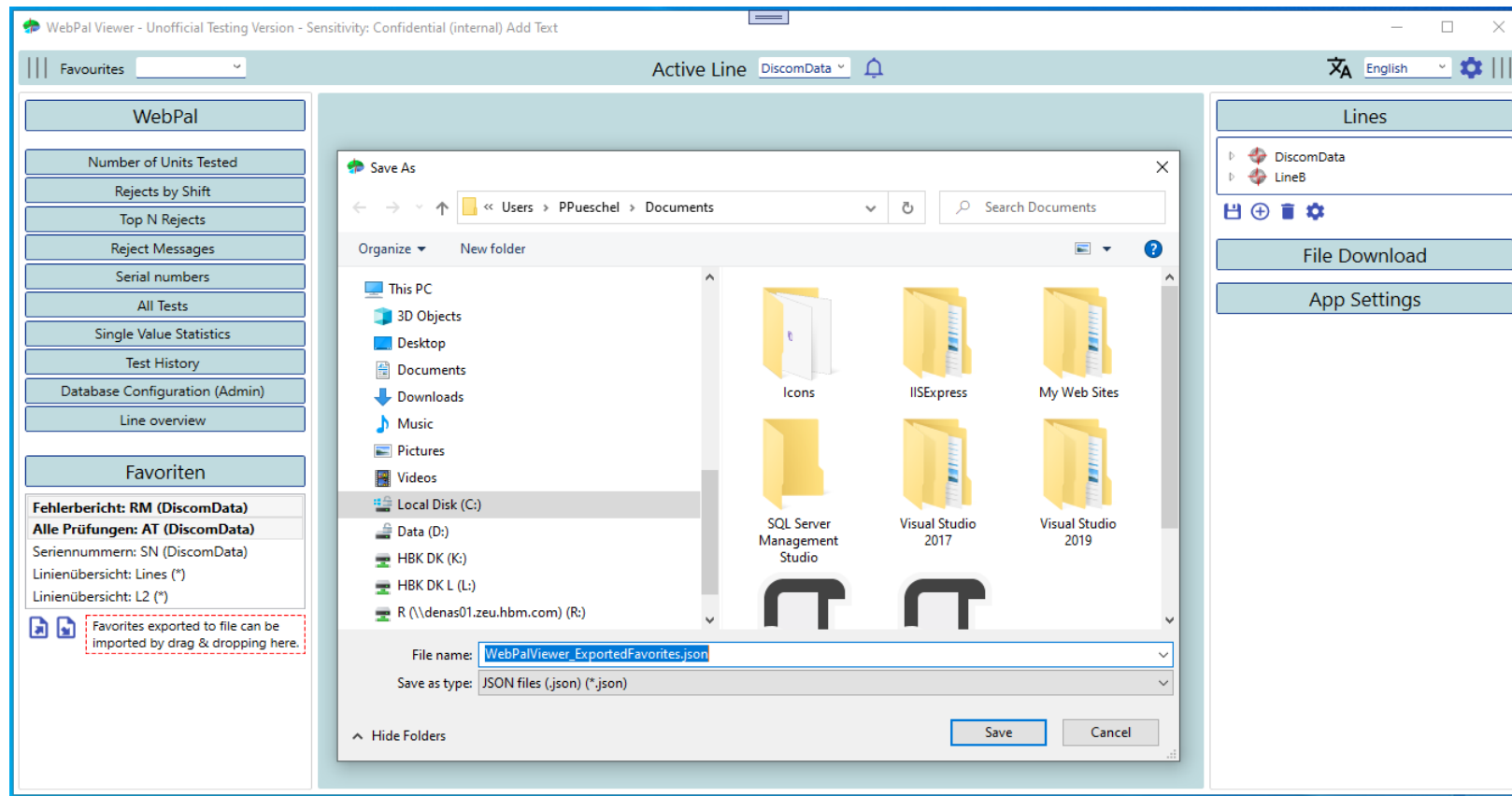
The screenshot displays the WebPal Viewer interface and the AppConfig.xml configuration file. The WebPal Viewer window shows a report titled "DiscomData Production Statistics" with a red banner indicating "Sensitivity: Confidential (internal)". The Notepad++ window shows the AppConfig.xml file with the following configuration:

```
<?xml version="1.0"?>
<AppConfig xmlns:xsd="http://www.w3.org/2001/XMLSchema"
<InstancePath>C:\Discom\Analysis\WebPalViewer\AppCon
<LocalPersistenceType>File</LocalPersistenceType>
<WebApiRequestPersistenceType>Service</WebApiRequest
<ServerHost>MsSqlServer</ServerHost>
<User>DomainUser</User>
<AuthenticationServiceConnection>https://localhost/D
<SerializationServiceConnection>http://localhost/Dis
<WebApiServiceConnection>https://localhost/Discom.Up
<SerializationDatabaseConnection>https://localhost/D
<IsLocal>true</IsLocal>
<AuthenticatedByService>>false</AuthenticatedByService
<IncludeResultDbModule>true</IncludeResultDbModule>
<IncludeParamDbModule>>false</IncludeParamDbModule>
<IncludeKinematicsModule>>false</IncludeKinematicsMod
<IncludeToolsModule>>false</IncludeToolsModule>
<ShowDashboard>false</ShowDashboard>
<Configured>true</Configured>
<UseTls>false</UseTls>
<ShowNewFeatures>false</ShowNewFeatures>
<Version>2.2.8</Version>
<ShowClassification>true</ShowClassification>
<Classification>Internal</Classification>
<ClassificationAddText>Add Text</ClassificationAddText>
<Languages />
</AppConfig>
```

