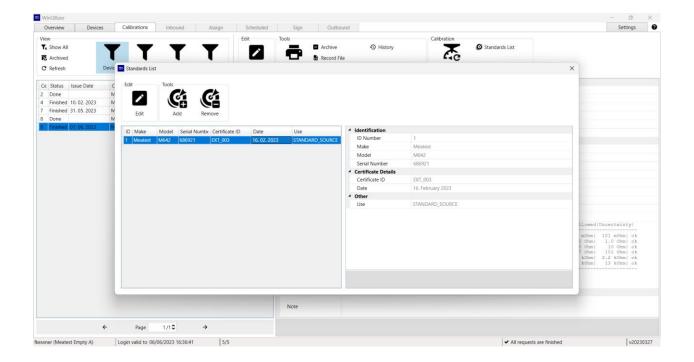
WinQBase - Database software for calibration laboratories

User manual



This PDF user manual is an auto-conversion of interactive CHM help. Interactive CHM help provides better reading experience and is also available from Meatest website.

WinQBase client

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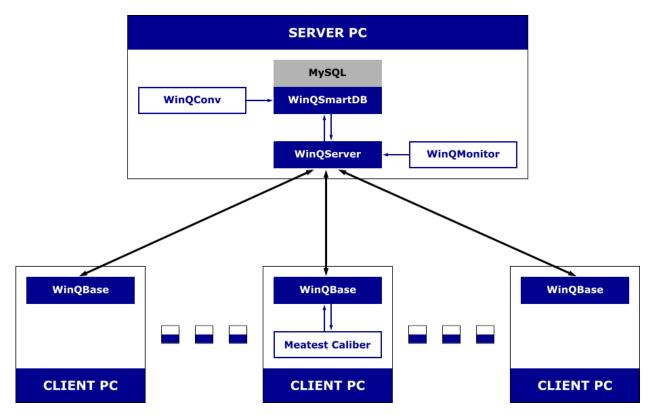
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Introduction

WinQBase is database software for calibration laboratories that keeps track of laboratory resources as well as its customers, equipment provided for calibrations and other essentials. Client app interacts with calibration software Caliber to create, manage and run calibration procedures. Calibration results are processed by WinQbase again to provide calibration certificates and keep records in central database.

The system holds history of changes that is easy to browse through and can recall past records if needed. The central database that stores all WinQBase as well as all Caliber resources can be backed-up using native MySQL or MSSQL tools.

WinQBase is based on client – server topology consisting of one central database server and several client PCs that access the data over local area network. Diagram chart below shows an example of such system and its interactions:



WinQServer is the backbone of WinQbase system, managing its central database and providing data access to users via client applications (WinQBase) installed on their local PCs. This concept allows simultaneous work of multiple client stations within WinQBase system all while maintaining database integrity.

The server side includes two utilities: WinQConv and WinQMonitor. WinQConv is used to migrate data from previous versions of WinQBase. WinQMonitor is graphical user interface for server setup, management and monitoring. Both tools as well as the entire server side of WinQbase system shall be managed by system administrators only.

Login screen

Login screen is the user's entry point into the system.



Welcome to WinQBase

Username				
Password				
Server		Database	~ O	Set
	Log me in			
	Continue offline			
	Changelog			

On each WinQBase startup, the user may choose to either log in online to access the central database or run the app in offline mode. It's recomended to use online mode at all times. Login form keeps username and server setup from last successful login.

Online mode (default)	Offline mode
Online mode connects the user to local database (or one of local	Offline mode is designed for scheduled calibrations at

databases if the calibration lab runs multiple databases on a single server), providing up-todate data in real time. Status icon next to **Set** button indicates availability of selected server.

Users can log in online by clicking on **Log me in**. The app will then contact selected server, identify the user through login and password, load necessary data and display **Dashboard**. customer sites where VPN connection to central server cannot be established.

This mode provides limited set of tools and access to locally stored procedures, allowing the user to run calibrations offline and later import the calibration data into the database.

Users can enter offline mode by clicking **Continue offline**. Offline mode requires offline data to be stored in local client app and will only run if offline data have been previously downloaded.

SEE MORE

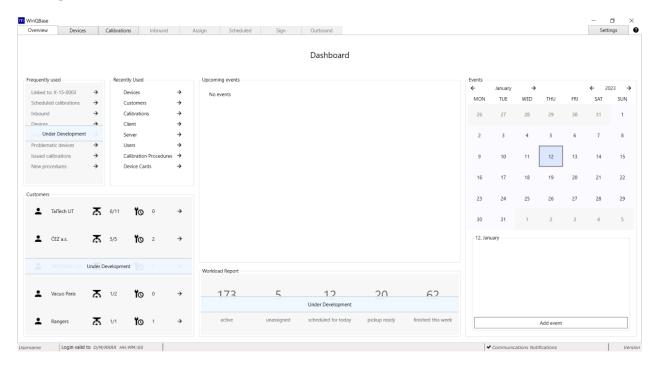
SEE MORE

Go back to Home page.

Dashboard tab

Dashboard tab is the first to show up once the user successfuly logs in and the client app downloads initial data from database. The tab includes shortcuts to tabs and filtered views **Recently used** by current user and **Events** calendar to manage the user's agenda.

User may also click on **Devices** or **Calibrations** tab to browse database records or manage application and system settings in **Settings** tab on the far right.



Devices tab

Devices tab shows records of all instruments in the database, ie. both laboratory standards and customer assets. Devices tab is divided into three sections: list of records on the left, single record overview on the right and toolbar on top.

Overview	Devices	Calibrations	Inbound	Assign	Scheduled	Sign	Outbound					S	ettings
iew						Add	Edit	Tools		Calibration		Service Events	
T _x Show All		/ /	-	Model		New Devi	ce 💼		Decommission	-	Import Calibration	A Report failure	
B Decommis	ioned	I I	I			New From	This		Record File	\square	Show Calibrations	✓ Mark as repaired	
C Refresh		omer Device Gro	up Serial Num	har			Ed		History	Calibrate		Yo History	
O Merresin	6450	oniei Denee oro	op benannann						ristory	comprote		IG History	
D Number	Etalon	Customer	Workplace	Owner Info	Device Group	Make	Model	Identification					
62		Manumenure	Manumenure		Denaity	Meaterd	OCM 622	ID Number	400				
101								Etalon	10				
100								Customer	MERTER apol. 1	1.0			
69								Workplace	Serve .				
410									See.				
407								Owner Info	24442-44 5070/5 4/19-00				
					Manhorson Street	Manufacture 2							
405								Device Group	Multimatey				
454								Make	Meanword				
410								Model	80.0				
412		Tesla Stropkov	Testa Strophov		Multimatey	METER	Martes M-1800	Serial Number	000027005				
401		MEATEST spoil to	Break Control of Contr	Break (Dekaty	Meaterst	14542	4 Status					
400		MEATEST spell to	Break Control of Contr	Break Street	Kalibratory	Meaterd	MPIEC	Condition	Without water of	Courses .			
400		MEATEST spok un	Brog.	Break Control of Contr	Kalibrithory	Meaterd	8010	Last Service Event					
400	1	MEATEST spoil or	Brook	Break	Multimatey	Meaterd	8010	Date of Registration	28. February 202				
407	14	MEATEST upol. La	Break Control of Contr	Break (Multimatey.	Meaterst	8010	Warranty					
405	14	MEATEST upol. La	Break Control of Contr	Break (Multimatey.	Meaterd	8010	Date of Decommissio					
405		MEATEST spoil or	Brog.	Break (Kalibrithery	Meaterd	M140	Calibration	on				
404	14	MEATEST spoil to	Break Control of Contr	Break (Kalibrithory	Meaterd	8010	Calibration					
403		MEATEST upoil to	Brog.	Break (Kalibratory	Meaterd	MP133C	Last Calibration					
452		MEATEST spoil or	Brog.	Break (Kalibratory	Meaterst	8010		-				
401		MEATEST spoil or	Break .	Break	Kalibrithery	Meaterst	Option RCD	Calibration Interval					
400	14	MEATEST upoil to	Brog.	Break (Multimatey	Meaterst	8010	Calibration Cost					
479		MEATEST upoil to	Broat Contract	Break (Desaty	Meaterst	M-520	Default Procedure					
478		100	100		Kalibrithery	Infectional I	MI151	4 Other					
477					Kalibrithery	Meaterd	M716D	Asset ID					
475		MEATEST upol. La	Brog.	Break (Kalibratory	Meaterst	8010	Price					
<							,	Noto					
		<	Page	1/19\$	<i>→</i>								

By default, the **list of records** shows all active (ie. not decommissioned) devices. The list can be filtered out using predefined filters in **View** section of the toolbar, sorted by clicking on individual columns of the list, reorganized and listed through using navigation panel below. The rest of the toolbar as well as **single record overview** are related to- and interact with the record selected in the list of records.

Toolbar groups' help
View
Add
Edit
<u>Tools</u>

Calibration

Service events

Calibrations tab

Shows calibrations and prints **calibration certificates**. Calibration tab can be accessed directly or through **Calibration group** tools on **Devices tab**. The former is recommended when searching all calibrations of certain type (fe. expired calibrations), the latter is recommended when looking up calibration of a particular device or group of devices. Calibrations tab is divided into three sections: list of records on the left, single record overview on the right and toolbar on top.

