



# ibaDaVIS

## Data Visualization and Information Service

Start Up

v3.0.0

### Measurement Systems for Industry and Energy

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Issue	Date	Revision	Author	Version SW
1.0	2018-07-17	First issue	tg	2.0
1.1	2018-07-31	System requirements	tg	2.0
1.2	2021-06-07	System requirements; Installation, Datasource configuration, ibaHD-Server Connection , Dashboard configuration	tg	2.9
1.3	2021-09-29	Screen shots	tg	2.10
1.4	2023-04-25	Actualized sopported operation systems and system requirements	tg	2.11
1.5	2023-07-03	Virtual Signals	tg	3.0

The current version is available for download on our web site www.iba-ag.com.

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Start up

### In 5 Steps from the installation to your visual process information

#### 1. Installation

Got your Dongle/ Soft license ready? - Plug it into your x64 windows based PC! Follow the installation instructions when executing the *ibaDaVIS-v3.X.X.exe* installer. The CodeMeter Runtime is included in the installation of ibaDaVIS v3.0.0 or higher



During the installation *ibaDaVIS* provides a port number which will be used for the access your web browser – preferably the *Chrome, Mozilla* or the *Windows Edge* browser.

Network interface and port Click Install to start installation with the current settings					
Select network i	Select network interface and port:				
IP Address:	Any IP address (preferred)				
	○ Specific IP address				
	fe80::7584:b36:2a04:e33c 🛛 🗸				
Port:	80 🔶				
State:	available Test				

Finally the installer will offer to open ibaDaVIS in your standard browser.



If the *ibaDaVIS Service* did not start correctly a message will be given. The *ibaDaVIS Service* may need to run under another than the system account or there might be a problem regarding the license. When you're running ibaDaVIS with a WIBU Soft license the license key must be activated separately. Contact the ibaSupport for further information.

The ibaDaVIS Status is available at the windows task bar as tray icon. Right-Click to the icon and a number of options as context menu is provided which will help you also in other situations.



#### 2. Login

Use Google Chrome or Mozilla Firefox or Microsoft Edge as web browser (Microsoft InternetExplorer is not supported) with the address <u>http://localhost:80</u> based on the logic for the web address <u>http://[PC-name]:[Port]</u>. Status app helps you to start the ibaDaVIS in the broser directly.

First login as admin: Username: admin Password: Admin#1

The admin user is always present and can not be removed. The password can be changed.

#### 3. Add a Datasource

#### 3.1. Configure the database connection to display database or dat file data

Click on the current user name (*admin*) and select the *Datasource Management*. Continue at the Datasource Management menu and click on the *Add* button to add your *Database* connection.

👤 admin	Datasource Management
🛆 Datasource Management	+ Add T Delete
	Add Database

Enter now your *MariaDB*, *MS SQL*, *SQLite*, *MySQL*, *Oracle or Postgress* connection information and test it.

Name SQLite_DB_Connection	×	Don't forget to
Database Type SQLite	~	Save
Path E:\Projects\ibaDaVIS\DB\DataExtracted\Start2018.db	×	your settings.
A Test		

In some cases you need to run the service under another account than the system account to get in touch with your database.

Note: You can manage under which
account the ibaDaVIS Service is
running during the installation (see
the picture below) or at the system
services any time.

Service User Click Next to install as Local System account or select user manually.				
Select service user:				
Local System Account     This Liner:				
Damain	Colored Ularea			
Domain	Select User			
Usemame				
Password				

## **3.1.1.** Add ibaFile table to display dat file signals and KPI values on the dashboards

Add ibaFile Table to add a table which is created and filled using *ibaAnalyzer-DB* and which will give you access on the signals of the dat files which are the source of the extraction.



