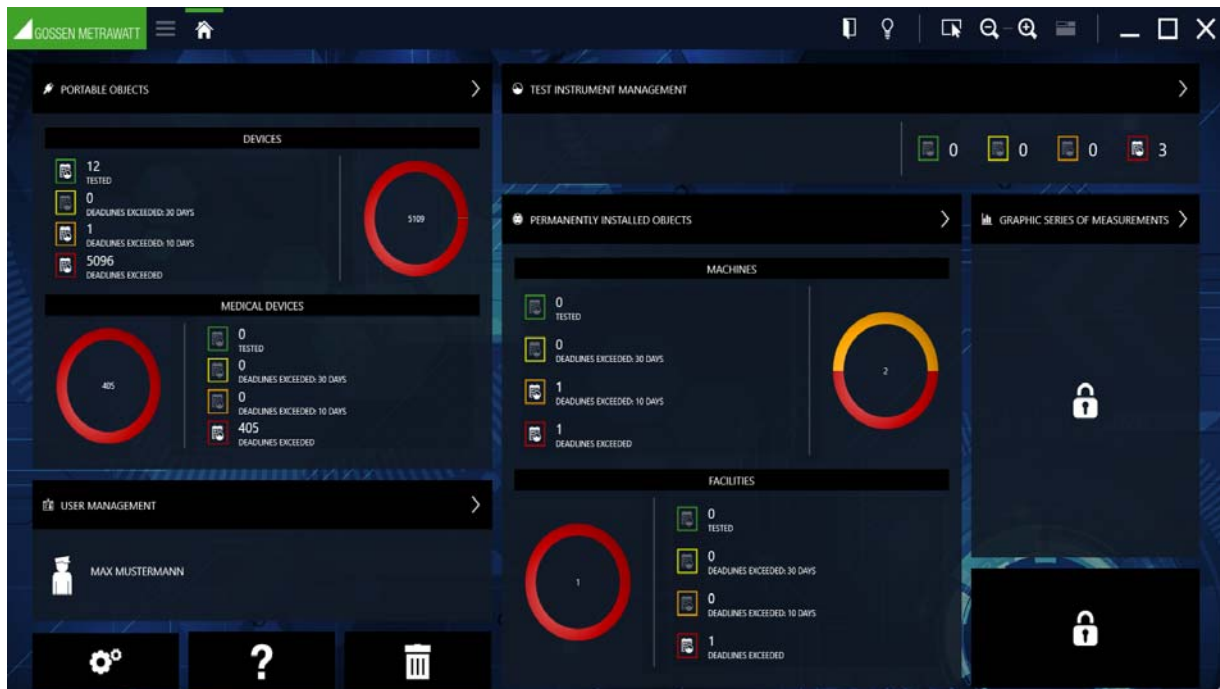


IZYTRON IQ

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

3-349-999-03
8/9.19



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1 System requirements for local and client installation

The program **IZYTRONIQ** runs on Windows 7, 8.1 und 10:

Minimum requirements

Software components

- Operating system: Windows 7
- .NET Framework 4.6.1*

Hardware

- CPU: Dual-core i3 > 3.4 GHz
- RAM: ≥ 2 GB
- Hard drive: at least 2 GB of free memory (depending on data volume)
- Resolution: 1280x800

Recommended

Software components

- Operating system: Windows 10
- .NET Framework 4.6.1*

Hardware

- CPU: Quad-core i7 2.8 GHz
- RAM: ≥ 4 GB
- Hard drive: at least 4 GB of free memory (depending on data volume)
- Resolution: 1920x1080
- Touch display and active pen

* Microsoft has an installation assistant to install .NET Framework 4.6.1.

2 Versions of IZYTRONIQ

2.1 Introduction

IZYTRONIQ is available in 8 performance levels and configurations that provide users with a solution that is tailored to specific requirements. Users can add upgrades to enhance the scope of functions at any time to accommodate additional requirements. Naturally, upgrades do not alter any existing data.

BUSINESS versions

The common denominator of the Business versions is their local installation and use on one computer. They are installed on single devices. A separate license is required for each workstation. These versions do not support multi-user operation in networks. It is still possible to create several users.

ENTERPRISE versions

The common denominator of the Enterprise versions is the ability to work in a team. The software is installed on several computers that share the data in one database. Depending on the version, the data can be made available online and offline. An infinite number of licenses can be purchased for multi-user operation to suit requirements.

EDUCATION versions

The EDUCATION versions may only be used in the areas of training and education.



• BUSINESS Starter

- Stationary objects (machinery & facilities)
- Portable objects (devices & medical devices)
- Test device management
- User management
- Push/print function
- Sequence management + sequence editor
- Catalog management and editing
- Tree structure for machinery and facilities
- Tree structure for devices and medical devices
- Tree structure for locations (facilities, buildings, levels & rooms)
- Simple universal report as a PDF
- Simple list generator (PDF, Excel)
- Red/green test analysis

Main communication features

- Import of memory structure, catalogs, sequences and measurements from the test device
- Export of memory structure, catalogs and sequences to the test device
- Data import of memory structure, catalogs, sequences and measurements from an XML file
- Data export of memory structure, catalogs, sequences and measurements to an XML file
- Data import of master data for portable objects from a CSV file



• BUSINESS Advanced

in addition to BUSINESS Starter

- Extended test reports in portrait and landscape format
- Design of individual report templates in Microsoft Word
- Company logo can be integrated in the report
- Scanned signature can be integrated in the report
- Audit-proof PDFs with checksum of report content as a QR Code
- Reports can be saved as PDF and Microsoft Word documents
- Barcode generator using the Brother printer P-Touch (accessory)
- PROFISCAN barcode generator code 128 as a list printout to replace the PROFISCAN booklet

* QR Code is a registered trademark of DENSO WAVE INCORPORATED



- **BUSINESS Professional**

in addition to BUSINESS Advanced

- Remote function
- Manual input of measured values
- Images/photos can be integrated in the test reports
- Document management (attachments as Word, Excel and PDF documents or photos and images)
- MULTI changes
- Dashboard function in the home screen
- Quick links
- Analysis and trend development for similar tests of one object
- Overarching statistics with percentage failure rate as a PDF printout

- **EDUCATION Professional**



- **BUSINESS Premium**

in addition to BUSINESS Professional

- Roles & rights management for users
- Screen designer and data field editor to customize the application

- **EDUCATION Premium**



- **ENTERPRISE Premium**

EDUCATION Premium enables collaborative work.

An infinite number of users can access the same database at the same time.

Each user requires a separate ENTERPRISE Premium license for concurrent use of the application.

In addition to BUSINESS Professional

- Network capability – connection to an external MS-SQL database (server)
- Floating multi-user operation – with staggered license model
- Roles & rights management for users
- Screen designer and data field editor to customize the application



- **ENTERPRISE Ultimate**

ENTERPRISE Ultimate is an additional license for provisioning and automatic reconciliation of mobile data (data replication).

At least one license is required to use ENTERPRISE Premium.

An Ultimate license is required for each mobile workstation (outdoor/offline). An infinite volume of datasets can be exchanged, i.e. synchronized between the server and the mobile workstation. Users can access these datasets offline at the mobile workstation and can be edited there and then synchronized.

3 Downloading BUSINESS and CLOUD Variants

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

After downloading the file (**IZYTRONIQ.Setup.exe**), it must be stored to a directory. The setup file then appears in the selected directory. After starting the file, follow the installation instructions (see “Initial installation of BUSINESS Starter / Advanced / Professional / Premium”).

4 Initial installation of BUSINESS Starter / Advanced / Professional / Premium

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** and **BUSINESS Premium** 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 with the available system environment (see “System requirements for local and client installation”).

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. Afterwards, either standard or user-defined installation can be selected. In the case of user-defined installation, the directory path can be changed. After installation, you have the option of either starting the program directly or closing the installer.

After starting the software for the first time, the license key has to be entered (see “Licensing”).

5 Initial installation of the ENTERPRISE Variant



Caution!

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

Minimum technical requirements must be fulfilled in order to operate one's own server.

Further information is included in our installation checklist which we can make available to you upon request.

Further software components from Microsoft are also required, for example a server with MS Server operating system. This includes MS IIS, which must be administrated for **IZYTRONIQ**.

Installation of the required MS SQL database also necessitates appropriate technical knowledge.

Additional license costs are incurred depending on the selected performance level of the MS SQL database.

In order to assure GDPR-compliant, secure communication between the server and the client, the data must be encrypted for transmission. A certificate is required to this end. Detailed information concerning this certificate can be found in the corresponding passages of the respective sections.

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

Download

IZYTRONIQ Enterprise can be downloaded from <https://www.izytron.com/downloads.php>.

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.

IZYTRONIQ



(Starter, Advanced, Professional)

[IZYTRONIQ Download](#)

IZYTRONIQ



(Premium, Professional)

[IZYTRONIQ Download](#)

IZYTRONIQ



(Premium, Ultimate)

[IZYTRONIQ Download](#)

[IZYTRONIQ Backend Download](#)



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 Backend and Client after installation has been completed.

5.1 Installation Prerequisites for IZYTRONIQ BACKEND

Windows Server 2016 or higher is recommended for installation.

The network infrastructure is dealt with in detail in the following sections, for example settings and features are described which are required for operation of the backend.

The following attributes must be activated:

- Windows Server 2016 or later
- **MS SQL Server** for the database
(mixed mode authentication is recommended in the case of an MS SQL Express installation)
- MS SQL Management Studio
- **Activated IIS with the corresponding features**
 - Common HTTP features
 - All except for WebDAV Publishing
 - Health and diagnostics
 - HTTP logging
 - Request monitor
 - Performance
 - Static content compression)
 - Security
 - Request filtering
 - Basic authentication
- **The following features must be activated:**
 - 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 4.6 features
 - WCF services
 - HTTP activation

5.1.1 .NET Framework 4.6.1

Installation of .NET Framework 4.6.1 or later can be executed by a corresponding Microsoft installation program.

5.1.2 Microsoft SQL Server

A Microsoft SQL Server (2016 or later) must be available to which the backend can connect.

Appropriate software can be obtained from Microsoft for a license fee.

The following hardware specifications are minimum requirements which may have to be scaled up depending upon usage and utilization:

Processor	Quad core CPU
RAM	8 GB
Hard disk space	100 GB



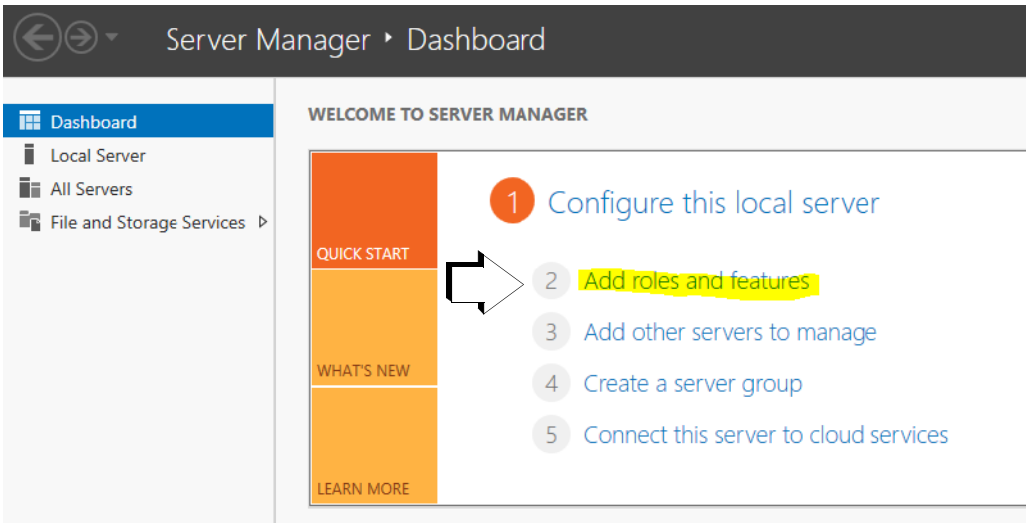
Note

The specifications in the table shown above make reference to an **IZYTRONIQ ENTERPRISE** single-server installation.

5.1.3 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 “Installation Prerequisites for IZYTRONIQ BACKEND”.

5.1.4 SSL Certificate

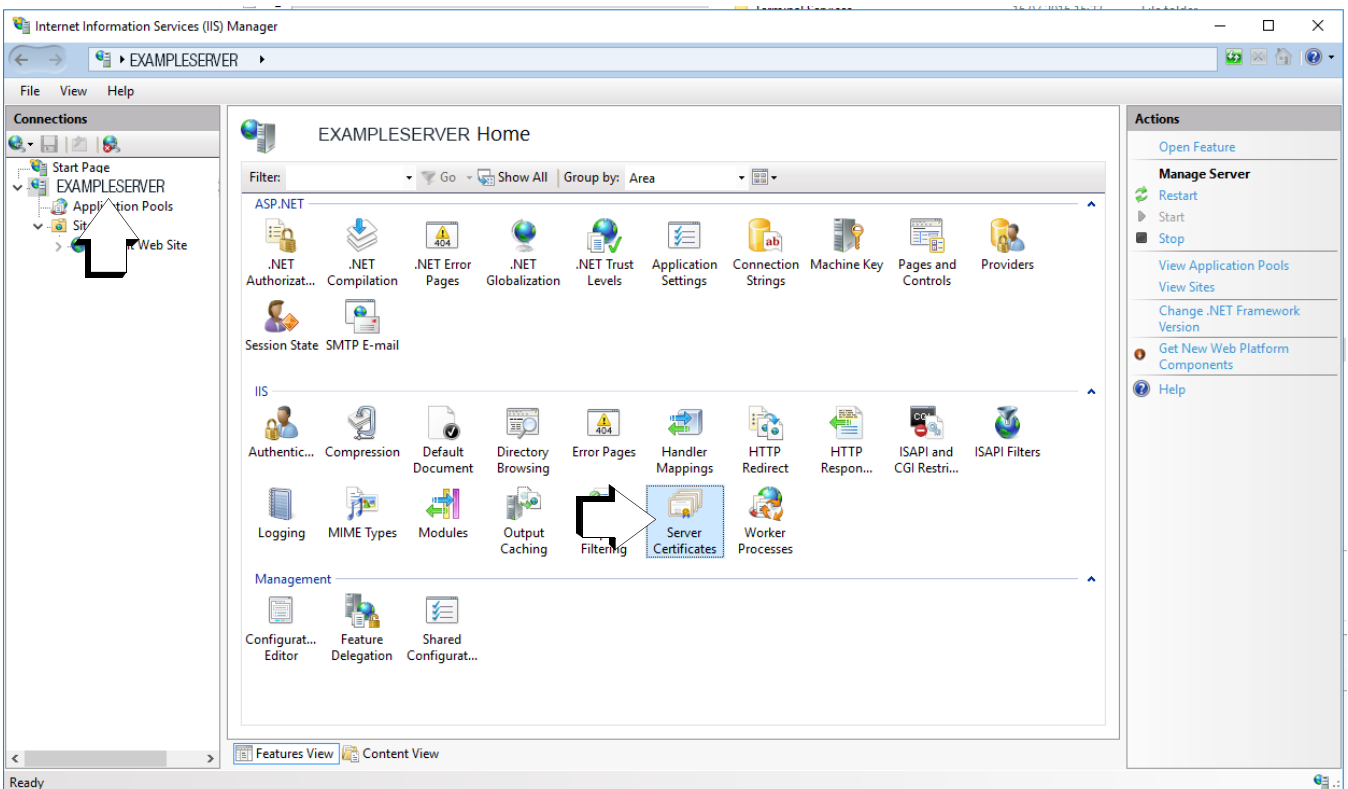
A valid certificate must be available on the server in order to be able to use the WebService and the **SyncService**.

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

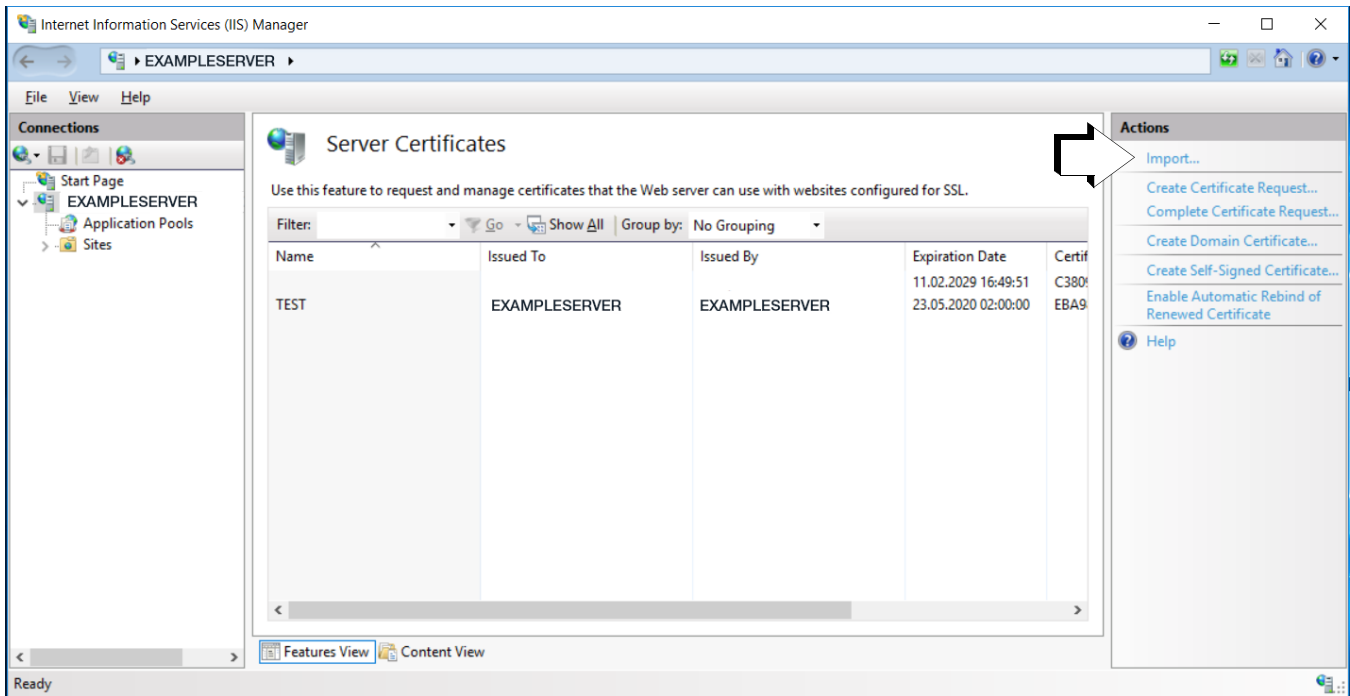
It's advisable to obtain the certificate from an authorized source with a suitable duration of validity. A self-signed certificate can be used as an alternative. However, these are typically limited to one year and must be installed separately to the clients in the “Trusted Root Certification Authorities”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