Overview	Devices	Calibrations	Inbound	Assign	Scheduled Sign	Outbound		Settings
iew	_		Edit	Tools	• · · · · · · · · · · · · · · · · · · ·		Calibration	4. 4. 492
* Show All		r T	1			History	A	idards List
Archived					Record File		C^G	
C Refresh	Inva	alid Today	Edit	Print			Redo Calibration	
Certificate ID	Status	Issue Date	Valid To	Customer	Unit Under Test Result	Date	Certificate Details	
				Management	NO. MANAGERIC CO., No. 8 (MI)	ALC: NO. 1861	Certificate ID	825
101		26. 52. 2023	40.03.2007		499, 11, 12, 12 -	40.05.2003	Status	Dow.
100		82.03.2823	80.03.2023		500.11,11,11	82.03.2825	Issue Date	
1222	Finadowei	81.03.2023	01.03.2025	Manufrances	512. Meatest, OCT Not OK	01.03.2023	Valid To	02. March 2023
1221	Dane		01.03.2023	Manufrenune	102, Meatest, OCT Not OK	01.03.2023	Customer	Manametain
12010	Finadowd	82.03.3825	01.03.2023	Manufrance	512. Meatest, OCT Not OK	01.03.2023	Unit Under Test	502, Mealest, OCM 622, 6522541
12118	Done		27.42.3034	MEATEST special and	401, Meatest, Mb. Nor CH	27.42.3825	Calibration Details	
1218	Dana		27.02.3024	MEATEST spell s.r.	401, Meatest, Mil-Not CK	27.62.3809	Result	Nut OK
0.00	Done		21.62.3825	MEATEST spell Lr	400, Meatest, 801 Not CK	21.02.3825	Date	61, March 2023
1216	Done		25.62.3034	MEATEST special	401, Meatiest, Mile Not CK	25.62.3809	Place	
215	Done		21.02.2024	MEATEST spell av	401, Meatest, Mb. Not CK	21.02.2023	Person in Charge	Jaroslav Postulavský
1214	Done		21.02.3034	MEATEST speci. s.r.	401, Meatest, Mil-Not CK	25.62.3803	Responsible Person	
1213	Done		20.02.2024	MEATEST spell by	401, Meatest, Mb. Not CH.	21.12.2023	Temperature (°C)	27.58
1212	Done		20.02.2014	MEATEST spell s.r.	401, Meatest, Mb. Not CK	25.52.2025	Humidity (%)	18
12111	Dane		20.12.2024	MUATED god Lr	401, Meatest, Mb. Not CH.	25.52.2025	Procedure	MORE VEC
400,3719	Finantiand	17.62.3923	17.02.2034	MEATEST spail ar	401, Meatest, MS- CK	17.62.2025	Procedure Description	Delicenti precentara pri pre rapitti.
1258	External	06.01.2023		MUNTER and LA	475, Meatest, 921 CK, except	06.01.2023		Putchion Respect Mandards 2001 Deviation hep-
1257	External	86.01.2023		MEATEST spot ar	475, Meatest, 907 CH, eccept	06.01.2023		NOT-ON: (0.01 10.01 10.01 10.01 10.00 10.00
1256	External	18.12.2022		MEATEST spot. Lr	476, Meatest, 921 DK, except	19.12.2002		TEL: (0, 10, 10, 10, 10, 10, 10, 10, 10, 10, 1
1255	External	18.12.2022		MEATEST special	475, Meatiest, 907 CH, except	18.12.3822	Protocol	
1254	External	18.12.2022		MUNTER and LA	475, Meatest, 921 CK, except	18.12.2002		3 separated deviation is interval allowed deviation I uncertainty
1253	External	18.12.2022		MEATEST spell ar	475, Meatest, 901 CH, except	18.12.3822		contacted by operator
1252	External	18.12.2022		MUNTER april 14	476, Mealers, 921 CK, except	18.12.2002	4 Other	
1251	External	18.12.2022		MEATEST spail ar	475, Meatest, 921 CH, except	18.12.2022		
1250	External	18.12.2022		MEATEST spell Lr	476, Meatest, 921 CK, except	18.12.2002	Note	
240	External	18.12.3822		MEATEST spell s.r.	475, Meatest, 907 CH, except	18, 12, 2822		
140	External	18.12.2022		MUNTER and LA	475, Meatest, 921 DR, except	18.12.2002		cardia
							s <	
		+	Page	1/120\$	÷			

The **list of records** can be filtered out using predefined filters in **View** section of the toolbar, sorted by clicking on individual columns of the list, reorganized and listed through using navigation panel below. The rest of the toolbar as well as **single record overview** are related to- and interact with the record selected in the list of records.

Toolbar groups' help

<u>View</u>

<u>Edit</u>

<u>Tools</u>

Calibration

Settings tab

Manages client application and certain system settings, divided into individual categories on the left. See category descriptions below for more details.

Q WinQBase 4		- 0 :	×
Overview Devices	Calibrations Inbound Assign Scheduled Sign Outbound	Settings	0
Client	Change Settings for Your Computer		
Filters Preferences	, My Account		
	Signature : Set		
Server			
Users	Change Password		
Parameters	Advanced		
Device Groups	Path to Caliber : Set		
Device Models	Offine Storage		
Calibration Procedures	Caliber Files Offline Storage Version: Update to Latest		
Customers	Procedures Offline Storage Version: Update to Latest		
Calibration Places	Offline Calibrations Stored:		
Username	Login valid to D/M/RRRR HH:MM:SS	Ver	rsion
	Sottings cotogory		
	Settings category		
	<u>Client</u>		
	<u>Chent</u>		
	<u>Filters</u>		
	<u>inters</u>		
	<u>Server</u>		
	<u>Users</u>		
	<u>Parameters</u>		
	Deutee exercise		
	Device groups		

Device cards

Calibration Procedures

Customers

Calibration places

Settings - Client

Access level: everyone

Personal settings of client application. My Account settings affect current user across the entire network, all other settings on this page affect this PC only. Setting up **Path to Caliber** is required to run calibrations, manage Device Cards and Calibration Procedures using Caliber as external program.

Q WinQBase 4					o ×
Overview Devices	Calibrations Inbound Assig	n Scheduled Sign	Outbound		Settings 🕜
Client	Change Settings for Y	our Computer			
Filters					
Preferences	My Account	_			
Server	Signature : Set				
Users	Change Password				
Parameters	Advanced				
Device Groups	Path to Caliber :	atest Callor callor are	Set		
Device Models	Offline Storage				
Calibration Procedures	Caliber Files Offline Storage Version:	2022-12-2070748:09-054 files	Update to Latest		
Customers	Procedures Offline Storage Version:	2022-12-22707-49122 (364 19vd	Update to Latest		
Calibration Places			Opdate to Latest		
	Offline Calibrations Stored:				
Username	Login valid to D/M/RRRR HH:MM:SS			✓ Communications Notifications	Version

My Account

- **Signature** Sets user signature in JPG, JPEG, PNG or BMP format to be used in calibration certificates and other client-generated documents.
- **Change password** Changes current user password. Minimum length is 6 characters.

Advanced

 Path to Caliber Used by WinQBase client to call Caliber on current PC to run calibrations, edit Instrument Cards or Procedures. Default Caliber location is C:\Program Files (x86)\Meatest\Caliber\caliber.exe

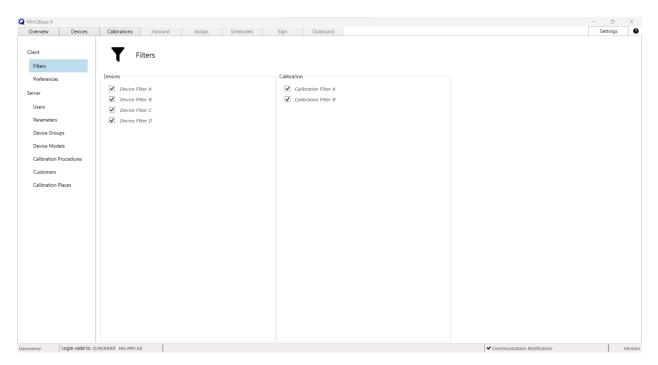
Offline Storage

- **Caliber Files** and **Procedures** Allow user to update local data storage to be used later in <u>offline mode</u>. Both items show date of the last update (if any).
- Offline calibrations stored Shows the number of offline calibrations saved on current PC. Offline calibrations can imported into online database using <u>Import Calibration</u> tool on Devices tab.

Settings - Filters

Access level: everyone

Each user can indivially pick filters to be shown in their <u>View</u> group on **Devices** and **Calibrations** tabs.



The list of available filters here can be managed and expanded by system administrators only. See **this page** in server manual for more details.

Settings - Preferences

Access level: everyone

Additional user interface preferences of client application. Settings on this page affect this PC only.

Q WinQBase 4								×
Overview Devic	es Calibrations Inb	ound Assig	n Scheduled	Sign	Outbound		Settings	0
Client Filters Preferences Server Users Parameters Device Groups Device Groups Device Models Calibration Procedures Customers Calibration Places	Prefere	Inces	· · · · · · · · · · · · · · · · · · ·		Set			
Username	Login valid to D/M/RRRR	HH:MM:55				✓ Communications Notifications	Ve	ersion

User interface

- **Language** Sets client application language (changing the language requires restarting the application)
- **Zoom** Magnifies text and on-page elements of client application. Useful for extra large or extra small displays.
- Entries per page Sets the number of records shown per page in List of Records on Devices and Calibrations tabs.
- **Show Tips on Startup** Shows tutorial info-bubbles on client startup when turned on.

Printing

There are several options to choose from when printing calibration certificate on Calibrations tab. Selecting default options here will suppress user prompt pop-ups that normally show up when printing a calibration certificate and use selected defaults instead. User may select **Default Print**

Template, **Default Output Folder** and whether the certificate shall be exported in original format or printed on a printer under **Export Behavior**. There is no option to preselect a specific printer.

Settings - Server

Access level: Administrator only

This page includes basic server management tools for system administrators. See **WinQServer manual** for more server setup tools. Tools on this page **may cause irreversible data loss**, make sure to read page element descriptions below thoroughly before taking any action.