Select the table by name from the drop downlist and save the current settings to finalize the setup of the *ibaFile Table* 

by	Table Settings	Options Virtual								
	Name dbo.deFile		×	dbo.deFile						~
nd										
t	_FileId Integer	_TimeStamp DateTime	_FileName String	۹	_FileType String	_Complete Digital	_ErrorOnExtract Digital	_MetaldVersion	Einsatzbund String	Dateiname String
ize	Alias	Alias	Alias		Alias	Alias	Alias	Alias	Alias	Alias
e	Unit	Unit	Unit		Unit	Unit	Unit	Unit	Unit	Unit
	Color	Color	Color		Color	Color	Color	Color	Color	Color

## **3.1.2.** Add any time based table from a database as datasource to follow general trends on the dashboards

Add General Table when you add any table which contains a time stamp in datetime format as data source e.g. to display data the PDA is writing to your database using the cloud/ database datastore



Select the table by name from the drop downlist and correct the column for the time stamp before saving the current settings and finalize the setup of the General Table.

ole by	+ Add 🔟 Delete						$\checkmark$	Save 🖉 Cancel
ie drop	٩	Table Settings						
correct	local MsSQl	Name dbo.PDA_TIMESERI	ES	X Table dbo.P	PDA_TIMESERIES	✓ Timest	amp column 1E	~
or the	New Table>	Column Settings						
efore	🖶 dbo.deFileDAT	I_TIME DateTime	MICROSEC Integer	sine_10s Double	CPU Double	Network_Traffic_Wlan Double	RAM Double	Temperatur Double
inalize		Alias	Alias	Alias	Alias	Alias	Alias	Alias
he		Unit	Unit	Unit	Unit	Unit	Unit	Unit
2.		Decimal places	Decimal places	Decimal places	s Decimal places	Decimal places	Decimal places	Decimal places
		Color	Color	Color	Color	Color	Color	Color
		04 06 2020 15-23-15	0		20.45	5.19	46.28	

#### 3.2. Add your ibaHD-Server as datasoure to see ibaHD data on your dashboards

Add the ibaHD-Server connection by Click on the current user name (*admin*) and select the *Datasource Management*. Continue at the Datasource Management menu and click on the *Add* button to add your *Add ibaHD-Server* connection.



The fastest way to enter the connection items of the ibaHD-Server is given as quick connection. Get the quick connection as string into the clip board from the GUI of the HD Server by three clicks

General Configure Server Port:	Connections	Backup 🕅 rer 💡 Get 9003	API key 2	🔓 ibaHD-API	User management Log
Status:		Running on p	ort 9003		
TLS certif	icate:	C5CB3EB7B1	771185147EC33159	267BBCF52C8DBB	
Call history					
Request Time	\\ \\ Addre	255	User	Request count	API Method
	6 ibaHD-A	PI key for admi	n		×
	API key:	653d74f0c42	18d789783fd4405d3	22f0dc60f5175fe19ac89d6	67904553557792 Galaga OK

The all required connection info is now present as text in the clipboard.

Drop the clipboard content as text directly at the following line of the ibaHD-Server connection page in the ibaDaVIS to setup the ibaHD-Server connection.

Datasource Management		
+ Add 🔟 Delete		
Q	Name	
HD <new database=""></new>	Server	
local MsSQl	Port	
dbo.PDA_TIMESERIES	User	
dbo.deFileDAT	API Key	
	Certificate thumbprint	Remove
	Select certificate	
	🛆 Test	
	Paste ibaHD-Server quick connect info here	
	ibaHD Manager Quick Connect	

Add a name for the ibaHD-Server connection and mayhaps exchange the server name against the IP address to get a positive connection test result before saving the current settings.

≡	Datasource Management		
+	Add 🔟 Delete		
٩		Name myHDServerConnection	×
Ħ	<new database=""></new>	Server IBA-FUE-NOTE518.iba-ag.local	×
₿	local MsSQl	Port 9003	×
	dbo.PDA_TIMESERIES	User admin	×
	dbo.deFileDAT	API Key	×
		Certificate thumbprint C5CB3EB7B1771185147EC33159267BBCI	Remove
		Select certificate	Ē
		Paste ibaHD-Server quick connect info here	
		ibaHD Manager Quick Connect { "Host": "IBA-FUE-NOTE518.iba-ag.local", "F	Port": 9003, "User ×

Add your time or event based store individually by clicking Add store and selecting the time or event based store by name from the given list to finalize the setup of the hd data as datasource.

