



New Features in ibaDaVIS v2.4.0

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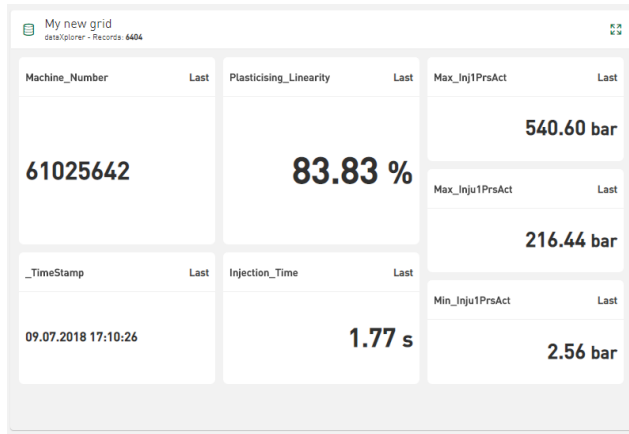
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1 New Features

1.1 New tile type Grid

The *Grid* is a new kind of tile for dashboards. Multiple single values can be visualized on one tile as grid on the dashboard. It is easy to creat, to resize and to position the individual grid cells in the *Grid*.

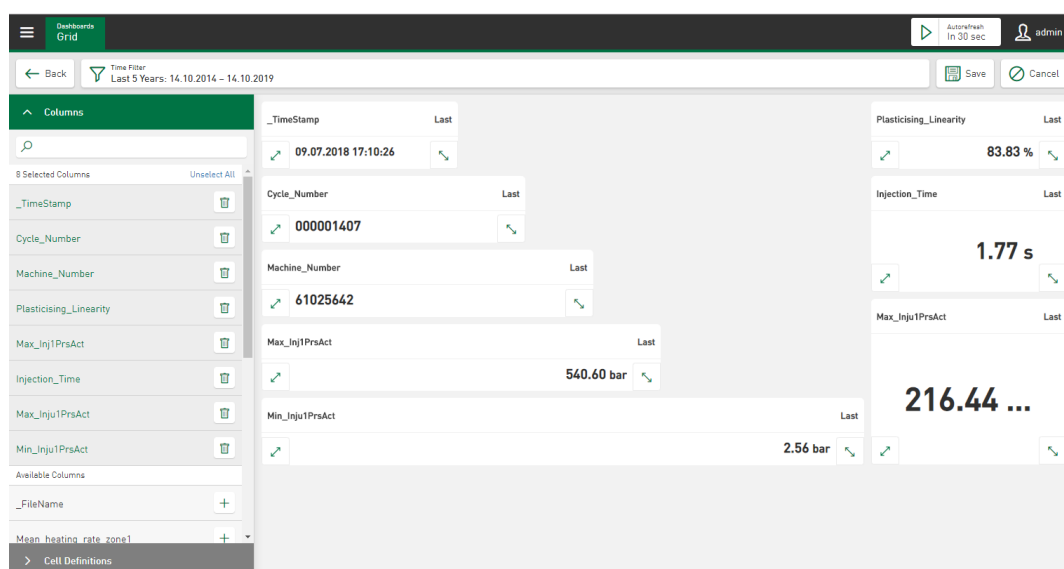


1.1.1 Configuration

A grid tile can be added on your dashboard for database values.

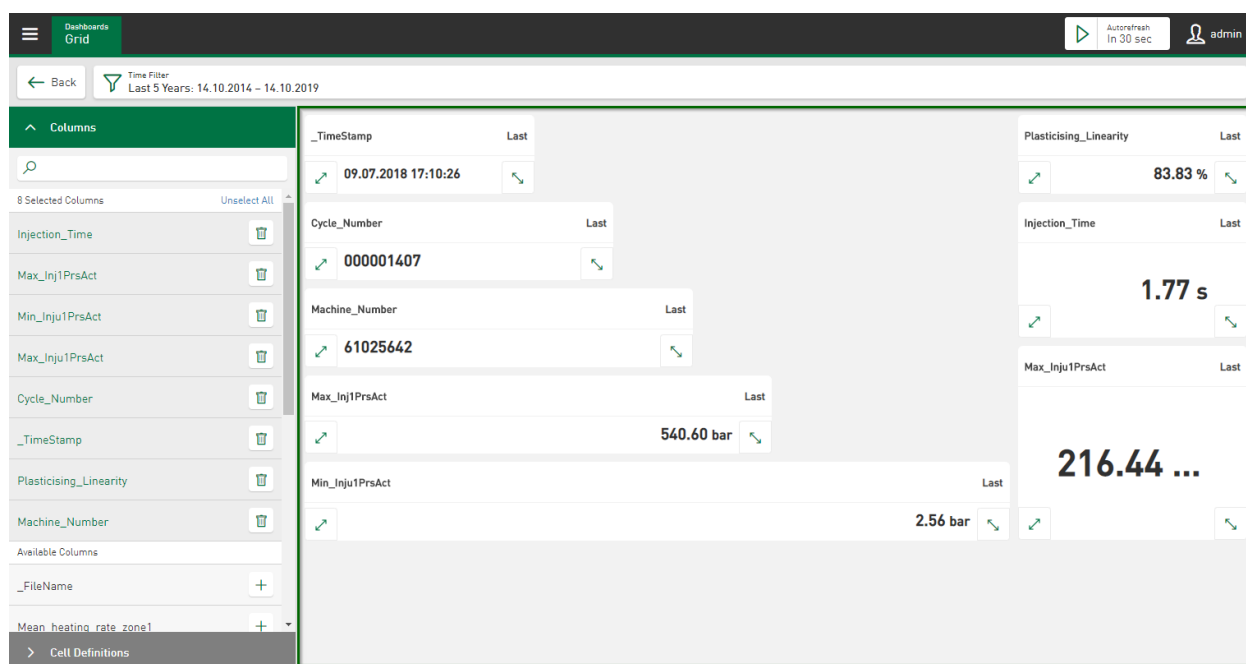
The screenshot shows the "Add Tile" configuration dialog. It has a title bar "Add Tile" with a close button. Below the title bar, there are two input fields: "Tile Name" with the value "My new grid" and "Datasource" with the value "dataXplorer". Below these fields are two tabs: "Database values" (selected) and "DAT File Signals". Below the tabs is a "Tile Type" dropdown menu with the value "Grid". At the bottom of the dialog are "OK" and "Cancel" buttons.