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

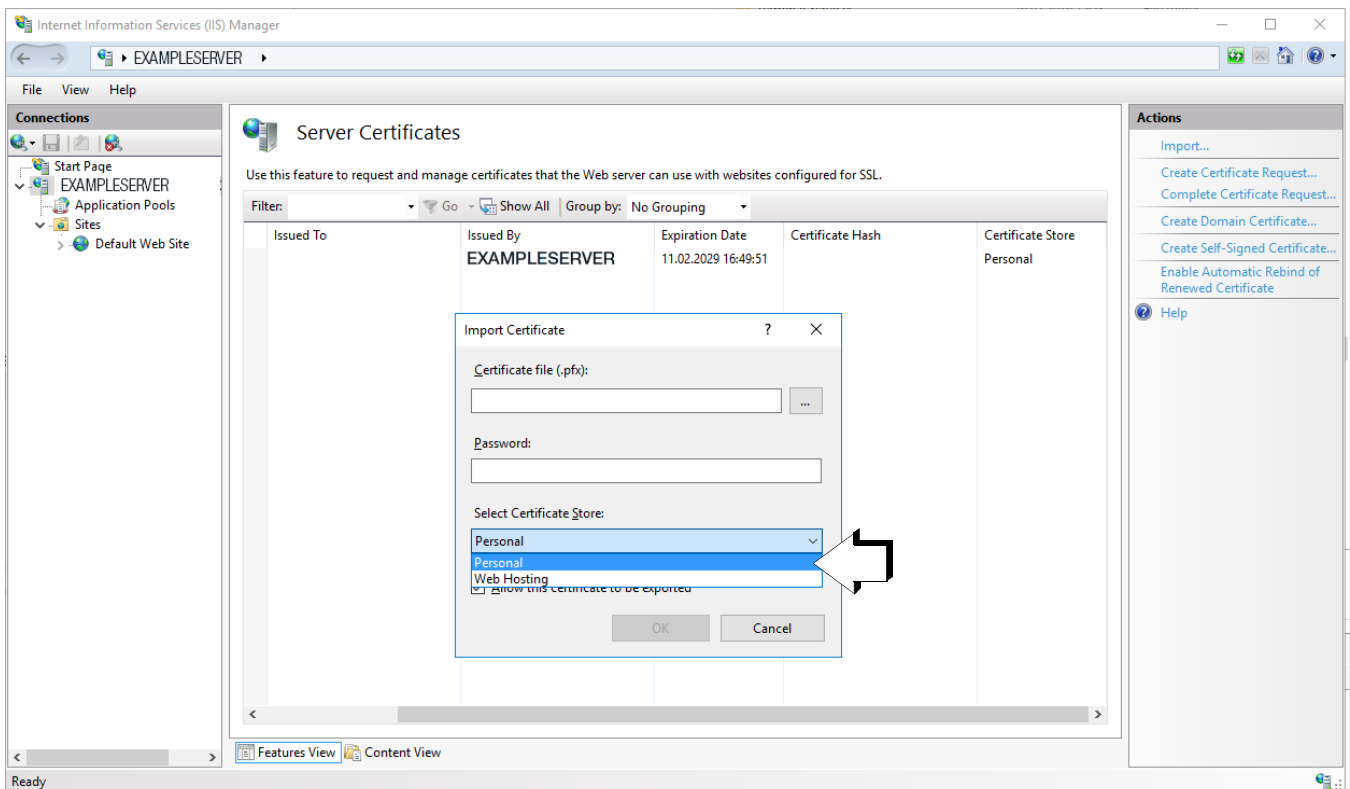
- ▶ Click Server Certificates to this end.



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



- ▶ Select "Personal" under certificate store.

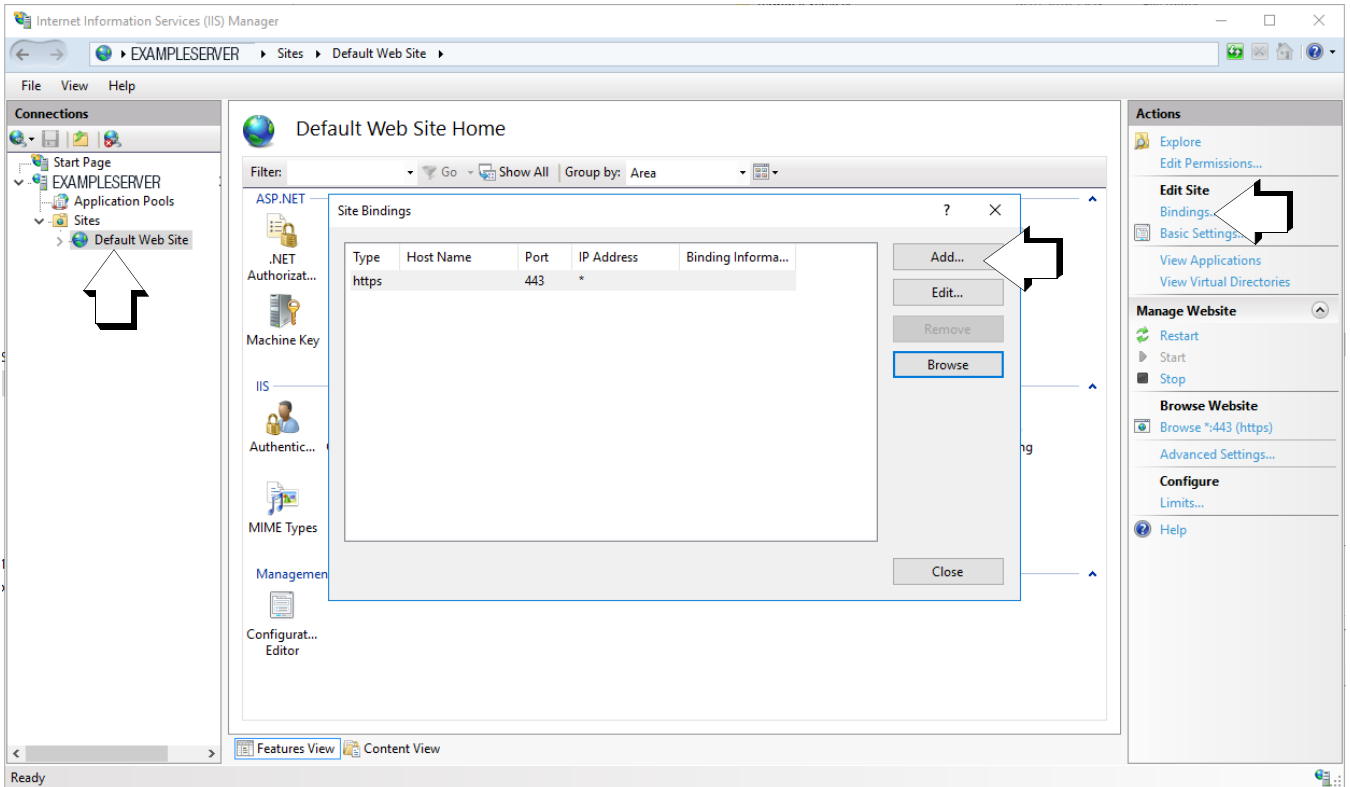


The certificate's fingerprint is entered to the respective configuration files (**IZYTRONIQ.SyncSvc.exe** and **Web**) in uppercase letters without blanks and without hidden special characters. It may be advisable to copy the certificate's fingerprint into the editor and copy it, in order to avoid errors.

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".

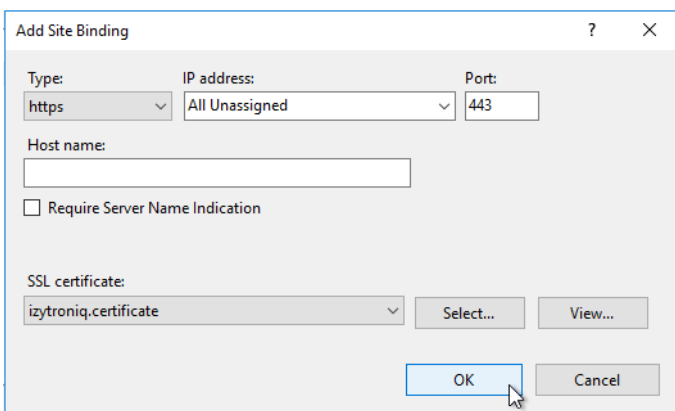
Subsequently, the certificate also has to be entered to the bindings of the **default website** so that communication can take place in the case of standard installation.



A new binding must be added to the site bindings 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.

5.1.5 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 must 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.

5.1.6 Hardware Recommendations

This section includes recommendations for the network infrastructure for operation of the Enterprise variant of IZYTRONIQ.

5.1.6.1 Server

Standard installation typically involves installation to a server on which the database, the application and the synchronization service run. The server must be adequately dimensioned in accordance with system utilization.

Backend Server

Location: Intranet
Access: Domain access
Operating system: Windows Server 2016
Accessibility: Via HTTPS from the clients (via intranet)

Services

Name	Type	Description
IZYTRONIQ Backend	Web service	Provision of services for the IZYTRONIQ client

Hardware

Above all, the backend server requires as much computing power as possible.

Name	Minimum	Recommended
CPU	1 logical core per 10 users	1 logical core per 5 users
RAM	1 GB per 10 users	1 GB per 5 users

Synchronization Server

Location: Intranet
Access: Domain access
Operating system: Windows Server 2016
Accessibility: Via HTTPS from the clients (via intranet)

Services

Name	Type	Description
IZYTRONIQ backend sync service	Windows service	Service for synchronizing the client database with the backend database and importing data from the test instruments

Hardware

Name	Minimum	Recommended
CPU	Quad core	Quad core
RAM	8 GB	16 GB
Hard disk	10 GB	15 GB
Network	100 Mbit/s	≥ 100 Mbit/s

Backend Database Server

Location: Intranet
Access: Domain access
Operating system: Windows Server 2016

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).

Services

Name	Type	Description
MS SQL server 2016 or newer MS SQL server version	Database	Backend database

We recommend using MS SQL server 2016 or higher.

Hardware

Hardware depends to a great extent on whether additional databases and services, or only the database for the backend server, will be run on the server.

Name	Minimum	Recommended
CPU	Dual core	Quad core
RAM	8 GB	16 GB
Hard disk	10 GB	20 GB
Network	100 Mbit/s	> 100 Mbit/s

5.2 Installing IZYTRONIQ Backend

General

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:

- **Database**
- **Application server**
- **Synchronization service**
- **License activation tool**

Installation must be started by means of a command prompt with administrative rights. The .msi files have to be executed with the "msiexec /i" command.

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 an MS SQL server provided by the customer while **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 MS SQL server.

5.2.1 Installing the Database

IZYTRONIQ BackEnd Database.msi

Description

This setup 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 in the following. These are used automatically if the corresponding parameter isn't specifically configured during installation.

```
PRODUCT_LANGUAGE = de  
BACKEND_SERVERNAME = localhost  
BACKEND_DATABASE = IZYTRON.IQ  
BACKEND_DATABASE_USERNAME =  
BACKEND_DATABASE_USERPWD =
```

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 does not correspond to setup, 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 "IZYTRON.IQ.SyncSvc.exe.config" file is appropriately modified, the application server utilizes the correct database.

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

5.2.2 Installing the Application Server

IZYTRONIQ BackEnd ApplicationServer.msi

Description

This setup installs the application server to IIS.

MSI Package

The MSI package includes the following optional parameters:

INSTALLWEBAPPDIR = standard wwwroot directory of the IIS,

normally = c:\inetpub\wwwroot\IZYTRON.IQ

WEBSITE_NAME = Default Website

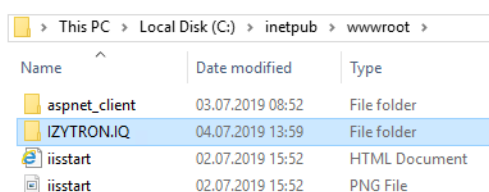
WEBAPP_NAME = IZYTRON.IQ

APPPPOOL_NAME = IZYTRON.IQ.BackEnd Pool

APPPPOOL_USERNAME =

APPPPOOL_USERPWD =

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



Name	Date modified	Type
aspnet_client	03.07.2019 08:52	File folder
IZYTRON.IQ	04.07.2019 13:59	File folder
iisstart	02.07.2019 15:52	HTML Document
iisstart	02.07.2019 15:52	PNG File

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

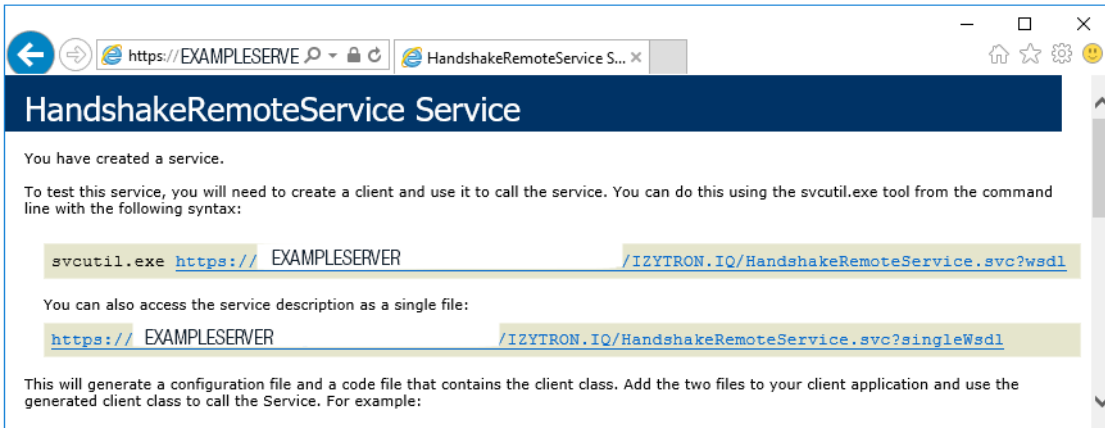


Attention!

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: ApplicationPoolIdentity.
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`

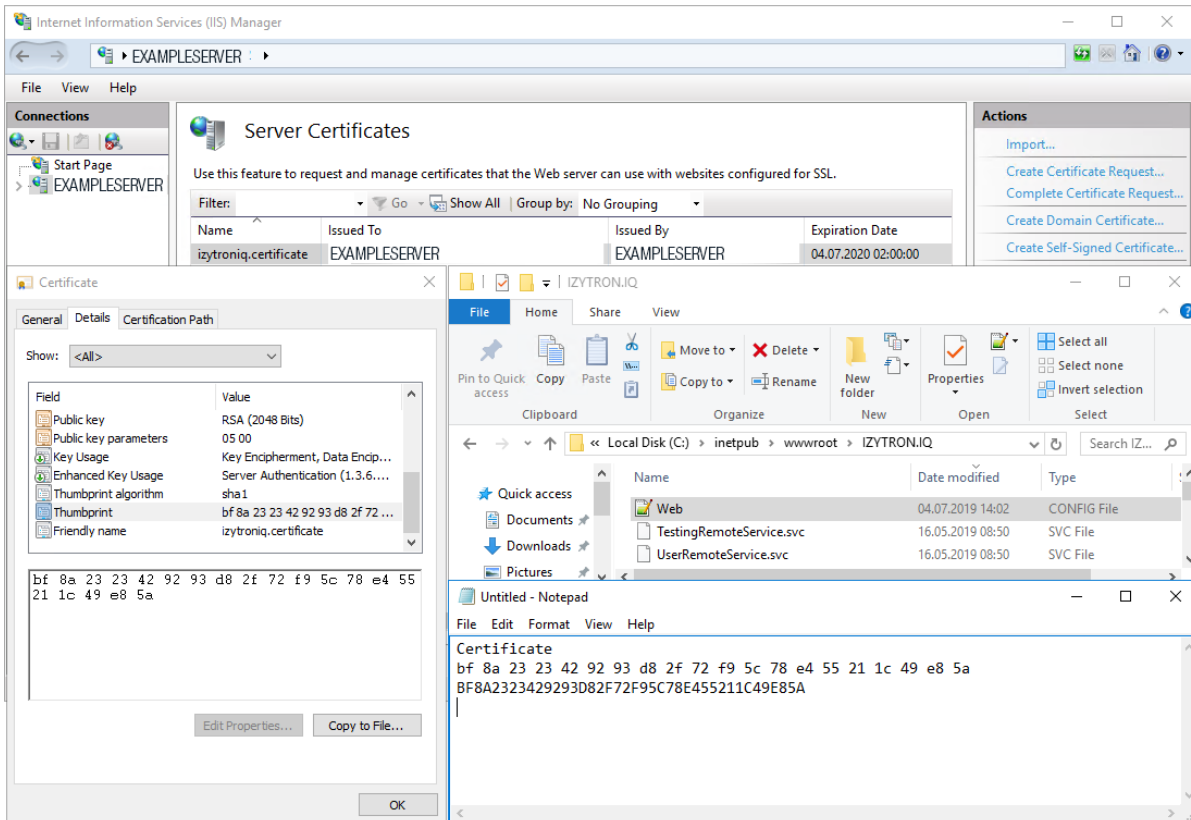


Note

However, if URL `https://localhost/IZYTRON.IQ/HandshakeRemoteService.svc` is used, 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). Please refer to previous section 5.1.4, "SSL Certificate", for details.



The value for “findValue” must also be correctly set in the **Web.Config** file under the <serviceCertificate> tag. This corresponds to the certificate’s fingerprint or thumbprint.

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.

For the purposes of **IZYTRONIQ**, the fingerprint must be taken over

- without blanks,
- using uppercase letters only and
- without hidden special characters

within the <serviceCertificate> tag of the Web.config file.



Note

The Web.config file doesn’t have to be modified until modification of the **IZYTRONIQ** SyncService.exe.config file becomes necessary during installation of the synchronization service (next section: “Installing the Synchronization Service”). The corresponding tag in the Web.config file can simply be replaced with the modified <serviceCertificate> tag there.



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.

5.2.3 Installing the Synchronization Service

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 SyncService".

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) has been started automatically after installation, it should be stopped for the purpose of configuration.

