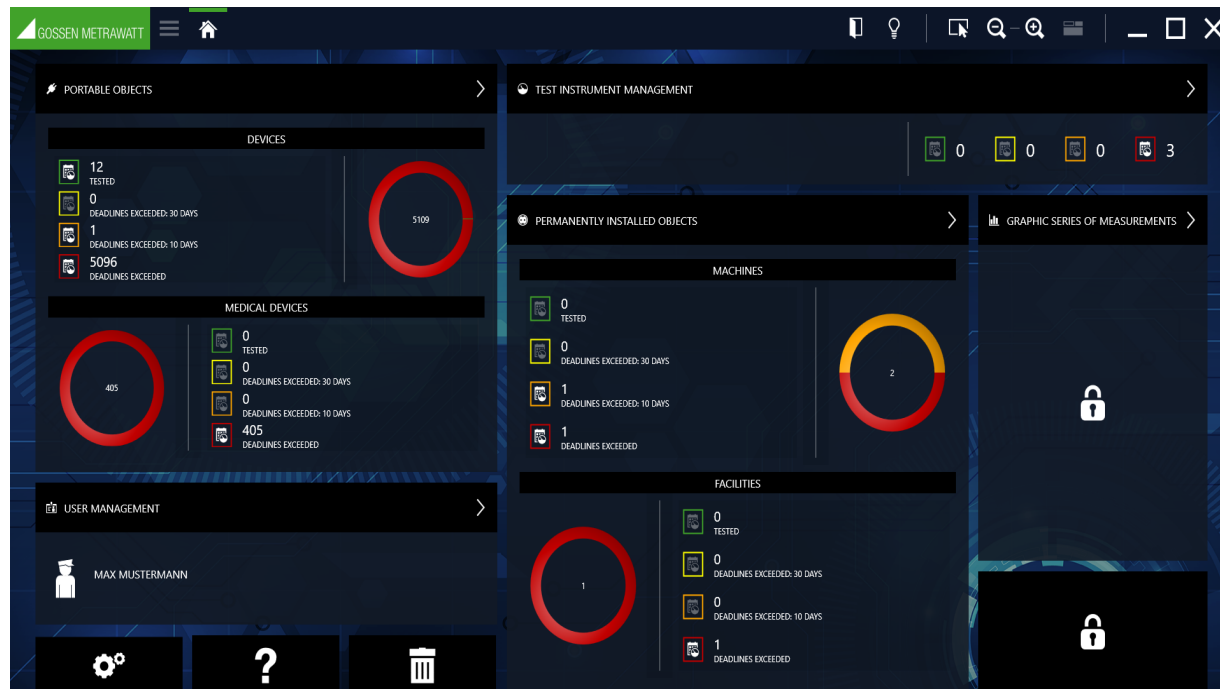


IZYTRON IQ

Software for the Management of Test Instruments and the Generation of Test Reports

3-349-999-03
9/12.24



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1 About this Online Help

Online help for **IZYTRONIQ** is available directly in the program, as a web version and as a downloadable PDF file.

Opening the Online Help

The online help can be opened at any time directly in **IZYTRONIQ**. Click the help icon  to this end. When using a standard keyboard layout, you can also open the online help as usual by pressing the F1 key.

Alternatively, online help can be displayed in your browser:

help.izytron.com

The PDF file can be downloaded from our website:

<http://www.gmc-instruments.de/>

For which software version is the online help valid?

The online help always makes reference to the latest version of **IZYTRONIQ**. Information is only provided for some of the older versions in the case of especially important points.

For this reason, please be sure to always use the latest version of **IZYTRONIQ**.

The version of the online help and the software version for which it's valid can be found on the initial page of this online help.

Layout and Controls

The main topics are displayed in the left-hand column. The respectively selected main topic is highlighted in green. If subtopics are available, this is indicated by a preceding cursor arrow. The subtopics can be displayed by selecting this arrow, and are hidden after selecting it once again.

The content of the selected topic is displayed on the right-hand side.



Show/Hide:

The left-hand column is hidden or displayed again by selecting this icon.



Search:

The online help can be searched here by entering any desired keywords.

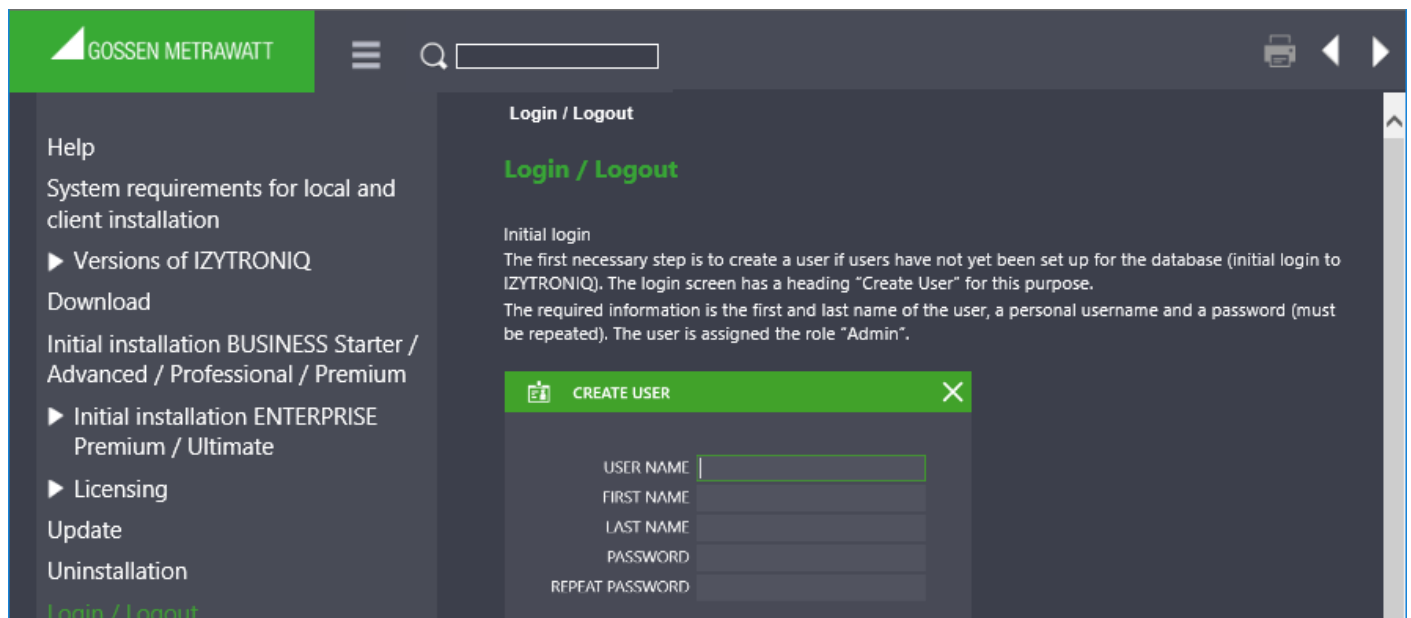


Print:

The content displayed on the right-hand side can be printed out.



Scroll: You can scroll forward (down) or backward (up) in the left-hand column.



Note

Depending on the **IZYTRONIQ** variant, some depictions may differ.

2 Getting Started

Proceed as follows in order to install and familiarize yourself with **IZYTRONIQ**:

1. Take a look at the different variants of **IZYTRONIQ** and choose the one that suits you best (see „**IZYTRONIQ** Variants“).
2. Make sure that your system fulfills the technical requirements (see „System Requirements“).
3. Download the installation file (see „Download“).
4. Install **IZYTRONIQ** (see „Installation“).
5. License your **IZYTRONIQ** software (see „Licensing“).
6. Create your first user profile and log on to **IZYTRONIQ** (see „Login/Logout“).
7. Learn basic procedures for using the software, see:
 - „Layout and Operation“
 - „Portable Objects“ / „Stationary Objects“
 - „Test Equipment Management“
 - „User Administration“
 - „Recycle Bin“
 - „Settings“
 - „Synchronization“
 - „Lists“
8. Transfer data from your instrument to **IZYTRONIQ**, see:
 - „Push-Print Data Transmission“
 - „SECUTEST/SECULIFE ST – Getting Started“ / „PROFITEST / **SECULIFE IP** – Getting Started“ / „METRAHIT – Getting Started“).
9. Generate test reports, see:
 - „Test Reports“
 - „Document Management – Attaching Files“
 - „Printing“



Note

Use the video tutorials to quickly and easily familiarize yourself with certain operations in **IZYTRONIQ** (see „VIDEOS – Tutorial“).

Additional functions that may be of interest to you:

- Program individualized test sequences (see „Sequence Editor – Individual Test Sequences“).
- Automate a test sequence (see „Remote Function – Automated Sequence Control for a Test“).
- Transfer data from older test instruments that aren't compatible with **IZYTRONIQ** (see „**NEXONIQ**“).
- Transfer and convert ETC files to **IZYTRONIQ** (see „**NEXONIQ**“).

3 IZYTRONIQ Variants

IZYTRONIQ is available with various performance levels and features, providing the user with a customized solution for meeting his or her own specific requirements. If requirements become more demanding, the user can expand the range of functions by upgrading at any time. All existing data is of course retained during this process (see „Upgrade“).

Business Variants

Local installation and use on a single computer is the common feature of all **BUSINESS** variants. The software is installed to individual PCs. One license is required for each workstation. Multi-user operation within a network is not supported. However, several users can be set up.

ENTERPRISE Variants

Teamwork is the common feature of the **ENTERPRISE** variants. The software is installed to several PCs which share data in a single database. Depending on the variant, data can be made available online as well as offline. Depending upon requirements, any number of licenses can be purchased for multi-user operation.

EDUCATION Variants

The **EDUCATION** variants are intended and licensed exclusively for use in training and education applications.

CLOUD Variant

The **CLOUD** variant is installed locally to a notebook, a surface PC or a Windows desktop computer and supports the full range of functions. Data resides in the secure cloud which you can access from anywhere around the globe, working together as a team. There's no need to have your own server.

Detailed Overview of the Variants

Functions	Business				Education		Enterprise		Cloud
	Starter	Advanced	Professional	Premium	Professional	Premium	Premium	Ulti-mate*	Pre-mium**
Tests and Test Objects									
Stationary objects (machines and systems)	×	×	×	×	×	×	×	×	×
Portable objects (equipment and medical devices)	×	×	×	×	×	×	×	×	×
Tree structure for locations (properties, buildings, floors and rooms)	×	×	×	×	×	×	×	×	×
Test equipment management	×	×	×	×	×	×	×	×	×
Catalog management	×	×	×	×	×	×	×	×	×
Activate/deactivate devices (remove from service)	×	×	×	×	×	×	×	×	×
Create and manage device sequences	×	×	×	×	×	×	×	×	×
Manual entry of measured values	×	×	×	×	×	×	×	×	×
Remote function (automated test sequences) ¹			×	×	×	×	×	×	×
Push-print ²	×	×	×	×	×	×	×	×	×
Save/delete filter			×	×	×	×	×	×	×
Reports and printing									
Simple universal report as PDF file	×	×	×	×	×	×	×	×	×
PROFITEST distributor report			×	×	×	×	×	×	×
Individualized report template generation with Microsoft Word®		×	×	×	×	×	×	×	×
Company logo can be integrated into reports		×	×	×	×	×	×	×	×
Scanned signature can be integrated into reports		×	×	×	×	×	×	×	×
Images/photos can be integrated into test reports			×	×	×	×	×	×	×
Document management (attachments such as Word®, Excel® and PDF files, or photos and images)			×	×	×	×	×	×	×
Simple list generator (PDF, Excel)	×	×	×	×	×	×	×	×	×
PROFISCAN list generator		×	×	×	×	×	×	×	×
Evaluations									
Analysis and trending for identical tests conducted on a given object			×	×	×	×	×	×	×
PDF printout with global statistics including failure rate as percentage			×	×	×	×	×	×	×
Dashboard function			×	×	×	×	×	×	×
Program									
Quick links (save/delete tree structure selection)			×	×	×	×	×	×	×
MULTI changes			×	×	×	×	×	×	×
User administration	×	×	×	×	×	×	×	×	×
Roles and rights management for users				×		×	×	×	×
Extended registration card with individual data fields				×		×	×	×	×
Interfaces and Communication									
Import and export of tree structures to and from test instruments ³	×	×	×	×	×	×	×	×	×
Data import from test instrument (objects, measurements, catalogs and sequences)	×	×	×	×	×	×	×	×	×
Data export to test instrument (objects, catalogs and sequences)	×	×	×	×	×	×	×	×	×
Data import with attachments (IZY file)				×		×	×	×	×
Data export with attachments (IZY file)				×		×	×	×	×
Data import from PCDOC IQ user software	×	×	×	×	×	×	×	×	×
Data import from NEXONIQ software	×	×	×	×	×	×	×	×	×
Merging of various IZYTRONIQ databases				×		×	×	×	×
Data storage in a common database (SQL server)							×	×	×
Offline operation and data replication ⁴								×	×
Automatic database backup									×
License									
Single user license (PC-specific)	×	×	×	×	×	×		×	
Multi-user operation as floating license model (concurrent user license)							×		
Named user license									×

* ENTERPRISE Ultimate is an additional license for the provision and automatic synchronization of on and offline data (data replication*).

At least one **ENTERPRISE Premium** license is required as a prerequisite.

One Ultimate license is required for each mobile workstation (outdoor/offline). Data replication takes place between the server and the mobile workstation (see footnote 4).

** **Premium CLOUD** makes it possible to work with data in the cloud.

Regardless where they are, any number of users can simultaneously access the same datasets in the cloud. A GMC-INSTRUMENTS CLOUD subscription is required. One user is included in the price – further licenses are required for each additional user.

Premium CLOUD offers all of the functionality provided by an IZYTRONIQ ENTERPRISE Premium license.

- 1 For **SECUTEST ST BASE** and **SECUTEST ST BASE10** with SECUTEST DB+ database expansion (Z853R), **SECUTEST ST PRO** and **SECUTEST ST PRO BT comfort** with SECUTEST DB+ database expansion (Z853R), **SECUTEST BASE** and **SECUTEST BASE10** with SECUTEST DB+ database expansion (Z853R), **SECUTEST PRO** with SECUTEST DB+ database expansion (Z853R), **SECULIFE ST BASE** and **SECULIFE ST BASE25** with SECUTEST DB COMFORT database expansion (Z853S).
Test data can be read from the instrument without the respective database expansion, but nothing can be transferred to the instrument. The database expansion is thus required for the range of functions described in this documentation.
- 2 For **PROFITEST MBASE+ IQ**, **PROFITEST MTECH+ IQ**, **PROFITEST MPRO IQ**, **PROFITEST MXTRA IQ**, **PROFITEST PRIME**, **PROFITEST PRIME AC**, **SECULIFE Ip IQ**, **METRAHIT IM XTRA BT**, **METRAHIT IM E-DRIVE BT**, **METRAHIT IM TECH BT**, **SECUTEST ST BASE** and **SECUTEST ST BASE10** with SECUTEST DB+ database expansion (Z853R), **SECUTEST ST PRO** and **SECUTEST ST PRO BT comfort** with SECUTEST DB+ database expansion (Z853R), **SECUTEST BASE** and **SECUTEST BASE10** with SECUTEST DB+ database expansion (Z853R), **SECUTEST PRO** with SECUTEST DB+ database expansion (Z853R), **SECULIFE ST BASE** and **SECULIFE ST BASE25** with SECUTEST DB COMFORT database expansion (Z853S).
Test data can be read from the instrument without the respective database expansion, but nothing can be transferred to the instrument. The database expansion is thus required for the range of functions described in this documentation.
- 3 For trees with portable objects using **SECUTEST ST BASE** and **SECUTEST ST BASE10** with SECUTEST DB+ database expansion (Z853R)* **SECUTEST ST PRO** and **SECUTEST ST PRO BT comfort** with SECUTEST DB+ database expansion (Z853R)*, **SECUTEST BASE** and **SECUTEST BASE10** with SECUTEST DB+ database expansion (Z853R)*, **SECUTEST PRO** with SECUTEST DB+ database expansion (Z853R)*, **SECULIFE ST BASE** and **SECULIFE ST BASE25** with SECUTEST DB COMFORT database expansion (Z853S)* and stationary objects using **PROFITEST MBASE+ IQ**, **PROFITEST MTECH+ IQ**, **PROFITEST MPRO IQ**, **PROFITEST MXTRA IQ**, **PROFITEST PRIME**, **PROFITEST PRIME AC**, **SECULIFE Ip IQ**.
- 4 Data replication refers to multiple storage of the same data in different locations and synchronization of the utilized data sources. It's generally used to make data available on and offline in multiple locations. The user can transfer a subset of data from the main database to the local database on his or her notebook or tablet, and continue working with this data offline. The locally acquired data can be subsequently synchronized with the main database. When working in a large test team, interaction between IZYTRONIQ ENTERPRISE Premium and IZYTRONIQ ENTERPRISE Ultimate ensures that data conflicts are avoided to the greatest possible extent, and are detected no later than during return transmission.

4 System Requirements

Depending on the variant, **IZYTRONIQ** is installed to the system differently:

- **BUSINESS** variants: local installation (to the client)
- **EDUCATION** variants: local installation (to the client)
- **CLOUD** variants: local installation (to the client)
- **ENTERPRISE** variants: installation of the front-end (locally to the client) and the backend (to the server)

Installation requirements can be found in the sections corresponding to your version:

- **BUSINESS, EDUCATION, CLOUD** and **ENTERPRISE** Frontend
- **ENTERPRISE** Backend

4.1 BUSINESS, EDUCATION, CLOUD and ENTERPRISE Frontend

The following system requirements apply to local installation of all **BUSINESS** and **EDUCATION** variants, the **CLOUD** variant, and installation of the frontend of all **ENTERPRISE** variants.

Minimum Requirements

- Operating system: Windows 10 version 1809
- .NET Framework 4.8*
- CPU: dual core i3 > 3.4 GHz or comparable (only x86 and x64 processors are supported)
- RAM: ≥4 GB
- Hard disk: at least 4 GB available memory (depending on data volume)
- Resolution: 1280 × 800
- Cloud: Internet connection > 1000 Mbit/s **
- Cloud: connection via HTTPS (port 443) ***

Recommendations

- Operating system: Windows 10 version 1909
- .NET Framework 4.8*
- CPU: quad core i7, 2.8 GHz or comparable (only x86 and x64 processors are supported)
- RAM: ≥8 GB
- Hard disk: at least 8 GB available memory (depending on data volume)
- Resolution: 1920 × 1080
- Touchscreen and active pen
- Cloud: Internet connection > 2000 Mbit/s **
- Cloud: connection via HTTPS (port 443) ***

* The installation wizard determines whether or not .NET Framework 4.8 is already installed. If not, it's installed.

** Synchronisation speed, data retrieval speed, and saving speed may vary dependent on the internet connection.

*** The full URLs, which must be reachable to for a specific cloud account, will be provided by our Support on request.

4.2 ENTERPRISE Backend

Default installation is typically to a single server on which the following components are installed:

- Application server
Provision of services for the IZYTRONIQ client
- Database
Microsoft SQL Server 2016 or newer version as backend database
The database server does not necessarily require its own installation. If there's already an existing database server with adequate resources, this can be used as well (in an existing or a separate instance). This offers the advantage of not having to run an additional SQL server (mirroring, backup and disaster recovery).
- Synchronization service
IZYTRONIQ backend synchronization service (Windows service) for synchronizing the client database to the backend database, or importing data from the test instruments
- License activation tool

The server's hardware must be adequately dimensioned in accordance with system utilization. Furthermore, certain software components must be installed and certain settings must be made.

Minimum Requirements – Hardware

- Operating system: Windows Server 2016
- CPU: quad core
- RAM: ≥ 8 GB
- Hard disk: at least 10 GB available memory (depending on data volume)
- Network: ≥ 100 Mbit/s

Recommendations – Hardware

- Operating system: Windows Server 2022
- CPU: quad core
- RAM: ≥16 GB
- Hard disk: at least 15 GB available memory (depending on data volume)
- Network: ≥1 Gbit/s

Access Requirements

- Location: intranet
- Access: domain access
- Accessibility: via HTTPS from the clients (via intranet)

Required Software Components and Settings

- Microsoft SQL Server 2016 or newer: for the database
 - Appropriate software can be obtained from Microsoft for a license fee.
 - Mixed mode authentication is recommended in the event that MS SQL Express is installed.
 - Minimum hardware requirements (with reference to an **IZYTRONIQ** ENTERPRISE single server installation – can be scaled up depending on usage patterns and workload): quad core CPU, 8 GB RAM, 100 GB hard disk space
- Microsoft SQL Management Studio
- Microsoft Internet Information Services (IIS) with:
 - All common HTTP features except WebDAV publishing
 - Health and diagnostics
 - HTTP logging
 - Request monitor
 - Performance:
 - Static content compression
 - Security:
 - Request filtering
 - Basic authentication
- Application development:
 - .NET Extensibility 4.6
 - ASP.NET 4.6
 - ISAPI extensions
 - ISAPI filters
- Management tools
 - IIS management console
 - IIS 6 management compatibility
 - Complete
- .NET Framework 4.8 features
(Installation of .NET Framework 4.8 or later can be executed by a corresponding Microsoft installation program.)
 - WCF service s
 - HTTP activation

5 Download

Different variants of **IZYTRONIQ** can be downloaded from:
<https://www.izytron.com/downloads.php>

IZYTRONIQ



(Starter, Advanced, Professional)

[IZYTRONIQ Download](#)

IZYTRONIQ



(Premium, Professional)

[IZYTRONIQ Download](#)

IZYTRONIQ



(Premium, Ultimate)

[IZYTRONIQ Download](#)

[IZYTRONIQ Backend Download](#)

BUSINESS, EDUCATION and CLOUD Variants

Download the BUSINESS installation file for all **BUSINESS** variants, as well as for the **CLOUD** variant. Download the corresponding file for the EDUCATION variants.

After downloading the file (**IZYTRONIQ.Setup.exe**), it must be saved to a directory. The setup file then appears in the selected directory. After launching the file, follow the installation instructions (see „Installation“).



Important Note

Downloading the **CLOUD** Variant

If you're already registered with the **GMC-INSTRUMENTS CLOUD** (see „Licensing **Premium CLOUD**“), the download is available to you there as well.

Select **DOWNLOAD CENTER** in the **ADMINISTRATION** section of the **WELCOME TO THE CUSTOMER AREA** dashboard.

ENTERPRISE Variants

Download the BUSINESS installation file.

After downloading the files (**IZYTRONIQ.Setup.exe** and **IZYTRON.Backend.zip**), they have to be saved to a directory on the server intended for this purpose.



Important Note

Due to the fact that the Client and Backend versions are mutually dependent on each other, we always recommend running both downloads (Backend and Client), one immediately after the other, from the above referenced website.

Otherwise it's not possible to rule out possible incompatibilities between the backend and the client after installation has been completed.

6 Installation

The installation procedure differs depending on the variant:

- **BUSINESS and EDUCATION**
- **Premium CLOUD**
- **ENTERPRISE**

Observe information concerning the specific topics as well.

- Porting: Reinstallation on Another Computer

6.1 BUSINESS and EDUCATION

IZYTRONIQ can be installed as standalone (local) software and used exclusively on the respective PC. The application can be used with **BUSINESS Starter**, **BUSINESS Advanced**, **BUSINESS Professional**, **BUSINESS Premium**, **EDUCATION Premium** and **EDUCATION Professional** licenses.

Installation of **IZYTRONIQ** is started by executing the **IZYTRONIQ.Setup.exe** file. Verification is first of all conducted to determine whether or not installation is possible in the available system environment (see „System Requirements“).

The file path for the installation directory can be subsequently customized.

When prompted to choose **STANDALONE**, **NETWORK VERSION (CLIENT)** or **CLOUD OPERATION**, **STANDALONE** must be selected.

The user is then asked in which language **IZYTRONIQ** should be installed.

After installation, you have the option of either starting the program directly or closing the installer.

When starting the software for the first time, the license key has to be entered (see “Licensing **BUSINESS** and **EDUCATION**”).

6.2 Premium CLOUD

Various items are required for **Premium CLOUD**: a **GMC-INSTRUMENTS CLOUD** account, a subscription with a user license for each desired user and a client on the user’s PC from which the data in the cloud is accessed.

Only installation of the clients to the PC is described in this section. Information about the **GMC-INSTRUMENTS CLOUD** account, subscription and user licenses can be found in the “Licensing **Premium CLOUD**” section.

Installation of **IZYTRONIQ** is started by executing the **IZYTRONIQ.Setup.exe** file. Verification is first of all conducted to determine whether or not installation is possible in the available system environment (see „System Requirements“).

The file path for the installation directory can be subsequently customized.

When prompted to choose **STANDALONE**, **NETWORK VERSION (CLIENT)** or **CLOUD OPERATION**, **CLOUD OPERATION** must be selected.

After installation, you have the option of either starting the program directly or closing the installer. Close the installer and proceed with account setup and licensing (see “Licensing **Premium CLOUD**”).

6.3 ENTERPRISE

With the **IZYTRONIQ ENTERPRISE** variants, a backend is first installed to the server and then the frontend is installed to the utilized clients. The application can be used with **ENTERPRISE Premium** and **ENTERPRISE Ultimate** licenses.

Proceed as follows:

1. Make sure that the all System Requirements are fulfilled. An installation checklist is available for download at <https://www.izytron.com/downloads.php>.
2. Examine „Required Users and Rights for Installing the Backend“.
3. Complete „Preparations for Installing the Backend“.
4. Complete „Installing the Backend“.
5. Complete „Installing the Frontend“.



Attention!

As is the case with every client-server architecture, administrative knowledge is required in order to install the necessary backend components.

Our industry support team would be happy to help you with installation of your **IZYTRONIQ** backend within the framework of a service package.



Attention!

In order to assure GDPR-compliant, secure communication between the server and the client, the data must be encrypted for transmission. An SSL certificate is required to this end. Further information can be accessed at „Preparations for Installing the Backend“.

6.3.1 Required Users and Rights for Installing the Backend

A local administrator is required in order to install and set up the backend. This user’s password may not expire or be changed. Ideally, the server is installed directly under this user’s ID.

This user must also be set up in the SQL Management Studio and have “dbcreator” and “sysadmin” rights in order to create databases.

6.3.2 Preparations for Installing the Backend

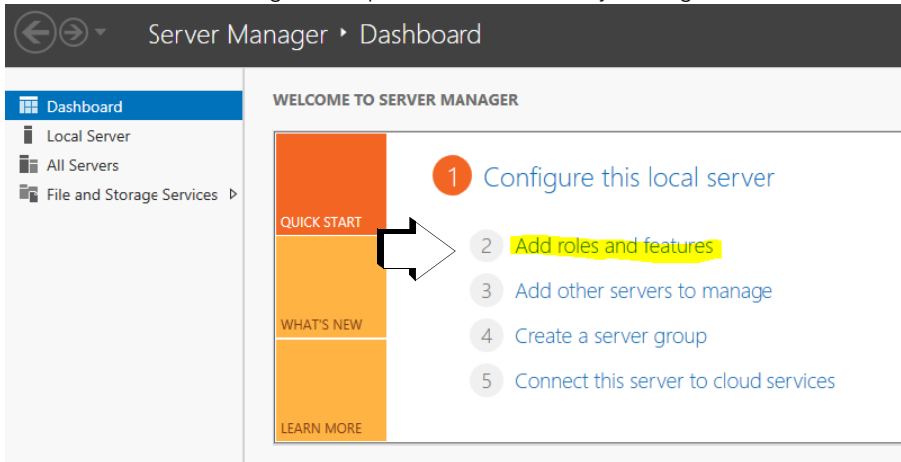
The following preparations must be completed before beginning with installation of **IZYTRONIQ**:

1. Installing IIS in the Server Manager under “Roles and Features”
2. Embedding an SSL Certificate

Installing IIS in the Server Manager under “Roles and Features”

The following description is based on the English version of a Windows server. Images and sequences may vary depending on server version.

- Start the Server Manager and open the selection list by clicking **Add roles and features**.



The required features are listed under „System Requirements“. Install any missing roles and features.

Embedding an SSL Certificate

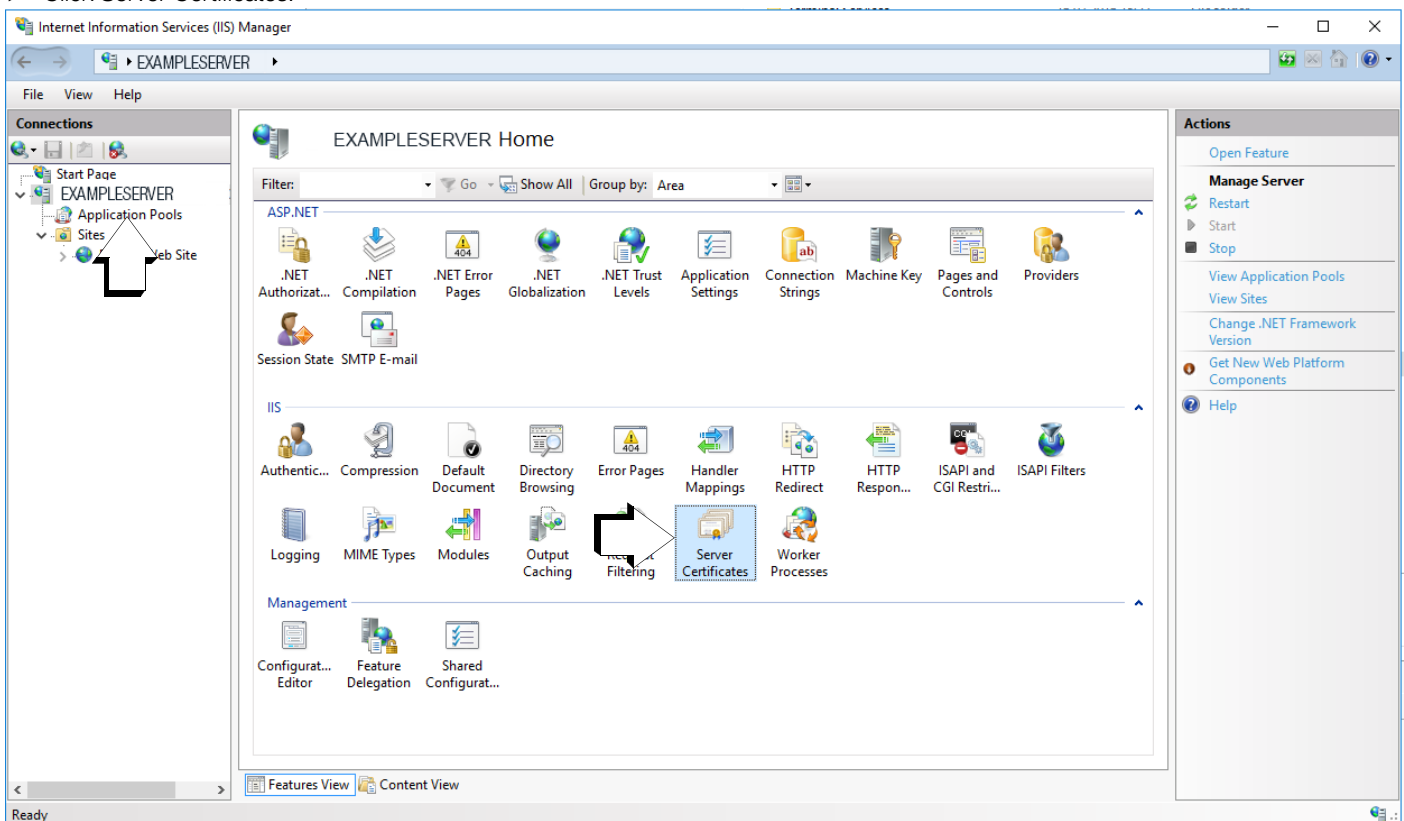
A valid certificate must be available on the server in order to be able to use the WebService and the **SyncService**.

This certificate provides for secure communication via https in order to ensure GDPR-compliant data exchange.

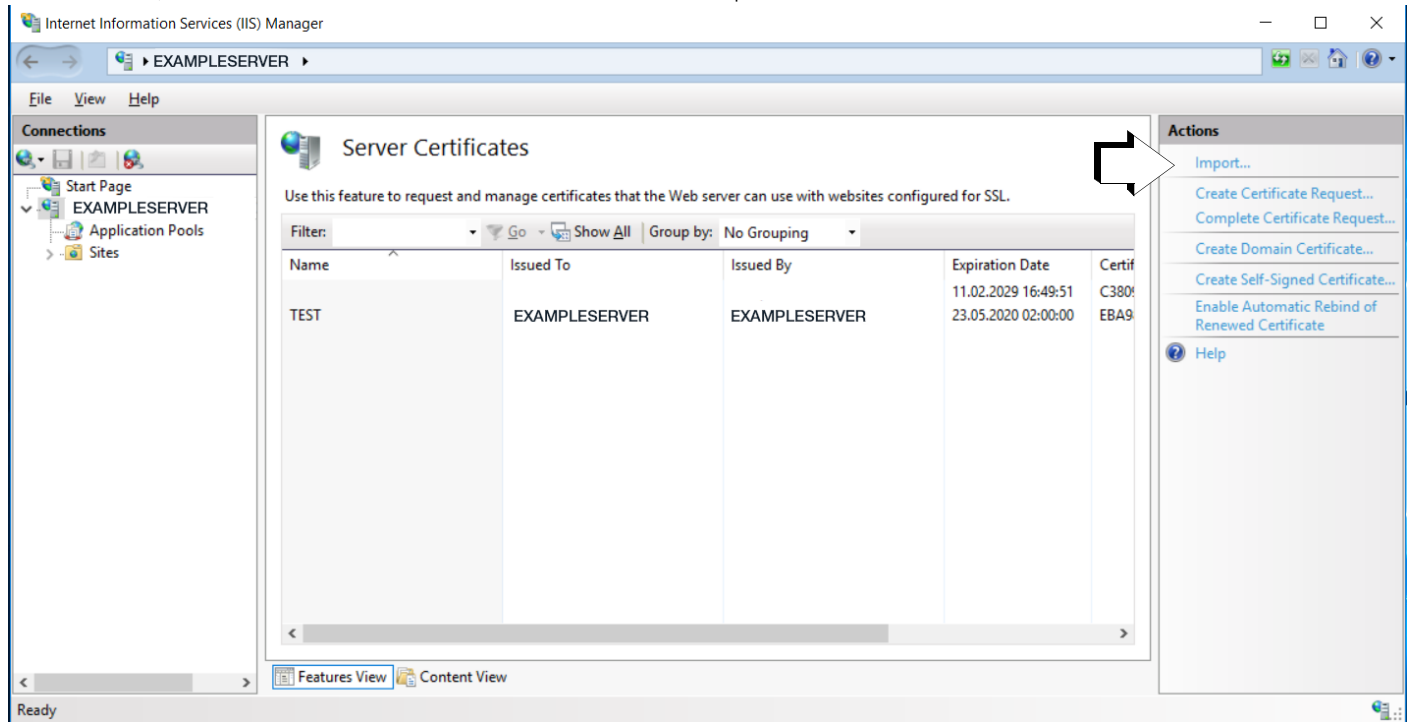
It's advisable to obtain the certificate from an authorized source with a suitable duration of validity. A self-signed certificate can be used as an alternative. However, these are typically limited to one year and must be installed separately to the clients in the “Trusted Root Certification Authorities” memory location.

A description of where the certificate has to be embedded into the IIS (Internet Information Services) is included below.

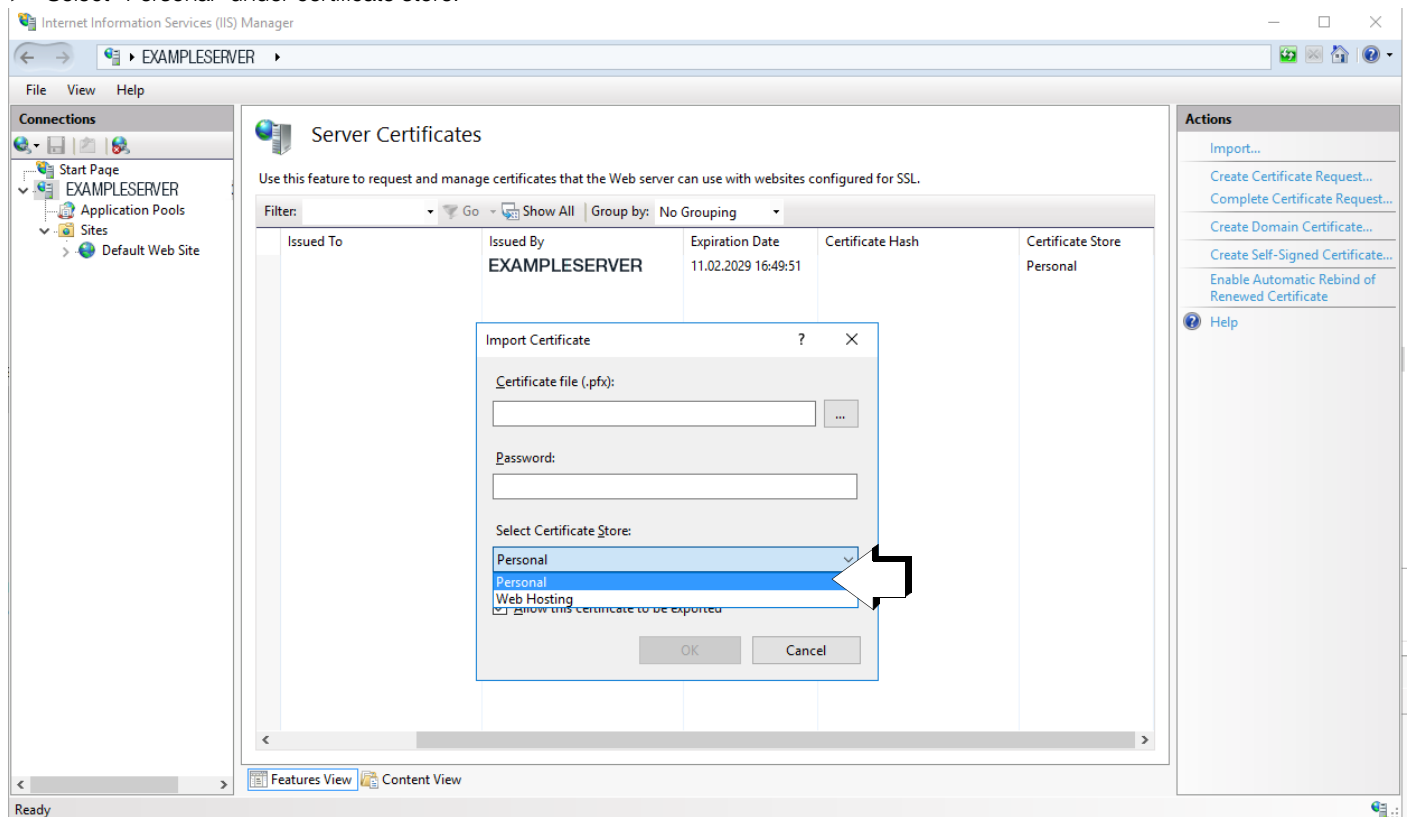
- Click Server Certificates.



- Afterwards, the desired certificate has to be loaded to IIS via the import function.



- Select "Personal" under certificate store.



- The certificate's fingerprint is entered to the respective configuration files (**IZYTRONIQ.SyncSvc.exe** and **Web**) in uppercase letters without blanks and without hidden special characters. It may be advisable to copy the certificate's fingerprint into the editor and make a note of it, in order to avoid errors.

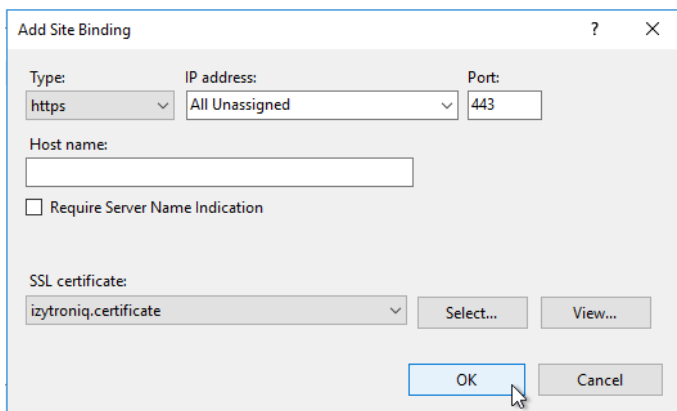
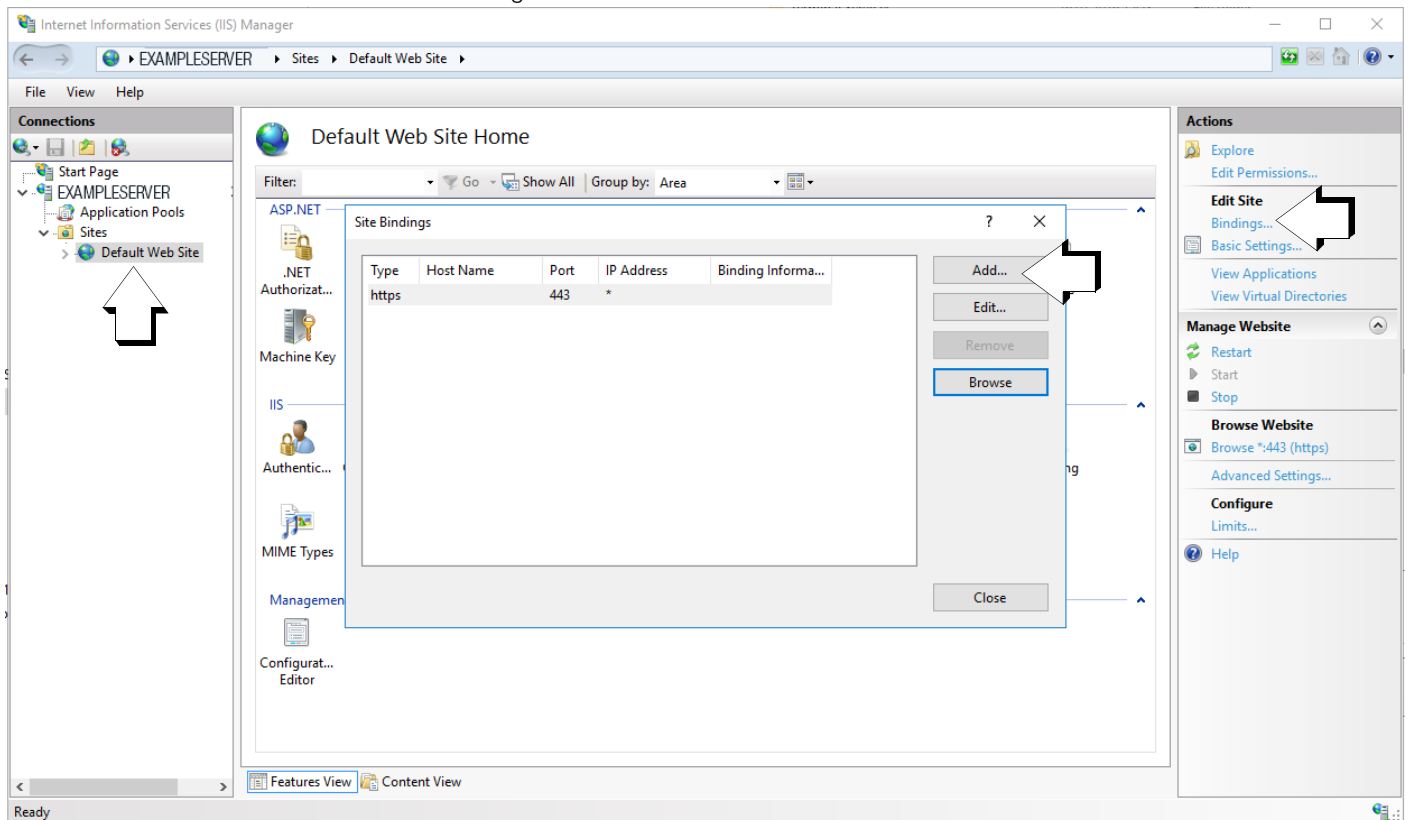


Note

This is only possible after successful installation of the backend's .msi files, which is described in more detail below beginning with „Installing the Database“.

- Subsequently, the certificate also has to be entered to the bindings of the **default website** so that communication can take place in the case of standard installation.

A new binding must be added via the “Add” function. A new window appears. It must be assured that “https” is selected under type and that “443” is selected as the port. The SSL certificate must then be selected which was previously imported into IIS. The “IP address” and “Host name” fields remain unchanged.



- Acknowledge your selections by clicking OK.

6.3.3 Installing the Backend

The backend includes 4 installation packages, all of which have to be installed to the same server, even if the database will run on a separate server.

1. Installing the Database
2. Installing the Application Server
3. Installing the Synchronization Service
4. Installing the License Activation Tool

Installation must be executed with administrative rights. It can be run via the command prompt and the MSI files are executed with the “msiexec /i” command. It can also be executed by double clicking as usual.

Elements in angle brackets < > are placeholders.

In the case of a standard installation, the default values listed below are always used – even if they’re not explicitly specified. The parameters can be optionally edited in the case of a non-standard installation.



Note

Two databases are installed to a Microsoft SQL server provided by the customer while the **IZYTRONIQ** Enterprise backend is being installed. User accounts must be provided which include corresponding rights for installation and operation of **IZYTRONIQ** Enterprise, in particular with rights for accessing the Microsoft SQL server.

6.3.3.1 Installing the Database

File

IZYTRON.IQ BackEnd Database.msi

Description

This setup file installs the application server’s database.

MSI Package

The MSI package includes the following optional parameters, for which the respectively used default values are specified below. These are used automatically if the corresponding parameter isn’t specifically configured during installation.

```
PRODUCT_LANGUAGE=<server language; standard: de>
BACKEND_SERVERNAME = localhost
BACKEND_DATABASE=IZYTRON.IQ
BACKEND_DATABASE_USERNAME=<user name; standard: logged-on user>
BACKEND_DATABASE_USERPWD=<user password; standard: logged-on user>
```

The last two parameters are typically only required if the database to be set up will run on another server.

Example of configuration during installation:

```
msiexec /i "IZYTRON.IQ BackEnd Database.msi"
BACKEND_SERVERNAME=myserver\SQLEXPRESS
PRODUCT_LANGUAGE = en
BACKEND_DATABASE_USERNAME = johndoe
BACKEND_DATABASE_USERPWD = mypassword
```

In the example, the database for the English language is installed to the SQL server (“myserver”) with MS SQL instance SQLEXPRESS and user “johndoe” along with his password (“mypassword”) as “IZYTRON.IQ”.

Comments

- If the database already exists when setup is executed, it’s not deleted. If the version in the Database_Info table doesn’t correspond to the setup version, setup executes the corresponding **update scripts** in so far as an **IZYTRONIQ** database is involved.
- The database doesn’t necessarily have to be installed to the same server as the backend. If the connection string in the registry is appropriately modified, the application server utilizes the correct database. See „Installing the Synchronization Service“ for details.

It’s advisable to determine whether or not the **IZYTRONIQ** database has been successfully created with the help of the Microsoft SQL Management Studio.

6.3.3.2 Installing the Application Server

File

IZYTRON.IQ BackEnd ApplicationServer.msi

Description

This setup installs the application server to IIS.

MSI Package

The MSI package includes the following optional parameters, for which the respectively used default values are specified below. These are used automatically if the corresponding parameter isn't specifically configured during installation.

INSTALLWEBAPPPDIR=<standard wwwroot directory from IIS, usually = c:\inetpub\wwwroot\IZYTRON.IQ>

WEBSITE_NAME = Default Website

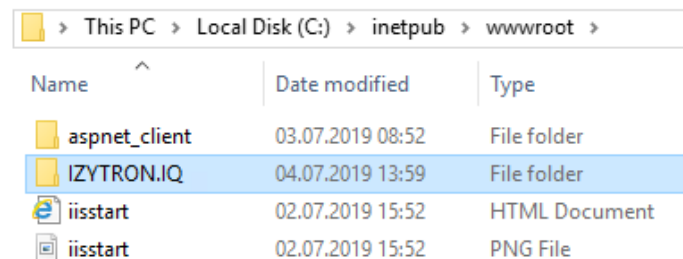
WEBAPP_NAME=IZYTRON.IQ

APPPPOOL_NAME=IZYTRON.IQ.BackEnd Pool

APPPPOOL_USERNAME=ApplicationPoolIdentity

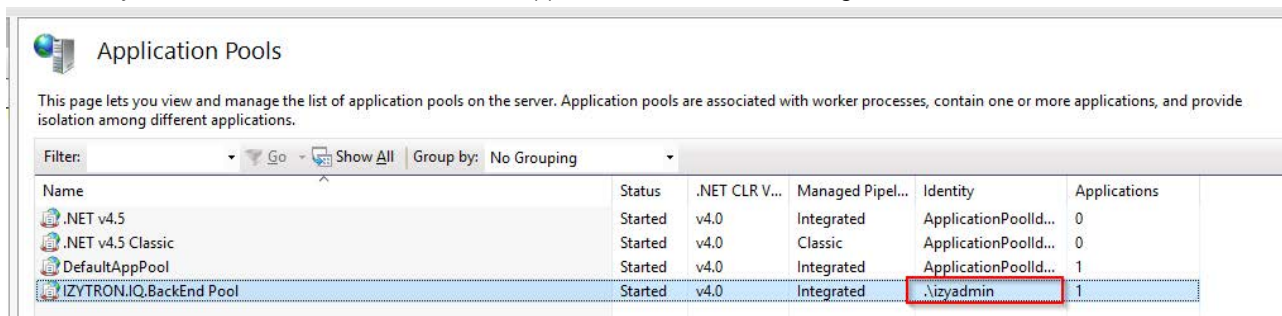
APPPPOOL_USERPWD=<password>

With the default settings, the application server is installed as follows:



This installs the application server to IIS under "MyWebSite\MyWebApp" (virtual directory) and physically to "c:\myinstall\dir". The application pool (IZYTRON.IQ.BackEnd Pool) (default) is set up with username "myapppooluser" and password "mypwd", and is assigned to the website.

Alternatively, the user can also be defined via the ApplicationPool in the IIS manager:

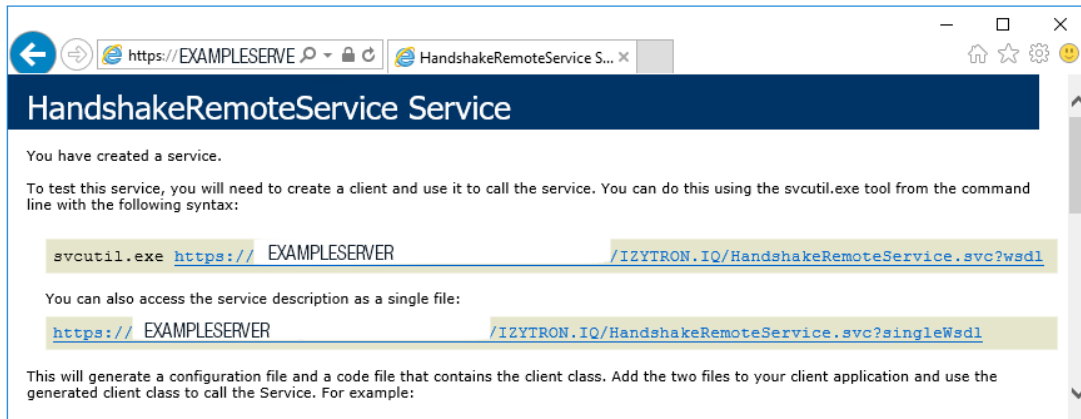


Attention!

The user designated for operative use must also always have access to the database with read and write authority, in so far as this user is not the dbo (database owner)!

Comments

- The application's URL is laid out as follows:
https://<certificate path>/<application name>
The certificate path is the path which is specified in the general information for the certificate in IIS: ("General" tab, issued to: <certificate path> in the "Certificate" window).
- If "IZYTRON.IQ BackEnd ApplicationServer.msi" is executed directly by double-clicking, the application server is installed as "Default Web Site **IZYTRONIQ**" with the "IZYTRON.IQ.BackEnd Pool" app pool and the following default app pool credentials: Application-PoolIdentity.
This user (ApplicationPool) probably doesn't have any access to the database. A suitable user must be entered to this end (in the app pool's "Advanced Settings" under "Identity").
- The following URL can be opened in the browser in order to display the correct installation:
"https://localhost/IZYTRON.IQ/HandshakeRemoteService.svc" (if installed in this way).
In the event of correct installation, an information page is displayed.
https://<certificate path>/IZYTRON.IQ/HandshakeRemoteService.svc



HandshakeRemoteService Service

You have created a service.

To test this service, you will need to create a client and use it to call the service. You can do this using the svcutil.exe tool from the command line with the following syntax:

```
svcutil.exe https://EXAMPLESERVER /IZYTRON.IQ/HandshakeRemoteService.svc?wsdl
```

You can also access the service description as a single file:

```
https://EXAMPLESERVER /IZYTRON.IQ/HandshakeRemoteService.svc?singleWsdl
```

This will generate a configuration file and a code file that contains the client class. Add the two files to your client application and use the generated client class to call the Service. For example:



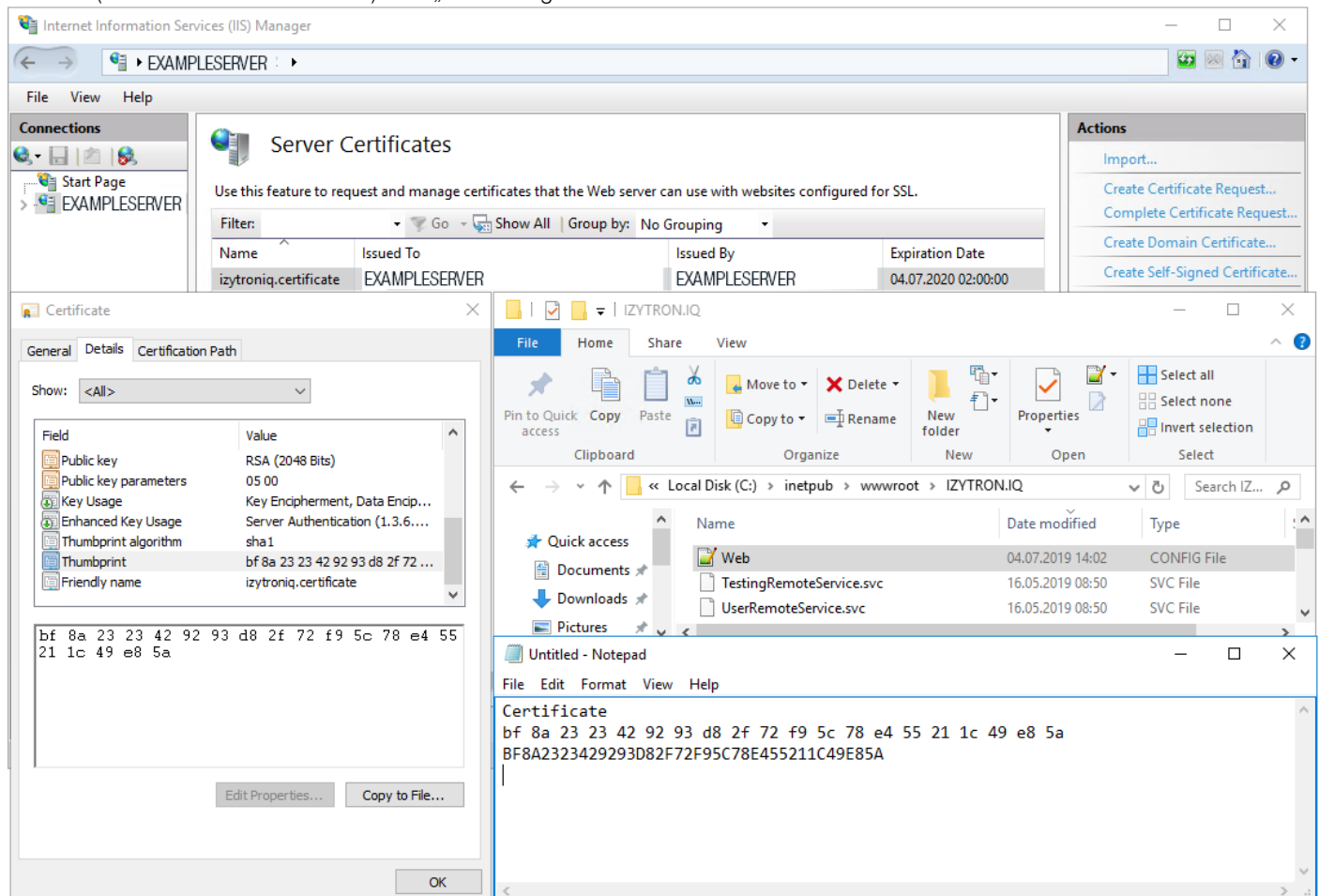
Note

However, if `https://localhost/IZYTRON.IQ/HandshakeRemoteService.svc` is used as the URL, a certificate error is displayed as a rule in the browser because certificates are not typically issued via a certificate path including "localhost".

The user must also assure that the certificate used for the application has been entered or saved to the web browser which is also used for the application. This also applies in the case of computers for which subsequent installation of an **IZYTRONIQ** Enterprise client is planned, if a self-signed certificate is involved.

If the page is not displayed, a standard IIS error message appears instead, which provides information concerning any possible installation errors.

- The application uses default HTTPS port 443. The TCP port setting may not be changed.
- A valid certificate must be assigned to the page. Otherwise, the clients are unable to access the application server. A corresponding binding with a certificate for this purpose must therefore be set up on the **IZYTRONIQ** backend server. When installing the **IZYTRONIQ** backend application service with the default parameters specified above, binding to the default website must take place in IIS (internet information services). See „Embedding an SSL Certificate“ for details.



Internet Information Services (IIS) Manager

EXAMPLESERVER

File View Help

Server Certificates

Use this feature to request and manage certificates that the Web server can use with websites configured for SSL.

Name	Issued To	Issued By	Expiration Date
izytroniq.certificate	EXAMPLESERVER	EXAMPLESERVER	04.07.2020 02:00:00

Filter: [Go] Show All Group by: No Grouping

Actions: Import... Create Certificate Request... Complete Certificate Request... Create Domain Certificate... Create Self-Signed Certificate...

Certificate

General Details Certification Path

Show: <All>

Field	Value
Public key	RSA (2048 Bits)
Public key parameters	05 00
Key Usage	Key Encipherment, Data Encip...
Enhanced Key Usage	Server Authentication (1.3.6....
Thumbprint algorithm	sha1
Thumbprint	bf 8a 23 23 42 92 93 d8 2f 72 f9 5c 78 e4 55 21 1c 49 e8 5a
Friendly name	izytroniq.certificate

bf 8a 23 23 42 92 93 d8 2f 72 f9 5c 78 e4 55 21 1c 49 e8 5a

Edit Properties... Copy to File... OK

File Home Share View

Pin to Quick access Copy Paste Move to Delete Copy to Rename New folder Properties Open Select all Select none Invert selection

Clipboard Organize New Open Select

Local Disk (C:) > inetpub > wwwroot > IZYTRON.IQ

Name	Date modified	Type
Web	04.07.2019 14:02	CONFIG File
TestingRemoteService.svc	16.05.2019 08:50	SVC File
UserRemoteService.svc	16.05.2019 08:50	SVC File

Untitled - Notepad

File Edit Format View Help

Certificate

bf 8a 23 23 42 92 93 d8 2f 72 f9 5c 78 e4 55 21 1c 49 e8 5a

BF8A2323429293D82F72F95C78E455211C49E85A

In the **Web.Config** file, "serviceCertificate" must also be adapted for the tag's lines (<serviceCertificate> findvalue="localhost" x509FindType="FindBySubjectName" storeLocation="LocalMachine" storeName="My"):

- The value for "findValue" must be set to the certificate's fingerprint or thumbprint here. As shown in the figure above, the fingerprint or thumbprint can be taken from the certificate's details, which in turn can be found in IIS under Server Certificates. Enter the fingerprint in capital letters only without spaces, and without hidden special characters.
- "x509FindType" must be changed to "FindByThumbprint".

Example: <serviceCertificate findValue="1234567890ABCDEF1234567890" storeLocation="LocalMachine" storeName="My" x509FindType="FindByThumbprint" />



Attention!

The user of the application server's application pool (in IIS) must be authorized to access the database. Corresponding rights (read and write) must be provided at the database side.