For each selected column a new resizable grid cell is displayed. The grid cell shows the column name or the corresponding alias column name and the aggregator in the header row. The currently filtered last value and the specified unit are displayed in the lower part of the grid cell.

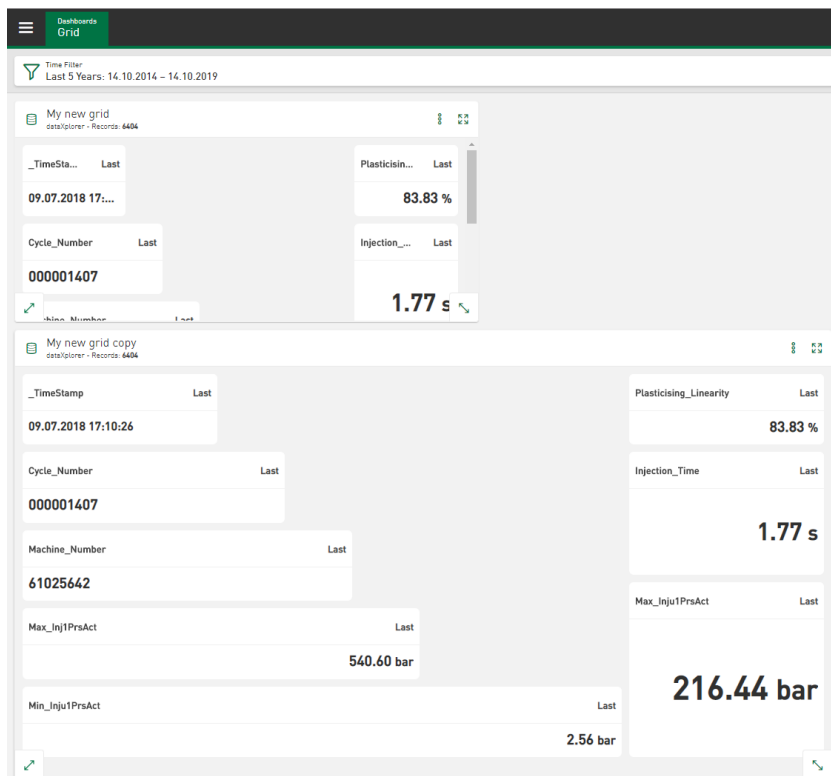


The size and position of the grid cell can be changed in the same manner as each tile is changed on the dashboard. The font size of the values grows or shrinks with the size of the grid cell.

Width and position of the grid cell is consistent when you switch back to the dashboard. When designing your grid layout you can use the full width of the design area.



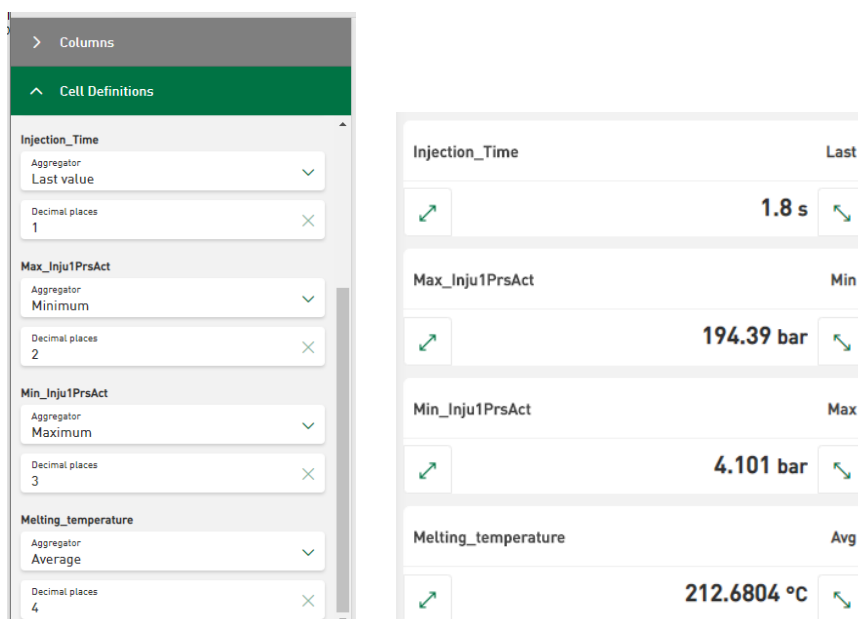
Increase the width and height of your grid tile on the dashboard when cells which you have configured are currently not fully visible.