Q WinQBase 4				-	o ×
Overview Devices	Calibrations Inbound Assign Scheduled Sign Outbound			Setti	ings 🛛 🔞
	Calibrations Inbound Assign Scheduled Sign Outbound Manage Global Settings For All Users on This Server (v4.0.0.0) Active Users User Kck Data Linkages Kck Key Symbol: S Device Numbering Format: EVSIDS Calibration Numbering Format: SIDS Curtom Attributes Calibration Devices Add Value	Print Templates Print Template A Print Template B Print Template C Print Template D Add	Remove Remove Remove Remove		ings
Username	Login valid to D/M/RRRR HH:MM:SS		✓ Communication	ons Notifications	Version

Active Users

Shows active users on the server. **Kick** button will force selected client app to shut down and disconnect from the server.

Data Linkages

Key symbol defines character used in print report templates to mark sections to be completed by WinQBase when generating documents.

DeviceandCalibrationnumberingformatsdetermine

Custom Attributes

Adds and removes custom attributes to/from **Device** and **Calibration** records. Type in a unique attribute name and click **Add value** to add new custom attribute or click **Remove** to remove the selected attribute.

Warning: Remove button permanetly deletes the attribute and its data in all records! Custom attributes' names cannot be renamed once created. Any operation with Custom atributes may take seconds or even minutes to complete. how ID Numbers or new records are created. Numbering formats on this page are read only, see **Variables' configuration** page in server manual for more details on numbering format setup.

Print Templates

Lists print templates records in the database that can be used to generate documents like calibration certificates. See <u>this</u> <u>page</u> for more details.

Download saves selected template to current PC, **Upload revision** uploads new template from PC to refresh selected record in the database, **Remove** removes the record from the database and **Add** adds new record into database associates it with selected file from current PC.

Print Templates - Tips & Tricks

Print Templates are files, stored in database and available as templates for generating documents like calibration certificates, calibration stickers, inventory records and other record printouts. When selected for printing, WinQBase will make a copy of the template file, replace all **Keywords** inside the file with record data and either save the file on a local PC or print the content on a printer based on **Client Preferences**. See below an example of .docx print template (left) and calibration certificate generated from this template (right):

meatest	Calibration certificate no. \$ <u>CertificateID</u> \$	mea	atest		Calibration certificate no. 34 mused by PBp Hemmer on outvictors
Customer Unit under test Result Calibration date. validity	\$Customer\$ ID \$UUT\$ \$Result\$ \$Date\$, \$ValidTo\$	Customer Unit under ta Result Calibration d		MEATEST \$1.9. ID 2. METEX. M3850D, 0 OK 30/10/2023, 30/10/2024	
Standards used	\$StandardsList[standards_list_text]\$	Standards us	sed	M143, Meatest, SN: 6700	081 (5155578v, 30/10/2023)
Procedure	\$ProcedureDescription\$	Procedure		Direct measurement of	f M143 Multifunction Calibrator.
Lab conditions	Workplace \$Place\$ Temperature \$Temperature\$"C Humidity \$Humidity\$%	Lab conditio	ns	WorkplaceLab 1Temperature23 °CHumidity50 %	
Notes	\$Note\$	Notes		-	
Calibration data: Secotocoliables Calibrated by	Approved by	Calibration da DC Voltage Function P VDC-2W VDC-2W	Standar Standar 4 V 1.000 4 V 4.000	0 V 1.002 V 2.00 m	
Calibration data: \$EcotocolTable\$	\$Note\$	Calibration da DC Voltage Function f VDC-2W	Range Standar 4 V 1.000	0 V 1.002 V 2.00 m 0 V 4.002 V 2.00 m	nV 50 4.01 mV 0.59 mV nV 15 13.01 mV 0.67 mV

L.

Print Template management

Print templates can be added, updated and deleted from database on <u>Settings - Server</u> page but their content **can be edited only in its default editor** outside WinQBase (f.e. MS Word for .docx files). Supported file formats are: MS Word documents (.docx, .doc, .xlsx, .xls...) and other plain-text file formats (.txt, .html, .xml,...).

Keywords

Click any item in **Single Record Overview** to see its Keyword shown in tooltip at the bottom of the page. Such Keywords, wrapped between **Key signs** as defined on **Settings - Server** page ('\$' by default) can be placed into any print template to be replaced by record data items when the record gets printed. F.e. *\$Manufacturer\$* may print as "Meatest" or "Keysight"

when printing Device-type record, i.e. inventory list. Calibration certificate print templates can use additional keywords from table below:

KEYWOR D TYPE	DESCRIPTION	EXAMPLES
DUT data	Use "Device." prefix to access Device Under Test data.	\$Device.Model\$ \$Device.AssetID\$
Standards' data	List standards used in calibration from its <u>Standards List</u> . See available formats in <u>ConfigVars.ini</u> server file	\$StandardsList[standards_list_text]\$ \$StandardsList[standards_list_html]\$
Protocol	Use \$Protocol\$ keyword to print calibration data into any template as plain text. Monospaced font is recomended for this type of output. MS Word templates also support \$ProtocolTable[<i>parameters</i>] \$ keyword to print calibration data in table format. See note below the table for more details.	\$Protocol\$ \$ProtocolTable[Diagram=#ff0000 #00000 #0000ff , Header=#00008e,Rows=#ffffff #e3e3e3]\$
Signatures	Print signature images used by PersonInCharge or PersonResponsible. Signatures can be set by each user on <u>Settings -</u> <u>Client</u> page.	\$SIGNATURE_PERFORMED\$ \$SIGNATURE_APPROVED\$

Table protocols in MS Word

Table format can be customized in three ways:

1. **Keyword parameters.** ProtocolTable keyword can be modified with parameters Diagram, Header and Rows, divided by comma. All parameters are optional.

Add **Diagram** parameter to print measurement diagram with each cal point. Optionally, assign Diagram parameter with up to 3 hex colors, divided by '|' to define diagram colors for DUT specification limits, measured value and source value.

Define cell background colors with **Header** and/or **Rows** parameters. Rows paramater may hold up to 2 hex colors, divided by '|'. Second value defines interchanging row color. Omitting any of these parameters will cause WinQBase to use default table colors defined in the template document.

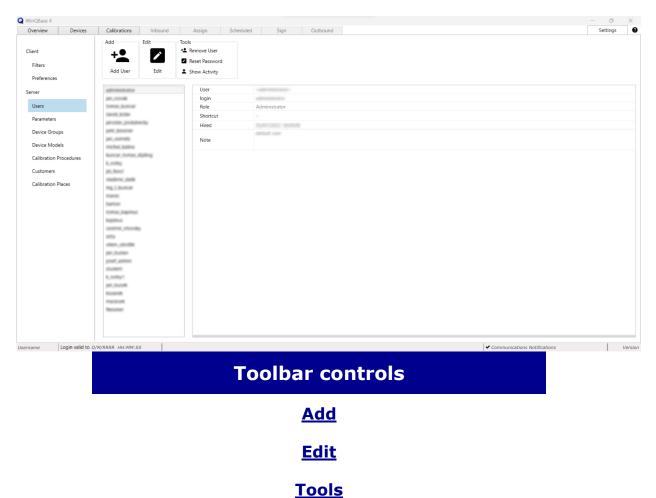
2. **MS Word text styles** with names "ProtocolTableHeaderText" and "ProtocolTableContentText" define table header and content text format. Furthermore, Caliber 3.04 and higher supports styles in protocol notes. Any note with non-zero style inside the protocol will split the protocol table and print the note on a separate line with "styleX" text style. F.e. Note created in Caliber with style number 7 will print using MS Word's "style7" text style. Missing styles are replaced by document's default style.

Caliber Report settings. Go to Caliber > Modify > Configuration > Text Report to define column order, widths and header texts to be printed in both Plain-text and Table protocols of WinQBase. All other settings on that page like protocol footer note, symbol descriptions, decimal sign definition, etc. will also affect WinQBase output.

Settings - Users

Access level: Administrator, Head of Laboratory

Manages user accounts and their access to the database. Note: **Login** is generated automatically from User name when the user gets added and **cannot be changed later**. **Remove user** permanently removes user from the database rather than archiving its data and therefore **cannot be undone**. Click the Access level link above to see permissions associated with user **Roles**.



Roles

WinQBase system allows a hierarchy of users using roles that have defined levels of permission to access forms and controls. Table below shows an overview of roles and their permissions.

Setting a role for user is done through the **Users** form which is accessible by settings menu tabs on sidebar. Menu **Settings** is accessible by main menu tabs on top bar.