The App Settings panel on the right shows the "Show sensitivity classification" option checked and highlighted in yellow.

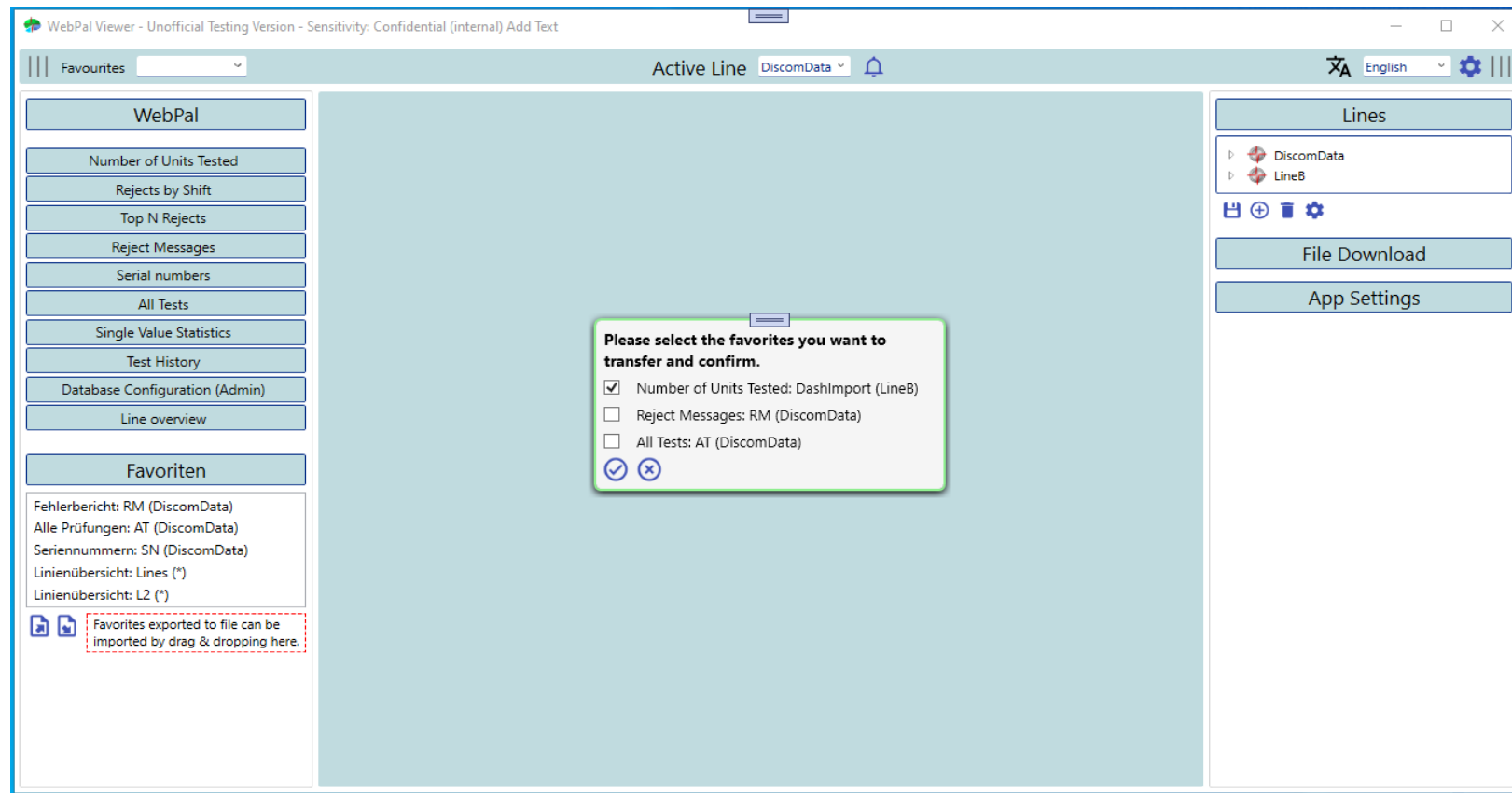
IX. New functions (version 2.2.9)