1.1.2 Cell definitions

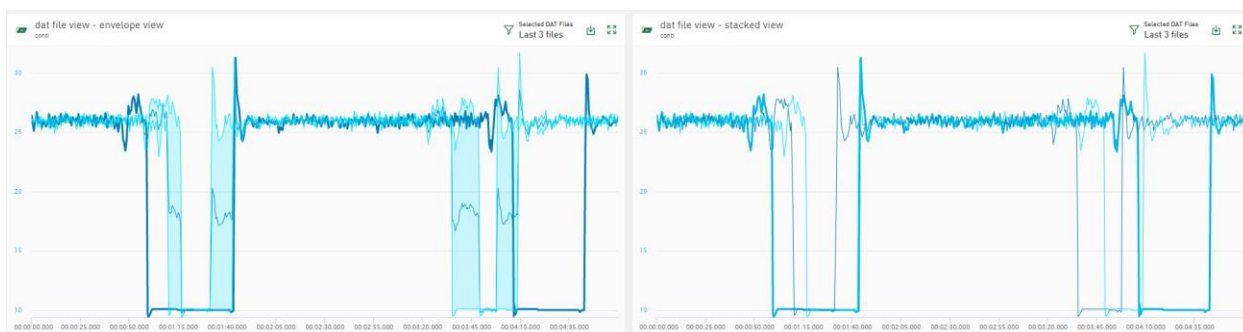
The names of selected columns and cell specific options are available as *Cell definition*. For numeric values, it's possible to display the calculated average, minimum, maximum or total value of the selected column values instead of the last value (default). The number of displayed decimal places can also be defined for numerical values.

e.g.



1.2 Highlighting of signals from the last dat file in envelope and stacked view

The dat file tile supports separate visualization of signals from the last file when the dat file tile displays the signals as envelope view or stacked view.



Check the option to display *Signals from last file separately* and the drawn line for signals from the last dat file is wider than the line for signals from previous dat files.

The envelope which is usually computed from signals of all the currently selected dat files is not including the signals of the last dat file when the option to display *Signals from last file separately* is checked.

E.g. the dat file filter is set to display signals from the *Last 3 files*. The new introduced option *Signals from last file separately* is checked. The envelope is computed from signals of the previous dat file and the one before. Signals of the last dat file are displayed separately at the same graph.

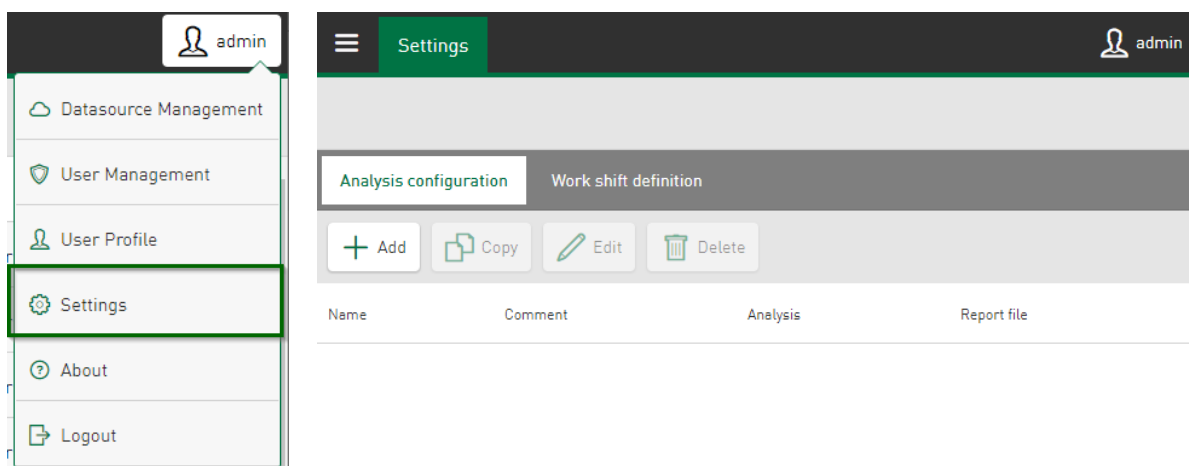


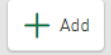
1.3 Download dat files and analysis file as bundle

In this version you can download dat files together with an assigned analysis file (.pdo) as *Process Data Container* (.pdc). The *Process Data Container* file format is supported in ibaAnalyzer v7.1 or higher. When you click on a downloaded pdc file the ibaAnalyzer will open the containing dat file together with the included analysis file. If multiple dat files are included in the pda file they are opened in ibaAnalyzer in parallel.