6.3.3.3 Installing the Synchronization Service

File

IZYTRON.IQ BackEnd SyncService.msi

Description

This setup installs the synchronization service. It's installed as a standalone Windows service with the name "IZYTRONIQ BackEnd Sync-Service".

Comments

The service must be installed to the same server as the application server.

Configuration

- Installation directory: %Programfiles%\Gossen-Metrawatt\IZYTRON.IQ BackEnd SyncService
- The configuration file is located in the installation directory and its name is IZYTRON.IQ.SyncSvc.exe.config.
Note: If the service (IZYTRON.IQ BackEnd SyncService) is started automatically after installation, it should be stopped for the purpose of configuration.
- The following lines must be changed in the **IZYTRONIQ.SyncSvc.exe.config** file.
<serviceCertificate findValue="[certificate thumbprint]" storeLocation="LocalMachine" storeName="My" x509FindType="FindByThumbprint" />
Enter the fingerprint or thumbprint of your utilized certificate in uppercase letters without blanks in place of [certificate thumbprint].
Example:
<serviceCertificate findValue="[certificate thumbprint]" storeLocation="LocalMachine" storeName="My" x509FindType="FindByThumbprint" />

```

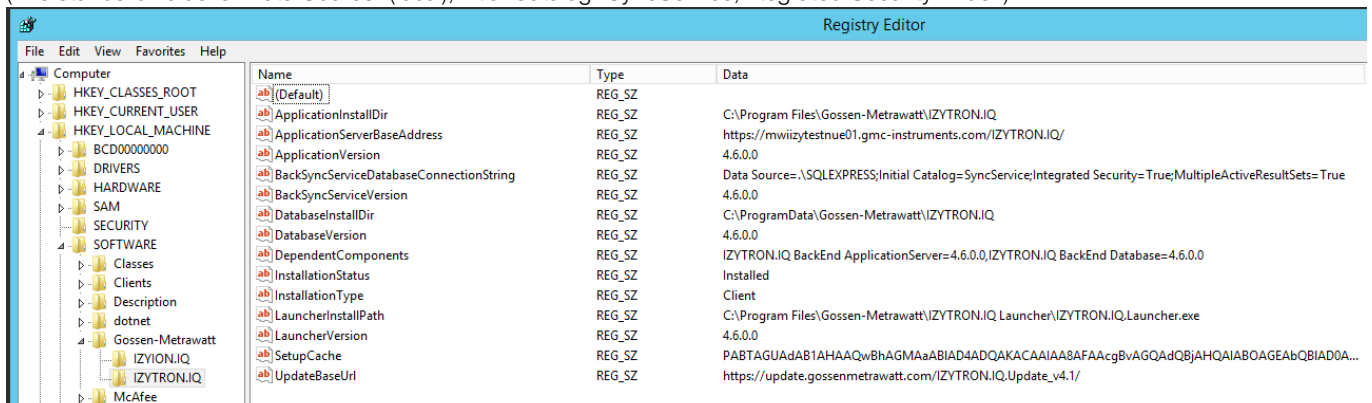
63      <baseAddresses>
64      <!--<add baseAddress="http://*/SyncService"/>-->
65      <add baseAddress="https://*/SyncService" />
66      </baseAddresses>
67      </host>
68      <!--<endpoint binding="basicHttpBinding" contract="IZYTRON.IQ.ISyncService"/>-->
69      <endpoint binding="basicHttpsBinding" contract="IZYTRON.IQ.ISyncService" />
70      </service>
71      </services>
72      <behaviors>
73      <serviceBehaviors>
74      <behavior name="SyncServiceBehavior">
75      <!--<serviceMetadata httpGetEnabled="true"/>-->
76      <serviceMetadata httpsGetEnabled="true" />
77      <serviceCredentials>
78      <serviceCertificate findValue="[certificate thumbprint]" storeLocation="LocalMachine"
79      </serviceCredentials>
80      </behavior>
81      </serviceBehaviors>

```

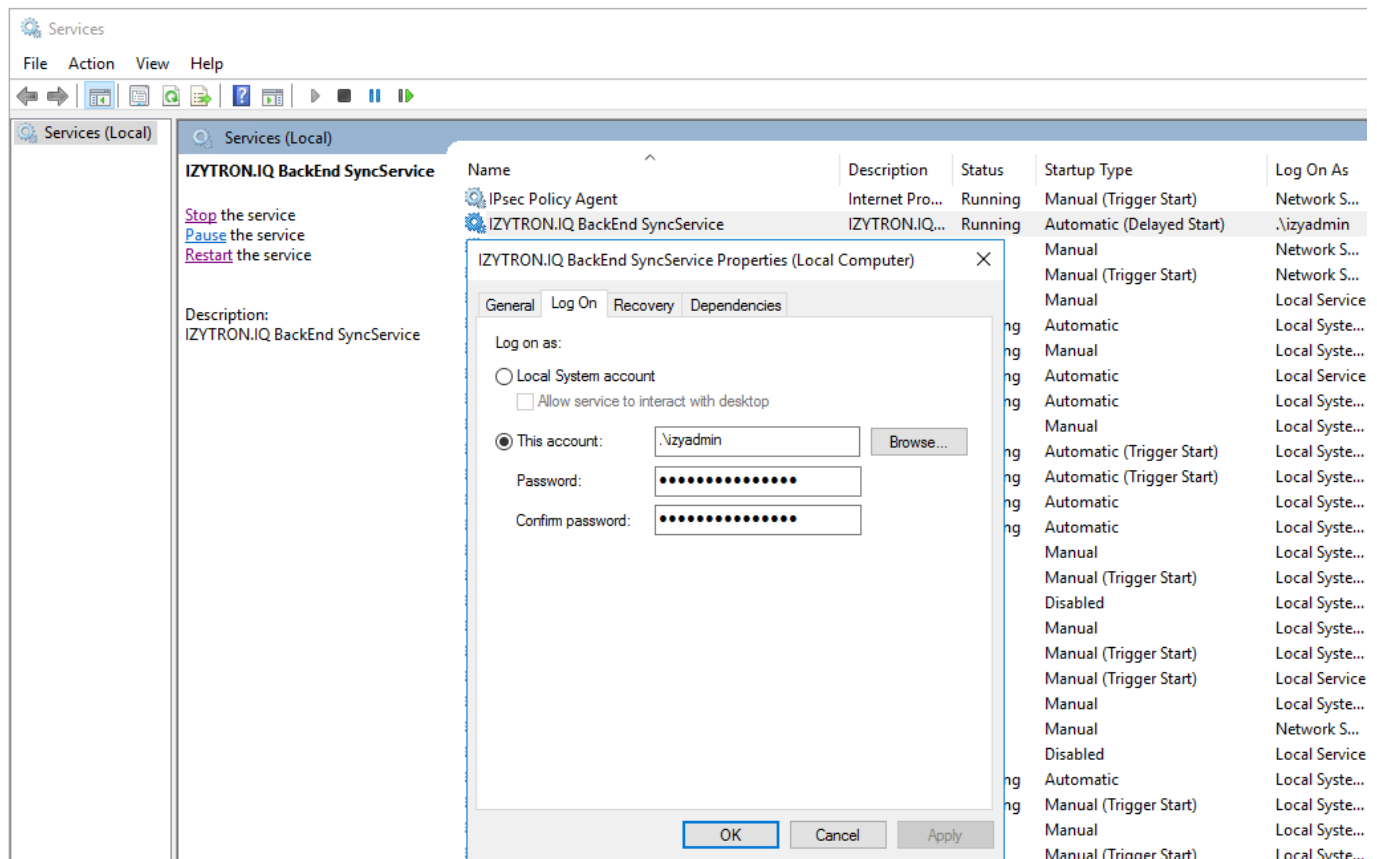

**Note**

The Web.config file of the **IZYTRONIQ** application server can be changed by copying the modified “serviceCertificate” tag from the **IZYTRONIQ.SyncSvc.exe.config** file and inserting it at the appropriate place in the Web.config file.

- The connection string for the SyncService database is stored in the Windows registry:
Key = Computer\HKEY_LOCAL_MACHINE\SOFTWARE\Gossen-Metrawatt\IZYTRON.IQ
Entry = BackSyncServiceDatabaseConnectionString
If necessary, the path to the instance must be changed there in the value for “DataSource = (local)”. For example, “DataSource=(local)\SQLEXPRESS”, where “(local)” should be replaced by the computer name if necessary or, if the database is located on another server, by the server name, as well as the instance if applicable.
(The standard value is “Data Source=(local);Initial Catalog=SyncService;Integrated Security=True”.)

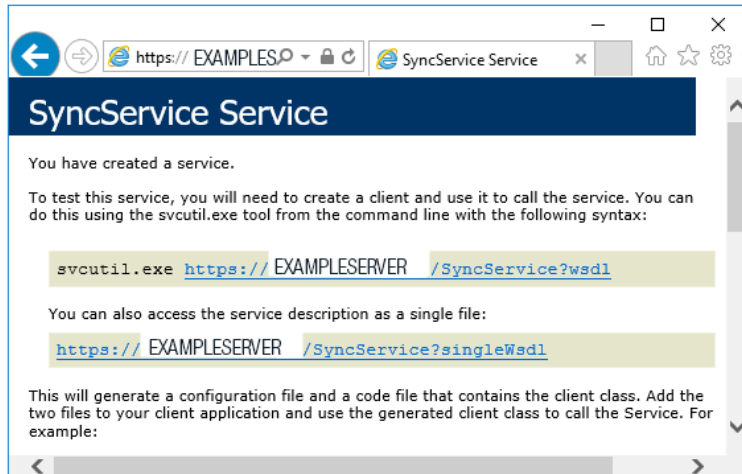


- In order to make it possible for the service to create the SyncService database when it's started, it must be started via a user account which is capable of creating databases.
The following figure shows an example of how the service is accordingly set up using an account which has corresponding SQL server-side authority as a “dbcreator”.

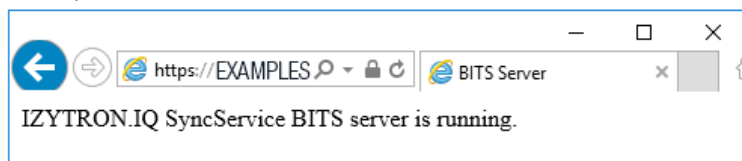


After the service has been started, checking can be conducted to determine whether or not the “SyncService” database has been successfully created.

After it has been installed to the **IZYTRONIQ** backend server, the synchronization service should be checked for correct functioning with the help of a web browser and the following link: "https://<certificate path>/SyncService".



The synchronization service can be subjected to additional testing for correct functioning with the help of the following link: "https://<certificate path>/bits".



It's advisable to set the service's start mode to "Automatic (Delayed Start)".

6.3.3.4 Installing the License Activation Tool

File

IZYTRON.IQ BackEnd License Activation.msi

Description

This setup installs the license activation tool (floating service). It's installed as a standalone program with the following name: "IZYTRON.IQ BackEnd License Activation".

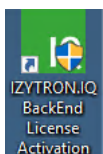
Comments

The service must be installed to the same PC as the application server.

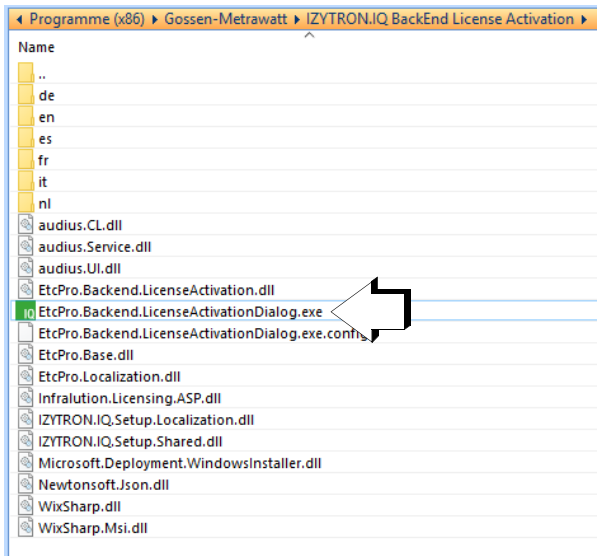
In order to install the service, execute the **IZYTRONIQ** BackEnd License Activation.msi file with the help of the command prompt using administrative rights as described above for the other three .msi files.

Configuration

The following icon appears on the desktop of the **IZYTRONIQ** BackEnd Server after installation:



- Start the **IZYTRONIQ.BackEnd.LicenseActivation** tool by double clicking the icon.



Attention!

For the following procedures, use only the license certificate most recently obtained from us which has been issued for **IZYTRONIQ ENTERPRISE Premium**.

*License certificates issued for **IZYTRONIQ ENTERPRISE Ultimate** may not be used with IZYTRON.IQ BackEnd.LicenseActivation!*

Comment:

License keys from license certificates which have been issued for **IZYTRONIQ Enterprise Ultimate** should instead be stored to the outdoor PC for which offline operation without connection to the server will be additionally enabled. The **IZYTRONIQ** client which has been previously installed as a server-based client must be started at the outdoor PC to this end, where the Ultimate license can then be entered in the “Settings” menu (see also „Licensing“ in this regard if necessary).

In order to activate a license for the backend application, a valid license key must be entered to the “License Key” field (1). The license key can be found in your license certificate, which must have been issued for **IZYTRONIQ Enterprise Premium**. In the event that licensing has already taken place and, for example, licensing will be extended to include one or more floating licenses, the license certificate with the license extension must be used, because it replaces the existing license.

This license can be activated at the registration server by clicking the “Activate” button (2), assuming that the **IZYTRONIQ** backend server is connected to the Internet.

If connection with the Internet is not possible, offline activation can be used as an alternative. An activation file can be generated to this end by clicking the “Generate Activation File” button (3). Send this file to our support department via e-mail.

IZYTRONIQ License Activation Tool

Online Activation

License Key

Computer SID (optional) ⓘ

Offline Activation

Current License Data

License

License Status

Number of Floating Licenses

Authentication Date

Expiry Date

Attachments Path

Path ⓘ

Gossen Metrawatt GmbH

Product Support Hotline

Phone: +49-911-8602-0

Fax: +49-911-8602-669

e-mail: support@gossenmetrawatt.com

You will then receive a valid .lic file. The file must be saved to the following hidden directory: C:\ProgramData\Infralution\Licenses\.



Note

If a license has already been saved to the server, it's details can be displayed under “Current License Data”.

6.3.4 Installing the Frontend

IZYTRONIQ is installed here to the PC as a client.



Attention!

If a self-signed SSL certificate is used for the server, it must be saved to the client before installing **IZYTRONIQ**. Problems will otherwise be encountered later on with the synchronization service.

Checking procedure: access <https://<Servername>.<Domain>/IZYTRON.IQ/HandshakeRemoteService.svc>. If the page is displayed, **IZYTRONIQ** can be installed. If the page can't be displayed, the certificate must be saved to the client.

Save the certificate to the "Trusted Root Certification Authorities" location on the client PC, for example by means of:

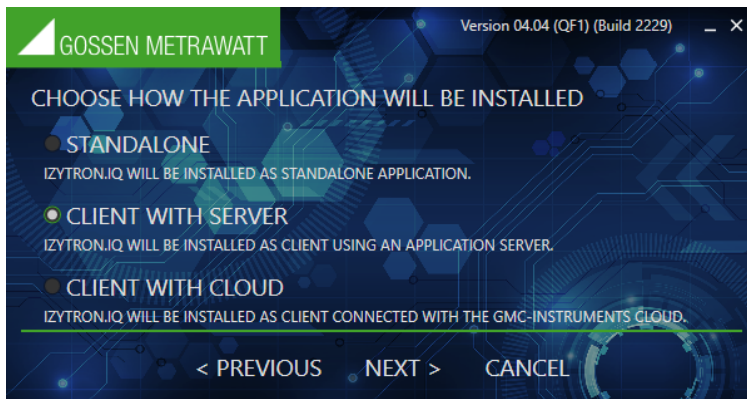
- Installation via the browser
- Export from the application server's IIS to the client PC and by double clicking the certificate file

(Read the documentation for your browser and IIS to this end.)

Installation of **IZYTRONIQ** is started by executing the **IZYTRONIQ.Setup.exe** file. Verification is first of all conducted to determine whether or not installation is possible in the available system environment (see „System Requirements“).

The file path for the installation directory can be subsequently customized.

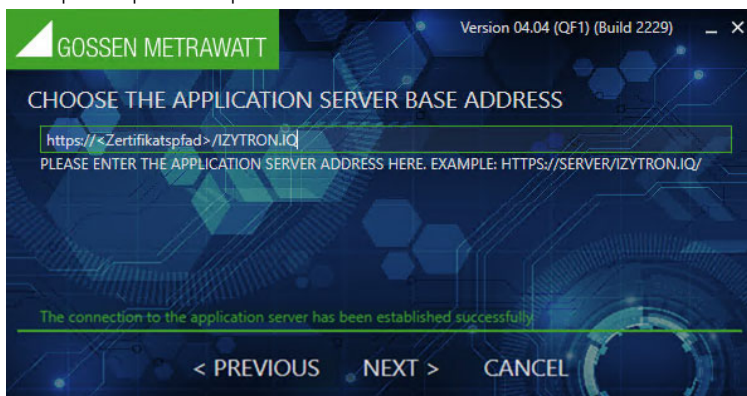
When prompted to choose STANDALONE, NETWORK VERSION (CLIENT) or CLOUD OPERATION, **NETWORK VERSION (CLIENT)** must be selected.



The application server must then be specified. A functioning **IZYTRONIQ** ENTERPRISE backend is required to this end, whose URL is entered during the next step in accordance with the certificate path (address to which the certificate is issued).

Complete entry: <https://<Zertifikatspfad>/IZYTRON.IQ/>

Example: <https://Computername.domain.com/IZYTRON.IQ/>



The floating license is distributed by the server (**ENTERPRISE Premium**) and can be expanded to include offline functionality (**ENTERPRISE Ultimate**), whose license code can only be entered to the client's own "Settings" menu after the client has been started.

The license activation tool for the backend may not be used to activate an **IZYTRONIQ** Enterprise Ultimate license!

We recommend starting the application directly after installation of the client in order to set up an administrative user.

After installation, you have the option of either starting the program directly or closing the installer.

6.4 Porting: Reinstallation on Another Computer

The procedure for installing **IZYTRONIQ** to another system differs depending on the variant.

BUSINESS and EDUCATION Variants

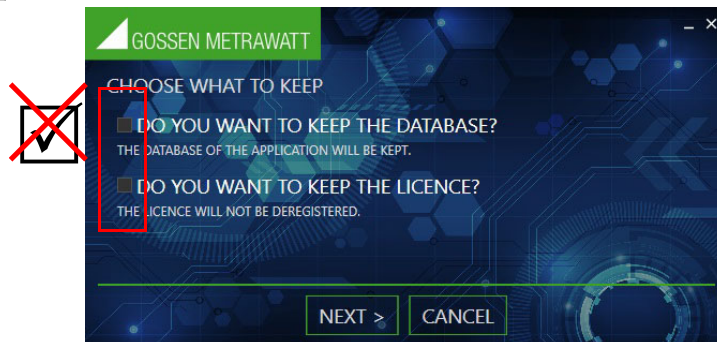
1. Back up your database (see „Backing Up / Restoring the Database (**BUSINESS** and **EDUCATION** variants only)“).
2. Uninstall the following programs in the specified order using the usual tools for your operating system (e.g. Windows 10: **Settings** > **Apps** > **Apps & Features**):

a) GMC-I Driver Control	 GMC-I Driver Control 1.21.0	40,0 MB 25.03.2021
b) IZYON.IQ	 IZYON.IQ	70,0 MB 25.03.2021
c) IZYTRON.IQ	 IZYTRON.IQ	358 MB 06.07.2021



Attention!

Do not check the “What to keep” box!



3. Download the installation file(s) for your variant (see „Download“).
4. Install **IZYTRONIQ** to the other system (see „Installation“).
5. License **IZYTRONIQ** with the existing license key (see „Licensing“).
6. Import the database saved in step 1 to the new installation (see „Backing Up / Restoring the Database (**BUSINESS** and **EDUCATION** variants only)“).

ENTERPRISE Premium

With **ENTERPRISE** variants, the data is located on a server. The local installation must therefore be removed and connection to the server must be restored after reinstallation to another device. Your data are automatically synchronized to the server. As a result, you can start uninstalling immediately.

1. Uninstall the following programs in the specified order using the usual tools for your operating system (e.g. Windows 10: **Settings** > **Apps** > **Apps & Features**):

a) GMC-I Driver Control	 GMC-I Driver Control 1.21.0	40,0 MB 25.03.2021
b) IZYON.IQ	 IZYON.IQ	70,0 MB 25.03.2021
c) IZYTRON.IQ	 IZYTRON.IQ	358 MB 06.07.2021
d) IZYTRON.IQ Backend License Activation	 IZYTRON.IQ BackEnd License Activation	3,50 MB 09.02.2021

2. Download the installation file(s) for your variant (see „Download“).
3. Install **IZYTRONIQ** to the other system (see „Installation“).
When doing so, enter the path to the database server.



Note

You don't have to license the client installation. Floating licenses are made available by the server. If one of these licenses is available, you can use **IZYTRONIQ**.

ENTERPRISE Ultimate

With **ENTERPRISE** variants, data are stored on a server, and data for offline work can also be saved to your device. And thus first of all you'll have to make sure that all local data is transferred to the server. Then remove the local installation. After reinstallation to another device, reestablish connection to the server. Then you'll be able to access the data again, or download it from the server for offline use if required. Furthermore, with **ENTERPRISE Ultimate**, the hardware (the computer's MAC address) is linked to the license key of the client installation. This means that your license is tied to the hardware. And thus when you uninstall the local installation, you have to release the license to be able to use it later on another device.

1. Synchronize your data (see „Synchronization“).
All of your local data are transferred to the server.



Attention!

Data Loss!
Local data which are not synchronized will be lost.

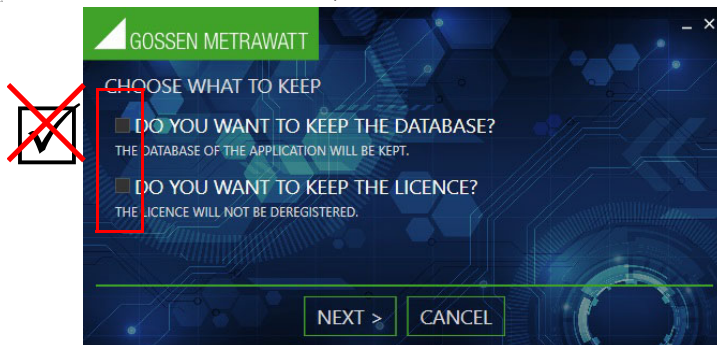
2. Uninstall the following programs in the specified order using the usual tools for your operating system (e.g. Windows 10: **Settings > Apps > Apps & Features**):

a) GMC-I Driver Control		GMC-I Driver Control 1.21.0	40,0 MB 25.03.2021
b) IZYON.IQ		IZYON.IQ	70,0 MB 25.03.2021
c) IZYTRON.IQ		IZYTRON.IQ	358 MB 06.07.2021
d) IZYTRON.IQ Backend License Activation		IZYTRON.IQ BackEnd License Activation	3,50 MB 09.02.2021



Attention!

Do not check the “What to keep” box!



3. Download the installation file(s) for your variant (see „Download“).
4. Install **IZYTRONIQ** to the other system (see „Installation“).
When doing so, enter the path to the database server.
5. License **IZYTRONIQ** with the existing, previously released license key (see „Licensing“).

Premium CLOUD

With the **Premium CLOUD** variant, the data are stored decentrally in the cloud and you log in each time with your login credentials (see „Licensing **Premium CLOUD**“ and „Login/Logout“).

And thus you can therefore install **Premium CLOUD** locally to another client (see „Installation“) and log in (see „Login/Logout“).

7 Licensing

A license is required in order to use **IZYTRONIQ**. Licensing is possible online or with the help of an activation file. The procedure depends on the variant:

- Licensing **BUSINESS** and **EDUCATION**
- Licensing **ENTERPRISE Premium**
- Licensing **ENTERPRISE Ultimate** (please read „Note on Working in Multi-User Mode (floating licenses)“ as well)
- Licensing **Premium CLOUD**



Attention!

Back up your license keys!

The license keys are required, for example, when porting to other hardware.

7.1 Licensing BUSINESS and EDUCATION

In order to license **IZYTRONIQ**, enter the registration code you received at the time of purchase along with your address and email address at reg.izytron.com. Your license key will be sent without delay to the specified e-mail address. This license key must be entered when first starting **IZYTRONIQ**. Connection is then established to the license server for authentication. The utilized hardware (the computer's MAC address) is linked to the license key. This means that your license is tied to the hardware. If you want to use this license on other hardware, **IZYTRONIQ** must first be uninstalled from the existing hardware. The license is de-authenticated and released for use on other hardware (new computer).

If you're unexpectedly unable to license and authenticate the software by means of a one-time connection to the Internet, licensing can be completed without an Internet connection. You'll need to contact GOSSEN METRAWATT directly to this end. Our friendly team is available to you by phone at +49 911 8602-0.

7.2 Licensing ENTERPRISE Premium

In order to license **IZYTRONIQ**, enter the registration code you received at the time of purchase along with your address and email address at reg.izytron.com. Your license key will be sent without delay to the specified e-mail address. This license key must be entered to the server. Connection is then established to the license server for authentication. This means that your license is tied to the hardware.

IZYTRONIQ ENTERPRISE Premium functions as a client-server system and creates a network structure based on this system. This structure consists of a central database server which functions as the server component, and several workstations which function as the client component.

The server must be installed manually by the respective administrator. The administrator is provided with installation instructions (best practice document) on how to set up the MS SQL server for **IZYTRONIQ**. No separate license key is required for the clients in **ENTERPRISE Premium**. Instead, the desired number of floating licenses must be available from the server (see „Note on Working in Multi-User Mode (floating licenses)“). In addition to the installation on the server, the client must be installed locally to each workstation. The server's database path must be specified during installation to the client. You can set up any number of clients without licenses, but you can never use more than the purchased number of floating licenses at the same time.

If you're unexpectedly unable to license and authenticate the software by means of a one-time connection to the Internet, licensing can be completed without an Internet connection. You'll need to contact Gossen Metrawatt GmbH directly to this end. Our friendly team is available to you by phone at +49 911 8602-0.

7.3 Licensing ENTERPRISE Ultimate

IZYTRONIQ ENTERPRISE Ultimate licenses can only be used in combination with at least one **ENTERPRISE Premium** floating license (see „Note on Working in Multi-User Mode (floating licenses)“). An existing **ENTERPRISE Premium** license is thus a prerequisite for the purchase of an **ENTERPRISE Ultimate** license.

Each instance of **ENTERPRISE Ultimate** must be licensed after installation to the portable device (tablet, notebook):



Note

Under certain circumstances, existing databases may be reset (see below).

We recommend backing up existing data if applicable (see „Backing Up / Restoring the Database (**BUSINESS** and **EDUCATION** variants only)“).

1. Enter the registration code you received at the time of purchase along with your address and email address at reg.izytron.com. Your license key will be sent without delay to the specified e-mail address.
2. Start **IZYTRONIQ**.
3. Log in.
4. Select **Settings**.
The **Settings** menu is displayed.
5. Select **License**.
The **License** menu appears. The currently valid **ENTERPRISE Premium** license is displayed.

6. Enter the license key for **ENTERPRISE Ultimate** to the **Upgrade – Activate license online** field.
7. Select **Activate**.
8. Acknowledge the security prompt by clicking **Yes**.
Connection is established to the license server for authentication. The license is activated. The utilized hardware (the computer's MAC address) is linked to the license key. This means that your license is tied to the hardware.
9. Acknowledge the restart prompt by clicking **Yes**.
IZYTRONIQ is restarted.
10. After restarting, **IZYTRONIQ** automatically determines whether or not the local database is suitable for offline operation.
 - If the database is suitable:
A dialog appears for selecting either the offline or the online mode. Select your mode.
 - If the database is not suitable (existing or faulty database):
A message appears indicating that the offline database does not yet contain all information, and that **IZYTRONIQ** will start in online mode and must be synchronized. Log in. The synchronization menu is displayed automatically. Start synchronization. As soon as the message appears confirming that synchronization has been successfully completed, the local database must be reset. Select the **Reset local database** option from the synchronization menu. The new database contains administrative information only, i.e. no further data. Now you need to synchronize the database to the server (see „Synchronization“). After successful synchronization, the database can be used.
11. You can now work with **IZYTRONIQ ENTERPRISE Ultimate**.

**Note**

If you want to use the activated license on other hardware, **IZYTRONIQ** must first be uninstalled from the existing hardware. The license is de-authenticated and released for use on other hardware (new computer).

7.4 Licensing Premium CLOUD

An account with **GMC-INSTRUMENTS CLOUD** is required in order to use **Premium CLOUD**, by means of which you can manage your **Premium CLOUD** subscription including licenses and additional users for **Premium CLOUD**.

**Note**

All basic operations such as creating or deleting users, as well as contract management, are performed via the **GMC-INSTRUMENTS CLOUD**. You can view users and add expanded information in **IZYTRONIQ** user administration, which is only possible here. See „User Administration **Premium CLOUD**“ for details.

First of all create a user account, then buy the required licenses and finally enter all required additional **Premium CLOUD** users and link them to a license.

Creating a GMC-INSTRUMENTS CLOUD Account

1. Open the website at <https://www.gmc-instruments.cloud/>.
2. Select **Login** from the menu.
The **GMC-I Cloud Login** dialog appears.
3. Select **Register** from the menu.
The **Open GMC-I Cloud account** dialog appears.
4. Enter an **e-mail address** and a **password**.

**Note**

The access credentials entered here are the access credentials for the **GMC-INSTRUMENTS CLOUD** account and the primary user of **Premium CLOUD**. Additional **Premium CLOUD** users will be entered separately at a later point in time.

5. Acknowledge by clicking “Continue”.
The **Which type of account do you want to create?** Dialog appears.
6. Select company account and confirm by clicking **Next**.
The **Create new account** dialog appears.
7. Fill in the fields with your data.
8. Acknowledge by clicking **Next**.
9. Your customer account is created and the customer area is displayed.

Ordering a License and Purchasing Additional Users

1. Select **Users & Licenses** from the menu in the administration area.
2. Select **Order License** from the menu in the **License Overview** area.
The product selection page appears.
3. Select **Subscribe for free** from the menu in the **IZYTRONIQ CLOUD COLLECTION Subscription** area.
4. Follow the instructions in order to subscribe.
The license appears in the account as soon as it has been purchased.
5. Select **Users & Licenses** from the menu in the **Administration** area.
The **License Overview** and the **User Overview** appear.
6. Select **Add Contract Options** from the menu in the **License Overview** area.
The **Contract Features** dialog appears.
7. Add the desired number of users to the **Additional IZYTRONIQ Users** field.
8. Acknowledge by clicking **Buy Now**.
The desired number of users is purchased.



Note

In order to discontinue additional users, select **Discontinue** from the menu for the desired user in the **License Overview** area.
(The additional user must not be assigned to any user. If necessary, delete the assignment first – see below.)

Entering Additional Premium CLOUD Users and Linking them to a User License

After creating an additional user, a license must be assigned so that **IZYTRONIQ** can be enabled for the user. The license must first be purchased (see above).

1. Open the website at <https://www.gmc-instruments.cloud/>.
2. Select **Login** from the menu.
The **GMC-I Cloud Login** dialog appears.
3. Log in with your user account.
The **Welcome to the Customer Area** dashboard appears.
4. Select **Users & Licenses** from the menu in the **Administration** area.
The **License Overview** and the **User Overview** appear.
5. Select **Enter Users** from the menu in the **User overview** area.
The **Create New User** dialog appears.
6. Acknowledge by clicking **Save**.
The new user is entered.
7. Select **Licenses** from the menu for the desired user in the **User Overview** area.
The **Licenses** dialog appears. All available licenses are displayed in the **Available Licenses** area.
8. Enter a checkmark next to the **IZYTRONIQ Collection Cloud** license.
9. Acknowledge by clicking **Assign/Release Licenses**.
The license is assigned to the user and displayed in the **User Overview**. The users can now access **Premium CLOUD**.



Note

In order to decouple a license from a user, select **Licenses** from the menu for the desired user. Then remove the check mark in the Assigned Licenses area and confirm by clicking **Assign/Release Licenses**.
The freed up license is once again available and can be assigned to another user.

Editing Users

An entered user can be edited at any time: salutation, name, e-mail address and user roles can be changed. With regard to user roles, be sure to assign "Admin" and "User Administration" rights to suitable persons only.

1. Log in to the **GMC-INSTRUMENTS CLOUD**.
The **Welcome to the Customer Area** dashboard appears.
2. Select **Users & Licenses** from the menu in the **Administration** area.
The **License Overview** and the **User Overview** are displayed.
3. Select **Edit** for the user to be edited in the **User Overview** area.
The **Edit User** dialog appears.
4. Edit the desired fields.
5. Acknowledge by clicking **Save**.
The user is edited.

Deleting Users

When a user is deleted, the assigned license is automatically freed up.

1. Log in to the **GMC-INSTRUMENTS CLOUD**.
The **Welcome to the Customer Area** dashboard appears.
2. Select **Users & Licenses** from the menu in the **Administration** area.
The **License Overview** and the **User Overview** are displayed.
3. Select the user to be deleted from the table in the **User Overview** area.
The **Delete User** dialog appears.
4. Acknowledge the security prompt by clicking **Delete User**.
The user is deleted.



Attention!

Account deletion – all data are permanently deleted!

The user with which you registered is also the account for the **GMC-INSTRUMENTS CLOUD**. The “Delete Account” menu item is displayed here.
If the account is deleted, the account and all data are permanently lost!

Managing Licenses and Viewing Information

You can manage your license(s) at a later point in time and, for example, change the contract variant, add and remove options or change your payment method. You can also view important information such as contract status and data usage.

1. Open the website at <https://www.gmc-instruments.cloud/>.
2. Select **Login** from the menu.
The **GMC-I Cloud Login** dialog appears.
3. Log in with your user account.
The **Welcome to the Customer Area** page appears.
4. Select **Users & Licenses** from the menu in the **Administration** area.
The **License Overview** and the **User Overview** appear.
5. Information concerning your products is displayed in the **License Overview** area, and you can edit any desired options.



Note

You can access your invoices in the **Administration** area by clicking **Billing** in the menu.

7.5 Note on Working in Multi-User Mode (floating licenses)

The **IZYTRONIQ** floating license model is a licensing method which specifies the maximum number of users that can access the same database at the same time. And thus the **IZYTRONIQ** floating license model differs from the workstation-based license model, in which the workstation license is tied to the hardware. The software itself can be installed to any number of computers with the concurrent user license model. A central server manages the licenses, which are also called floating licenses or network licenses. The server registers the number of currently assigned licenses and grants each authorized user the right to access the database. After all licenses have been assigned, any additional concurrent user must wait until another user has finished his session so that a license is once again made available.

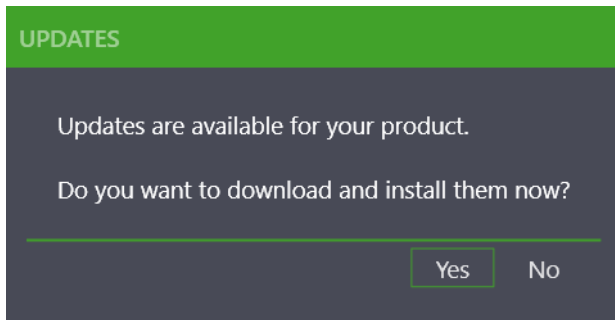
Whereas, for example, software with a floating license for five concurrent users may also be used by more than five users, only up to five users can access it simultaneously.

8 Update

Free updates are available during the statutory warranty period. Furthermore, you can purchase an „Upgrade“ to another version of **IZY-TRONIQ** at any time.

Updates are distributed exclusively via the update service and are **not** installed via setup. Each time it's started, the software determines whether or not a new version of the software is available on the server.

Furthermore, an update request can be triggered manually in **IZYTRONIQ**'s global settings (see „Global Settings“).



Automatic update checking can be disabled in the global settings. If you'd like to continue participating at the end of the statutory warranty period, you can purchase a maintenance contract. Contact our sales department in this regard.

Note



ENTERPISE variants: Restart IIS if you experience problems after an update.

9 Upgrade

If your requirements become more demanding, you can expand the range of functions by upgrading at any time. All existing data is of course retained during this process.

Contact our sales department to purchase an upgrade (see „Support & Contact“).

Several issues need to be taken into consideration in order to successfully complete an upgrade and prevent data loss. Carefully and completely follow the instructions provided below in order to ensure that you'll be able to use your existing database.

Upgrading within BUSINESS or EDUCATION

The upgrade process is described below for switching from:

- A **BUSINESS** variant to another **BUSINESS** variant , e.g. from **BUSINESS Starter** to **BUSINESS Professional**
- **EDUCATION Professional** to **EDUCATION Premium**,
- An **EDUCATION** variant to a **BUSINESS** variant

Prerequisites: You've already purchased the upgrade and you're connected to the Internet.

1. Check to determine whether or not an update is available for your current **BUSINESS** or **EDUCATION** installation. If so, execute the update (see „Update“).
The database is updated to the most recent format, which is compatible with current variants.
2. Access the **Settings** menu.
The **Settings** dialog appears.
3. Select **License** from the menu.
The **License** dialog appears.
4. Enter the license key to the **License Key** field in the **Upgrade – Activate License Online** area.
5. Acknowledge by clicking **Activate**.
The new license is activated and the program restarts.

If no Internet access is available, **IZYTRONIQ** can be activated using the activation file.

1. Check to determine whether or not an update is available for your current **BUSINESS** or **EDUCATION** installation. If so, execute the update (see „Update“).
The database is updated to the most recent format, which is compatible with current variants.
2. Access the **Settings** menu.
The **Settings** dialog appears.
3. Select **License** from the menu.
The **License** dialog appears.
4. Click the button with the same name in the **Upgrade – Generate Activation File** area.
5. Save the activation file (License.lic) and send it to our product support department (see „Support“).
You'll receive the activation file from product support.
6. Access the **Settings** menu again.
The **Settings** dialog appears.
7. Select **License** from the menu.
The **License** dialog appears.
8. Click the button with the same name in the **Upgrade – with Activation File** area.
A security prompt appears.
9. Acknowledge the security prompt by clicking **Yes**.
The **Open** dialog appears.
10. Select the license file you received from product support.
11. Confirm by clicking **Open**.
The **Open** dialog appears. The new license is activated and the program restarts.

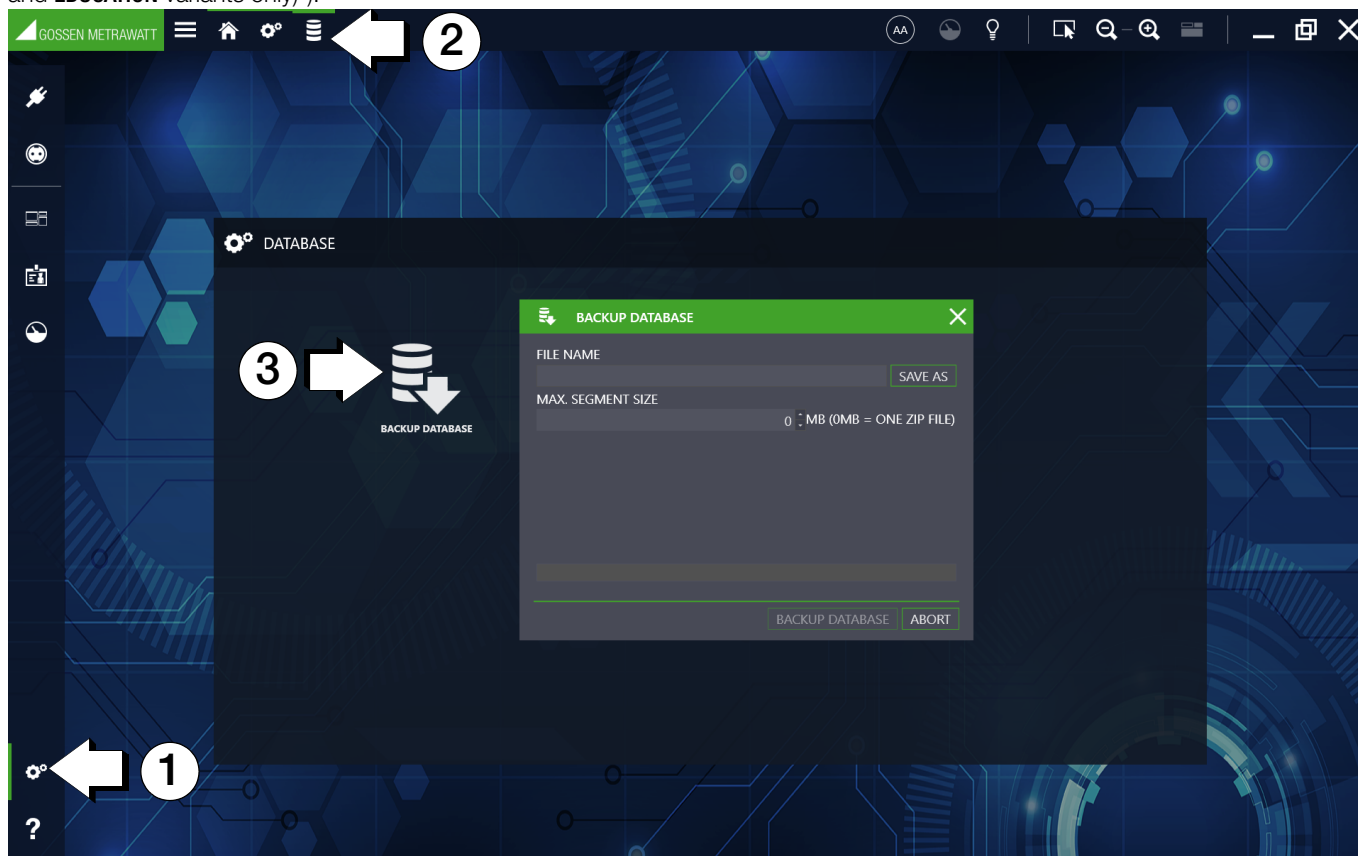
Upgrading from BUSINESS or EDUCATION to CLOUD or ENTERPRISE

Prerequisites: You've already purchased the upgrade.

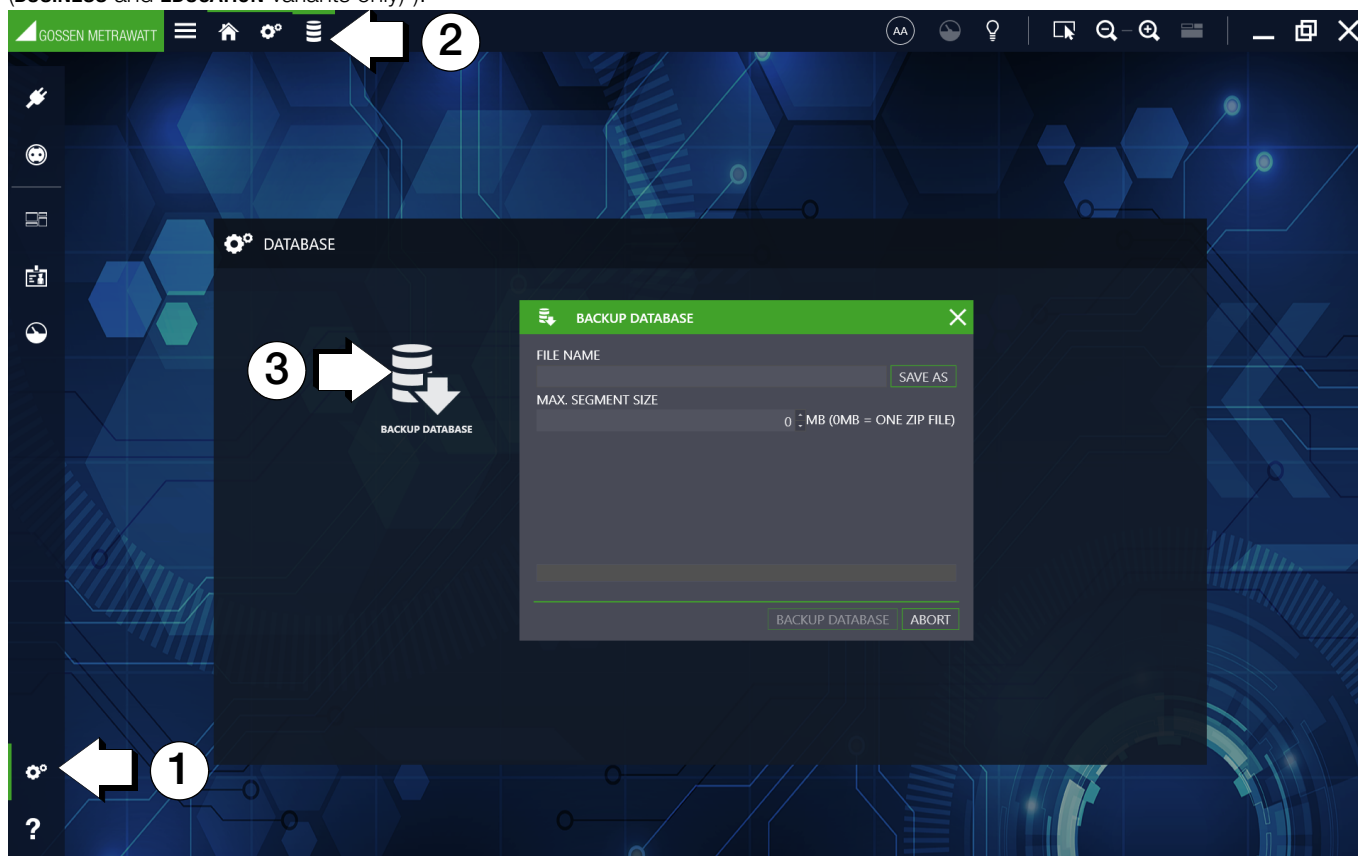
When updating from a **BUSINESS** or **EDUCATION** variant to a **CLOUD** or **ENTERPRISE** variant, both variants must be available in the latest version, because the database structure depends on the **IZYTRONIQ** software version. In other words, you must first update your **BUSINESS** or **EDUCATION** variant and additionally make sure that you've downloaded the latest version of the **CLOUD** or **ENTERPRISE** variant which you will then install.

The database is thus backed up twice during this process – the first time before you begin work (general backup before the update) and a second time in order to export the database from the updated **BUSINESS** or **EDUCATION** variant in the latest database format. Only this database can be imported into the subsequently installed current **CLOUD** or **ENTERPRISE** variant (backup in the most current database format).

1. Save your database as a ZIP file. Use the backup database function to this end (see „Backing Up / Restoring the Database (**BUSINESS** and **EDUCATION** variants only)“).

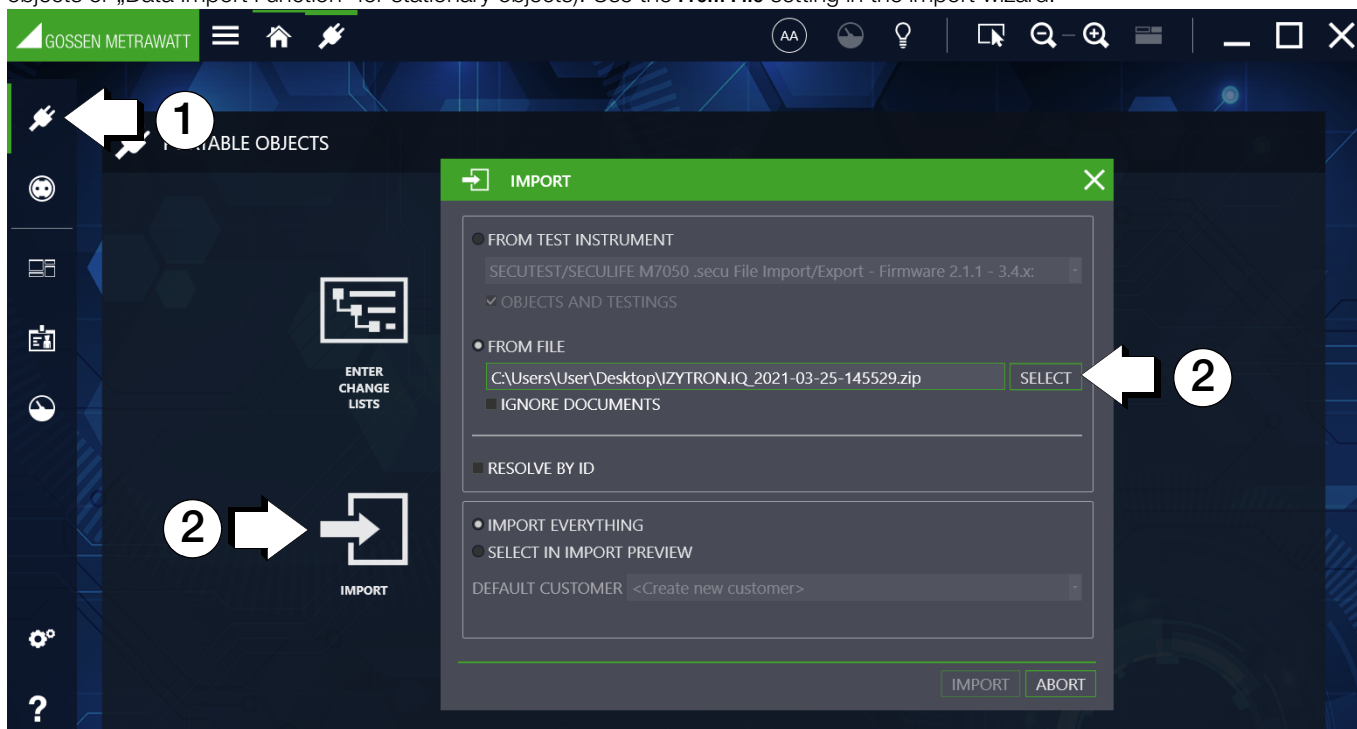


2. Check to determine whether or not an update is available for your current **BUSINESS** or **EDUCATION** installation. If so, execute the update (see „Update“).
The database is updated to the most recent format which is compatible with the current **ENTERPRISE** and **CLOUD** variants.
3. Save your updated database as a ZIP file. Use the backup database function to this end (see „Backing Up / Restoring the Database (**BUSINESS** and **EDUCATION** variants only)“).



4. Download the current installation file for the **ENTERPRISE** or **CLOUD** variant (see „Download“).
5. Execute installation of the **ENTERPRISE** or **CLOUD** variant (see „Installation“).

6. Restart IIS.
7. License **IZYTRONIQ** (see „Licensing“).
8. Import the updated, i.e. last saved, database. Use the data import function to this end (see „Data Import Function“ for portable objects or „Data Import Function“ for stationary objects). Use the **From File** setting in the import wizard.



After import has been completed, your previous database is available in the **ENTERPRISE** or **CLOUD** variant and can be used.

10 Uninstalling the Software

IZYTRONIQ is uninstalled via program management in the operating system.

While uninstalling the software, you can choose to keep the local database and/or the license on your PC. If you release them, they can be used on another PC.



Note

The license can only be released if you're using a license which is authorized for this purpose. Please contact our support team for more information in this regard.

11 Login/Logout

Access to **IZYTRONIQ** is controlled by user accounts. User accounts are created and managed in user administration.

This section describes initial login and the regular login/logout process. Within this context, differentiation is made between the **Premium CLOUD** variant and all other variants.

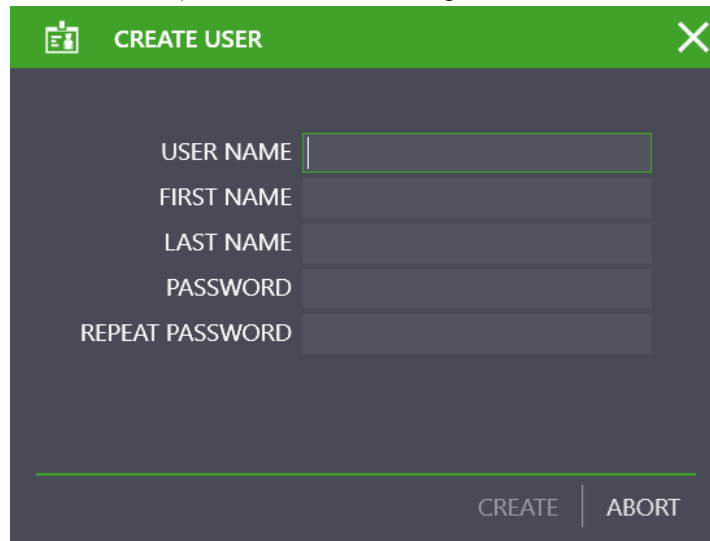
All additional information concerning user accounts can be found in the “User Administration” section.

All Variants Except Premium CLOUD

Initial Login

If there aren't yet any users in the database (initial login to **IZYTRONIQ**), a user must be created. If this is the case, “Create User” appears as the heading in the initial screen.

The following must be entered: user's first and last name, a freely selectable user name, a password (including repetition) and an e-mail address (required for future services and functions). The “Admin” role is assigned to this user.



CREATE USER

USER NAME

FIRST NAME

LAST NAME

PASSWORD

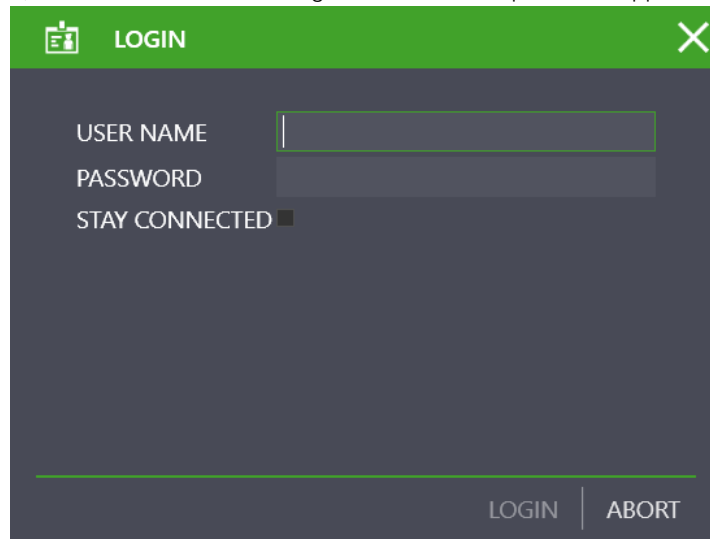
REPEAT PASSWORD

CREATE | ABORT

Renewed Login

Only users who are registered with a password in **IZYTRONIQ** user administration can use the software.

When the software is started again, the initial screen for entering a user name and password appears.



LOGIN

USER NAME

PASSWORD

STAY CONNECTED ☐

LOGIN | ABORT



Note

Entering an e-mail address is a newer feature. An e-mail address must be entered when creating new user accounts. If user accounts have existed for some time, i.e. if they don't yet include an e-mail address, a prompt appears asking you to enter the e-mail address.

Switching Users

The  button in the status bar can be used to switch users in the running application.

Remaining Logged In

If you want to stay logged for this program at to your PC, click in the field beside “REMAIN LOGGED IN” in the login window. The next time the program is started, it opens without displaying a login window. You can undo this selection by opening the “PERSONAL SETTINGS” menu and unchecking the “REMAIN LOGGED IN” parameter (see „Personal Settings”).

Logging Out – Exiting the Program

Several options are available in the application for exiting **IZYTRONIQ**:

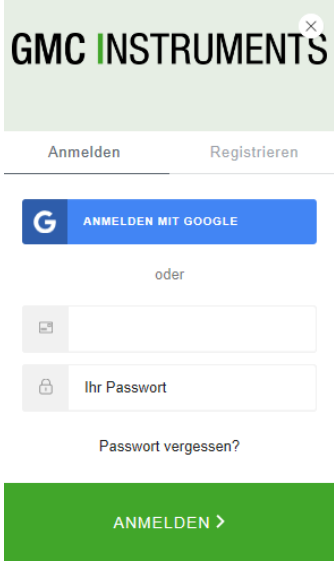
- Exit **IZYTRONIQ** by selecting the Windows exit function in the status bar: .
- Log out by clicking the  icon in the status bar:
After clicking the icon, a security prompt must first be answered with “Yes”. The login window appears. Select “CANCEL”. Exit **IZYTRONIQ** by confirming the renewed prompt with “Yes”.

Premium CLOUD

Login

Only those users can log in for whom a licensed user account exists in the cloud portal (see „Licensing”).

When the software is started (again), the initial screen for entering a user name and password appears.



The login screen for GMC INSTRUMENTS features a light green header with the company logo. Below the header, there are two tabs: 'Anmelden' (selected) and 'Registrieren'. A blue button with the Google 'G' logo and the text 'ANMELDEN MIT GOOGLE' is prominently displayed. Below this, the word 'oder' is centered. There are two input fields: one for the email address (with an envelope icon) and one for the password (with a lock icon and the placeholder text 'Ihr Passwort'). A link 'Passwort vergessen?' is located below the password field. At the bottom, a large green button with the text 'ANMELDEN >' is centered.

Logging Out – Exiting the Program

Several options are available in the application for exiting **IZYTRONIQ**:

- Exit **IZYTRONIQ** by selecting the Windows exit function in the status bar: .
- Log out by clicking the  icon in the status bar:
After clicking the icon, a security prompt must first be answered with “Yes”. The login window appears. Select “CANCEL”. Exit **IZYTRONIQ** by confirming the renewed prompt with “Yes”.

12 Layout and Operation

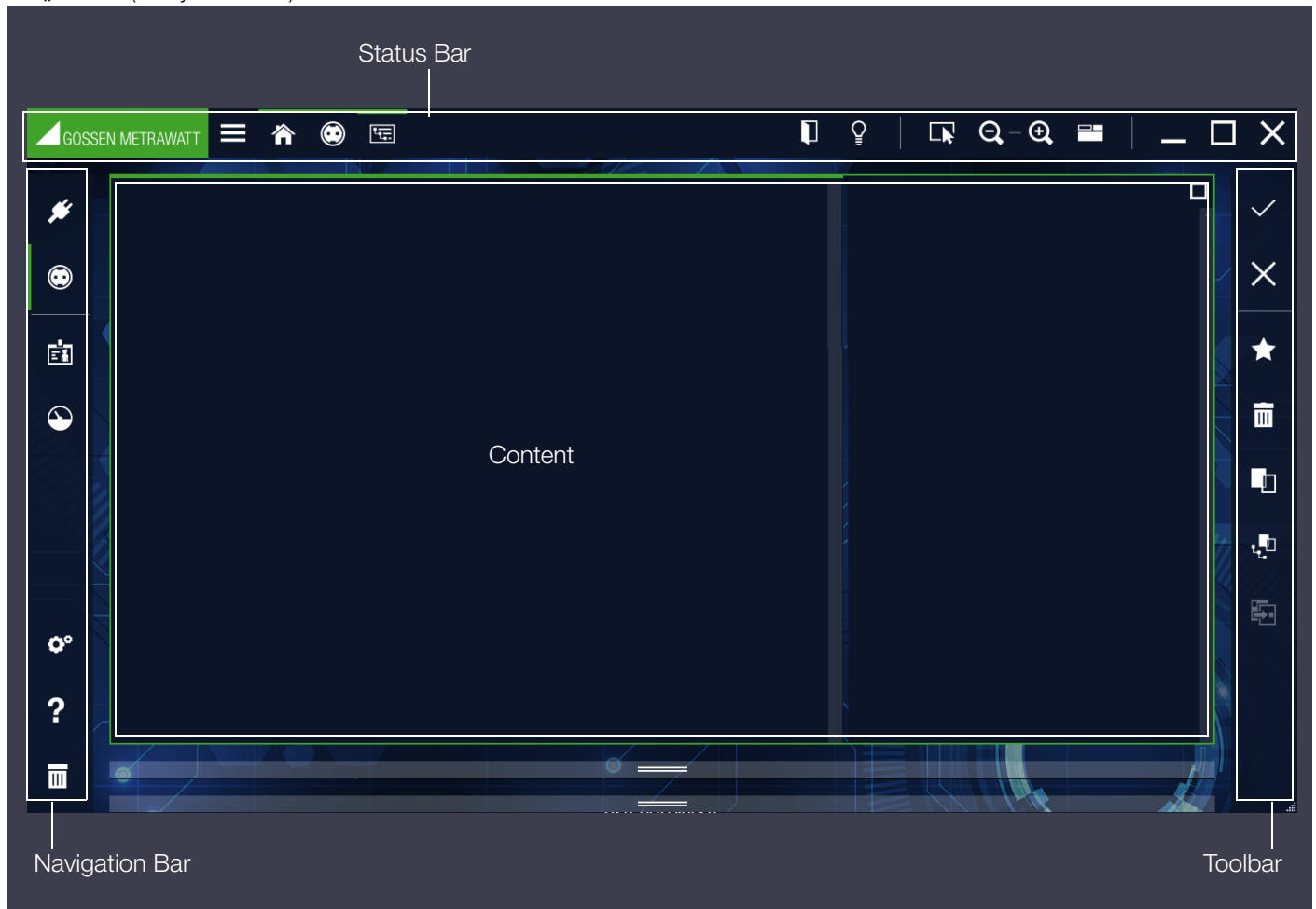
IZYTRONIQ can be operated in many different ways.