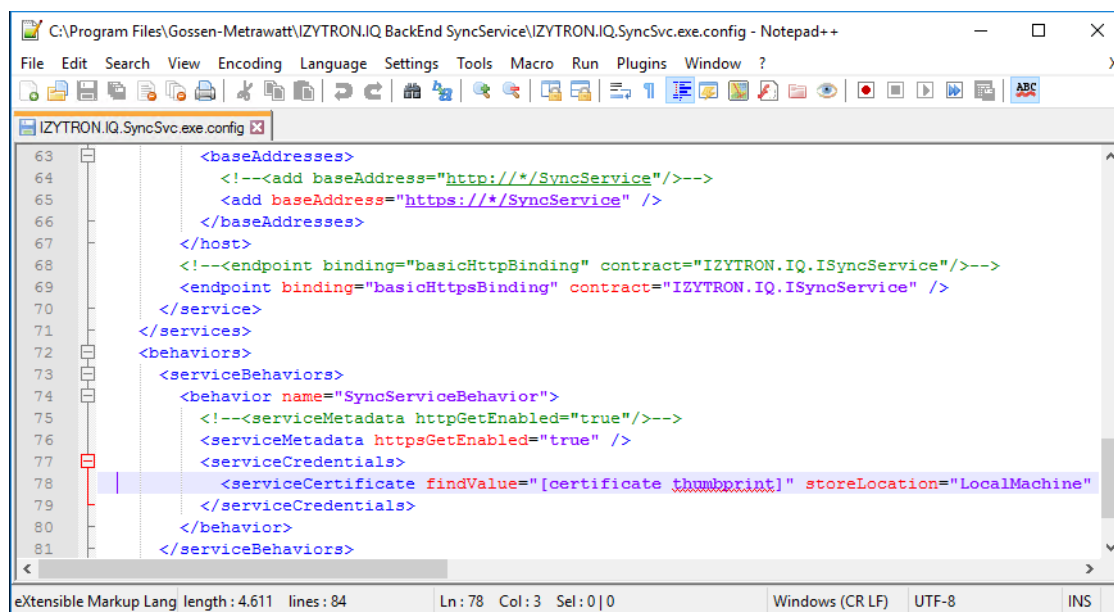
The following lines must be changed in the IZYTRONIQ.SyncSvc.exe.config file.

```
<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" />
```



```
C:\Program Files\Gossen-Metrawatt\IZYTRON.IQ BackEnd SyncService\IZYTRON.IQ.SyncSvc.exe.config - Notepad++
File Edit Search View Encoding Language Settings Tools Macro Run Plugins Window ?
IZYTRON.IQ.SyncSvc.exe.config
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 to the local synchronization service database is configured with the name "SyncService" in the <connectionStrings> section of the IZYTRONIQ.SyncSvc.exe file.

The path to the instance must be modified if necessary under "DataSource=(local)", for example "DataSource=(local)\SQLEXPRESS", and "(local)" must be replaced with the computer's name if applicable.

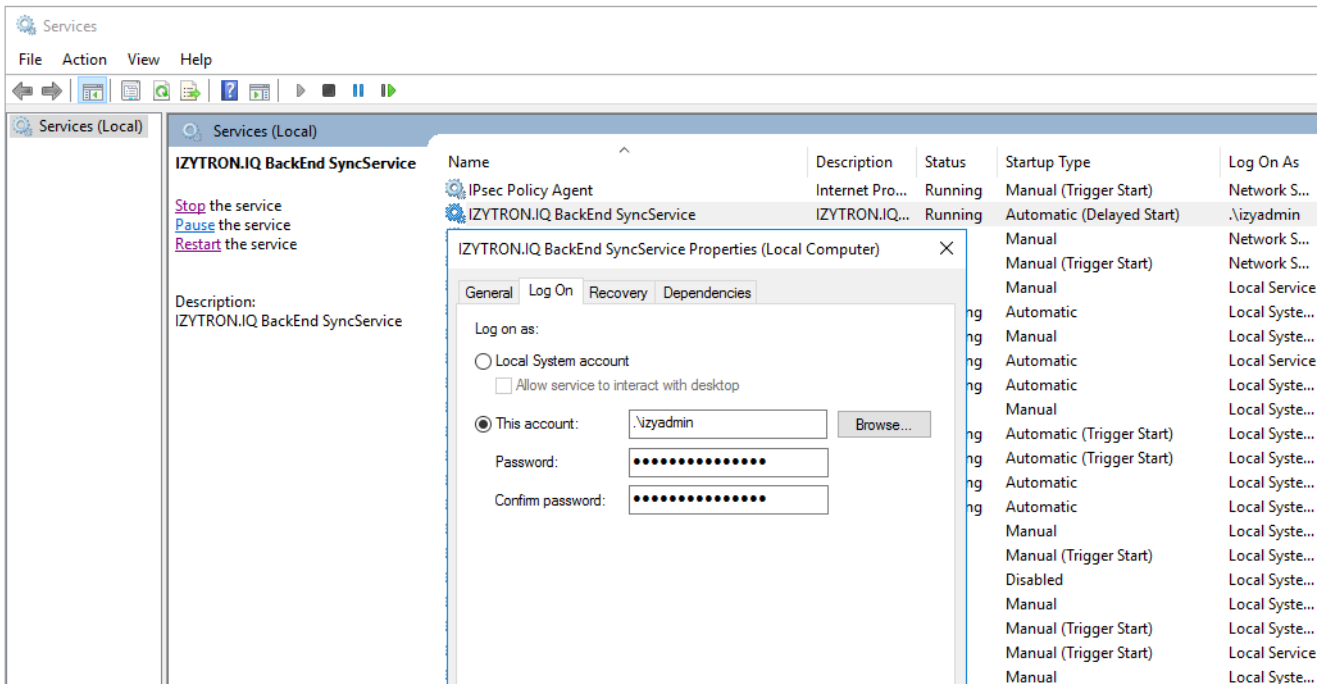
We recommend adding the following entry to the line: ";MultipleActiveResultSets=True".

Example:

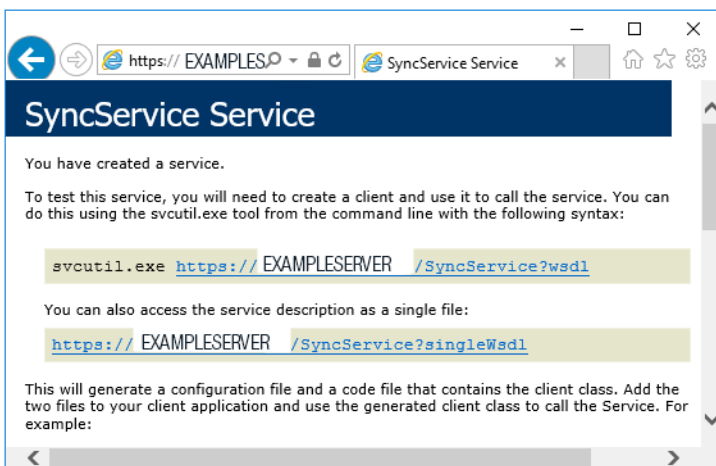
```
<add name="SyncService" providerName="System.Data.SqlClient" connectionString="Data Source=(local);Initial Catalog=SyncService;Integrated Security=True;MultipleActiveResultSets=True"/>
```

- **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".

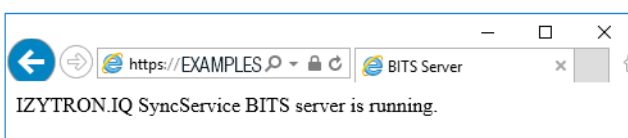
After the service has been started, checking can be conducted to determine whether or not the "SyncService" database has been successfully created.



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)".

5.2.4 Installing the License Activation Tool (floating services)

IZYTRON.IQ BackEnd License Activation.msi

Description

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

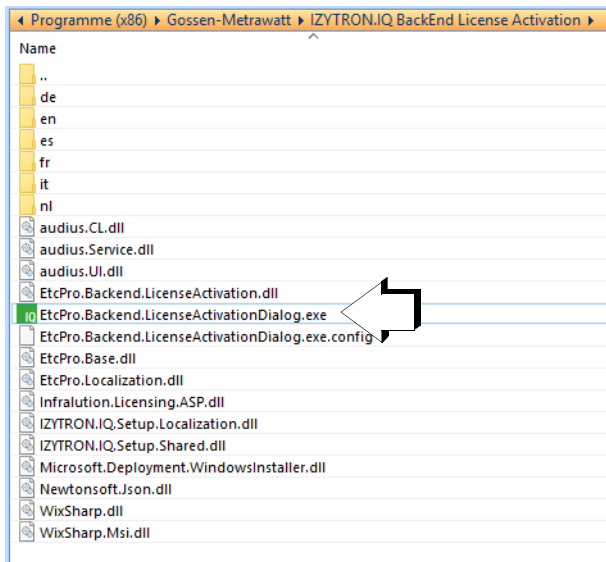
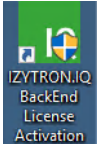
Comments

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 3 .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.



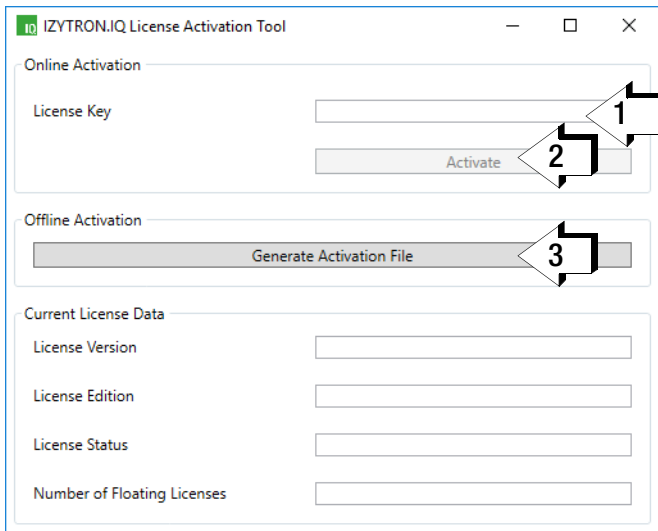
Important Note

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:

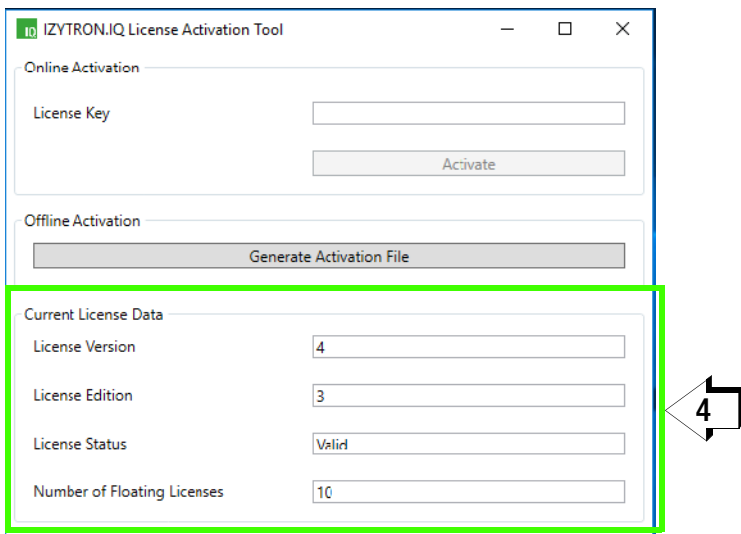
License keys from license certificates which have been issued for **IZYTRONIQ** Enterprise Ultimate should instead be stored to the outdoor PC for which offline operation without connection to the server will be additionally enabled. The **IZYTRONIQ** client which has been previously installed as a server-based 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 the following section 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 is possible 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.



GMC-I Messtechnik GmbH

Product Support Hotline

Phone: +49-911-8602-0

Fax: +49-911-8602-709

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”.

5.3 Installing the Frontend (client) for IZYTRONIQ Enterprise

IZYTRONIQ can be installed to the PC as a client. The “Network Version (Client)” option must be selected in response to the following prompt: Standalone, Network Version (Client) or Cloud Operation.



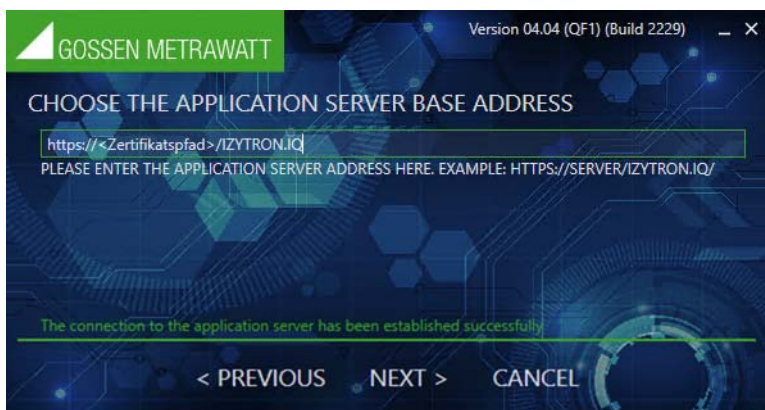
A functioning **IZYTRONIQ** ENTERPRISE Backend is required to this end, whose URL is entered during the next step in accordance with the certificate path (address to which the certificate is issued).

Example of a typical, complete entry:

`https://<certificate path>/IZYTRON.IQ/`

Example:

`https://computer name.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 be entered exclusively 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 Licensing

A license is needed to operate **IZYTRONIQ**. It can be obtained online using an activation file.

6.1 Licensing BUSINESS Starter / BUSINESS Advanced / BUSINESS Professional / BUSINESS Premium / EDUCATION Professional / EDUCATION Premium

To license your **IZYTRONIQ**, go to reg.izytron.com and enter the registration code you received when purchasing the product, together with your address data and your email address. Your license key will be sent to the email address you provided without delay. You must enter this license key the first time you start **IZYTRONIQ**. A connection is then established with the license server for the purpose of authentication. Your hardware (MAC address of your computer) is coupled to the license key during this process. This means that the license can only be used with this particular hardware. Should you wish to use the license on different hardware, it is first necessary to uninstall **IZYTRONIQ** on its current hardware. During this process, the license will be de-authenticated and released for use with other hardware (new computer).

In the unlikely event that you are unable to license and authenticate the software by a one-time connection with the Internet, the licensing procedure can also be completed without an Internet connection. To do this, you will have to contact employees at GOSSEN METRAWATT directly. Our friendly team is available to assist you on telephone: +49 911 8602-0.

6.2 Licensing ENTERPRISE Premium

To license your **IZYTRONIQ**, go to reg.izytron.com and enter the registration code you received when purchasing the product, together with your address data and your email address. Your license key will be sent to the email address you provided without delay. The license key must be entered on the server. A connection is then established with the license server for the purpose of authentication. This means that the license can only be used with this particular hardware.

IZYTRONIQ ENTERPRISE Premium acts as the client server system and provides a network structure within this system. This structure consists of a central database server as the server component and several workstation computers as client components.

The respective administrator must install the server manually. For this purpose, the administrator will receive the installation instructions (best practice document) describing how the MS SQL server should be configured for **IZYTRONIQ**. Separate license keys are not needed for the clients in **ENTERPRISE Premium**. Instead you will require the necessary number of floating licenses on the server. In addition to installing the server, you will have to install the client on each workstation computer. The database path for the server must be specified during installation on the client. You may install an infinite number of license-free clients, but please take note that simultaneous use will never exceed the number of floating licenses you have purchased.

In the unlikely event that you are unable to license and authenticate the software by a one-time connection with the Internet, the licensing procedure can also be completed without an Internet connection. To do this, you will have to contact employees at GOSSEN METRAWATT directly. Our friendly team is available to assist you on telephone: +49 911 8602-0.

6.3 Licensing ENTERPRISE Ultimate

The **IZYTRONIQ ENTERPRISE Ultimate** licenses can only be used in combination with at least one **ENTERPRISE Premium** floating license. To purchase a **ENTERPRISE Ultimate** license, you require a **ENTERPRISE Premium** license.

Each **ENTERPRISE Ultimate** must be licensed after installation on the mobile device (tablet, notebook).

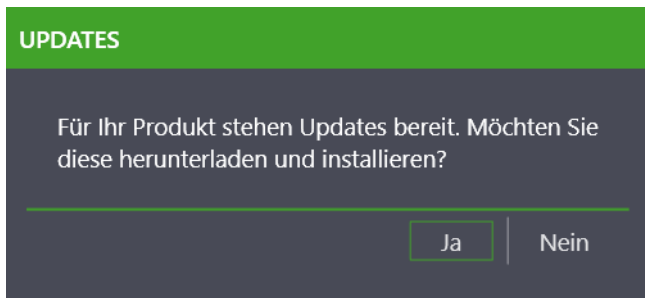
To license your **IZYTRONIQ**, go to reg.izytron.com and enter the registration code you received when purchasing the product, together with your address data and your email address. Your license key will be sent to the email address you provided without delay. You must enter this license key the first time you start **IZYTRONIQ**. A connection is then established with the license server for the purpose of authentication. Your hardware (MAC address of your computer) is coupled to the license key during this process. This means that the license can only be used with this particular hardware. Should you wish to use the license on different hardware, it is first necessary to uninstall **IZYTRONIQ** on its current hardware. During this process, the license will be de-authenticated and released for use with other hardware (new computer).

7 Update

Free updates will be available to you during the statutory warranty period.

Updates are distributed exclusively via the update service and are **not** installed by setup. In this regard, the software checks whether a new version is available on the server each time it is started.

In addition, the **IZYTRONIQ** Global Settings contain the option to query updates manually; refer to “Global settings”.