1.3.1 Configuration in Settings

Use the new introduced paragraph *Settings* to open the *Analysis configuration*.



Use the  **Add** button to add an analysis file reference (.pdo) and an optional report file (.lst) to your *Analysis configuration*. The name of the analysis is obligatory. The other fields for *Comment*, *Analysis* and *Report file* are mandatory.

A new added record for the analysis is displayed after pressing OK at the list *Analysis configuration*.

Analysis configuration			
Work shift definition			
<div> <div>+ Add</div> <div>Copy</div> <div>Edit</div> <div>Delete</div> </div>			
Name	Comment	Analysis	Report file
ProcessDetails	Inspect Process Details	c:\AnalysisTemplate\ProcessDetails.pdo	c:\ReportTemplate\ProcessDetailsReport.lst
ProductDetails	Inspect Product Details	c:\AnalysisTemplate\ProductDetails.pdo	c:\ReportTemplate\ProductDetailsReport.lst

The current settings are directly saved at the project.

1.3.2 Connection of dat files and analysis in the datasource management

You need to connect the analysis to your datasource to bundle your analysis to the dat files which are working together with the configured analysis file (.pdo).

Switch to the *Datasource Management* and select the table at your database connection. Open the tab *Analysis*.

You will find your configured analysis in a checkable list. Select the related analysis and finalize the current settings by pressing save.

✓ Save

✗ Cancel

Table Settings

Event Definitions

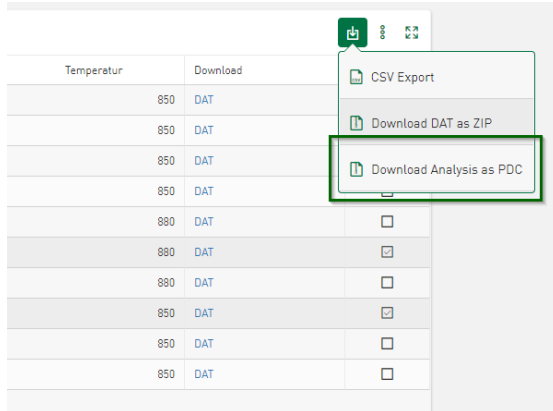
Options

Analysis

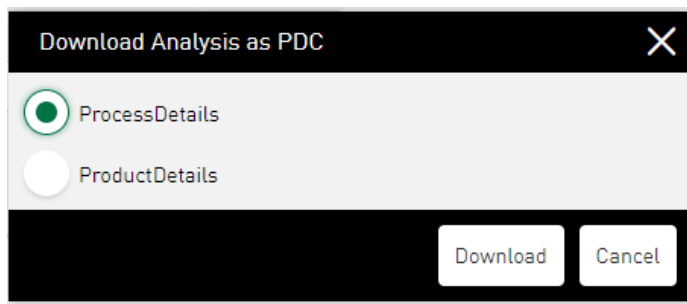
Name	Comment
<div><div>✓</div>ProcessDetails</div>	Inspect Process Details
<div><div>✓</div>ProductDetails</div>	Inspect Product Details

1.3.3 Usage

In this version of ibaDaVIS the table tile and the dat file view tile provide the download of dat files. To start the download as of analysis and dat file as *Process Data Container* file (.pdc) you have to select dat files manually at the table and start the download using menu item at the flyout dialog.



You can decide which of the analysis files will be included to the *Process Data Container* (.pdc) file just before the download starts.

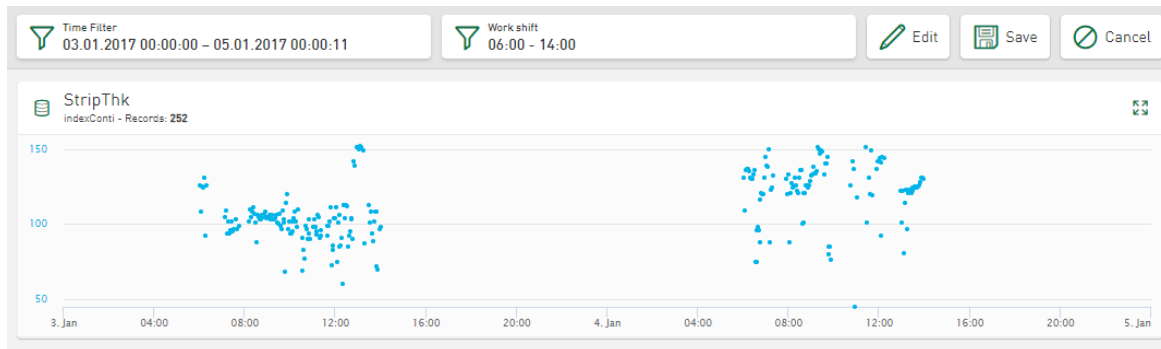


At the dat file view tile you can start the download of the currently displayed dat files by pressing the new introduced *Download Analysis as PDC* button. Having an *Analysis configuration* bound to the used datasource will automatically provide the *Download Analysis as PDC* menu item at the flyout on your dat file tile when you click on the download button.