				ROLES					
APPLICATION FORM		TION / RUMENT	Administ rator	Head of laborat ory	Calibra tion technic ian	Logisti cian			
	R	ecently used	~	~	~	~			
DASHBOARD		Events	~	~	~	~			
	Upco	ming events	~	~	~	~			
	View	Show all Decommisi oned	~	~	~	~			
		Refresh Filter							
	Add	New device							
	Add	New from this	Ť	Ť	Ť	Ť			
DEVICES	Edit	Edit	~	~	~	~			
		Print			~	~			
	Tools	Decommis sion	~	~	0	0			
		History			~	~			
		Calibrate							
	Calibra tion	Import calibration	~	~	~	~			
		Show calibration							

		Service Events	History Report failure Mark as repaired	~	~	~	0
		View	Show all Archived Refresh Filter	~	~	~	~
		Edit	Edit	~	~	~	0
0	CALIBRATIONS		Print			~	
		Tools	Archive	1		0	0
		10015	Protocol file	Ŷ	Ť	~	Ŭ
			History			~	
		Calibra tion	Redo calibration	~	~	~	~
		U	ser interface	~	~	~	~
	CLIENT		My account		~	~	~
			Advanced	~	~	~	~
		Offline storage		~	~	~	~
	FILTEDS		Devices	~	~	~	~
	FILTERS		Devices Calibration	✓ ✓	✓ ✓	✓ ✓	✓ ✓
	FILTERS			✓ ✓ ✓	~	~	
			Calibration		✓ ✓	✓ ✓	~
			Calibration Active users	✓	✓ ✓ ◎	 ✓ ✓ Ø 	 ✓ Ø
 SETTI NGS 		D Custo	Calibration Active users Pata linkages	✓ ✓ ✓	 <	 <	 ✓ Ø
 SETTI NGS 		D Custo	Calibration Active users Pata linkages m attributes	✓ ✓ ✓	 <	 <	 ✓ Ø Ø Ø
 SETTI NGS 		Custo	Calibration Active users Pata linkages m attributes nt templates Create	✓ ✓ ✓	 <	 <	 ✓ Ø Ø Ø

		Show activity				
PARAMETERS		Parameters	~	~	~	~
	View	Search Archived	~	~	~	0
DEVICE GROUPS	Add	Restore New device group	~	~	~	0
	Edit	Edit	~	~	~	0
	Tools	Archive Print History	~	~	⊘✓✓	0
	View	Search Archived Refresh	~	~	~	0
	Add	Create by program New from this Import	~	~		0
DEVICE CARDS	Edit	Edit Edit	~	~	~	0
	Tools	Export Archive Print History Upload DEV file	~	~	> > > >	0
		Search				
CALIBRATION PROCEDURES	View	Archived Refresh	~	~	~	0
	Add	Create by program	~	~	~	0

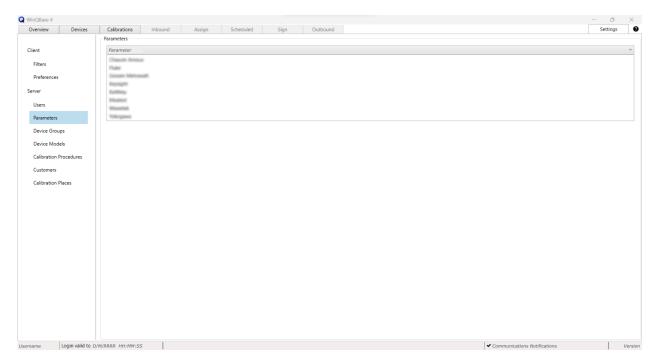
			Import							
		Edit	Edit				0			
		Luit	Edit	~	~	~	0			
			Export			~				
		Tools	Archive			0	0			
		10015	Print	Ť	~	~	G			
			History			~				
			Search							
		View	Archived	~	~	~	~			
			Refresh							
		Add	Add customer	~	~	~	~			
		Edit	Edit	~	~	~	~			
			Customer workplace s			~	~			
CUSTOM		Tools	Archive	~	~	0	0			
ERS						Print			~	~
			Historie			~	~			
- 11 - 1		View	Archived	~	~	~	~			
		_								
		Add	Add new workplace	~	~	~	~			
	WORKPL			✓ ✓	> >	 	~ ~			
	WORKPL ACES	Add	workplace	✓ ✓	✓ ✓	 <	~ ~ 0			
	WORKPL ACES	Add	workplace Edit	 	> > >					
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	WORKPL ACES	Add Edit Tools	workplace Edit Archive Print History Search		> > >	⊘ ✓	⊘ ✓			
	ACES	Add Edit Tools	workplace Edit Archive Print History Search Archived		> > >	⊘ ✓	⊘ ✓			
	ACES	Add Edit Tools	workplace Edit Archive Print History Search Archived Refresh Add calibration			⊘ ✓	⊘ ✓			

	Print		~	~
	History		~	~

Settings - Parameters

Access level: everyone

System administrators may define a list of selectable parameters for each text attribute to unify the responses provided by users. This page just shows parameter lists associated with defined attributes. For more information about adding, editing and managing parameter lists, see **parameter configuration** page in server manual.

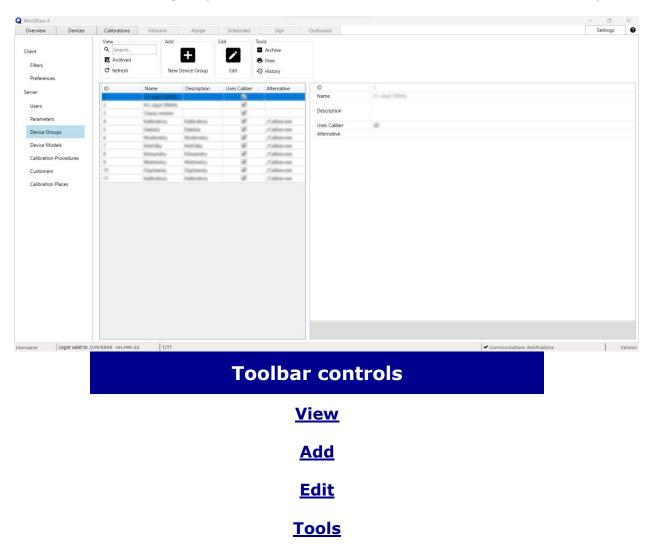


Settings - Device Groups

Access level: Administrator, Head of Laboratory, Calibration Technician

Devices can be sorted into Device Groups allowing users to search devices in the database more effectively.

Future development will allow use of **alternative** programs for calibrations of devices within a group and user **role** allocation based on Device Groups.



Settings - Device Models

Access level: Administrator, Head of Laboratory, Calibration Technician

This page lists Device Models available to be assigned to individual devices in the database. Each record includes a link to **Caliber's** Instrument Card, ie. device driver that provides Caliber with necessary data to use the device in a calibration. In general, all tools with floppy disk icon use Caliber to perform the associated task and therefore proper setup of **Path to Caliber** on <u>Settings - Client</u> page is required to use them.

Caliber may use auxiliary Instrument Cards in procedures for virtual converters, alternative instrument setup, specifications, etc. Such Instrument Cards get imported into the database during procedure creation or procedure import as new Device Model records which may represent the same model as another record or may represent no device at all but are still necessary for Caliber to operate properly. For this reason, **newly created Device Models need to be marked as Primary to become assignable in Devices tab**. All other records will remain hidden and available only to Caliber.

Overview Devices	Calibrations	Inbound	Assign	Scheduled	Sign	Outbound				Settings
	View	Ac	d	Edit		Tools				
ient	Q Search		Create by Program				 Archive 	Upload DEV File		
	R Archived		Import	1	P/		Print			
Filters	C Refresh		a import	Edit						
Preferences	C Nerresh			Edit	Edit by Program	Export	History			
	ID	Model	Make	DEV File	Primary	ID				
rver		-	(Managered)	Statement March	-	Model	10715			
Users	8	MO1088	Meaterst	Meating M1088		Make	Trisument.			
-	8	MITTER:	Meaterst	Meaters MT33C		DEV File	(despired)	8110		
Parameters	-	14140	Meaterst	Meatest M140		Primary				
Device Groups	5	101142	Meatest	Meatest M142						
	-	14140	Meaterst	Meatest M143						
Device Models	1	MIS1	Meatest	Meatest MTS1						
Calibration Procedures	÷	M760	(deaties)	Meatest M162						
	2	10754	Meatest	Meatest MT54						
Customers	10	M525	Meatiest	Meatest MS25						
Calibration Places	11	10021	Meaterst	Meatest MLT						
contractor rates	12	10122	Meaterst	Meatest ME32						
	18	10541	Meaterst	Meatest 18541						
	15	140-10-00	Meaterst	Meatest Mid2						
	10	14584	Meaterst	Meaters 140-50 x Repaight 1458A						
	1.0	DARTIA	Keynight	Keynghi 14401A						
	10	DARTIA	Keynight	Repager 14401A						
	-	Dation 1281	Waterland	Waveriek Datron 1						
	1	41084	False	Page 2008A						
	1	M143		107140						
	100	1010	False	Fiate (1010)						
	100	79	False	Plate 79						
	24	47V	Fale	Pale 27V						
	275	any .	False	Pulse DBV						
	200	125	Fishe	Flate 175						
	10	179	Fale	Plate 179						
	10	167	Fale	Fiate 187						
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<u>Add</u>

<u>Edit</u>

<u>Tools</u>

Settings - Calibration Procedures

Access level: Administrator, Head of Laboratory, Calibration Technician

Manages **Caliber's** Procedures that can be used to run calibrations. All tools with floppy disk icon use Caliber to perform the associated task and therefore proper setup of **Path to Caliber** on <u>Settings - Client</u> page is required to use them. New Instrument Cards generated by procedure creation or import in Caliber get automatically imported into the database as new <u>Device Model</u> records.