- From version 2.2.9 the option to export/import stored settings (favorites) is available. The favorites selected from the new menu are exported in the json format by clicking on the export button.
- These files can be imported either by clicking the import button and selecting the respective file or by drag & dropping the file onto the area outlined by the red dashes.



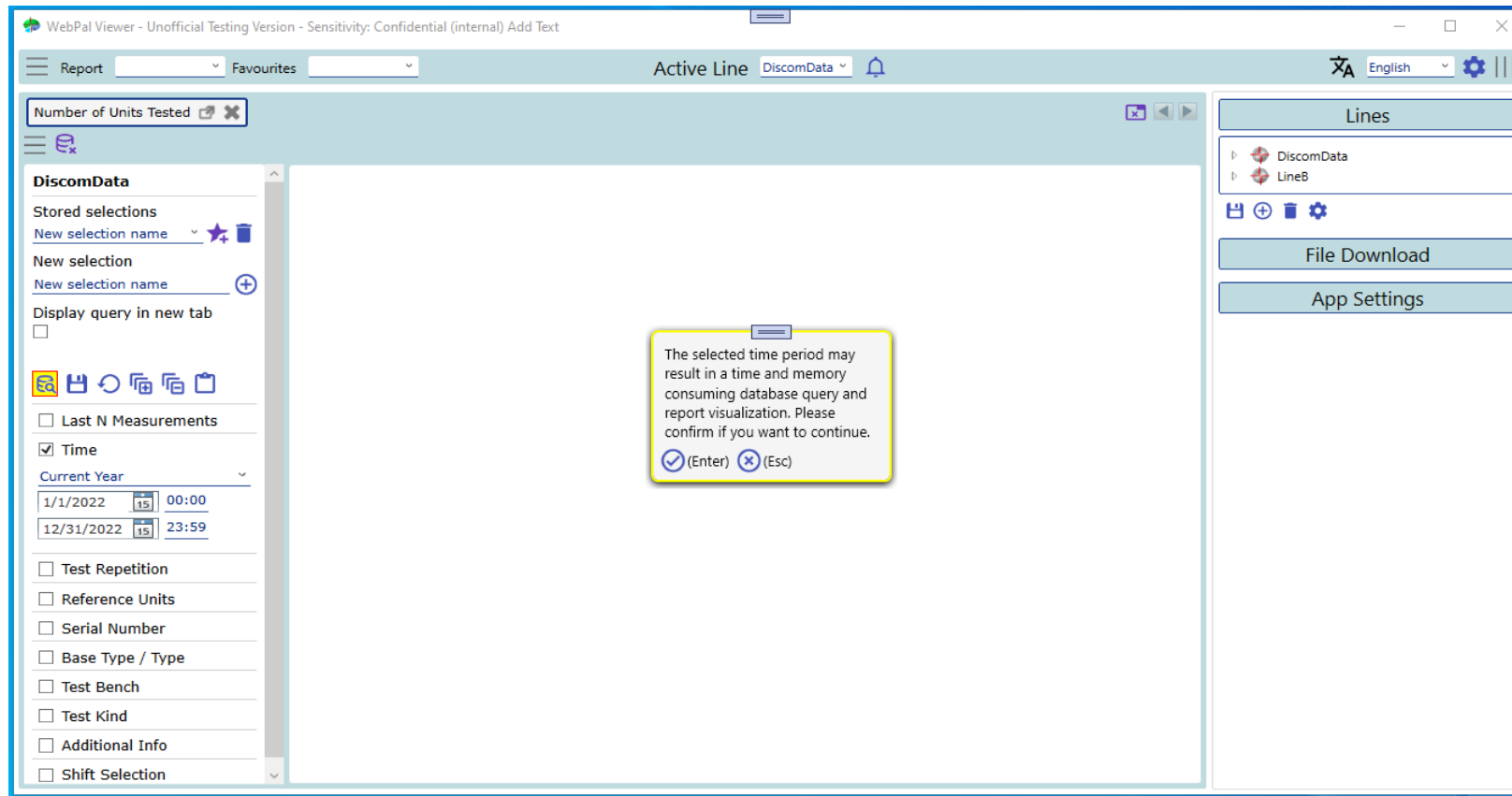
IX. New functions (version 2.2.9)

- When a list of stored selections has been successfully imported, the following pop-up shows where the stored selections can be selected for final import into the program.
- Once an import has been finalized, the imported favorites show in the list of favorites.



IX. New functions (version 2.2.9)

- From version 2.2.9 the pop-up windows' commands can be triggered by keyboard. The confirm command which triggers the underlying action or confirms the notification can be triggered by hitting the *enter* key. The cancel command can be triggered by hitting the *esc* key.



IX. New functions (version 2.2.9)

- From version 2.2.9 the export of report data to the clipboard is available. The export is formatted as semi-colon separated strings.