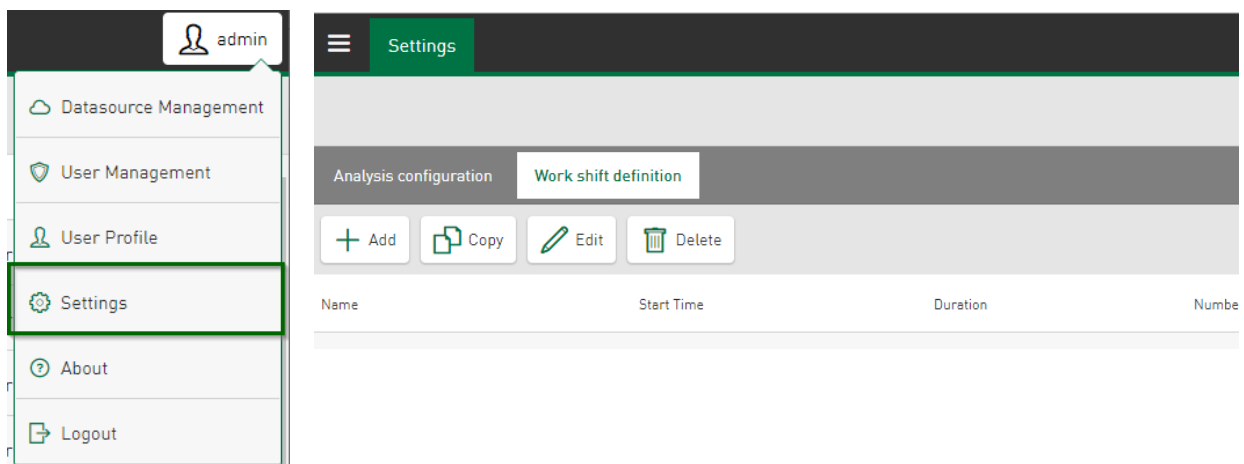
1.4 Time filter for work shift period

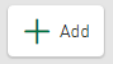
The work shift filter is an additional time filter. Per dashboard one work shift filter can be added. The defined shift can easily be activated or deactivated and reduce the displayed data to the selected period of time. All defined work shifts together cover 24 hours maximum.



1.4.1 Configuration in Settings

Use the new introduced paragraph *Settings* to open the *Work Shift Definition*.

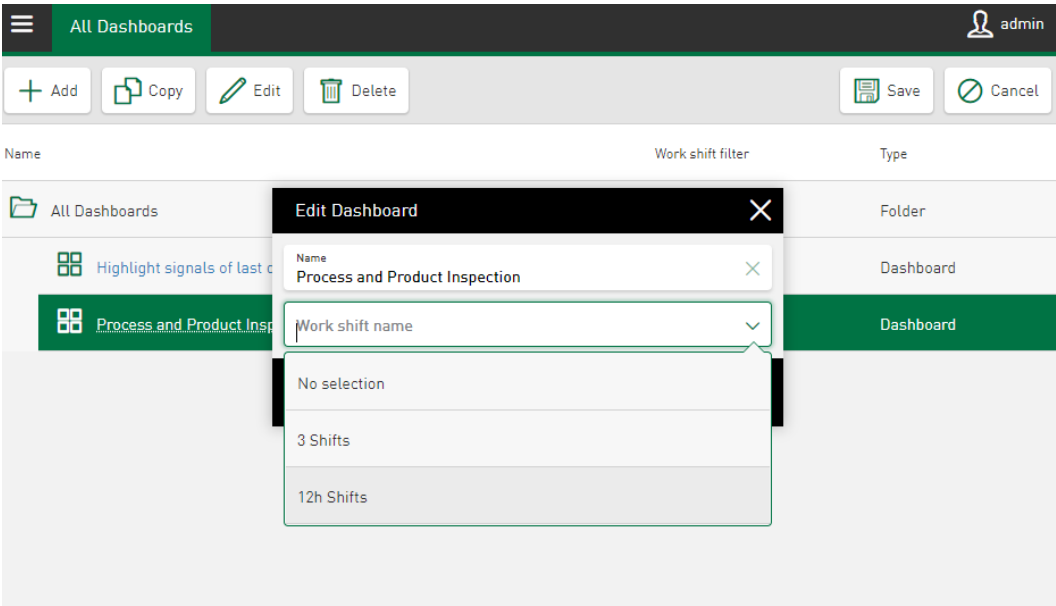


Use the  button to add a *Work shift definition*.

The screenshot shows a dialog box titled 'Work shift definition' with a close button (X) in the top right corner. The dialog contains four input fields: 'Name' with the value '12h Shifts', 'Start Time' with the value '06:00', 'Shift duration' with the value '12:00', and 'Number of defined shifts' with the value '2'. Each input field has a small 'X' icon to its right. At the bottom of the dialog are 'OK' and 'Cancel' buttons.

The sum of configured work shift hours is limited to 24 hours.

Go to the *All Dashboard* page to assign the defined work shift definition as additional filter to any dashboard. The dialog to add or edit a dashboard provides the field to select any of the configured work shifts by name as additional filter for the currently selected dashboard.