- „Information Concerning General Layout“: Familiarize yourself with the basic elements including status bar, navigation bar and toolbar.
- „Home Screen“: Gain an overview of the primary initial view, from which you can access all of the main modules.
- „Dashboard“: Get to know the analysis tool which may also be available in the home screen depending on the installed IZYTRONIQ variant.

12.1 Information Concerning General Layout

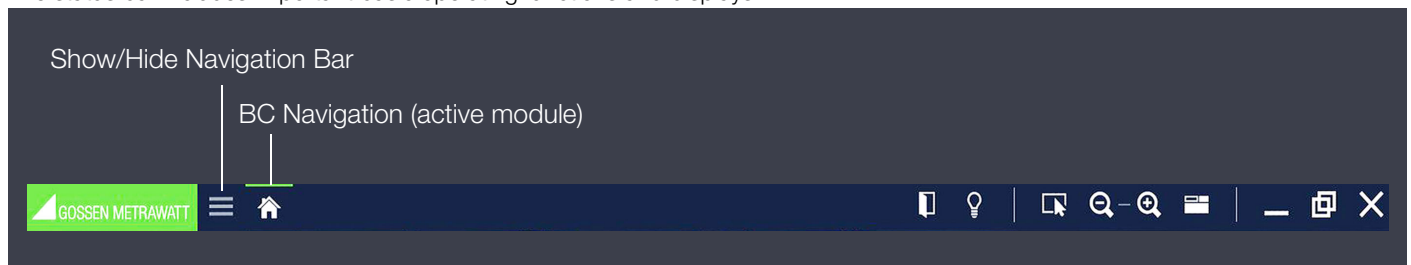
Status bar, navigation bar and toolbar are available to the user for working with the respective interface (content):

1. „**Status Bar**“ (always available)
2. „**Navigation Bar**“ (can be shown and hidden)
3. „**Toolbar**“ (always available): includes context-sensitive content



12.1.1 Status Bar

The status bar includes important basic operating functions and displays.



Bread Crumb Navigation

A display appears at the left-hand side of the status bar (header) indicating which IZYTRONIQ branch is currently in use. The active module is indicated by a green bar. Bread crumb navigation permits operation even without a navigation bar, for example, the navigation bar can be hidden in tablet mode.

Icons and their Functions



Hide/show the navigation bar



Logout/login:
The user is logged out and the application displays the login window.



Quick links (as of **BUSINESS Professional**)

Quick link makes frequently needed selections from the tree structures available to you with a single mouse click. It's easy to set up a new quick link using the quick link function in the status bar. Any desired data selection can be directly transferred to the quick link from there. Double clicking an entry makes it possible to repeatedly run the saved evaluation, and to display the results in the desired output format.



Mouse mode:

If the user is in mouse mode, a finger is displayed for switching to touch mode. Icons generally appear larger in touch mode and smaller in mouse mode.



Touch mode:

If the user is in touch mode, a mouse pointer is displayed.
Icons generally appear larger in touch mode and smaller in mouse mode.



Zoom factor:

Icons for zooming in and out within the content area.



Toggle view:

Toggle display amongst "Tree View and List", "Tree View, Details and List", and "Tree View and Details"



Minimize:

The user can minimize the display with the help of this icon (it then appears as an icon only in the taskbar).



Shrink:

The user can shrink the display with the help of this icon (the display appears in the size the user has selected by means of dragging).



Maximize:

The user can maximize the display with the help of this icon (fills the whole screen).



Exit:

The user is asked here if the application should be exited. If confirmed, the application is closed.



Number of users (**ENTERPRISE Premium**, **ENTERPRISE Ultimate** and **Premium CLOUD**):

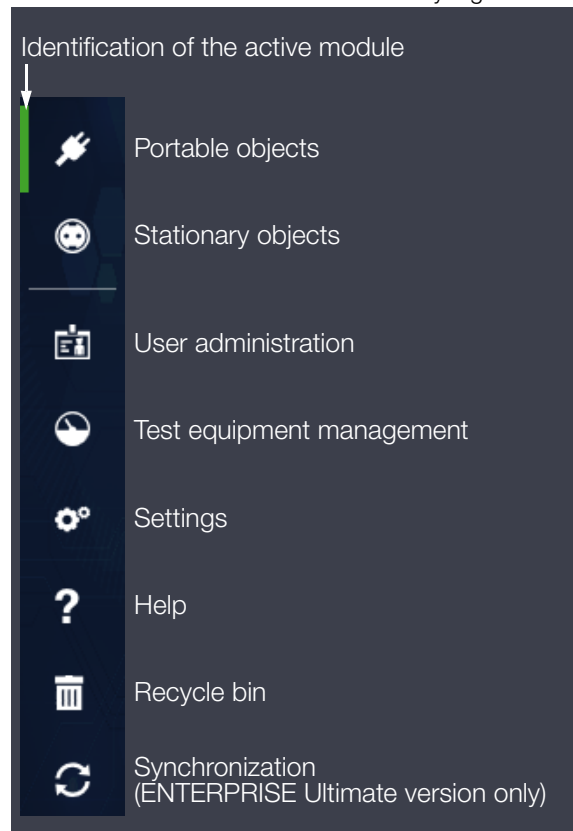
The number of users currently logged in is displayed here.

12.1.2 Navigation Bar

The navigation bar makes it possible to jump directly from one main module to the next.

The navigation bar can be shown and hidden with the help of the  icon in the status bar.

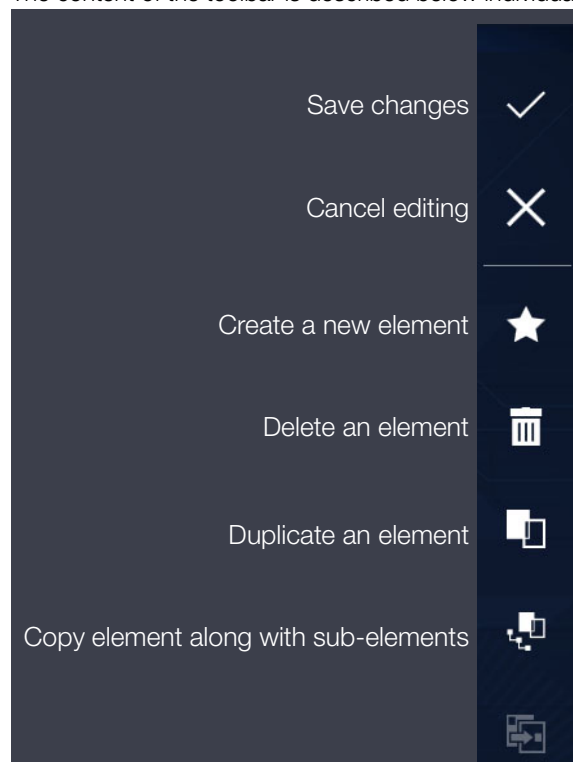
When activated, the navigation bar is visible in almost all operating displays. Selecting or tapping a module icon opens the corresponding module. The active module is indicated by a green bar in the navigation bar.



12.1.3 Toolbar

The toolbar is context-sensitive and always displays all of the tools which are made available within the selected context. It's located on the right edge of the screen.

The content of the toolbar is described below individually for each operating window.

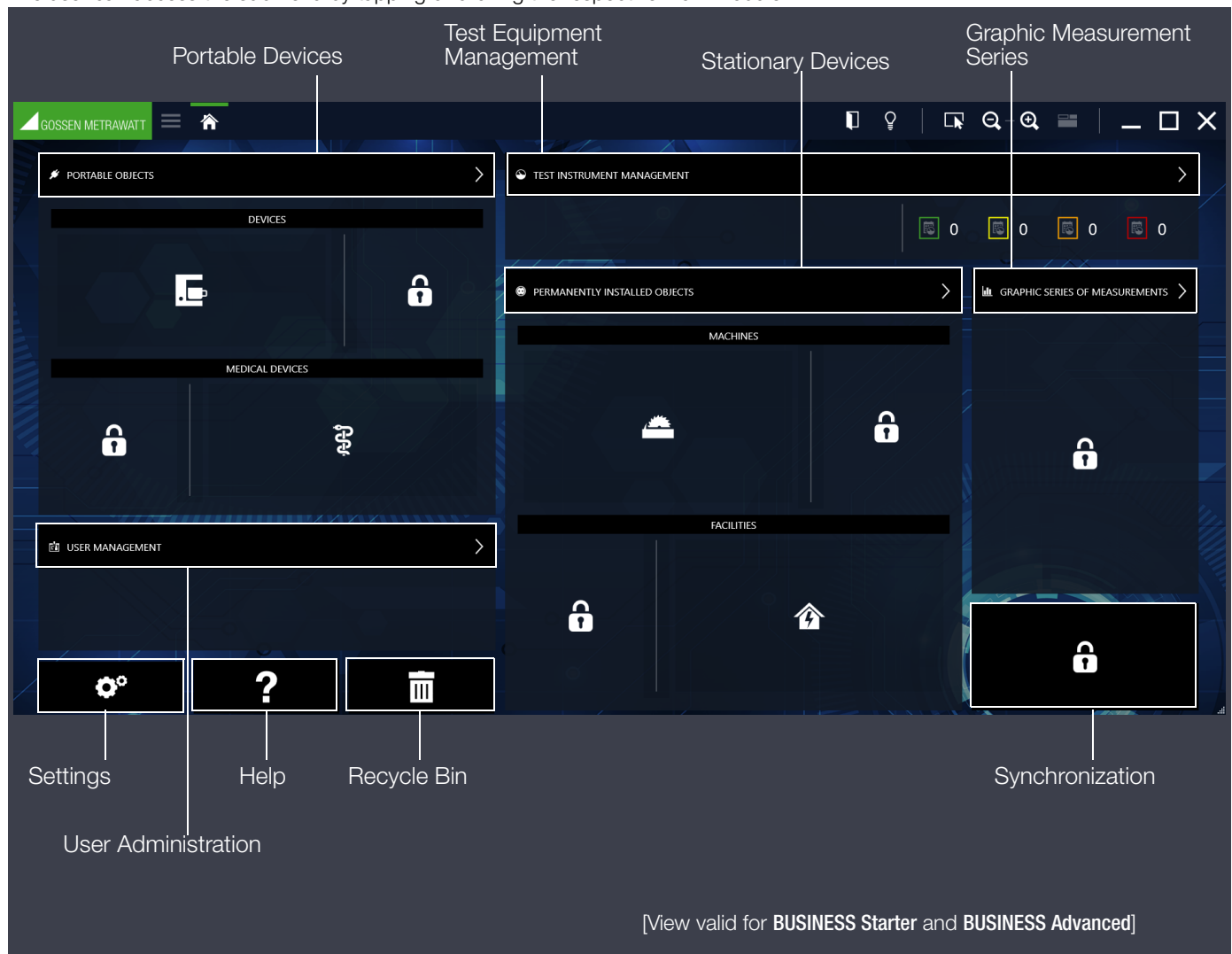


12.2 Home Screen

After a user has logged in, the primary initial window (home screen) is displayed.

The home screen contains main modules which are used for operation. Depending on your **IZYTRONIQ** variant, either the  icon or the dashboard function appears (see Dashboard).

The user can access the submenu by tapping or clicking the respective main module.



Main Modules

Operation of **IZYTRONIQ** is broken down into various modules in a clear-cut fashion. These main modules can also be found in the navigation bar.

The following modules can be selected:

- **Portable objects (devices and medical devices)** 
Testing, acquisition and management of portable devices (see „Portable Objects“)
- **Stationary objects (machines and systems)** 
Testing, acquisition and management of stationary devices (see „Stationary Objects“)
- **User administration** 
Entry and management of users (see „User Administration“)
- **Test equipment management** 
Entry and management of test instruments (see „Test Equipment Management“)
- **Settings** 
General settings for working with **IZYTRONIQ** (see „Settings“)
- **Help** 
Display online help (see „Help“)

- **Recycle bin** 
Permanent deletion or recovery of data moved to the recycle bin (see „Recycle Bin“)
- **Synchronization (ENTERPRISE Ultimate version only)** 
Synchronization of a server database with a local database on a PC

12.3 Dashboard

The **IZYTRONIQ** dashboard is an analysis tool within the home screen that helps the user cope with the increasing demands placed on figures and evaluations with a clear-cut graphic display, while at the same time providing quick access to the various main modules. It facilitates systematic evaluation of all tests, calibrations and deadlines, thus assuring the necessary transparency to your company as a foundation for your continuous improvement process.

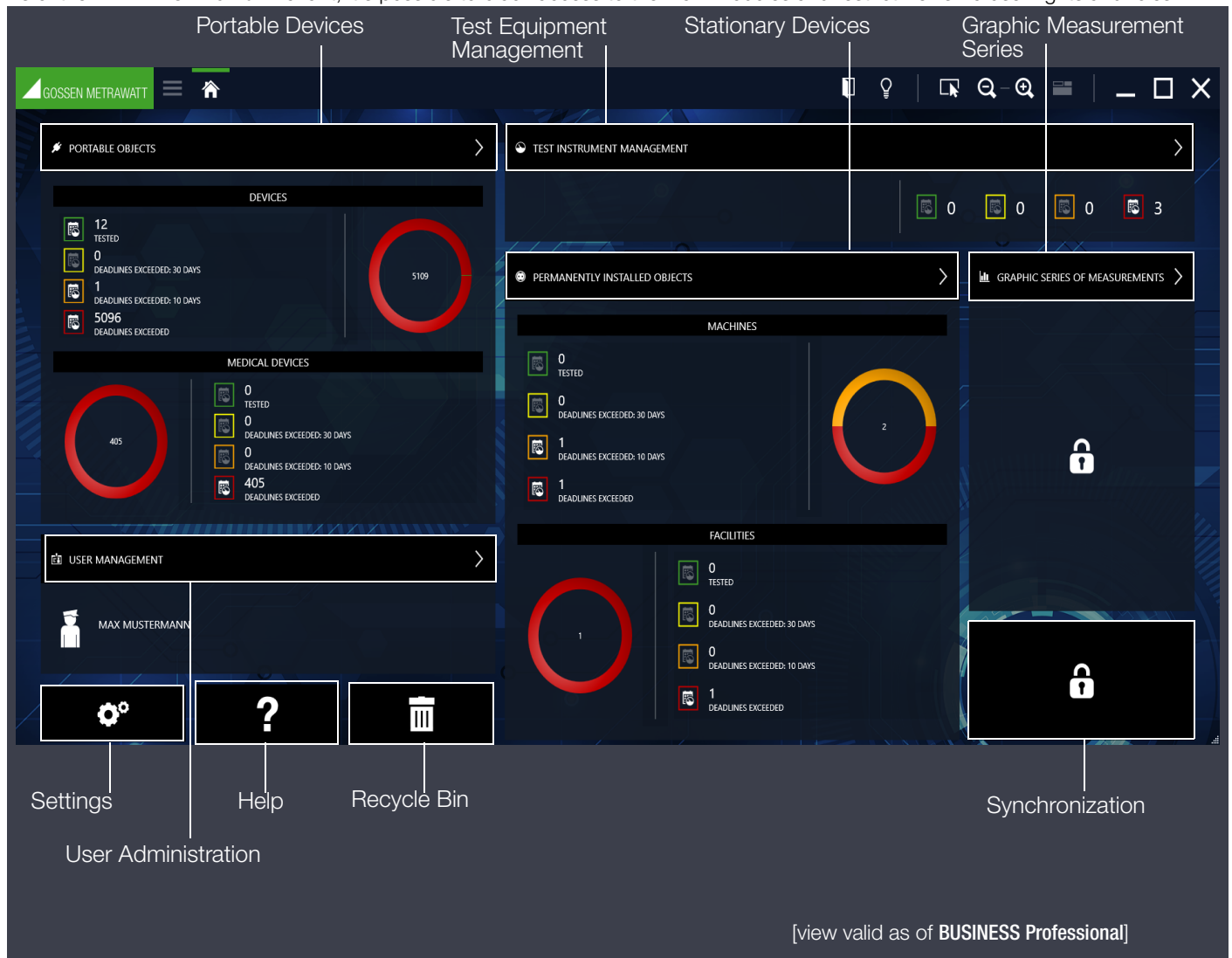
Important data for some of the modules are also displayed:

- Deadline monitoring (past due, to be tested in the near future, to be tested very soon and devices outside of the escalation levels) for portable and stationary devices, as well as test instruments
 - Test Deadlines for Objects [as of **BUSINESS Professional**]
 - Test Deadlines for Test Instruments [as of **BUSINESS Professional**]
- Connected test instruments for test equipment management (see „Devices at Interface“)
- User data of the logged-in user for user administration (see „User“)
- Optional graphic measurement series in the form of Y/t-diagrams (see „Graphic Measurement Series“)

The corresponding module sections can be accessed by clicking these areas.

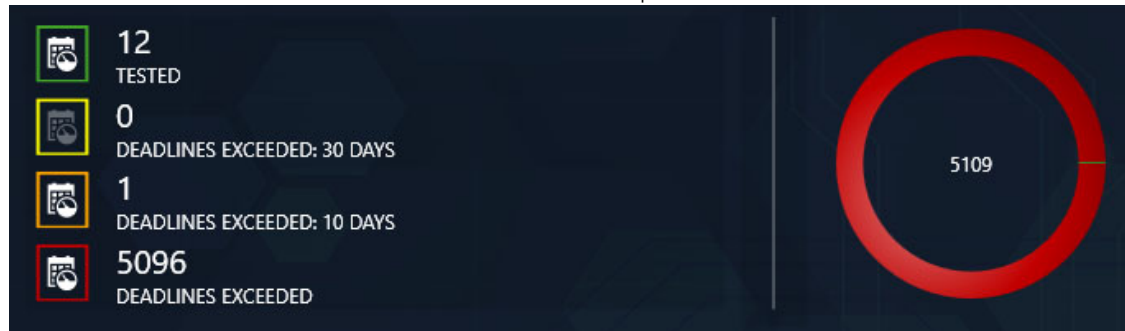
As of **BUSINESS Professional**, the dashboard function is integrated into the home screen.

As of the **ENTERPRISE Premium** variant, it's possible to block access to the main modules and restrict views via user rights and roles.



12.3.1 Test Deadlines for Objects [as of BUSINESS Professional]

The dashboard function is subdivided into an overview and a pie chart for each main module:



Overview Diagram

The evaluated number of objects belonging to the respective main module are grouped into 4 categories in the overview:

- **Icon outlined in green:** all objects listed here lie within the individually defined test intervals and have passed the last inspection.
- **Icon outlined in yellow:** all objects listed here fall within the individually defined escalation time (escalation level 1) and have passed the last inspection.
- **Icon outlined in orange:** all objects listed here fall within the individually defined escalation time (escalation level 2) and have passed the last inspection.
- **Icon outlined in red:** all objects listed here are already outside of the individually defined test interval, have not been tested or have not passed the last inspection.

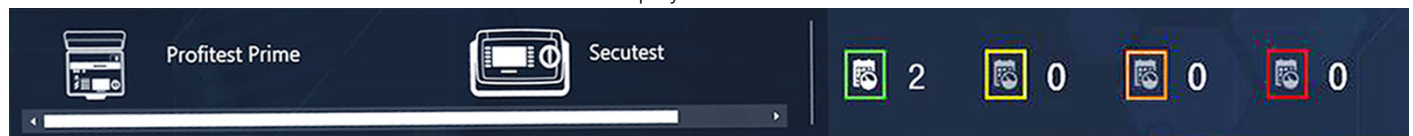
The corresponding objects are displayed in the filter list by selecting the icon outlined in the respective color (see „Lists“).

Pie Chart

The pie chart shows the percentage distribution of the categories described above, as well as the total number of listed objects.

12.3.2 Test Deadlines for Test Instruments [as of BUSINESS Professional]

An overview of calibration dates for the test instruments is displayed in this dashboard function:



The evaluated number of objects which belong to test equipment management are grouped into 4 categories in the overview:

- **Icon outlined in green:** all objects listed here lie within the individually defined test intervals and have passed the last inspection.
- **Icon outlined in yellow:** all objects listed here fall within the individually defined escalation time (escalation level 1) and have passed the last inspection.
- **Icon outlined in orange:** all objects listed here fall within the individually defined escalation time (escalation level 2) and have passed the last inspection.
- **Icon outlined in red:** all objects listed here are already outside of the individually defined test intervals, have not been tested or have not passed the last inspection.

The corresponding objects are displayed in the filter list by selecting the icon outlined in the respective color (see „Lists“).

12.3.3 Devices at Interface

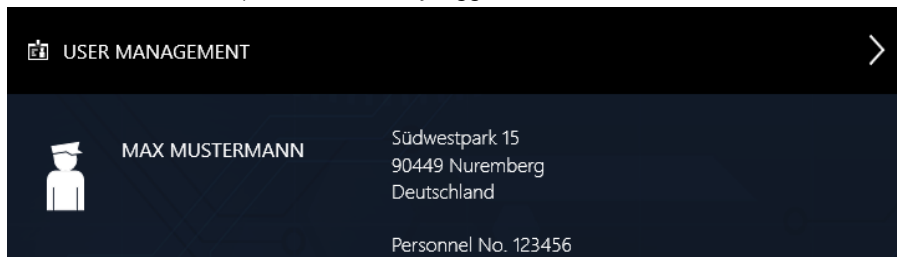
This field shows which test instruments are connected. If no measuring or test instruments are connected, the field remains empty.



Test equipment management is opened by clicking the icon (see „Test Equipment Management“). If an instrument is connected which isn't yet available in IZYTRONIQ, a message is displayed asking whether the instrument should be automatically saved to test equipment management.

12.3.4 User

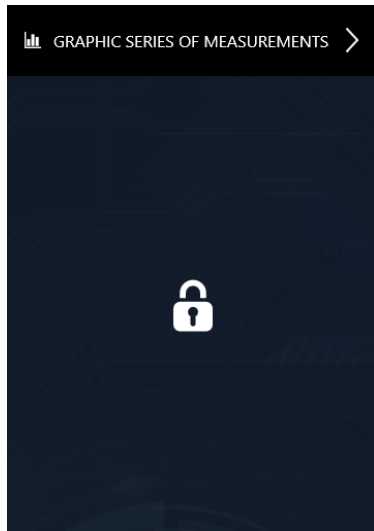
This field shows which person is currently logged in:



User administration can be opened by selecting the user (see „User Administration“).

12.3.5 Graphic Measurement Series

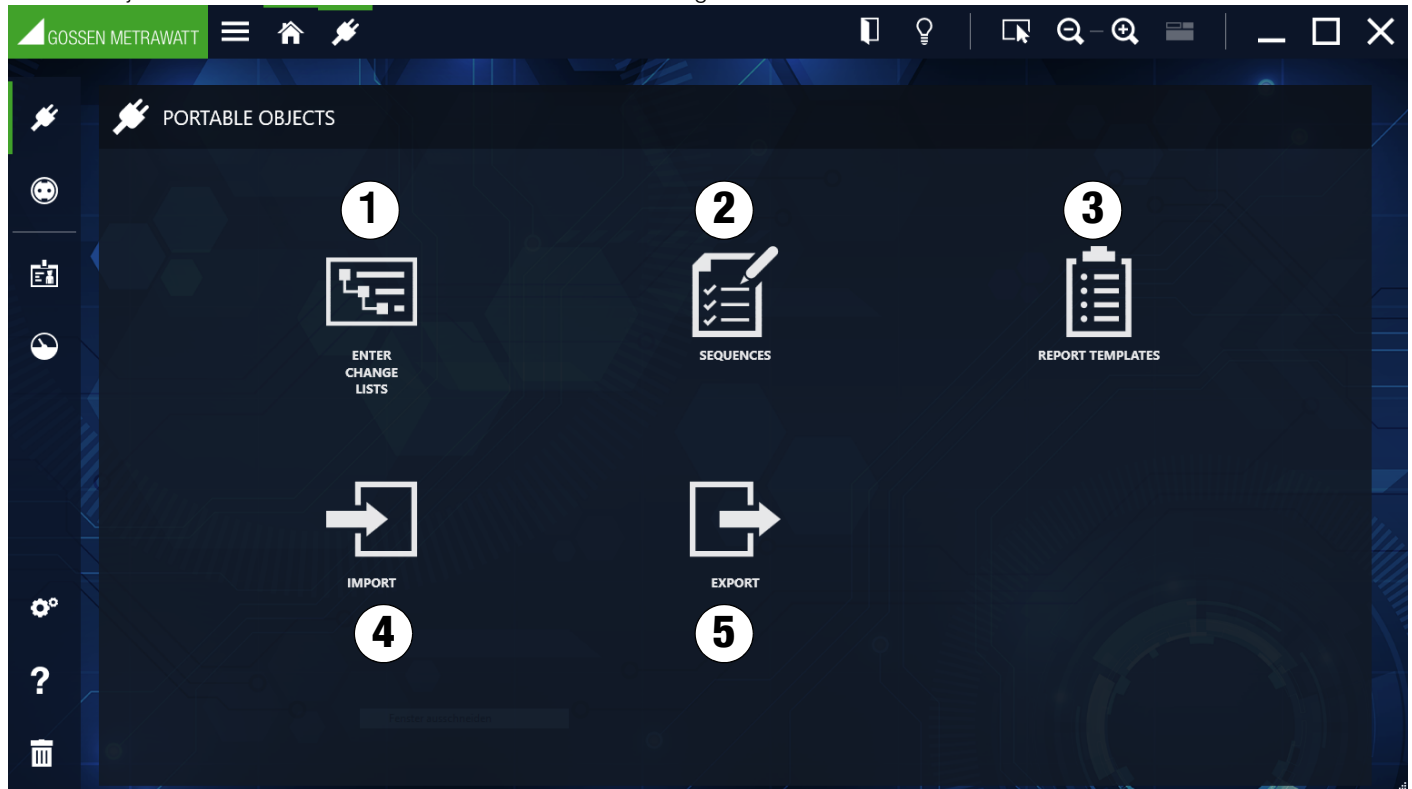
We plan to create an optional user interface for Y/t-diagrams in the future, which will be available for a fee.



13 Portable Objects

Clicking the object module icon for portable devices () in the home screen or in the navigation bar opens the initial window of the object module for portable devices.

Portable objects and their associated tests are recorded and managed in this module.



The following functions are available in the initial window:

1. Enter, change, lists:
Entry, organization and filtering of locations, customers and test objects, including tests and test sequences. Execution of tests in dialog with measuring and test instruments, creation of test reports and comparison of test results (see „The “Enter, Change, Lists” Function“).
2. Sequences: Create and manage test sequences and assignment to test objects (see „Function Sequences“).
3. Report templates: Import (Word file), create and manage report templates (see „Report Templates Function“).
4. Import: Import objects, tests and sequences from measuring instruments (see „Data Import Function“).
5. Export: Export objects and sequences to measuring and testing instruments (see „Data Export Function“).

The stationary objects module includes the following object types:

- Devices
- Medical devices

13.1 The “Enter, Change, Lists” Function

Locations, customers and test objects can be created, structured and managed here. Test sequences and tests can be managed and assigned to test objects. Test results can be compared with each other and test reports can be printed out.

The module window consists of the following 3 views:

1. **Tree view:** This view consists of two sub-trees, namely the electric tree (e-tree) on the left and the location tree on the right. All customers, test objects and locations, as well as their relationships to each other, can be logged, displayed and managed here. Objects can also be selected here. See also „The Tree View“.
2. **Detail view:** All of the selected object’s details are displayed in this view. If a test object has been selected, the test sequences used for the object and all the tests performed on the object are displayed here in various tabs. See also „The Detail View“.
3. **a) List view – standard search:** This view displays a list of all test objects located in the branch below the selected object in the tree view. Using various filter criteria, this list can be filtered so that only the desired data are displayed. Here as well, objects can be selected. See also „Standard Function“ or „Lists“.
b) List view – advanced search function (large amounts of data): If you’re working with large amounts of data, it makes good sense to pre-select the data which is currently relevant for you. Performance is improved as a result. Two tabs are displayed in this view. A selection must be made in the first “SELECTION LIST” tab as to which test objects will be displayed in the “LIST OF OBJECTS” tab. This list can in turn be further filtered as well using various filter criteria. See also „Advanced Search Function“ or „Lists“.

"Basic Use of the 3 Views"



The screenshot displays the IZYTRONIQ software interface with the following components and annotations:

- Top Navigation Bar:** Includes the GOSSEN METRAWATT logo, a hamburger menu, and various utility icons.
- Left Sidebar:** Contains icons for different views and functions.
- Tree View (1):** Located at the top left, showing a hierarchy of devices and locations.
 - E-TREE:** Lists devices like 'Bohrhammer (GERAET0020)' and 'Bohrmaschine (GERAET0021)'.
 - LOCATION TREE:** Lists locations like 'Südwestpark (LIEGENSCHAFT0002)', 'Haus 15 (GEBAEUDE0001)', 'EG (EBENE0001)', and 'EG01 (RAUM0001)'.
- Detail View (2):** Located in the center, showing technical data for a selected device.

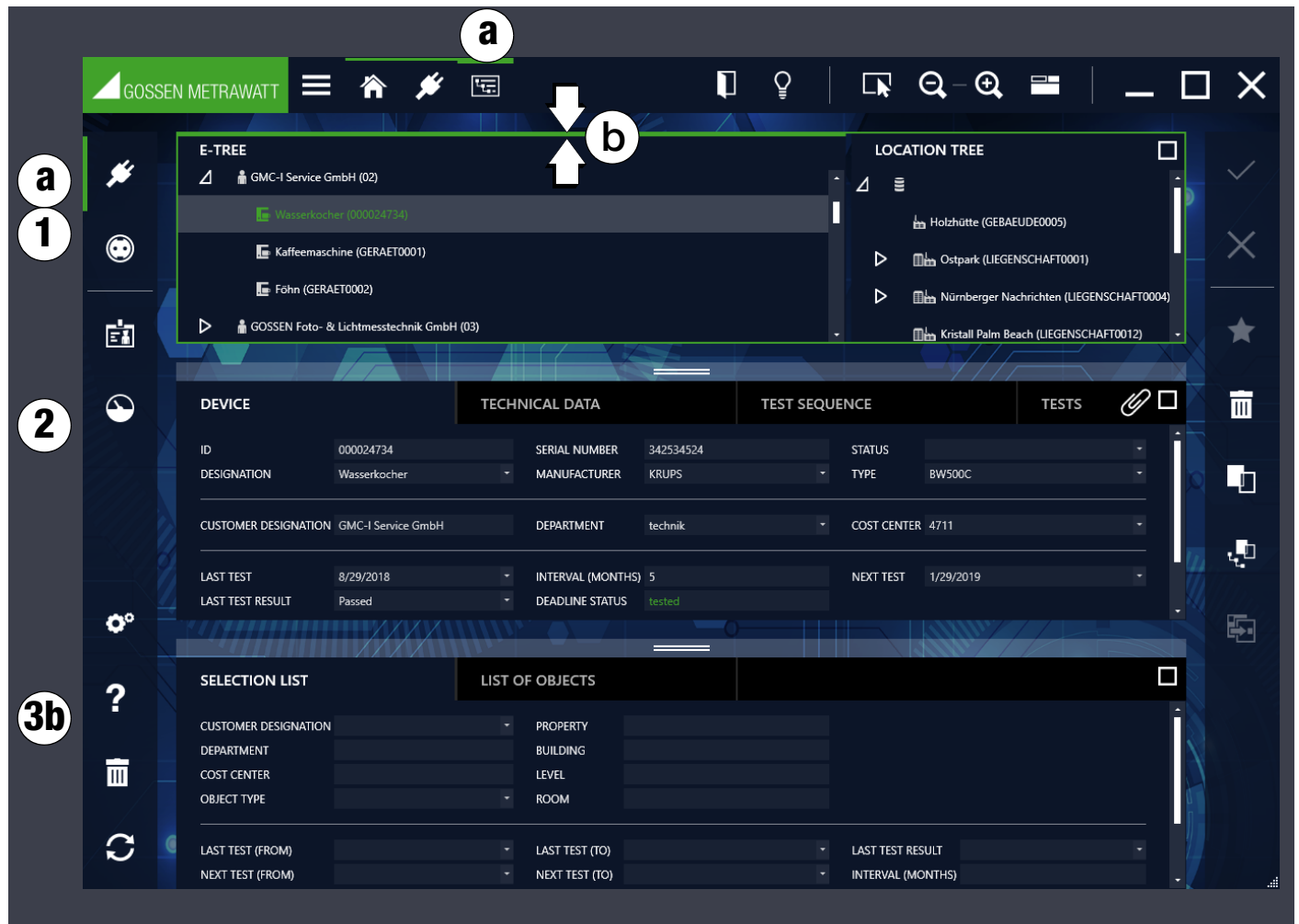
DEVICE		TECHNICAL DATA		TEST SEQUENCE		TESTS	
ID	GERAET0020	SERIAL NUMBER		STATUS	OK		
DESIGNATION	Bohrhammer	MANUFACTURER	GM	TYPE			
CUSTOMER DESIGNATION	Bosch	DEPARTMENT		COST CENTER			
LAST TEST		INTERVAL (MONTHS)		NEXT TEST			
LAST TEST RESULT		DEADLINE STATUS	Not tested				
COMMENT							
- List View (3a):** Located at the bottom, showing a table of data.

Drag a column header here to group by that column											
MARK ALL EN	OBJECT TYPE	ID	TYPE	DESIGNATION	SERIAL...	MANUFA...	STATUS	CUSTOMER DE...	CUSTOMER ID	INTERVAL (M...	LAST TEST
☐	Device	GERAET0020		Bohrhammer		GM	OK	Bosch	KUNDE0001		

Annotations on the screenshot:

- (1)** Points to the Tree View.
- (2)** Points to the Detail View.
- (3a)** Points to the List View.
- (a)** Points to the top navigation bar.
- (b)** Points to the active sub-functionality in the Tree View.

(1) Tree View (2) Detail View, (3a) List View – Default Search; (a) Identification of Active View; (b) Active Sub-Functionality



(1) Tree View (2) Detail View, (3b) List View – Advanced Search Function; (a) Identification of Active View; (b) Active Sub-Functionality

The active view is outlined in green.

The respectively active sub-functionality is identified by a more pronounced green bar on the top side of the green outline.

13.1.1 The Tree View

The tree view shows all acquired test objects, customers and locations. These are displayed hierarchically as two tree structures, namely the electric tree (e-tree, left) and the location tree (right).

A closed node can be opened and an open node can be closed by selecting the node icons.

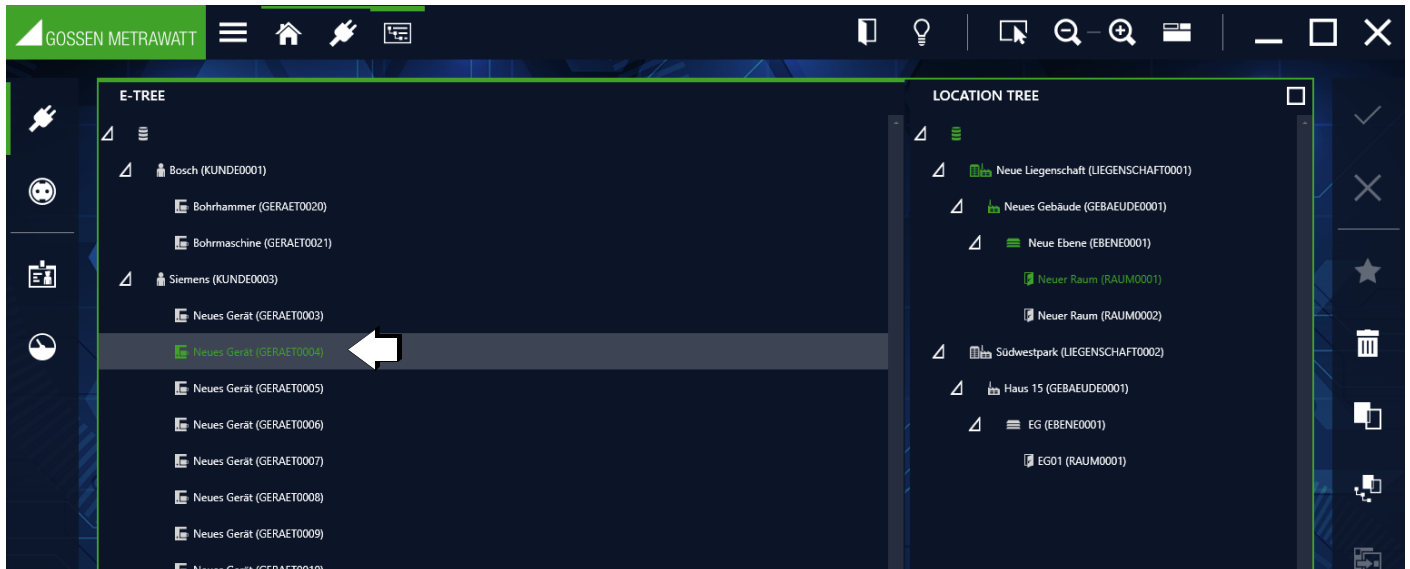
E-Tree

Customers and test objects are displayed here. Objects are always assigned to a customer. There's no provision for test objects which are not assigned to a customer.



Note

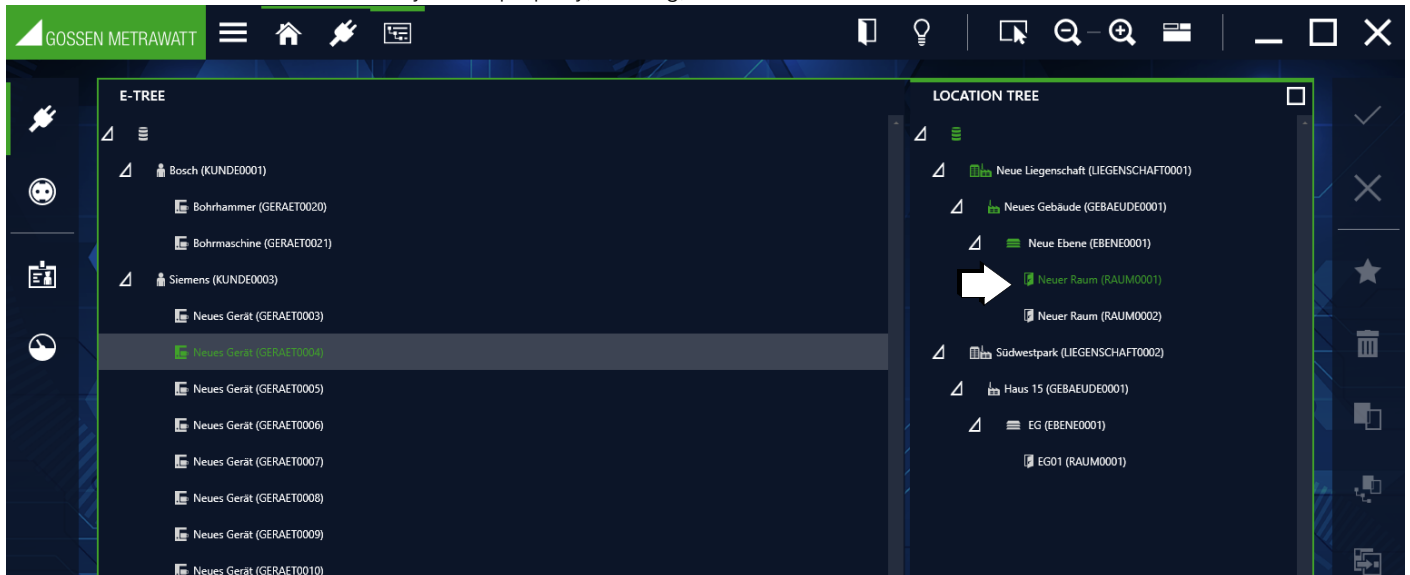
Although all customers are displayed regardless of the type of test object (portable and stationary), only portable test objects can be accessed.



Selected Test Object in the E-Tree

Location Tree

Registered locations are displayed hierarchically here. Test objects can be assigned to these locations, although this is not mandatory. The location tree has 4 defined hierarchy levels: property, building, floor and room. Not all of the hierarchical levels need to be used.



Selected Location in the Location Tree

Interaction Amongst the Tree Structures

A test object can (but doesn't have to) have a link to exactly one object in the location tree.

On the other hand, an object in the location tree can have links to several test objects in the e-tree. If a location is marked in the location tree, all elements located at this location are highlighted in green in the e-tree.

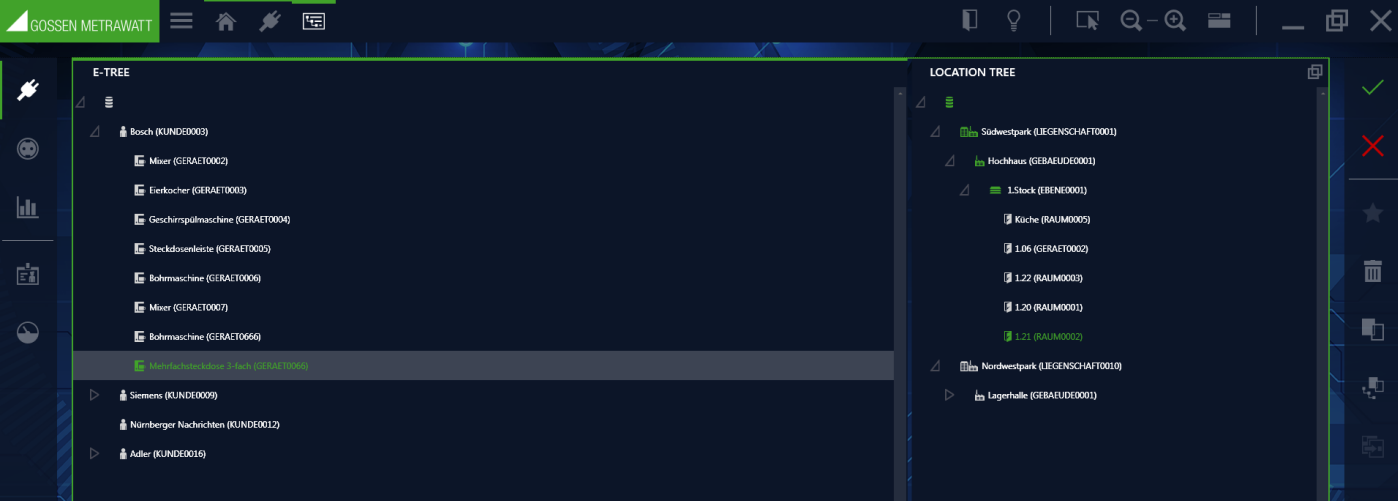
If a test object is selected in the e-tree, its location assignment can be recognized by the fact that the associated location object is highlighted in green.

Tree Element Linking Logic

If an object is selected, the corresponding tree becomes the active tree. This tree is identified by means of a green outline around the tree window and by a more pronounced green bar on the top side, as described above. Only one object can be selected at a time in the active tree. This changes the color of the icon and the text for the object to green, and the corresponding line has a gray background. The associated elements are identified in the other tree by changing the color of their icons and texts from white to green. The respective parent objects are identified only by the green color of their icons – the color of the text remains white.

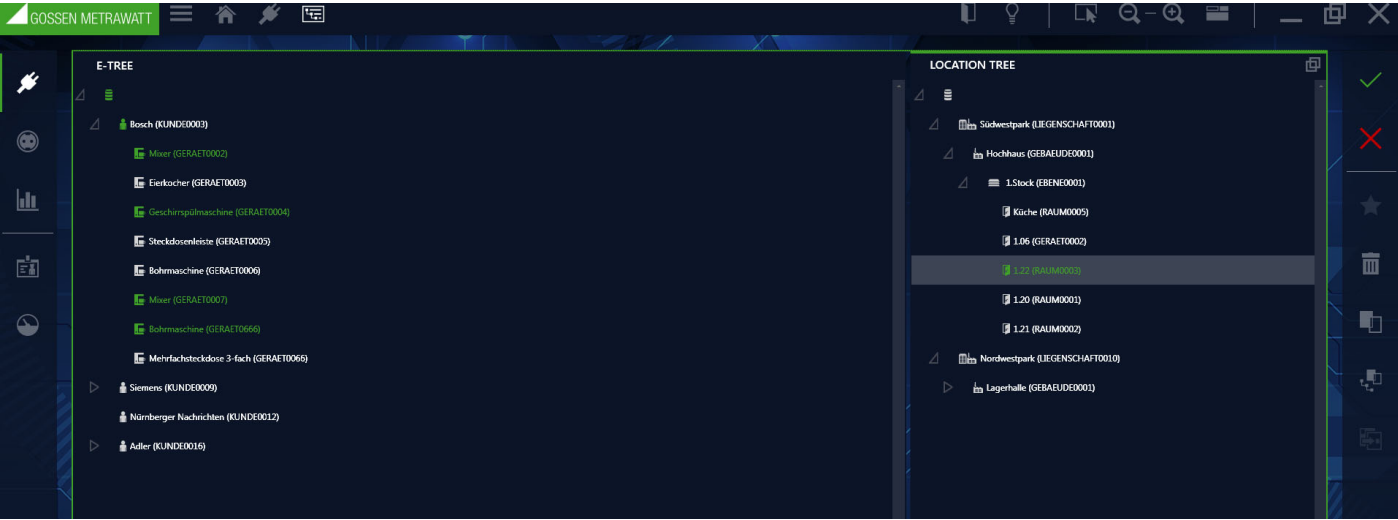
E-Tree Example: Multiple Outlet Assignment

The e-tree is active and the multiple 3-way outlet is selected. The icon and text are then green and have a gray bar in the background. The location tree reveals that this multiple outlet is located in room 1.21. The parent objects, Südwestpark, high-rise building, 1st floor, are identified by the green color of their icons, so that even when the node is closed, you can see where the multiple outlet is located.



Location Tree Example: Objects in Room 1.22

The location tree is active, room 1.22 is selected. The icon and text are then green and have a gray bar in the background. The e-tree shows which objects are in this room.



Editing Trees

In order to create a new element, the object under which the new element will be created must already be selected. The selected object is then displayed with a gray bar in the background. After selecting , the “New Element” popup appears, in which the selection of possible elements at the selected position in the tree is presented (e.g. if it’s in the “Buildings” hierarchy level in the location tree, “Levels” or “Rooms” can be created).

Hierarchy in the location tree for portable objects:

Icons	Meaning
Location Tree	
	Property
	Building
	Floor
	Room

Hierarchy in the e-tree for portable objects:

Icons	Meaning
E-tree	

Icons	Meaning
	Customer
	Device
	Medical device

After selecting the desired element type, an element ID and the number of elements to be created must then be specified. The element ID can also be created automatically by a rule defined in the settings, which is mandatory when creating several elements of the same type at the same time. After creating one or more elements, the newly created element (the first in case of multiple creation) is automatically selected and creation of a subordinate element is initiated. The process is not ended until the user explicitly closes the “New Element” popup (“Close” command). The newly created element or elements are identified with a + sign as long as they have not yet been saved.

★ Create a new element

★ NEW ELEMENT ✕

ELEMENT TYPE

☒ Level
☐ Room

DETAIL

AUTOMATIC ASSIGNMENT OF IDS ✓

ELEMENT ID

COUNT

CREATE | CLOSE

- ✓ Save changes
- ✕ Cancel editing
-  Delete an element
-  Copy an element
-  Copy an element along with its sub-elements (always inserted below the selected element in the hierarchy)
-  Paste a copied element (always inserted below the selected element in the hierarchy)

13.1.2 The Detail View

The most important characteristics of the object selected in the tree view (customer, device, medical device and location) are managed in the detail view of the portable objects. Objects cannot be created or deleted here.

Depending on the object selected in the tree view, the master data consists of different numbers of tabs and different amounts of content:

- **Customer:** customer and contacts
- **Location:** master data
- **Device / medical device:** device, technical data, test sequences and tests

DEVICE		TECHNICAL DATA		TEST SEQUENCE	TESTS
ID	GERAET0021	SERIAL NUMBER		STATUS	OK
DESIGNATION	Bohrmaschine	MANUFACTURER	GM	TYPE	
CUSTOMER DESIGNATION	Bosch	DEPARTMENT		COST CENTER	
LAST TEST		INTERVAL (MONTHS)		NEXT TEST	
LAST TEST RESULT		DEADLINE STATUS	Not tested		
COMMENT					

Example of a Device Tab

Tab layouts 

Editing

Important data such as the object ID, object designation and characteristics of the respective objects can be entered and edited in the tabs. It's also possible to attach documents such as images, certificates and operating instructions.

After selecting the entry fields, you can fill them in either by entering text or by selecting text from a drop-down field. As long as the entries have not been saved, newly created objects in the e-tree are identified with a + sign, and edited objects in the e-tree are identified with a * sign.



Note

IZYTRONIQ doesn't set any limits with regard to the number of characters in the respective data fields, although this may be restricted by the connected test instrument. Please check the technical parameters of the test instrument in this respect. Depending on which test instrument is connected, restrictions apply to the data fields which can be transferred. Please check the technical parameters of the test instrument in this respect.

All entry windows include fields which have to be filled in. If these mandatory fields are left empty, they're identified by the following icon: . As a consequence, the object cannot be saved. Tab labels and all other associated displays appear in red until the corresponding mandatory fields are filled in.

Customer Object

CUSTOMER Tab

Address and contact data can be entered here for the selected customer.

Tools:



Save changes



Discard changes (with confirmation)



Manage attachment (add, view and delete file/photo)



Print (see „Printing“)

CONTACTS Tab

Contact persons for the respective customer can be managed here. Since this tab is a list, the functions of the list view apply and, in addition, the list icons in the toolbar are activated (see „Lists“).

Tools:

-  Save changes
-  Discard changes (with confirmation)
-  Enter a new contact
-  Delete a contact
-  Manage attachment (add, view and delete file/photo)
-  Print (see „Printing“)

Location Object

Location Tab

Address and building information can be entered here.

The locations are broken down hierarchically into four main objects, namely property, building, floor and room. The following data can be acquired depending on the main object:

- **Property:** Address information, remarks
- **Building:** Address and architecture information, remarks
- **Floor:** ID and designation, comments
- **Room:** ID and designation, comments

Tools:

-  Save changes
-  Discard changes (with confirmation)
-  Manage attachment (add, view and delete file/photo)
-  Print (see „Printing“)

Device Object

The manufacturer, as well as test and technical data, are entered to the device object. Test sequences with which the device has to be tested and data resulting from performed tests are also saved.

DEVICE and TECHNICAL DATA Tabs

Important data such as the object ID, object designation and characteristics of the respective objects can be entered and edited in the tabs. It's also possible to attach documents such as images, certificates and operating instructions.

After clicking the entry fields, you can fill them in either by entering text or by selecting text from a drop-down field. As long as the entries have not been saved, newly created objects in the e-tree are identified with a + sign, and edited objects in the e-tree are identified with a * sign.

Tools:

-  Save changes
-  Discard changes (with confirmation)
-  Manage attachment (add, view and delete file/photo)
-  Print (see „Printing“)

“Setting Up Devices” 

TEST SEQUENCE Tab

Assignment of test sequences to the selected object is managed in the test sequence tab. Multiple test sequences can be assigned to any given object.

The view of assigned test sequences is displayed as a list. And thus the functions of the list view apply and, in addition, the list icons in the toolbar are activated (see „Lists“).

A check mark in the second column (default) identifies the test sequence that should be used to test the object. If the details (individual steps) of a sequence need to be displayed, double-click the sequence or select the sequence and click the  icon. The sequence steps list then appears, which is displayed instead of the sequence list. The view is returned to the initial display by clicking the  icon. The test sequences themselves are managed in a superordinate sequence pool (see „Function Sequences“).

**Note**

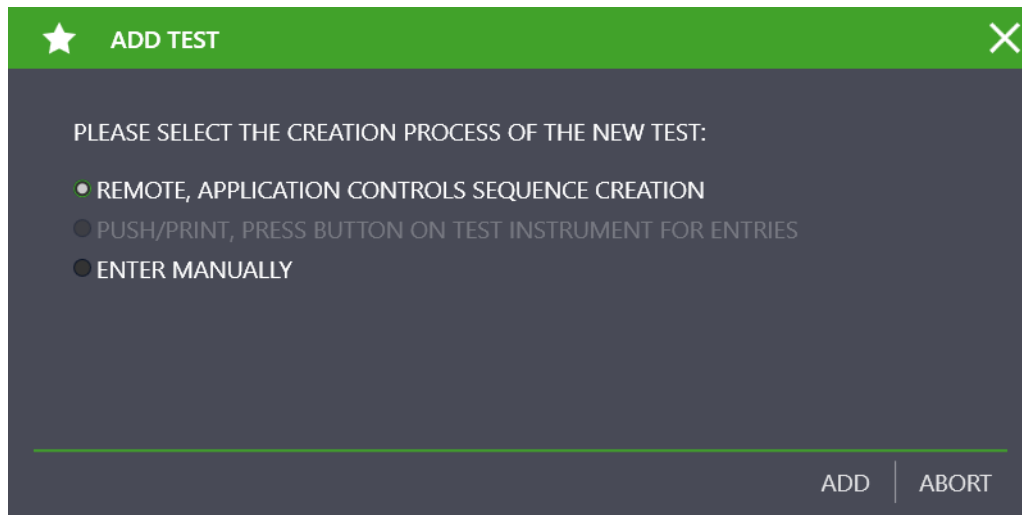
Deletion doesn't clear the sequence itself, but rather only the link. The sequence is retained in the sequence pool.

Tools:

-  Save changes
-  Discard changes (with confirmation)
-  Show sequence details (if currently in the sequence list view)
-  Show sequence list (if currently in the sequence details view)
-  Add sequences from sequence pool
-  Delete sequence assignment – the sequence itself remains in the sequence pool
-  Manage attachment (add, view and delete file/photo)
-  Print (see „Printing“)

TESTS Tab

Tests for the selected object can be managed in and added to the tests tab. The tests listed here can have various origins. After clicking the tool icon (★), the “Add Test” popup appears and offers the following options:



- ▶ **REMOTE**, the application controls the sequence (see „Remote Function – Automated Sequence Control for a Test“). You can run, control and evaluate test sequences with **IZYTRONIQ** here. You can have several different test instruments perform tests via remote control, and evaluate them. Attachments can be displayed in the form of circuit diagrams, drawings, instructional photos etc. Measurements can be performed and logged manually with any desired test instruments (see „Document Management – Attaching Files“).
- ▶ **PUSH/PRINT**, entries are made by pressing a key on the test instrument (see „Push-Print – Getting Started“):
With the help of the push-print function, test results can easily be sent directly to the desired test object in **IZYTRONIQ** by simply pressing a key on the test instrument, where they can be saved in the Tests tab.

Manual Entry [as of BUSINESS Professional]

This function makes it possible to perform tests with any desired test instruments for which there is no connection to **IZYTRONIQ**. Tests can also be created which do not require a test instrument, e.g. entry of a quantity.

After selecting the “Manual Entry” function and clicking “ADD”, the “MANUAL ENTRY” screen appears.

The name of the test must be entered and the utilized test instrument must be selected in the upper content area. The inspector and the date are entered automatically.



Note

Only a test instrument which has been entered to test equipment management can be selected.

Manual tests can then be created line by line in the lower content area. Select the “ADD TEST STEP” ★ function from the toolbar to this end. The current test can be documented in this way, and the following fields can be filled in. The Test Step field is the only mandatory field.

No.	Consecutive number of the test step (automatic)
Step category	Manual (automatic)
Measuring instrument	Utilized test instrument (automatic)
Test step	Test step, e.g. measurement
Min	Minimum value
Max	Maximum value
Result	Resultant value
Passed	Passed
Evaluation	Evaluation
Attachment	Displays documents which can be attached.

After saving your entries ✓, manual measurement is completed and the display is switched back to the “TESTS” tab, where the created measurement is then displayed.

“Manual Measured Value Entry”



Create Container, Summary of Existing Tests

With the help of this function, several tests for the selected object can be combined in a single container. This makes it possible to generate a joint report for these tests. The individual tests retain the name of the responsible inspector, and the creator is responsible for the container.

In order to create the container, the tests to be included must first be selected. Then select "CREATE CONTAINER"  from the toolbar. After clicking "ADD" an entry window appears in which the name of the container and the inspector responsible for it can be entered. Clicking "ADD" again creates the container and returns the display to the Tests tab.

"Container" 

Tools:

-  Save changes
-  Discard changes (with confirmation)
-  Display test/container details (if currently in a corresponding test view)
-  Jump up one level (if currently in a test/container detail view)
-  Creation of tests in accordance with the aforementioned methods
-  Delete tests and container
-  Create container
-  Transfer tests to container
-  Clear container
-  Compare tests:
Two or more tests of the same type can be compared with each other. After clicking the icon, the tests to be compared have to be marked. After confirmation, a tabular comparison view is displayed.

"Test Comparison" 

-  Manage attachment (add, view and delete file/photo)
-  Print (see „Printing“)
-  Print reports

(Since this tab is a list, the functions of the list view apply and, in addition, the list icons in the toolbar are activated – see „Lists“.)

13.1.3 List Views

2 list views are available which include all existing objects:

- Standard Function
- Advanced Search Function

The lists differ with regard to type of selection or search function.

We recommend the advanced search function for large volumes of data. This is disabled by default. The advanced search function is activated by accessing the PERSONAL SETTINGS submenu under SETTINGS and checking the ENABLE ADVANCED SEARCH FUNCTION option in the SETTINGS – EDIT LISTS section.

Standard Function

The list view displays all objects which are hierarchically beneath the element selected in the tree view. For example, all of a customer's test objects or all of the test objects that are located in a room can be listed in this way. Only one element can be selected at a time in the tree view. The number of currently listed elements is displayed in the bottom right-hand corner of the view.

Drag a column header here to group by that column											
☐ MARK ALL ENTRIES	ID	OBJECT TYPE	MANUFACTURER	TYPE	SERIAL NUMBER	STATUS	LAST TEST RESULT	NEXT TEST	DEADLINE STATUS	DOCUMENTS	
☐	0001	Medical device							Not tested		
☐	0001	Device	AMIS	Bum...	111111111111111...		Not passed	5/14/2018	Test failed		
☐	0002	Device	AS-Schwabe GmbH	16/250	4469489485				Not tested		
☐	0003	Device	IKEA	B1603...	49389438759		Not passed	2/28/2018	Test failed		
☐	0004	Device	Transmedia	ZLS-6...			Passed	2/28/2019	tested		
☐	0005	Device	Steinel	HL 19...			Passed	2/26/2019	tested		
☐	0006	Device	Fein	FMM...					Not tested		
☐	0007	Device	AEG	BE 60...					Not tested		
☐	0008	Device		16/250					Not tested		

Tools:



Save changes



Cancel editing



Delete objects



Print (see „Printing“)



Print reports



Multi-assistant (as of **BUSINESS Professional**) – see „Multi-Assistant (as of **BUSINESS Professional**)“

(Since this tab is a list, the functions of the list view apply and, in addition, the list icons in the toolbar are activated – see „Lists“.)

Advanced Search Function

The advanced search function view is advantageous when working with large amounts of data. First of all, set appropriate filters for your search. When the search has been completed, only the data that are relevant to you will be displayed. This list view is subdivided into two tabs to this end: the “SELECTION LIST” tab for setting the filters and the “OBJECTS LIST” tab for displaying the search results.

First set the filters in the first tab (“SELECTION LIST”). For example, you can filter by the customer, object type and/or location. The filter function for the time period during which testing was performed can additionally be switched on and off via the ACTIVE field.