WebPal Viewer - Unofficial Testing Version - Sensitivity: Confidential (internal) Add Text

Report: [dropdown] Favourites: [dropdown] Active Line: DiscomData

Number of Units Tested [icon]

DiscomData

Stored selections
New selection name [input] [star] [trash]

New selection
New selection name [input] [plus]

Display query in new tab

[icon] [icon] [icon] [icon] [icon] [icon]

Last N Measurements

Time

Current Year [dropdown]

1/1/2022 [calendar] 00:00

12/31/2022 [calendar] 23:59

Test Repetition

Reference Units

Serial Number

Base Type / Type

Test Bench

Test Kind

Additional Info

Shift Selection

DiscomData Production Statistics

Sensitivity: Confidential (internal) Add Text

Test Result Overview: from 1/1/2022 12:00:00 AM until 12/31/2022 11:59:59 PM

Detail	Total		TB1		
	Type	N	%	N	%
Total		89050	3.9%	23448	3.6%
EDHE		53390	3.7%	14277	3.1%
GHBD		23548	3.7%	5992	4.4%
FHII		5786	4.7%	1549	3.2%
EHBD		3174	4.0%	761	5.3%
JHIJ		1194	2.4%	325	1.5%
JHII		744	7.4%	206	9.2%
CHII		537	6.7%	148	2.0%
AHIJ		513	11.5%	141	11.3%
JJJJ		48	2.1%	12	0.0
IIII		47	0.0	12	0.0
DHBB		26	0.0	16	0.0