	+	+ Add 📋 Delete					`
Ko Add Time-based Store	P		Time-based Store	Analysis			l
		local MsSQl	Name HD write data	×	Select time-based HD store HD write data		1
		dbo.PDA_TIMESERIES	Signals				
		dbo.deFileDAT	Q				1
	но	myHDServerConnection					
		New Table>	Available signals			Color	
			0. Virtual				
			1. DataXplorer				

Similar to the Signal tree in ibaPda Client you can distinguish to see active inactive or all signals at the signal tree. The latest configuration is used for the dispalyed signal names.

_	+ Add 🔟 Delete							✓ Save
🗟 Add Event-based Store	٩	Event-based Sto	ore Analysis					
	local MsSQl	Name HD GenEvents		X Select ev HD Ger	ent-based HD store nEvents			
	dbo.PDA_TIMESERIES	Events						
	dbo.deFileDAT	Event String	Timestamp DateTime	Message String	Trigger String	Priority String	Acknowledged Digital	AckComment String
	myHDServerConnection	Alias	Alias	Alias	Alias	Alias	Alias	Alias
	HD write data	Unit	Unit	Unit	Unit	Unit	Unit	Unit
		Decimal places	Decimal places	Decimal places	Decimal places	Decimal places	Decimal places	Decimal place
		Color	Color	Color	Color	Color	Color	Color
		Active Event 01	19.05.2021 13:46:02	mEvent	Outgoing		0	

There is only one event of each kind visualized.

#### 4. Add your Dashboard

R.

Navigate to All Dashboards and Add Dashboard.

All Dashboard	<b>≡</b> All Das	shboards
🔁 All Dashboards	O Search	+ Add / Edit
	Name	Add Folder
	🔁 All Dasht	Add Dashboard

You enter a name at the given field at the modal dialog and add optional a symbolic image for your first dashboard.

All Dashboards			<u> A</u> admin
Search + Add Edit			
Name	Image	Work Shift Filter	Permission
🔁 All Dashboards			Edit
	Add Dashboard	×	
	Name my first Dashboard	×	
	Work Shift Name No Selection	~	
	Image (relative to ibaDaVIS Server)		
		OK Cancel	

The new item in the list of dashboards is the link to your first dashboard.



#### 5. Add tiles to visualize data on your first dashboard

Open your dashboard and switch the dashoard into edit mode to start.

≡	Dashboards my first Dashboard	<b>∝o</b> Share	⊳	<sup>Autorefresh</sup> In 30 sec	🔬 admin
7	Time Filter 18.05.2021 17:06:39 - 19.05.2021 17:06:39				🖉 Edit
In ed	it mode you click add tile	dashboa	rd		

You are asked to enter a Name, select your configured Datasource. Dependent on the source type the option for the tile type will change.

Don't become nervous if you don't see any data. Maybe your're just looking at the wrong time range. Change the displayed time range by clicking on the *Time Filter* at the top of your dashboard. Select the time range where you definitely have data.

Tile Name Datasource dbo.deFile Tile Type Line chart	Add Tile	×
Datasource dbo.deFile ~ Tile Type Line chart ~	Tile Name	
Tile Type View View View View View View View Vie	Datasource dbo.deFile	~
	Tile Type Line chart	~