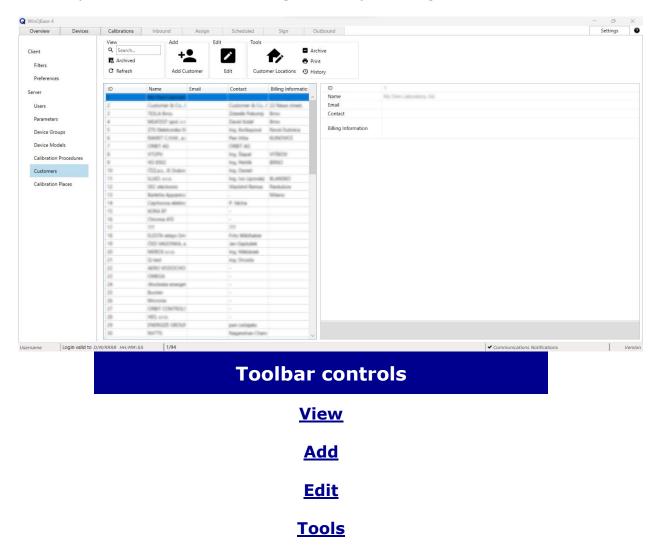
verview Devices	Calibrations In	bound	Assign	Scheduled	Sign	Outbound		Settings
	View	Add		Edit		Tools		
ent	Q Search	Cre	eate by Program				Archive	
	R Archived	La Im	port	1	P/	1 -	Print	
Filters	C Refresh			Edit	Edit by Program	Export	History	
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rver	1		Stational Support		ARE DONE OF	Nam	e	Fulle /1018 sample procedure
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Calibration Procedures		12 HS	Prine relies etc.					
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customers		NUTREZ	Prine relies etc.					
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	14 147	AUGA	Prine relies etc.	Author David K	LA HETHERA			
	15 (96)	88	Prime mélleni etal	Author David 6	ui PK300			
		7506	Prine relies etc.					
		1-038	Prine nélesi etal					
	18 141		Pline relies etc.					
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		Allerana I	Prine relies etc.			-		
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me Login valid to D/	M/RRRR HH:MM:SS	1/364						Communications Notifications
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				То	olba	r co	ontr	ols
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					4	<u>Add</u>		
					-	<u>Add</u> Edit		

<u>Tools</u>

Settings - Customers

Access level: everyone

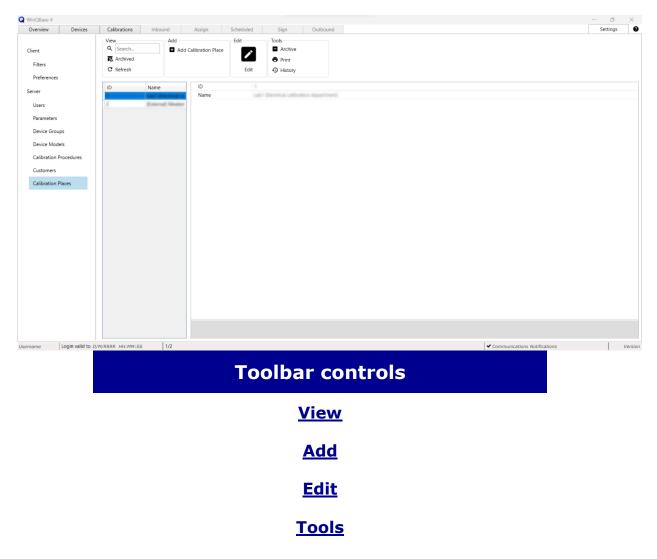
Devices in database can be linked to a Customer, whose data will be printed on all future calibration certificates. It is recomended to create one or more customer records for the calibration laboratory itself in order to distinguish between internal and external devices. Addresses of customers being based in multiple locations can be distinguished by defining **Customer Locations**.



Settings - Calibration Places

Access level: Administrator, Head of Laboratory, Calibration Technician, Logistics

Manages list of laboratory workplaces, teststands or locations to be later associated with **Calibrations** and printed in calibration certificates. Third party laboratories can be listed here too, allowing the user to associate eternal calibration certificates (imported for tracebility purposes) with certain location.



Calibration in Offline mode

Offline mode allows the user to run calibrations in Caliber offline, using locally stored procedures and instrument cards. Offline mode requires having properly configured interface for Meatest software **Caliber** and offline data to be stored in local client app. These can be set up in online mode under **Offline storage** and **Advanced** sections of **Settings > Client** screen.

alibration Procedures	Caliber Files		Calibration	
Plake (1010) sample procedure Plake 2017 sample procedure Plake 2017 sample procedure MT-80ue MT-80ue	Log Caliber Files offline storage version Procedures offline storage version Offline calibrations stored:	on: n:	California - 16/01/2023 13:1048 R-16/113/06/12 (205 Herg 1-16/113/06/12 (205 Herg 13:40 (1 Herg	

Offline calibration process is as follows:

- 1. Select procedure from the **Calibration Procedures** list.
- Click Calibrate to initiate the offline calibration in Caliber app. Calibration record will appear in Calibration list once the calibration is done.
- 3. Next time you log in online, go Devices tab, find the associated UUT and click on **Import calibration button** to save the offline calibration into online database.
- Finally, print the calibration certificate (online) using <u>Print button</u> to complete the calibration process and set the calibration record status to <u>Completed</u>.

Toolbar - View group

View group tools narrow down the **List of Records** to help the user find a particular record. Devices & Calibrations can be filtered out using preselected **Filters** whereas records in Settings tab can be filtered out using **Search** query.



Filters

Used in **Devices & Calibrations** tabs. Individual Filters can be toggled on and off by clicking on individual Filter buttons or deactivated all at once by clicking Show all button. Some filters may request additional search criteria (such as Serial Number filter asking for serial number to search the list for). Each user can indivially pick filters for their user interface at **Filters** page on **Settings** tab. The list of available filters there can be managed and expanded bv administrators system as described **here**.

Q

Search

Used in **Settings** tab only. Type in a search phrase to find all records that contain such phase in any of their text attributes.

Tools common to both methods:



Archived Decommissioned

Toggles visibility of archived records. Visibility of archived items is turned of by default. With visibility turned on, user may browse through both archived and active records.

Refresh

Refreshes **List of Records** using selected filters. The list gets refreshed automatically when switching filters, the main purpose of this button is to clear the list from newly archived records.

Toolbar - Add group

Add group tools add new records into the database.



New Device Add Calibration Place New Device Group Add Customer Add User New Workplace

Adds new record of given type and activates <u>edit mode</u>, enabling user to enter individual values in **single record overview** below.

See more info on: **adding users** or **adding workplaces**.



New from This

Clones selected record and activates <u>edit mode</u>, enabling user to edit copied values in **single record overview** below.





Create by Program

Starts external program (**Caliber** by default) to create new **Procedure** or **Instrument card** and add it into the database.

Import

Starts external program (**Caliber** by default) to import external **Procedure** or **Instrument card** file into the database.

Toolbar - Edit group

Most records in WinQBase are read-only by default and can only be edited in **edit mode**. Clicking on Edit icon will activate the edit mode and allow the user to change certain entries. Once in edit mode, the edit group tools get replaced with **Save** and **Cancel** options and the rest of the toolbar, list of records and tab switch become locked, forcing the user to either save or discard changes before leaving edit mode.





Edit by program

Starts external program (**Caliber** by default) to edit associated **Procedure** or **Instrument card**.

Edit

Activates edit mode (see above) and allows the user to edit entries in **single record overview** below the toolbar.

Toolbar - Tools group

General tools:



Archive Decommission

Toggles condition of the selected record to or from archived state. Archived/decommisioned records no longer appear in the **list of records** unless recalled using related switch in **view group** of the toobar.



History

Shows history of changes of the selected record in dedicated **History pop-up window**.

Printing & data export:



Print

Prints selected record data (fe. to create a calibration certificate). See more details **here**.



Record File

Exports the entire content of the <u>list of records</u> into CSV or HTML table file. List record count affects the time needed to create the Record File so the export **may be a lentghy operation**. Avoid using this tool on long and unfiltered lists.





Protocol File

Calibrations tab only. Exports just the calibration data (rather than all calibration data like **Print** does) from the selected calibration record. This can be useful as raw data export for further processing.

Export

Settings - Device Cards & Calibration Procedures only. Starts external program (**Caliber** by default) to export **Procedure** or **Instrument card** from the database into a file.

Tools specific to Settings - Server - Users:



Delete User

Removes selected user from the database. This action cannot be undone. **Reset Password**

Opens pop-up for window the operator to set a new for password the selected user. Old password will no longer work once the new password is set.

Show Activity

Opens pop-up window that shows of activity the selected user (ie. actions done inside WinQBase the system) within selected timeframe. This popup is similar to **Record History**.

Other tools:



Customer Locations

Opens pop-up window where the user can manage different customer locations. Each Customer record is associated with at least one Location record. Newly added Customers get automatically associated with a default Location created from Customer data.



Upload DEV File

For use by system administrators only. This tool restores device card record's missing link to a DEV file. DEV-less device cards can be created only through database conversion from WinQBase 3.9 or earlier. Similarly to **Import** tool, Upload DEV File starts external program (**Caliber** by default) to import external **Instrument card** file into the database and link it to selected record.

History

History form is used to display the editing history of the selected record. When viewing the history, the user has the option of choosing a time window of display. It defines this using preset speed dials or by directly entering the start and end date.

Today	Last Week	From	DD.MM.RRRR 🚔 🕶				
Last Month	All	То	DD.MM.RRRR			Show History	
D/M/RRRR HH:MM:	SS User A		Attribute 2	=>	Value		
D/M/RRRR HH:MM:	SS User C		Attribute 4	=>	Value		
D/M/RRRR HH:MM:	SS User C		Atrribute 1	=>	Value		
D/M/RRRR HH:MM:	SS User C		Atrribute 3	=>	Value		
D/M/RRRR HH:MM:	SS User A		Atrribute 3	=>	Value		
D/M/RRRR HH:MM:	SS User B		Atrribute 1	=>	Value		
D/M/RRRR HH:MM:	SS User A		Atrribute 2	=>	Value		
D/M/RRRR HH:MM:	SS User A		Atrribute 1	=>	Value		
D/M/RRRR HH:MM:	SS User A		Atrribute 1	=>	Value		

The form is accessible through **History** or **View activity** tool in the **Tools** control section, located on the parent record form.

Print

Print form is used to specify a print for the selected record. One or more records to be printed are selected from the list on the form of the given type of records. When entering a print job, user has the option of choosing which of the print templates will be used. Management of print reports used in the system is done on the **Server** settings form. A description of the rules for creating or editing a template can be found <u>here</u>.

Select Template for Printing	×
Print_Template_A.docx Print_Template_B.docx	
Print	

After processing the print template, the user has the option to determine how to complete the print job by printing on the selected device or by exporting to a file.

m Print	×
Print	
Export	

The form is accessible through the **Print** tool in the **Tools** section of the controls, located on the parent record form.