*New Text Document.txt - Notepad

```
File Edit Format View Help
BenchName;TypeName;GoodUnits;AllUnits;TypeId;BenchId
TB1;JHIJ;320;325;3;1
TB1;JDHE;0;1;29;1
TB1;FHII;1499;1549;24;1
TB1;GHBD;5725;5992;19;1
TB1;EDHE;13827;14277;14;1
TB1;CHII;145;148;26;1
TB1;JJJJ;12;12;7;1
TB1;CBAA;0;4;30;1
TB1;IHBD;3;3;28;1
TB1;JHII;187;206;11;1
TB1;AHIJ;125;141;23;1
TB1;IIII;12;12;9;1
TB1;BHBC;1;1;25;1
TB1;EHBD;721;761;18;1
TB1;DHBB;16;16;27;1
TB2;AHIJ;105;111;23;2
TB2;EHBD;675;694;18;2
TB2;CBAA;0;4;30;2
TB2;JHII;132;141;11;2
TB2;JHIJ;257;264;3;2
```

IX. New functions (version 2.2.9)



- From version 2.2.9 the mechanism to save changes to the current selection (filter + report) has been changed. By default, changes are no longer automatically stored. If changes are to be stored, the save button needs to be clicked.
- If the check box for saving changes automatically is set, any changes to the current selection is stored instantly and explicitly saving is not needed.

WebPal Viewer - Unofficial Testing Version - Sensitivity: Confidential (Internal) Add Text

Report: [Dropdown] Favourites: [Dropdown] Active Line: DiscomData

Number of Units Tested: [Input]

DiscomData

Stored selections

New selection name: [Input] [Star] [Trash]

New selection

New selection name: [Input] [Plus]

Display query in new tab

[Print] [Refresh] [Home] [Back] [Forward]

Last N Measurements

Time

Today

9/19/2022 00:00

9/19/2022 23:59

Test Repetition

Reference Units

Serial Number

Base Type / Type

Test Bench

Test Kind

Additional Info

Shift Selection

DiscomData Production Statistics

Sensitivity: Confidential (Internal) Add Text

Test Result Overview: from 1/1/2022 12:00:00 AM until 12/31/2022 11:59:59 PM

Detail	Total		TB1		TB2		TB3		TB4	
	N	%	N	%	N	%	N	%	N	%
Total	89050	3.9%	23448	3.6%	19215	4.1%	21931	4.6%	24456	3.4%
EDHE	53390	3.7%	14277	3.1%	11346	4.5%	13040	4.5%	14727	3.1%
GHBD	23548	3.7%	5992	4.4%	5257	3.2%	5825	4.4%	6474	2.9%
FHII	5786	4.7%	1549	3.2%	1239	4.2%	1407	6.5%	1591	4.8%
EHBD	3174	4.0%	761	5.3%	694	2.7%	939	2.4%	780	5.8%
JHIJ	1194	2.4%	325	1.5%	264	2.7%	275	2.9%	330	2.7%
JHII	744	7.4%	206	9.2%	141	6.4%	182	6.6%	215	7.0%
CHII	537	6.7%	148	2.0%	124	6.5%	109	10.1%	156	9.0%
AHIJ	513	11.5%	141	11.3%	111	5.4%	119	12.6%	142	15.5%
JJJJ	48	2.1%	12	0.0	12	8.3%	12	0.0	12	0.0
IIII	47	0.0	12	0.0	11	0.0	12	0.0	12	0.0
DHBB	26	0.0	16	0.0	2	0.0	3	0.0	5	0.0