The automatic search for updates can be disabled in the Global Settings. You have the option of concluding a maintenance contract if you wish to receive updates beyond the statutory warranty period. Contact our sales department if you are interested.

8 Uninstallation

To uninstall **IZYTRONIQ**, go to the Control Panel of the operating system.

During uninstall, you can choose whether you wish to keep the local database and/or the license on your PC. They will be available for use on an alternative PC if you release them.



Note

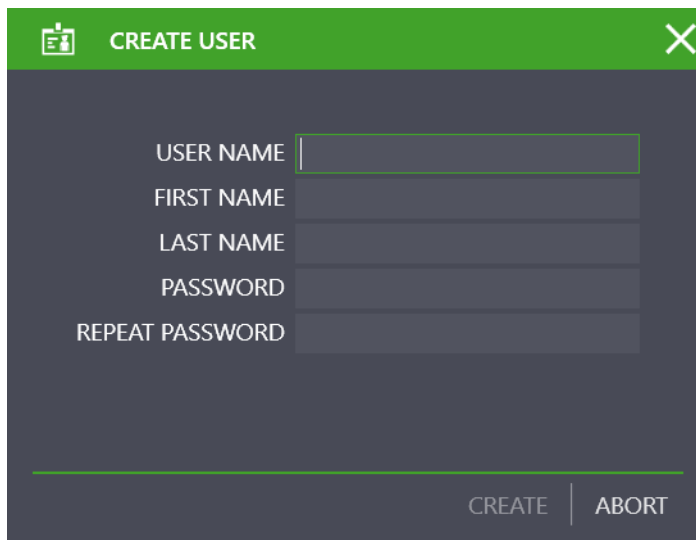
Only certain licenses can be released. Contact our support department for further information.

9 Login / Logout

Initial login

The first necessary step is to create a user if users have not yet been set up for the database (initial login to **IZYTRONIQ**). The login screen has a heading “Create User” for this purpose.

The required information is the first and last name of the user, a personal username and a password (must be repeated). The user is assigned the role “Admin”.

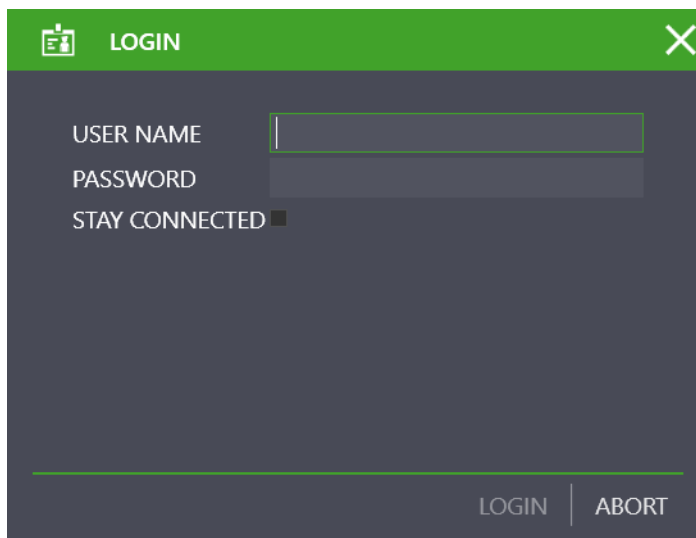


The screenshot shows a dialog box titled "CREATE USER" with a green header bar. Below the header, there are five input fields: "USER NAME", "FIRST NAME", "LAST NAME", "PASSWORD", and "REPEAT PASSWORD". At the bottom of the dialog, there are two buttons: "CREATE" and "ABORT".

Subsequent login


Users can only access the software if they are registered in the **IZYTRONIQ** user management with a password.

When the software is launched after the first time, it will open a login screen to enter the user name and password.



The screenshot shows a dialog box titled "LOGIN" with a green header bar. Below the header, there are three input fields: "USER NAME", "PASSWORD", and a checkbox labeled "STAY CONNECTED". At the bottom of the dialog, there are two buttons: "LOGIN" and "ABORT".

Switching users


It is also possible to use the  button in the status bar to switch users while the application is open.


Stay Connected

If you wish to remain logged in to this program at your PC, click on the entry field behind „STAY CONNECTED“ in the login window. When restarting the program, it will then open directly without a login window appearing. You can undo this selection by opening the „PERSONAL SETTINGS“ menu and by removing the check mark behind parameter „STAY CONNECTED“; see “Personal settings”.

Log out – close

The application has several options to close **IZYTRONIQ**:

1. Close the **IZYTRONIQ** application by selecting the Close Window function  in the status bar.

2. Use the  symbol in the status bar:

After clicking on the symbol, you must respond to the confirmation prompt with "Yes". Then you will see the login screen. Select "ABORT" in this case. You close **IZYTRONIQ** by responding to the confirmation prompt with "Yes".

10 Basics of operation

IZYTRONIQ is operated using a number of neatly structured modules. These modules are found in the home screen and in the navigation bar.

Portable Objects (devices and medical devices)

- Checking, registering and managing of **portable devices**

Stationary objects (machinery & facilities)

- Checking, registering and managing of **stationary devices**

User management

- Creating and managing users

Test device management

- Creating and managing test devices

Settings

- General settings for working with **IZYTRONIQ**

Help

- To access online help, refer to “Help”

Recycle bin

- Irreversible erasure or restoration of data moved to the recycle bin

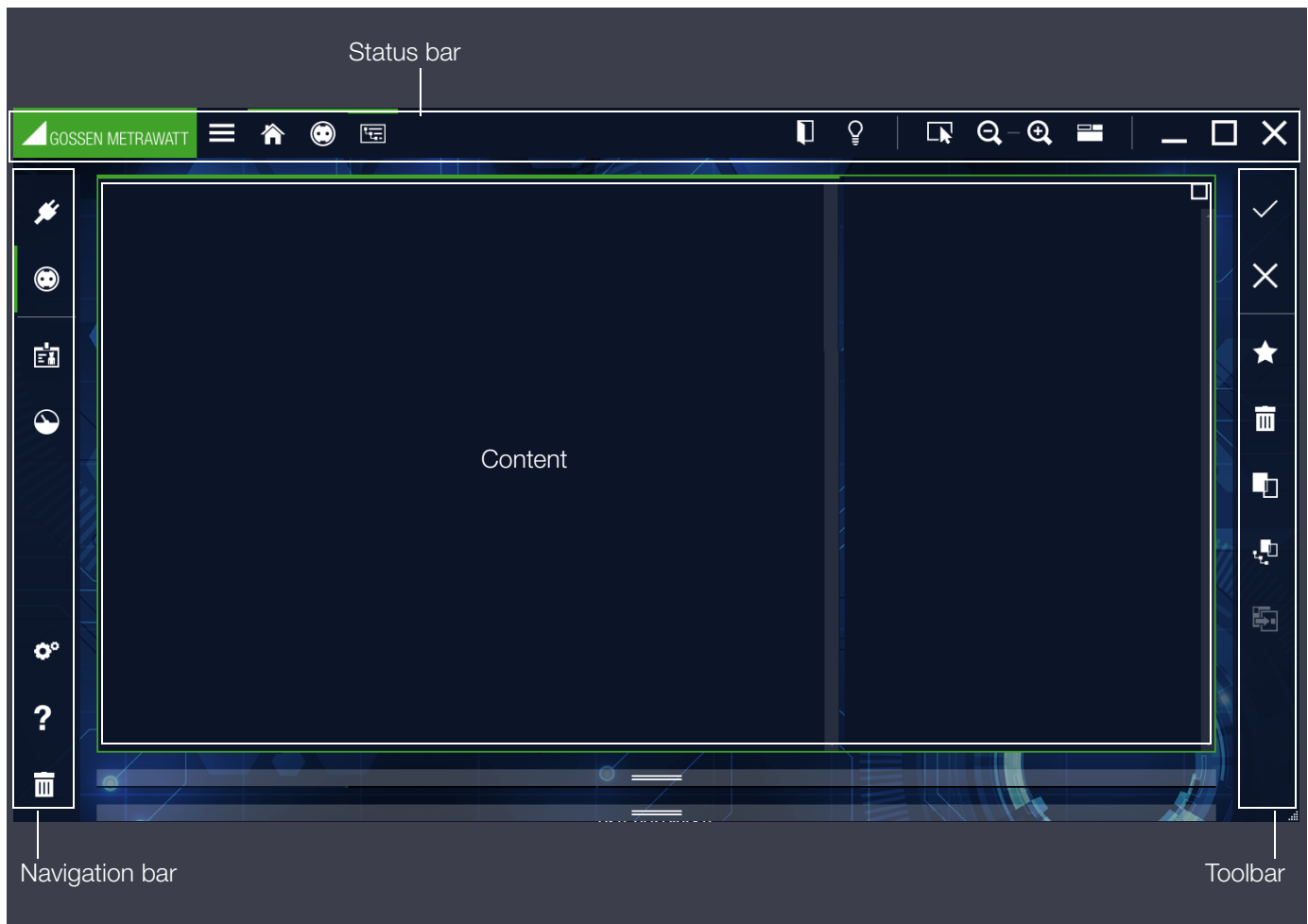
Synchronization (ENTERPRISE Ultimate version only)

- Comparison of a server database with a local database of a PC

10.1 Structure of the user interface

The status bar, navigation bar and toolbar are available to users to operate the respective interface (content).

1. **Status bar (always shown)**
2. **Navigation bar (shown or hidden)**
3. **Toolbar (always shown):** has context-sensitive content.

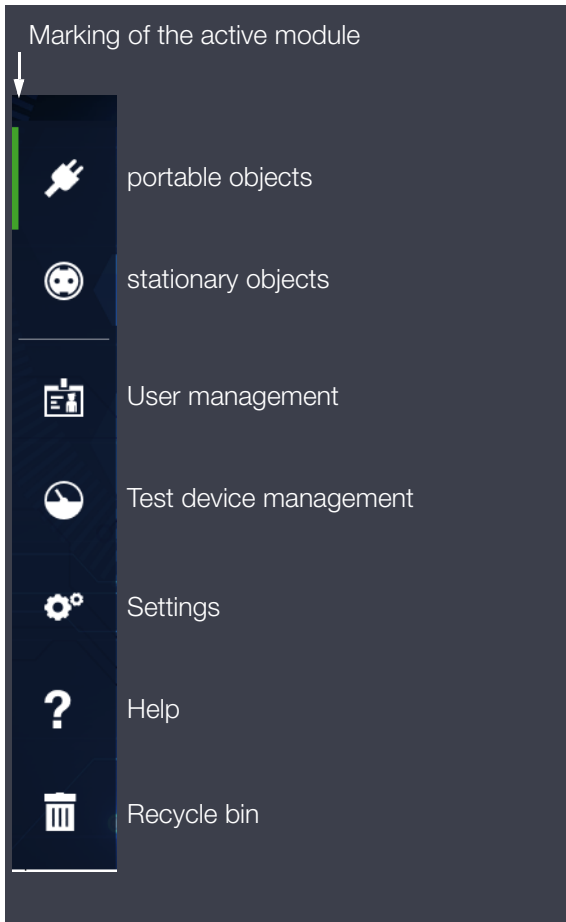


10.1.1 Navigation bar

The navigation bar is used to skip directly from one main module to the next.

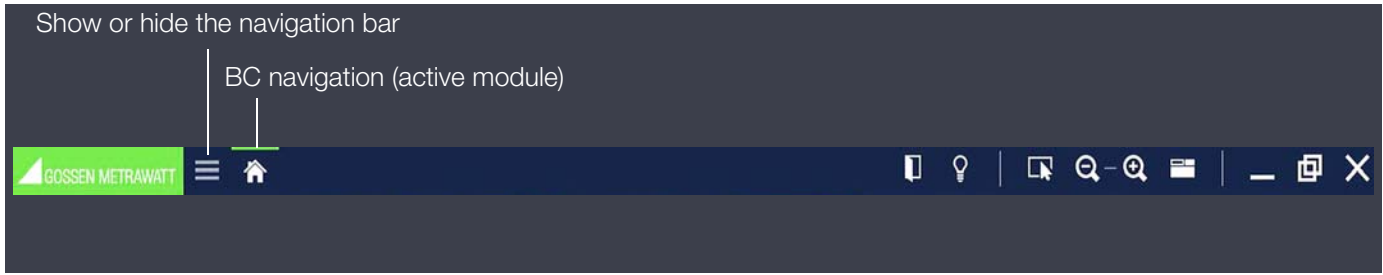
The navigation bar can be shown and hidden using the  symbol in the status bar.

When enabled, the navigation bar is visible in almost all control panels. Modules are opened by selecting or tapping on a module symbol. A green bar in the navigation bar indicates which module is active.



10.1.2 Status bar












The status bar contains important basic operating functions and alerts.



Breadcrumb navigation

The branch of **IZYTRONIQ** in which the user is currently located is shown on the left-hand side of the status bar (header). The active module is indicated by a green bar. Breadcrumb navigation enables operation without a navigation bar, which can be hidden in tablet mode (for instance).

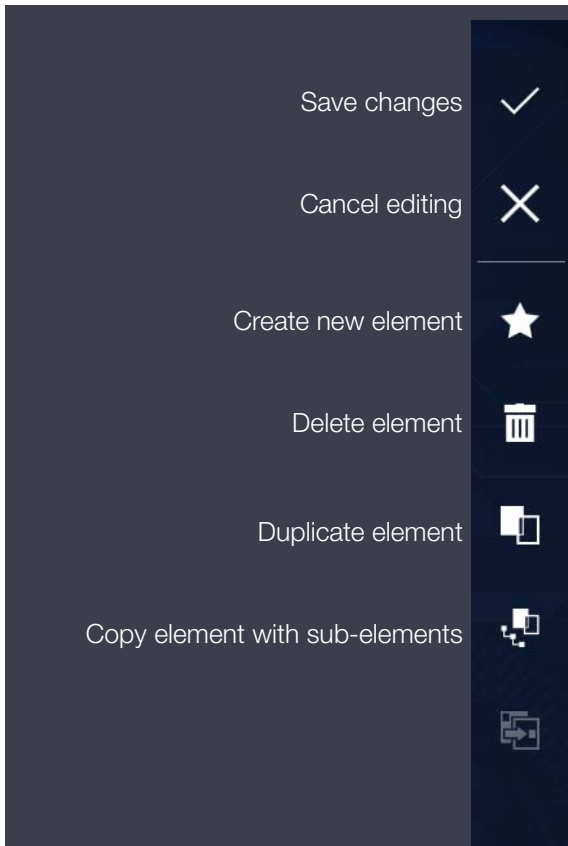
The other symbols have the following functions:

-  Show/hide the navigation bar
-  Logout/login:
The user is logged out and the application shows the login screen.
-  Quick links (from **BUSINESS Professional**)
Quick links make the most frequent selections in the tree structure available by mouse click. The convenient quick link function in the status bar allows users to set up additional shortcuts. Any data can be selected there and transferred to the quick link. The saved analysis can be executed repeatedly by double-clicking on the entry, and the results will be shown in the requested output form.
-  Mouse mode:
When the user is in mouse mode, the program displays a finger to switch to touch mode. Symbols are always enlarged in touch mode and smaller in mouse mode.
-  Touch mode:
A mouse pointer is shown when the user is in touch mode.
Symbols are always enlarged in touch mode and smaller in mouse mode.
-  Zoom factor:
Symbols to zoom in and out of the content panel.
-  Toggle display:
Switch the display between "Tree view and list", "Tree view, details and list" and "Tree view and details".
-  Minimize:
Users click on this symbol to minimize the window (it will only be shown as a symbol in the taskbar).
-  Zoom out:
Users click on this symbol to reduce the window size (it will be shown in the size selected by the user by adjusting the zoom factor).
-  Maximize:
Users click on this symbol to maximize the window (it will only be shown as a symbol in the taskbar).
-  Close:
Users will be asked whether they want to close the application; the application is closed if the user confirms.

10.1.3 Toolbar


This bar is context-sensitive and always shows the tools that are made available for the selected context. It is located on the right-hand side of the screen.

The following sections describe the content of this bar for the individual operating windows.

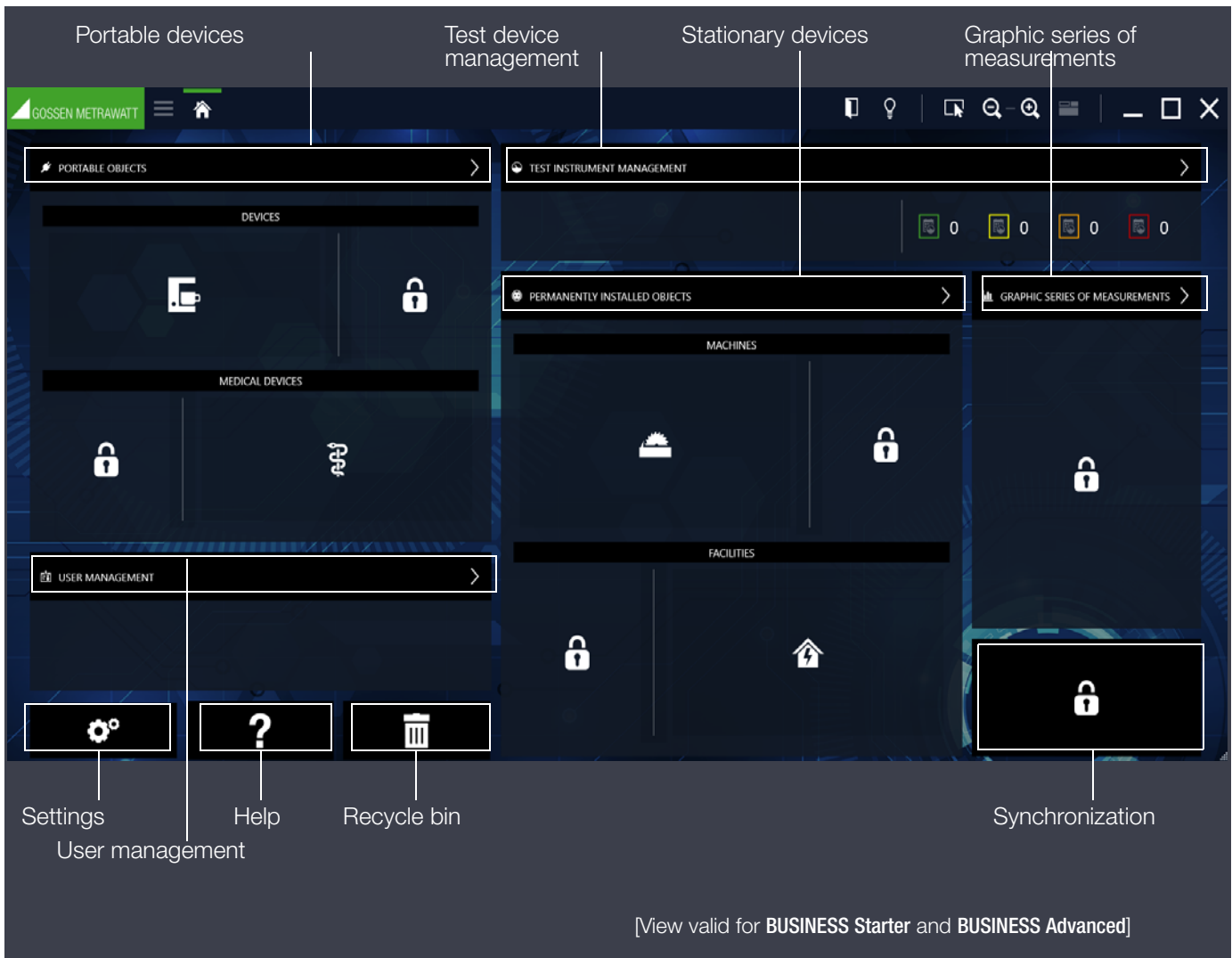


11 Home screen

The home screen is shown once a user has logged in.

The home screen contains the elements Portable Objects, Test Device Management, User Management, Settings, Stationary Objects, Help and the Recycling Bin. Depending on the version of IZYTRONIQ, users will see the  symbol or the dashboard function; refer to "Dashboard".

Users access the submenus by tapping or clicking on the relevant main module.



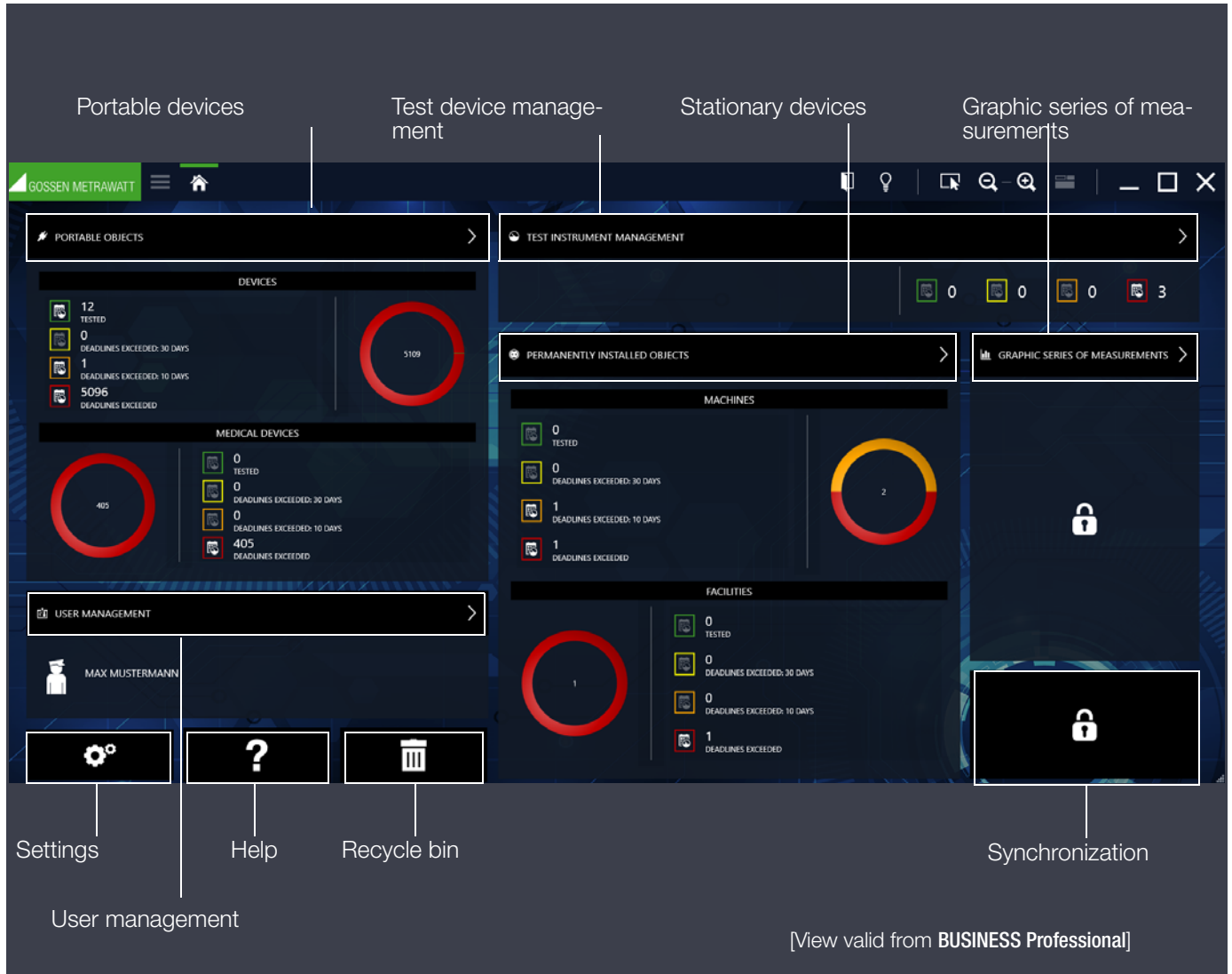
11.1 Dashboard

The dashboard function is integrated in the home screen from **BUSINESS Professional**.

The **IZYTRONIQ** dashboard is an analysis tool within the home screen that assists users in more complex requirements in terms of statistics and analyses, while still providing a shortcut to the various main modules.

It enables the systematic evaluation of all tests, calibrations and deadlines and therefore ensures the necessary transparency within your company as the foundation for your continuous process of improvement.

From version **ENTERPRISE Premium**, the system has the option of blocking or restricting access to the main modules by means of user roles and rights.



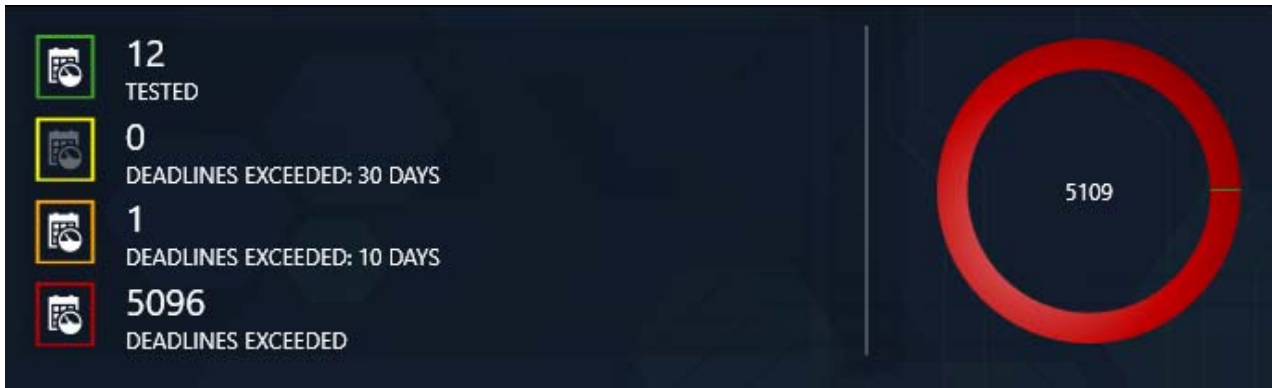
Dashboard functions

Important data from several modules is also shown.

- Deadline monitoring (overdue devices, devices to be tested on short notice, devices to be tested soon, and devices outside the escalation levels) for portable, stationary and test devices [from **BUSINESS Professional**]
- Connected devices for test device management
- User data of the registered user for user management

Users access the matching module segments by clicking on these areas.