SELECTION LIST		LIST OF OBJECTS	
CUSTOMER DESIGNATION	Gossen Metrawatt GmbH (CU0002)	PROPERTY	
DEPARTMENT		BUILDING	
COST CENTER		LEVEL	
OBJECT TYPE		ROOM	
LAST TEST (FROM)		LAST TEST (TO)	
NEXT TEST (FROM)		NEXT TEST (TO)	
LAST TESTER		INTERVAL (MONTHS)	
ID		SERIAL NUMBER	
DESIGNATION		MANUFACTURER	
ACTIVE	☐	STATUS	
		TYPE	

Tools:



Save changes



Cancel editing



Generate list



Delete all selection criteria

(Since this tab is a list, the functions of the list view apply and, in addition, the list icons in the toolbar are activated – see „Lists“.)

Then start the advanced search by clicking the button. A window with a progress bar is displayed.

The filtered search results are then displayed in the “OBJECTS LIST” tab. Additional filters can be added here in order to refine the search.

SELECTION LIST

LIST OF OBJECTS

↑

Drag a column header here to group by that column

☐ MARK ALL EN	OBJECT TYPE	ID	TYPE	DESIGNATION	SERIAL NUMBER	MANUFACTUR...	STATUS	CUSTOMER DE...	CUSTOMER ID
☐	Device	GERAET0004	MIXI	Mixer	2398094875	Phillips		GOSSEN METRAW...	KUNDE0023
☐	Device	GERAET0010	MIXI	Mixer	2398094875	Phillips		GOSSEN METRAW...	KUNDE0023
☐	Device	GERAET0011		Kühlschrank				GOSSEN METRAW...	KUNDE0023
☐	Device	GERAET0001	AFA33	Geschirrspülmaschi...	8765876576	Miele		GOSSEN METRAW...	KUNDE0023
☐	Device	GERAET0007		Geschirrspülmaschi...	23865645	Blomberg		GOSSEN METRAW...	KUNDE0023
☐	Device	GERAET0005		Geschirrspülmaschi...	23865645	Blomberg		GOSSEN METRAW...	KUNDE0023
☐	Device	GERAET0015	rtz88	Mikrowelle		Conrad		GOSSEN METRAW...	KUNDE0023
☐	Device	GERAET0003	BH7	Bohrhammer	348763498764	Siemens		GOSSEN METRAW...	KUNDE0023
☐	Device	GERAET0002	...	Bohrmaschine	6654657463656	Black&Decker		GOSSEN METRAW...	KUNDE0023

Count=16

Tools:

- ☒ Save changes
- ☐ Cancel editing
- ☐ Delete objects
- ☐ Print (see „Printing“)
- ☐ Print reports
- ☐ Multi-assistant (as of **BUSINESS Professional**) – see „Multi-Assistant (as of **BUSINESS Professional**)“

(Since this tab is a list, the functions of the list view apply and, in addition, the list icons in the toolbar are activated – see „Lists“.)

13.2 Function Sequences

General

Sequences can be assigned to each electrical test object. A sequence consists of a series of various test steps. If a freely programmable sequence of test steps needs to be performed one after the other, the use of test sequences is recommended. Automatic test sequences can be compiled which include visual inspections, instructions, checks and individual measurements.

The sequences are instrument-specific and are stored in a sequence pool. If necessary, they can be transferred to the appropriate test instruments.

Essentially, we distinguish between the following types of sequences:

- Test instrument sequences

These are test sequences which have been created for a specific type of test instrument, e.g. PROFITEST or SECUTEST.

Test instrument sequences can be programmed conveniently in the Sequence Editor – Individual Test Sequences and transferred to the test instrument later on.



Note

Fixed SECUTEST sequences: The SECUTEST features configurable auto-sequences which can't be transmitted bidirectionally. It's also possible to transfer the test instrument sequences described here to the SECUTEST. Only transferable sequences can be edited and managed in sequence management.

- IZY sequences

These sequences can only be executed in **IZYTRONIQ**. They can include test steps from instrument sequences, but they offer many other functions as well. For example, manual entry of measured values, push-print tests, remote measurements, instructions and visual inspections can be integrated. Help screens can be saved for each test step, which are then displayed to the user during testing relative to the respective step. An IZY sequence can be cascaded with other previously programmed sequences, and measurement steps can also be programmed for different test instruments within a sequence. If a measurement step is programmed for remote testing, it controls the corresponding test instrument and only measurement data is transferred from the test instrument. Display and control take place in **IZYTRONIQ**.

Sequence Management Layout and Use

The sequence management overview/tab is broken down into two parts:

- List view (1)
The sequence list is displayed in the upper window in the sequence pool (in the sequence repository).
- Detail view (2)
The individual test steps of the sequence selected at the top are displayed in the lower window.

SEQUENCES

Drag a column header here to group by that column

☐ MARK ALL EN	TEST TYPE	SEQUENCE NA...	MEASURING I...	SEQUENCE KIND	STANDARD	SEQUENCE VE...	STATUS	DOCUMENTS
☐	Gerätesequenz	Wiederholungsprüf...		Remote sequence	VDE0701-0702	2		
☐	Remoteprüfung	Reparatur		Remote sequence	VDE0701-0702	1		
☐	Gerätesequenz	DGUV3		Remote sequence	VDE 0701-0702	1		

Count=3

DETAIL

SEQUENCE NAME Wiederholungsprüfungen TEST SEQUENCE VERSION 2 SEQUENCE TYPE Remote sequence

☐ MARK ALL EN	NO.	STEP TYPE	MEASURING I...	TEST STEP	DOCUMENTS
☐	1	Visual inspection		Line connection	
☐	2	Test instruction		Earth clamp	
☐	3	Push/Print		RPE	
☐	4	Test instruction		RINS	

The respective view is outlined in green and the active part of the view is identified by a bold green bar in the upper left-hand part of the view.

Only those icons which are valid and can be activated for the selected view are displayed in the toolbar.

Tools:

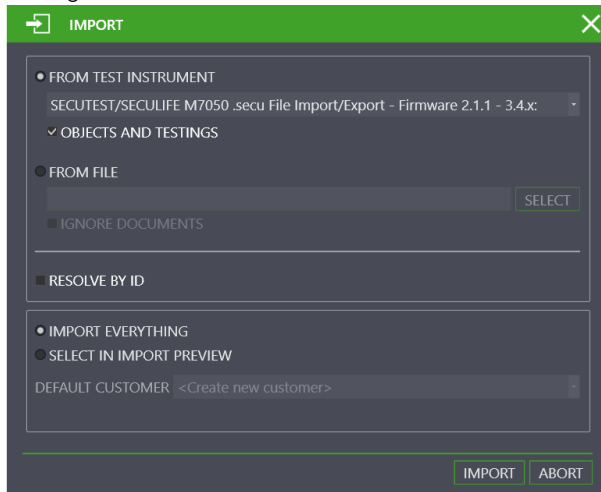
- ✓ Save changes
- ✗ Cancel editing
- ★ Add new sequence: the sequence editor is launched (see „Sequence Editor – Individual Test Sequences“). A new sequence can be created in this way and added to the sequence pool (the sequence repository).
- ✎ Edit sequence: the selected sequence can be edited in the sequence editor.
- 📄 Duplicate sequence: this command copies the selected sequence. The name of the sequence is copied, to which the word Copy is added.
- 🗑 Delete sequence: The sequence is deleted. If the sequence has already been assigned to one or more objects, all assignments must first be deleted.
- 📎 Manage attachment (add, view and delete file/photo)

(Since this tab is a list, the functions of the list view apply and, in addition, the list icons in the toolbar are activated – see „Lists“.)

13.3 Data Import Function

The import function is used to synchronize data from a test instrument or file with the **IZYTRONIQ** database.

This function can be found in the “PORTABLE OBJECTS” menu  under the “IMPORT” function . The import wizard is started by clicking this function.



The import wizard asks how you would like to import data. Available options depend on your **IZYTRONIQ** variant:

BUSINESS Starter	TEST INSTRUMENT FILE (XML)
BUSINESS Advanced BUSINESS Professional	TEST INSTRUMENT FILE (XML, CSV)
BUSINESS Premium	TEST INSTRUMENT FILE (XML, IZY)
ENTERPRISE Premium ENTERPRISE Ultimate CLOUD	TEST INSTRUMENT FILE (XML,CSV, IZY, ZIP)

- FROM TEST INSTRUMENT: you can choose from amongst all connected instruments here. OBJECTS AND TESTS are selected for import by default.
- FROM FILE: Tap the “SELECT” field in order to select the file to which the data will be imported. You can also select the file format in the open Windows file explorer window.
- IGNORE DOCUMENTS: Reports and attachments are not imported when importing IZY files.
- RESOLVE ACCORDING TO ID: A reference is used during import in order to determine whether or not changes have been made to an object (e.g. a new measurement has been added). By default, an internal, invisible reference tag is used for import. If problems arise in this respect during import, use the ID of the measuring instrument as a reference for the import with this option.

Select IMPORT ALL or SELECTION IN IMPORT PREVIEW in order to start the import:

- After selecting IMPORT ALL and clicking IMPORT, import runs automatically.
- If SELECTION IN IMPORT PREVIEW is selected, the data in the IMPORT PREVIEW are displayed first. These data can be selected and post-processed here. The selected objects are subsequently imported into the **IZYTRONIQ** database by selecting the  function.
- A customer from the database can be specified via STANDARD CUSTOMER, if the data include a customer.



Attention!

Data Loss!

The last data imported to **IZYTRONIQ** are always used. If data was saved to the test instrument and then changes were made to the data in **IZYTRONIQ**, importing the data from the test instrument overwrites these changes once again.

Example: You created a test object (system) in **IZYTRONIQ** and transferred it to the test instrument (**PROFITEST...**). The **PROFITEST...** is being used in the field. At the same time, the system's technical data are changed in **IZYTRONIQ**. The data will be imported later from the **PROFITEST...** to **IZYTRONIQ**. Afterwards, the system's modified (new) technical data are overwritten with the old technical data from the **PROFITEST...**

For this reason, don't change any data in **IZYTRONIQ** if they're used in the test instrument. In other words: If you want to edit data in **IZYTRONIQ**, transfer the changed data to the test instrument before using the test instrument!

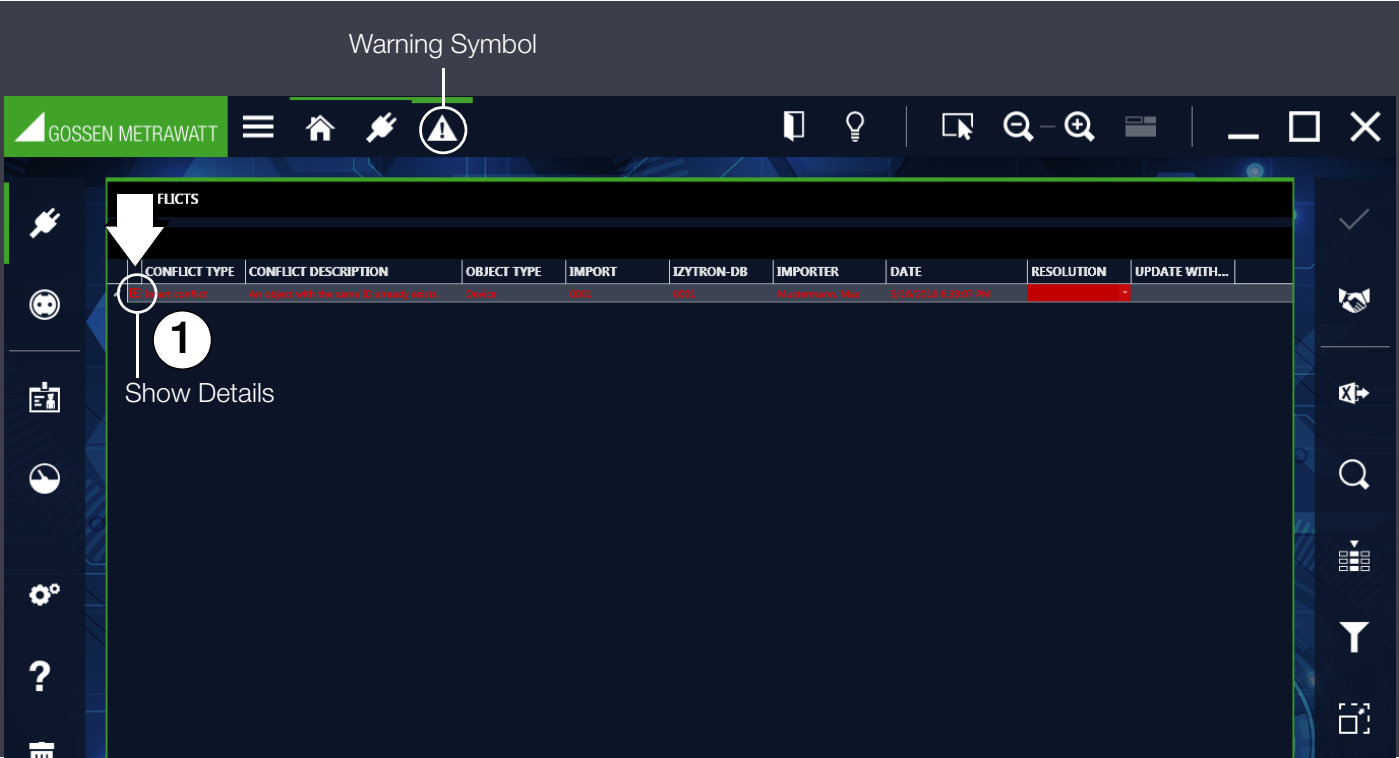
Successful import and any transmission errors that may have occurred are displayed.

If conflicts occur between existing data and data to be imported which cannot be resolved automatically, the conflict manager is activated.

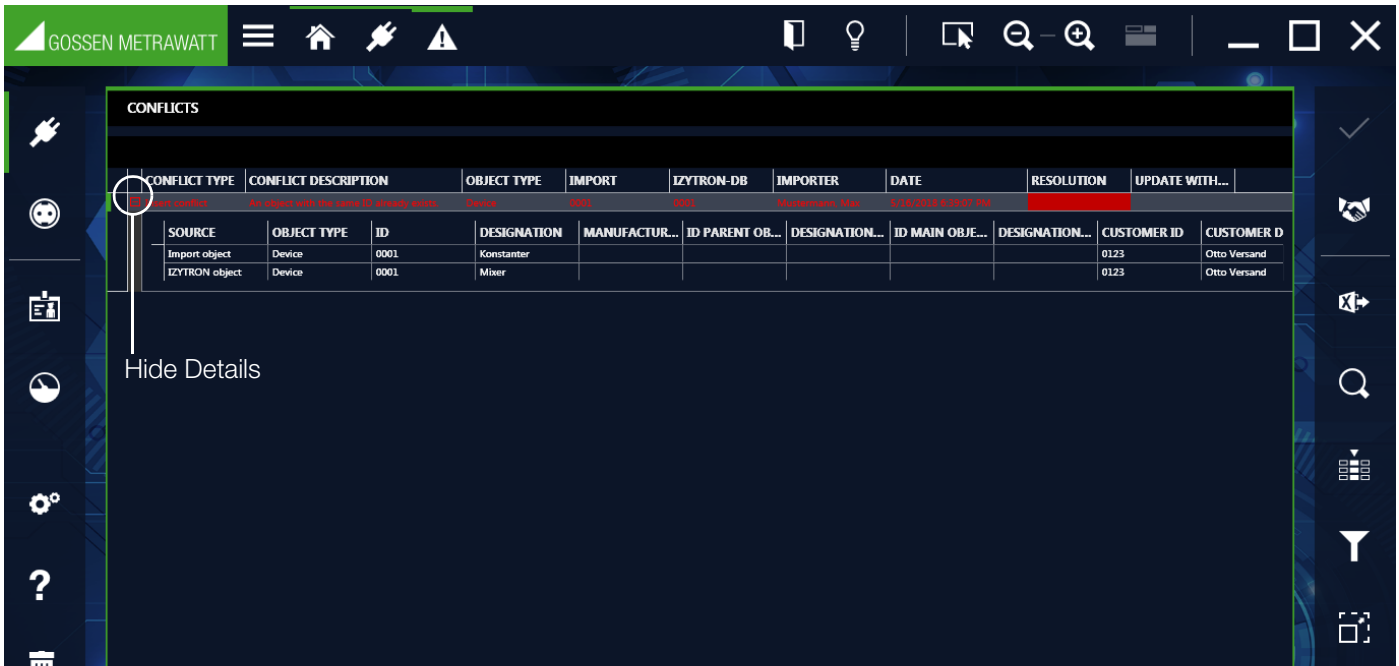
“Data Import via Preview”

The Conflict Manager

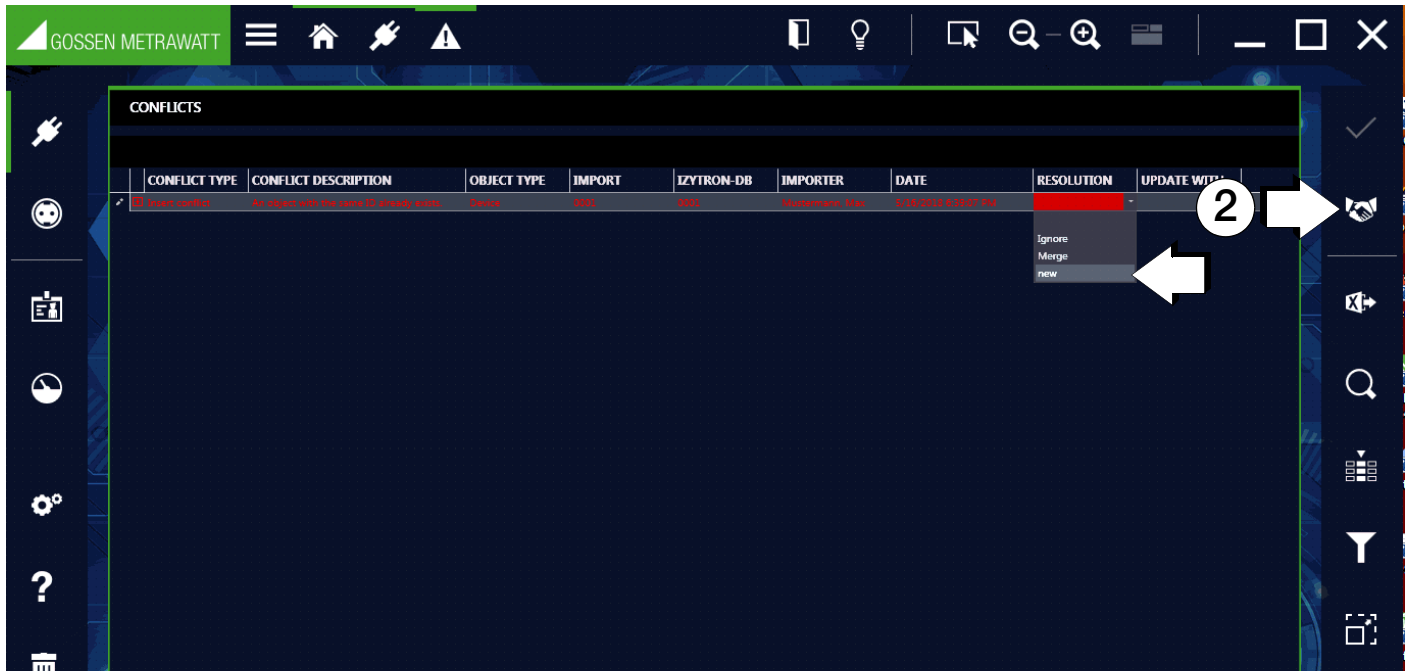
If conflicts occurred during import and objects could not be transferred as a result, these objects are not simply discarded – an attempt is made to resolve these conflicts manually. Affected objects are copied to a separate file/table to this end. At the same time, a warning symbol appears in the status bar and the entries are highlighted in red.



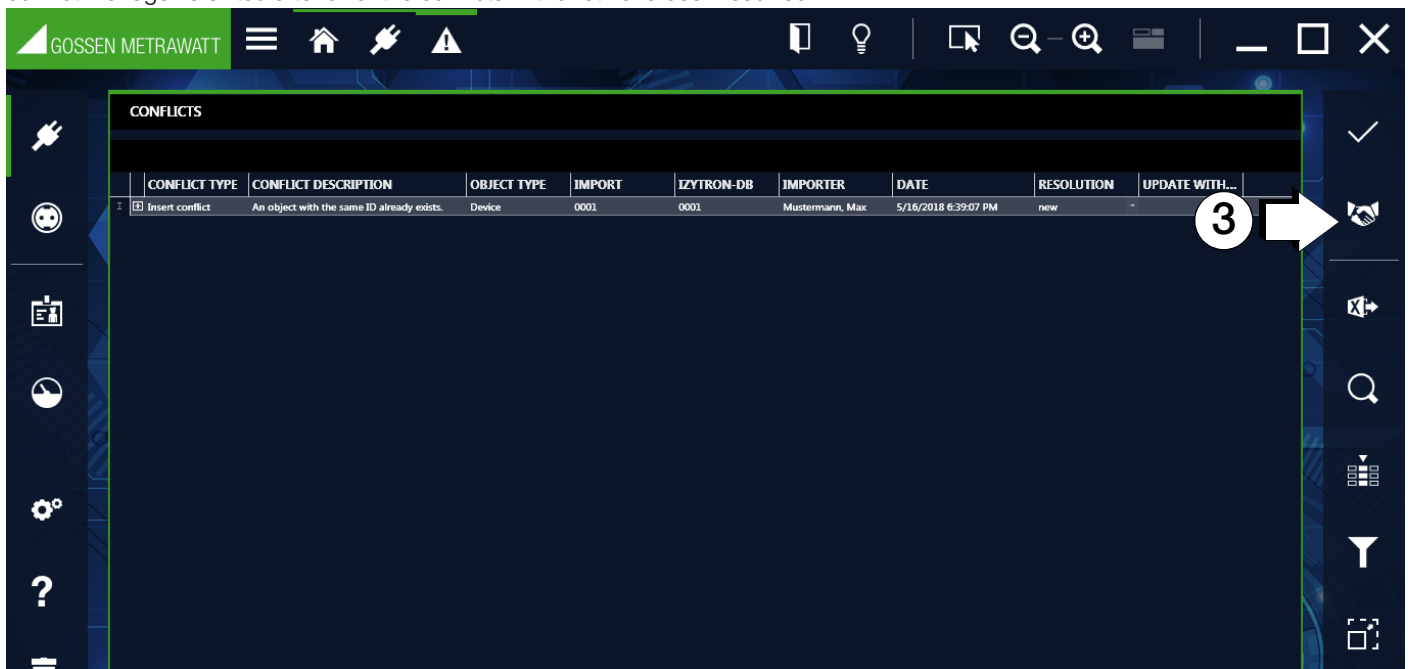
Conflicts can be dealt with here. There's a description for each conflict. The details associated with the conflict objects (1) are displayed by clicking the detail icon (+).



By repeatedly clicking the handshake icon (2), you're offered various possible methods for resolving the conflict: ignore, merge or new. These depend on the respective conflict. Alternatively, clicking in the "Solution" column opens a pull-down menu from which possible solution methods can be selected.



The red highlighting disappears after selecting the desired method. The respective conflict is resolved by saving the changes. The resolved entry is then no longer displayed in the conflict manager and the respective object is integrated into the main database. The conflict manager is exited after all of the conflicts in the list have been resolved.



The following solution options are available:

Designation	Description
Ignore	Data import is ignored.
Update with source ID (of the imported object)	All data stored in IZYTRONIQ for this object are overwritten.
Update with target ID (of the existing object)	All data stored in IZYTRONIQ for this object, except the ID, are overwritten.
Merge	The object's master data are synchronized.
New	Object import and assignment of a new ID
...	

Tools:



Conflict solving



Selection of the solution method

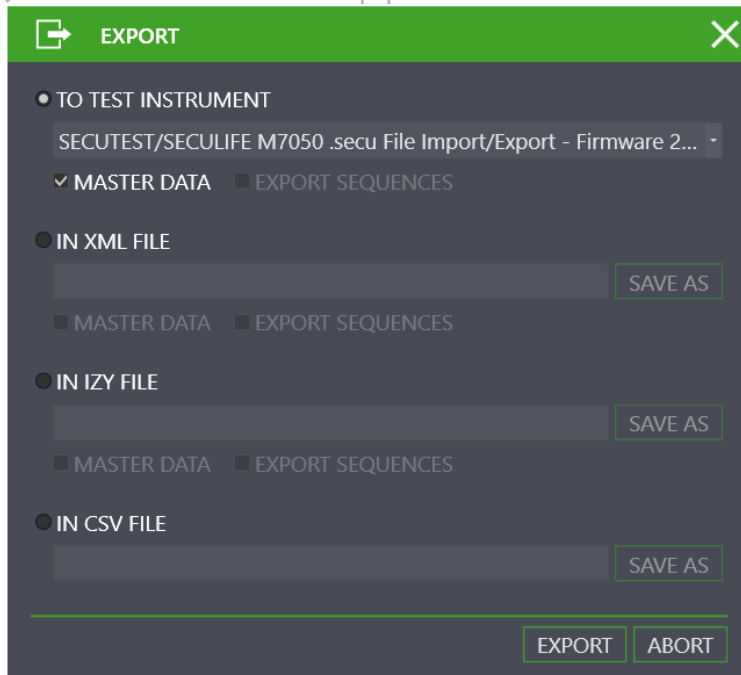
(Since this tab is a list, the functions of the list view apply and, in addition, the list icons in the toolbar are activated – see „Lists“.)

“Working with the Conflict Manager”



13.4 Data Export Function

The export function is used to transfer data to a test instrument or a file. The function can be found in the “PORTABLE OBJECTS” menu  under the “EXPORT” function . The export wizard is started by selecting this function.



The export wizard asks how you would like to import data. Available options depend on your **IZYTRONIQ** variant:

BUSINESS Starter	TEST INSTRUMENT FILE (XML)
BUSINESS Advanced BUSINESS Professional	TEST INSTRUMENT FILE (XML, CSV)
BUSINESS Premium	TEST INSTRUMENT FILE (XML, IZY)
ENTERPRISE Premium ENTERPRISE Ultimate CLOUD	TEST INSTRUMENT FILE (XML, CSV, IZY, ZIP)

- TO TEST INSTRUMENT: you can choose from amongst all connected instruments here. OBJECTS and/or SEQUENCES can be selected.
- TO XML FILE: OBJECTS and/or SEQUENCES can be selected. Tap the “SAVE AS” field in order to select the file to which the data will be saved.
- TO CSV FILE: Tap the “SAVE AS” field in order to select the file to which the data will be saved.
- TO IZY FILE: OBJECTS, DEVICE CATALOGS and SEQUENCES are selected by default in each case. Tap the “SAVE AS” field in order to select the file to which the data will be saved.
- TO ZIP BACKUP FILE: Tap the “SAVE AS” field in order to select the file to which the data will be saved.



Attention!

When the data is exported, all existing data is deleted from the connected test instrument and overwritten by the exported data. Consequently, a warning appears prior to export.

The Export Filter is launched after selecting EXPORT.

Export Filter

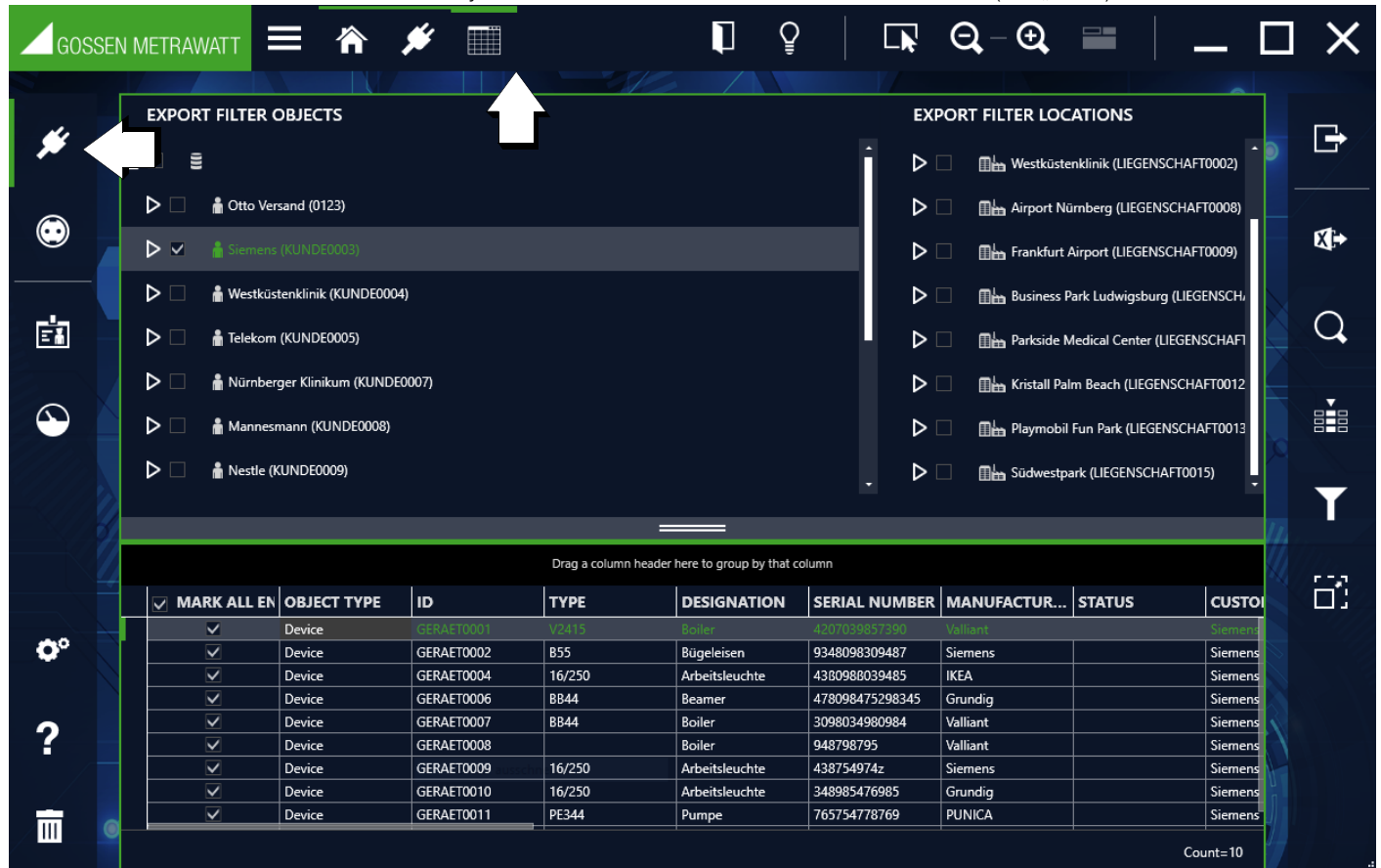
The export filter consists of two filter menus:

- OBJECTS EXPORT FILTER
- EXPORT SEQUENCES

If more than one filter menu is selected, the “NEXT” > and “BACK” < buttons are used to toggle between the views. After selecting the “EXPORT” button  in the toolbar, the selected range of data and the associated customers and locations are transferred to the connected test instrument. The action which is momentarily being executed is displayed during export. If all data are successfully transferred, a corresponding message is displayed.

Selecting and Filtering Objects

The OBJECTS export filter consists of a two-part view. Both tree views are located in the upper half, and the list of selected objects is located in the bottom half. A preliminary selection of customers and locations can be made in the tree views by selecting the checkboxes which precede the elements. Potential objects for transmission can be selected in the e-tree and narrowed down by selecting locations in the location tree. Elements selected in this way can then be further filtered in the list at the bottom (see „Lists“).



EXPORT FILTER OBJECTS

- ☐ Otto Versand (0123)
- ☒ Siemens (KUNDE0003)
- ☐ Westküstenklinik (KUNDE0004)
- ☐ Telekom (KUNDE0005)
- ☐ Nürnberger Klinikum (KUNDE0007)
- ☐ Mannesmann (KUNDE0008)
- ☐ Nestle (KUNDE0009)

EXPORT FILTER LOCATIONS

- ☐ Westküstenklinik (LIEGENSCHAFT0002)
- ☐ Airport Nürnberg (LIEGENSCHAFT0008)
- ☐ Frankfurt Airport (LIEGENSCHAFT0009)
- ☐ Business Park Ludwigsburg (LIEGENSCHAFT0010)
- ☐ Parkside Medical Center (LIEGENSCHAFT0011)
- ☐ Kristall Palm Beach (LIEGENSCHAFT0012)
- ☐ Playmobil Fun Park (LIEGENSCHAFT0013)
- ☐ Südwestpark (LIEGENSCHAFT0015)

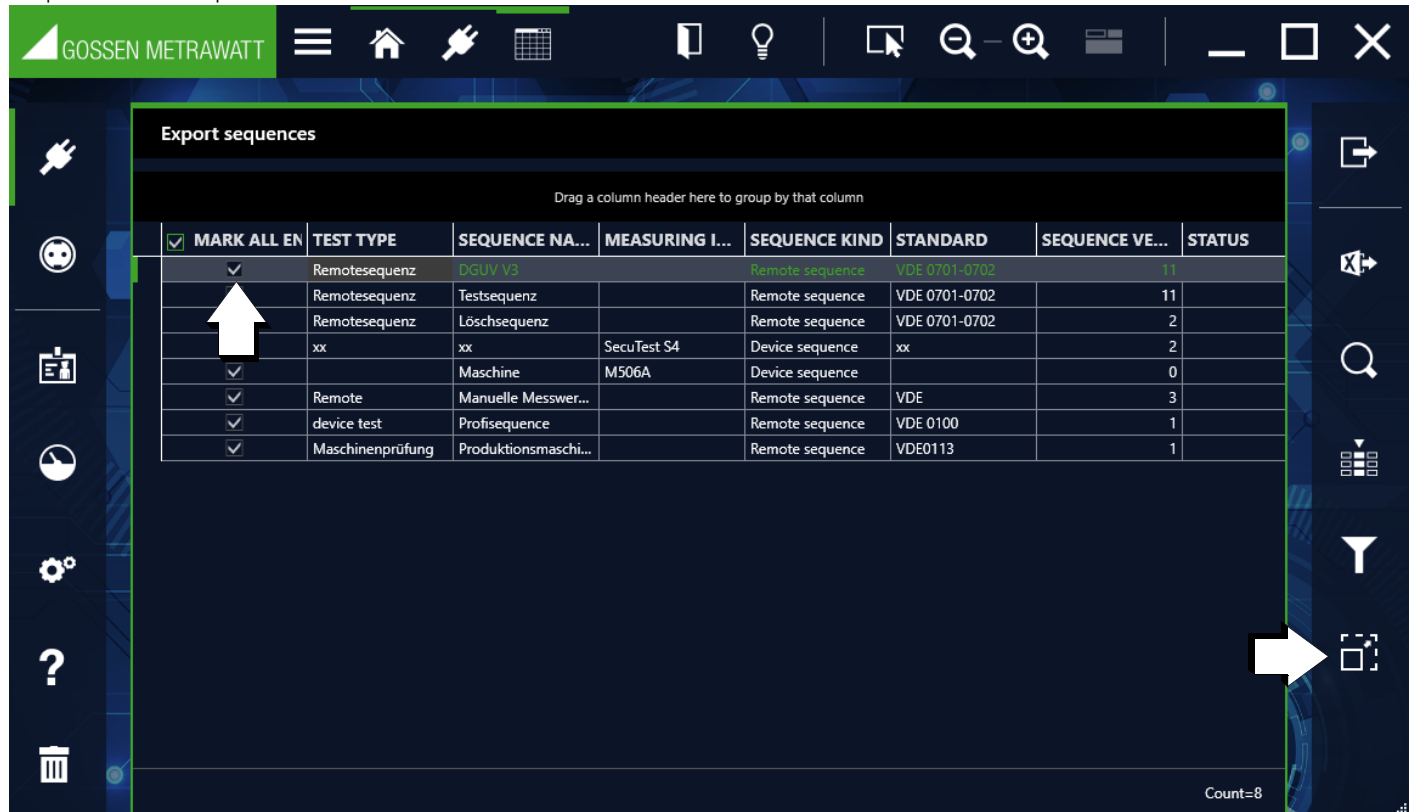
Drag a column header here to group by that column

☒	MARK ALL EN	OBJECT TYPE	ID	TYPE	DESIGNATION	SERIAL NUMBER	MANUFACTUR...	STATUS	CUSTOI
☒		Device	GERAET0001	V2415	Boiler	4207039857390	Valliant		Siemens
☒		Device	GERAET0002	B55	Bügeleisen	9348098309487	Siemens		Siemens
☒		Device	GERAET0004	16/250	Arbeitsleuchte	4380988039485	IKEA		Siemens
☒		Device	GERAET0006	BB44	Beamer	478098475298345	Grundig		Siemens
☒		Device	GERAET0007	BB44	Boiler	3098034980984	Valliant		Siemens
☒		Device	GERAET0008		Boiler	948798795	Valliant		Siemens
☒		Device	GERAET0009	16/250	Arbeitsleuchte	438754974z	Siemens		Siemens
☒		Device	GERAET0010	16/250	Arbeitsleuchte	348985476985	Grundig		Siemens
☒		Device	GERAET0011	PE344	Pumpe	765754778769	PUNICA		Siemens

Count=10

Selecting and Filtering Sequences

Sequences to be exported can be selected and filtered here.



Export sequences

Drag a column header here to group by that column

☒ MARK ALL EN	TEST TYPE	SEQUENCE NA...	MEASURING I...	SEQUENCE KIND	STANDARD	SEQUENCE VE...	STATUS
☒	Remotesequenz	DGUV V3		Remote sequence	VDE 0701-0702	11	
	Remotesequenz	Testsequenz		Remote sequence	VDE 0701-0702	11	
	Remotesequenz	Löschsequenz		Remote sequence	VDE 0701-0702	2	
	xx	xx	SecuTest S4	Device sequence	xx	2	
☒		Maschine	M506A	Device sequence		0	
☒	Remote	Manuelle Messwer...		Remote sequence	VDE	3	
☒	device test	Profisequenz		Remote sequence	VDE 0100	1	
☒	Maschinenprüfung	Produktionsmaschi...		Remote sequence	VDE0113	1	

Count=8

13.5 Report Templates Function

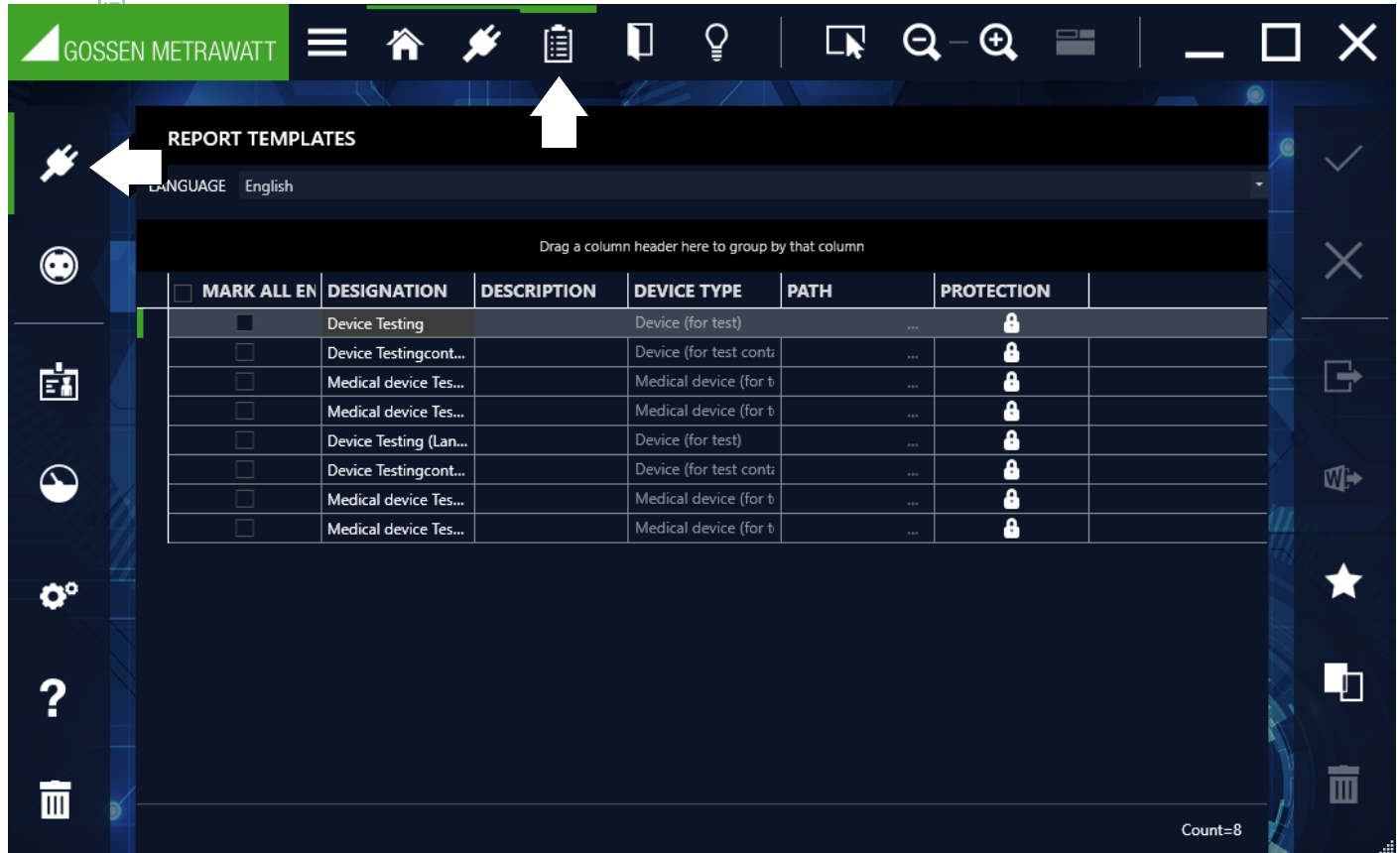
Report templates are used for the documentation of tests, for example, or as acceptance or handover reports. Variable data from the selected measurements is accessed for this purpose in conjunction with object-related data (for example customer data). Report templates either comply with legal requirements or standards, or have been or are created in order to standardize documentation. Default reports are available in **IZYTRONIQ** which cannot be edited or deleted.

You can create new templates or copy existing templates and modify them.

As of the **BUSINESS Advanced** variant, a company logo or a scanned signature can be integrated into the report templates. These are saved to the setup menu under global or personal settings (see „Global Settings“ and „Personal Settings“).

Templates are created in Microsoft Word and test data can be arranged as desired using placeholders (see „Editing Report Templates“).

Report management for portable objects can be found in the “PORTABLE OBJECTS” menu  under the “REPORT TEMPLATES” function .



Report Templates Selection List

All available report templates are displayed in report management.

If a test report needs to be printed out, the corresponding report templates are made available depending on the object type (device, medical device).

In order to add a new report, a report must be created in advance using Microsoft Word. This can be added to the list by clicking the “ADD REPORT” button . After clicking this icon, a system-specific menu for opening Word documents appears. The desired report template is selected and confirmed, and a new entry is added to the administration table. In order to be able to save the new report template, the user has to select the device type to which the report template will apply and enter the name of the report template.

Tools:

 Save changes

 Cancel editing

 Save report template as Microsoft Word file

 Open report template in Microsoft Word

 Add new report template

 Duplicate report template:
This command copies the selected report template. The name of the report template is copied, to which the word Copy is added.



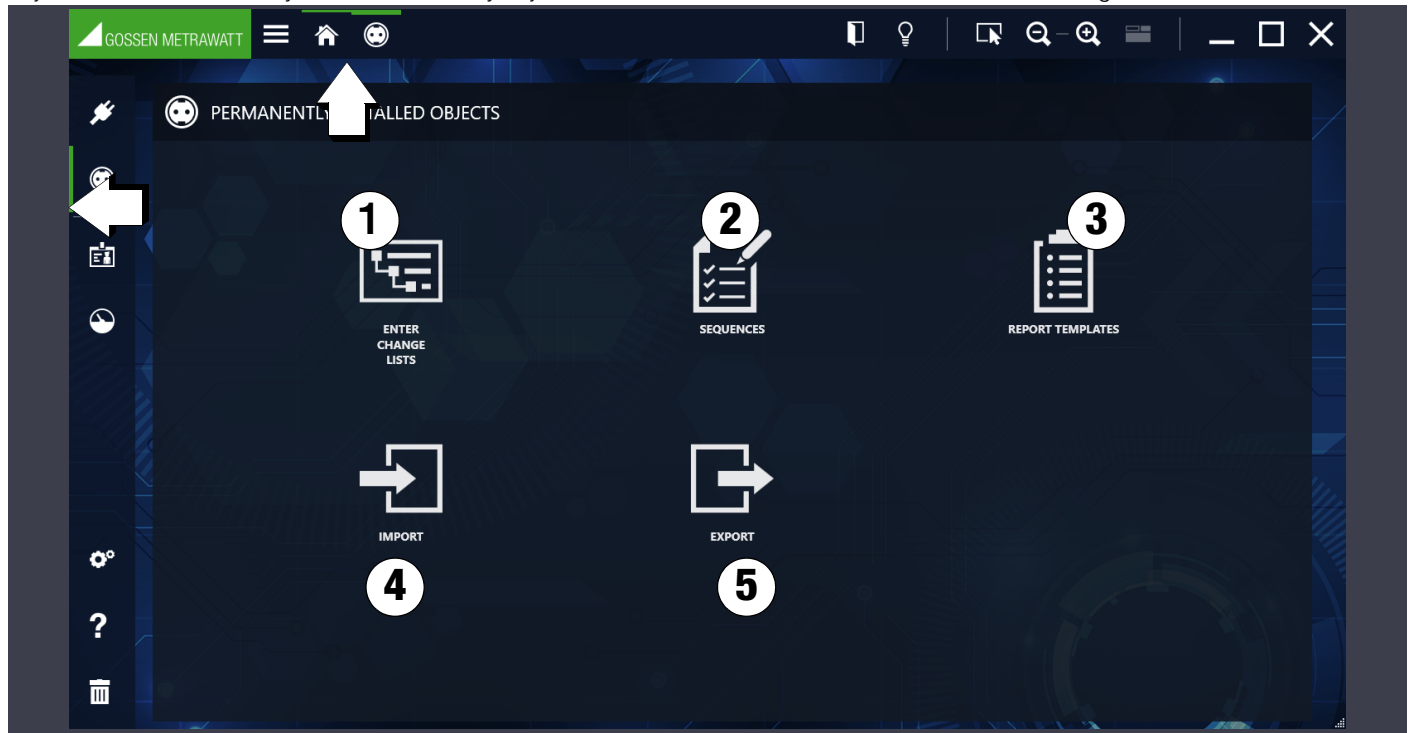
Delete report template:

The sequence is deleted. If the sequence has already been assigned to one or more objects, all assignments must first be deleted.

(Since this tab is a list, the functions of the list view apply and, in addition, the list icons in the toolbar are activated – see „Lists“.)

14 Stationary Objects

Clicking the object module icon for stationary devices (🏠) in the home screen or in the navigation bar opens the initial window of the object module for stationary devices. Stationary objects and their associated tests are recorded and managed in this module.



The following functions are available in the initial window:

1. Enter, change, lists:
Enter, edit and filter objects. Administer test sequences and tests. (see „The “Enter, Change, Lists” Function“).
2. Sequences:
Create and manage test sequences. (see „Function Sequences“).
3. Report templates:
Import (Word file) and manage report templates (see „Report Templates Function“).
4. Import:
Import objects (see „Data Import Function“).
5. Export:
Export objects and sequences (see „Data Export Function“).

The object modules include two main categories:

- System
- Machine

14.1 The “Enter, Change, Lists” Function

Locations, customers and test objects can be created, structured and managed here. Test sequences and tests can be managed and assigned to test objects. Test results can be compared with each other and test reports can be printed out.

The module window consists of the following 3 views:

1. Tree view: This view consists of two sub-trees, namely the electric tree (e-tree) on the left and the location tree on the right. All customers, test objects and locations, as well as their relationships to each other, can be logged, displayed and managed here. Objects can also be selected here. See also „Tree View“.
2. Detail view: All of the selected object’s details are displayed in this view. If a test object has been selected, the test sequences used for the object and all the tests performed on the object are displayed here in various tabs. See also „Detail View“.
3. a) List view: This view displays a list of all test objects located in the branch below the selected object in the tree view. Using various filter criteria, this list can be filtered so that only the desired data are displayed. Here as well, objects can be selected. See also „Standard Function“ or „Lists“.
- b) List view – advanced search function (large amounts of data): If you’re working with large amounts of data, it makes good sense to preselect the data which is currently relevant for you. Performance is improved as a result. Two tabs are displayed in this view. A selection must be made in the first “SELECTION LIST” tab as to which test objects will be displayed in the “LIST OF OBJECTS” tab. This list can in turn be further filtered as well using various filter criteria. See also „Advanced Search Function“ or „Lists“.

“Basic Use of the 3 Views” based on the example of portable objects 

1 Tree View

a Identification of Active View

2 Detail View

3a List View – Default Search

a Identification of Active View

b Active Sub-Functionality

MARK ALL EN	OBJECT TYPE	ID	TYPE	DESIGNATION	SERIAL...	MANUFA...	STATUS	CUSTOMER DE...	CUSTOMER ID	INTERVAL (M...	LAST TEST
☐	Facility	ANLAGE0001	Anlage	Anlage				Siemens	KUNDE0003		
☐	Distributor	VERTEILER0001	Verteiler	Verteiler				Siemens	KUNDE0003		
☐	RCD	RCD0001	Neuer RCD	Neuer RCD				Siemens	KUNDE0003		
☐	Electric circuit	STROMKREIS0001	Neuer Stromkreis	Neuer Stromkreis				Siemens	KUNDE0003		

Count=5

(1) Tree View (2) Detail View, (3a) List View – Default Search; (a) Identification of Active View; (b) Active Sub-Functionality

1 Tree View

a Identification of Active View

2 Detail View

3b List View – Advanced Search Function

a Identification of Active View

b Active Sub-Functionality

MARK ALL EN	OBJECT TYPE	ID	TYPE	DESIGNATION	SERIAL...	MANUFA...	STATUS	CUSTOMER DE...	CUSTOMER ID	INTERVAL (M...	LAST TEST
☐	Facility	ANLAGE0001	Anlage	Anlage				Siemens	KUNDE0003		
☐	Distributor	VERTEILER0001	Verteiler	Verteiler				Siemens	KUNDE0003		
☐	RCD	RCD0001	Neuer RCD	Neuer RCD				Siemens	KUNDE0003		
☐	Electric circuit	STROMKREIS0001	Neuer Stromkreis	Neuer Stromkreis				Siemens	KUNDE0003		

(1) Tree View (2) Detail View, (3b) List View – Advanced Search Function; (a) Identification of Active View; (b) Active Sub-Functionality

The active view is outlined in green.

The respectively active sub-functionality is identified by a more pronounced green bar on the top side of the green outline.

14.1.1 Tree View

The tree view shows all acquired test objects, customers and locations. These are displayed hierarchically as two tree structures, namely the electric tree (e-tree, left) and the location tree (right).

A closed node can be opened and an open node can be closed by selecting the node icons.

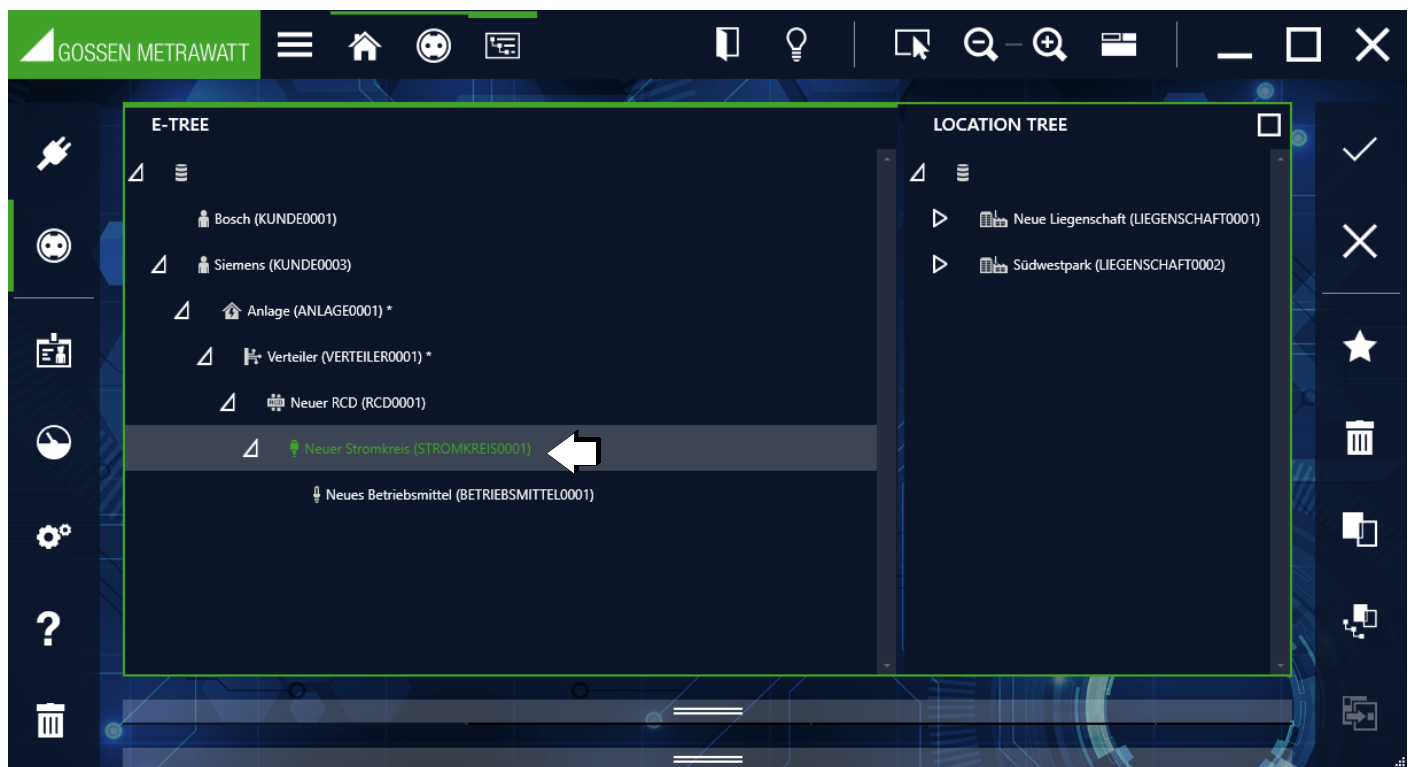
E-Tree

Customers and test objects are displayed here. Objects are always assigned to a customer. There's no provision for test objects which are not assigned to a customer.



Note

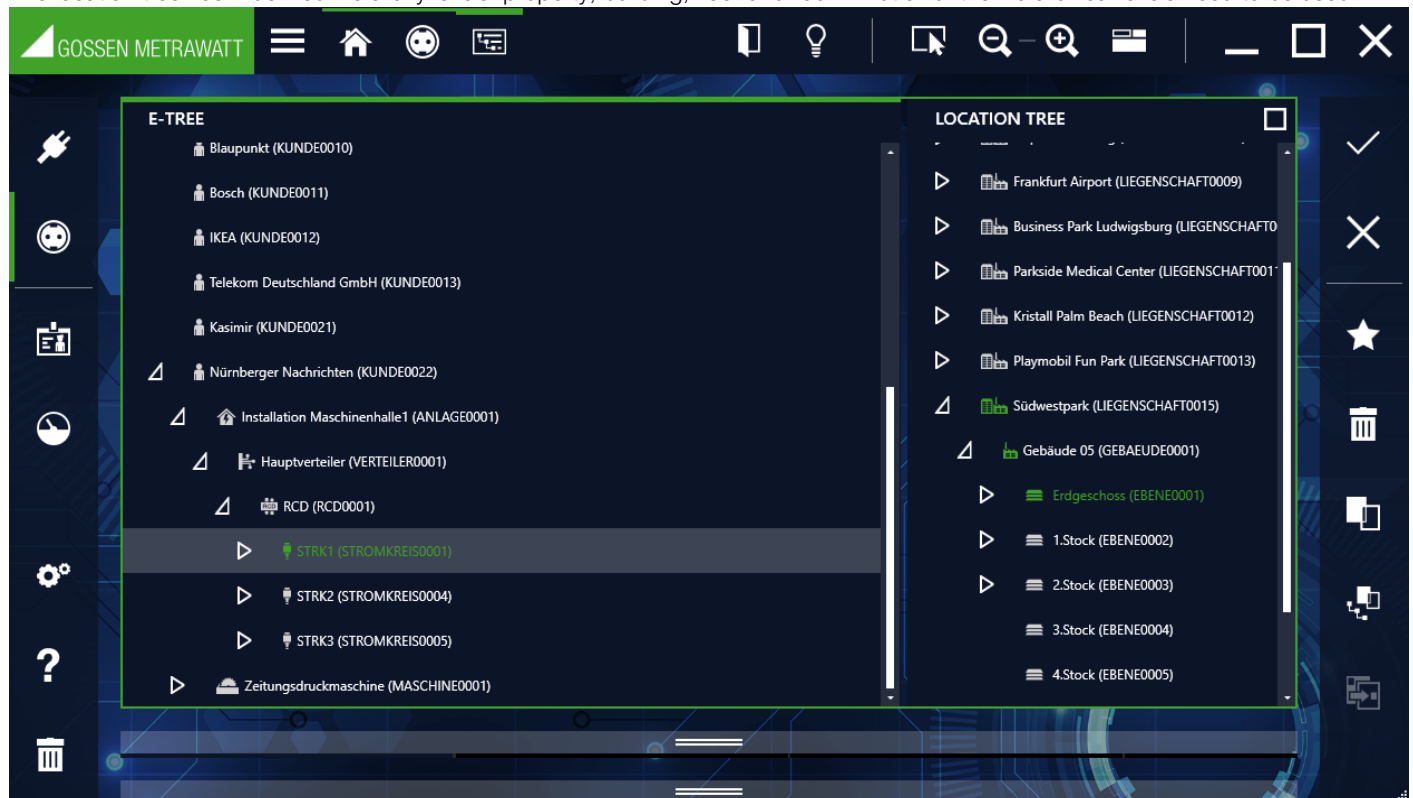
Although all customers are displayed regardless of the type of test object (portable and stationary), only stationary test objects can be accessed.



Selected Test Object in the E-Tree

Location Tree

Registered locations are displayed hierarchically here. Test objects can be assigned to these locations, although this is not mandatory. The location tree has 4 defined hierarchy levels: property, building, floor and room. Not all of the hierarchical levels need to be used.



Tree View: Location Tree is Selected

Interaction Amongst the Tree Structures: Links

A test object can (but doesn't have to) have a link to exactly one object in the location tree.

On the other hand, an object in the location tree can have links to several test objects in the e-tree.

In order to display these reciprocal tree markings, the **ACTIVATE RECIPROCAL TREE MARKINGS** function must be activated, which is disabled by default.

Go to the **PERSONAL SETTINGS** submenu in the **SETTINGS** menu and check the **ACTIVATE RECIPROCAL TREE MARKINGS** option in the **SETTINGS – EDIT LISTS** section.