Lines

File Download

App Settings

Activate edit mode

Presentation Path (Exe)
C:\Program Files (x86)\Discom\Presentation\blr

Presentation Path (Analysis)

Presentation Report

Use Presentation Parameters

TasWavEditor Path
C:\Program Files (x86)\Discom\TasWavEditor\bi

Load last query

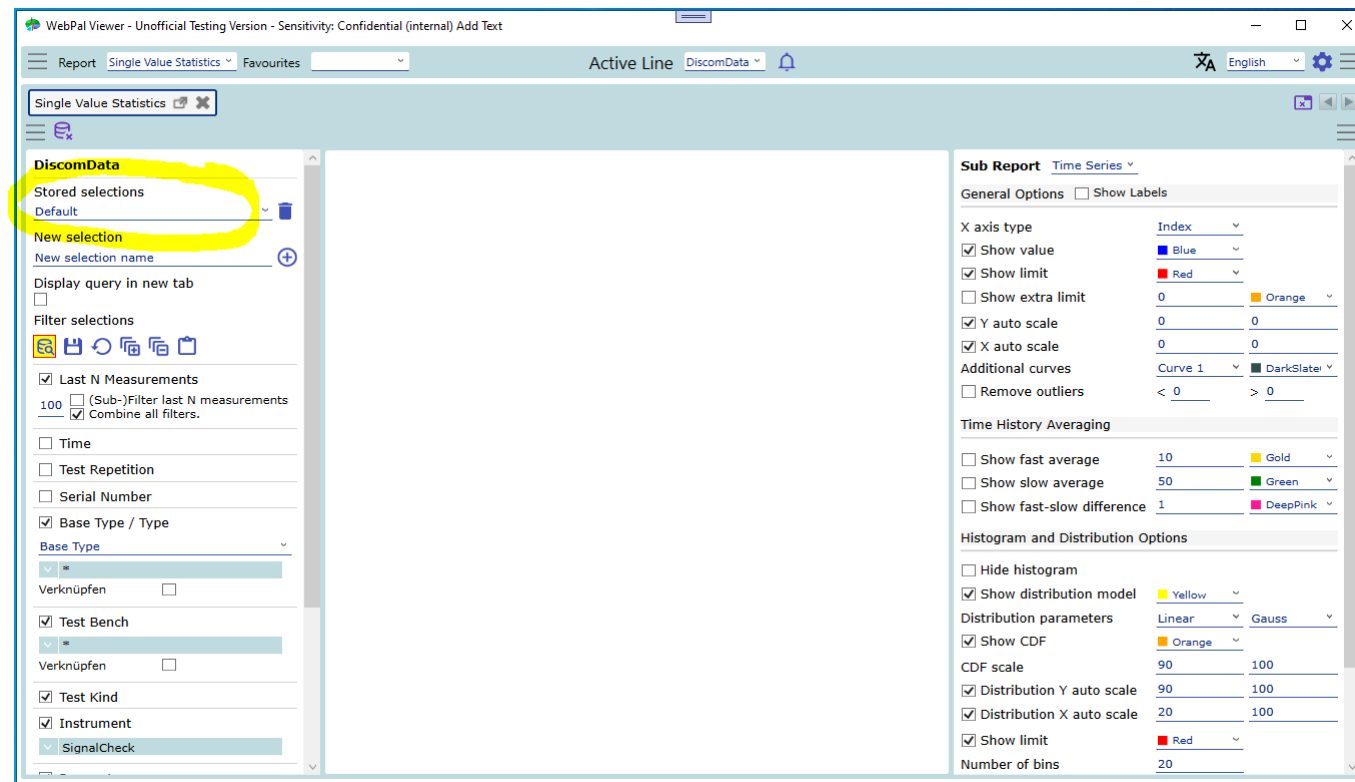
Show dashboard

Save changes automatically

Reconfigure

IX. New functions (version 2.2.9)

- From version 2.2.9 the mechanism to save the *default* selection (filter + report) has been changed. By default, changes to the default selection will be stored.
- The stored default report selections will be transferred to any callback report (report created by a report link).