11.1.1 Test deadlines for objects [from BUSINESS Professional]



The dashboard function is shown as an overview diagram and pie chart in each main module.

Overview diagram

The overview shows you the evaluated number of objects belonging to this main module, grouped into 4 categories:

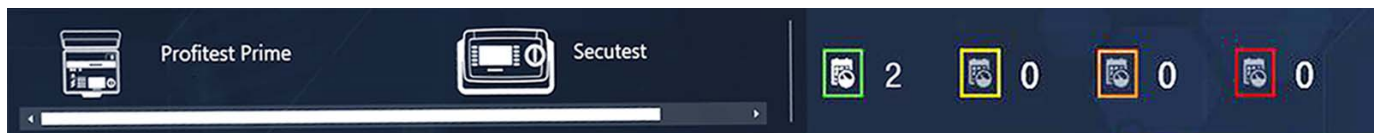
- **Symbol in a green square:** this means that all the objects listed here are within the individually defined test intervals and that all the listed objects passed their most recent test
- **Symbol in a yellow square:** this means that all the objects listed here are inside the individually defined escalation time (1st escalation level) for testing and that all the listed objects passed their most recent test
- **Symbol in an orange square:** this means that all the objects listed here are inside the individually defined escalation time (2nd escalation level) for testing and that all the listed objects passed their most recent test
- **Symbol in a RED square:** this means that all the objects listed here are outside the individually defined test interval, were not tested or did not pass their most recent test

The matching objects are shown in the filter list by selecting the symbol in the relevant colored square; refer to “Lists”.

Pie chart

The pie chart shows the percentage distribution of the aforementioned categories and the total number of listed objects.

11.1.2 Test deadlines for test devices [from BUSINESS Professional]



This dashboard function shows an overview of the calibration deadlines for test devices.

Overview diagram

The overview shows you the evaluated number of objects belonging to test device management, grouped into 4 categories:

- **Symbol in a green square:** this means that all the objects listed here are inside the individually defined test intervals and that all the listed objects passed their most recent test
- **Symbol in a yellow square:** this means that all the objects listed here are inside the individually defined escalation time (1st escalation level) for testing and that all the listed objects passed their most recent test
- **Symbol in an orange square:** this means that all the objects listed here are inside the individually defined escalation time (2nd escalation level) for testing and that all the listed objects passed their most recent test
- **Symbol in a RED square:** this means that all the objects listed here are outside the individually defined test intervals, were not tested or did not pass their most recent test

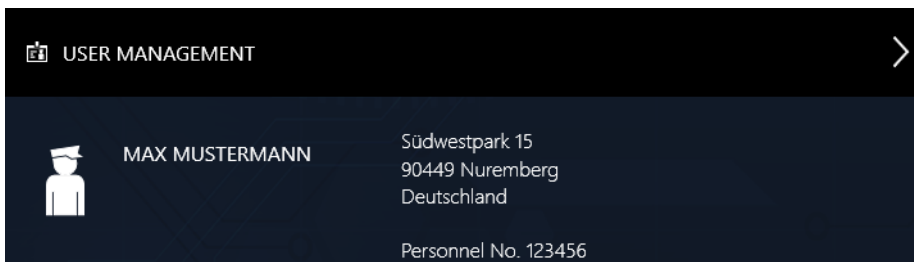
The matching objects are shown in the filter list by selecting the symbol in the relevant colored square; refer to “Lists”.

11.1.3 Devices on the interface



This field indicates which test devices are connected. The field remains blank if no measurement or test devices are connected. Selecting the symbol opens test device management; refer to "Test device management". When a device is connected that is not present in the **IZYTRONIQ**, the system shows a message asking the user whether the test device should be saved to test device management.

11.1.4 Users

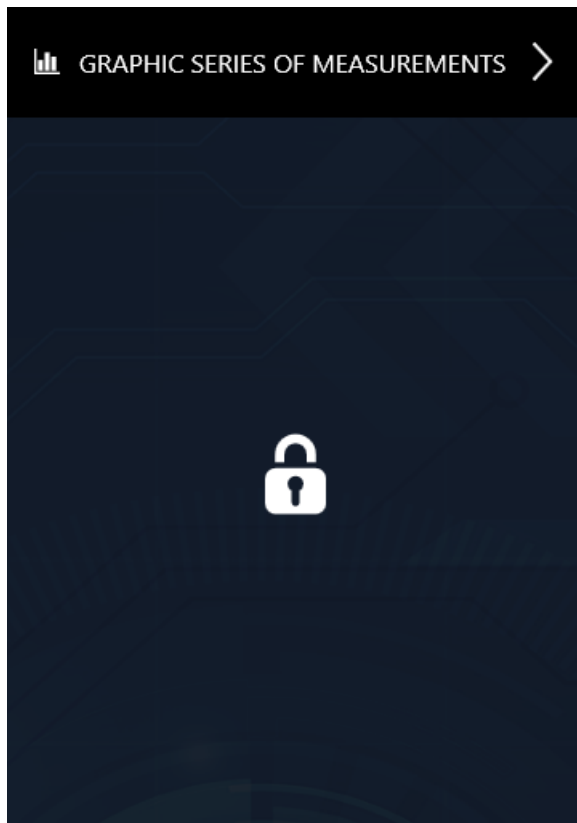


IZYTRONIQ

This field shows which person is currently logged in. Selecting the user opens user management; refer to "User management".

11.1.5 Graphic series of measurements








There are plans to offer an optional and paid interface for Y/t diagrams here in future.



12 Main modules

IZYTRONIQ is operated using a number of neatly structured modules. These modules are found in the home screen and in the navigation bar.

The following modules can be selected:

- **Portable objects (devices and medical devices)** 
Checking, registering and managing of portable devices; refer to “Module for portable objects”
- **Stationary objects (machinery & facilities)** 
Checking, registering and managing of stationary devices; refer to “Module for stationary objects”
- **User management** 
Creating and managing users; refer to “User management”
- **Test device management** 
Creating and managing test devices; refer to “Test device management”
- **Settings** 
General settings for working with **IZYTRONIQ**; refer to “Settings”
- **Help** 
To access online help, refer to “Help”
- **Recycle bin** 
Irreversible erasure or restoration of data moved to the recycle bin; refer to “Recycle bin”

Synchronization (ENTERPRISE Ultimate version only)

- Comparison of a server database with a local database of a PC

12.1 Module for portable objects

This module is used to structure, organize and manage locations, customers and test objects.

Test sequences are managed, created and assigned to test objects here.


Tests are conducted in a dialog with measurement and test devices and then imported from the measurement and test devices. Data can also be exported from the application to the measurement and test devices. Users have the option of comparing test results and creating test reports.

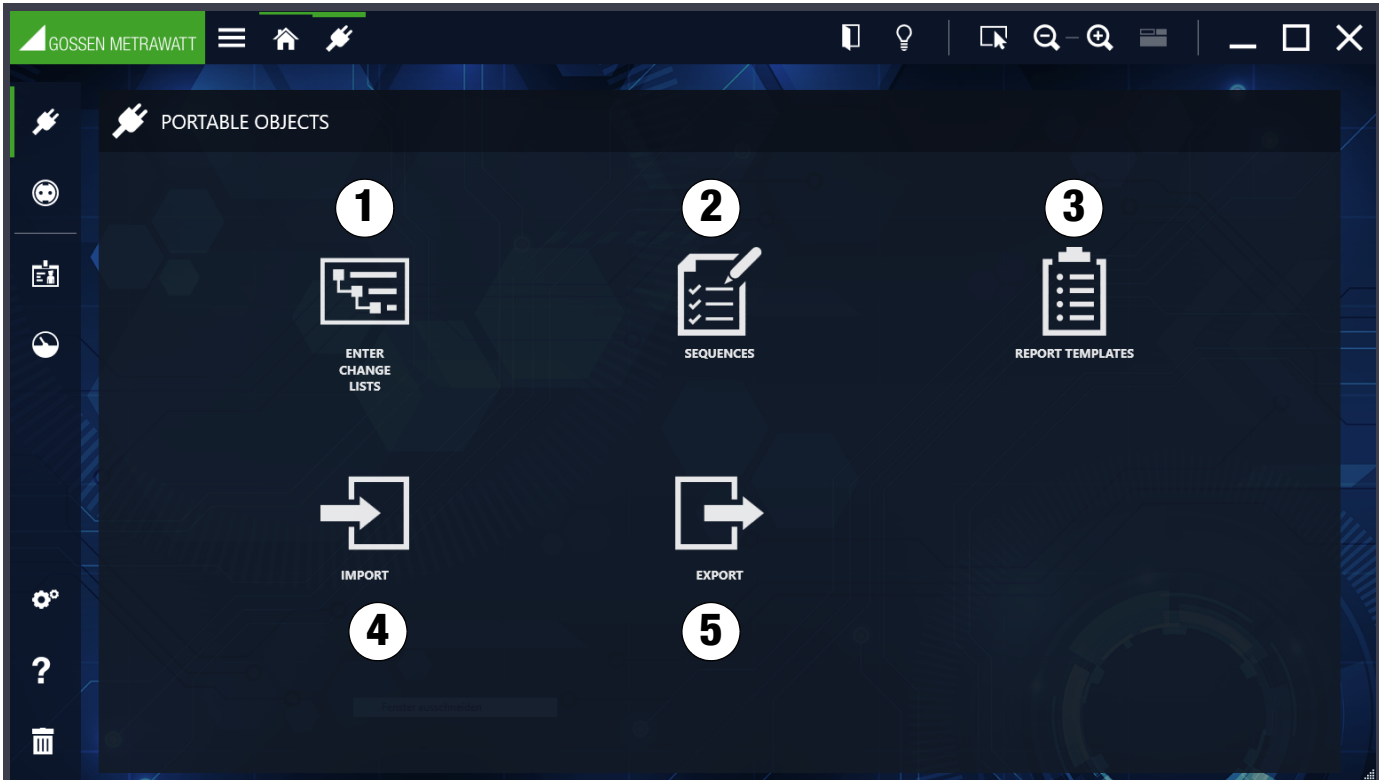
It is also possible to create and manage report templates for test reports.

The object modules contain the following object types:

- devices
- medical devices

12.1.1 Structure of the home screen

Selecting the object module symbol for portable devices  in the home screen or in the navigation bar opens the start screen of the object module for portable devices.



Start screen for the object module – portable objects

The following functions are available:

- | | |
|--------------------------|--|
| (1) Input, change, list: | Input, change and filter objects. Management of test sequences and tests |
| (2) Sequences: | Creating and managing test sequences |
| (3) Report templates: | import (Word file) and manage test templates |
| (4) Import: | Import objects |
| (5) Export: | Export objects and sequences |

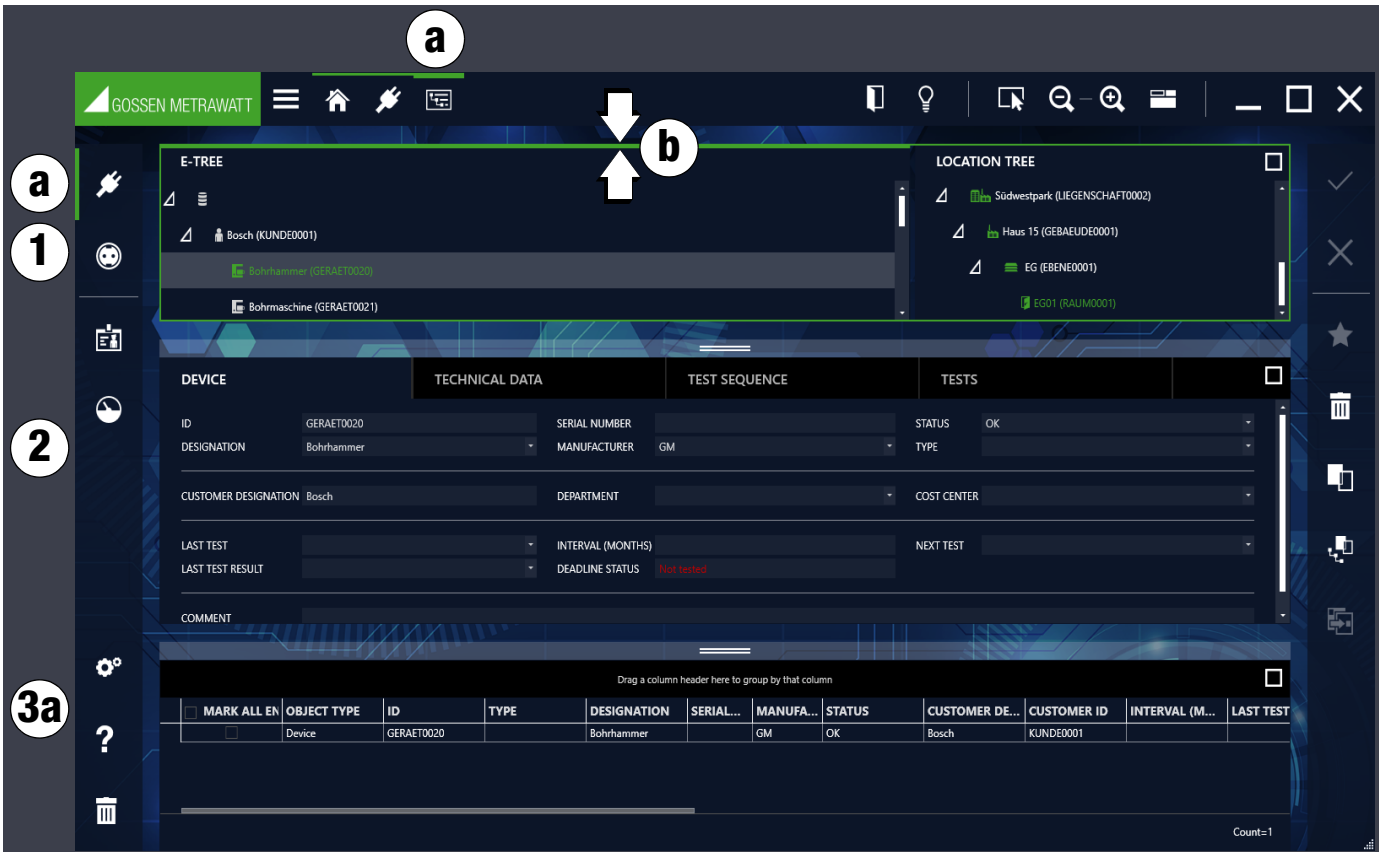
12.1.2 Function “Input, change, list”

This module is used to structure, organize and manage locations, customers and test objects. The sequences and tests can be managed and assigned to test objects. Test results can be compared and test reports printed out.

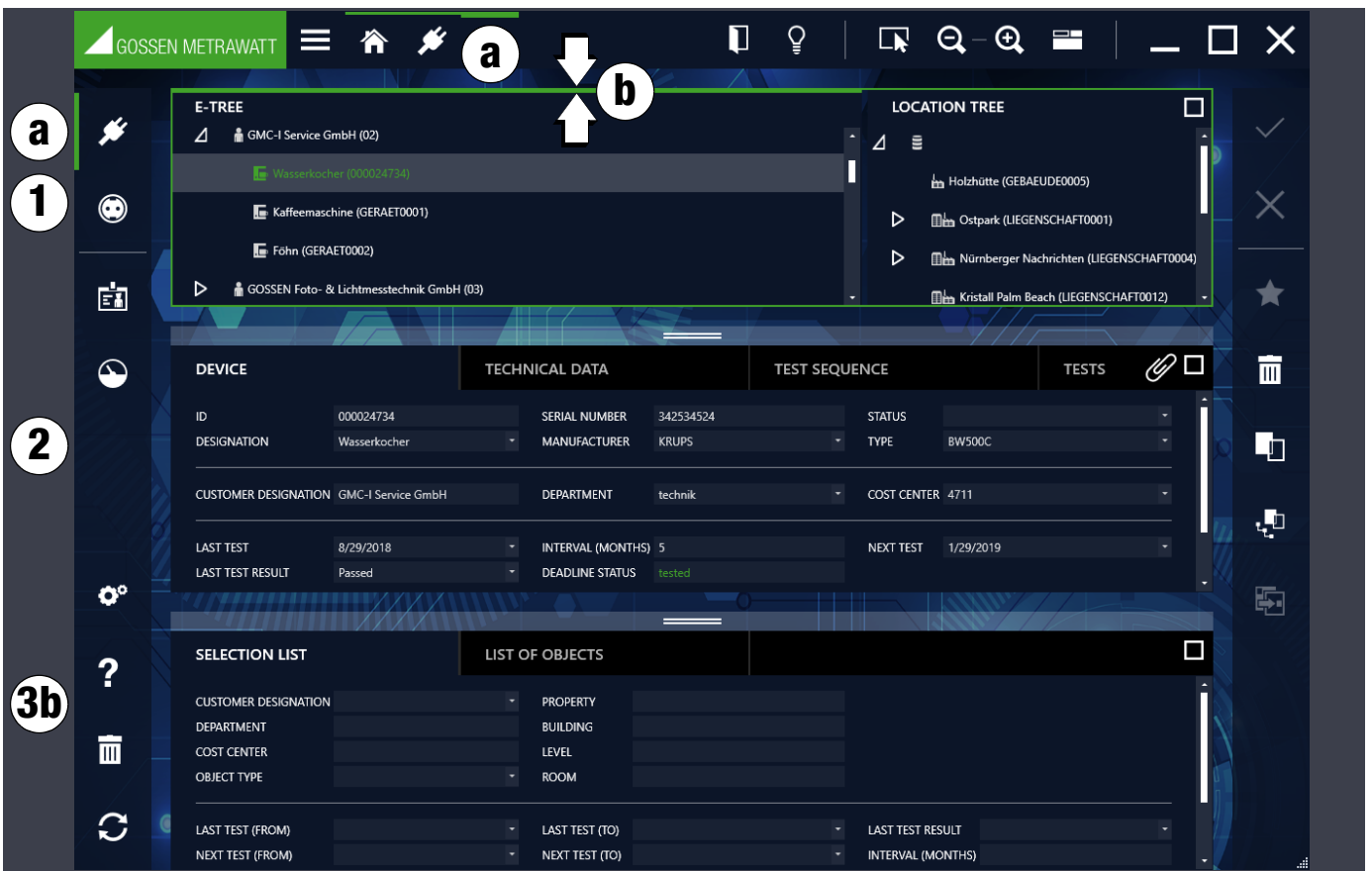
The module view consists of the following 3 parts:

1. **Tree view:** This view consists of two sub-trees, namely the electric tree on the left and the location tree on the right. All customers, test objects and locations – as well as their mutual relationships – can be registered, shown and managed here. Objects can be selected here. Refer also to “The tree view:”.
 2. **Detailed view:** All details for the selected object are shown in this view. Once the test object has been selected, the test sequences used for this object, as well as all tests conducted on this test object, are shown in various tabs. Refer also to “The detailed view”.
 3. **List view – standard search:** This view shows a list of all test objects located in the branch below the selected object in the tree view. A variety of criteria can be defined to filter this list so that only the required data is shown. Objects can also be selected here. Refer also to “The list view – standard function:” or “Lists”.
- b) List view – extended search function (for large data volumes):** If you work with large data volumes, it is useful to make a pre-selection of those data which are currently relevant for you. This helps to improve system performance. In this view, 2 index cards are shown. A selection has to be made via the first index card „SELECTION LIST“ as to which test objects are to be displayed in the „LIST OF OBJECTS“ index card. This list, in turn, can be filtered further by means of various criteria. See also “List view – extended search function” or “Lists”.

Video „Basic operation of the three views“



(1) Tree view (2) Detailed view (3a) List view – standard search; (a) Marking of active view; (b) Active sub-function



(1) Tree view (2) Detailed view (3b) List view – extended search function; (a) Marking of active view; (b) Active sub-function

The active view is always shown with a green border.
 Within the border, the active sub-function is indicated by a bold green bar at the top.

12.1.2.1 The tree view:

The tree view shows all registered test objects, customers and locations. They are displayed hierarchically as two tree structures, namely the electric tree (on the left) and the location tree (on the right).

Selecting the node symbol opens a closed node or closes an open node.

Electric tree

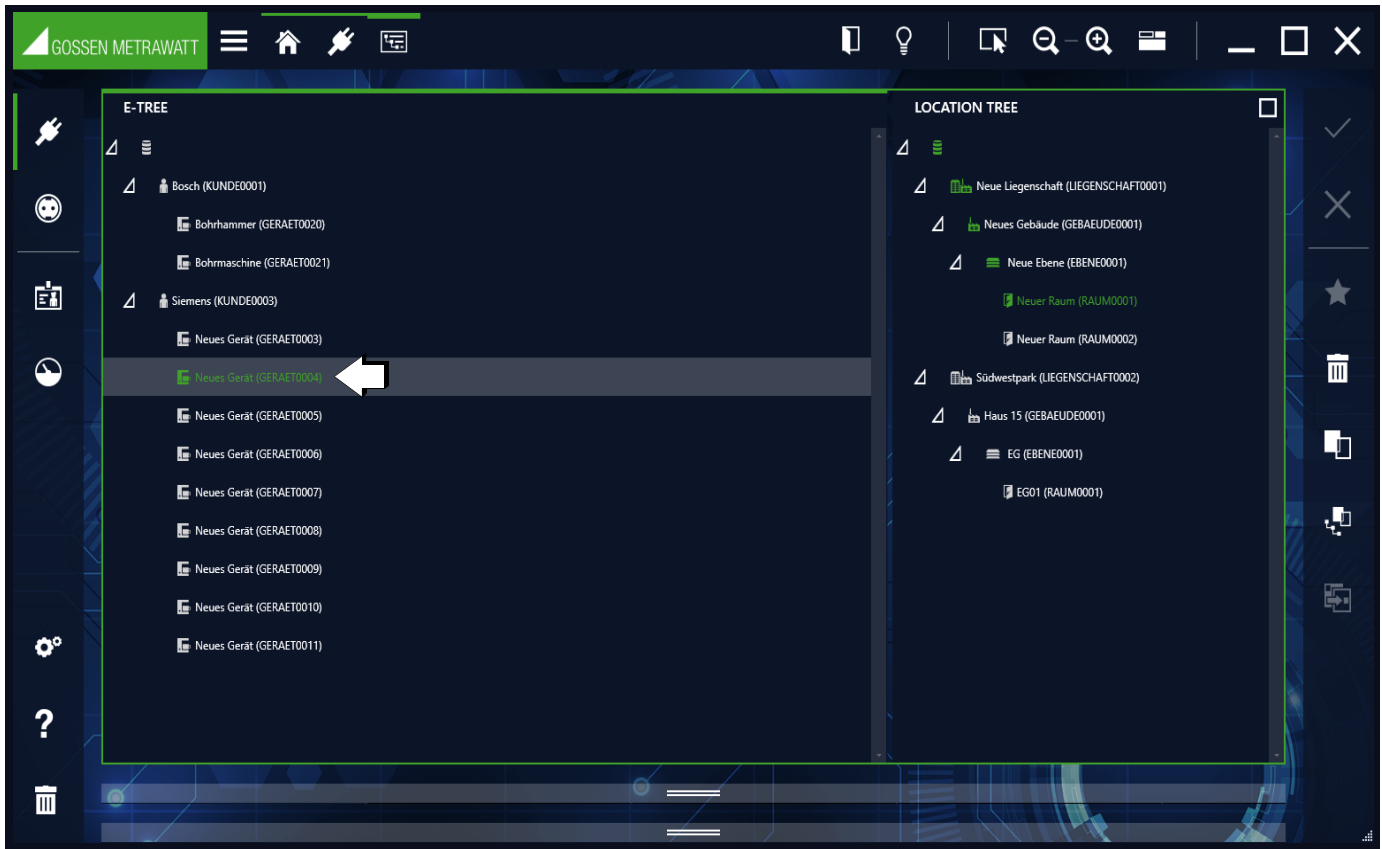