There are several ways to link objects to one another and to delete links. Work is always conducted from the e-tree to the location tree:

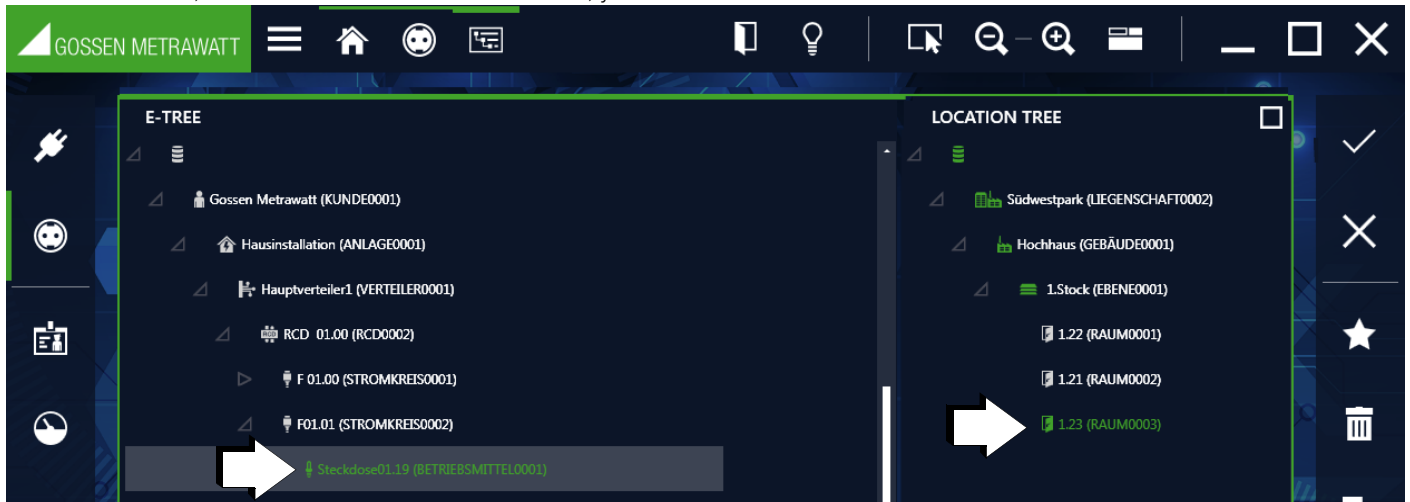
- **Drag & drop:**
Drag the object from the e-tree to a location in the location tree. If the object is already linked, the old link is replaced by the new one.
- **MULTI-ASSISTANT:**
Filter the **SELECTION** list such that the objects to be linked are displayed in the **OBJECTS LIST**. Decide whether you want to link all or only some objects from the list. Make any desired selections by marking the respective entries. Open the **MULTI-ASSISTANT** and select the **LOCATION** tab. Select one of the two location assignment modes, i.e. perform **ACTION FOR ALL OBJECTS IN THE LIST** or perform **ACTION FOR MARKED OBJECTS IN THE LIST**. Then they select either **CHANGE LOCATION** or **REMOVE LOCATION**. If you want to change the location, select the new location from the **Location Tree** list. Confirm by clicking **EXECUTE**. The change is implemented and you can close the **MULTI-ASSISTANT**.

If a linked object is then selected, the corresponding tree becomes the active tree. This tree is identified by means of a green outline around the tree window and by a more pronounced green bar on the top side, as described above. Only one object can be selected at a time in the active tree.

If a location is marked in the location tree, all elements located at this location are highlighted in green in the e-tree. If a test object is selected in the e-tree, its location assignment can be recognized by the fact that the associated location object is highlighted in green. The respective parent objects are identified only by the green color of their icons – the color of the text remains white.

E-Tree Example:

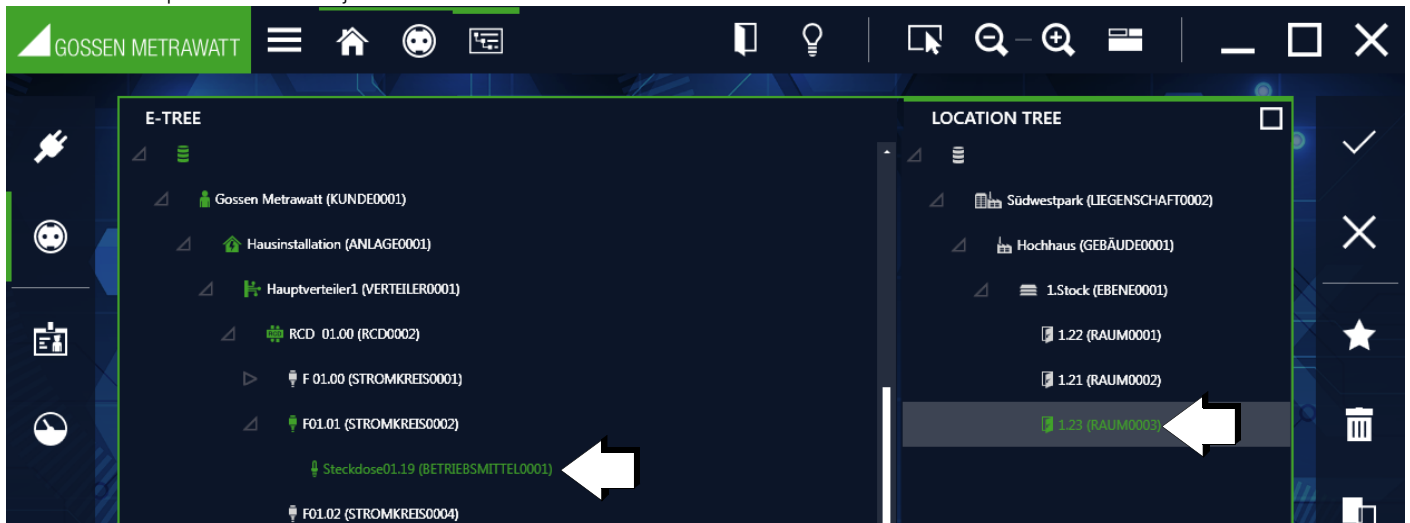
The e-tree is active and outlet 01.19 is selected. The icon and text are then green and have a gray bar in the background. The location tree reveals that this outlet is located in room 1.23. The parent objects, Südwestpark, high-rise building, 1st floor, are identified by the green color of their icons, so that even when the node is closed, you can see where the outlet is located.



Example, Outlet Assignment

Location Tree Example:

The location tree is active, room 1.23 is selected. The icon and text are then green and have a gray bar in the background. The e-tree indicates that only outlet 01.19 is located in this room. The parent objects, namely customer Gossen Metrawatt, building installation, main distributor 1, RCD 01.00 and F01.01, are identified by the green color of their icons, so that even when the node is collapsed you can see that one of this parent node's objects is located in the selected room.



Example, Objects in Room 1.23

Editing Trees

In order to create a new element, the object under which the new element will be created must already be selected. The selected object is then displayed with a gray bar in the background. After selecting ★, the “New Element” popup appears, in which the selection of possible elements at the selected position in the tree is presented (e.g. if it's in the “Buildings” hierarchy level in the location tree, “Levels” or “Rooms” can be created).

Hierarchy in the location tree for stationary objects:

Icons	Meaning
Location Tree	
	Property
	Building
	Floor
	Room

Hierarchy in the e-tree for stationary objects:

Icons	Meaning
E-Tree – Stationary Objects	
	Electrical system
	Machine
	Distributor
	RCD
	RCM
	IMD
	Circuit
	Protective equipotential bonding rail
	Protective equipotential bonding conductor
	Earth electrode
	Measuring point
	Operating equipment

After selecting the desired element type, an element ID and the number of elements to be created must then be specified. The element ID can also be created automatically by a rule defined in the settings, which is mandatory when creating several elements of the same type at the same time. After creating one or more elements, the newly created element (the first in case of multiple creation) is automatically selected and creation of a subordinate element is initiated. The process is not ended until the user explicitly closes the “New Element” popup (“Close” command). The newly created element or elements are identified with a + sign as long as they have not yet been saved.



Note

In the case of distributors, please refer to the notes concerning the distributor report and the tree structure required to this end in section „Test Documentation – Generating Test Reports“.



Create a new element:

★ NEW ELEMENT

ELEMENT TYPE

☐ Level
 ☐ Room

DETAIL

AUTOMATIC ASSIGNMENT OF IDS ☒

ELEMENT ID

LEVEL0002

COUNT

1

CREATE

CLOSE

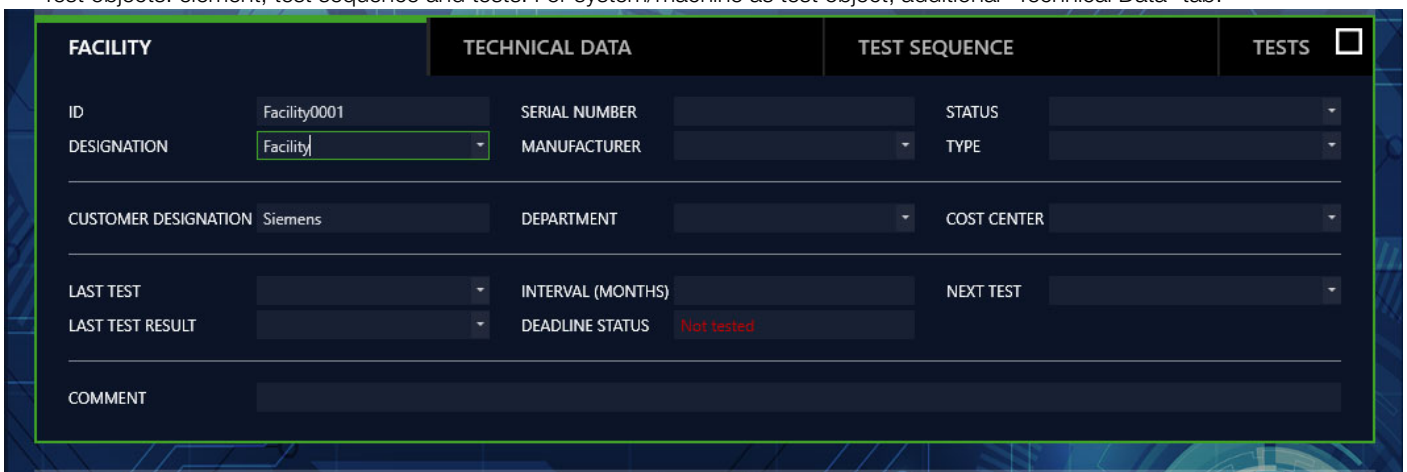
-  Save changes
-  Cancel editing
-  Delete an element
-  Copy an element
-  Copy element along with sub-elements
-  Paste a copied element (always inserted below the selected element in the hierarchy)

14.1.2 Detail View

The most important characteristic values of the object selected in the tree view (customer, system, machine, distributor, circuit, RCD, RCM, IMD, operating equipment, equipotential bonding rail, equipotential bonding conductor, earth electrode, measuring point and location) are managed in the detail view of the stationary objects. Objects cannot be created or deleted here.

Depending on the object selected in the tree view, the master data consists of different numbers of tabs and different amounts of content.

- Customer: customer and contacts
- Location: master data
- Test objects: element, test sequence and tests. For system/machine as test object, additional “Technical Data” tab.



Example, System Tab

Editing

Important data such as the object ID, object designation and characteristics of the respective objects can be entered and edited in the tabs. It's also possible to attach documents such as images, certificates and operating instructions.

After clicking the entry fields, you can fill them in either by entering text or by selecting text from a drop-down field. As long as the entries have not been saved, newly created objects in the e-tree are identified with a + sign, and edited objects in the e-tree are identified with a * sign.



Note

IZYTRONIQ doesn't set any limits with regard to the number of characters in the respective data fields, although this may be restricted by the connected test instrument. Please check the technical parameters of the test instrument in this respect. Depending on which test instrument is connected, restrictions apply to the data fields which can be transferred. Please check the technical parameters of the test instrument in this respect.

All entry windows include fields which have to be filled in. If these mandatory fields are left empty, they're identified by the following icon: . As a consequence, the object cannot be saved. Tab labels and all other associated displays appear in red until the corresponding mandatory fields are filled in.

Customer Object

CUSTOMER Tab

Address and contact data can be entered here for the selected customer.

Tools:



Save changes



Discard changes (with confirmation)



Manage attachment (add, view and delete file/photo)



Print (see „Printing“)

CONTACTS Tab

Contact persons for the respective customer can be managed here.

Tools:



Save changes



Discard changes (with confirmation)



Enter a new contact



Delete a contact



Manage attachment (add, view and delete file/photo)



Print (see „Printing“)

(Since this tab is a list, the functions of the list view apply and, in addition, the list icons in the toolbar are activated – see „Lists“.)

Location Object

Location Tab

Address and building information can be entered here.

The locations are broken down hierarchically into four main objects, namely property, building, floor and room.

The following data can be acquired depending on the main object:

Property:	Address information, remarks
Building:	Address and architecture information, remarks
Floor:	ID and designation, comments
Room:	ID and designation, comments

Tools:



Save changes



Discard changes (with confirmation)



Manage attachment (add, view and delete file/photo)



Print (see „Printing“)

Test object

The test object is broken down into three or four tabs (TEST OBJECT, TEST SEQUENCE, TESTS and, in the case of systems or machines, TECHNICAL DATA).

TEST OBJECT Tab <name>

Important data such as the object ID, object designation and characteristics of the respective objects can be entered and edited in the tab. It's also possible to attach documents such as images, certificates and operating instructions.

After clicking the entry fields, you can fill them in either by entering text or by selecting text from a drop-down field. As long as the entries have not been saved, newly created objects in the e-tree are identified with a + sign, and edited objects in the e-tree are identified with a * sign.

Tools:



Save changes



Discard changes (with confirmation)



Manage attachment (add, view and delete file/photo)



Print (see „Printing“)

TECHNICAL DATA Tab (for systems and machines only)

Since extensive data is required for test objects of this type, an additional tab is required. Important information which describes the system can be entered here.

Tools:



Save changes



Discard changes (with confirmation)



Manage attachment (add, view and delete file/photo)



Print (see „Printing“)

“Entering Machines and Systems”

**TEST SEQUENCE Tab**

Assignment of test sequences to the selected object is managed in the test sequence tab. Multiple test sequences can be assigned to any given object.

The view of assigned test sequences is displayed as a list. Entering a checkmark to the STANDARD column selects the test sequence with which testing of the object will be performed.

The test sequences themselves are managed in a superordinate sequence pool (see „Function Sequences“).

**Note**

Deletion doesn't clear the sequence itself, but rather only the link. The sequence is retained in the sequence pool.

The details (individual steps) of a sequence can be displayed by double-clicking the sequence or by selecting the sequence and clicking the  icon. The sequence steps list then appears, which is displayed instead of the sequence list.

The view is returned to the initial display by clicking the  icon.

Tools:



Save changes



Discard changes (with confirmation)



Show sequence details (if currently in the sequence list view)



Show sequence list (if currently in the sequence details view)



Add sequences from sequence pool



Delete sequence assignment – the sequence itself remains in the sequence pool

-  Manage attachment (add, view and delete file/photo)
-  Print (see „Printing“)

(Since this tab is a list, the functions of the list view apply and, in addition, the list icons in the toolbar are activated – see „Lists“.)

TESTS Tab

Tests for the selected object can be managed and set up in the tests tab. The view of executed tests is displayed as a list.

The tests listed here can have various origins:

- Import of executed measurements from the test instrument or from a file
- Direct performance of tests by means of various methods

The details of a test can be displayed by double-clicking the test or by selecting the test and clicking the  icon. The detail view of the test is then opened. If a plus symbol (+) precedes the line, further information can be accessed by clicking the symbol, or by double-clicking – switching between MEASUREMENTS and PARAMETERS is also possible.

The view is returned to the initial display by clicking the  icon.

After clicking the tool icon () , the “Add Test” popup appears and offers the following options:


ADD TEST


PLEASE SELECT THE CREATION PROCESS OF THE NEW TEST:

- ☒ REMOTE, APPLICATION CONTROLS SEQUENCE CREATION
- ☐ PUSH/PRINT, PRESS BUTTON ON TEST INSTRUMENT FOR ENTRIES
- ☐ ENTER MANUALLY

ADD

ABORT

► REMOTE:

The application controls the sequence (see „Remote Function – Automated Sequence Control for a Test“).

You can run, control and evaluate test sequences with **IZYTRONIQ** here. You can have several different test instruments perform tests via remote control, and evaluate them. Attachments can be displayed in the form of circuit diagrams, drawings, instructional photos etc. Measurements can be performed and logged manually with any desired test instruments (see „Document Management – Attaching Files“).

► PUSH-PRINT:

Entries are made by pressing a button on the test instrument (see „Push-Print – Getting Started“).

With the help of the push-print function, measurement results can easily be sent directly to the desired test object in **IZYTRONIQ** by simply pressing a key on the test instrument, where they can be saved in the Tests tab.

► Manual Entry:

This function makes it possible to perform tests with any desired test instruments for which there is no connection to **IZYTRONIQ**. Tests can also be created which do not require a test instrument, e.g. entry of a quantity. After selecting the “Manual Entry” function and clicking “ADD”, the “MANUAL ENTRY” screen appears. The name of the test must be entered and the utilized test instrument must be selected in the upper content area. The inspector and the date are entered automatically.



Note

Only a test instrument which has been entered to test equipment management can be selected.

Manual tests can then be created line by line in the lower content area. Select the “ADD TEST STEP”  function from the toolbar to this end. The current test can be documented in this way, and the following fields can be filled in. The Test Step field is the only mandatory field.

No.	Consecutive number of the test step (automatic)
Step category	Manual (automatic)
Measuring instrument	Utilized test instrument (automatic)
Test step	Test step, e.g. measurement
Min	Minimum value
Max	Maximum value

Result	Resultant value
Passed	Passed
Attachments	Displays any documents that may have been attached.

After saving your entries , manual measurement is completed and the display is switched back to the “TESTS” tab, where the created measurement is then displayed.

“Manual Measured Value Entry”



With the help of the container function, several tests for a selected object can be combined in a single container. This makes it possible to generate a joint report for these tests. The individual tests retain the name of the responsible inspector, and the creator is responsible for the container.

In order to create the container, the tests to be included must first be selected. Then select “CREATE CONTAINER”  from the toolbar. After clicking “ADD” an entry window appears in which the name of the container and the inspector responsible for it can be entered. Clicking “ADD” again creates the container and returns the display to the Tests tab.

How-to video, “Containers”



Tools:



Save changes



Discard changes (with confirmation)



Display test/container details (if currently in a corresponding test view)



Jump up one level (if currently in a test/container detail view)



Creation of tests in accordance with the aforementioned methods



Delete tests and container



Create container



Transfer tests to container



Clear container



Compare tests:

Two or more tests of the same type can be compared with each other. After clicking the icon, the tests to be compared have to be marked. After confirmation, a tabular or graphic comparison view is displayed.



Manage attachment (add, view and delete file/photo)



Print (see „Printing“)



Print reports

(Since this tab is a list, the functions of the list view apply and, in addition, the list icons in the toolbar are activated – see „Lists“.)

14.1.3 List Views

2 list views are available which include all existing objects:

- Standard Function
- Advanced Search Function

The lists differ with regard to type of selection or search function.

We recommend the advanced search function for large volumes of data, which is the default setting.

Selection must be made in the following menu path:

SETTINGS > PERSONAL SETTINGS > GENERAL SETTINGS >

ACTIVATE ADVANCED SEARCH FUNCTION (FOR LARGE DATA VOLUMES) parameter

If a checkmark is entered here, the advanced search function is active.

Standard Function

The list view displays all objects which are hierarchically beneath the element selected in the tree view. For example, all of a customer's test objects or all of the test objects that are located in a room can be listed in this way. Only one element can be selected at a time in the tree view. The number of currently listed elements is displayed in the bottom right-hand corner of the view.

Drag a column header here to group by that column														
☐ MARK ALL EN	OBJECT TYPE	ID	TYPE	DESIGNATION	SERIAL...	MANUFA...	STATUS	CUSTOMER DE...	CUSTOMER ID	INTERVAL (M...	LAST TEST	DEADLINE STA...	LAST TEST RES...	NEXT TEST
☐	Facility	Facility0001		Facility				Siemens	KUNDE0003			Not tested		
☐	Distributor	VERTEILER0001		Verteiler				Siemens	KUNDE0003			Not tested		
☐	RCD	RCD0001		Neuer RCD				Siemens	KUNDE0003			Not tested		
☐	Electric circuit	STROMKREIS0001		Neuer Stromkreis				Siemens	KUNDE0003			Not tested		
☐	Equipment	BETRIEBSMITTEL00...		Neues Betriebsmittel				Siemens	KUNDE0003			Not tested		

Count=5

Tools:

-  Save changes
-  Cancel editing
-  Delete objects
-  Print (see „Printing“)
-  Print reports
-  Multi-assistant (as of **BUSINESS Professional**)

(Since this tab is a list, the functions of the list view apply and, in addition, the list icons in the toolbar are activated – see „Lists“.)

Advanced Search Function

The advanced search function view is advantageous when working with large amounts of data. First of all, set appropriate filters for your search. When the search has been completed, only the data that are relevant to you will be displayed. This list view is subdivided into two tabs to this end: the “SELECTION LIST” tab for setting the filters and the “OBJECTS LIST” tab for displaying the search results.

First set the filters in the first tab (“SELECTION LIST”). For example, you can filter by the customer, object type and/or location. The filter function for the time period during which testing was performed can additionally be switched on and off via the ACTIVE field.

SELECTION LIST	LIST OF OBJECTS
CUSTOMER DESIGNATION	Gossen Metrawatt GmbH (CU0002)
DEPARTMENT	
COST CENTER	
OBJECT TYPE	
PROPERTY	
BUILDING	
LEVEL	
ROOM	
LAST TEST (FROM)	
NEXT TEST (FROM)	
LAST TESTER	
LAST TEST (TO)	
NEXT TEST (TO)	
LAST TEST RESULT	
INTERVAL (MONTHS)	
ID	
DESIGNATION	
SERIAL NUMBER	
STATUS	
MANUFACTURER	
TYPE	
ACTIVE	☐
FIELD 1	
FIELD 2	
FIELD 3	

Tools:

-  Save changes
-  Cancel editing
-  Generate list
-  Delete all selection criteria

(Since this tab is a list, the functions of the list view apply and, in addition, the list icons in the toolbar are activated – see „Lists“.)

Then start the advanced search by clicking the  button. A window with a progress bar is displayed.

The filtered search results are then displayed in the “OBJECTS LIST” tab. Additional filters can be added here in order to refine the search.

SELECTION LIST

LIST OF OBJECTS

Drag a column header here to group by that column

☐	MARK ALL EN	OBJECT TYPE	ID	TYPE	DESIGNATION	SERIAL NUMBER	MANUFACTUR...	STATUS	CUSTOMER DE...	CUSTOMER ID
	☐	Device	GERAET0004	MIXI	Mixer	2398094875	Phillips		GOSSEN METRAW...	KUNDE0023
	☐	Device	GERAET0010	MIXI	Mixer	2398094875	Phillips		GOSSEN METRAW...	KUNDE0023
	☐	Device	GERAET0011		Kühlschrank				GOSSEN METRAW...	KUNDE0023
	☐	Device	GERAET0001	AFA33	Geschirrspülmaschi...	8765876576	Miele		GOSSEN METRAW...	KUNDE0023
	☐	Device	GERAET0007		Geschirrspülmaschi...	23865645	Blomberg		GOSSEN METRAW...	KUNDE0023
	☐	Device	GERAET0005		Geschirrspülmaschi...	23865645	Blomberg		GOSSEN METRAW...	KUNDE0023
	☐	Device	GERAET0015	rtz88	Mikrowelle		Conrad		GOSSEN METRAW...	KUNDE0023
	☐	Device	GERAET0003	BH7	Bohrhammer	348763498764	Siemens		GOSSEN METRAW...	KUNDE0023
	☐	Device	GERAET0002	Bohr...	Bohrmaschine	6654657463656	Black&Decker		GOSSEN METRAW...	KUNDE0023

Count=16

Tools:

-  Save changes
-  Cancel editing
-  Delete objects
-  Print (see „Printing“)
-  Print reports
-  Multi-assistant (as of **BUSINESS Professional**) – see „Multi-Assistant (as of **BUSINESS Professional**)“

(Since this tab is a list, the functions of the list view apply and, in addition, the list icons in the toolbar are activated – see „Lists“.)

14.2 Function Sequences

General

Sequences can be assigned to each electrical test object. A sequence consists of a series of various test steps. If a freely programmable sequence of test steps needs to be performed one after the other, the use of test sequences is recommended.

Automatic test sequences can be compiled which include visual inspections, instructions, checks and individual measurements.

The sequences are instrument-specific and are stored in a sequence pool. If necessary, they can be transferred to the appropriate test instruments.

Essentially, we distinguish between the following types of sequences:

Test instrument sequences

These are test sequences which have been created for a specific type of test instrument, e.g. PROFITEST or SECUTEST.

Test instrument sequences can be programmed conveniently in the Sequence Editor – Individual Test Sequences and transferred to the test instrument later on.



Note

Default Sequences

Some test instruments come with default sequences. When sequences are transferred into the test instrument, all existing sequences will be overwritten. To restore the default sequences, you can load them from our website (see "myGMC") and transfer them into the test instrument.

IZY sequences

These sequences can only be executed in **IZYTRONIQ**. They can include test steps from instrument sequences, but they offer many other functions as well. For example, manual entry of measured values, push-print tests, remote measurements, instructions and visual inspections can be integrated. Help screens can be saved for each test step, which are then displayed to the user during testing relative to the respective step. An IZY sequence can be cascaded with other previously programmed sequences, and measurement steps can also be programmed for different test instruments within a sequence. If a measurement step is programmed for remote testing, it controls the corresponding test instrument and only measurement data is transferred from the test instrument. Display and control is implemented in **IZYTRONIQ**.

Sequence Management Layout and Use

The sequence management overview/tab is broken down into two parts:

- **List View**
The sequence list is displayed in the upper window in the sequence pool (in the sequence repository).
- **Detail View**
The individual test steps of the sequence selected at the top are displayed in the lower window.

SEQUENCES

Drag a column header here to group by that column

MARK ALL EN	TEST TYPE	SEQUENCE NA...	MEASURING I...	SEQUENCE KIND	STANDARD	SEQUENCE VE...	STATUS	DOCUMENTS
☐	Gerätesequenz	Wiederholungsprüf...		Remote sequence	VDE0701-0702	2		
☐	Remoteprüfung	Reparatur		Remote sequence	VDE0701-0702	1		
☐	Gerätesequenz	DGUV3		Remote sequence	VDE 0701-0702	1		

Count=3

DETAIL

SEQUENCE NAME: Wiederholungsprüfungen TEST SEQUENCE VERSION: 2 SEQUENCE TYPE: Remote sequence

MARK ALL EN	NO.	STEP TYPE	MEASURING I...	TEST STEP	DOCUMENTS
☐	1	Visual inspection		Line connection	
☐	2	Test instruction		Earth clamp	
☐	3	Push/Print		RPE	
☐	4	Test instruction		RINS	

Sequence View: (1) List View, (2) Detail View

The respective view is outlined in green and the active part of the view is identified by a bold green bar in the upper left-hand part of the view.

Only those icons which are valid and can be activated for the selected view are displayed in the toolbar.

Tools:

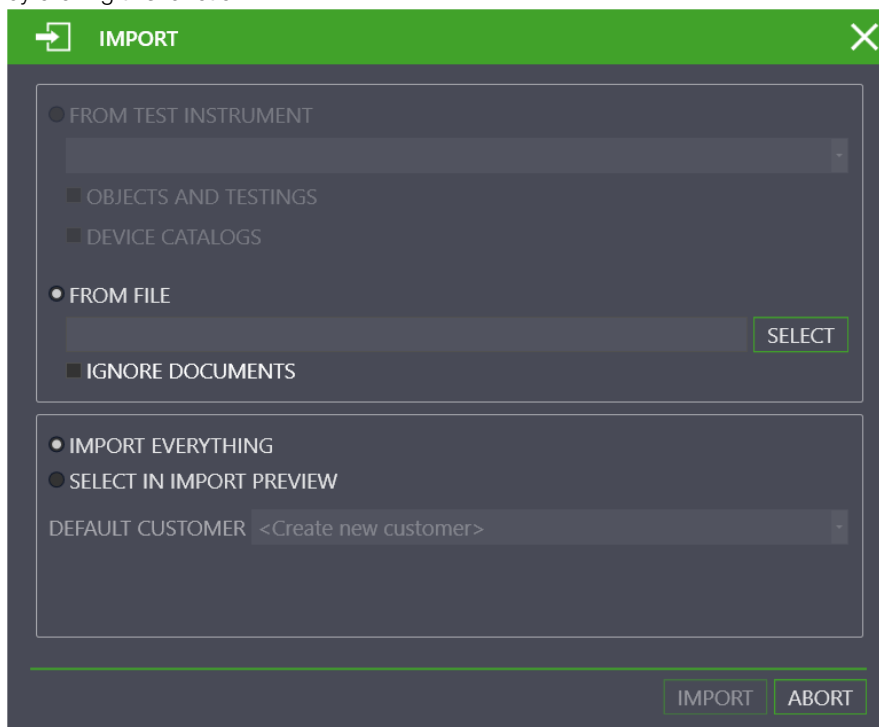
- ✓ Save changes
- ✗ Cancel editing
- ★ Add new sequence: the sequence editor is launched (see „Sequence Editor – Individual Test Sequences“). A new sequence can be created in this way and added to the sequence pool (the sequence repository).
- ✎ Edit sequence: the selected sequence can be edited in the sequence editor.
- 📄 Duplicate sequence: this command copies the selected sequence. The name of the sequence is copied, to which the word Copy is added.
- 🗑 Delete sequence: The sequence is deleted. If the sequence has already been assigned to one or more objects, all assignments must first be deleted.
- 📎 Manage attachment (add, view and delete file/photo)

(Since this tab is a list, the functions of the list view apply and, in addition, the list icons in the toolbar are activated – see „Lists“.)

14.3 Data Import Function

The import function is used to synchronize data from a test instrument or file with the **IZYTRONIQ** database.

This function can be found in the “STATIONARY OBJECTS” menu  under the “IMPORT” function . The import wizard is started by clicking this function.



The import wizard asks how you would like to import data. Available options depend on your **IZYTRONIQ** variant:

BUSINESS Starter	TEST INSTRUMENT FILE (XML)
BUSINESS Advanced BUSINESS Professional	TEST INSTRUMENT FILE (XML)
BUSINESS Premium	TEST INSTRUMENT FILE (XML, IZY)
ENTERPRISE Premium ENTERPRISE Ultimate CLOUD	TEST INSTRUMENT FILE (XML, IZY, ZIP)

- FROM TEST INSTRUMENT: you can choose from amongst all connected instruments here. OBJECTS AND TESTS are selected for import by default.
- FROM FILE: Tap the “SELECT” field in order to select the file to which the data will be imported. You can also select the file format in the open Windows file explorer window.
- IGNORE DOCUMENTS: Reports and attachments are not imported when importing IZY files.
- RESOLVE ACCORDING TO ID: A reference is used during import in order to determine whether or not changes have been made to an object (e.g. a new measurement has been added). By default, an internal, invisible reference tag is used for import. If problems arise in this respect during import, use the ID of the measuring instrument as a reference for the import with this option.

Select IMPORT ALL or SELECTION IN IMPORT PREVIEW in order to start the import.

- After selecting IMPORT ALL and clicking IMPORT, import runs automatically.
- If SELECTION IN IMPORT PREVIEW is selected, the data in the IMPORT PREVIEW are displayed first. These data can be selected and post-processed here. The selected objects are subsequently imported into the **IZYTRONIQ** database by selecting the  function.
- A customer from the database can be specified via STANDARD CUSTOMER, if the data include a customer.

**Attention!****Data Loss!**

The last data imported into **IZYTRONIQ** are always used. If data was saved to the test instrument and then changes were made to the data in **IZYTRONIQ**, importing the data from the test instrument overwrites these changes once again.

Example: You created a test object (system) in **IZYTRONIQ** and transferred it to the test instrument (**PROFITEST...**). The **PROFITEST...** is being used in the field. At the same time, the system's technical data are changed in **IZYTRONIQ**. The data will be imported later from the **PROFITEST...** to **IZYTRONIQ**. Afterwards, the system's modified (new) technical data are overwritten with the old technical data from the **PROFITEST...**

For this reason, don't change any data in **IZYTRONIQ** if they're used in the test instrument. In other words: If you want to edit data in **IZYTRONIQ**, transfer the changed data to the test instrument before using the test instrument!

Successful import and any transmission errors that may have occurred are displayed.

If conflicts occur between existing data and data to be imported which cannot be resolved automatically, the conflict manager is activated.

The Conflict Manager

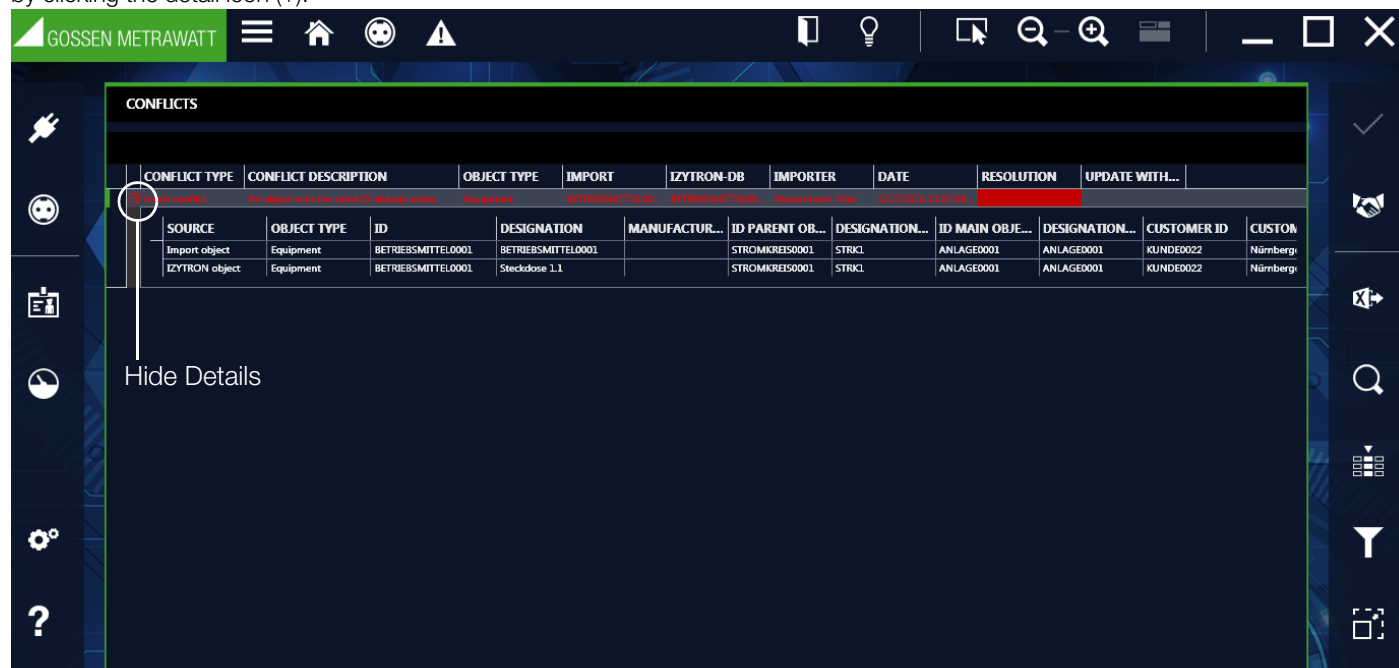
If conflicts occurred during import and objects could not be transferred as a result, these objects are not simply discarded – an attempt is made to resolve these conflicts manually. Affected objects are copied to a separate file/table to this end. At the same time, a warning symbol appears in the status bar and the entries are highlighted in red.

Warning Symbol

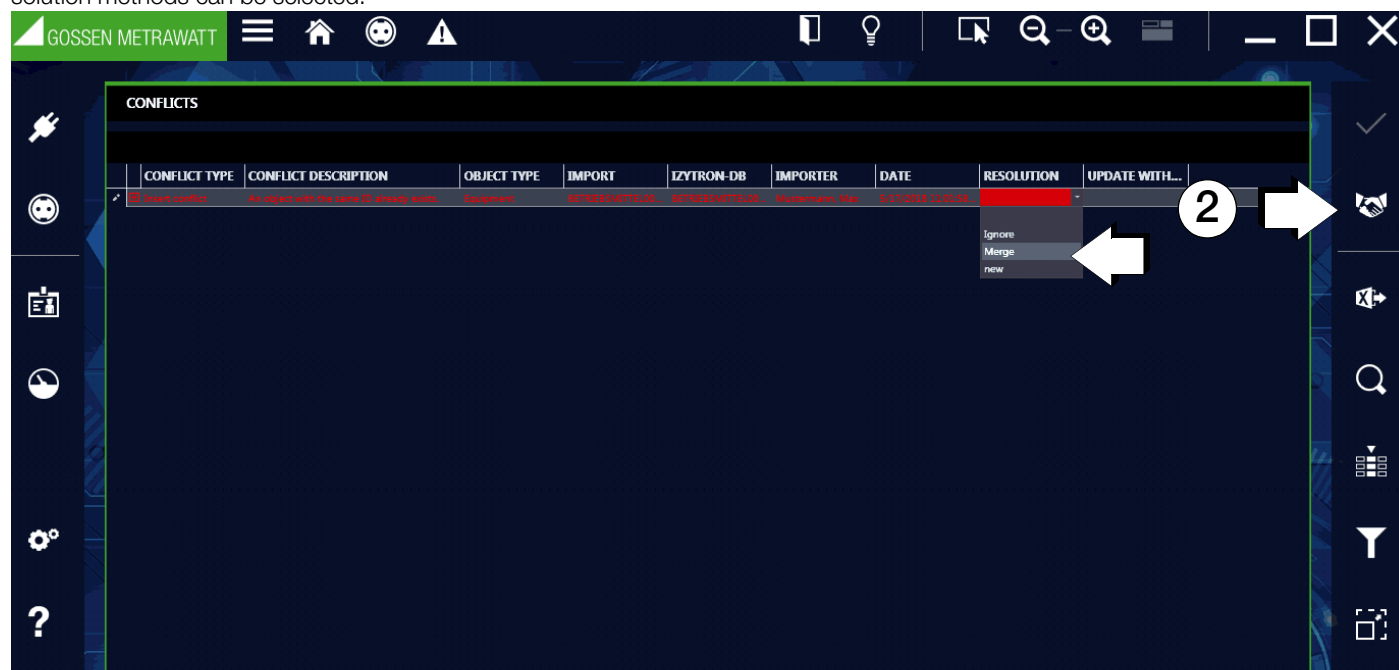
CONFLICT TYPE	CONFLICT DESCRIPTION	OBJECT TYPE	IMPORT	IZYTRON-DB	IMPORTER	DATE	RESOLUTION	UPDATE WITH...
Data conflict	An object with the same ID already exists.	Equipment	NETWESCHNETZ-DB...	NETWESCHNETZ-DB...	Metrawatt, Goss	2023/02/09 11:00:00		

1
Show Details

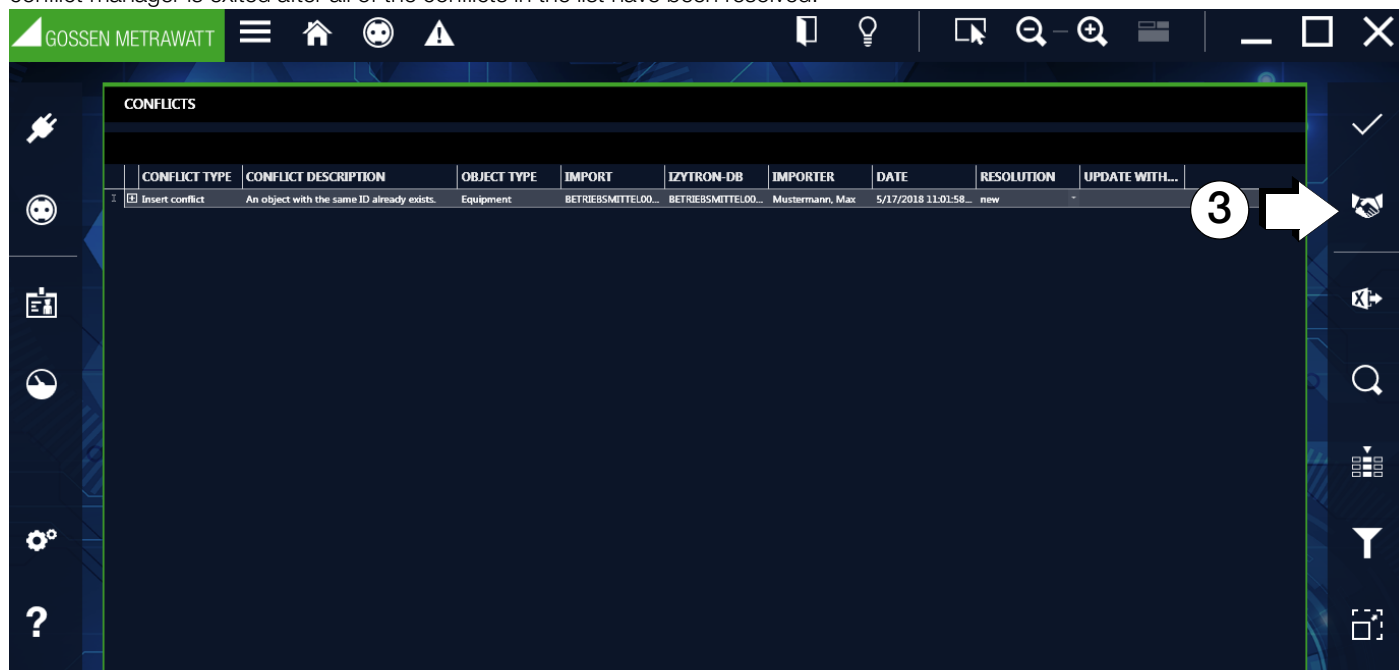
Conflicts can be dealt with here. There's a description for each conflict. The details associated with the conflict objects (1) are displayed by clicking the detail icon (+).



By repeatedly clicking the handshake icon (2), you're offered various possible methods for resolving the conflict: ignore, merge or new. These depend on the respective conflict. Alternatively, clicking in the "Solution" column opens a pull-down menu from which possible solution methods can be selected.



The red highlighting disappears after selecting the desired method. The respective conflict is resolved by saving the changes. The resolved entry is then no longer displayed in the conflict manager and the respective object is integrated into the main database. The conflict manager is exited after all of the conflicts in the list have been resolved.



The following solution options are available:

Designation	Description
Ignore	Data import is ignored.
Update with source ID (of the imported object)	All data stored in IZYTRONIQ for this object are overwritten.
Update with target ID (of the existing object)	All data stored in IZYTRONIQ for this object, except the ID, are overwritten.
Merge	The object's master data are synchronized.
New	Object import and assignment of a new ID
...	

Tools:



Conflict solving

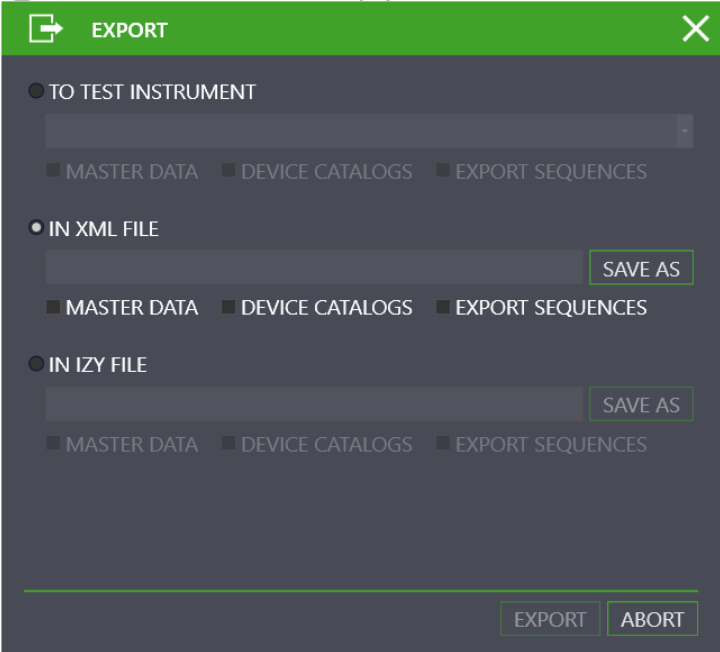


Selection of the solution method

(Since this tab is a list, the functions of the list view apply and, in addition, the list icons in the toolbar are activated – see „Lists“.)

14.4 Data Export Function

The export function is used to transfer data to a test instrument or a file. The function can be found in the “STATIONARY OBJECTS” menu  under the “EXPORT” function . The export wizard is started by selecting this function.



The export wizard asks how you would like to import data. Available options depend on your **IZYTRONIQ** variant:

BUSINESS Starter	TEST INSTRUMENT FILE (XML)
BUSINESS Advanced BUSINESS Professional	TEST INSTRUMENT FILE (XML, CSV)
BUSINESS Premium	TEST INSTRUMENT FILE (XML, IZY)
ENTERPRISE Premium ENTERPRISE Ultimate CLOUD	TEST INSTRUMENT FILE (XML,CSV, IZY, ZIP)

- TO TEST INSTRUMENT: you can choose from amongst all connected instruments here. OBJECTS and/or SEQUENCES can be selected.
- TO XML FILE: OBJECTS and/or SEQUENCES can be selected. Tap the “SAVE AS” field in order to select the file to which the data will be saved.
- TO CSV FILE: Tap the “SAVE AS” field in order to select the file to which the data will be saved.
- TO IZY FILE: OBJECTS, DEVICE CATALOGS and SEQUENCES are selected by default in each case. Tap the “SAVE AS” field in order to select the file to which the data will be saved.
- TO ZIP BACKUP FILE: Tap the “SAVE AS” field in order to select the file to which the data will be saved.

**Attention!**
When the data is exported, all existing data is deleted from the connected test instrument and overwritten by the exported data. Consequently, a warning appears prior to export.

The Export Filter is then started by selecting "EXPORT".

Export Filter

The export filter consists of three filter menus:

- OBJECTS EXPORT FILTER
- EXPORT TEST INSTRUMENT CATALOGS
- EXPORT SEQUENCES

If more than one filter menu is selected, the “NEXT”  and “BACK”  buttons are used to toggle between the views. After selecting the “EXPORT” button  in the toolbar, the selected range of data and the associated customers and locations are transferred to the connected test instrument. The action which is momentarily being executed is displayed during export. If all data are successfully transferred, a corresponding message is displayed.

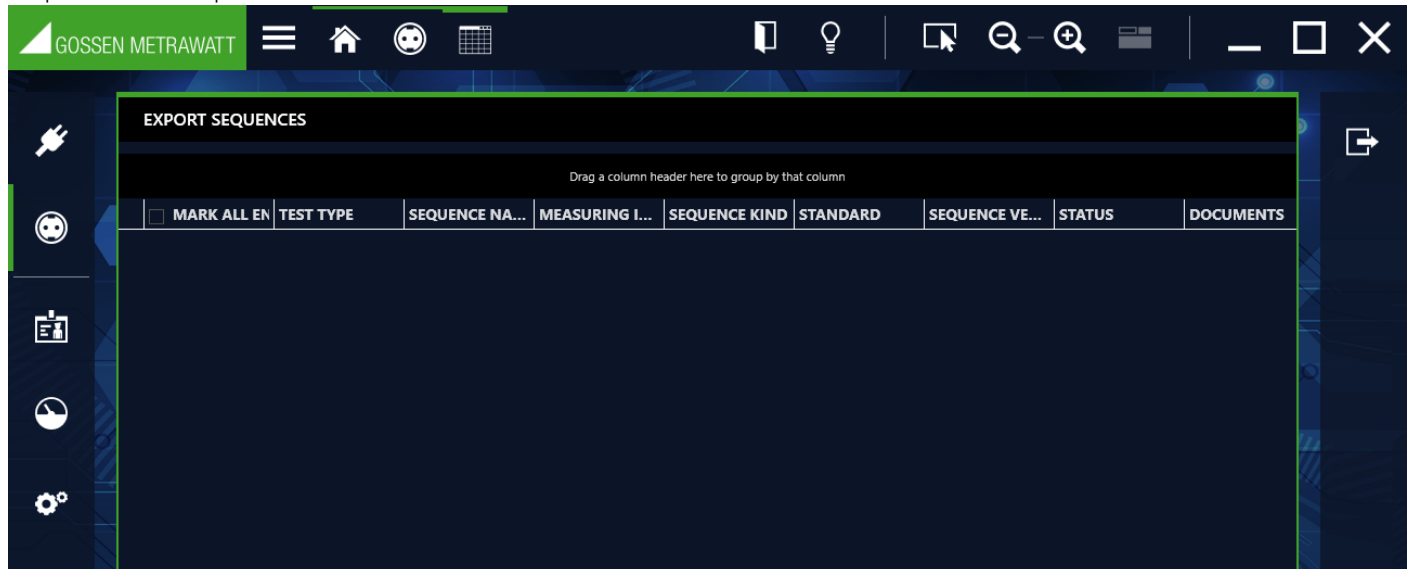
The OBJECTS export filter consists of a two-part view. Both tree views are located in the upper half, and the list of selected objects is located in the bottom half. A preliminary selection of customers and locations can be made in the tree views by selecting the checkboxes which precede the elements. Potential objects for transmission can be selected in the e-tree and narrowed down by selecting locations in the location tree. Elements selected in this way can then be further filtered in the list at the bottom (see „Lists“).

Catalog selection consists of a two-part view.

The various catalogs are displayed on the left-hand side, and the corresponding catalog entries appear on the right-hand side. Selection can be made by means of various procedures. Choices can be made as to which catalog entries are exported by activating the check-boxes. The filter can be used to narrow down the selection.

Export Sequences

Sequences to be exported can be selected and filtered here.



14.5 Report Templates Function

Report templates are used for the documentation of tests, for example, or as acceptance or handover reports. Variable data from the selected measurements is accessed for this purpose in conjunction with object-related data (for example customer data). Report templates either comply with legal requirements or standards, or have been or are created in order to standardize documentation. Default reports are available in **IZYTRONIQ** which cannot be edited or deleted.

You can create new templates or copy existing templates and modify them.

As of the **BUSINESS Advanced** variant, a company logo or a scanned signature can be integrated into the report templates. These are saved to the setup menu under global or personal settings (see „Global Settings“ and „Personal Settings“).

Custom templates are created in Word and test data can be arranged as desired using placeholders.

Report management for stationary objects can be found in the “STATIONARY OBJECTS” menu  under the “REPORT TEMPLATES” function .



Report Templates Selection List

All available report templates are displayed in report management.

If a test report needs to be printed out, the corresponding report templates are made available depending on the object type (device, medical device).

In order to add a new report, a report must be created in advance using Microsoft Word. This can be added to the list by clicking the “ADD REPORT” button . After clicking this icon, a system-specific menu for opening Word documents appears. The desired report template is selected and confirmed, and a new entry is added to the administration table. In order to be able to save the new report template, the user has to select the device type to which the report template will apply and enter the name of the report template.

Tools:



Save changes



Cancel editing



Save report template as Microsoft Word file



Open report template in Microsoft Word



Add new report template



Duplicate report template:

This command copies the selected report template. The name of the report template is copied, to which the word Copy is added.



Delete report template:

The sequence is deleted. If the sequence has already been assigned to one or more objects, all assignments must first be deleted.

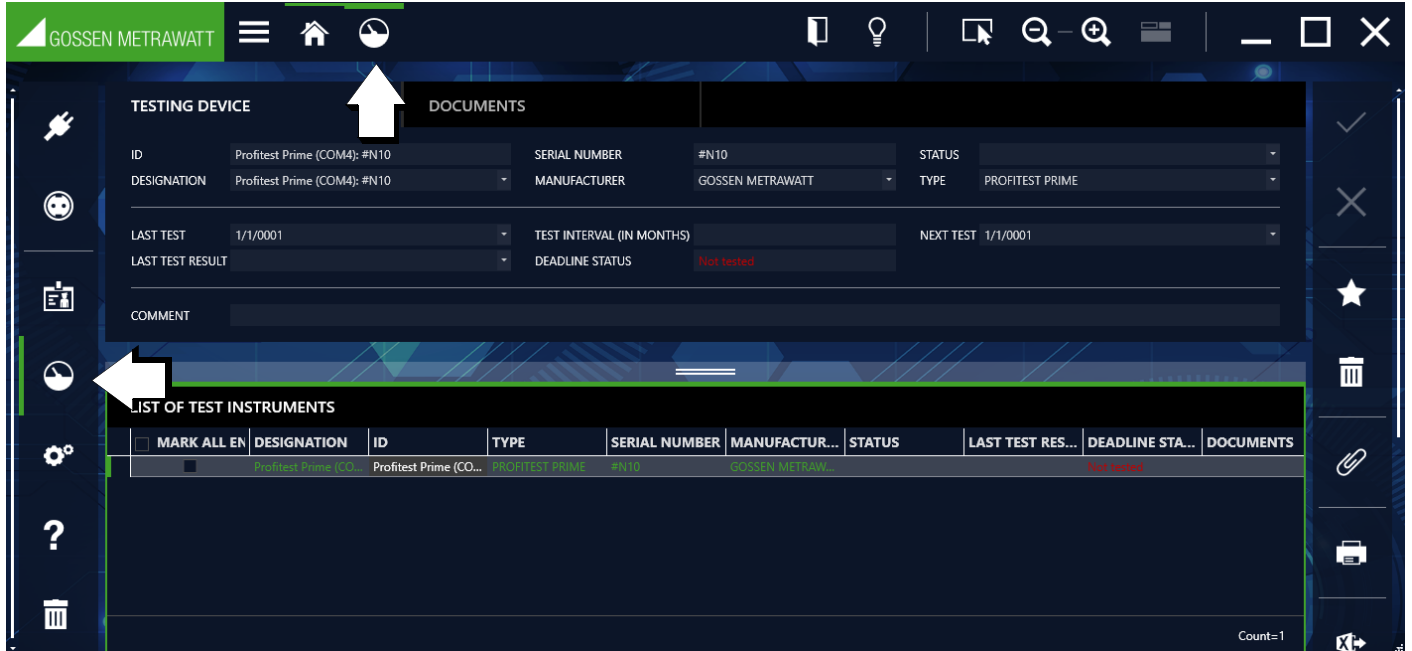
(Since this tab is a list, the functions of the list view apply and, in addition, the list icons in the toolbar are activated – see „Lists“.)

15 Test Equipment Management

IZYTRONIQ can manage measuring and test instruments which are used for tests performed on objects (devices, medical devices, machines and systems). Device characteristics such as device designation, manufacturer, type, serial number and calibration data can be set up, imported, displayed and edited.

If a test instrument is connected, checking is first conducted to determine whether or not it's a GOSSEN METRAWATT measuring instrument. If so, its serial number and device type are read out. Checking is performed in order to determine whether or not the test instrument is already present in IZYTRONIQ, and if not it's registered.

The calibration data in the database is monitored and upcoming or pending calibration deadlines are displayed in the home screen.



Test equipment management consists of two tabs:

- Test Instrument: master data and calibration data (see „Test Instrument Tab“)
- Documents: calibration certificates (see „Documents Tab“)

Additionally, the list of registered test instruments is displayed in the lower part of the view (see „Test Instruments List“).

“Test Equipment Management, Setting Up Test Equipment” 

Test Instrument Tab

All master and calibration data can be entered to the test instrument tab. Mandatory fields include “ID number”, “Designation”, “Serial number” and “Type”.

Tools:

-  Save changes
-  Cancel editing
-  Add user
-  Delete user – exception: the user who is currently logged in cannot be deleted.
-  Manage attachment (add, view and delete file/photo)
-  Print (see „Printing“)

Documents Tab

All calibration certificates can be entered to the documents tab.

Tools:

-  Save changes

-  Cancel editing
-  Add calibration certificate
-  Remove calibration certificate
-  Manage attachment (add, view and delete file/photo)
-  Print (see „Printing“)

(Since this tab is a list, the functions of the list view apply and, in addition, the list icons in the toolbar are activated – see „Lists“.)

Test Instruments List

All registered test instruments are displayed in the test instruments list.

After selecting a test instrument from the list, its associated master data and documents are displayed.

Tools:

-  Save changes
-  Cancel editing
-  Add user
-  Delete user –
exception: the user who is currently logged in cannot be deleted.
-  Manage attachment (add, view and delete file/photo)
-  Print (see „Printing“)

(Since this tab is a list, the functions of the list view apply and, in addition, the list icons in the toolbar are activated – see „Lists“.)

16 User Administration

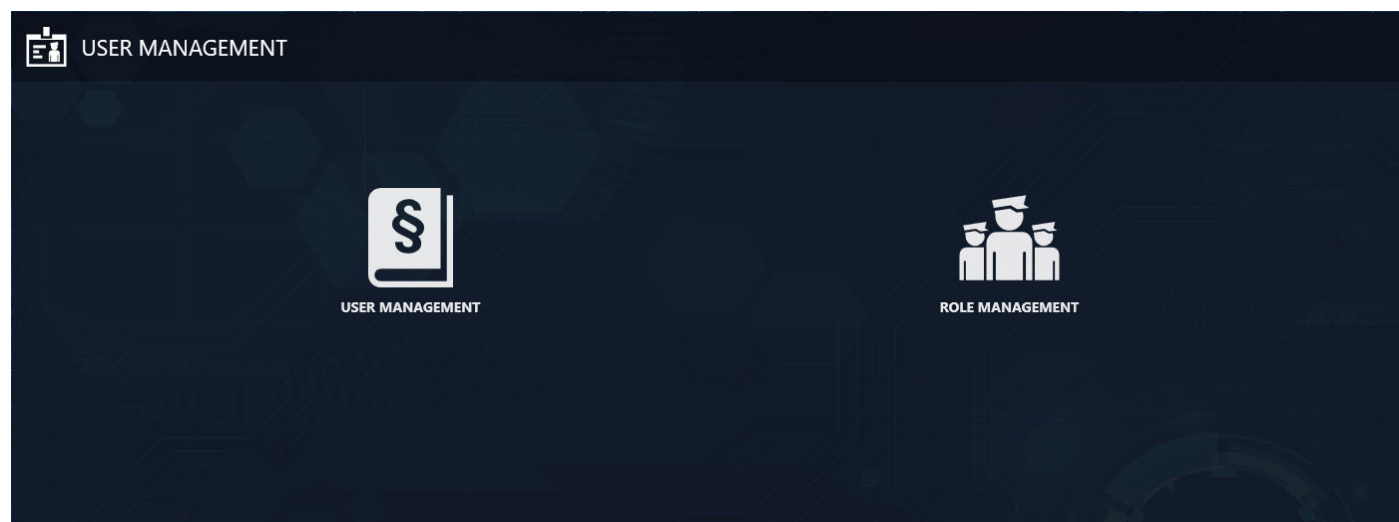
Users are set up for **IZYTRONIQ** in user administration. The scope of functions varies depending on your **IZYTRONIQ** variant:

- User Administration – **BUSINESS** Versions Except for the Premium Variant: All registered users have the same rights.
- User Administration – **BUSINESS Premium** and **ENTERPRISE** Versions: Additional roles and rights can be assigned to users.
- Roles Management – **BUSINESS Premium**, **ENTERPRISE** and **Premium CLOUD** Versions: Additional roles and rights can be assigned to users. The user to whom the Admin role has been assigned can set up and manage additional users with the defined roles and their associated rights.
- User Administration **Premium CLOUD**: Basic user administration is handled in the GMC-INSTRUMENTS Cloud portal. Further information can be stored and roles can be managed in **IZYTRONIQ**.



Attention!

Observe all applicable legal stipulations with regard to personal data!