Print

The user selects the output device for printing through the standard system dialog, and then the prepared data is printed itself.

Export

The print template is processed and then saved in the original file format on the client device. The location of the exported data is specified by the user through the file explorer dialog window.

Toolbar - Calibration group

Tools specific to Devices tab:

Note: All these tools will eventually switch to Calibrations tab.





Calibrate

Opens pop-up window with list of available calibration procedures. Clicking on Calibrate inside the pop-up will start external program (**Caliber** by default) to run this procedure.

Once the calibration is done, WinQBase will switch to Calibrations tab, use the data from external program to create new calibration record, associate it with selected device and activate Edit mode for the user fill in additional details.

Import Calibration

Asks the user to choose calibration data source for a new calibration User may record. import either data from previously created offline calibration or an external calibration report. WinQBase will then switch to Calibrations tab, use the data to create new calibration record, associate it with selected device and activate Edit mode for the user fill in additional details.



Show Calibrations

Switches to Calibrations tab and shows calibrations related the selected to device. This is done by filtering out all other calibrations from the List of Records.

Tools specific to Calibrations tab:



Redo Calibration

Starts external program (**Caliber** by default) to re-run selected calibration.

Once the calibration ends, WinQBase will use the data from external program to create new calibration record, copy all other data from the previously selected calibration record and activate **Edit mode** for the user touch up any details as needed.

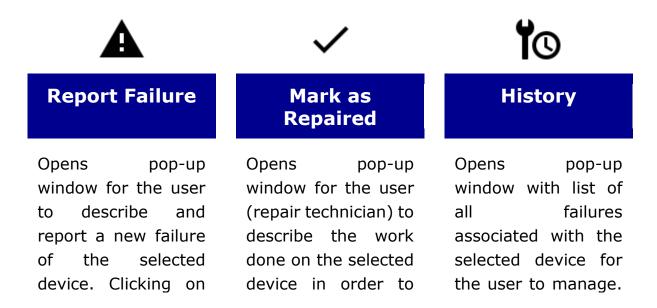


Standards List

Opens pop-up window with list of standards used in selected calibration. The list can be printed in calibration report as required ISO17025. by User may add and remove devices from current database flagged as **Standards** to/from the list using Add Standard and Remove Standard buttons in the pop-up window.

Toolbar - Service events group

Service event tools manage failures that may impact device performance and therefore prevent the device from being used in a calibration.



Report Failure inside the pop-up will set the device condition to **Malfunction**, create new service event and associate it with the device. restore it into working condition. Clicking on Mark as Repaired inside the pop-up will set the device condition back to **Ok** and close the active service event of the device. Setting a Solved date will render the **Failure** solved and ultimately restore the **Device** condition to Ok.

List of records

List of records shows preview of records of a given type. The list can be filtered out using predefined filters in <u>View</u> section of the toolbar or sorted by clicking on individual columns of the list. Selecting a record in the list will show its details in <u>single record overview</u> and allow the user to interact with the record through toolbar above.

ID Number	Etalon	Customer	Workplace	Owner Info	Device Group	Make	Model
612		MERTER spot or	dena:	Broo	Kalifestiony	Meaterd	MT20C
491		MERTEST spok s.r	dens.	Bree .	Kalibratory	Medient	8010
60	14	MUNTEST open an	dens.	deno.	Multimatey	Mealerd	4010
403	14	MERTEST spot. s.r	dens.	Brea.	Multimatey	Meaterst	8010
400	14	MUNTED april to	dense .	dens.	Multimatey	Meaterd	4010
467		MERTEST appl. s.r	line .	direct.	Kalibratory	Meaters	14140
400		MUNTED appl. or	dens.	deno.	Kalifettory	Meaterst	8010
403		MERTEST appl. L1	deno:	Brea.	Kalibratory	Meaters	M133C
4004		MERTEST upon an	dense.	deno.	Kalifettery	Meaters	8010
403		MERTEST appl. s.r.	deno:	Break Street	Kalibrithory	Meaterst	Option ACD
482	14	MUNTED appl. or	dens.	Break	Multimativy	Meaterd	4010
401		MERTEST apol. La	deno.	direct.	Denaty	Meatern	84-520
400			100		Kalifeditory	Meeterd	MILES.
679				12 2	Automation	Manufacture of Control	1000
479.	0	MEATEST apple or	Brea	Reno.	Kalifertitory	Meaterd	8010
477					Kalibrittory	Meaterst	190003
476		MEATEST appl. 1 /	dense .	direct in	Kalifeditory	Mealerd	MT00
475					Kalibrithery	Meaterst	84140
474					Kalifeditory	Meaterd	APT 880
473					Kalibrithery	Mediate	MT60
472		MEATEST appl. 14	dense .	Seno .	Kailleditory	Meateri	MPD C
40%					Kalibrithery	Meaterst	MT60
470					Kalifedhory	Mealerd	MT160
400		MERTEST spot. s.r.	line .	Break .	Kalibrithery	Meaters	MITESC.
400					Kalifeditory	Mealerd	MT00
467					Kalibrithery	Meaterst	P6003
400					Kalifettiony	Meaters	MPTER
400					Kalibedtory	Meaterst	14000
45.4					Kalifestiony	Transmitte	100004
4623					Kalibrithery	Transmitte	30104
462					Kalifeditory	Medient	14000
401					Kalibratory	Mediect	10000
460					Kalifettery	Meaterd	14000
403					Kalibrittory	Meaterst	PARTIE
418					Kalificationy	Magheot	14000
457					Desaty	Medieci	144612
456					Kaliferditory	Mealerst	14000
405		MERTER appl. La	dena .	direct.	Desaty	Medieal	M-520
<							

List is divided into pages that can be listed through using navigation panel below the list. Number of records that fit on a page is defined by **Entities per Page** on <u>**Client**</u> page of Settings tab.

List customization

Columns in the list can be reordered, resized, added or removed to achieve optimal personalized layout. Custom layouts are saved individually for each user. Drag and drop column header to change its position. Drag column header edge or double-click the edge to resize it. Right click on column header and select either **Add columns** or **Remove column** to select which data columns will be shown in the list.

Boundary between the list and single record overview can be adjusted as well. The fewer columns there are in the list, the more space you get for the overview and vice versa.

Single record overview

Single record overview shows all attributes of the record selected in **list of records**. Attributes are grouped into foldable sections for clarity. Overview width can be adjusted by draging the boundary between the overview and **list of records**. The fewer columns there are in the list, the more space you get for the overview and vice versa.

4	Identification							
	ID Number	475						
	Etalon							
	Customer	-						
	Workplace	-						
	Owner Info							
	Device Group							
	Make							
	Model							
	Serial Number							
4	Status							
	Condition	Without valid calibration						
	Last Service Event							
	Date of Registration							
	Warranty							
	Date of Decommission							
4	Calibration							
	Calibration Due							
	Last Calibration							
	Calibration Interval							
	Calibration Cost							
4	Ostatní							
	Asset ID							
	Price							
	Note							
		culture attribute 2						
		specification						
		quantity						
	Custom	Derifie (104						
		internal						
		dynamic 1						
		custom-test						

By default, all data in the overview are read-only and can only be edited in **edit mode**, activated by **Add** or **Edit** tools. In edit mode, user can either pick values from dropdowns/selectors on the right or type in custom values as appropriate.

System administrators may define content of certain dropdowns on **Parameters** page of Settings tab.

System Requirements

WinQServer has the following system requirements:

- Windows OS (any desktop version from Windows 7 to Windows 11 or server version from Windows Server 2008 to Windows Server 2022).
- MySQL or MSSQL database, installed on SSD drive. Database installation is part of the installation procedure. Performance is significantly reduced when the database is installed on HDD.
- **Internet connection** for periodic online license validation & update.

Setting up a VPN is recommended for remote access to the database.

Server Configuration - Config.ini

File:SYSTEM_DRIVE:/ProgramData/WinQServer/Config.iniScope:entire system

The file contains categories of properties that are used for basic configuration of application. Table below shows their definitions and values.

CATEGORY	PROPERTY	VALUE	DESCRIPTION
	RelativePath	\Logs	Relative path (relative to location of configuration file) of folder with server's log files.
[Logs]	FileTemplate	ServiceLog_{0}_{1}_{2}.txt	Pattern of log file names. Symbol {0} represents year, {1} is month, and {2} represents day.
[Database]	Server	localhost	Domain name or IP address of computer with RDBMS installed.
	Username	Username	Username to access RDBMS.

	Password	Password	Password to access RDBMS.
	Database	Database name	Name of the database in RDBMS with WinQDB modules that will be used.
[Pooling]	PoolMaximum	10	Specifies number of requests that server can handle simultaneously.
	LockTimeout	10	Maximum number of seconds that a single request can take to be serviced before it is forced to terminate.
	AutoClose	300	Defines number of seconds after slot is closed to requests if it is not in use.
[Service]	Port	8080	Number of communication port that is used for operation of service. WARNING: Each service that is managed in server's operating system must have its own unique port number assigned!
[Service]	Port Protocol	8080 http	communication port that is used for operation of service. WARNING: Each service that is managed in server's operating system must have its own unique port number

[Session]	SessionActivityProtectionMins	15	Number of minutes that a user is considered active even if they do not send any requests to the server.
-----------	-------------------------------	----	--

If server have to manage more than one database, then to add new database, new **DatabaseX** and **ServiceX** categories must be created in the configuration file with the definition of its interface. Index **X** can take on values from 2 to 10. Server together with the mandatory default database service is able to manage up to 10 different databases in total. Table below shows the category definitions and values.