### Overview of supported tile types

Tile type	Can be used for	Additional
Line Chart	<ul> <li>Display of time trends</li> <li>Visualization of down times</li> <li>Visual detection of abnormal trend development</li> </ul>	<ul> <li>Zoom function is used as interactive filter for all tiles on the dashboard.</li> <li>Y-axis can be scaled manually.</li> </ul>
Scatter chart	<ul> <li>Display technological relations</li> <li>Visualize correlations</li> <li>Monitor process deviation</li> <li>Visual detection of outliers</li> </ul>	<ul> <li>Switch x-axis from time to one of the selected value columns.</li> <li>See the relation e.g. between speed and momentum.</li> <li>X and Y-axis can be scaled manually.</li> </ul>
Histogram data as histogram the backmanner the backmanner	<ul> <li>Display the distribution of a value</li> <li>Visual detection of process deviation</li> <li>Visualize process stability</li> </ul>	<ul> <li>Switch between total and percentual scaling</li> <li>Value range can be configured</li> <li>Number of classes can be configured</li> </ul>
Pie chart	<ul> <li>Display product variety</li> <li>Monitor the distribution of data to different classes</li> </ul>	<ul> <li>Clicking on a segment applies the filter for the selected category to all tiles on the dashboard</li> <li>The selected category is aggregated by Sum, Count, Average, Max, or Min</li> </ul>
Gauge	<ul> <li>Visualization of scalar values e.g. average use period, total count of products or other KPI values</li> </ul>	<ul> <li>Aggregation of the selected value column by Sum, Count, Average, Max, or Min operator</li> </ul>
Number         Numer, htt         Jondaws         Laurant           INA         *         800x13x4         800x13x1         800x13x1           INA         *         800x13x4         800x10x10x1         800x10x1           INA         *         800x13x4         800x10x10x10x1         600x10x1           INA         *         800x13x4         800x10x10x1         600x10x1           INA         *         800x13x4         800x10x10x1         600x10x1           INA         *         800x13x4         600x10x1	<ul> <li>Display selected columns of your data table</li> </ul>	<ul> <li>Sort the displayed values by clicking on the table header.</li> <li>Clicking on the table header also opens a column related filter which will be applied to all tiles on the dashboard.</li> <li>Download the dat file or a pdf report.</li> </ul>

#### System requirements

- Support of 64 Bit systems only
   Windows 8.1 (x64), Windows 2012 Server R2 (x64), Windows 10 (x64), Windows Server 2016 (x64), Windows
   Server 2019 (x64), Windows Server 2022 (64), Windows 11 (x64),
- .net Framework 6 is included when you install ibaDaVIS
- CodeMeter Runtime for Windows v7.21a or higher (most recent version is included in installer)
- Supported Browser: Google Chrome, Mozilla Firefox, Microsoft Edge

#### Where to get support and other useful information

• The About page offers the license info and contact information for your region.

1	Autorefresh In 30 sec	min	Find our local partner at the
зт	<ul> <li>Datasource Management</li> </ul>	ibaDaVIS	contact information page
	🕼 User Management	Version v3.0.0	
	<u>∬</u> User Profile		iba Support
	Settings	License container 3-4326749	Please select your location to find our nearest support staff:
	tor Settings	Customer name iba AG	Europe     Asia
	⑦ Help	Container type WIBU CmStick v4.3	<u>Africa</u> <u>Australia, New Zealand and Oceania</u> <u>New Homeson (NASTA)</u>
	① About	Container host IBA-FUE-NOTE518	Central and South America
	_	Required EUP date 09/19/2023	
	Logout	EUP date 12/31/2024	
		License information ibaDaVIS Ties Demo 12/31/2024 License agreement Third party licenses	Or Contact us directly: www.iba-ag.com
		Tile licenses Total: 252 used: 84 free: 168	support@iba-ag.com
		Build information 82/73563 19.09.2023 09:20.35	Tel: +49 (911) 97282-14
		Support Contact Information	

• Start the integrated Help to get detailed information about the ibaDaVIS controls and features.

Ι	Autorefreah In 30 sec	Info Introduction First steps Configuration of datasources Configuration of dashboards Adding tiles Tile types Working with the dashboards User Management. User Profile Settings Heb Logging Appendix
3 T	🛆 Datasource Management	Search Q
	🗘 User Management	- Working with the dashboards
_	<u>Ω</u> User Profile	These inderboard view View can select a dashboard view Edit dashboard View can select a dashboard view The pane contains the configured tiles for the most recorrily set time range. Fater sphere
	Settings	Display of the datasets on tiles
	⑦ Help	
	(i) About	In the dashboard, you can
	🕞 Logout	entities that are applied to all this in the databased, exclude chapter <u>Billing calitions</u> expert the definition price for the included and then, see chapter <u>Disk</u> or <u>Alitican databased views</u> enable the editing models to the databased in order to
		and a more true, see additional pass and the true, exception passion of a time, see <u>Sufficience at life and change tile size</u> change size and position of a time, see <u>Sufficience at life and change tile size</u>