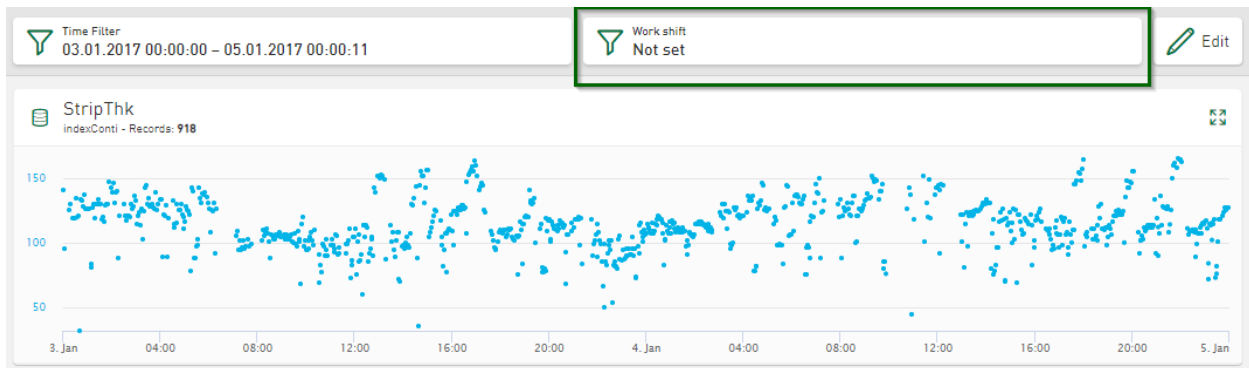


Finalize the current settings by pressing **Save**.



1.4.2 Usage

On the dashboard you'll find the *Work shift* filter next to the usual time filter at the filter bar.



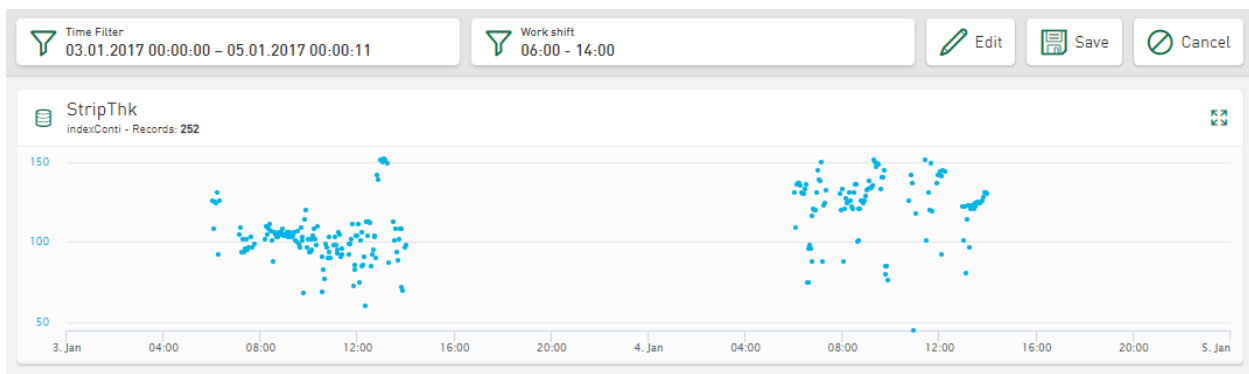
Click on the *Work shift* filter to select the individual time period of the work shifts.

A modal dialog titled '3 Shifts' with a close button (X) is shown. It contains three options for selecting work shifts:

- ☐ 1 Shift
22:00 - 06:00
- ☒ 2 Shift
06:00 - 14:00
- ☐ 3 Shift
14:00 - 22:00

At the bottom of the dialog are 'OK' and 'Cancel' buttons.

The selected time periods are applied as sub filters and reduce the displayed data according to the selected time range.



1.5 ibaDaVIS Status App

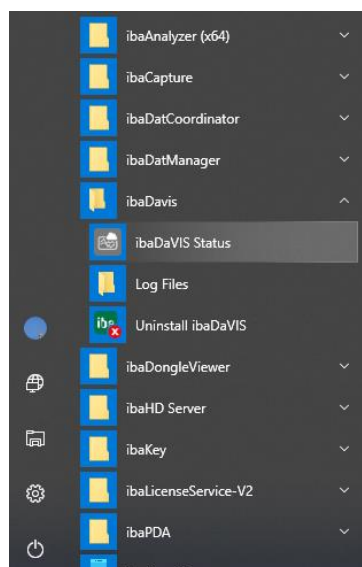
After the installation of ibaDaVIS 2.4.0 a tray icon for ibaDaVIS will show up in your task bar.



ibaDaVIS Status is launched at the background and showing up as tray icon in your task bar. The icon is monitoring the current service status, it provides a context menu to control the service activity and other useful shortcuts.