CATEGORY	PROPERTY	VALUE	DESCRIPTION
	Server	localhost	Domain name or IP address of computer with RDBMS installed.
ĺ	Username	Username	Username to access RDBMS.
	Password	Password	Password to access RDBMS.
[DatabaseX]	Database	Database	Name of database in RDBMS with WinQDB modules that will be used. WARNING: Multiple server
	name	services must not be connected to one physical database!	
			Number of communication port that is used for operation of service.
[ServiceX]	Port	Port number	WARNING: Each server service must be assigned its own unique port number (eg 8081, 8082, etc.)!
	Protocol	http	The type of communication protocol that is used to operate the service.
	LoginExpirationMinutes	60	Defines number of minutes after which each user's login is valid.

Server Configuration -ConfigXFilters.json

File:SYSTEM_DRIVE:/ProgramData/WinQServer/ConfigXFilters.jsonScope:entire system

ConfigXFilters.json defines **filters for Device and Calibration records**. Filters help users to search specific records or list certain records (f.e. devices past calibration due date). All filters listed in this file show up on **Settings - Filters** page in client application, where each user can indivially pick which filters they want to use. Newly added filters are deactivated on Settings - Filters page by default.

Syntax

Each filter is defined by a group between '{' and '}', separated by ',' from another filter. Filter group consists of the following parameters:

FILTER GROUP PARAMETER	DESCRIPTION	EXAMPLE
"type"	Can be "device" or "calibration". Defines where the filter is supposed to show up.	"type": "device",
"name"	Display name for client application users.	"name": "Customer",
"join"	Used for advanced filtering using records from multiple SQL tables. Part of SQL command to be added after LEFT JOIN keyword.	
"sql"	Part of SQL command to be added after WHERE keyword. SQL commands can be fixed or further parametrized by arguments as defined below.	"sql": "fk_workplace = '{{Location ID}}'", with Location ID being f.e. 5, this filter will generate SQL command "SELECT * FROM device WHERE fk_workplace = 5"
"description"	Description for client application users.	"description": "Displays devices that belong to the customer's selected workplace.",
"arguments"	Arguments allow users to parametrize filters with their inputs. F.e. to search for a particular device based on its serial number. When user clicks on a filter	"arguments": [{"name": "Serial Number", "type": "string"}],

with arguments in client application, a pop-up form with parameter names, inputs and descriptions will appear. Parametrized filter then activates as soon as user types in required inputs and hits OK.	
--	--

Each argument group consists of the following parameters:

ARGUMENT GROUP PARAMETER	DESCRIPTION	EXAMPLE
"name"	Display name for client application users.	"name": "Location ID",
"type"	Argument type. Can be "string", "integer", "decimal", "boolean", "datetime" or "enum".	"type": "integer",
"description"	Description for client application users.	"description" : "workplace ID number"
"allowedValues"	Enum type only. List of available enum values.	"allowedValues": ["apple", "orange"],
"defaultValues"	Default value to be pre-filled in client application form.	"defaultValues": "apple",
"isArray"	Allows multiselect and defines argument as an array of values. Can be "true" or "false".	"isArray": "true",

Example of filter definition:

```
{
 "type":
                                                         "device",
 "name":
                                                       "Customer",
 "sql": "fk_workplace = '{{Location
                                                          ID}}'",
 "description": "Displays devices that belong to the customer's selected
workplace.",
 "arguments":
                                                                [
   {
     "name":
                                "Location
                                                             ID",
    "type":
                                                        "integer",
     "description" :
                              "workplace ID
                                                          number"
   }
 ]
},
```

Server Configuration -ConfigFieldValues.json

File: SYSTEM_DRIVE:/ProgramData/WinQServer/ConfigFieldValues.json **Scope:** database; servers running multiple databases have additional ConfigFieldValues*X*.json files, one for each database

ConfigFieldValues.json defines **presets for custom items** of Device and Calibration records and "Manufacturer" item in Device records. Items listed in this file show up with dropdowns next to manual entry in client app, allowing users to pick a value from the list rather than typing values in by hand:

Other			
Asset ID			
Price	0		
Note	V1 version		
Custom	condition	good	good ~
Custom			good
			bad
		1	ugly

File contents can be also viewed in client application on <u>Settings -</u> <u>Parameters</u> page. See <u>Settings - Server</u> page in client app for list of custom items that presets can be defined for.

Syntax

Each preset is defined by a group between '{' and '}', consisting of item name and list of associated values. Value list consists of individual values, listed between '[' and ']' and separated by ','. Preset groups are also separated by ',' from one another. Default content of ConfigFieldValues.json is as follows:

```
{
"Name":
```

"manufacturer",

7"	/alues":]
	"Chauvin	Arnoux",
	"Fluke",	
	"Gossen	Metrawatt",
	"Keysight",	
	"Keithley",	
	"Meatest",	
	"Wawetek",	
	"Yokogawa"	
]		
},		

Configuration - ConfigVars.ini

File: SYSTEM_DRIVE:/ProgramData/WinQServer/ConfigVars.ini **Scope:** database; servers running multiple databases have additional ConfigVars*X*.ini files, one for each database

ConfigVars.ini defines **numbering format** for newly created Device and Calibration records. Record IDs cannot be changed once created so make sure to <u>set numbering formats before adding any new items into the database</u>. Furthermore, this file defines **how standards get listed** on a calibration certificate.

Syntax

Each variable needs to be defined on a separate line with format VARIABLE_NAME=VALUE. VALUE may consist of any characters (except Key symbol), **Wildcards and Iterators** as defined table below. Both Wildcards and Iterators need to be wrapped between **Key symbols** ('\$' by default) as defined in <u>Server</u> settings in client app. Default content of ConfigVars.ini is as follows:

```
calibration_list_format=$ID$
device_list_format=$ID$
standards_list_text=$EtalonModel$, $EtalonManufacturer$, SN:
$EtalonSerialNumber$ ($CertificateID$, $CertificateDate$)
```

Calibration and Device numbering formats

Main IDs are assigned to newly created records according to these numbering format definitions. By default, main IDs use primary database record IDs (wildcard "ID") to create a unique ID for each newly created record. Both definitions can be customized by adding characters, <u>calibration</u> numbering formats may use additional wildcards and iterators:

CALIBRATION RECORD WILDCARD	DESCRIPTION	EXAMPLE
USERID	Prints operator's ID number.	\$USERID\$ prints as "5", "2",
DATE[format]	Prints calibration date with specified "format".	\$DATE[dd-MM-yyyy]\$ prints as "31-12-2023", "01-01- 2024",
ITERATOR[<i>label</i>]	Iterators can be used as an alternative to ID wildcard. Prints a number, starting with 1 and counting up with each new record. "Label" defines how often the counter gets reset to 1 with available options being "daily_label", "weekly_label", "monthly_label" and "yearly_label".	calibration format description "CAL \$DATE[dd-MM-yyyy]\$- \$ITERATOR[daily_label]\$" creates IDs like "CAL 12-03-2023-1", "CAL 12-03-2023-2", "CAL 13-03-2023- 1",

Standards' list printing format

Calibration certificate templates may use \$StandardsList[standards list format]\$ label to print a list of standards associated with the calibration. Such label will print standard details as defined in standards list *format*, one standard per line. Format definition "EtalonManufacturer", include wildcards "EtalonModel" & may "EtalonSerialNumber" to print standard identification details and/or wildcards "CertificateID" & "CertificateDate" to print its traceability details. Multiple standard list formats can be defined to handle specifics of certain template filetypes. This is done by changing "format" suffix into something else, f.e. standards list **html** example below includes html tags as required by HTML templates:

standards_list_html=\$EtalonModel\$<\td>\$EtalonManufacturer\$<\td>
\$EtalonSerialNumber\$

Today

Today form is used to preview current entries in log file of **WinQServer** server service. Each record consists of data on originator of the event, time of occurrence, type (severity level) and its brief description. It also includes a set of basic tools that serve user to control server service itself.

Today		Yesterday	Older	Settings	
View		Server			
-	•		Stop		
Filter		Start			
#	Sent	Time	Type Message		
		1141.12	Responding to 3007	request /authoing Loan 1 response 200 connection Marij	
		114147	Responding to (GET	request laufiging Law 1 response 200 connection Main)	
		110102	Requiring to 3587	request /aufiging Loar 1 requires 200 correction Mart)	
		1140.57	Responding to 2027	request /authoring Loan 3, response 200, connection Main)	
188		11.00.52	Responding to 3587	request /authors (user 3, response 200, constition Main)	
		11.00.47	Responding to 2021	request (suffging (user 3, requires 200, constition Marc)	
		11.00.42	Reporting to [227	request lashging (see 3 regional 200 connection Marc)	
		11.00.37	Responding to 3587	request lasting loar 1 reports 200 correction Marci	
		11.00.02	Responding to 3287	request /aufiging loar 3, response 200, connection Marci	
1946		11.00.27	Responding to \$587	request /aufiging Loan 1, response 200, connection Main)	
		1146.22	Responding to 3587	request /aufiging (user 3: requires 200; correction Mari)	
		11.00.17	Responding to 3207	request /authoring (user 3: response 200; connection Main)	
		11.00.12	Responding to 3507	request /authors (user 3: response 200: connection Main)	
		11.00.07	Responding to 2027	request /aufiging (user 3: response 200, connection Marc)	
		11-00-02	Reporting to [37]	request (authoring (user 3: response 200; connection Mari)	
		18:58:57	Regionaling to 3587	request laufiging Lose 1 response 205 connection Marci	
		10.58.52	Responding to 320°	request (authoring juner 3, response 200, connection Marr)	
1.940		10.58.47	Responding to SSE	request /aufliging (user 3, response 300, connection Main)	
		10:59-42	Responding to 3587	request (suffging Loar 3: regionse 20) connection Man)	
154		10.59.37	Responding to 3287	request /authorsg (user 3, response 200, correction Marr)	
		10.59.34	Responding to (GP)	request /admin/offlars (user 3, requirise 200; connection Main)	
		18.58.34	Reporting to 220	request radion/antity/1 (user 1, requires 200, correction Mari)	
		10.59.34	Requiring to 227	request radeocreekly/5 Loan 1 requirise 200, connection Manj	
		10.09.04	Responding to 3287	request lap-order/eventhortvol (user 1 regional 20) correction Mari	
		10.58.34	Responding to 3287	request lapitation/papel/harb-libpapelinsb-218cont- stabiliterare	
		10.59.34	Responding to 318	repart ap being page; hat integration in a distribution	
		10.59.34	Management of 1987	repart approvement/paper/act/dipaped/rel/10 user 1 reporte 2	
140		10.59.34	Responding to 2017	request lag- orgin/customecolgina/The(d_mol)-18/He(d_mai)-154	
		10.59.33	Responding to 2027 Responding to 2027	request. Agri-order/Luttomer-vortglacs/Sortvid Loer 3, regioner 200, conne request. Agri-organ/Luttomer/Waetid_minty-186/Berlid_mach-1_Loer 3, regio	
			and the second s	repart taj- imple/culture/The[ii_mii]+16/he[ii_ma]+1 (car 1, repo	

The form is accessible throught the main menu tabs on the top bar and by default displays a complete overview of records. A defined set of control elements can be used to work with records.