This displays all customers and test objects. The objects are always assigned to a customer.

The system does not accommodate test objects that are not assigned to a customer.



Note

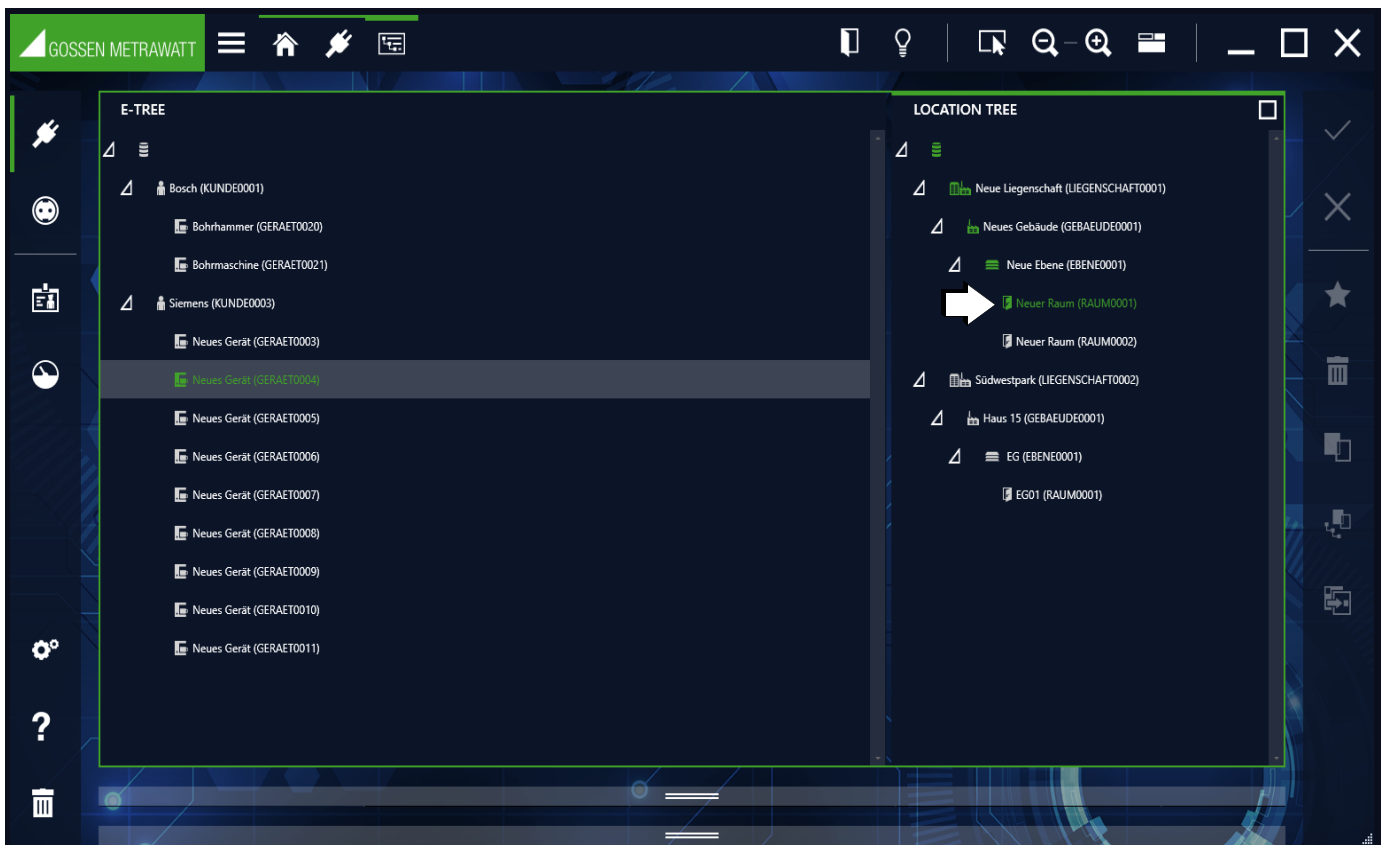
Although all customers are shown, regardless of the type of test object (portable and stationary), it is only possible to access portable test objects.



Selected test object in the e-tree

Location tree

The registered locations are shown in a hierarchical form here. Test objects can be assigned to these locations, although it is not mandatory. The location tree has the 4 defined hierarchy levels of property, building, level and room. It is not mandatory to use all levels of the hierarchy.



Selected position in the location tree

Interdependency of the tree structures

A test object can be linked to precisely one object in the location tree (although this is not necessary).

In contrast, an object in the location tree may be connected to several test objects in the electric tree. When a location is marked in the location tree, all elements in the electric tree that are situated at this location will be marked in green.

When a test object is selected in the electric tree, its assignment to a particular location is shown by a green marking on the corresponding location object.

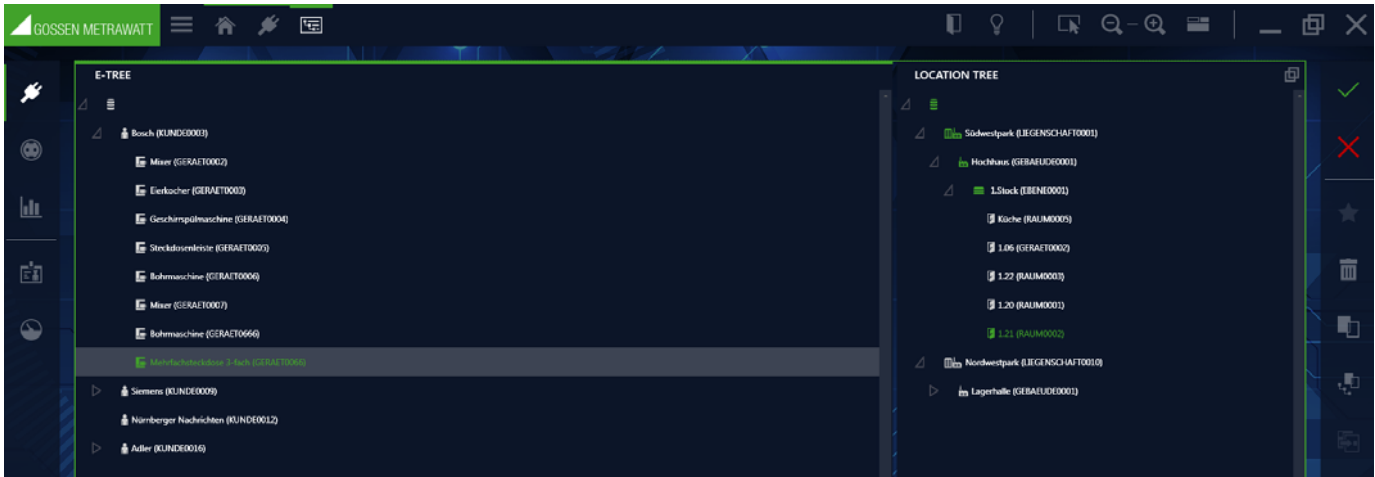
Connection logic for the tree elements

By selecting an object in a particular tree, the tree to which it is assigned will become the active tree. As described above, this is indicated by a green border around the tree window and a bold green bar at the top. Only one object can be marked in the active tree. By doing so, the symbol and text color of the object turn green, and the matching line is shaded in gray.

In the other tree, the matching elements are indicated by the color of the symbol and text turning green. The parent objects are always indicated by a green symbol, while the color of the text remains white.

Example for the e-tree:

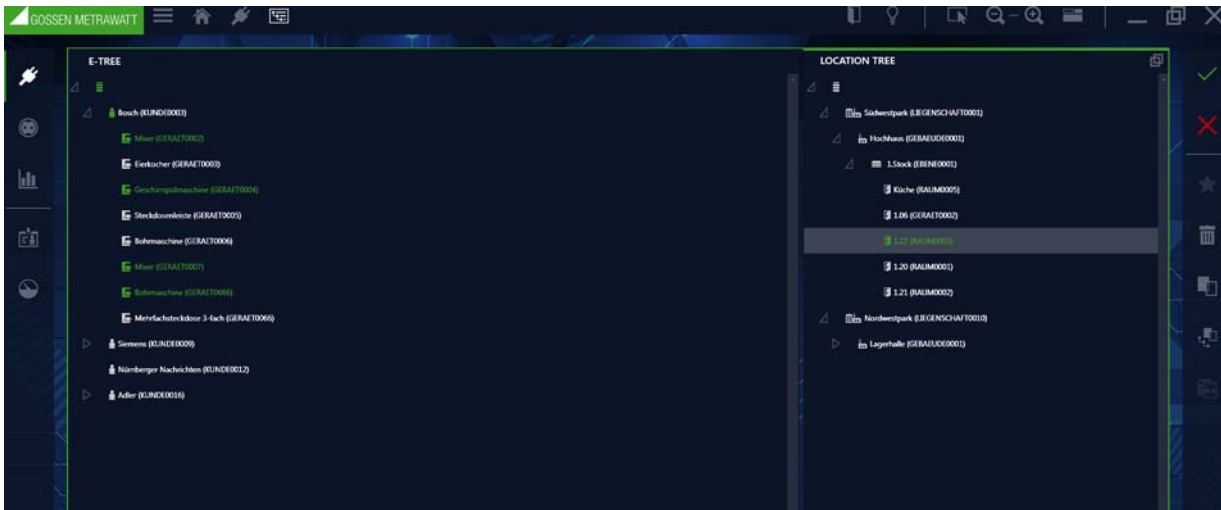
The electric tree is active; the power strip (3 sockets) is selected. Therefore, the symbol and text are green and shaded gray. The location tree now indicates that this power strip is situated in room 1.21. The parent objects Südwestpark, High-rise, 1st floor are indicated by the green symbol, which means it is possible to identify where the power strip is located, even when the node is closed.



Example: assignment of a power strip




Example for the location tree:

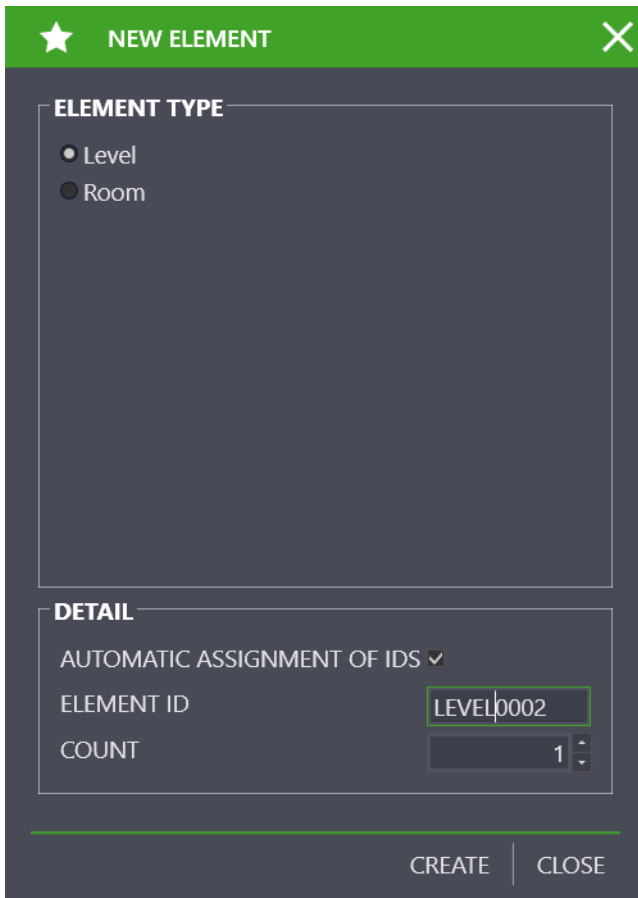
The location tree is active, and room 1.22 is selected. Therefore, the symbol and text are green and shaded gray. The electric tree shows which objects are present in this room.



Example: objects in room 1.22

Functions of the toolbar – index card for tree view

-  Save changes
-  Cancel editing
-  Create new element:



NEW ELEMENT

ELEMENT TYPE

- Level
- Room


DETAIL

AUTOMATIC ASSIGNMENT OF IDS





ELEMENT ID

COUNT

CREATE | CLOSE

To create a new element, the object under which this new element is to be added must be marked in advance. The marked object is then shaded gray. After selecting , a "New Element" popup opens in which the user is offered the selection of elements that are possible for the chosen position in the tree (e.g. if it is included in the hierarchy level "building" of the location tree, it is possible to create "levels" or "rooms"). Once the required element type has been selected, it is then necessary to define an element ID and the number of elements to be created. The element ID can also be created automatically by a logic defined in the settings; this is mandatory to create several elements of the same type. After creating one or several elements, the newly created element is selected automatically (the first one if several elements are created) and the creation of a subordinate element starts. The process is only concluded when the user explicitly closes (command CLOSE) the popup "New Element". The newly created element/s is/are marked with a "+" until they have been saved.





Example for a new element in the location tree

-  Delete element
-  Copy element
-  Copy element with sub-elements
-  Paste copied element (is inserted in the hierarchy below the marked element)

12.1.2.1.1 Available tree elements

LOCATION TREE

In the location tree, the following elements can be created for portable objects in the hierarchy shown below.

Symbols	Significance
Location tree	
	Property
	Building
	Level
	Room

Creating elements is hierarchy-dependent. If the user marks an existing location in the tree, only the elements available at the selected position in the tree are shown when a new location is created.

E-TREE

The following elements can be created in the electric tree for portable objects:

Symbols	Significance
Electric tree	
	Customer
	Device
	Medical device

12.1.2.2 The detailed view

The most important parameters for the object marked in the tree view (customer, device, medical device and location) are managed in the detailed view of portable devices. The objects cannot be created or deleted here.

Important data such as the object ID, object designation and parameters for the individual objects can be created and edited in the index cards. It is also possible to attach documents such as images, certificates and operating instructions.

When the input fields are selected, content can be added by entering text or making selections from a drop-down menu. Newly created objects in the electric tree are marked with a "+", and edited objects with a "*", until the changes have been saved.




Note

IZYTRONIQ does not define a limit for the number of characters in the respective data fields, but the connected test devices themselves may limit the number of characters. Please check the technical parameters of the test device. A restriction of transferable data fields may apply, depending on the connected test device. Please check the technical parameters of the test device.

Compulsory fields.

Some fields in the input screens are compulsory.

Compulsory fields that are left blank are marked with the following symbol: .

As a result, the object cannot be saved.

The tab names and all associated displays are shown in red writing until the corresponding compulsory fields have been completed.

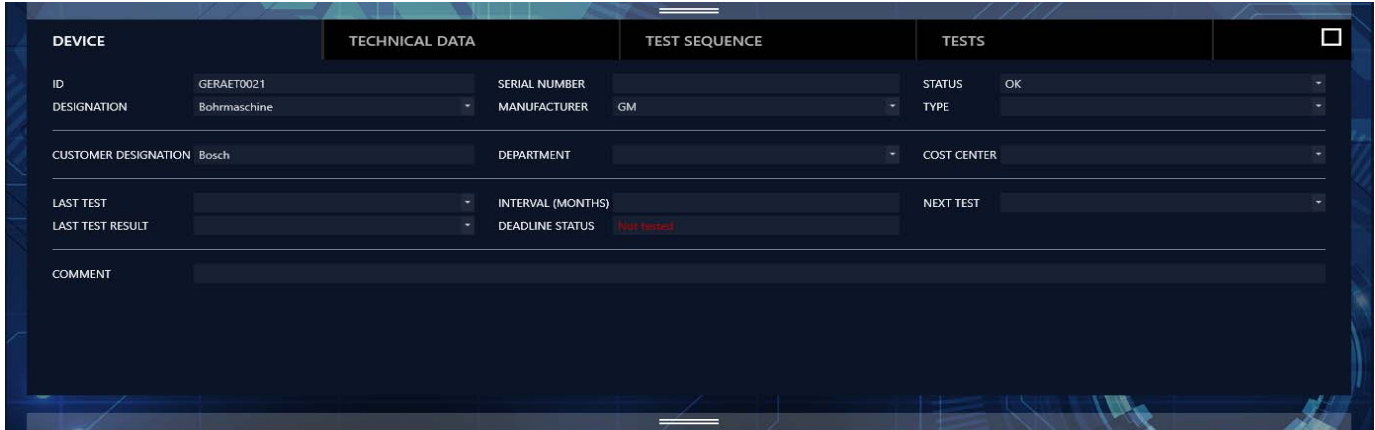
12.1.2.2.1 Structure of the index cards

The master data consists of a differing number of index cards and contents, depending on the marked object in the tree view.

Customer: Two index cards: Customer and contacts.

Location: One index card: Master data

Device/med. Device: Four index cards: 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 Test needed		
COMMENT			

Example of an index card for a device

Object: Customer**Index card CUSTOMER**

This can be used to add address and contact details for a selected customer:







Functions of the toolbar – index card for a customer

-  Save changes
-  Discard changes (with prompt)
-  Manage attachments (add, display and delete a file/photo)
-  Print, refer to "Print"

Index card CONTACTS

This is used to manage contacts at the respective customer.

Functions of the toolbar – index card for CONTACTS

-  Save changes
-  Discard changes (with prompt)
-  Create new contact
-  Delete contact
-  Manage attachments (add, display and delete a file/photo)
-  Print, refer to "Print"

This index card is a list, so the functions of the list view will apply; the list symbols will be active in the toolbar as well; refer to "Lists".

Object: Location





Index card Location

The address and building data are entered here.

Locations are divided into the four hierarchies of property, building, level and room.
The following data can be added, depending on the main object:

Property:	Address data, comments
Building:	Address and architectural data, comments
Level:	ID and designation, comments
Room:	ID and designation, comments

Functions of the toolbar – index card for a Location

-  Save changes
-  Discard changes (with prompt)
-  Manage attachments (add, display and delete a file/photo)
-  Print, refer to “Print”

Object: Device





The manufacturer, test and technical data are added to the device object. The test sequences used to test the device, as well as the data for the listed tests, are also saved.

Index card DEVICE and TECHNICAL DATA