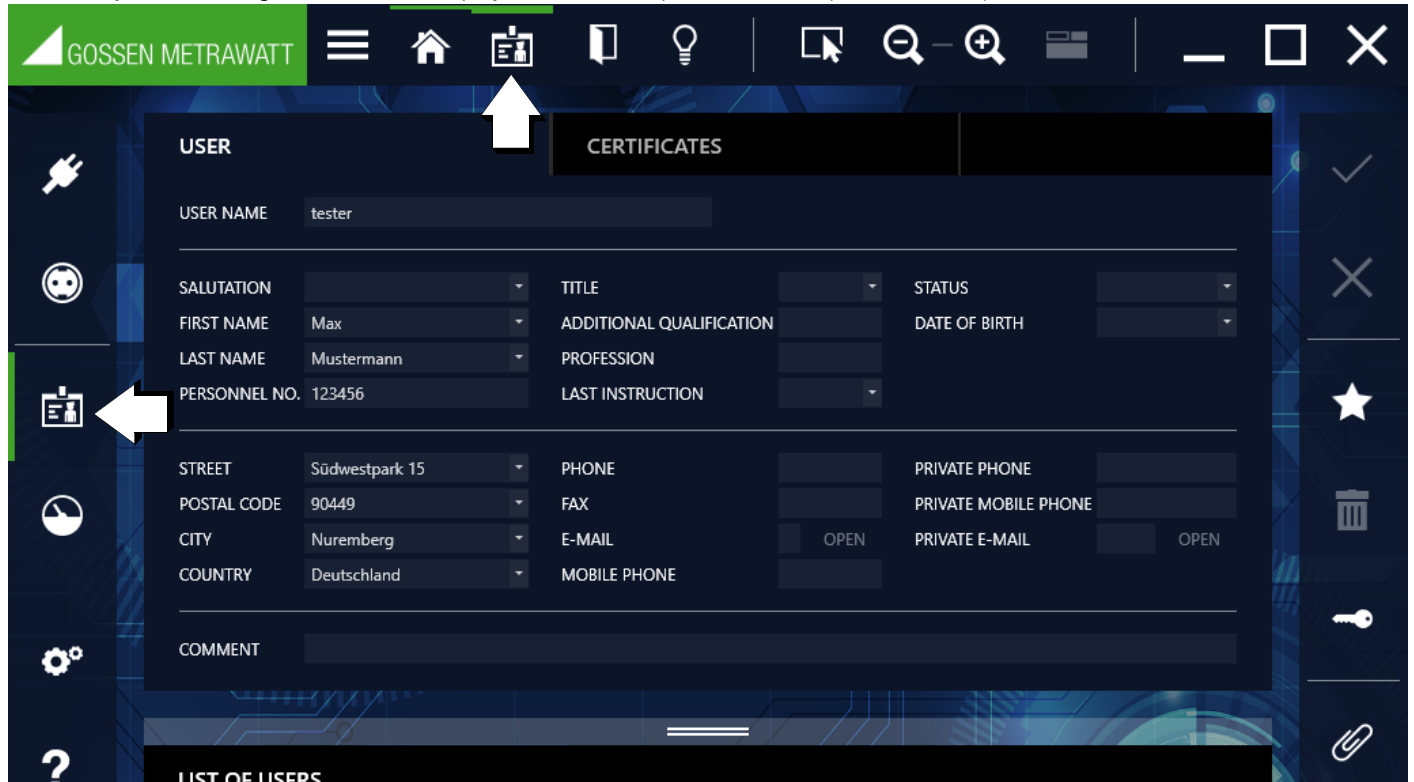
Menu Selection of Either User Administration – **BUSINESS Premium** and **ENTERPRISE** Versions or Roles Management – **BUSINESS Premium**, **ENTERPRISE** and **Premium CLOUD** Versions

16.1 User Administration – BUSINESS Versions Except for the Premium Variant

User administration consists of two tabs:

- User: personnel data, address information and qualifications (see „User Tab“)
- Certificates: Qualification documents (see „Certificates Tab“)

Additionally, the list of registered users is displayed in the lower part of the view (see „User List“).



Each user must specify and change his or her own password via the  function.

In the business variants ranging from Starter to Professional, each user can also reset and change passwords for other users as the administrator.

As of **BUSINESS Premium**, only the user who is authorized to do so can assign passwords.

How-to video, “Entering Users” 

User Tab

All personnel data can be entered to the user tab. Mandatory fields include “USERNAME” and “SURNAME”.

Tools:

-  Save changes
-  Cancel editing
-  Add user
-  Delete user –
exception: the user who is currently logged in cannot be deleted.
-  Password:
A password can be issued to each user.
-  Manage attachment (add, view and delete file/photo)
-  Print (see „Printing“)

Certificates Tab

All documents related to qualification such as training, degrees, certificates etc. can be entered to the certificates tab. "DESCRIPTION" is a mandatory field.

Tools:

-  Save changes
-  Cancel editing
-  Add certificate
-  Remove certificate
-  Manage attachment (add, view and delete file/photo)
-  Print (see „Printing“)

(Since this tab is a list, the functions of the list view apply and, in addition, the list icons in the toolbar are activated – see „Lists“.)

User List

All registered users are displayed in the user list.

After selecting a user from the list, all associated master data and certificates are displayed.

Authorization to view user-specific data can be restricted by means of roles and rights.

Tools:

-  Save changes
-  Cancel editing
-  Add user
-  Delete user –
exception: the user who is currently logged in cannot be deleted.
-  Password:
A password can be issued to each user.
-  Manage attachment (add, view and delete file/photo)
-  Print (see „Printing“)

(Since this tab is a list, the functions of the list view apply and, in addition, the list icons in the toolbar are activated – see „Lists“.)

16.2 User Administration – BUSINESS Premium and ENTERPRISE Versions

In the ENTERPRISE version, user administration consists of four tabs:

- User: personnel data, address information and qualifications (see „User Tab“)
- Rights: Read and/or write privileges for customers can be assigned to the selected inspector here (see „Rights Tab“).
- Certificates: Qualification documents (see „Certificates Tab“)
- Test instruments: in preparation

Additionally, the list of registered users is displayed in the lower part of the view.

USER

USER NAME: admin

SALUTATION: TITLE: STATUS:

FIRST NAME: Max ADDITIONAL QUALIFICATION: DATE OF BIRTH:

LAST NAME: Mustermann PROFESSION: LAST INSTRUCTION:

PERSONNEL NO.:

STREET: PHONE: PRIVATE PHONE:

POSTAL CODE: FAX: PRIVATE MOBILE PHONE:

CITY: E-MAIL: OPEN: PRIVATE E-MAIL: OPEN:

COUNTRY: MOBILE PHONE:

COMMENT:

LIST OF USERS

MARK ALL EN	USER NAME	TITLE	FIRST NAME	LAST NAME	PERSONNEL NO.	SALUTATION	PROFESSION	STATUS	DATE OF BIRT
☐	admin		Max	Mustermann					
☐	tester		Peter	Tester					

Count=2

Each user must specify and change his or her own password via the function.

In the business variants ranging from Starter to Professional, each user can also reset and change passwords for other users as the administrator.

As of **BUSINESS Premium**, only the user who is authorized to do so can assign passwords.

User Tab

All personnel data can be entered to the user tab. Mandatory fields include "USERNAME" and "SURNAME".

Tools:

- Save changes
- Cancel editing
- Add user
- Delete user –
exception: the user who is currently logged in cannot be deleted.
- Password:
A password can be issued to each user.
- Manage attachment (add, view and delete file/photo)
- Print (see „Printing“)

Rights Tab

All existing customers are listed in the rights tab. Read or write privileges for the selected customer can be assigned by selecting them in the READ and/or WRITE columns.

Tools:

- Save changes
- Cancel editing

(Since this tab is a list, the functions of the list view apply and, in addition, the list icons in the toolbar are activated – see „Lists“.)

Certificates Tab

All documents related to qualification such as training, degrees, certificates etc. can be entered to the certificates tab. "DESCRIPTION" is a mandatory field.

Tools:

-  Save changes
-  Cancel editing
-  Add certificate
-  Remove certificate
-  Manage attachment (add, view and delete file/photo)
-  Print (see „Printing“)

(Since this tab is a list, the functions of the list view apply and, in addition, the list icons in the toolbar are activated – see „Lists“.)

User List

All registered users are displayed in the user list.

After selecting a user from the list, all associated master data and certificates are displayed.

Authorization to view user-specific data can be restricted by means of roles and rights.

Tools:

-  Save changes
-  Cancel editing
-  Add user
-  Delete user –
exception: the user who is currently logged in cannot be deleted.
-  Password:
A password can be issued to each user.
-  Manage attachment (add, view and delete file/photo)
-  Print (see „Printing“)

(Since this tab is a list, the functions of the list view apply and, in addition, the list icons in the toolbar are activated – see „Lists“.)

16.3 User Administration Premium CLOUD

User administration for the **Premium CLOUD** variant has a significantly different approach as compared with the other variants.

After registering for the **GMC-INSTRUMENTS CLOUD** and creating your first user account (see „Login/Logout“), additional users can be added, managed and deleted. Please note that a license is required for each user. Detailed information can be found in „Licensing **Premium CLOUD**“.

You can't add or remove users yourself in the **Premium CLOUD** variant – you can only conduct advanced editing. In the **Premium CLOUD** version, user administration consists of four tabs:

- User: personnel data, address information and qualifications (see „User Tab“)
- Rights: Read and/or write privileges for customers can be assigned to the selected inspector here (see „Rights Tab“).
- Certificates: Qualification documents (see „Certificates Tab“)

User Tab

All personnel data can be entered to the user tab. Mandatory fields include "USERNAME" and "SURNAME".

Tools:

-  Save changes
-  Cancel editing
-  Add user



Delete user –
exception: the user who is currently logged in cannot be deleted.



Password:
A password can be issued to each user.



Manage attachment (add, view and delete file/photo)



Print (see „Printing“)

Rights Tab

All existing customers are listed in the rights tab. Read or write privileges for the selected customer can be assigned by selecting them in the READ and/or WRITE columns.

Tools:



Save changes



Cancel editing

(Since this tab is a list, the functions of the list view apply and, in addition, the list icons in the toolbar are activated – see „Lists“.)

Certificates Tab

All documents related to qualification such as training, degrees, certificates etc. can be entered to the certificates tab. “DESCRIPTION” is a mandatory field.

Tools:



Save changes



Cancel editing



Add certificate



Remove certificate



Manage attachment (add, view and delete file/photo)



Print (see „Printing“)

(Since this tab is a list, the functions of the list view apply and, in addition, the list icons in the toolbar are activated – see „Lists“.)

User List

All registered users are displayed in the user list.

After selecting a user from the list, all associated master data and certificates are displayed.

Authorization to view user-specific data can be restricted by means of roles and rights.

Tools:



Save changes



Cancel editing



Add user



Delete user – exception: the user who is currently logged in cannot be deleted.



Password: A password can be issued to each user.



Manage attachment (add, view and delete file/photo)



Print (see „Printing“)

(Since this tab is a list, the functions of the list view apply and, in addition, the list icons in the toolbar are activated – see „Lists“.)

16.4 Roles Management – BUSINESS Premium, ENTERPRISE and Premium CLOUD Versions

Powerful user rights management is available to the user as of software variant **IZYTRONIQ BUSINESS Premium** or **IZYTRONIQ ENTERPRISE Premium**. Roles can be set up and assigned to users via user rights management. Read and write privileges can be assigned to groups of people using this role structure (for example trainees group, inspectors group). The rights of individual users can be further restricted as well. For example, it's possible to only allow a given user to access a specific customer's test objects.

Users can be assigned rights by activating a checkbox in roles management, or removed again by deactivating it. Users are assigned roles by means of which they're granted rights. It's also possible to specify that these rights should only apply to certain customers. Various customers can be assigned read and/or write privileges in the rights tab in user administration to this end (see „User Administration – **BUSINESS Premium** and **ENTERPRISE** Versions“). If the administrator activates the corresponding checkbox, the rights specified in the roles will only apply to the customers added to the list.

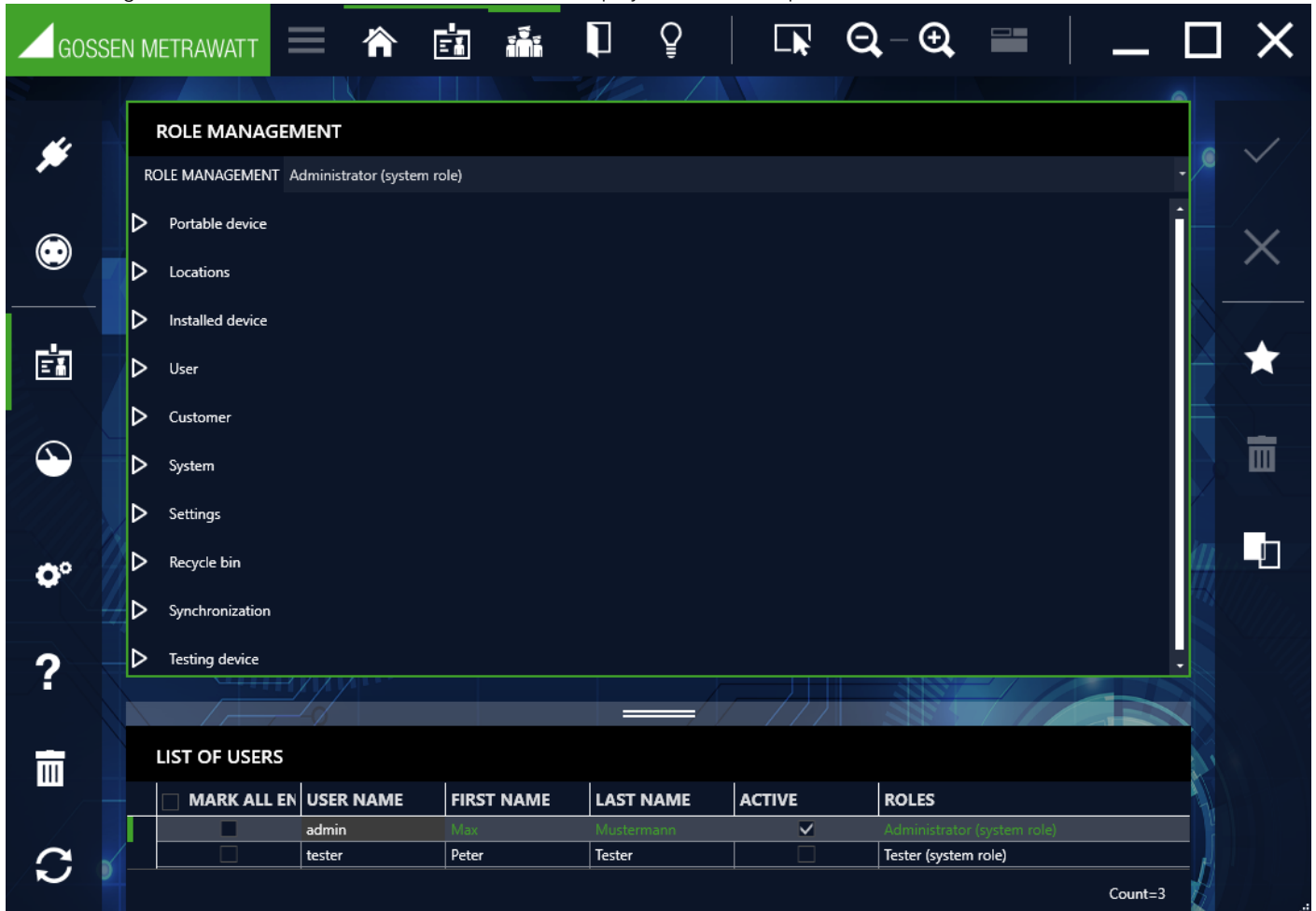
Multiple roles can be assigned to users. These are displayed in the ROLES column. The ACTIVE column shows who owns the role which is currently selected in the upper window (in the saved state).

The following roles are predefined by default:

- Administrator
- Inspector
- Staff

Additional roles can also be defined. By entering checkmarks to the rights in the different categories, a role can be assigned to them.

The list of registered users created in user administration is displayed in the lower part of the view.



MARK ALL EN	USER NAME	FIRST NAME	LAST NAME	ACTIVE	ROLES
☒	admin	Max	Mustermann	☒	Administrator (system role)
☐	tester	Peter	Tester	☐	Tester (system role)

Count=3

Tools:

 Save changes

 Cancel editing

 Add role

 Delete role:
exception: the user who is currently logged in cannot be deleted.

 Duplicate role:
This command copies the selected role. The name of the role is copied, to which the word Copy is added.

Procedure for Adding a Role

1. Select the desired role (e.g. administrator, inspector or staff) that you want to assign to a specific user from the role management row in the upper window using the pull-down menu. Alternatively, you can create a new role which will then also appear in the pull-down menu.
The list of users then shows the users for whom this selected role privilege is already active or available, indicated in each case by the checkmark in the ACTIVE column.
2. Enter a checkmark to the ACTIVE column for the user who will be assigned the previously selected role, along with the corresponding rights. Current role privileges are displayed in the ROLES column.
3. After saving, the new role is conclusively transferred to the selected user.

Procedure for Revoking a Role

1. Select the desired role (e.g. administrator, inspector or staff) that you want to revoke from a specific user from the role management row in the upper window using the pull-down menu.
The list of users then shows the users for whom this selected role privilege is already active or available, indicated in each case by the checkmark in the ACTIVE column.
2. Remove the checkmark from the ACTIVE column for the user from whom the previously selected role will be revoked, along with the corresponding rights. Current role privileges are displayed in the ROLES column.
3. After saving, the revoked role is conclusively deleted.

17 Recycle Bin

Data/objects which are deleted in **IZYTRONIQ** are moved to the recycle bin. This means that the data have not been permanently deleted and can thus be restored. The recycle bin must be opened to this end, the data to be restored must be selected and the “Restore” button must be clicked.



Note

Please note that lower-level elements and dependencies are deleted as well.

If data with subordinate elements are deleted, only the main object is displayed here.

The recycle bin view is broken down into a list view and a detail view:

- List view: the list of deleted data/objects is displayed at the top.
- Detail view: details associated with the selected elements are displayed at the bottom.

RECYCLE BIN

Drag a column header here to group by that column

MARK ALL...	OBJECT TYPE	OBJECT INFORMATION	DELETED ON	DELETED BY	WRITE PERMIS...
☒	Circuit	Designation: Machine1	2/27/2023 2:02:16...	admin	✓

Count=1

DETAILS

FIELD NAME	CONTENT
CHARACTERISTIC	8
NUMBER OF POLES	
NOMINAL CURRENT	16
CONDUCTOR TYPE	NYM-J
NUMBER OF CON...	3
CONDUCTOR CRO...	1.5
CONDUCTOR LEN...	
COMMENT	
DESIGNATION	Machine1
ID	C0002
TYPE	
SERIAL NUMBER	
MANUFACTURER	
STATUS	
LAST TEST	12/30/2022
LAST TESTER	undef.
LAST TEST RESULT	Passed
NEXT TEST	
INTERVAL (MONT...	
TEST CENTER	
DEPARTMENT	

Count=24

Tools:



Restore: restore selected objects



Delete: permanently delete selected objects



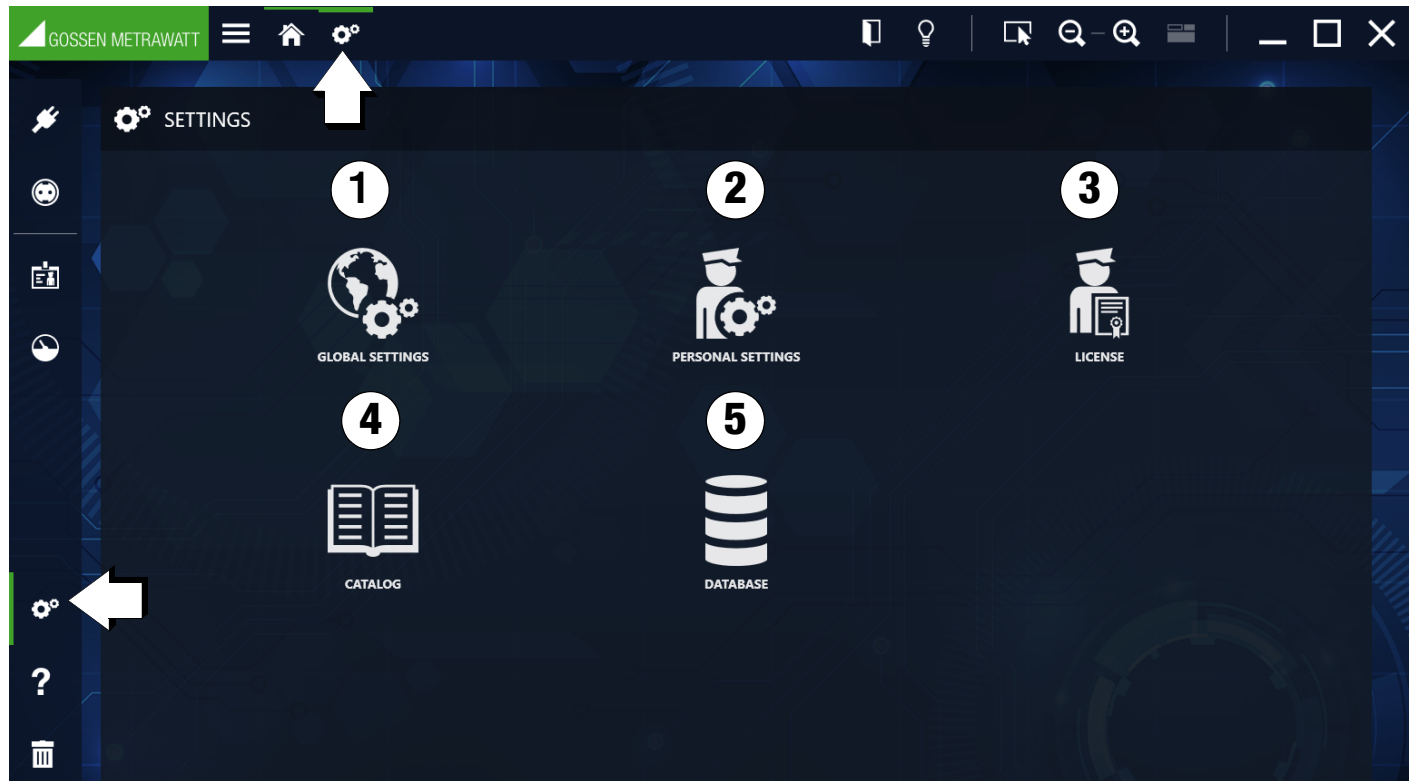
Empty recycle bin: permanently delete all items from the recycle bin

(Since this tab is a list, the functions of the list view apply and, in addition, the list icons in the toolbar are activated – see „Lists“. These functions apply only to the list view).

18 Settings

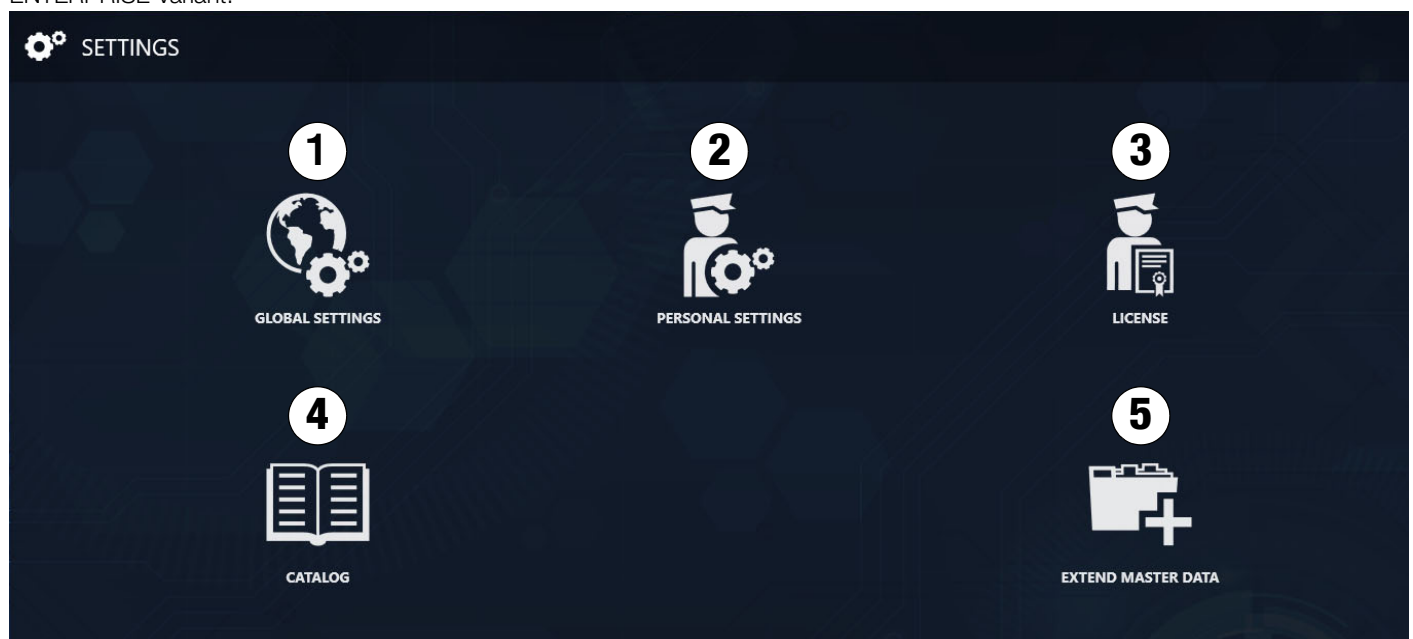
Global and personal settings for working with **IZYTRONIQ** are configured in this module. Different settings are possible depending on your **IZYTRONIQ** variant.

BUSINESS and EDUCATION Variants:



1. „Global Settings“
2. „Personal Settings“
3. „License“
4. „Catalogs“
5. „Backing Up / Restoring the Database (**BUSINESS** and **EDUCATION** variants only)“

ENTERPRISE Variant:



1. „Global Settings“
2. „Personal Settings“
3. „License“
4. „Catalogs“
5. „Expand Master Data – ENTERPRISE Version“

18.1 Global Settings

Settings which apply globally to all users can be found here.

Display of Test/Calibration Deadlines

Deadlines/colors for scheduled dates – default values:

- Red: deadline exceeded
- Orange: deadline exceeded in xx days
- Yellow: deadline exceeded in yy days

File Management

Defines the path for storing file attachments. By default it is the same as the path for the database.



Attention!

This path must be local on the device where the IZYTRONIQ is installed. It must NOT be a network path, OneDrive-Pfad, or similar.

As of ENTERPRISE, installation differs from BUSINESS (see „ENTERPRISE“).

Printing

As of **BUSINESS Advanced**: The default file format (.pdf, .doc or .docx) in which selected data will be saved via the print menu (Save as) can be preselected here (see also „Printing“).

Entering Objects

How the IDs of the objects will be set up in the tree structure can be specified here.

A separate rule can be created for each object type – selectable via pull-down menu.

Object ID format and increment must be selected in order to specify formulation of the object name. For object ID, the name of the object type is first displayed as a prefix (beginning of the object name, field to the left of [ID]) or as a suffix (end of the object name, field to the right of [ID]). However, prefix or suffix can be selected as desired. The result of the preselection is displayed simultaneously as an example of an object ID. The number of digits in the ID number and the number of digits in the ID increment must also be specified.

Conflict Pool

Colors for the display in the conflict manager depending on the number of entries. Default setting:

- Green: up to 10 entries
- Yellow: more than 10 and up to 100 entries (limit values are set automatically)
- Red: equal to or more than 100 entries

Report Templates

The following entries and attachment are used for all test reports.

- Contractor: The address of the respective contractor is entered here including name, street, postal code, city and country (pull-down menu).
- Logo: The logo for all future test reports is incorporated with the help of the “SELECT” button (possible as of **BUSINESS Advanced**). After clicking “SELECT”, an explorer window appears with recommended image formats (*.jpg, *.jpeg, *.bmp), in which you can search for a user-defined logo file.

“Replacing Logo and Company Address”



Updating

- Check for updates automatically: selection can be made here as to whether or not **IZYTRONIQ** will search for updates when started.
- Check for updates: a manual search for updates can be started by clicking this button.

Restore Default Settings

All selected global settings are reset to their default values.

An extra “system settings” authorization is required for reset.

Tools:



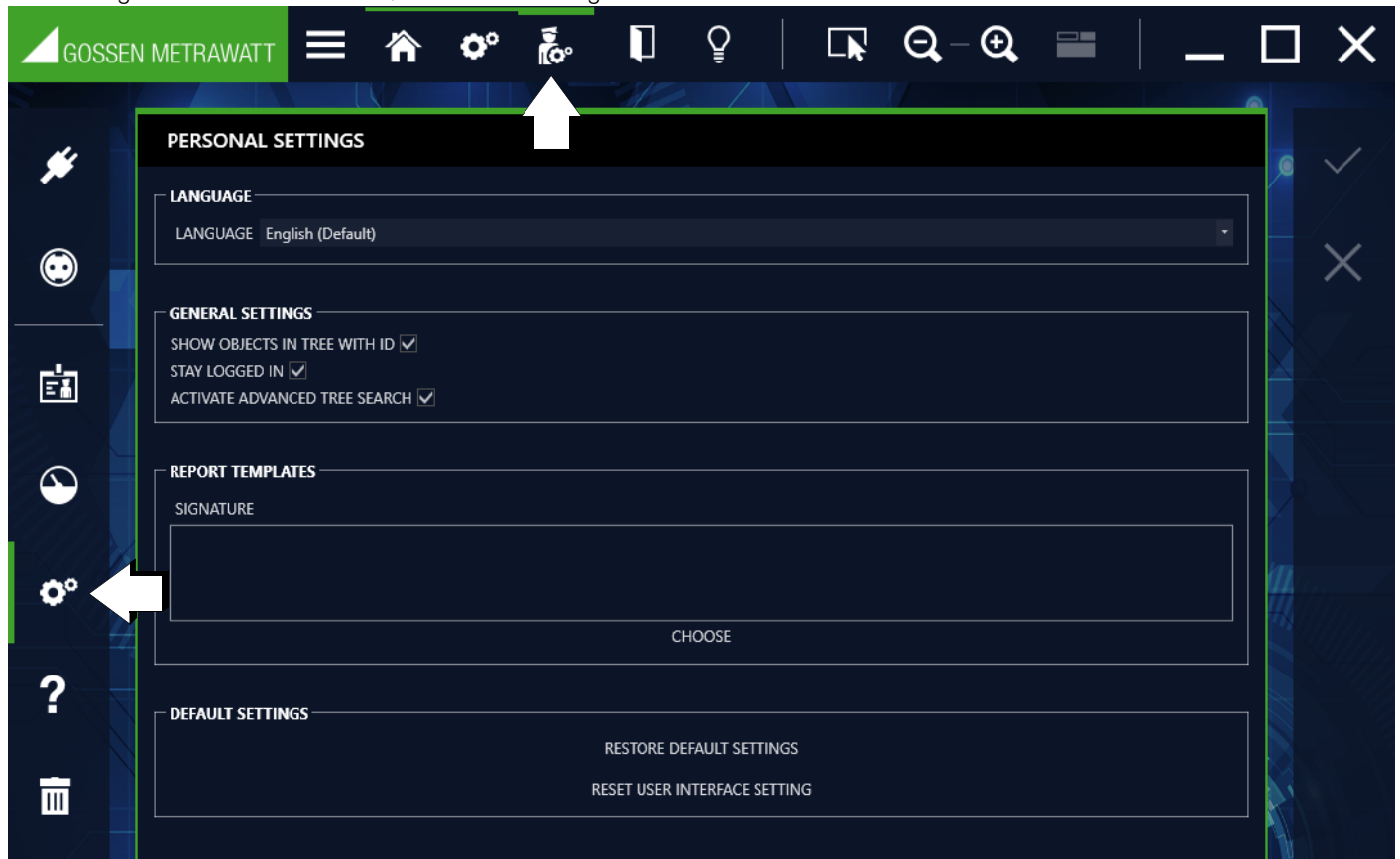
Save changes



Cancel editing

18.2 Personal Settings

The user can enter personal settings here that apply only to the logged-in user, for example change language, show or hide IDs, store files with signatures or reset **IZYTRONIQ** to its default settings.



Language

Select the language for the user interface from a pull-down menu.

General Settings

- **SHOW OBJECTS IN TREE WITH ID:** Use this setting to preselect whether or not objects in the tree are displayed with an ID number (default setting = yes, with ID).
- **REMAIN LOGGED IN:** If you have selected “REMAIN LOGGED IN” in the login window, you can cancel this selection here. Remove the checkmark from the “REMAIN LOGGED IN” parameter by clicking the field once again and confirming your change.
- **ACTIVATE ADVANCED SEARCH FUNCTION (FOR LARGE DATA VOLUMES):**
Refer to „Advanced Search Function“ for the meaning of this setting (default setting = yes).

Report Templates

You can include your signature here for attachment to report templates. After clicking “SELECT”, an explorer window appears with recommended image formats (*.jpg, *.jpeg, *.bmp), in which you can search for the corresponding file.

Default Settings

- Selecting “Restore Default Settings” makes it possible to reset all previously entered personal settings (language, display IDs in tree structures).
- Selecting “Reset Window Settings” makes it possible to reset all previously entered personal settings that affect the user interface (list displays, window size, window positions etc.).

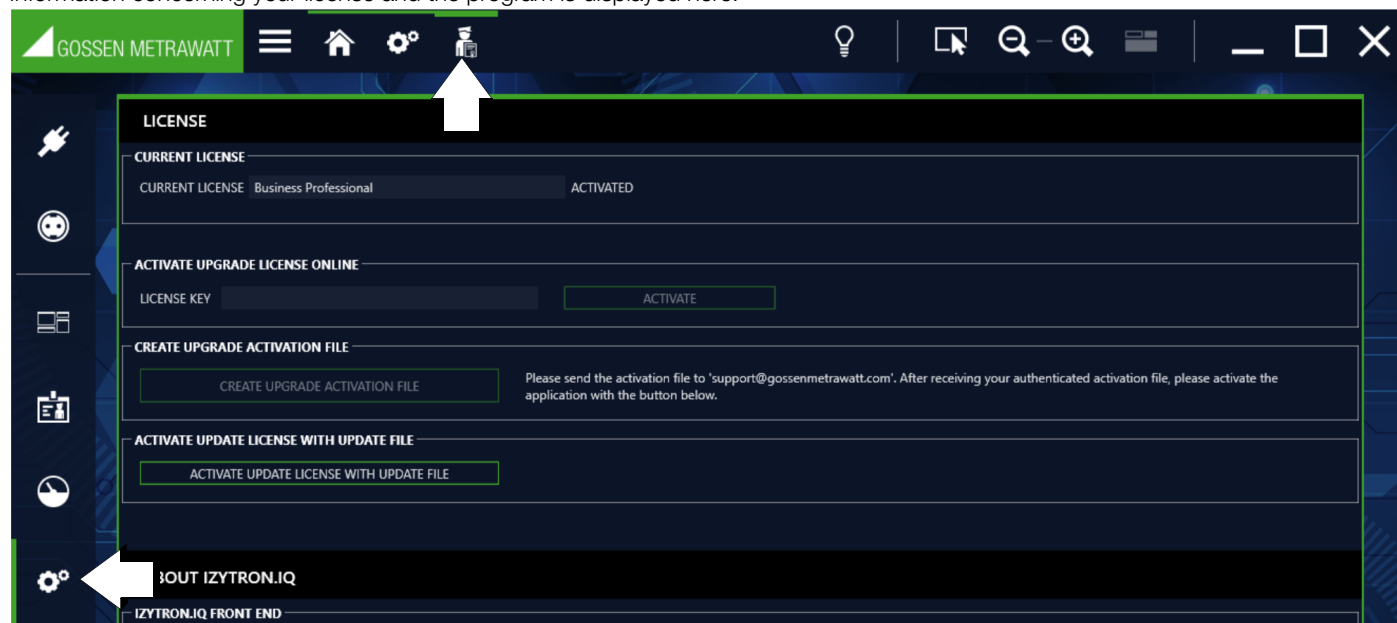
Tools:

 Save changes

 Cancel editing

18.3 License

Information concerning your license and the program is displayed here.



Current License

The currently activated license is displayed here.

Upgrade – activate license online / generate activation file / activate with activation file

If your requirements become more demanding, you can expand the range of functions by upgrading at any time. All existing data is of course retained during this process.

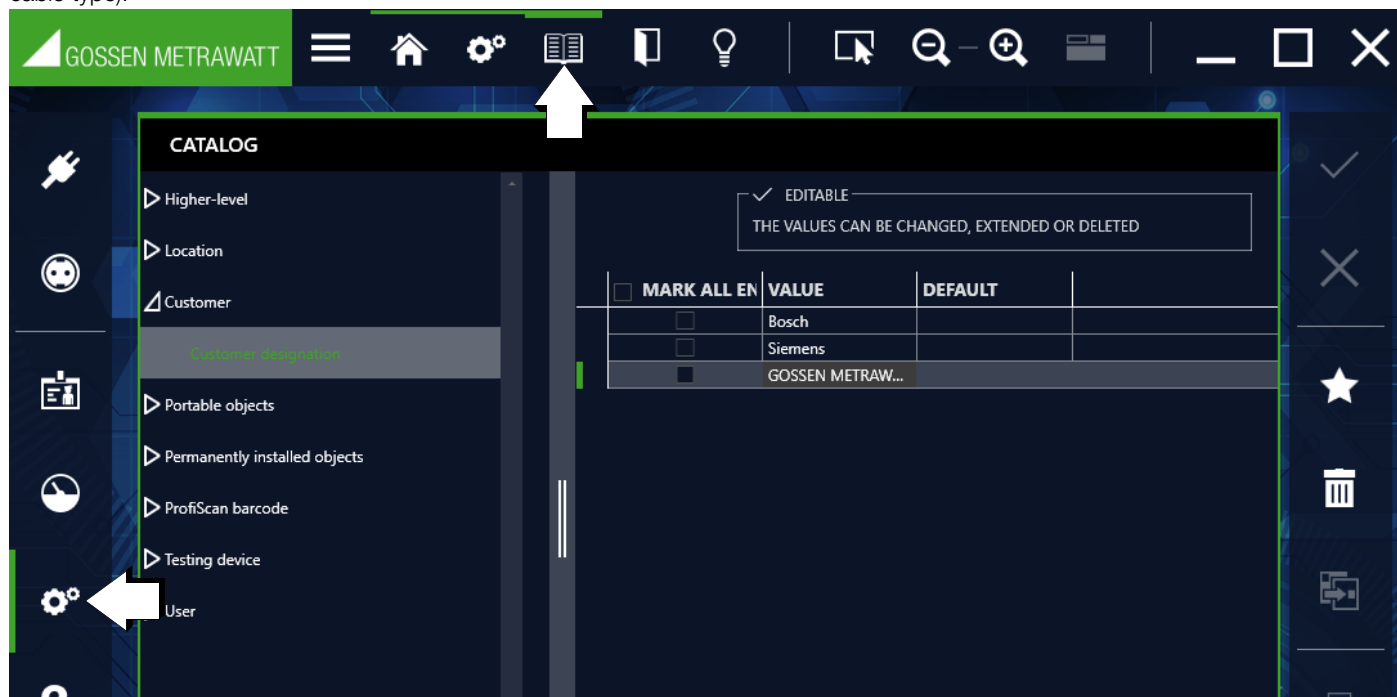
The upgrade procedure depends on your software version. Complete information on how to upgrade your software can be found under „Upgrade“.

About IZYTRONIQ

The program version, the build and the database version are displayed here.

18.4 Catalogs

Catalogs are available for certain data fields. Some of the catalogs are predefined at the factory and cannot be changed. These are catalogs which are essential for the Profitest test instrument in order to evaluate its measured values. Other catalogs are freely editable. These catalogs are used, for example, for auto-completion of field entries, but can also be transferred to the Profitest as an inventory tool (e.g. cable type).



The catalog view consists of two fields. A hierarchical view of the entry fields is displayed as a tree structure in the left-hand field. After selecting the entry fields, the input window appears in the right-hand field. A note appears in the upper right area indicating whether or not the respective values can be changed. If this is possible, further entries can be made using the ★ command.

The following types of catalog entries are available:

- Alphanumeric entry fields – any desired input
Entry fields to which any desired number and character strings can be entered. Each completed entry is transferred to the respective catalog. These catalogs are used for auto-completion.
- Numeric entry fields with and without unit of measure – any desired input
Entry fields to which numerical values within specified limits can be entered. In addition, selection can be made from a list of preset units of measure. Values are entered by selecting the pen icon . These catalogs are used for auto-completion.
- ProfiScan barcode entry fields – any desired input
Ready-made barcodes (CODE 128 and QR code) are available for test instruments from the PROFITEST MASTER/PRIME series, which serve as input aids for the following functions. ProfiScan extends options for test documentation – a categorized comment can be saved to each electrical object in the tree structure by simply scanning the respective barcode. The following categories are available:
 - Defects (inspection defects)
 - Test (reason for test: new installation, periodic test)
 - Inspection (visual inspection documentation)
 - Test run (function test)
 - Reporting (scope of testing)

IZYTRONIQ makes it possible to create your own barcodes which can be added to the end of the catalog list.

The corresponding texts can be assigned to a test object in the **PROFITEST...** test instrument by simply scanning the desired barcode.

FAULTS

Cover defective

Cover missing

Is not installed properly

Has no designation

Housing broken

BARCODES



ProfiScan example (print preview / PDF)

“Profiscan” 

Tools:

 Save changes

 Cancel editing

 Add element

 Remove element

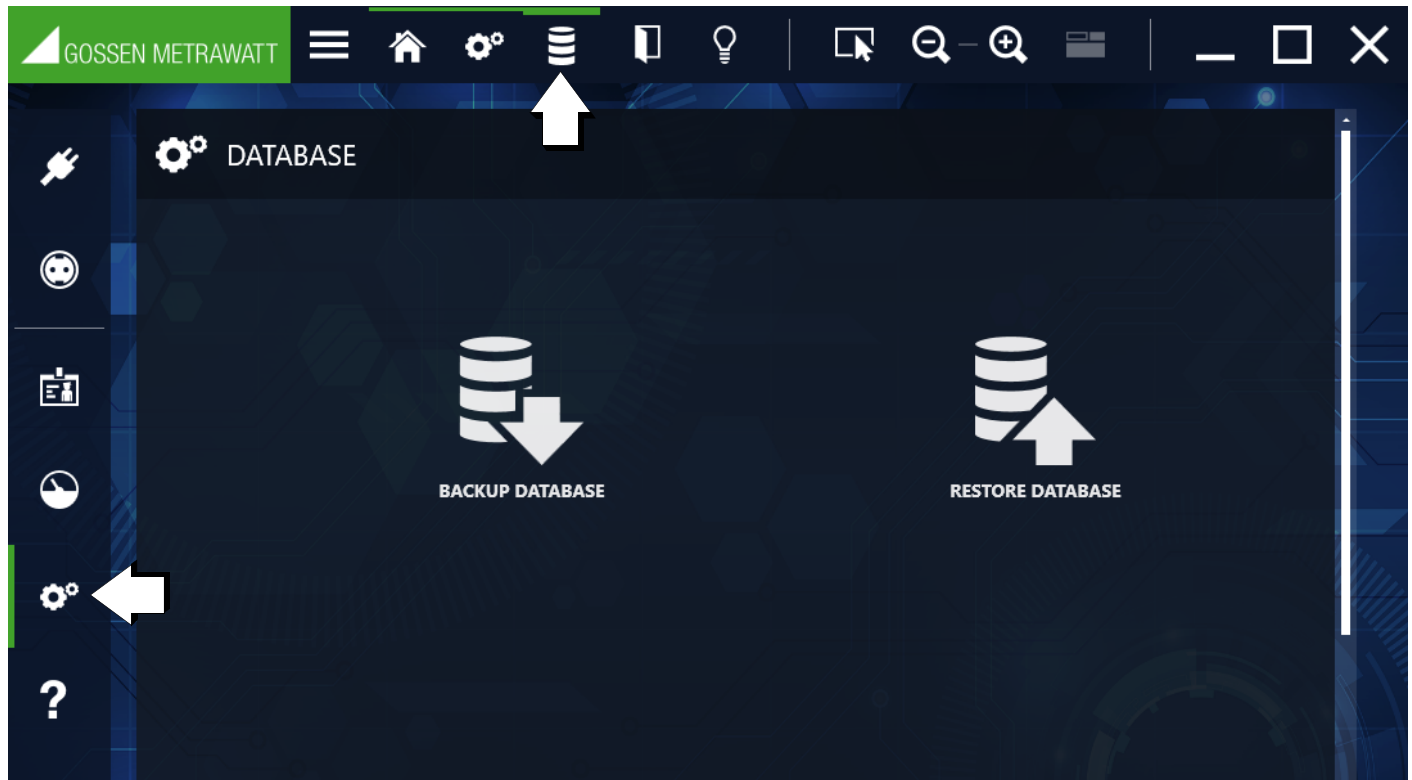
 Paste from clipboard

 Print:
Print and save the selected barcode list or all lists,
if main menu item “Barcode” has been selected (see „Printing“).

(Since this tab is a list, the functions of the list view apply and, in addition, the list icons in the toolbar are activated – see „Lists“.)

18.5 Backing Up / Restoring the Database (BUSINESS and EDUCATION variants only)

The internal local database can be backed up and a previous state can be restored. The database is exported or re-imported as a ZIP file to this end.



Note

This section describes import and export of the entire database in ZIP format.

For import and export of data, please refer to:

- „Data Import Function“ and „Data Export Function“ for portable objects in general
- „Data Import Function“ and „Data Export Function“ for stationary objects in general
- Prüfgerät **SECUTEST...**/ **SECULIFE...**: „Data Export to the Test Instrument“ bzw. „Data Import from a Test Instrument“
- Prüfgerät **PROFITEST...**: „Data Export to the Test Instrument“ bzw. „Data Import from a Test Instrument“

Backup Database (export as ZIP file)

The internal database can be backed up as a ZIP file. By default, the file is saved to the same path as the database and is automatically tagged with backup date and time. Storage location and name can be changed.

1. Select **Settings**.
The **Settings** menu appears.
2. Select **Database**.
The **Database** menu appears.
3. Select **Back Up Database**.
The **Back Up Database** dialog appears.
4. Optional: Change the file name and/or the location by selecting **Save as** and specifying the file name and/or the location.
5. Specify the maximum file size in the **Max. Segment Size** field. If this value is exceeded, the database is saved to multiple ZIP files. Enter a value of 0 in order to save the entire database to a single ZIP file.
6. Click the **Backup** button.
The database is backed up.

Restoring the Database (import from ZIP file)

You can restore the internal database to a previous state by importing a previously created backup copy (see „Backup Database (export as ZIP file)“).

**Attention!**

Before restoring, backup the current database as well (see „Backup Database (export as ZIP file)“).

1. Select **Settings**.
The **Settings** menu appears.
2. Select **Database**.
The **Database** menu appears.
3. Select **Restore Database**.
The **Restore Database** dialog appears.
4. Click **Select** and specify a backup copy (ZIP file).
5. Click the **Restore** button.
A security prompt appears.
6. Acknowledge the prompt by clicking **Yes**.
The database is restored.
7. Acknowledge the completion message by clicking **OK**.
IZYTRONIQ is restarted.

Using Older Database Versions

In the **BUSINESS**, **EDUCATION** and **ENTERPRISE** variants, the structure of the local database depends on the **IZYTRONIQ** version.

If an older database is imported as a backup into a newer version within the same variant, the database structure is automatically updated during import. Proceed as described in „Restoring the Database (import from ZIP file)“ to this end.

Example: A database from an **IZYTRONIQ BUSINESS** installation with software version 3.0 can be imported directly into a **BUSINESS** installation with current software version 4.6.

In the event of a variant upgrade – e.g. from **BUSINESS** to **ENTERPRISE** – the database backup cannot be imported directly if the software versions differ. In this case, the database backup must first be imported to a corresponding **IZYTRONIQ** version. **IZYTRONIQ**, and thus the database as well, must then be updated to the version of the target variant, so that the database is updated to its software version. Export the updated database once again. This second, updated backup can then be imported into the other **IZYTRONIQ** variant.

Example: A database backup from an **IZYTRONIQ BUSINESS** installation with software version 3.0 needs to be imported into an **IZYTRONIQ ENTERPRISE** installation with software version 4.6. This involves importing the database backup into **IZYTRONIQ BUSINESS** 3.0, updating it to version 4.6, exporting the database again (with 4.6 format) and then importing it into **IZYTRONIQ ENTERPRISE** 4.6.

This process is easiest if the current software version is always used.

**Attention!**

If data used for updating the backup is already included in **IZYTRONIQ**, it will be overwritten!

Back up the database before updating (see „Backup Database (export as ZIP file)“).

1. Open an **IZYTRONIQ** variant and version which corresponds to the backup database to be imported.
Example: Database backup from **IZYTRONIQ BUSINESS** 3.0 = open **IZYTRONIQ BUSINESS** 3.0.

**Attention!**

You'll be asked if you want to install the latest **IZYTRONIQ** version. Do not update the software!

2. Back up existing data if necessary (see note above).
3. Import the old database backup (see „Restoring the Database (import from ZIP file)“).
4. Close **IZYTRONIQ**.
5. Update the old **IZYTRONIQ** software to the target variant's version. See also „Update“.

Example: The target variant is **IZYTRONIQ ENTERPRISE** 4.6. Update **IZYTRONIQ BUSINESS** 3.0 to **IZYTRONIQ BUSINESS** 4.6.

The procedure is easiest if the target variant corresponds to the current software version. Then simply close the old **IZYTRONIQ** software, start it again and accept the update prompt. Otherwise the appropriate installation files will have to be available.

The software, and thus the database as well, are updated.
6. Export the updated database (see „Backup Database (export as ZIP file)“).

The old database is now in a format which is compatible with the newer **IZYTRONIQ** version, and can be imported into another **IZYTRONIQ** version with the same software revision.

Example: By means of the update, your **IZYTRONIQ BUSINESS** variant, and thus the previously imported database as well, have been updated from 3.0 to 4.6. The export provides you with a database backup in version 4.6.

7. Import the new database backup to the other variant with the same software revision (see „Restoring the Database (import from ZIP file)“).
Example: Import the backup created in the previous step from **IZYTRONIQ BUSINESS 4.6** to **IZYTRONIQ ENTERPRISE 4.6**.
Your data are now available in the other variant.
8. If applicable, restore the old **IZYTRONIQ** version and import the initially saved original database.
Example: Uninstall **IZYTRONIQ BUSINESS 4.6** and reinstall **IZYTRONIQ BUSINESS 3.0**. Import the database backup saved in step 2.

Refer to the „Upgrade“ section if you require information concerning upgrades.

18.6 Expand Master Data – ENTERPRISE Version

A new tab for each object type (1) can be added to the detail view with the help of the “Expand Master Data” function (see „The “Enter, Change, Lists” Function“). Depending on the language (3) to be selected, the user can freely define the name of the respective tab (2). Up to 30 entry fields can be added to this tab. 5 input formats are available for these fields: yes/no, date, decimal, integer and text.

Adding a Field

Select the ★ icon in the toolbar. Depending on the language (5) to be selected, enter the name of the new field (4).

5 different entry formats are available under DATA TYPE (6). The new field is added to the next free position by clicking "CREATE". The new field is confirmed by clicking "Save".

ADD FIELD

NAME OF FIELD 4 English (Defa... 5

DATATYPE 6

- Boolean (yes/no)
- Boolean (yes/no)
- Date
- Decimal number
- Integer
- Text

CREATE | CLOSE

Positioning a Field

Occupied fields can be selected using the cursor (a green outline appears) and positioned as desired using drag & drop. The new position is confirmed by clicking "Save".

Activating a Field

The tab with all newly created fields is not displayed in the detail view of the corresponding object type until the "ACTIVATED" field is activated.

Tools:

Save changes

Cancel editing

Add field

Delete field

Edit field

19 Synchronization

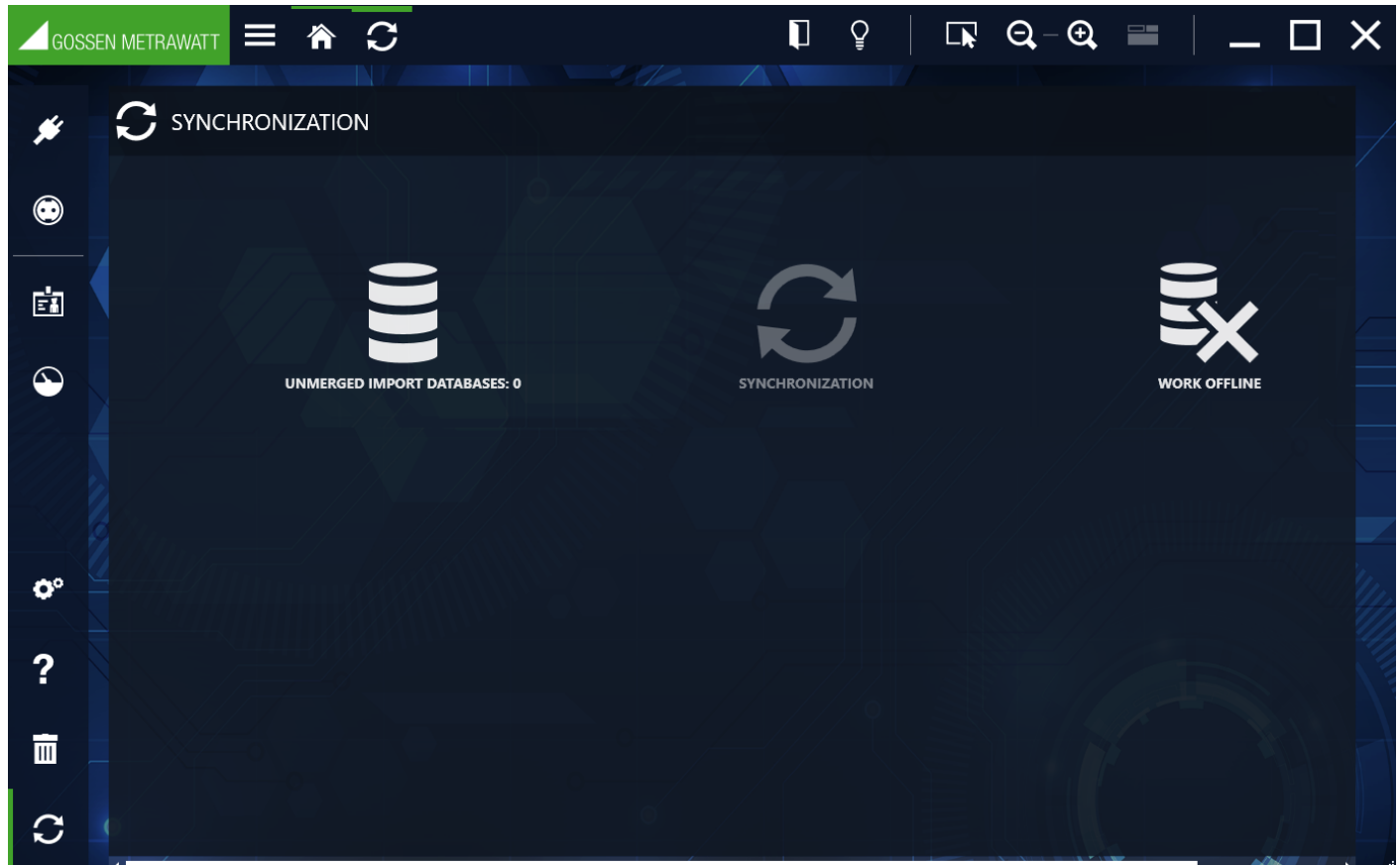
The SYNCHRONIZATION menu is available in the **ENTERPRISE Premium**, **ENTERPRISE Ultimate** and **Premium CLOUD** variants for controlling the exchange of data with offline clients with **ENTERPRISE Ultimate**.

- **ENTERPRISE Ultimate** and **Premium CLOUD**: synchronization between the database on the server and the local clients (e.g. laptop). Synchronization must be performed actively and offers the option of deciding which data is saved for the offline mode.
- **ENTERPRISE Premium**: only unresolved import databases can be resolved.



Note

An Internet connection is required for synchronization.



Unresolved Import Databases (ENTERPRISE Premium, ENTERPRISE Ultimate and Premium CLOUD only)

Unresolved import databases occur when a user doesn't import all data immediately when using **ENTERPRISE Ultimate**, and instead defers some of the data. For example, he does not import some of the measurements. These deferred data are then displayed as an unresolved import database and can be checked at leisure by the same or another user with an **ENTERPRISE Premium**, **ENTERPRISE Ultimate** or **Premium CLOUD** license and administrative rights, and then imported if necessary.

1. Select **Synchronization**.
The **Synchronization** menu appears.
2. Select **UNRESOLVED IMPORT DATABASES**.
The **SELECT IMPORT DATABASE** dialog appears.
3. Select the data base(s).
4. Click the **IMPORT** button.
The selected database(s) is/are imported.

Synchronizing Data (ENTERPRISE Ultimate only)

In order to make the required customer or object data available at the corresponding locations of use, it's necessary to synchronize this data between the server database and the local database of the respective laptop/notebook.

After on-site testing, locally stored measurement and test data must then be backed up again to the server database by means of synchronization.

The synchronization process involves several phases. First of all, the local database is uploaded and merged with the server database. The user can then decide whether or not to download data for offline use, and if so which data. The selected data are then downloaded as a local database for the offline mode.

1. Start **IZYTRONIQ**.

2. Log in.
The “Offline Mode” / “Online Mode” prompt appears.
3. Select **Online Mode**.
4. Acknowledge by clicking **OK**.
5. Select **Synchronization**.
The **Synchronization** menu appears. You'll see whether or not data are waiting to be synchronized under **Unresolved Import Databases**.
6. Select **Synchronization**.
The synchronization process is started. The local database is uploaded and merged with the server database.
The **Download Objects** prompt appears.
7. Respond to the **Download Objects** prompt in order to specify which data should be available in the offline mode.
No: No data are downloaded.
Yes: A further prompt appears asking which objects should be downloaded. After confirming with Yes, the tree view appears for free selection of the objects to be downloaded. If No is selected, the objects included in the previous synchronization are downloaded.
The selected data are downloaded and are available as a local database for offline use.
8. Synchronization has been completed. Confirm successful completion by clicking **OK**.

Resetting the Local Database - Working Offline (ENTERPRISE Ultimate only)

In order to work offline with **ENTERPRISE Ultimate**, the local database is first reset and then synchronized with the server so that both are up to date. After returning to online mode, the local database is then synchronized with the server's database.

1. Select **Synchronization**.
The **Synchronization** menu appears.
2. Select **RESET LOCAL DATABASE**.
The **RESET LOCAL DATABASE** security prompt appears.
3. Acknowledge the prompt by clicking **Yes**.
4. Select the desired data.
5. Click the **Synchronization** button.
The local database is reset, and is then filled with the selected objects and saved. You can now work offline.

Working Offline (Premium CLOUD only)

You can work offline with **Premium CLOUD**. After selecting this option, the local database is reset and then synchronized with the server so that both are up to date. After returning to online mode, the local database is automatically synchronized with the server's database.

1. Select **Synchronization**.
The **Synchronization** menu appears.
2. Select **WORK OFFLINE**.
The **WORK OFFLINE** security prompt appears.
3. Acknowledge the prompt by clicking **Yes**.
The local database is reset, and then it's synchronized and saved. You can now work offline.

20 Help ?

Opens online help (see „About this Online Help“).

21 Lists

The following functions are available in all of the modules in which lists are displayed:

- Sorting
- Grouping
- Filtering
- Multi-Assistant (as of **BUSINESS Professional**)

“Working With the List, Filter Functions, Sorting, Filter Editor and Column Wizard” 

“Working With the List, Generating an Excel File” 

21.1 Sorting

Any column can be sorted in ascending ▲ or descending ▼ order by clicking it. How the column is sorted is indicated by the corresponding icon (see below). Only one column can be sorted at a time. Clicking another column causes it to be re-sorted.

Drag a column header here to group by that column								
☐ MARK ALL EN	ID	OBJECT TYPE	MANUFACTURER	TYPE	SERIAL NU...	▲	STATUS	LAST TEST RESULT
☐	0003	Device	IKEA	B1603...	49389438759			Not passed
☐	999999	Device	bosch	zzt	88888888888			
☐	SCH0178	Device	Dell	Dell 1...	CN-0VUCH5			
☐	0555	Device	ASTEC	DA2-...	D484R20444C6			
☐	0131	Device	HP	KTC H...	F12941218050923			
☐	SCH0071	Device	HP	KTC H...	F12941218051001			
☐	0129	Device	HP	KTC H...	F12941224061692			
☐	0128	Device	HP	KTC H...	F12941224067470			

21.2 Grouping

Entries in the selected column can be grouped. This means that elements of the same type from the selected column are grouped together.

Example: The object type column contains 15 elements, 10 of the “device” type and 5 of the “medical device” type. If this column is grouped, 2 groups are created – a “devices” group with 10 elements and a “medical devices” group with 5 elements.

Grouping by several columns at the same time is also possible. Columns are grouped by dragging and dropping the column headings into the grouping box. Grouping can be undone by dragging and dropping the column headings back into the list header. The place at which the column is inserted is indicated by an orange double arrow.



Note

If the column heading is moved to a position outside of the header, an  is displayed – the corresponding column is moved to the column editor and is thus no longer visible in the current list.