Open in Browser	Open the current default browser using the local ibaDaVIS service URL
Start Service Stop Service Restart Service	Start / Stop / Restart ibaDaVIS service
Open Log/Configuration Folder	Open the windows file explorer at ~ProgramData\iba\ibaDaVIS\db
Save Support File	Assemble ibaDaVIS application related information for ibaSupport as zip file
Exit	Close the ibaDaVIS Status

The *ibaDaVIS Status* App can be started manually using the windows startmenu

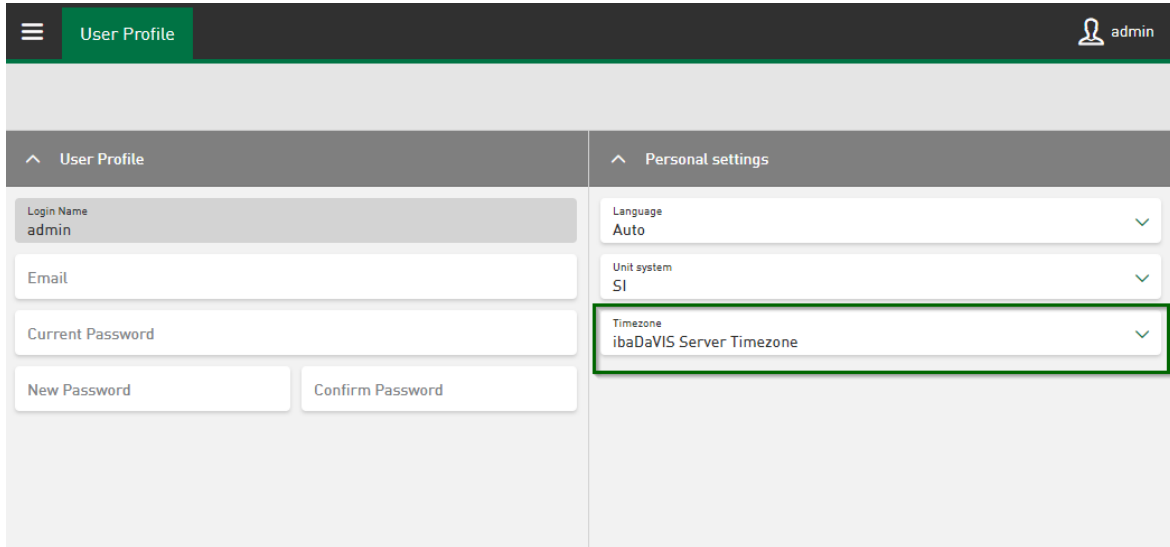


1.6 Support file creation

Use the ibaDaVIS tray icon at your windows taskbar to create a support file for the application ibaDaVIS. The support file includes log files, project file and other for relevant information to help solving support issues.

1.7 User Profile supports timezone selection

The *User Profile* page provides the *Timezone* as dropdown selection field. As a local setting the user can select his time zone. According to that client side selected time zone the UTC offset to the time zone of the ibaDaVIS Service host is computed. The UTC offset is used for the visualization of any timebased data at the dashboard charts.



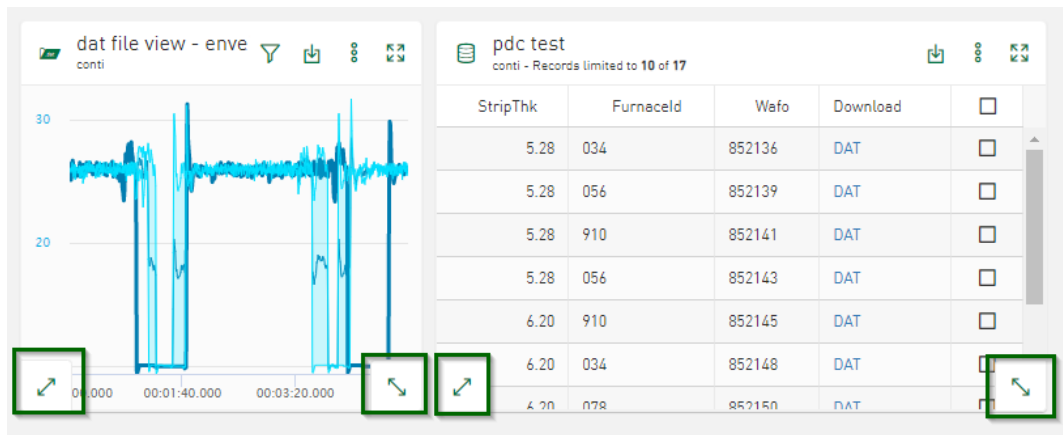
The screenshot displays the 'User Profile' page in the ibaDaVIS application. The page is divided into two main sections: 'User Profile' and 'Personal settings'. The 'User Profile' section contains fields for 'Login Name' (admin), 'Email', 'Current Password', 'New Password', and 'Confirm Password'. The 'Personal settings' section contains dropdown menus for 'Language' (Auto), 'Unit system' (SI), and 'Timezone' (ibaDaVIS Server Timezone). The 'Timezone' dropdown is highlighted with a green border.