The bottom information bar contains record statistics and current status of server service. The statistical indicator **OA** (overall) is total number of logged records, **Err** (Error) is number of logged records with error type, and **Warn** (Warning) is number of logged records with warning type.

Controls	
View	
Server	

Yesterday

Yesterday form is used to preview entries in the log file of **WinQServer** server service that were recorded the previous day. Each record consists of data on originator of event, time of occurrence, type (severity level) and its brief description.

WinQServer	Service Monitor			-		×
Today	Yesterday	Older		Se	ettings	?
View Filter						
# Sent	Time Type	Message				
			There were no logs yesterday			
🗄 OA 🛛 👔	🛛 Err 🔺 Warn				Status	

The form is accessible through the main menu tabs on the top bar and by default displays a complete overview of records. A defined set of control elements can be used to work with records.

The bottom information bar contains record statistics and current status of server service. The statistical indicator **OA** (overall) is the total number of logged records, **Err** (Error) is the number of logged records with error type and **Warn** (Warning) is number of logged records with warning type.



Older

Older form is used to preview past entries in the log file of the **WinQServer** server service. Each record consists of data on the originator of the event, time of occurrence, type (severity level) and its brief description. A tool for browsing and selecting from saved log files is included.

Tod	ау	Yesterday	a	Older	Settings	
View	7	File				
Filt	er	Open				
#	Sent	Time	Туре	lessage		П
100		13.53.26		d-line unally request has been handled ht	p./782.188.1254.8083/logout (connection Marr)	
1010		1555.26		sponding to \$5875 request August Later 18.	response 200, connection Main)	
		12.53.26		thirte request is being handled as unsafe h	Http://182.188.1.254.8083/logout (connection: Mani)	
10.00		13.53.24		man prights interpret (2011 of prihrough	18, response 200, connection Main)	
		13.53.49		man, prights: transpar (733) of pribring	VE response 200 connection Main)	
40736		13.53.14		moving to 2027, request, faultying (user	18. response 200. connection Main)	
		13.53.09		model of the second states of the second	12. separate 202. correction Main)	
4054		13:53:64		sponding to [UR7] sequent /authoring Loan	18. eegennae 200. connaction-Main)	
		13.52.59		mout prights). Inspect ['30] of pribring	18. response 200, connection Main)	
		13:52:54		monthing to \$127 magnet. Including Loss-	'R response 202 connection Main'	
		13:52:49		sponding to 3587) request Jacobing Loan	18. response 200, connection: Main)	
		13:52:44		monthing to (1977) expand Auditoring Loans	18, response 200, correction Main)	
		13:52:39		sponding to (027) request. Authoring (user	UL response 202 connection Main)	
		13:52:34		sponding to \$207 request. Juditying (user	18. response 200. connection Main)	
		13:52:29		sponding to (UET) request. Jaufiging Loan	18. response 200. connection Main)	
10.00		13:52.24		sponding to (UET) request. /authoring Loan	18, response 200, connection Main)	
		13.52.19		sponding to (UE) request /authoring luser	18. response 200. connection Main)	
1044		13:52:54		sponding to (CET) request Jacobing Loan	18. response 200, connection Main)	
		13:52:09		sponting to 3007 request /authors Low	18. response 200, connection: Main)	
		13.52.64		sponding to (OF) request /authoring Loan	18. response 200, connection Main)	
		12.51.58		sponding to 3507 request /authoring (user	18. response 200, connection: Main)	
		13.51.54		sporting to (UE) request /suffging (see	18. response 200. connection Main)	
		13.51.49		sponding to (UET) request. Juditying Loan	18. response 200. connection Main)	
		13.51.44		sponding to (027) request. /authoring Loan	18, response 200, connection: Main)	
		125139		sponding to 3027 request. Judiping Loan	18, response 200, connection Main)	
		1333.34		sponding to (UET) request. Authoring Laws	VE requirise 200, connection: Maint	
		125129		sporting to (027) request Jacobing Law	18. response 200, connection Main)	
10.14		13.51.24		sponding to (UET) sequent Jauffiping Loan	18, response 200, connection Main)	
		1351.09			VE response 200, connection Maint	
100 C		12.51.54		manipulation integrate (TEE) of preliming	18, response 200, connection Main)	

The form is accessible trought the main menu tabs on the top bar and by default displays a complete overview of records. A defined set of control elements can be used to work with records.

Meatest WinQBase User Manual

The bottom information bar contains record statistics, name of displayed file and current status of server service. The statistical indicator **OA** (overall) is total number of logged records, **Err** (Error) is number of logged records with error type, and **Warn** (Warning) is number of logged records with warning type.

Controls	
View	
<u>File</u>	

Settings - General

General settings form is used to preview selected parameters of **WinQServer** server service, which are used for its basic **configuration**. User can use the explorer's direct access to settings files through prepared controls.

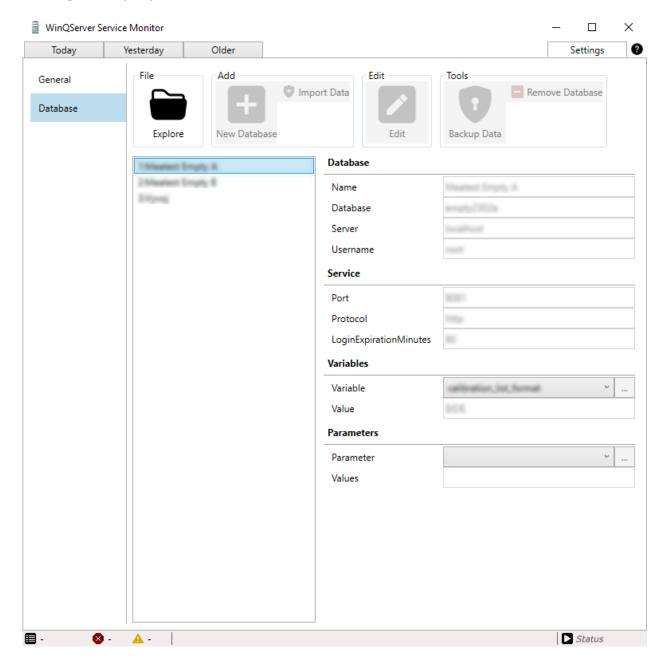
WinQServer Se	WinQServer Service Monitor		- 🗆	\times
Today	Yesterday Older		Settings	0
General Database	File Explore			
	Logs			
	RelativePath FileTemplate	Virge ServiceLog, JR, /V, DDM		_
	Pooling			
	PoolMaximum			
	LockTimeout	10		_
	AutoClose	100		
	Session			
	SessionActivityProtectionMin	s 10		
a - a	- 🔺 -		Status	

The form is accessible through the settings menu tabs on the sidebar and by default displays an overview of configurable parameters. **Settings** menu is accessible through the main menu tabs on the top bar. A defined set of control elements can be used to work with records.



Settings - Database

Database settings form is used to preview parameters of connected databases in the **WinQServer** server service. This view contains properties from basic **configuration** that are related to database setup. Information from the files **variables** and **parameters** of viewed database is also attached. User can use the explorer's direct access to the settings files through the prepared controls.



The form is accessible trought the settings menu tabs on the sidebar and by default displays an overview of configurable parameters. **Settings** menu is accessible trought the main menu tabs on the top bar. A defined set of control elements can be used to work with records.

Controls	
<u>File</u>	
Add	
Edit	
Tools	

Controls - View

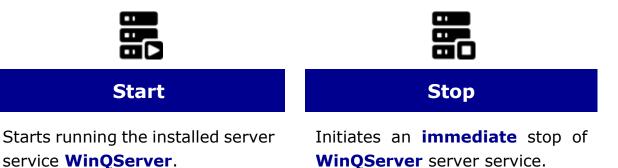
View controls group groups together tools intended for filtering displayed records. It is therefore possible to effectively pre-select displayed records (from their total number) based on preset criteria.



DETAIL

Controls - Server

Server controls group groups together tools intended for filtering displayed records. It is therefore possible to effectively pre-select displayed records (from their total number) based on preset criteria.



Controls - File

File controls group groups together tools designed to access the file system. For example you can select log files or navigate directly to folder with configuration files of **WinQServer** server service.



Open

Opens a system dialog that allows the user to browse and select a file.



Explore

Through operating system explorer displays contents of folder with configuration files of WinQServer **WinQServer** server service.