Grouping Box

Drag a column header here to group by

☐ MARK ALL EN	OBJECT TYPE	DESIGNATION	MANUFACTURER	SERIAL
☐	Medical device	Blutdruckmessgerät	Omron	
☐	Medical device	Blutdruckmessgerät	Omron	
☐	Medical device	Blutdruckmessgerät	Omron	
☐	Medical device	Blutdruckmessgerät	Omron	
☐	Medical device	Blutdruckmessgerät	Omron	
☐	Medical device	Blutdruckmessgerät	Omron	
☐	Medical device	Blutdruckmessgerät	Omron	
☐	Medical device	Blutdruckmessgerät	Omron	
☐	Medical device	Blutdruckmessgerät	Omron	
☐	Medical device	Defibrillator	Bosch	3479398
☐	Medical device	MedBohrer	Eschenbach	0648563
☐	Medical device	Patientenbett	Schroder	7759893
☐	Device	Geschirrspülmaschi...		
☐	Device	Bohrhammer		
☐	Device	Kühlschrank		
☐	Device	Mixer		

Group List by Object Type

OBJECT TYPE

☐ MARK ALL ENTRI

DESIGNATION

MANUFACTURER

SERIAL NUMBER

INTERVAL (MONT

OBJECT TYPE: Device

☐	Mehrfachsteckdose		8765865	
☐	Geschirrspülmaschi...			
☐	Bohrhammer			
☐	Kühlschrank			
☐	Mixer			

OBJECT TYPE: Medical device

☐	Infusionspumpe	Bosch	3509834098	
☐	Defibrillator	Siemens	3465634	
☐	EKG	Siemens	456789	
☐	EEG	Bosch	98794857	
☐	Patientenbett	Schroder	77598934764648	
☐	Patientenbett	Schroder	77598934764648	
☐	Patientenbett	Schroder	77598934764648	
☐	Patientenbett	Schroder	77598934764648	
☐	Patientenbett	Schroder	77598934764648	
☐	Patientenbett	Schroder	77598934764648	

Grouping Results

Further editing functions are available in the list view toolbar:

OBJECT TYPE

MANUFACTURER

DESIGNATION

SERIAL NUMBER

☐ MARK ALL	DESIGNATION	INTERVAL (MONT	ID	TYPE	STATUS	CUSTOMER DESIGNATION	CUSTOMER ID	LAST TEST
OBJECT TYPE: Device								
MANUFACTURER:								
DESIGNATION: Geschirrspülmaschine								
DESIGNATION: Kühlschrank								
DESIGNATION: Mehrfachsteckdose								
DESIGNATION: Mixer								
OBJECT TYPE: Medical device								
MANUFACTURER: Bosch								
MANUFACTURER: Boso								
MANUFACTURER: Eschenbach								
MANUFACTURER: Medicon								

Grouping According to Several Columns

21.3 Filtering

Lists can be filtered simply, or in a complex manner using the filter editor.

Simple

- If the mouse pointer is positioned over an element in the header, the filter icon  is displayed. After clicking this icon, the color changes from white to orange and a filter menu with the following filter options is displayed. Filtering by multiple columns is possible:
- (Empty): Filter by rows which have no entry in the selected column.
- (Not empty): Filter by rows which have an entry in the selected column.
- (Entries): Filter by rows which have the selected entry in the selected column.

Drag a column header here to group by that column

☐ MARK ALL EN	ID	OBJECT TYPE 	MANUFACTURER	TYPE	S
☐	0001	Medical device			
☐	0001	Device		Bum...	1
☐	0002	Device	mbH	16/250	4
☐	0003	Device		B1603...	49
☐	0004	Device		ZLS-6...	
☐	0005	Device	Steinel	HL 19...	
☐	0006	Device	Fein	FMM...	
☐	0007	Device	AEG	BE 60...	
☐	0008	Device		16/250	

Filter Editor Function

The filter editor makes it possible to filter list entries with any degree of complexity. The filter editor is opened by clicking the  icon in the toolbar.

A filter consists of filter equations and their logical operations.

A filter equation consists of the column name (blue text) of the column to be filtered by, the filter condition (green text) and the filter value (white text). The number of filter values depends on the filter condition.

Logical Operation of the Filter Equation Filter Condition (green) Filter Value (white)

 **FILTER EDITOR** 

 **And** 

Filter Equation — **PROTECTION** **Equals** Checked 

Column Name (blue) — **RESULT** **Equals** Passed 

TESTER **Equals** Joe Public  — Delete Filter Equation

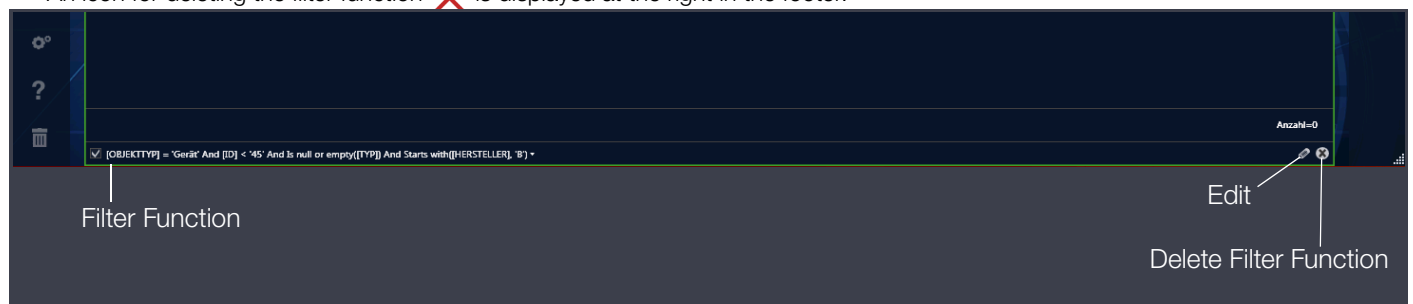
   Apply Filter

The column name, the filter condition and the logical operation can be selected by clicking the corresponding fields. The respective list of selection options is then opened:



If a filter has been set, it's identified accordingly:

- The filter function is displayed at the left in the list view footer.
- All columns used for filtering are flagged with the filter icon
- An icon for editing the filter function
- An icon for deleting the filter function



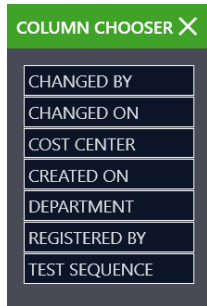
Tools:

- Save changes**
- Cancel editing**
- Print (see „Printing“)**
The filter list can be printed out with a printer or saved to a PDF, DOC or DOCX file. Barcodes and master data of selected objects can be printed or saved.
- Export to Excel**
This function can be used to export the filter list to Excel in CSV format. After clicking the icon, the Windows "Save as" menu appears. The desired storage location can be selected here. A file name must then be assigned. Export is completed by clicking "Save".
- Search**
The search function can be used to look for any search term in all columns. After clicking the search icon, a search window appears in the list view header. The search term can be entered here after selecting the entry field. Any matching term or terms are highlighted in yellow. The search term, and thus the highlighting as well, are deleted by clicking the delete icon in the search window. The search window is closed by selecting "Close".



Column Editor

The column editor, which contains all the column names, is opened by selecting the icon. Columns can be dragged from the container and dropped into the list header at the desired position. As a result, the entry no longer appears in the container. The place at which the new column is inserted is indicated by an orange double arrow. Columns can be removed from the list (moved to the column editor) by dragging them from the list header and dropping them.



Filter editor function (see above)

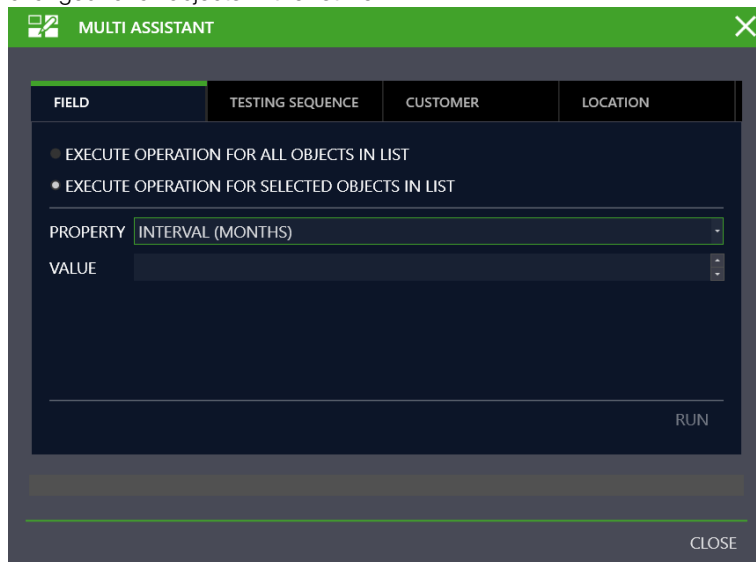


Resize

This function optimizes the width of all columns.

21.4 Multi-Assistant (as of BUSINESS Professional)

The properties of several objects can be changed simultaneously using the multi-assistant function. For example, test intervals can be changed for all objects in the list view.



The multi-assistant is available in the “Enter, Change, Lists” view for portable or stationary objects in the activated list view (green outline) (see „The “Enter, Change, Lists” Function“). The multi-assistant is also available in the test data preview.

The multi-assistant consists of four tabs: FIELDS, TEST SEQUENCES, CUSTOMER and LOCATION.

“Working with the Multi-Assistant”



The FIELDS Tab

Field content for selected object properties can be entered to a list of devices or changed here.

► First select the desired devices via the various selection functions, e.g. via tree selections or the Filter Editor Function.

The selected devices are displayed in the list view.

► If you want to assign new field content to selected devices only, the corresponding lines have to be selected. Otherwise, the selection applies to all devices in the list.

► After clicking the  icon, the multi-assistant tab menu appears.

► The “FIELDS” tab is already selected by default.

► Specify whether the action will be executed for all objects, or only for selected objects.

► Select an entry from the pull-down menu in the PROPERTY field.

► Enter the desired alphanumeric value to the VALUE field.

► Confirm by clicking “Execute”.

**Attention!**

The multi-assistant is a powerful tool. It makes it possible to selectively change data fields for many objects. After saving these changes, all edited data are irreversibly changed.

The TEST SEQUENCES Tab

Test sequences can be assigned to or removed from a list of devices here.

- ▶ First select the desired devices via the various selection functions, e.g. via tree selections or the Filter Editor Function.

The selected devices are displayed in the list view.

- ▶ If you only want to assign a test sequence to or remove it from selected devices, the corresponding lines have to be selected. Otherwise, the selection applies to all devices in the list.
- ▶ After clicking the  icon, the multi-assistant tab menu appears.
- ▶ Select the TEST SEQUENCES tab.
- ▶ Specify whether the action will be executed for all objects, or only for selected objects.

Removing Test Sequences

- ▶ Click "Remove Test Sequences".
- ▶ Select the test sequences which should no longer be assigned to the devices from the list which then appears.
- ▶ Confirm by clicking "Execute".

Assigning Test Sequences

- ▶ Click "Assign Test Sequences".
- ▶ Select the test sequences which should be assigned to the devices from the list which then appears.
- ▶ You can also mark a test sequence as the default sequence.
- ▶ Confirm by clicking "Execute".

The CUSTOMER Tab

Customers can be assigned to or removed from a list of devices here.

- ▶ First select the desired devices via the various selection functions, e.g. via tree selections or the Filter Editor Function.

The selected devices are displayed in the list view.

- ▶ If you want to assign new customers to selected devices only, the corresponding lines have to be selected. Otherwise, the selection applies to all devices in the list.
- ▶ After clicking the  icon, the multi-assistant tab menu appears.
- ▶ Select the CUSTOMER tab.
- ▶ Specify whether the action will be executed for all objects, or only for selected objects.
- ▶ Select an entry from the pull-down menu in the CUSTOMER field.
- ▶ Confirm by clicking "Execute".

The LOCATION Tab

Locations can be assigned to or removed from a list of devices here.

- ▶ First select the desired devices via the various selection functions, e.g. via tree selections or the Filter Editor Function.

The selected devices are displayed in the list view.

- ▶ If you only want to assign a location to or remove it from selected devices, the corresponding lines have to be selected. Otherwise, the selection applies to all devices in the list.
- ▶ After clicking the  icon, the multi-assistant tab menu appears.
- ▶ Select the LOCATION tab.
- ▶ Specify whether the action will be executed for all objects, or only for selected objects.

Removing Locations

- ▶ Click "Remove Locations".
- ▶ Confirm by clicking "Execute".

Changing or Adding Locations

- ▶ Click "Change Locations".
- ▶ Select the location that will be assigned to the selected objects in the location tree which then appears.
- ▶ Confirm by clicking "Execute".

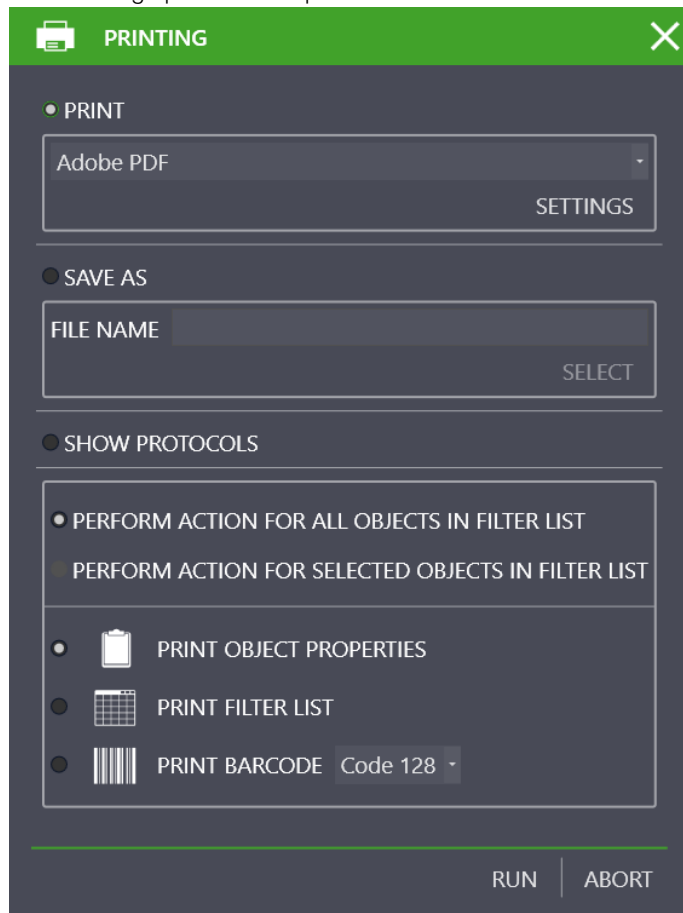
22 Printing

The print wizard is opened by selecting the printer icon  in the toolbar. The range of offered functions differs depending on the window in which the icon is clicked.

You can select from amongst the options offered by the system when printing.

As of the **BUSINESS Advanced** variant, you can additionally specify whether or not the selected action should be saved. Here you can choose from amongst PDF, DOC and DOCX formats.

The following operations are possible:



- Print object properties: this operation prints the data from the selected tab.
- Print filter list: this operation prints the selected filter list.
- Print barcode: this operation prints the device ID as a barcode.



Note

Printer settings that need to be retained (default settings) must be made directly in Windows (Windows Settings > Devices > Devices and Printers > Printers).

23 Test Reports

Existing tests can be printed out or saved as PDF files for the purpose of documentation. The layout and content of a report depend on the respectively selected template.

Fixed report templates are available as a standard feature. Custom templates can also be created:

- Generating Reports
- Editing Report Templates



Attention!

Changeable report

Reports with individual changes are not audit-proof.

- The creator of the report is liable for the content of the report.
- The audit-proof measurement values can be called up in the software at any time

23.1 Generating Reports

Reports can be initiated from the detail view in the Tests tab and from the list view.

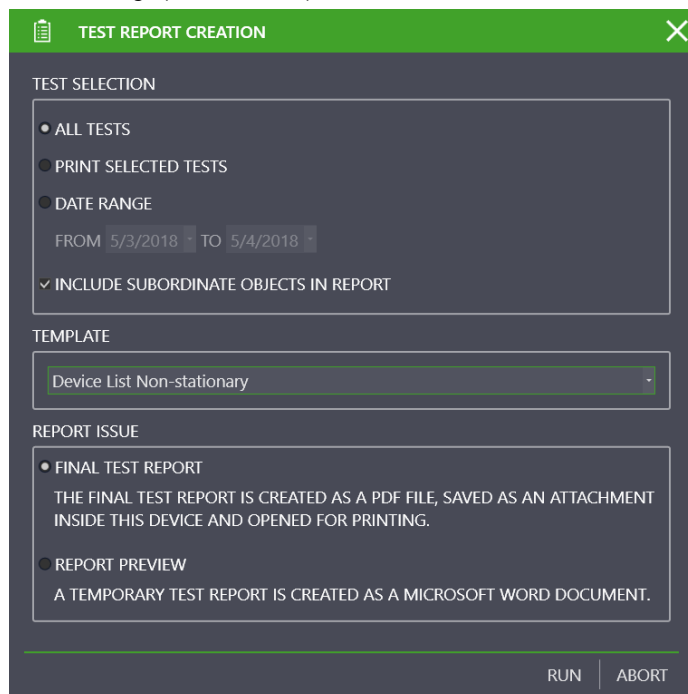
After selecting the tests from the detail view in the Tests tab and clicking the test report icon in the toolbar, the test report wizard appears.

Reports can also be initiated for several objects at the same time from the list view by clicking the test report icon in the toolbar.

As of the **BUSINESS Advanced** variant, it's possible to specify the use of either Word or PDF documents for the report preview.

"Report Generation and Photo Documentation" 

The following operations are possible:



- **TEST SELECTION:** Selection can be made here as to whether all tests, selected tests or tests from a predefined period will be documented. In the case of stationary objects, subordinate objects can also be documented.
- **REPORT TEMPLATE:** The template is used to define the appearance of the printout and the data to be included. There are standard templates in accordance with the standards. Custom templates can also be created, (see „Editing Report Templates“ [as of variant **BUSINESS Advanced**]).
- **REPORT PRINT-OUT:** A final (non-editable) test report can be created as a PDF file or a report preview can be generated as an editable Word document. The final test report is automatically attached to the selected test object.

See „SECUTEST/SECULIFE ST – Getting Started“ or „PROFITEST / **SECULIFE IP** – Getting Started“ for specific information concerning test reports for your instrument.

23.2 Editing Report Templates

Report templates available in IZYTRONIQ are used to create test reports from acquired test data. They include individual and summary reports, whose primary difference is related to the database to be used.

Individual reports are created for a single test of a given device (stationary or portable) and contain data for this test only. In addition to test details and test steps, it also includes device details and general information about the customer.

In contrast, summary reports can contain more than one test. These tests can be assigned to different devices, but must appear under the customer's same main device in the e-tree. And thus in the case of stationary devices, it's possible to create a report for all tests performed on a system or machine, even if individual distributors, circuits, measuring points etc. have been logged and tested separately.

The object types or template types in Report Template Management determine where a template can be used and which data is collected and processed for the report. These types result from the possible combinations of various properties including device type, report type (individual or summary report) and with or without device hierarchy.

Device types available for portable devices include device and medical device, and for stationary devices system and machine.

Since portable devices can't be represented in a hierarchy, the "Incl. Hierarchy" option is omitted in this case. As a result, the device details for each parent device are listed up to the one that has actually been tested, and its location information is not displayed. Two standard templates for each of these template types are included in the standard scope of delivery. They differ with regard to orientation: portrait and landscape format. Displaying the test steps in landscape format makes it possible to include images for each test step. The transferred data structure is identical in all cases.



Attention!

Changeable report

Reports with individual changes are not audit-proof.

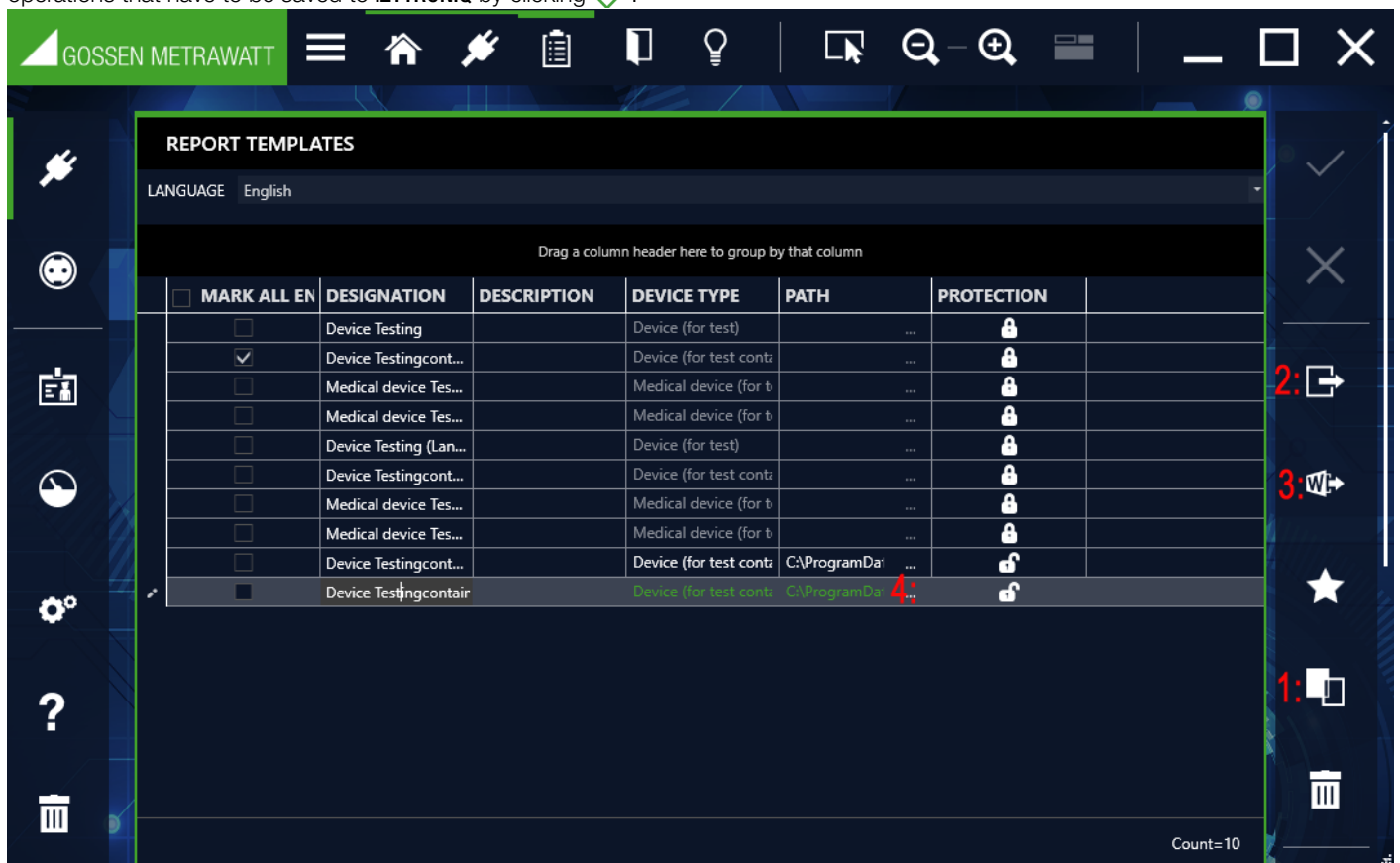
- The creator of the report is liable for the content of the report.

- The audit-proof measurement values can be called up in the software at any time

- „Report Template Management“
- „Editing a Template in Microsoft Word“

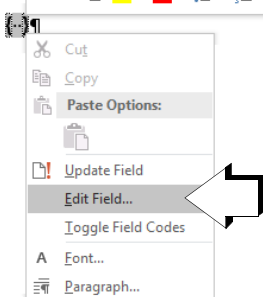
23.2.1 Report Template Management

In order to adapt the test report templates to your own requirements, the standard templates can be duplicated (1) and exported (2) to template management, or opened directly in Word (3). Furthermore, a Word file can be read in as a template by clicking the template's "..." button (4). In order to edit the template, it's advisable to name it appropriately after duplication and to export the actual Word document to a directory where it can be easily found again (e.g. your own desktop). Duplicating as well as renaming or loading a template are operations that have to be saved to **IZYTRONIQ** by clicking ✓.



23.2.2 Editing a Template in Microsoft Word

IZYTRONIQ uses Microsoft Word's mail merge function to create the test reports. Regardless of the object type, a data structure is stored in template management which is prepared by **IZYTRONIQ** and transferred to the Word document. The values from the transferred objects can be positioned and used in the template with the help of so-called merge fields. A new field is created to this end using the CTRL+F9 key combination, and is edited by right clicking and then selected "Edit Field".



In the dialog which then appears, the “Merge Field” field type can be specified in the left-hand area and the name of the desired field can be entered next to it at the right. Usable field names are dictated by the data structure, which is supplied by **IZYTRONIQ** as a data source.

The screenshot shows the 'Field' dialog box with the following details:

- Please choose a field:**
 - Categories: (All)
 - Field names: MergeField (selected), MergeRef, MergeSeq, Next, NextIf, NoteRef, NumChars, NumPages, NumWords, Page, PageRef, Print, PrintDate, Private, Quote, RD, Ref, RevNum.
- Field properties:**
 - Field name: PhoneNumber
 - Formatting: (none), Uppercase, Lowercase, First capital, Title case.
- Field options:**
 - ☐ Text to be inserted before:
 - ☐ Text to be inserted after:
 - ☐ Mapped field
 - ☐ Vertical formatting
 - ☒ Preserve formatting during updates
- Description:** Insert a mail merge field
- Buttons: Field Codes, OK, Cancel

This data structure consists of several objects. The range within which an object's values can be used is limited by two merge fields. They're designated "TableStart:ObjectName" and "TableEnd:ObjectName" and are no longer visible in the completed document. The exact object structure and the available fields are described in the following sub-section.



Note

Due to the comprehensive nature of the data structure, it's advisable to use the existing standard templates as a starting point for your own customizations, or at least to view them as working examples.

Data Structure

Name	Type	Description
Data	Object	
- Container	Object	
- -ContainerItems	Object	
- --Date	Date	Date of report generation
- --Id	Text	Code for the created container
- --QRCode	Image	QR code for identifying the test
- --Logo	Image	Company logo from settings
- --Signature	Image	Signature
- --Kind	Text	Type of Test
- --ReportNumber	Text	Report number
- --TestingDate	Date	Test date
- --TesterDisplayName	Text	Inspector's name
- --CreatedByUserName	Text	Name of the user who created the test
- --ImportDate	Date	Import date
- --ImporterName	Text	Importer's name
- --Comment	Text	Comment about the test
- --IsContainer	Text	Flag indicating whether the report is being created for a container
- --Locked	Text	Flag indicating whether or not the test is locked
- --Name	Text	Name of the test
- --TestingDeviceType	Text	Test instrument type
- --ResultString	Text	Test results
- --ContactDisplayName	Text	Name of the customer contact person
- --Department	Text	Device's department
- --CostCenter	Text	Device's cost center
- --DeviceNumber	Text	Device's serial number
- --DeviceDescription	Text	Device designation
- --DeviceManufacturer	Text	Device manufacturer
- --DeviceType	Text	Device type
- --DeviceNominalVoltage	Text	Device's nominal voltage
- --DeviceNominalCurrent	Text	Device's nominal current
- --DevicePower	Text	Device's rated power
- --DevicePowerFactor	Text	Device's power factor
- --CustomerName	Text	Customer's name
- --CustomerStreet	Text	Customer's street address
- --CustomerPostalCode	Text	Customer's postal code
- --CustomerCity	Text	Customer's city
- --CustomerCountry	Text	Customer's country
- --ContractorName	Text	Contractor's name
- --ContractorStreet	Text	Contractor's street address
- --ContractorPostalCode	Text	Contractor's postal code
- --ContractorCity	Text	Contractor's city
- --ContractorCountry	Text	Contractor's country
- --Property	Text	Device location, property
- --Building	Text	Device location, building
- --Level	Text	Device location, floor
- --Room	Text	Device location, room
- --InspectionInterval	Text	Test Interval
- --NextInspection	Text	Next test
- --DevicesWithTestings	Object	Tests in the selection grouped by device
- ---Testing	Object	
- ----Items	Object	Object for representing a single test
- ----Date	Date	Date of report generation

Name	Type	Description
- ----Id	Text	Test code
- ----QRCode	Image	QR code for identifying the test
- ----Logo	Image	Company logo from settings
- ----Signature	Image	Signature
- ----Kind	Text	Type of Test
- ----ReportNumber	Text	Report number
- ----TestingDate	Date	Test date
- ----TesterDisplayName	Text	Inspector's name
- ----CreatedByUserName	Text	Name of the user who created the test
- ----ImportDate	Date	Import date
- ----ImporterName	Text	Importer's name
- ----Comment	Text	Comment about the test
- ----IsContainer	Text	Flag indicating whether or not the test is a container
- ----Locked	Text	Flag indicating whether or not the test is locked
- ----Name	Text	Name of the test
- ----TestingDeviceType	Text	Test instrument type
- ----Result	Text	Test results
- ----ResultString	Text	Test's result string
- ----ContactDisplayName	Text	Name of the customer contact person
- ----Department	Text	Device's department
- ----CostCenter	Text	Device's cost center
- ----DeviceName	Text	Device designation
- ----DeviceId	Text	Device code
- ----ParentDeviceName	Text	Designation of the superordinate device
- ----ParentDeviceId	Text	Superordinate device code
- ----DeviceNumber	Text	Device's serial number
- ----DeviceDescription	Text	Device description
- ----DeviceManufacturer	Text	Device manufacturer
- ----DeviceType	Text	Device type
- ----DeviceNominalVoltage	Text	Device's nominal voltage
- ----DeviceNominalCurrent	Text	Device's nominal current
- ----DevicePower	Text	Device's rated power
- ----DevicePowerFactor	Text	Device's power factor
- ----InspectionInterval	Text	Testing cycle
- ----NextInspection	Date	Next test
- ----Location	Object	Device location – hidden when report is created with hierarchy
- -----Property	Text	Device location, property
- -----Building	Text	Device location, building
- -----Level	Text	Device location, floor
- -----Room	Text	Device location, room
- ----CustomerName	Text	Customer's name
- ----CustomerStreet	Text	Customer's street address
- ----CustomerPostalCode	Text	Customer's postal code
- ----CustomerCity	Text	Customer's city
- ----CustomerCountry	Text	Customer's country
- ----ContractorName	Text	Contractor's name
- ----ContractorStreet	Text	Contractor's street address
- ----ContractorPostalCode	Text	Contractor's postal code
- ----ContractorCity	Text	Contractor's city
- ----ContractorCountry	Text	Contractor's country
- ----DeviceDetails	Object	List of device objects – includes multiple devices when report is created with hierarchy
- -----DetailsNonStationaryDevice	Object	Device object, if the device is a portable device
- -----DeviceName	Text	Device designation
- -----DeviceId	Text	Device code
- -----ParentDeviceName	Text	Designation of the superordinate device
- -----ParentDeviceId	Text	Superordinate device code
- -----DeviceNumber	Text	Device's serial number

Name	Type	Description
- -----DeviceDescription	Text	Device description
- -----DeviceManufacturer	Text	Device manufacturer
- -----DeviceType	Text	Device type
- -----ProtectionClass	Text	Protection class
- -----Voltage	Text	Voltage
- -----Current	Text	Amperage
- -----Power	Text	Power
- -----PowerFactor	Text	Power factor
- -----Remark	Text	Note
- -----DetailsMedicalDevice	Object	Device object if the device is a medical device
- -----DeviceName	Text	Device designation
- -----Deviceld	Text	Device code
- -----ParentDeviceName	Text	Designation of the superordinate device
- -----ParentDeviceld	Text	Superordinate device code
- -----DeviceNumber	Text	Device's serial number
- -----DeviceDescription	Text	Device description
- -----DeviceManufacturer	Text	Device manufacturer
- -----DeviceType	Text	Device type
- -----ProtectionClass	Text	Protection class
- -----Voltage	Text	Voltage
- -----Current	Text	Amperage
- -----Power	Text	Power
- -----PowerFactor	Text	Power factor
- -----Remark	Text	Note
- -----TrackingNumber	Text	Tracking number
- -----Responsible	Text	Responsible party
- -----ApplicationPartCountB	Text	Number of type B applied parts
- -----ApplicationPartCountBf	Text	Number of type BF applied parts
- -----ApplicationPartCountCf	Text	Number of type Cf application parts
- -----CeMark	Text	CE marking number
- -----DetailsStationaryFacility	Object	Device object if the device is a system
- -----DeviceName	Text	Device designation
- -----Deviceld	Text	Device code
- -----ParentDeviceName	Text	Designation of the superordinate device
- -----ParentDeviceld	Text	Superordinate device code
- -----DeviceNumber	Text	Device's serial number
- -----DeviceDescription	Text	Device description
- -----DeviceManufacturer	Text	Device manufacturer
- -----DeviceType	Text	Device type
- -----NetSystem	Text	Mains system
- -----NetVoltage	Text	Line voltage
- -----NetFrequency	Text	Line frequency
- -----NominalCurrent	Text	Nominal current
- -----Characteristic	Text	Characteristic
- -----VnbEvu	Text	Distribution network operator
- -----LeadTypeld	Text	Supply cable type
- -----LeadCount	Text	Number of conductors
- -----CrossSection	Text	Cross-section
- -----Remark	Text	Note
- -----DetailsStationaryMachine	Object	Device object if the device is a machine
- -----DeviceName	Text	Device designation
- -----Deviceld	Text	Device code
- -----ParentDeviceName	Text	Designation of the superordinate device
- -----ParentDeviceld	Text	Superordinate device code
- -----DeviceNumber	Text	Device's serial number
- -----DeviceDescription	Text	Device description
- -----DeviceManufacturer	Text	Device manufacturer
- -----DeviceType	Text	Device type

Name	Type	Description
- -----NominalVoltage	Text	Nominal voltage
- -----NominalCurrent	Text	Nominal current
- -----PowerFactor	Text	Power factor
- -----NetSystem	Text	Mains system
- -----NominalPower	Text	Nominal power
- -----Characteristic	Text	Characteristic
- -----LeadInType	Text	Supply cable type
- -----LeadCount	Text	Number of conductors
- -----CrossSection	Text	Cross-section
- -----Remark	Text	Note
- -----DetailsStationaryDistributor	Object	Device object if the device is a distributor
- -----DeviceName	Text	Device designation
- -----Deviceld	Text	Device code
- -----ParentDeviceName	Text	Designation of the superordinate device
- -----ParentDeviceld	Text	Superordinate device code
- -----DeviceNumber	Text	Device's serial number
- -----DeviceDescription	Text	Device description
- -----DeviceManufacturer	Text	Device manufacturer
- -----DeviceType	Text	Device type
- -----NetSystem	Text	Mains system
- -----ProtectionClass	Text	Protection class
- -----ProtectionKind	Text	Type of protection
- -----Remark	Text	Note
- -----DetailsStationaryRcd	Object	Device object if the device is an RCD
- -----DeviceName	Text	Device designation
- -----Deviceld	Text	Device code
- -----ParentDeviceName	Text	Designation of the superordinate device
- -----ParentDeviceld	Text	Superordinate device code
- -----DeviceNumber	Text	Device's serial number
- -----DeviceDescription	Text	Device description
- -----DeviceManufacturer	Text	Device manufacturer
- -----DeviceType	Text	Device type
- -----RcdType	Text	RCD type
- -----MeasDiffCurrent	Text	Rated residual current
- -----Characteristic	Text	Characteristic
- -----PoleCount	Text	Number of poles
- -----NominalCurrent	Text	Nominal current
- -----OvrCurrProtCharacteristic	Text	Overcurrent protection (RCBO)
- -----LeadType	Text	Cable type (RCBO)
- -----LeadCount	Text	Number of conductors (RCBO)
- -----CrossSection	Text	Conductor cross-section (RCBO)
- -----Remark	Text	Note
- -----DetailsStationaryRcm	Object	Device object if the device is an RCM
- -----DeviceName	Text	Device designation
- -----Deviceld	Text	Device code
- -----ParentDeviceName	Text	Designation of the superordinate device
- -----ParentDeviceld	Text	Superordinate device code
- -----DeviceNumber	Text	Device's serial number
- -----DeviceDescription	Text	Device description
- -----DeviceManufacturer	Text	Device manufacturer
- -----DeviceType	Text	Device type
- -----RcmType	Text	RCM type
- -----MeasDiffCurrent	Text	Rated residual current
- -----Characteristic	Text	Characteristic
- -----PoleCount	Text	Number of poles
- -----NominalCurrent	Text	Nominal current
- -----AlarmThreshold	Text	Alarm threshold (mA)
- -----Remark	Text	Note

Name	Type	Description
- ----DetailsStationaryImd	Object	Device object if the device is an IMD
- -----DeviceName	Text	Device designation
- -----Deviceld	Text	Device code
- -----ParentDeviceName	Text	Designation of the superordinate device
- -----ParentDeviceld	Text	Superordinate device code
- -----DeviceNumber	Text	Device's serial number
- -----DeviceDescription	Text	Device description
- -----DeviceManufacturer	Text	Device manufacturer
- -----DeviceType	Text	Device type
- -----ImdType	Text	IMD type
- -----MeasureVoltage	Text	Measuring voltage
- -----WarningValue	Text	Warning threshold
- -----AlarmValue	Text	Alarm threshold
- -----MeasureCurrent	Text	Measuring current
- -----NetNominalVoltage	Text	Nominal line voltage
- -----Remark	Text	Note
- ----DetailsStationaryCircuit	Object	Device object if the device is a circuit
- -----DeviceName	Text	Device designation
- -----Deviceld	Text	Device code
- -----ParentDeviceName	Text	Designation of the superordinate device
- -----ParentDeviceld	Text	Superordinate device code
- -----DeviceNumber	Text	Device's serial number
- -----DeviceDescription	Text	Device description
- -----DeviceManufacturer	Text	Device manufacturer
- -----DeviceType	Text	Device type
- -----LeadType	Text	Conductor type
- -----LeadCount	Text	Number of conductors
- -----CrossSection	Text	Wire cross-section
- -----Characteristic	Text	Characteristic
- -----NominalCurrent	Text	Nominal current
- -----PoleCount	Text	Number of poles
- -----Remark	Text	Note
- ----DetailsStationaryPaBar	Object	Device object if the device is an equipotential bonding rail
- -----DeviceName	Text	Device designation
- -----Deviceld	Text	Device code
- -----ParentDeviceName	Text	Designation of the superordinate device
- -----ParentDeviceld	Text	Superordinate device code
- -----DeviceNumber	Text	Device's serial number
- -----DeviceDescription	Text	Device description
- -----DeviceManufacturer	Text	Device manufacturer
- -----DeviceType	Text	Device type
- -----Remark	Text	Note
- ----DetailsStationaryPaConductor	Object	Device object if the device is an equipotential bonding conductor
- -----DeviceName	Text	Device designation
- -----Deviceld	Text	Device code
- -----ParentDeviceName	Text	Designation of the superordinate device
- -----ParentDeviceld	Text	Superordinate device code
- -----DeviceNumber	Text	Device's serial number
- -----DeviceDescription	Text	Device description
- -----DeviceManufacturer	Text	Device manufacturer
- -----DeviceType	Text	Device type
- -----LeadType	Text	Conductor type
- -----CrossSection	Text	Cross-section
- -----LeadMaterial	Text	Number of conductors
- -----Remark	Text	Note
- ----DetailsStationaryGround	Object	Device object if the device is an earth electrode

Name	Type	Description
- -----DeviceName	Text	Device designation
- -----DeviceId	Text	Device code
- -----ParentDeviceName	Text	Designation of the superordinate device
- -----ParentDeviceId	Text	Superordinate device code
- -----DeviceNumber	Text	Device's serial number
- -----DeviceDescription	Text	Device description
- -----DeviceManufacturer	Text	Device manufacturer
- -----DeviceType	Text	Device type
- -----GroundType	Text	Type of earth electrode
- -----GroundComposition	Text	Ground characteristics
- -----Purpose	Text	Usage
- -----Material	Text	Material
- -----GroundQuality	Text	Ground quality
- -----CrossSection	Text	Cross-section
- -----Remark	Text	Note
- -----DetailsStationaryMeasurePoint	Object	Device object if the device is a measuring point
- -----DeviceName	Text	Device designation
- -----DeviceId	Text	Device code
- -----ParentDeviceName	Text	Designation of the superordinate device
- -----ParentDeviceId	Text	Superordinate device code
- -----DeviceNumber	Text	Device's serial number
- -----DeviceDescription	Text	Device description
- -----DeviceManufacturer	Text	Device manufacturer
- -----DeviceType	Text	Device type
- -----Remark	Text	Note
- -----DetailsStationaryWorkingFund	Object	Device object if the device is work equipment
- -----DeviceName	Text	Device designation
- -----DeviceId	Text	Device code
- -----ParentDeviceName	Text	Designation of the superordinate device
- -----ParentDeviceId	Text	Superordinate device code
- -----DeviceNumber	Text	Device's serial number
- -----DeviceDescription	Text	Device description
- -----DeviceManufacturer	Text	Device manufacturer
- -----DeviceType	Text	Device type
- -----WorkingfundType	Text	Type of work equipment
- -----ProtectionKind	Text	Type of protection
- -----ProtectionClass	Text	Protection class
- -----LeadType	Text	Wire type
- -----LeadCount	Text	Number of conductors
- -----CrossSection	Text	Cross-section
- -----Remark	Text	Note
- -----TestingDevices	Object	List of utilized test instruments
- -----TestingDevice	Object	Test instrument object
- -----Description	Text	Designation of the test instrument
- -----Manufacturer	Text	Manufacturer
- -----Type	Text	Type
- -----SerialNumber	Text	Serial number
- -----LastCalibration	Date	Date of last calibration
- -----CombinedTestingSteps	Object	List of test steps
- -----GenericNumber	Text	Consecutive number of the test step
- -----Description	Text	Designation
- -----Number	Text	Step number
- -----Type	Text	Test step type
- -----TypeName	Text	Test step type name
- -----SequenceStepType	Text	Type of sequence step
- -----Criteria	Text	Criterion
- -----Minimum	Text	Minimum

Name	Type	Description
- -----Maximum	Text	Maximum
- -----TestingDeviceType	Text	Type of test instrument
- -----Comment	Text	Test step comment
- -----Result	Text	Result of the step
- -----ResultsBoolean	Text	Text "False" appears if result is not a Boolean value
- -----HasPassed	Text	"True" or "False" depending on whether the test step has been passed or not
- -----Status	Text	Test step status
- -----Beside Measures	Object	List of secondary measured values
- -----Name1	Text	Name of the first secondary measured value
- -----Value1	Text	Value of the first secondary measured value
- -----Name2	Text	Name of the second secondary measured value
- -----Value2	Text	Value of the second secondary measured value
- -----Parameters	Object	List of parameters
- -----Name1	Text	Name of the first parameter
- -----Value1	Text	Value of the first parameter
- -----Name2	Text	Name of the second parameter
- -----Value2	Text	Value of the second parameter
- -----StepImages	Object	List of images for the test step
- -----AttachmentImage	Image	Image for the test step
- -----CombinedTestingStepsWithImages	Object	List of test steps including images as separate entries
- -----GenericNumber	Text	Consecutive number of the test step
- -----Description	Text	Designation
- -----Number	Text	Step number
- -----Type	Text	Test step type
- -----TypeName	Text	Test step type name
- -----SequenceStepType	Text	Type of sequence step
- -----Criteria	Text	Criterion
- -----Minimum	Text	Minimum
- -----Maximum	Text	Maximum
- -----TestingDeviceType	Text	Type of test instrument
- -----Comment	Text	Test step comment
- -----Result	Text	Result of the step
- -----ResultsBoolean	Text	Text "False" appears if result is not a Boolean value
- -----HasPassed	Text	"True" or "False" depending on whether the test step has been passed or not
- -----Status	Text	Test step status
- -----Beside Measures	Object	List of secondary measured values
- -----Name1	Text	Name of the first secondary measured value
- -----Value1	Text	Value of the first secondary measured value
- -----Name2	Text	Name of the second secondary measured value
- -----Value2	Text	Value of the second secondary measured value
- -----Parameters	Object	List of parameters
- -----Name1	Text	Name of the first parameter
- -----Value1	Text	Value of the first parameter
- -----Name2	Text	Name of the second parameter
- -----Value2	Text	Value of the second parameter
- -----StepImages	Object	List of images for the test step
- -----AttachmentImage	Image	Image for the test step
- -----Steps	Object	Simple list of test steps
- -----Criteria	Text	Criterion
- -----Minimum	Text	Minimum
- -----Maximum	Text	Maximum
- -----TestingDeviceType	Text	Type of test instrument
- -----Type	Text	Test step type
- -----Result	Text	Test step result
- -----HasPassed	Text	"True" or "False" depending on whether the test step has been passed or not
- -----SequenceStepType	Text	Type of sequence step
- -----Images	Object	
- -----Item	Image	Image for the test step
- -----Questions	Object	Questions for visual inspections

Name	Type	Description
- -----Question	Text	Question
- -----Result	Text	Response
- -----SubTestings	Object	If this test includes sub-tests, the fields are repeated at this point starting with "Testing" (in actual practice, this is an exclusively theoretical case which isn't covered by the standard templates).
- -----TestingImages	Object	Images which are linked directly to the test
- -----Images3Cols	Object	List of test images for which three images are displayed per line
- -----Column1	Image	Image in the first column
- -----Column2	Image	Image in the second column
- -----Column3	Image	Image in the third column
- -----Images5Cols	Object	List of test images for which five images are displayed per line
- -----Column1	Image	Image in the first column
- -----Column2	Image	Image in the second column
- -----Column3	Image	Image in the third column
- -----Column4	Image	Image in the fourth column
- -----Column5	Image	Image in the fifth column
- --TestingDevices	Object	List of utilized test instruments
- ---TestingDevice	Object	Test instrument object
- ----Description	Text	Designation of the test instrument
- ----Manufacturer	Text	Manufacturer
- ----Type	Text	Type
- ----SerialNumber	Text	Serial number
- ----LastCalibration	Date	Date of last calibration
- --Testings	Object	All tests in the selection without grouping by device. The "Testing" object is repeated to this end (see above).
- --TestingSteps	Object	All test steps for all tests in the selection as a flat list
- ---GenericNumber	Text	Consecutive number of the test step
- ---Description	Text	Designation
- ---Number	Text	Step number
- ---Type	Text	Test step type
- ---TypeName	Text	Test step type name
- ---SequenceStepType	Text	Type of sequence step
- ---Criteria	Text	Criterion
- ---Minimum	Text	Minimum
- ---Maximum	Text	Maximum
- ---TestingDeviceType	Text	Type of test instrument
- ---Comment	Text	Test step comment
- ---Result	Text	Result of the step
- ---ResultsBoolean	Text	Text "False" appears if result is not a Boolean value
- ---HasPassed	Text	"True" or "False" depending on whether the test step has been passed or not
- ---Status	Text	Test step status
- ---StepImages	Object	List of images for the test step
- ----AttachmentImage	Image	Image for the test step
- --TestingStepsWithImages	Object	All test steps for all tests in the selection as a flat list, which include images for test steps as separate entries
- ---GenericNumber	Text	Consecutive number of the test step
- ---Description	Text	Designation
- ---Number	Text	Step number
- ---Type	Text	Test step type
- ---TypeName	Text	Test step type name
- ---SequenceStepType	Text	Type of sequence step
- ---Criteria	Text	Criterion
- ---Minimum	Text	Minimum
- ---Maximum	Text	Maximum
- ---TestingDeviceType	Text	Type of test instrument
- ---Comment	Text	Test step comment
- ---Result	Text	Result of the step

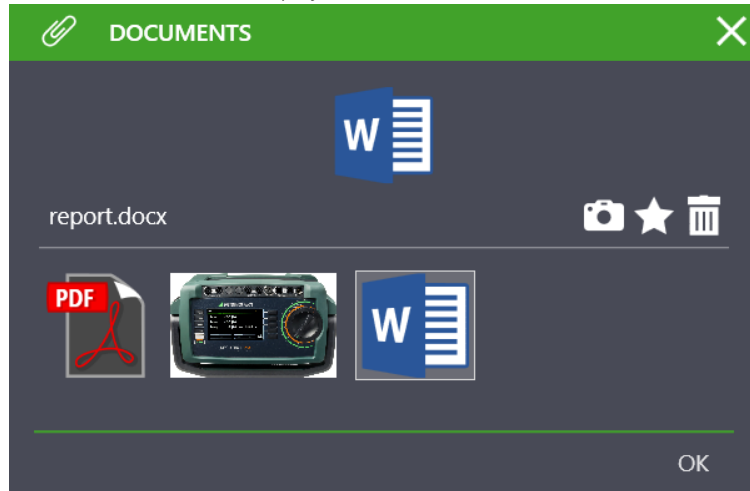
Name	Type	Description
- --ResultsBoolean	Text	Text "False" appears if result is not a Boolean value
- --HasPassed	Text	"True" or "False" depending on whether the test step has been passed or not
- --Status	Text	Test step status
- --StepImages	Object	List of images for the test step
- ---AttachmentImage	Image	Image for the test step

24 Document Management – Attaching Files

You can add documents to objects, sequences and tests. These documents are file attachments such as images (.jpg, .jpeg, .png, .bmp), PDF documents (.pdf), Word documents (.doc, .docx) or Excel documents (.xls, .xlsx). Any number of documents can be added. These documents are saved to an application folder. The folder's storage location can be specified in setup under "Global Settings".

Viewing Documents

If a document already exists or if it's possible to create a document, the document icon  appears in the toolbar. The document window is displayed by clicking this icon. This window is divided into two parts. The currently selected document is displayed at the top. All of the object's available documents are displayed at the bottom.



After clicking one of the documents at the bottom it's selected, transferred to the top display and its file name is shown. The document is then opened in the corresponding application by clicking it. Icons for photographing , creating  and deleting  documents are located on the right-hand side of the top window. Click "OK" to close the window.

Creating Documents

An icon for creating new documents  is located on the right-hand side of the document window. By clicking the icon, a document of the above-mentioned type can be created using the menu provided by the system for opening files. Click "OK" to return to the initial page.



Attention!

Adding attachments changes the current data record. These changes must be saved before exiting the page.

Deleting Documents

An icon for deleting documents  is located on the right-hand side of the document window. In order to delete a document, it must first be selected in the bottom section and can then be deleted by clicking the  icon. Click "OK" to return to the initial page.



Attention!

Adding attachments changes the current data record. These changes must be saved before exiting the page.



Attention!

Deleting an attachment only deletes the link to the attachment. The attachment itself is retained.

25 Push-Print Data Transmission

With the help of the **push-print** function, measurement results can easily be sent directly to the **IZYTRONIQ** database by simply pressing a key on the test instrument. The measurement results are stored under the selected test object in the tests tab and can be saved there.

“Push-Print” 

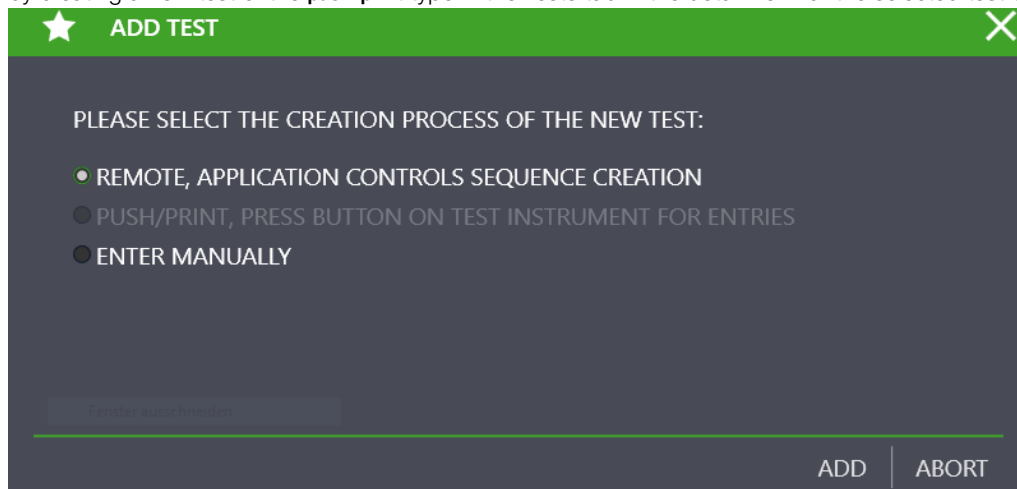
Universal Test Instrument Support

The test results from test instruments of any category or standard don't have to be filed and stored under the same categories (e.g. stationary or portable). For example, measured values from a protective conductor test measured with the **PROFITEST PRIME** test instrument can be assigned to a portable test object.

Performing a Push-Print Test

A push-print compatible test instrument is a prerequisite for performing a push-print test. If the respective test instrument is not equipped with this function, it's not possible to select a push-print measurement.

In order to be able to perform a push-print test, both the test instrument and **IZYTRONIQ** must be set to the push-print mode. This is done by creating a new test of the **push-print** type in the Tests tab in the detail view for the selected test object.



As soon as the "ADD" button is clicked, **IZYTRONIQ** and all connected push-print compatible test instruments are in the push-print operating mode. At the same time, a two-part push-print window appears and **IZYTRONIQ** is ready to receive data. The master data of the push-print test are displayed in the upper part of the window, where the name of the test must be added. The transferred measurement data are listed in the lower part after measurement has been completed.



As of immediately, measurements can be sent to the selected test object in **IZYTRONIQ** by pressing the corresponding key on any instrument that's in push-print mode.

After completing the respective measurement at the test instrument, a push-print icon  appears at the display instead of the save icon. Measurement data is no longer stored at the test instrument in this operating mode, and is instead transferred to **IZYTRONIQ** by

pressing the corresponding key (depending on the test instrument). These are then displayed in tabular format in the bottom window. After all desired push-print measurements have been performed, the transferred data records must be saved by clicking . The push-print mode is exited as a result. At the same time, all test steps are combined into a push-print test and displayed in the "Tests" tab. The individual measurements can be displayed again by clicking the  button in the toolbar or by double-clicking the push-print test. You can return to the test view from the individual measurement view by clicking .

The push-print mode is exited by:

- Saving the transmitted measurement data by clicking 
- Cancelling the push-print measurement by clicking 

Tools:

-  Save changes
-  Cancel editing
-  Manage attachment (add, view and delete file/photo)

26 Sequence Editor – Individual Test Sequences

The sequence editor makes it possible to program individual test sequences. A test sequence consists of one or more test steps. Different types of test sequences can be created with the sequence editor:

- The sequences created in the sequence editor can be imported to some test instruments (PROFITEST, SECUTEST).
- TEST INSTRUMENTS are also available that support computer-assisted testing via remote mode (SECUTEST, SECULIFE).
- Alternatively, strictly computer-based sequences can be programmed which don't require any test instrument (testing of ladders, fire extinguishers etc.).

The scope of functions of the connected test instrument is read in when the editing function of the sequence editor is started. Each test instrument has its own specially configured test steps. For this reason, the test instrument must be connected to the PC to create a test sequence.

If an IZY sequence will be created, a connected test instrument is only required if instrument-specific test steps are included in the IZY sequence. The respective test instruments are then also required for the execution of these sequences. The IZY sequence makes special sequence steps needed only for itself available to the sequence editor as well.

- „Types of Sequences“
- „Layout and Use of the Sequence Editor“
- „Types of Sequence Steps“

“PROFITEST Sequence Creation” 

“SECUTEST Sequence Creation” 

26.1 Types of Sequences

Test Instrument Sequences

These are test sequences which have been created for a specific type of test instrument and can only be run on it, or can be executed alternatively in **IZYTRONIQ** via remote mode. Distinction is made here between:

- Variable instrument sequences: These sequences can be created, modified and transferred to the appropriate test instrument by means of the Sequence Editor – Individual Test Sequences.
- Default sequences: These are fixed test sequences which are configured at the factory and whose sequence and parameters cannot be changed. However, these sequences can be duplicated and saved, and then edited as variable device sequences.

Both can be transferred from **IZYTRONIQ** to suitable test instruments.

IZY Sequence

The limited range of functions of the test instrument sequences can be combined with many other test steps within an IZY sequence. In addition to instrument-specific functions, the following IZY sequence test steps are available to the user:

- Manual entry
- Push-print
- Visual inspection
- Test instruction

IZY sequences can only be executed in **IZYTRONIQ**. They can contain steps from instrument sequences in which case they control the corresponding test instrument in remote mode, and only measurement data is supplied by the test instrument. **IZYTRONIQ** is used for display and control. This makes it possible to include a help screen for each test step.

26.2 Layout and Use of the Sequence Editor

The sequence editor consists of three parts:

1. Top left window: List of available sequence steps: Depending on the connected instruments and the type of sequence (IZY/instrument sequence), the sequence steps which can be used to create the sequence are displayed here.
2. Bottom left window: Configuration of the sequence step: The configuration and parameter setting options for the selected sequence step are made available here.
3. Window on the right: Design progress display: A breakdown of current sequence progress appears here.

The screenshot displays the Sequence Editor interface with three main panels:

- STEP SELECTION:** A list of available sequence steps including IZY-Remote, Sequences, DGUV V3, Testsequenz, Löschsequenz, and Manuelle Messwerteingabe Seq.
- TEST STEP: SUB-SEQUENCE:** A configuration panel for the selected step, showing fields for NAME and a value of Manuelle Messwerteingabe Seq.
- DESIGN PROGRESS:** A panel showing the sequence name (Profisquence), test type (device test), and standard (VDE 0100). It also includes a table with sequence steps and their associated instruments and documents.

The interface also features a top toolbar with various icons and a bottom status bar with labels for Configuration and Design Progress.

SERIAL NO.	TEST STEP	TEST INSTRU...	NAME	DOCUMENTS
1	Sub-sequence		DGUV V3	
2	Sub-sequence		Testsequenz	
3	Sub-sequence		Löschsequenz	
4	Sub-sequence		Manuelle Messwer...	



Attention!

The sequences and the individual sequence steps may only be created with the help of the sequence editor by a **qualified electrician** or under the direction and supervision of a qualified electrician.

Gossen Metrawatt GmbH assumes no liability for user-created sequences!



Attention!

Connecting line voltage to the test socket at the SECUTEST or SECULIFE test instrument and performance of a function test are only permissible if the test object has already passed all **safety test steps**! Depending on the test object's protection class, this means that visual inspection, as well as measurement of protective conductor resistance and insulation resistance, must have been passed.



Attention!

When creating sequence steps, make sure that the limit values entered always correspond to the current standard!

Sequence Creation Procedure

- Select either the "PORTABLE OBJECTS" or "STATIONARY OBJECTS" menu.

- ▶ Select the “SEQUENCES” menu.
- ▶ Click ★ in order to create a new sequence.
- ▶ Enter the following parameters: SEQUENCE NAME, TEST TYPE, STANDARD and FOR INSTRUMENT, and then click “ADD”
The new sequence is added to the table.

CREATE NEW SEQUENCE

SEQUENCE NAME Profisquence

TEST TYPE device test

STANDARD VDE 0100

FOR DEVICE IZY-Remote

ADD | ABORT

- ▶ Save the most recent settings by clicking ✓.
- ▶ Select the sequence you want to edit.
- ▶ Open the sequence editor by clicking ✎.
- ▶ Select a sequence step from the step selection window.
- ▶ Drag and drop it into the design progress window. All available options for configuring the currently selected step now appear in the configuration window. As long as the step is not configured correctly, it's displayed in red and the affected fields are identified with an error icon ✖. Creation of the sequence step is completed by filling in these fields. Now a new step can be added to the sequence by means of drag & drop. The following operations can be executed in the design progress window in the sequence of steps created in this way:
- ▶ Save the test sequence by clicking ✓.

Tools:

- ✓ Save test sequence
- ✖ Cancel editing
- 🗑 Delete test step: the currently selected test step is deleted
- ⬆ Move the selected test step up
- ⬇ Move the selected test step down
- ⬅ Return to sequence management
- 📎 Manage attachment (add, view and delete file/photo)

(Since this window is a list, the functions of the list view apply and, in addition, the list icons in the toolbar are activated – see „Lists“. These functions apply only to the list view).

26.3 Types of Sequence Steps

A wide variety of sequence steps are offered for the creation of test sequences. They depend on the connected test instrument and on the selected sequence type (device/IZY sequence, see „Types of Sequences“). Sequence steps can be categorized into the following types:

Measurements (automatically evaluated)

These sequence steps are measurements which are performed by a test instrument. They necessitate one or more limit values. The measurement can be evaluated automatically by comparing the measured values to these limit values. This type of step can be used in instrument sequences as well as in IZY sequences with connected test instrument.