IX. New functions (version 2.2.9)

- From version 2.2.9 the display for the lines overview can be inverted by selecting the option “Lines as columns (test stands as rows)”.

The screenshot shows the WebPal Viewer interface with two overlapping windows. The top window shows the 'Line Overview' for 'DiscomData' with columns 1-4 containing TB1, TB2, TB3, and TB4, all with a '> 10 min' status. The bottom window shows the 'Line Overview' for 'LineB' with rows 1-4 containing TB1, TB2, TB3, and TB4, all with a '> 10 min' status. The 'LineB' window also shows 'EOL1 > 10 min' in the first column. The settings panel on the left of the bottom window has the checkbox 'Lines as columns (test stands as rows)' checked and highlighted in yellow.

	1	2	3	4
DiscomData	TB1 > 10 min	TB2 > 10 min	TB3 > 10 min	TB4 > 10 min
LineB	EOL1 > 10 min			

	DiscomData	LineB
1	TB1 > 10 min	EOL1 > 10 min
2	TB2 > 10 min	
3	TB3 > 10 min	
4	TB4 > 10 min	

IX. New functions (version 2.3.0)

- From version 2.3.0 the lines overview provides the function to display reject statistics for multiple lines (and test benches).

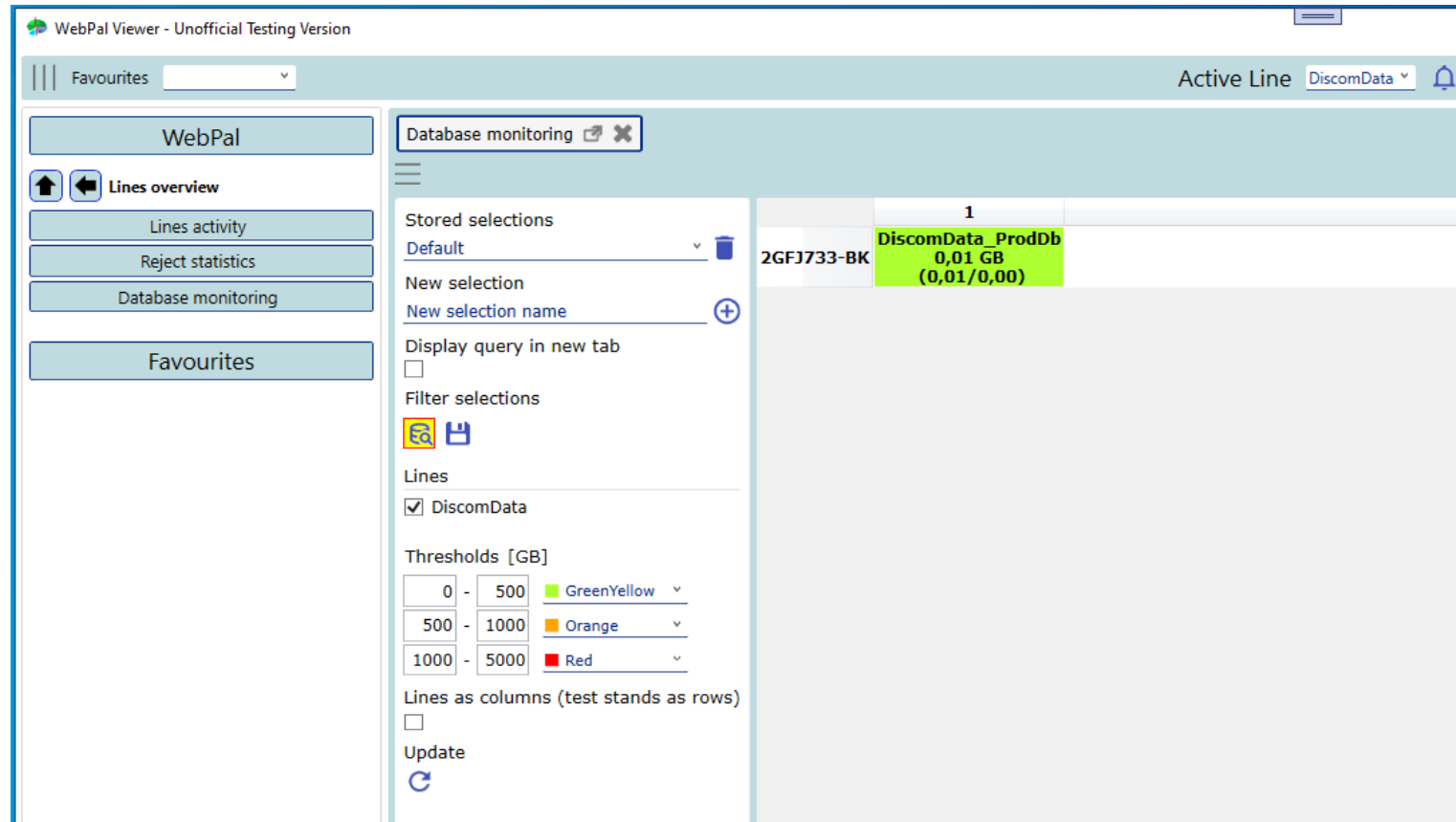
The screenshot shows the 'WebPal Viewer - Unofficial Testing Version' interface. On the left is a sidebar with navigation options: 'WebPal', 'Lines overview' (selected), 'Lines activity', 'Reject statistics', 'Database monitoring', and 'Favourites'. The main area is titled 'Reject statistics' and contains a table of data for the 'DiscomData' active line. The table has columns for test benches 1, 2, 3, and 4. The data is as follows:

	1	2	3	4
DiscomData	* 7,0 % (93/7/100)	TB1 2,9 % (33/1/34)	TB2 9,1 % (10/1/11)	TB3 13,5 % (32/5/37)

Below the table, there are various configuration options for the 'Reject statistics' view, including 'Stored selections' (Default), 'New selection' (New selection name), 'Display query in new tab', 'Filter selections', 'Lines' (DiscomData checked), 'Last N Measurements' (checked, 100), '(Sub-)Filter last N measurements' (unchecked), 'Combine all filters' (checked), 'Time', 'Test Repetition', 'Thresholds [%]' (0-5 GreenYellow, 5-10 Orange, 10-100 Red), 'Lines as columns (test stands as rows)' (unchecked), and an 'Update' button.

IX. New functions (version 2.3.0)

- From version 2.3.0 the lines overview provides the function to display result database sizes for multiple lines.



The screenshot shows the WebPal Viewer interface. On the left is a sidebar with navigation options: WebPal, Lines overview (selected), Lines activity, Reject statistics, Database monitoring, and Favourites. The main area is titled 'Database monitoring' and contains a 'Stored selections' dropdown set to 'Default'. Below this are options for 'New selection name', 'Display query in new tab', and 'Filter selections'. The 'Lines' section has a checked checkbox for 'DiscomData'. The 'Thresholds [GB]' section shows three ranges: 0-500 (GreenYellow), 500-1000 (Orange), and 1000-5000 (Red). There is also an unchecked checkbox for 'Lines as columns (test stands as rows)' and an 'Update' button. The main table displays results for 'Active Line: DiscomData'. The table has two columns: '2GFJ733-BK' and '1'. The cell for '1' contains the text 'DiscomData_Proddb', '0,01 GB', and '(0,01/0,00)' in green.

2GFJ733-BK	1
	DiscomData_Proddb 0,01 GB (0,01/0,00)