Important data such as the object ID, object designation and parameters for the individual objects can be created and edited in the index cards. It is also possible to attach documents such as images, certificates and operating instructions.

When the input fields are clicked on, content can be added by entering text or making selections from a drop-down menu. Newly created objects in the electric tree are marked with a "+", and edited objects with a "**", until the changes have been saved.

Functions of the toolbar – index card for a Device/Technical Data

-  Save changes
-  Discard changes (with prompt)
-  Manage attachments (add, display and delete a file/photo)
-  Print, refer to "Print"

Video „Creation of devices“

Index card TEST SEQUENCE

The test sequence index card is used to assign text sequences to the selected object.

Several test sequences can be assigned to one object.

The view of assigned test sequences is shown in a list. A marked checkbox in the second column (Standard) indicates the test sequence with which the object is to be tested.









The test sequences themselves are managed in a parent sequence pool; refer to “Sequences function”.



Note


Deleting only removes the link, but not the sequence. The sequence remains present in the sequence pool.


Functions of the toolbar – index card for a TEST SEQUENCE

-  Save changes
-  Discard changes (with prompt)
-  Show sequence details (if the user is in the sequence list)
-  Show sequence list (if the user is in the sequence detailed view)
-  Add sequences from the sequence pool
-  Delete sequence assignment; the sequence itself remains present in the sequence pool.
-  Manage attachments (add, display and delete a file/photo)
-  Print, refer to “Print”


This index card is a list, so the functions of the list view will apply; the list symbols will be active in the toolbar as well; refer to “Lists”.



Sequence steps

Users can show the details (individual steps) of a sequence by double-clicking on the sequence or by marking the sequence and then selecting the symbol . This opens a list of sequence steps, which is shown instead of the sequence list.

Users return to the original screen by selecting the symbol .

Index card: Tests

The index card for tests is used to manage and create tests for the selected object. The tests listed here are created in a variety of ways. Selecting the tool symbol  opens the popup “Add Test”, which 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 process (refer to “Automatic process control for a test – remote function”) Here you can execute, control and analyze test sequences in IZYTRONIQ. You can conduct remote testing with a variety of test devices and then analyze the results. Attachments such as circuit diagrams, drawings, instruction photos etc. can also be shown. Measurements can be conducted and reported using any test devices; refer to “Document management”.
- ▶ **PUSH/PRINT:** input at the push of a button on the test device (refer to “Push/Print – first steps”):
The push/print function allows users to send test results directly to the selected test object in the IZYTRONIQ and to save them there in the Tests tab at the push of a button on the test device.
- ▶ **Manual input [from BUSINESS Professional]**
This function allows tests to be conducted with any test devices that are not connected to IZYTRONIQ. It is also possible to create tests that do not require a test device, e.g. stating a number.
Users select the function “Manual Input” and then click on “ADD” to open the window “MANUAL INPUT”.

They enter a test name and the test device used in the upper content section. The tester and the date are added automatically.

Take note: Only test devices registered in test device management are eligible for selection.

Manual tests can be created in each row in the lower content section. To do this, users select the function ★ “ADD TEST STEP” in the toolbar. This is used to document current tests, whereby the following fields can be completed. Only the field “Test step” is compulsory.


No.	Sequential number of the test step (automatic)
Step type	Manual (automatic)
Test device	Test device used (automatic)
Test step	Test step, e.g. measurement
Min.	Minimum value
Max.	Maximum value
Result	Result value
Analysis	Analysis
Attachment	Shows any documents that are added.

The manual measurement is completed by saving ✓ the entries, and the screen returns to the index card “TESTS”. The created measurement is now shown here.

Video „Manual input of measured values“





► **Create container**, grouping of available tests


This function is used to group several tests for the selected object in one container. A joint report of these tests can therefore be created. The individual tests include the name of the responsible tester; the creator is responsible for the container.





The first step in creating a container is to mark the tests that will be included in the container. Afterwards, the user selects "CREATE TEST CONTAINER"  in the toolbar. Clicking on "ADD" opens an input screen to create the container name and to add the tester responsible for the container. Clicking again on "ADD" creates the container, and the program returns to the index card for tests.

Video „Creation of container“

Functions of the toolbar – index card for a TEST




-  Save changes
-  Discard changes (with prompt)
-  Show tests/container details (if the user is in the matching tests)
-  Skip to one level higher (if the user is in the test/container details screen)

 **Creating tests according to the methods outlined above**

-  Delete tests and containers
-  Create containers
-  Add tests to the container
-  Cancel the container


 **Compare tests:**

Two or more similar tests can be compared. Users click on the symbol and then mark the tests they wish to compare. After confirming, the results are shown as a table.

-  Manage attachments (add, display and delete a file/photo)
-  Print, refer to "Print"
-  Print reports

This index card is a list, so it is subject to the functions of the list view. The list symbols are also enabled in the toolbar; refer to "Lists".

Test steps

Users can show the details (individual steps) of a test by double-clicking on the test or by marking the test and then selecting the symbol . This opens a list of test steps, which is shown instead of the test list.

Users return to the original screen by selecting the symbol .

Video „Test comparison“

12.1.2.3 List views

Two list views are available which differ with regard to the type of selection and search function:

- standard function
- extended search function

For large data volumes we recommend the extended search function which conforms to the default setting.

The respective selection has to be made in the following menu path:

SETTINGS > PERSONAL SETTINGS > GENERAL SETTINGS >

Parameter **ACTIVATE EXTENDED SEARCH FUNCTION (FOR LARGE DATA VOLUMES)**

The extended search function is active when the appropriate tick mark is set.

The list view – standard function:

The list view shows all objects located in the tree view hierarchy below the selected element. This means, for example, that all test objects for one customer or all test objects located in the room can be listed. Here, only one element can be selected in the tree view. The number of currently listed elements is shown in the window at the bottom right.

<input type="checkbox"/> MARK ALL ENTRIES	ID	OBJECT TYPE	MANUFACTURER	TYPE	SERIAL NUMBER	STATUS	LAST TEST RESULT	NEXT TEST	DEADLINE STATUS	DOCUMENTS
<input type="checkbox"/>	0001	Medical device							Not tested	
<input type="checkbox"/>	0001	Device	AMIS	Burn...	1111111111111111...		Not passed	5/14/2018	Test failed	
<input type="checkbox"/>	0002	Device	AS-Schwabe GmbH	16/250	4469489485				Not tested	
<input type="checkbox"/>	0003	Device	IKEA	B1603...	49389438759		Not passed	2/28/2018	Test failed	
<input type="checkbox"/>	0004	Device	Transmedia	ZLS-6...			Passed	2/28/2019	tested	
<input type="checkbox"/>	0005	Device	Steinel	HL 19...			Passed	2/26/2019	tested	
<input type="checkbox"/>	0006	Device	Fein	FMM...					Not tested	
<input type="checkbox"/>	0007	Device	AEG	BE 60...					Not tested	
<input type="checkbox"/>	0008	Device		16/250					Not tested	


Functions of the toolbar

- Save changes
- Cancel editing
- Delete objects
- Print, refer to "Print"
- Print reports
- Multi-assistant (from **BUSINESS Professional**); refer to "Multi-assistant (from BUSINESS Professional)"

This index card is a list, so it is subject to the functions of the list view. The list symbols are also enabled in the toolbar; refer to "Lists".