Attention!

Please observe the operating instructions of the corresponding test instrument!

User Evaluated Measurements

As is also the case with automatically evaluated measurements, measurements in these sequence steps are performed by the test instrument. However, no limit values are required because the user evaluates the measurement after it has been completed. In this case as well, the sequence step can be used in instrument sequences as well as in IZY sequences with connected test instrument.

Manual Entry

No test instrument is required for this sequence step. An entry window is generated in which the measurement task is described and a field is displayed to which the measured value can be entered manually. The measured value can be evaluated automatically by configuring the sequence step with limit value and evaluation criterion. This sequence step can only be used in IZY sequences.

Checking

Checking can be conducted in the connected test instrument with this sequence step and positive results are a prerequisite for the following steps. In the event of negative results, the next step is not executed. However, manual override and repetitions of the check can also be configured. This sequence step can be used in instrument sequences as well as in IZY sequences with connected test instrument.

- Probe test, probe connection P1: Please execute a probe check after completing each test.
If probe P1 is used in a test sequence, a “Probe Test” step with “PROBE: Probe Connection P1” must be included in the respective test sequence. Background: In addition to assuring that a probe is connected to probe connection P1, the probe test at connection P1 also determines whether or not the probe’s fuse link is intact.



Attention!

If the fuse at test probe P1 is defective after testing has been started, all subsequent measurements conducted using this measuring path will be incorrectly evaluated as good!

- APP fuse test (for testers with sockets for applied parts)
If the APP sockets are used during a test sequence (regardless of whether the connections are used for measurement or in order to implement the “APP > PE” test condition [applied part to ground]), the “APP fuse test” step must be additionally conducted. This test step ensures that both APP fuses are intact.



Attention!

If measurements are conducted for which the APP connections are used, and if one or both of the APP fuses are defective, incorrect measured values may result.

Visualized Checks

Checking can be performed in the connected test instrument by means of this sequence step, which can have multiple predefined results. The results required in order to pass the test are specified during configuration of the sequence step. This sequence step can be used in instrument sequences as well as in IZY sequences with connected test instrument.

Time to Trip

This sequence step initiates a test sequence for PRCDs in the connected test instrument. The measured value can be evaluated automatically by configuring the sequence step with limit value, evaluation criterion and display texts. This sequence step can be used in instrument sequences as well as in IZY sequences with connected test instrument.

Visual Inspection

In the case of device sequences in the test instrument or IZY sequences in **IZYTRONIQ**, this sequence step displays several assessable visual inspection questions that can be entered while configuring the step, which have to be answered by the inspector when performing the step. This step can be used in instrument sequences as well as in IZY sequences.

Test Instruction

In the case of device sequences in the test instrument or IZY sequences in **IZYTRONIQ**, this sequence step displays an instruction which has to be acknowledged by the inspector when performing the step. This step can be used in instrument sequences as well as in IZY sequences.

Push-print

All connected test instruments are set to PUSH-PRINT mode by this sequence step. This makes it possible to transfer tests performed by the test instrument to **IZYTRONIQ** and store them by simply pressing a key. This step can only be used in IZY sequences with connected test instrument(s).

Subsequences

Sequences can be structured in a modular fashion. Recurring test steps can be combined into a subsequence to this end, which can be integrated into another sequence if required.

27 Remote Function – Automated Sequence Control for a Test

Automated test sequences can be run with **IZYTRONIQ** in the Tests tab in the detail view. A sequence is required in order to be able to use sequence control of this sort (see „IZY Sequence“).

The following options are available in addition to instrument test sequences:

- Manual entry
- Push-print
- Visual inspection
- Test instruction

Processes Without Test Instruments

An IZY remote sequence is required in order to run automated sequence control.

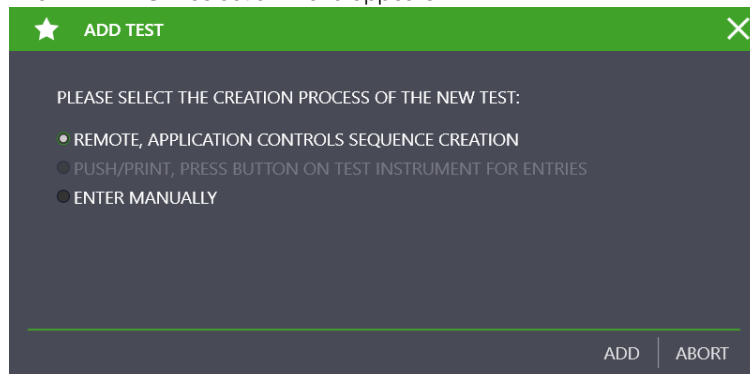
The following prerequisites must be fulfilled:

- At least one IZY remote sequence is available.
- The IZY remote sequence is assigned to the test object in the tab.

Procedure:

- ▶ Select portable or stationary objects.
- ▶ Select the “ENTER, CHANGE, LISTS” menu.
- ▶ Select the desired test object from the tree view.
- ▶ Select the Tests tab in the detail view.
- ▶ Select the “ADD TEST” icon ★ from the toolbar.

The “ADD TEST” selection menu appears:



- ▶ Select “REMOTE, APPLICATION CONTROLS SEQUENCE”.
- ▶ Confirm by clicking ADD

Sequences with Remote Steps

Some test instruments are equipped with a remote control function. **IZYTRONIQ** to send a control command to the test instrument via this function, which then performs the respectively desired measurement.

The following prerequisites must be fulfilled:

- The test instrument is connected to the PC via the USB port or the Bluetooth interface.
- The test instrument appears in the dashboard under “TEST INSTRUMENT MANAGEMENT”.
- The test instrument must support the remote function (e.g. SECUTEST, SECULIFE test instruments).



Attention!

An overloaded CPU may result in data loss during simultaneous transmission of measured values (polling). A possibly relevant worst case may thus not be detected, which may lead to incorrect test results. If possible, shut down programs running in the background which place a heavy load on the CPU during remote operation.



Attention!

Do not start measurements at your test instrument unless the test instrument and the DUT are in plain view. Do not connect line voltage to the test socket of your ECUTEST or SECULIFE test instrument before the surrounding area has been secured.

Processes with Push-Print Steps

Some test instruments and multimeters support a push-print function. Test steps for push-print can be inserted into the overall sequence with the Sequence Editor – Individual Test Sequences.

If push-print test steps are included in a sequence, the system checks to determine whether or not a push-print compatible test instrument is connected to the interface before executing the respective push-print step.

The following prerequisites must be fulfilled:

- The test instrument is connected to the PC via the USB port or the Bluetooth interface.
- The test instrument appears in the dashboard under “TEST INSTRUMENT MANAGEMENT”.
- The test instrument must support the remote function (e.g. PROFITEST PRIME, METRAHIT IM XTRA, SECUTEST, SECULIFE test instruments).

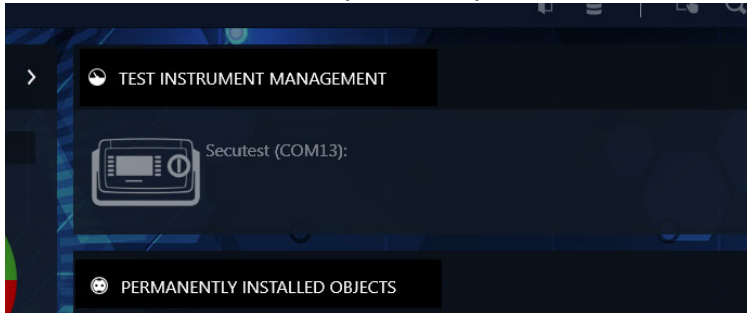
28 SECUTEST/SECULIFE ST – Getting Started

The following instruments are required for data exchange with IZYTRONIQ:

- **SECUTEST ST BASE** and **SECUTEST ST BASE10** with SECUTEST DB+ database expansion (Z853R)*
- **SECUTEST ST PRO** and **SECUTEST ST PRO BT comfort** with SECUTEST DB+ database expansion (Z853R)*
- **SECUTEST BASE** and **SECUTEST BASE10** with SECUTEST DB+ database expansion (Z853R)*
- **SECUTEST PRO** with SECUTEST DB+ database expansion (Z853R)*
- **SECULIFE ST BASE** and **SECULIFE ST BASE25** with SECUTEST DB COMFORT database expansion (Z853S)*

* Test data can be read from the instrument without the database expansion, but nothing can be transferred to the instrument. The database expansion is thus required for the range of functions described in this documentation.

The respective test instrument must be connected to the PC via the USB slave port. After the **SECUTEST.../SECULIFE...** has been switched on, the instrument is automatically detected by IZYTRONIQ.



If the instrument hasn't yet been entered to test instrument management, you're asked whether it should be saved automatically. The test instrument is now ready to exchange data with IZYTRONIQ.

- „Creating a Tree Structure“
- „Data Export to the Test Instrument“
- „Data Import from a Test Instrument“
- „Test Documentation – Generating Test Reports“

28.1 Creating a Tree Structure

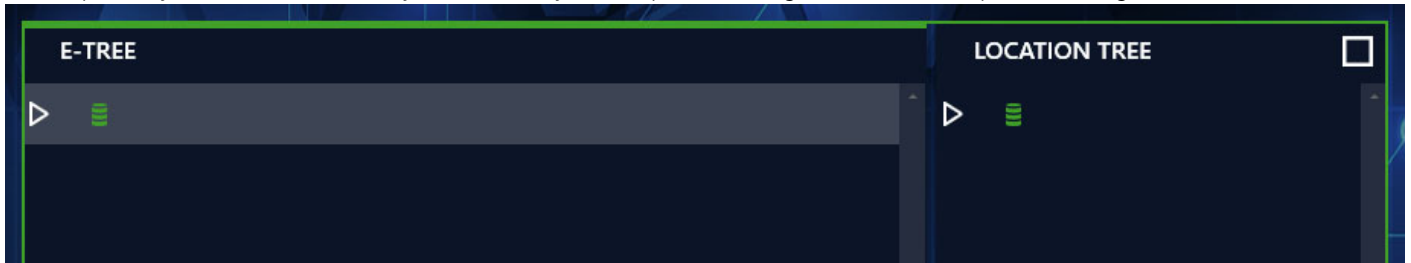
In order to add test objects for the **SECUTEST.../SECULIFE...**, switch to the “PORTABLE OBJECTS”  menu and select the “ADD/CHANGE/LISTS” function . A view is included here which consists of three windows arranged one on top of the other:

- Top window:
 - Left-hand side: e-tree (electric tree)
Customers and **portable** (also medical) **devices** can be added and displayed here. The **devices** must always be assigned to a customer and are all on the same hierarchy level.
 - Right-hand side: Location Tree
The locations to which devices from the e-tree can be assigned are displayed here.
- Middle window: Detail view of the test object's master data
- Bottom window: objects list view

The size of these windows can be increased or decreased by moving the top or bottom border, which are indicated by 2 short horizontal lines.

Each of the windows can be activated by selecting it. The active view is outlined in green.

The respectively active sub-functionality is identified by a more pronounced green bar on the top side of the green outline.



Tree Window with Activated E-Tree

Creating a New Object

The following steps must be executed in order to create a new object:

1. Activate the e-tree.
2. Select the element under which you want to create a new element.
3. Select “create new element”  from the toolbar on the right-hand side of the window.

Alternatively, after selecting the element and clicking the right mouse key, you can display the tool menu and select the desired action with the left mouse key.

4. Select the desired element type in the “NEW ELEMENT” popup window which then appears.
The popup window always shows all possible elements that can be created under the selected element.
5. Select the number and the ID of the new element.
The ID can also be assigned automatically if the corresponding function is activated.
6. Select “CREATE”.
7. Further elements can be created by following the above procedure.
8. Finally select “CLOSE”.
9. Don't forget to save the newly created structure by clicking the uppermost icon ✓ in the toolbar.

Locations can be created in the location tree in the same way.

Test objects can now be assigned to locations by simply dragging and dropping them.

Adding Master Data

After creating all of the elements in the tree view, you can add to their master data. Select the desired element in the tree to this end and you're provided with all of the data available for the respective element in the “aster data detail view”. The element's master data can be entered by selecting the corresponding field.

Don't forget to save the newly entered master data by clicking the uppermost icon ✓ in the toolbar.



Attention!

Some fields are mandatory and must be filled in order to save the master data. If any of these fields are empty, they're identified with the ✕ icon.

All devices located hierarchically below the element selected in the tree view are displayed in the “Devices List View” window (bottom window).

28.2 Data Export to the Test Instrument

The export function is used to transfer data to a test instrument or a file. The function can be found in the “PORTABLE OBJECTS” menu  under the “EXPORT” function . The export wizard is started by selecting this function.

The export wizard asks whether the data should be exported to a connected test instrument or to an XML or CSV file:

- TO TEST INSTRUMENT: you can choose from amongst all connected instruments here. OBJECTS and/or SEQUENCES can be selected.
- TO XML/CSV FILE: Tap the “SAVE AS” field in order to select the file to which the data will be saved.



Attention!

All data on the connected test instrument is deleted as a result of the export. Consequently, a warning appears prior to export.

The EXPORT FILTER is launched by selecting EXPORT.

Export Filter

The export filter consists of two filter menus:

- OBJECTS EXPORT FILTER
- EXPORT SEQUENCES

If more than one filter menu is selected, the “NEXT”  and “BACK”  buttons are used to toggle between the views. After selecting the “EXPORT” button  in the toolbar, the selected range of data and the associated customers and locations are transferred to the connected test instrument. The action which is momentarily being executed is displayed during export. If all data are successfully transferred, a corresponding message is displayed.

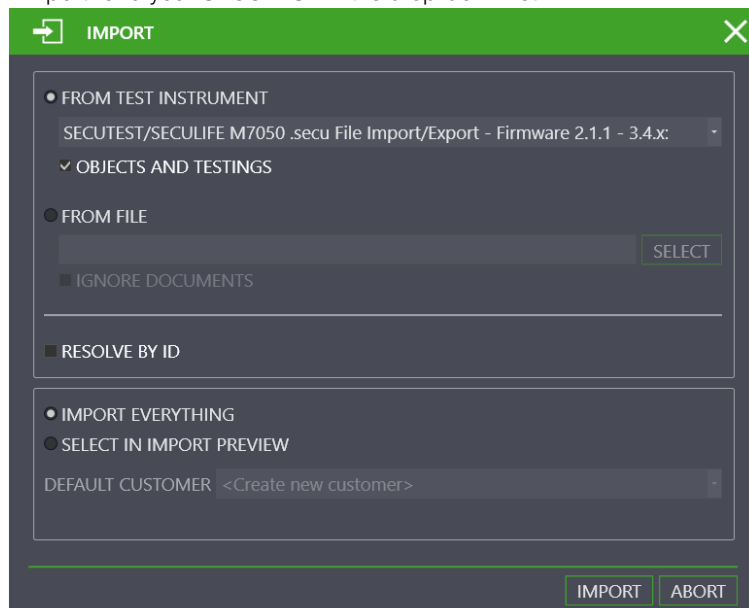
28.3 Data Import from a Test Instrument

The import function is used to synchronize data from a test instrument or file with the **IZYTRONIQ** database.

This function can be found in the “PORTABLE OBJECTS” menu  under the “IMPORT” function . The import wizard is started by clicking this function.

Test instruments from the SECUTEST series support two alternative ways of exchanging data:

- Data exchange via USB flash drive
 - Direct data exchange via USB cable
- In either case, select “FROM TEST INSTRUMENT” in the import window. You can switch back and forth between “Secutest 4 File Import” and your SECUTEST in the drop-down list:



OBJECTS AND TESTS are selected for import by default.

Select IMPORT ALL or SELECTION IN IMPORT PREVIEW in order to start the import.

- After selecting IMPORT ALL and clicking IMPORT, import runs automatically.
- If SELECTION IN IMPORT PREVIEW is selected, the data in the IMPORT PREVIEW are displayed first. These data can be selected and post-processed here. The selected objects are subsequently imported into the **IZYTRONIQ** database by selecting the  function.
- A customer from the database can be specified via STANDARD CUSTOMER, if the data include a customer.



Attention!

Data Loss!

The last data imported into **IZYTRONIQ** are always used. If data was saved to the test instrument and then changes were made to the data in **IZYTRONIQ**, importing the data from the test instrument overwrites these changes once again.

Example: You created a test object (system) in **IZYTRONIQ** and transferred it to the test instrument (**PROFITEST...**). The **PROFITEST...** is being used in the field. At the same time, the system's technical data are changed in **IZYTRONIQ**. The data will be imported later from the **PROFITEST...** to **IZYTRONIQ**. Afterwards, the system's modified (new) technical data are overwritten with the old technical data from the **PROFITEST...**

For this reason, don't change any data in **IZYTRONIQ** if they're used in the test instrument. In other words: If you want to edit data in **IZYTRONIQ**, transfer the changed data to the test instrument before using the test instrument!

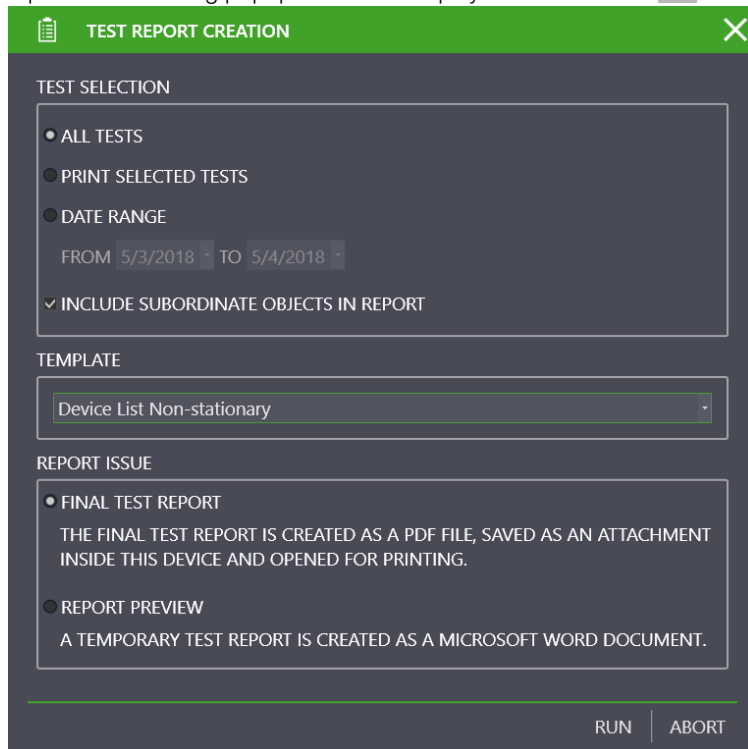
Successful import and any transmission errors that may have occurred are displayed.

If conflicts occur between existing data and data to be imported which cannot be resolved automatically, the conflict manager is activated.

28.4 Test Documentation – Generating Test Reports

Existing tests can be printed out or saved as PDF files for the purpose of documentation. Appearance and content of the documentation depends on the selected template, which can be managed in **IZYTRONIQ**. Fixed report templates are available as a standard feature. Custom templates can also be created.

In order to generate test reports for the **SECUTEST.../SECULIFE...**, switch to the “PORTABLE OBJECTS”  menu and select the “ADD/CHANGE/LISTS” function . The test object(s) for which a test report is to be generated must then be selected. Select a superordinate object such as customer or location in the tree view to obtain a list of test objects, or select a test object directly. Then switch to the master data detail view if an individual test object was selected, or switch to the master data list view if a superordinate object was selected. In both of the above-mentioned views, the “Report” command  can now be selected from the toolbar in order to generate the test report. The following popup window is displayed:



TEST REPORT CREATION

TEST SELECTION

- ☒ ALL TESTS
- ☐ PRINT SELECTED TESTS
- ☐ DATE RANGE
 - FROM 5/3/2018 TO 5/4/2018
- ☒ INCLUDE SUBORDINATE OBJECTS IN REPORT

TEMPLATE

Device List Non-stationary

REPORT ISSUE

- ☒ FINAL TEST REPORT
THE FINAL TEST REPORT IS CREATED AS A PDF FILE, SAVED AS AN ATTACHMENT INSIDE THIS DEVICE AND OPENED FOR PRINTING.
- ☐ REPORT PREVIEW
A TEMPORARY TEST REPORT IS CREATED AS A MICROSOFT WORD DOCUMENT.

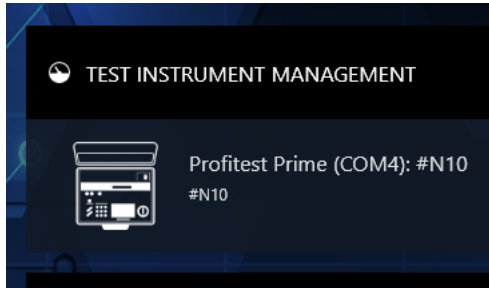
RUN | ABORT

See description under „Test Reports“.

29 PROFITEST / SECULIFE IP – Getting Started

The following instruments are required for data exchange with **IZYTRONIQ**:

- **PROFITEST INTRO** <in preparation>
- **PROFITEST MBASE+ IQ, PROFITEST MTECH+ IQ**
- **PROFITEST MPRO IQ, PROFITEST MXTRA IQ**
- **PROFITEST PRIME, PROFITEST PRIME AC**
- **SECULIFE IP IQ**



If the instrument hasn't yet been entered to test instrument management, you're asked whether it should be saved automatically. The test instrument is now ready to exchange data with **IZYTRONIQ**.

- „Creating a Tree Structure“
- „Data Export to the Test Instrument“
- „Data Import from a Test Instrument“
- „Test Documentation – Generating Test Reports“

29.1 Creating a Tree Structure

In order to add test objects for the **PROFITEST.../SECULIFE IP**, switch to the “STATIONARY OBJECTS” menu, and select the “ADD/CHANGE/LISTS” function . A view is included here which consists of three windows arranged one on top of the other:

- Top window
 - Left-hand side: e-tree (electric tree, see below)
 - Right-hand side: Location tree (see below)
- Middle window: Detail view of the test object's master data
- Bottom window: objects list view

The size of these windows can be increased or decreased by moving the top or bottom border, which are indicated by 2 short horizontal lines.

E-tree

Customers and their **stationary objects, machines** and **systems** can be added here. In contrast to portable objects, **IZYTRONIQ** permits the creation of complex tree structures. The PROFITEST and **IZYTRONIQ** feature a large number of different electrical sub-objects to this end, which can be freely inserted into an e-tree structure. A main object can also have a further main object of similar type within this structure (machine includes machine or system includes system). The following objects can be transferred to the PROFITEST:

- Customer
- System
- Machine
- Distributor
- RCD
- RCM
- IMD
- Circuit
- Operating equipment
- Measuring point
- Protective equipotential bonding rail
- Protective equipotential bonding conductor
- Earth electrode



Attention!

The objects have an internal hierarchy, so that it's not possible to create certain objects under any other object. Objects must always be assigned to a customer.

**Note**

In the case of distributors, please refer to the notes concerning the distributor report and the tree structure required to this end in section „Test Documentation – Generating Test Reports“.

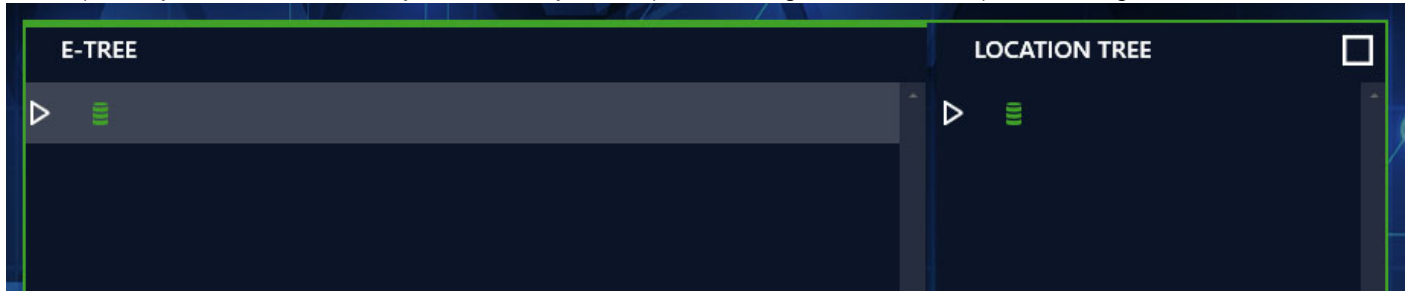
Location Tree

The locations to which electric objects from the e-tree can be assigned are displayed here.

Active Window

Each of the windows can be activated by selecting it. The active view is outlined in green.

The respectively active sub-functionality is identified by a more pronounced green bar on the top side of the green outline.



Tree Window with Activated E-Tree

Creating a New Object

The following steps must be executed in order to create a new object:

1. Activate the e-tree.
2. Select the element under which you want to create a new element.
3. Go to “create new element” ★ in the toolbar on the right-hand side of the window.
Alternatively, after selecting the element and clicking the right mouse key, you can display the tool menu and select the desired action with the left mouse key.
4. Select the desired element type in the “NEW ELEMENT” popup window which then appears.
The popup window always shows all possible elements that can be created under the selected element.
5. Select the number and the ID of the new element.
The ID can also be assigned automatically if the corresponding function is activated.
6. Select “CREATE”.
7. Further elements can be created by following the above procedure.
8. Finally select “CLOSE”.
9. Don't forget to save the newly created structure by clicking the uppermost icon ✓ in the toolbar.

Locations can be created in the location tree in the same way.

Test objects can now be assigned to locations by simply dragging and dropping them.

**Note**

Not every object can be assigned to a location.

Adding Master Data

After creating all of the elements in the tree view, you can add to their master data. Select the desired element in the tree to this end and you're provided with all of the data available for the respective element in the “aster data detail view”. The element's master data can be entered by selecting the corresponding field.

Don't forget to save the newly entered master data by clicking the uppermost icon ✓ in the toolbar.

**Attention!**

Some fields are mandatory and must be filled in order to save the master data. If any of these fields are empty, they're identified with the ⊗ icon.

29.2 Data Export to the Test Instrument

Test instruments of the PROFITEST series support bidirectional data exchange of tree structures, catalogs and sequences. These three export categories can be transferred both separately and together. This description only addresses simplified data export of the tree structure.

If the e-tree structure of a system or a machine is available in IZYTRONIQ, it can be exported to a connected test instrument or to a file.

Switch to the “STATIONARY OBJECTS” menu  and select the “EXPORT” function  to this end.

In the export wizard which then appears, you can specify whether data will be exported to a file (if so select a directory and specify a file name) or to a test instrument, and whether associated catalogs and/or sequences will be exported as well.

After all options have been specified, object selection is started by clicking “EXPORT”.

A split view is displayed. The two tree views appear in the top half and the list of objects appears in the bottom half, provided they have been selected in the tree view. Which objects will be exported can be selected in both windows. A preliminary selection of customers and locations can be made in the tree views by selecting the checkboxes which precede the elements. Associated objects to be transferred can be selected in the e-tree and limited by selecting locations in the location tree.



Attention!

If the data are transferred to a test instrument, all object data in the test instrument are deleted.



Attention!

Measurements may not be currently started in the test instrument when exporting data.

29.3 Data Import from a Test Instrument

Just like data export, data import can also be found in the “STATIONARY DEVICES” menu  under the “IMPORT” function . This function synchronizes data from a test instrument to the existing **IZYTRONIQ** database. The import wizard also asks whether or not you want to import object data, including tests. It's also possible to specify whether catalogs will also be transferred.



Attention!

Measurements may not be currently started in the test instrument when importing data.

Select IMPORT ALL or SELECTION IN IMPORT PREVIEW in order to start the import:

- After selecting IMPORT ALL and clicking IMPORT, import runs automatically.
- If SELECTION IN IMPORT PREVIEW is selected, the data in the IMPORT PREVIEW are displayed first. These data can be selected and post-processed here. The selected objects are subsequently imported into the **IZYTRONIQ** database by selecting the  function.



Attention!

Data Loss!

The last data imported into **IZYTRONIQ** are always used. If data was saved to the test instrument and then changes were made to the data in **IZYTRONIQ**, importing the data from the test instrument overwrites these changes once again.

Example: You created a test object (system) in **IZYTRONIQ** and transferred it to the test instrument (**PROFITEST...**). The **PROFITEST...** is being used in the field. At the same time, the system's technical data are changed in **IZYTRONIQ**. The data will be imported later from the **PROFITEST...** to **IZYTRONIQ**. Afterwards, the system's modified (new) technical data are overwritten with the old technical data from the **PROFITEST...**

For this reason, don't change any data in **IZYTRONIQ** if they're used in the test instrument. In other words: If you want to edit data in **IZYTRONIQ**, transfer the changed data to the test instrument before using the test instrument!

Successful import and any transmission errors that may have occurred are displayed.

If conflicts occur between existing data and data to be imported which cannot be resolved automatically, the conflict manager is activated.

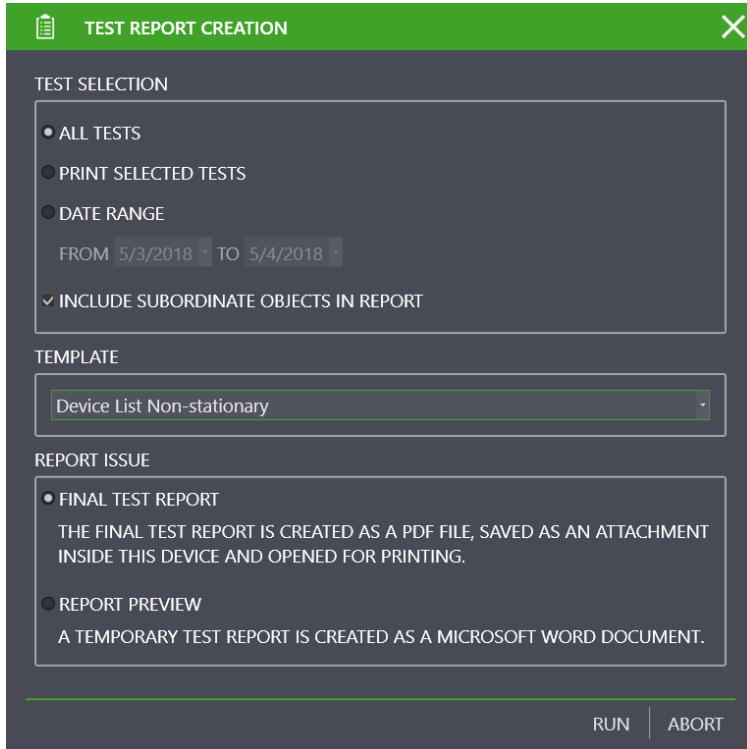
29.4 Test Documentation – Generating Test Reports

General information regarding the generation of test reports can be found under „Test Reports“. This section describes the generation of test reports specifically for the **PROFITEST.../SECULIFE Ip**, as well as related particularities.

Existing tests can be printed out or saved as PDF files for the purpose of documentation. Appearance and content of the documentation depends on the selected template, which can be managed in **IZYTRONIQ**. Fixed report templates are available as a standard feature, which comply with relevant legal requirements and thus cannot be changed. Custom templates can also be created.

In order to generate test reports for the **PROFITEST.../SECULIFE Ip**, switch to the “STATIONARY OBJECTS”  menu and select the “ADD/CHANGE/LISTS” function . The test instruments for which a test report is to be generated must then be selected. Select a superordi-

nate object such as customer or location in the tree view to obtain a list of test objects, or select a test object directly. Then switch to the master data detail view if an individual test object was selected, or switch to the master data list view if a superordinate object was selected. In both of the above-mentioned views, the “Report” command  can now be selected from the toolbar in order to generate the test report. The following popup window is displayed:



TEST REPORT CREATION

TEST SELECTION

- ALL TESTS
- PRINT SELECTED TESTS
- DATE RANGE
 - FROM 5/3/2018 TO 5/4/2018
- ✓ INCLUDE SUBORDINATE OBJECTS IN REPORT

TEMPLATE

Device List Non-stationary

REPORT ISSUE

- FINAL TEST REPORT

THE FINAL TEST REPORT IS CREATED AS A PDF FILE, SAVED AS AN ATTACHMENT INSIDE THIS DEVICE AND OPENED FOR PRINTING.
- REPORT PREVIEW

A TEMPORARY TEST REPORT IS CREATED AS A MICROSOFT WORD DOCUMENT.

RUN | ABORT

Notes on the Distributor Report

The distributor report is a special test report for the **PROFITEST...** and is only available for stationary objects of the distributor type.

Initially, the usual information is listed in the distributor report, including information about the customer and the test object. Subsequently, all test steps included in the detected distributor tests appear. Test images are also included. The special feature of the distributor report is the subsequent separate table in landscape format, which additionally lists measured values from subordinate:

- Circuits (measurement types: Riso, Zschl, Zi, Rlow, including parameters)
- RCDs (measurement types: tripping current and time to trip, including parameters).
- RCBOs (measurement types; Riso, Zschl, Zi, Rlow, tripping current and time to trip, including all parameters)

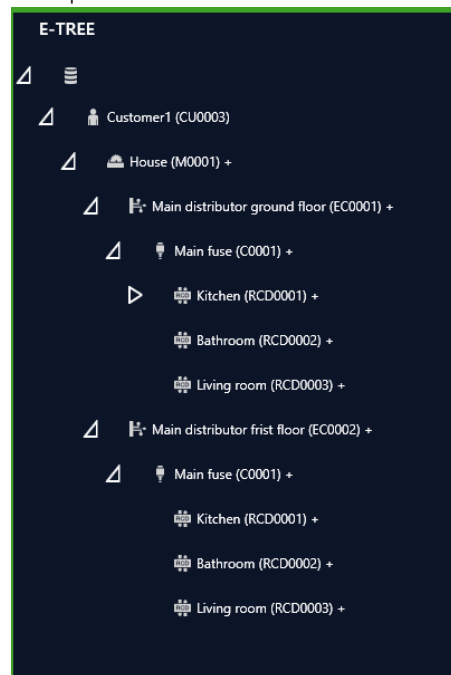
The table contains tests which are performed exclusively with **PROFITEST...** instruments. Manual tests and tests performed with other test instruments are ignored.

The created tree structure and the tests performed must meet the following requirements for distributor reports:

- The uppermost node is the distributor.
- RCDs (including RCBOs) and circuits can be included underneath the distributor. No other elements are permitted.
- Tests may only be performed and added for distributors, RCDs (including RCBOs) and circuits.

(See „The “Enter, Change, Lists” Function“ for more information on creating a structure for stationary objects.)

Example of a distributor structure:



Proceed as usual (see above) in order to generate a distributor report, and select the distributor. Select the "PROFITEST distributor report" as the report template.

30 METRAHIT – Getting Started

The following instruments are prerequisites for data communication with **IZYTRONIQ**:

- **METRAHIT IM XTRA BT**
- **METRAHIT IM E-DRIVE BT**
- **METRAHIT IM TECH BT**

In order to pair the devices, the PC must have Bluetooth and the Bluetooth interface must be activated.

If the instrument hasn't yet been entered to test instrument management, you're asked whether it should be saved automatically. The test instrument is now ready to share measurement results with **IZYTRONIQ** via the push-print function (see „Push-Print – Getting Started“).

Push-Print – Getting Started

With the help of the **push-print** function, measurement results can easily be sent directly to the **IZYTRONIQ** database by simply pressing a key on the test instrument. The measurement results are stored under the selected test object in the tests tab and can be saved there.

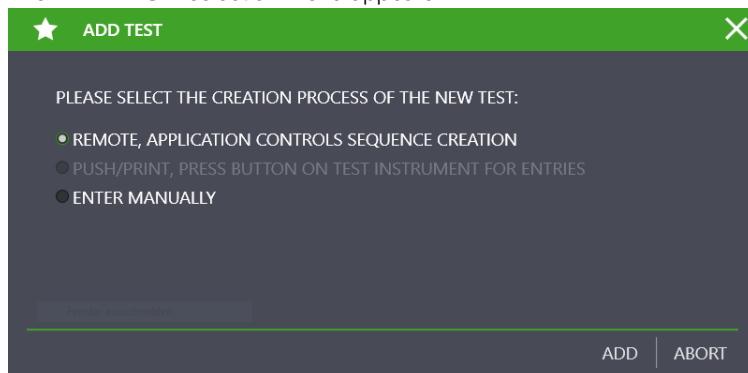
The following prerequisites must be fulfilled:

- The test instrument is connected to the PC via the USB port or the Bluetooth interface.
- The test instrument appears in the dashboard under “TEST INSTRUMENT MANAGEMENT”.
- The test instrument must support the push-print function.

Procedure:

- ▶ Select portable or stationary objects.
- ▶ Select the “ENTER, CHANGE, LISTS” menu.
- ▶ Select the desired test object from the tree view.
- ▶ Select the Tests tab in the detail view.
- ▶ Select the “ADD TEST” icon ★ from the toolbar.

The “ADD TEST” selection menu appears:



- ▶ Select **Push-Print** and then **ADD**.

A two-part window designated “NEW TEST PUSH/PRINT” appears and **IZYTRONIQ** is ready to receive data:



- ▶ Perform the measurement at the test instrument.

After completing the measurement at the test instrument, a push-print icon appears at instead of the save icon.

- ▶ Press the push-print key in order to transmit the measurement data to **IZYTRONIQ**.
- ▶ After completing all measurements, enter a test name to the top section of the push-print window.

► Select the save icon  in the toolbar.

This closes the list and returns the display to the “TESTS” tab in the detail display for the test object. The data have now been consolidated in a push-print container.

The individual measurements can be displayed once again by double-clicking the container or by clicking the  button in the toolbar. The display is returned to the container view by clicking .

31 Modules

IZYTRONIQ's range of functions can be extended through the use of optional modules.

- „NEXONIQ“
- „PC DOC IQ“

31.1 NEXONIQ

NEXONIQ is an optional module for **IZYTRONIQ**. A dongle is supplied with the purchase of **NEXONIQ**, which is plugged into a USB port at the computer. The software checks at regular intervals in order to determine whether or not the dongle is connected to the USB port, and if not the software is disabled.

NEXONIQ has two main functions:

- Read out of older test instruments which are not compatible with **IZYTRONIQ** and simultaneously convert the data to **IZYTRONIQ** format
- Convert ETC files to **IZYTRONIQ** format

License - Right of Use - Enabling

Unlike **IZYTRONIQ**, the program is not tied to the local PC or server by a license code, and is instead protected by a USB dongle. **NEXONIQ** can be installed locally as often as desired. In order to be able to work with the software, one USB dongle per workstation is required. This provides the customer with the advantage of not having to purchase a license for each computer workstation, but rather several users can share a physical USB dongle. The USB dongle is the required key for working with **NEXONIQ**.

Download

NEXONIQ available for download at www.gossenmetrawatt.com.

After downloading the ZIP file, it has to be decompressed to a directory (e.g. with WinZip®). The setup file then appears in the selected directory.

Follow the installation instructions which then appear.

System Requirements for Local and Client Installations

Minimum requirements and recommendations are based on the main **IZYTRONIQ** module.

NEXONIQ runs in Windows 7, 8.1 and 10.

Minimum requirements:

- Operating system: Windows 7
- .NET Framework 4.6.1*
- CPU: Dual core i3 > 3.4 GHz
- RAM: ≥ 2 GB
- Hard disk: at least 2 GB available memory (depending on data volume)
- Resolution: 1280 x 800

Recommendations:

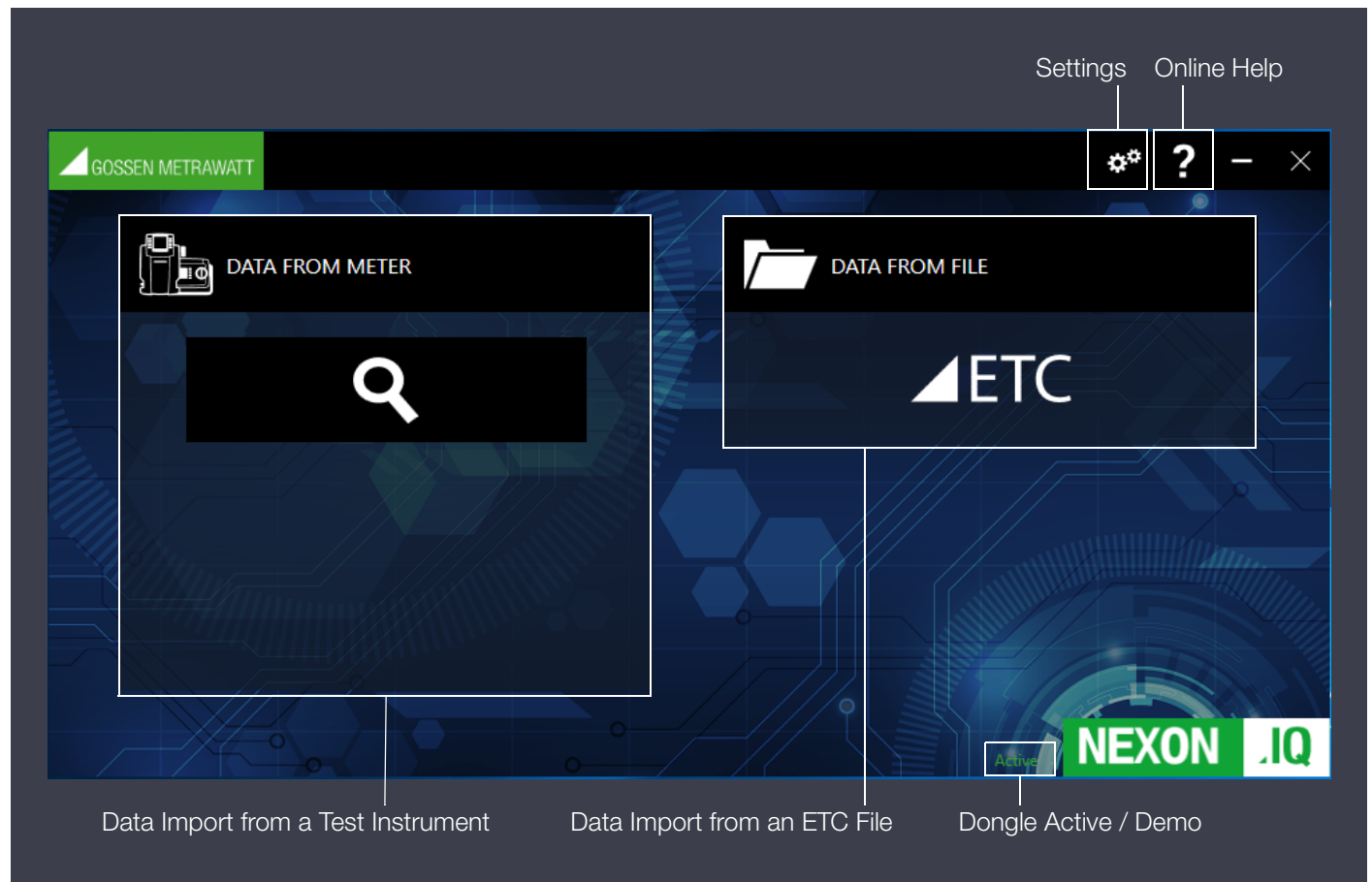
- Operating system: Windows 10
- .NET Framework 4.6.1*
- CPU: Quad core i7, 2.8 GHz
- RAM: ≥ 4 GB
- Hard disk: at least 4 GB available memory (depending on data volume)
- Resolution: 1920 x 1080
- Touchscreen and active pen

* Installation of .NET Framework 4.8 can be executed by a corresponding Microsoft installation program.

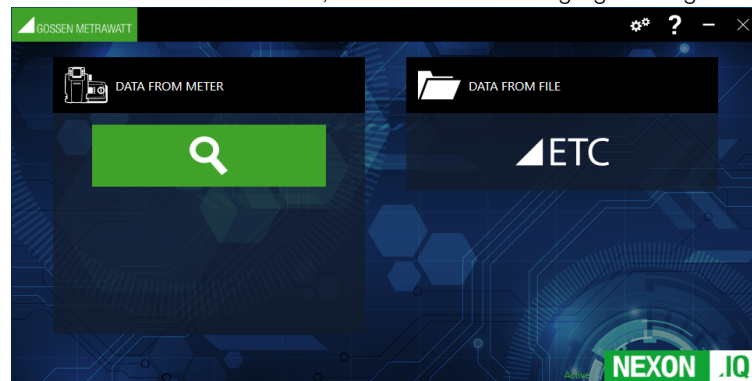
Working with NEXONIQ

- „Layout and Use“
- „Reading Out Data from Old Test Instruments and Saving it as an XML“
- „Converting an ETC File to XML“
- „Importing the Converted Files (XML) to **IZYTRONIQ**“

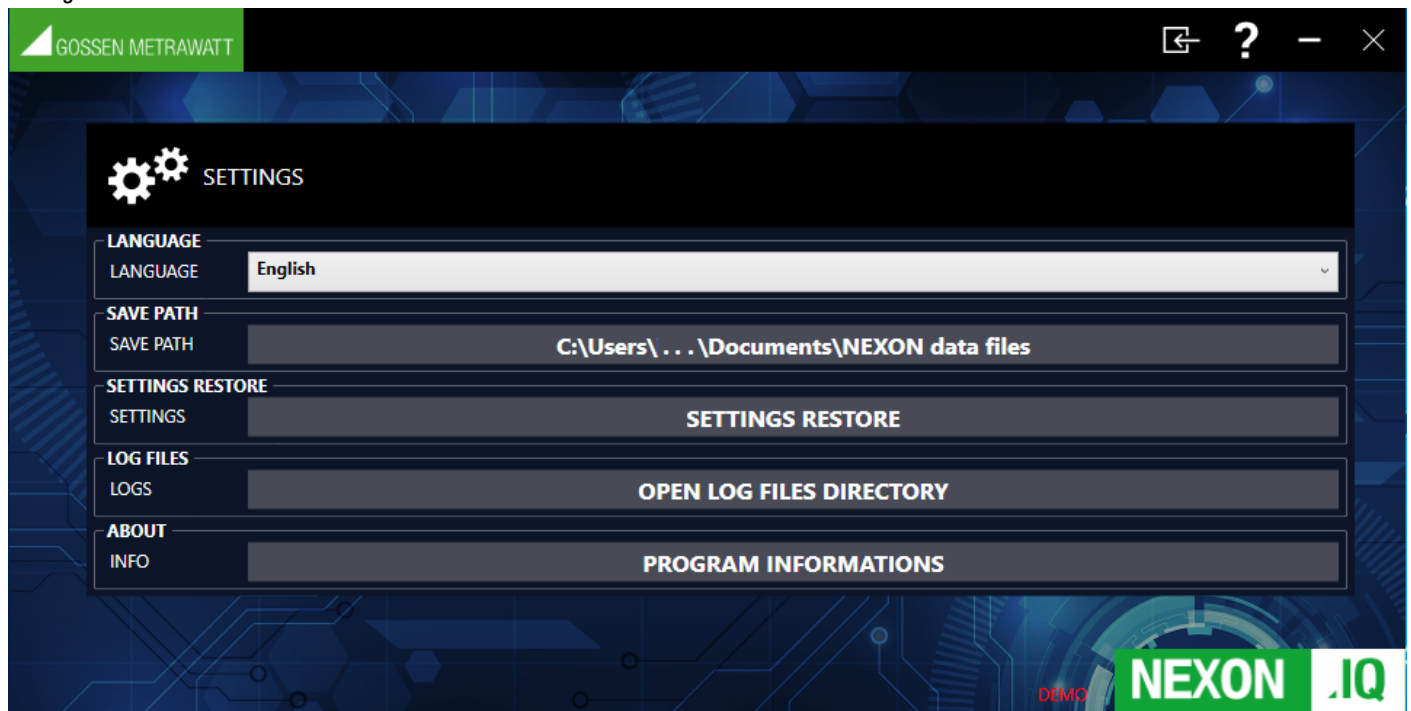
31.1.1 Layout and Use



After selection with the mouse, the selected area is highlighted in green:



Settings



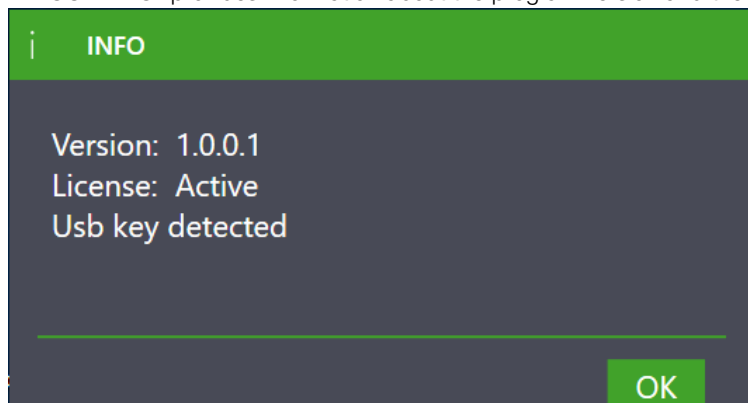
The language used by **NEXONIQ** can be changed in the “SETTINGS” menu under “LANGUAGE”.

“DIRECTORY PATH” is used to specify the destination folder.

“RESTORE SETTINGS” changes the destination directory back to its original settings (... \Documents \NEXON data files).

“REPORT FILES” makes it possible to specify the destination directory for report files.

“ABOUT INFO” provides information about the program version and the dongle’s status:



The display is returned to the start screen by clicking the  icon .

Online Help ?

The online help is started in the browser by clicking the “?” icon.

The user also has the option of opening the online help directly from the landing page in the browser:
help.izytron.com.

Elements in the header:



Show/Hide:

The left-hand column can be hidden or displayed again by selecting this icon.



Search:

The online help can be searched here for by entering any desired keywords.



Print:

The content displayed on the right-hand side can be printed out.



Scroll: You can scroll forward (down) or backward (up) in the left-hand column (TOC).

31.1.2 Reading Out Data from Old Test Instruments and Saving it as an XML

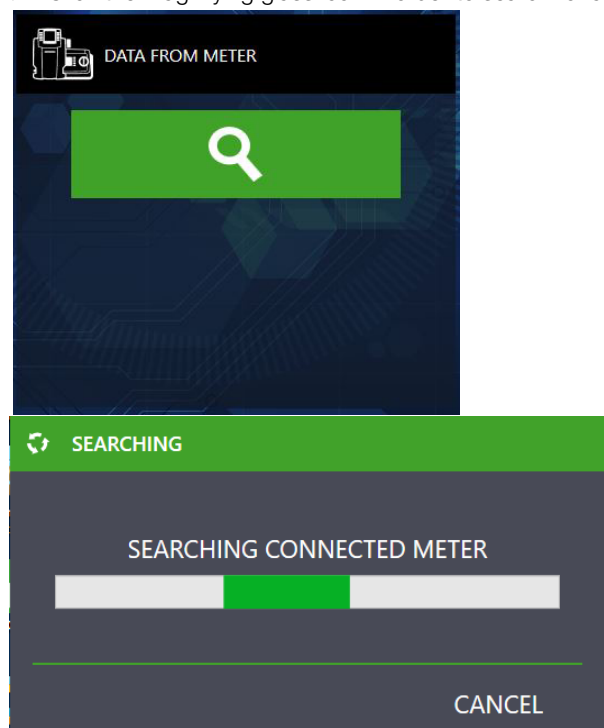
Older test instruments are often not directly compatible with IZYTRONIQ. Data can be read out and saved as an XML file with the help of NEXONIQ. As a second step, the XML file can be reimported to IZYTRONIQ.

The following test instruments can be read out:

SECUTEST SIII+
 SECUTEST SIII+H
 SECUTEST S2N+
 SECUTEST S2N+10
 SECUTEST PSI Module
 SECUTEST SI Module
 SECUTEST SI+Modul
 PROFITEST MTECH
 PROFITEST MBASE
 METRISO PRIME 10
 GEOHM XTRA
 GEOHM PRO
 PROFITEST PVSUN MEMO

Procedure

- Click the magnifying glass icon in order to search for a connected measuring instrument:



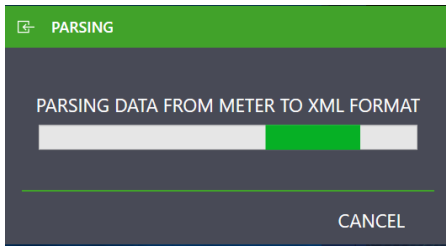
Note

Please observe the import instructions included with your test instrument. More detailed information can be found in the operating instructions for your test instrument.

- If the test device has been acquired, an icon appears with its designation:



- An XML file is created automatically by clicking the icon with the test instrument. The file can be found at C: \Users\Documents\NEXON data files, or in the individually selected target directory specified under SETTINGS.

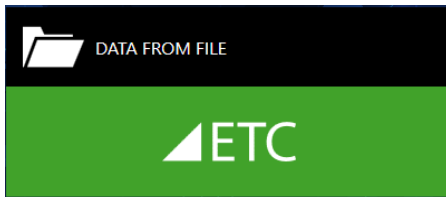


- Import the data to **IZYTRONIQ** (see „Importing the Converted Files (XML) to **IZYTRONIQ**“).

31.1.3 Converting an ETC File to XML

Data in ETC format can be converted to an XML file. As a second step, the XML file can be reimported to **IZYTRONIQ**.

- The ETC file to be imported can be selected in the subsequent Windows submenu by clicking the ETC icon :



After selecting the ETC file, the XML file is generated automatically. The file can be found at C: \Users\Documents\NEXON data files, or in the individually selected target directory specified under SETTINGS.

- Import the data to **IZYTRONIQ** (see „Importing the Converted Files (XML) to **IZYTRONIQ**“).

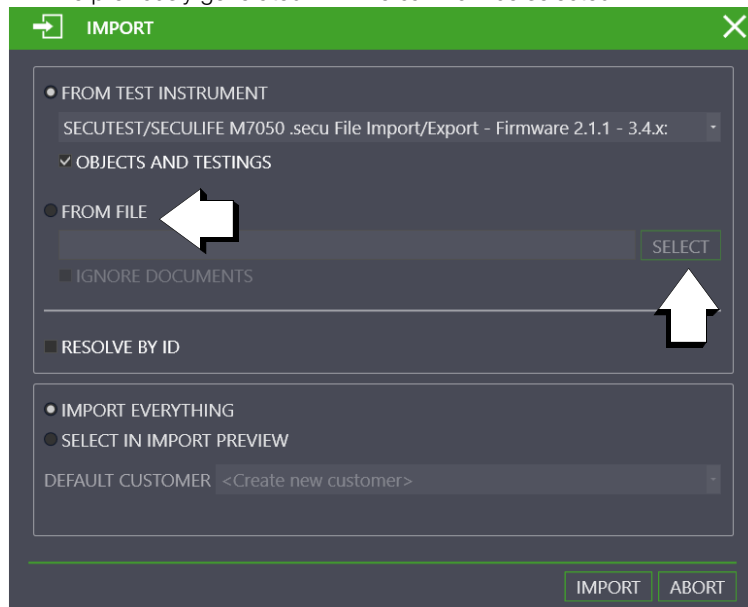
31.1.4 Importing the Converted Files (XML) to IZYTRONIQ

- Start **IZYTRONIQ**.

In order to import the respective XML file to **IZYTRONIQ**, specify whether the objects are “Portable Objects” (e.g. tests with SECUTEST) or “Stationary Objects” (e.g. tests with PROFITEST).

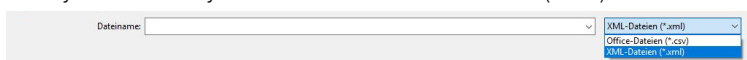
- Click the “Import” icon.
- Click “FROM FILE” and then “SELECT”.

The previously generated XML file can now be selected.



Note

It may be necessary to select the correct file format (*.xml).



- Click IMPORT.

Data from the NEXIONIQ file are transferred to the **IZYTRONIQ** database by means of the import function.

This function can be found in the “PORTALE OBJECTS”  menu or under “STATIONARY OBJECTS”  in the “IMPORT” function . The import wizard is started by clicking this function.

► Successful import and any transmission errors that may have occurred are displayed.

If conflicts occur between existing data and data to be imported which cannot be resolved automatically, the conflict manager is activated.

Refer to **IZYTRONIQ** online help for further information.

31.2 PC DOC IQ

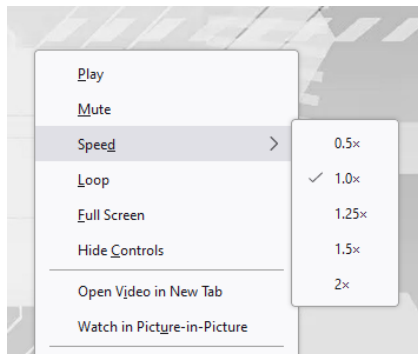
PC DOC IQ is an optional module for **IZYTRONIQ**. It serves as an universal interface between the older test instruments supplied by Gossen Metrawatt GmbH and the newer **IZYTRONIQ** software.

PC DOC IQ also functions as a data converter for **IZYTRONIQ**: Existing master data and test data can be transferred from PC.doc Access to **IZYTRONIQ**. Master data from any source can be transferred to **IZYTRONIQ** via the Excel interface. Furthermore, master data from existing ETC files (different file profiles) can be transferred to **IZYTRONIQ** by means of data the converter. Conversely, Microsoft Word and Excel reports and lists can also be generated. Measurement and test data can be saved to a database with the help of Microsoft Access as well.

Refer to the documentation provided with **PC DOC IQ** for further information and instructions for use. These documents can be found at <http://www.gmc-instruments.de/produkte/pc-doc-iq>.

32 VIDEOS – Tutorial

This tutorial is intended to provide the user with video instructions making it possible to gather experience concerning various topics relatively quickly.



Move the mouse pointer into the video screen area and click the right mouse key in order to open the video menu (see adjacent figure). The menu provides you with options for reducing video playback speed and muting the background music.

The “Enter, Change, Lists” Function – Portable Objects

How-to video, “Basic Use of the 3 Views”

Tab Layouts – Portable Objects

How-to video, “Setting Up Devices”

How-to video, “Manual Measured Value Entry”

How-to video, “Containers”

How-to video, “Test Comparisons”

Data Import Function – Portable Objects

How-to video, “Data Import via Preview”

The Conflict Manager – Portable Objects

How-to video, “Working with the Conflict Manager”

The “Enter, Change, Lists” Function – Stationary Objects

How-to video, “Basic Use of the 3 Views”

Tab Layouts – Stationary Objects

How-to video, “Entering Machines and Systems”

How-to video, “Manual Measured Value Entry”

How-to video, “Containers”

Test Equipment Management

How-to video, “Test Equipment Management, Setting Up Test Equipment”

User Administration – BUSINESS Versions Except for the Premium Variant

How-to video, “Entering Users”

Global Settings

How-to video, “Replacing Logo and Company Address”

Catalogs

How-to video, “Profiscan”

Lists

How-to video, “Working With the List, Filter Functions, Sorting, Filter Editor and Column Wizard”

How-to video, “Working With the List, Generating an Excel File”

“Working with Multi-Assistant”

How-to video, “Working with Multi-Assistant”

Generating a Test Report

How-to video, “Report Generation and Photo Documentation”

Push-Print

How-to video, “Push-Print”

Sequence Editor

How-to video, “PROFITEST Sequence Creation”

How-to video, “SECUTEST Sequence Creation”

33 Support & Contact

Sales

For inquiries to the sales department, for example regarding upgrades, please contact:

Gossen Metrawatt GmbH
Inside Sales
Südwestpark 15
90449 Nürnberg, Germany

Phone: +49 911 8602-01
Fax: +49 911 8602-669
e-mail: vertrieb@gossenmetrawatt.com (RFQs)
e-mail: verkauf@gossenmetrawatt.com (orders)

Support

Please use our **IZYTRONIQ support form** for support requests and for activation files:
https://izytron.com/technischer_support.php

Web

IZYTRONIQ: <https://izytron.com/index.php>
Gossen Metrawatt GmbH: <https://www.gossenmetrawatt.com>

34 Notes Regarding Open Source Software Licenses

In addition to the software parts developed by Gossen Metrawatt GmbH itself, this software also contains Open Source Software.

An overview of the Open Source Software components as well as the corresponding applicable Open Source license terms can be found here as a PDF: Open Source Licenses in the IZYTRONIQ software.

Further information on licenses, copyright notices and source code in accordance with the applicable law, the applicable license terms and stipulations will be provided to you at: vertrieb@gossenmetrawatt.com.

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