User Profile		Personal settings	
Login Name	admin	Language	Auto
Email		Unit system	SI
Current Password		Timezone	ibaDaVIS Server Timezone
New Password			
Confirm Password			

2 Improvements

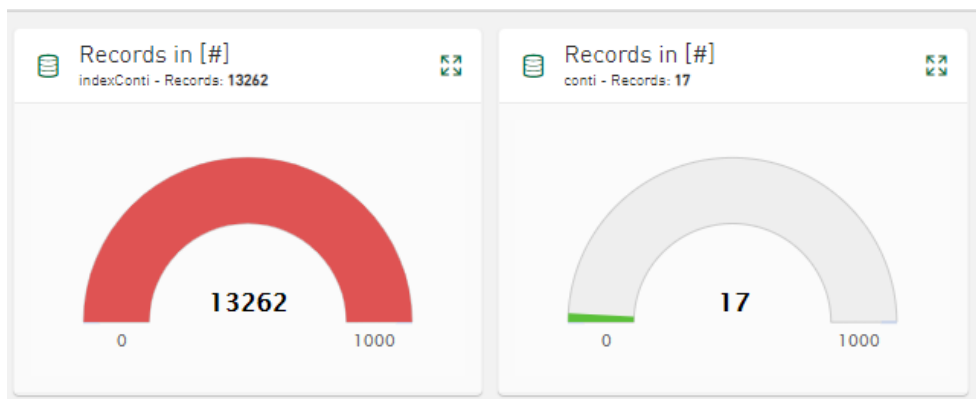
2.1 New framework for dashboard tile resizing and positioning

The library to resize tiles and change their position got changed. The dashboard tiles provide drag items at the left and right corner when the dashboard is in edit mode.



2.2 Dashboard tiles shows number of records

The number of rows returned as query result using the current dashboard filter is as number of records on each tile at the header.



2.3 Units at the Dashboard Table tile

The column header of the table tile supports the display of configured units.

Overview
dataXplorer - Records limited to 100 of 6404

Machine_Number	Plasticising_Linearity [%]	Max_Inj1PrsAct [bar]	Injection_Time [s]	Max_Inju1PrsAct [bar]	Melting_temperature [°C]	Maximum_melt_pressure [bar]	
61025642	85.98	1058.13	1.94	1058.13	211.70	1058.13	<input type="checkbox"/>
61025642	86.14	1045.83	1.93	1045.83	213.10	1045.83	<input type="checkbox"/>

To see units at the column header in your table on the dashboard you have to add them at the *Datasource Management*.

Plasticising_Linearity Double	Max_Inj1PrsAct Double	Injection_Time Double	Max_Inju1PrsAct Double	Min_Inju1PrsAct Double
Alias	Alias	Alias	Alias	Alias
Unit %	Unit bar	Unit s	Unit bar	Unit bar
Decimal places	Decimal places	Decimal places	Decimal places	Decimal places
NaN	540.60	1.77	216.44	2.56
83.83	540.10	1.77	222.60	2.56

2.4 Edit Settings as new permission at User Management

The list of permissions at the *User Management* got extended about the permission to *Manage Settings*.

^ User Permissions
<input type="checkbox"/> View Dashboards
<input type="checkbox"/> Edit Dashboards
<input type="checkbox"/> Manage Datasources
<input type="checkbox"/> Manage Users
<input checked="" type="checkbox"/> Manage Settings

User with the permission to *Manage Settings* are allowed to edit the *Analysis configurations* and *Work Shift Definitions*.

Analysis Configuration	Work Shift Definition
+ Add	Copy Edit Delete
Name	Comment
ProcessDetails	Inspect Process Details
ProductDetails	Inspect Product Details

2.5 Support for dat files having 1 MHz sample rate

The *Line chart* tile can visualize signals with a sample rate up to 1 MHz from dat files.

2.6 HTTPS Support

To enable support for the HTTPS protocol, a SSL certificate must be provided. Additionally it is recommended to use the default HTTPS port 443. After setting up the configuration it's required to restart ibaDaVIS service. The URL to access the web interface in the browser must be prefixed with *https://* instead of *http://*. There are two options for configuring HTTPS for ibaDaVIS using the *config.json* located at

C:\ProgramData\iba\ibaDaVIS\config.json

a) *config.json* when using a file based SSL certificate in PFX format

```
{
  "loglevel": "info",
  "Kestrel": {
    "Endpoints": {
      "HttpsInlineCertFile": {
        "Url": "https://localhost:443",
        "Certificate": {
          "Path": "<path to .pfx file>",
          "Password": "<optional certificate password>"
        }
      }
    }
  }
}
```

b) *config.json* when using a SSL certifact that was imported into the *Windows Certificate Store*

```
{
  "loglevel": "info",
  "Kestrel": {
    "Endpoints": {
      "HttpsInlineCertStore": {
        "Url": "https://localhost:443",
        "Certificate": {
          "Subject": "<subject; required>",
          "Store": "My",
          "Location": "CurrentUser",
          "AllowInvalid": "<true or false; defaults to false>"
        }
      }
    }
  }
}
```

Valid values for "Location" are: *CurrentUser*, *LocalMachine*

Source: <https://docs.microsoft.com/en-us/dotnet/api/system.security.cryptography.x509certificates.storelocation?view=netframework-4.7.2>

Valid values for "Store" are: *AddressBook*, *AuthRoo*, *CertificateAuthority*, *Disallowed*, *My*, *Root*, *TrustedPeople*, *TrustedPublisher*

Source: <https://docs.microsoft.com/en-us/dotnet/api/system.security.cryptography.x509certificates.storename?view=netframework-4.7.2>