List view – extended search function

This list view is useful if you work with large data volumes. In order to use it, you have to make a pre-selection of the data which are currently relevant for you.





In this view, 2 index cards are shown. A selection has to be made via the first index card „SELECTION LIST“ as to which test objects are to be displayed in the „LIST OF OBJECTS“ index card. Open the extended search function afterwards by pressing the key . A window pops up showing a progress bar. The list, which is subsequently created, is opened in the „LIST OF OBJECTS“ index card and can be filtered further by means of various filter criteria.

Index card SELECTION LIST



SELECTION LIST		LIST OF OBJECTS	
CUSTOMER SIGNATURE	GOSSEN METRAWATT (KUNDE0023)	PROPERTY	
DEPARTMENT		BUILDING	
COST CENTER		LEVEL	
OBJECT TYPE		ROOM	
LAST TEST (FROM)		LAST TEST (TO)	
NEXT TEST (FROM)		NEXT TEST (TO)	
		LAST TEST RESULT	
		INTERVAL (MONTHS)	
ID		SERIAL NUMBER	
DESIGNATION		MANUFACTURER	
		STATUS	
		TYPE	

Functions of the toolbar

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







This index card is a list, so it is subject to the functions of the list view. The list symbols are also enabled in the toolbar; refer to "Lists".

LIST OF OBJECTS Index card

SELECTION LIST		LIST OF OBJECTS							
<input type="checkbox"/> MARK ALL EN	OBJECT TYPE	ID	TYPE	DESIGNATION	SERIAL NUMBER	MANUFACTUR...	STATUS	CUSTOMER DE...	CUSTOMER ID
<input type="checkbox"/>	Device	GERAET0004	MIXI	Mixer	2398094875	Phillips		GOSSEN METRAW...	KUNDE0023
<input type="checkbox"/>	Device	GERAET0010	MIXI	Mixer	2398094875	Phillips		GOSSEN METRAW...	KUNDE0023
<input type="checkbox"/>	Device	GERAET0011		Kühlschrank				GOSSEN METRAW...	KUNDE0023
<input type="checkbox"/>	Device	GERAET0001	AFA33	Geschirrspülmaschi...	8765876576	Miele		GOSSEN METRAW...	KUNDE0023
<input type="checkbox"/>	Device	GERAET0007		Geschirrspülmaschi...	23865645	Blomberg		GOSSEN METRAW...	KUNDE0023
<input type="checkbox"/>	Device	GERAET0005		Geschirrspülmaschi...	23865645	Blomberg		GOSSEN METRAW...	KUNDE0023
<input type="checkbox"/>	Device	GERAET0015	rtz88	Mikrowelle		Conrad		GOSSEN METRAW...	KUNDE0023
<input type="checkbox"/>	Device	GERAET0003	BH7	Bohrhammer	348763498764	Siemens		GOSSEN METRAW...	KUNDE0023
<input type="checkbox"/>	Device	GERAET0002	xxxt	Bohrmaschine	6654657463656	Black&Decker		GOSSEN METRAW...	KUNDE0023

Count=16

Functions of the toolbar

-  Save changes
-  Cancel editing
-  Delete objects
-  Print, refer to "Print"
-  Print reports
-  Multi-assistant (from **BUSINESS Professional**); refer to "Multi-assistant (from BUSINESS Professional)"

This index card is a list, so it is subject to the functions of the list view. The list symbols are also enabled in the toolbar; refer to "Lists".

Miscellaneous

Sequences can be assigned to each electric test object. A sequence consists of individual test steps in a certain order. The use of test sequences is advisable if a set of freely programmed test steps will be performed one after the other.

Visual inspections, instructions, checks and individual measurements can be grouped to create automatic test sequences.

The sequences are specific to a test device and are saved to a sequence pool. They are transferred to the matching test device when needed.

A distinction is always made between the following types of sequence:

Test device sequences

These are test sequences that were created for a specific test device type, e.g. PROFITEST or SECUTEST.

Test device sequences are easy to program in the sequence editor and can be transferred to the test device later on.



Note

Fixed SECUTEST sequences: SECUTEST has configurable auto-sequences that cannot be transferred bi-directionally. In addition, the test device sequences described here can be transferred to the SECUTEST. Here, only the transferable sequences can be edited and managed in sequence management.

IZY sequences

The sequences can only be executed in the **IZYTRONIQ**. They may contain test steps from device sequences, but also come with many other functions. For instance, manual measurement input, push/print tests, remote measurements, instructions and visual inspections can be integrated as well. Helpful images can also be saved for each test, which are then shown to the user step-by-step during the test. Sequences that have already been programmed can be used to cascade an IZY sequence; additionally, measurement steps for various test devices can also be programmed within one sequence. When a measurement step is programmed for a remote test, it then controls the matching test device, whereby the test device merely transfers the measured data. Display and control are managed in the **IZYTRONIQ**.



Note

Factory sequences

These are assigned test sequences whose process and parameters cannot be changed and that are configured as factory settings. GMC-I Messtechnik GmbH can make the sequences available as test device sequences and as IZY sequences.

12.1.3.1 Structure and operation of sequence management

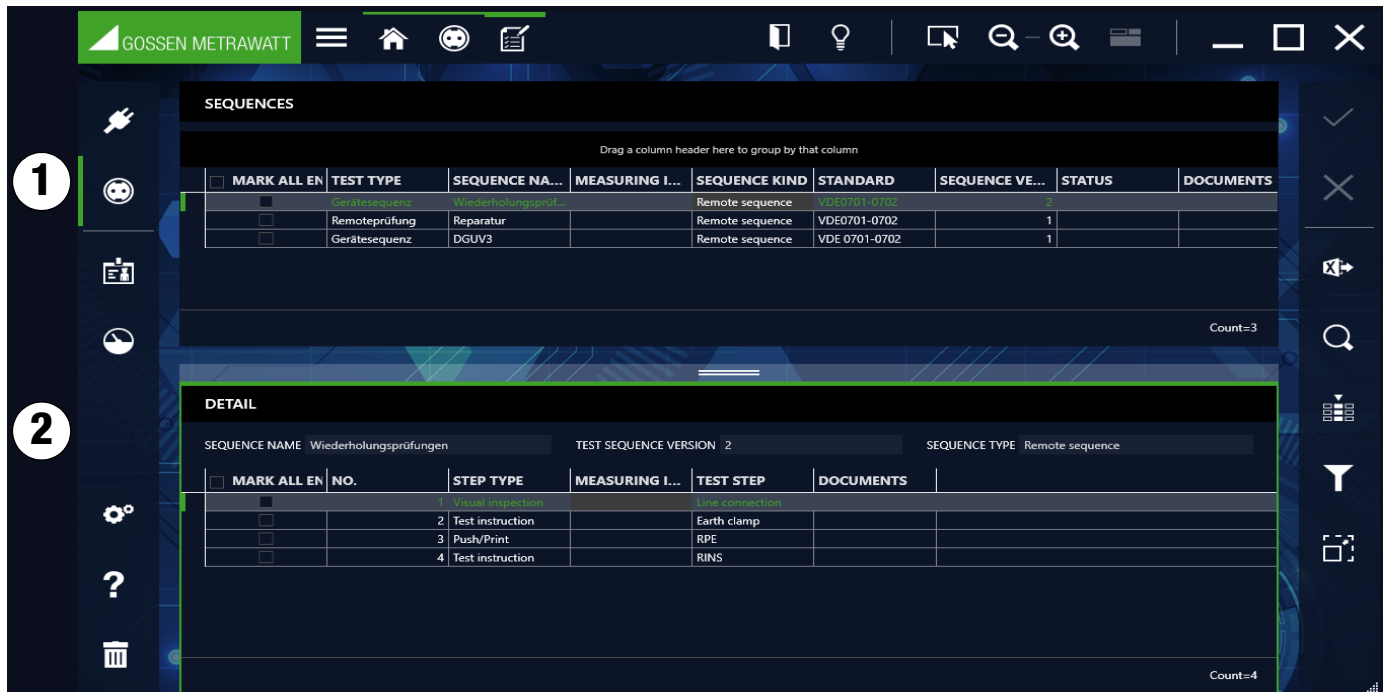
The overview/index card for sequence management is divided into two parts, namely the list and detailed view.

List view

The upper window shows the list of sequences in the sequence pool (in the sequence storage).

Detailed view

The lower window shows the individual test steps for the sequence marked in the upper window.



Sequence view: (1) List view, (2) Detailed view

The respective view has a green border, and the active part of the view is marked by a bold green bar in the top left part of the view. The toolbar only shows the symbols that are valid and can be activated for the selected view.

Toolbar functions in the list view

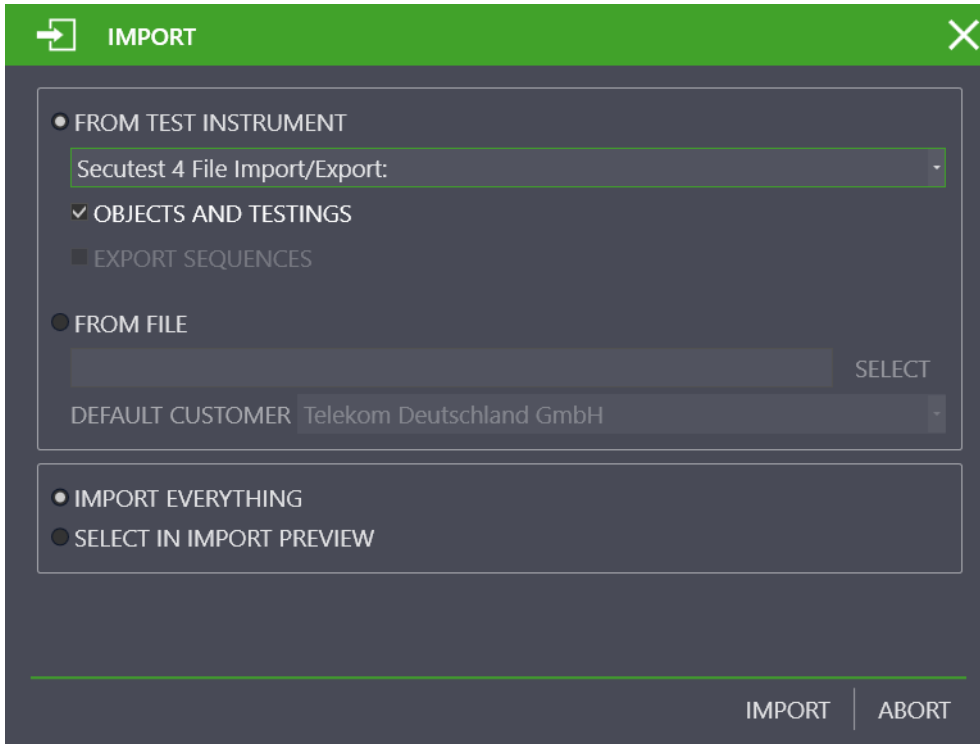
- ✓ Save changes
- ✗ Cancel editing
- ★ Add new sequences: The sequence editor is launched (refer to “Sequence editor”). This enables the creation of a new sequence, which is added to the sequence pool (sequence storage).
- ✎ Edit sequence: The marked sequence can be edited in the sequence editor.
- 📄 Duplicate sequence: This command copies the marked sequence. The name of the sequence is adopted, with the suffix “Copy”.
- 🗑 Delete sequence: This deletes the sequence. If the sequence has already been assigned to one or several objects, all assignments must be deleted before the sequence is deleted.
- 📎 Manage attachments (add, display and delete a file/photo)

This index card is a list, so it is subject to the functions of the list view. The list symbols are also enabled in the toolbar; refer to “Lists”.

12.1.4 Data import function (from the test device)

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


The function is found under  "IMPORT" in the menu  "PORTABLE OBJECTS". Selecting this function opens the import assistant.



The import assistant asks whether the data should be imported from a connected test device or a file (XML or CSV).

- FROM THE TEST DEVICE: here you can choose between connected devices. OBJECTS AND TESTS are selected for import in the default setting.
- FROM A FILE: Touch the field "SELECT" to select the file to which you wish to import the data. You can also select the file format in the open Windows Explorer panel. A customer from the database is specified if the file does not contain a customer.

To start import, select IMPORT EVERYTHING or SELECT IN IMPORT PREVIEW.

- Import takes place automatically if you select IMPORT EVERYTHING and then click on IMPORT.
- SELECT IN IMPORT PREVIEW initially shows the data in the IMPORT PREVIEW. The data can then be selected and edited. The objects are then imported to the **IZYTRONIQ** database by selecting the function .

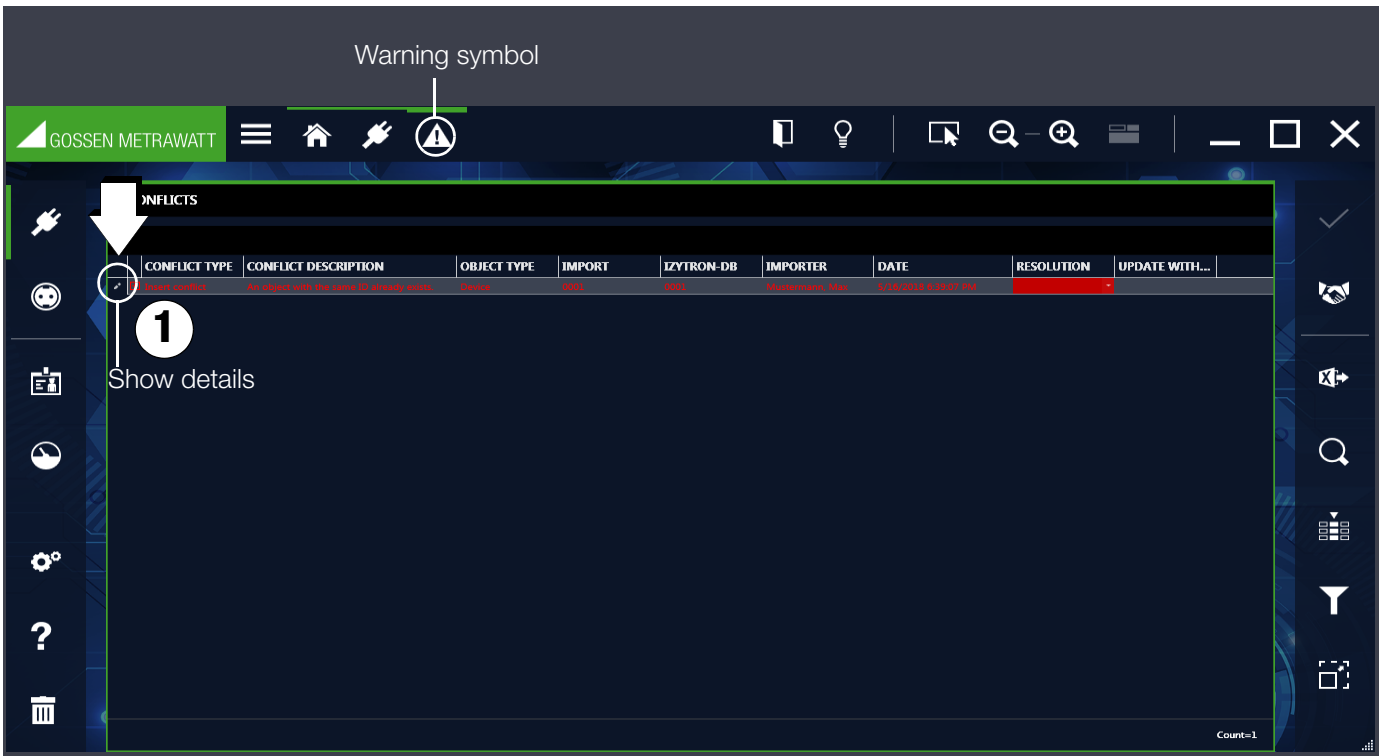
A message is shown confirming successful import and any transmission errors.

The conflict manager is activated when there are conflicts between existing and imported data that cannot be resolved automatically.

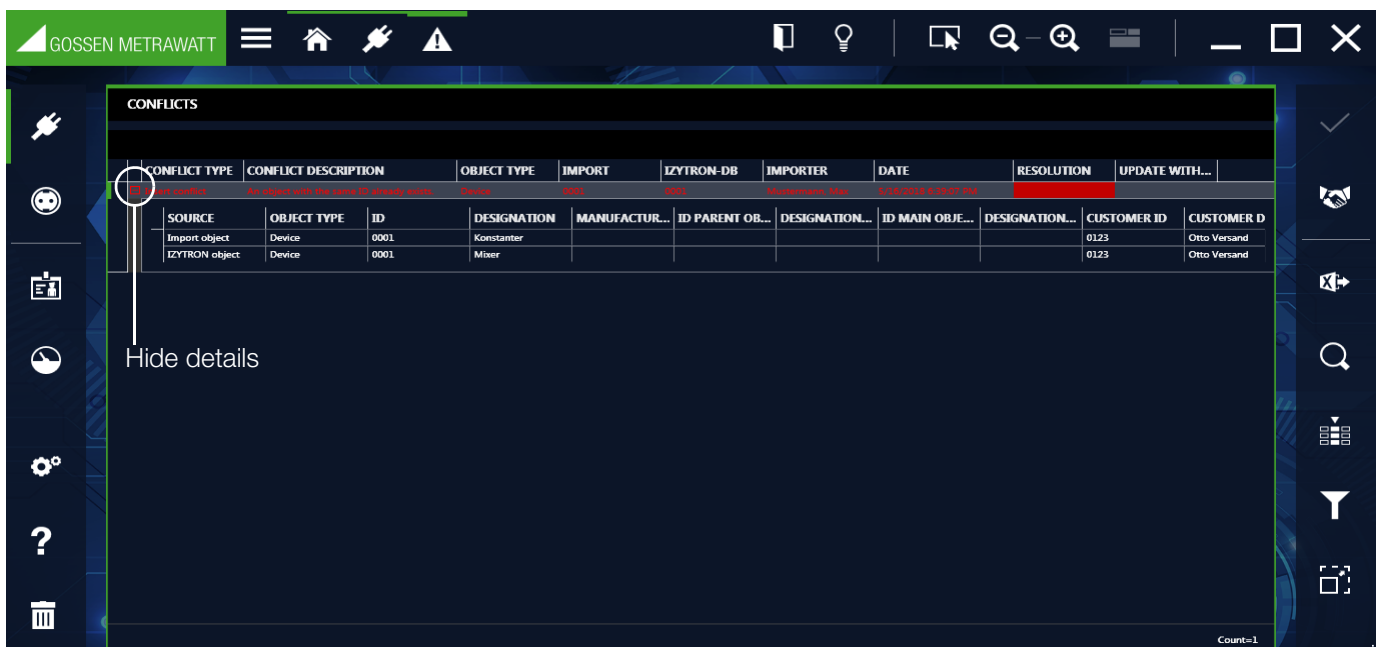
Video „File import via preview“

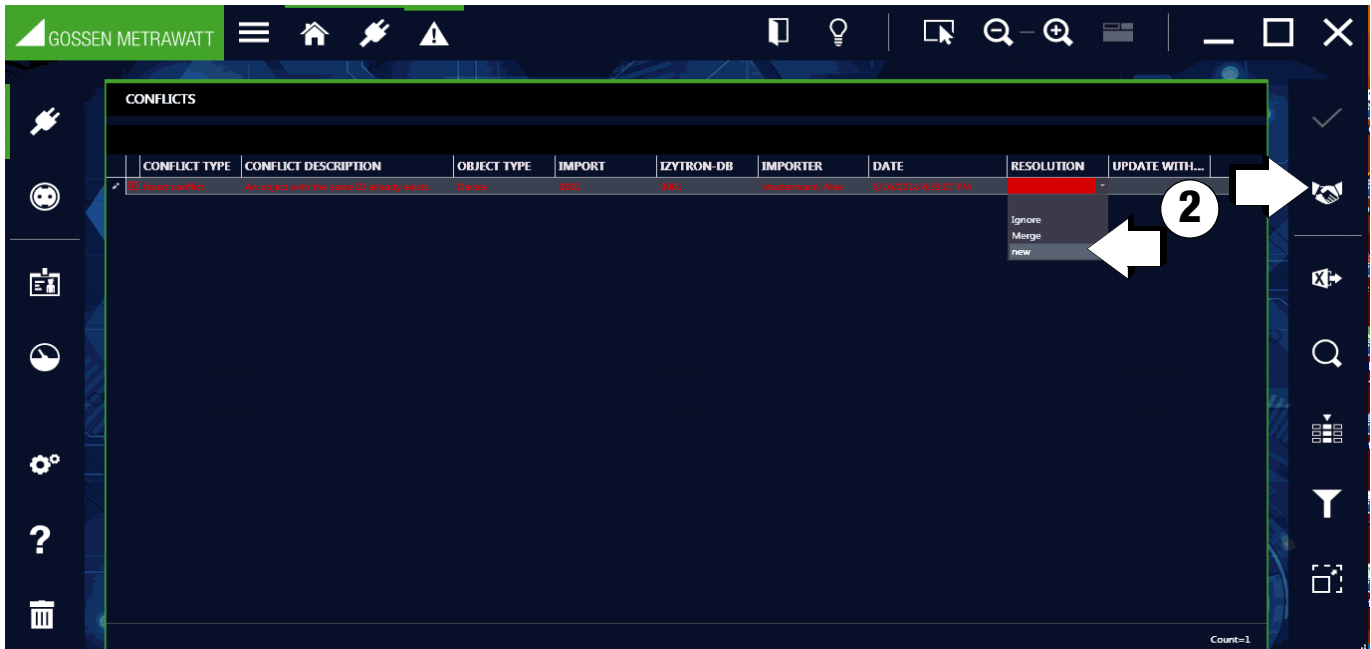
12.1.4.1 The conflict manager

Where there are conflicts during import that prevent transfer of the objects, these objects are not simply discarded. Instead, an attempt is made to resolve these conflicts manually. To do this, the relevant objects are copied to a separate folder/table. At the same time, a warning symbol is shown in the status bar and the entries are marked in red.



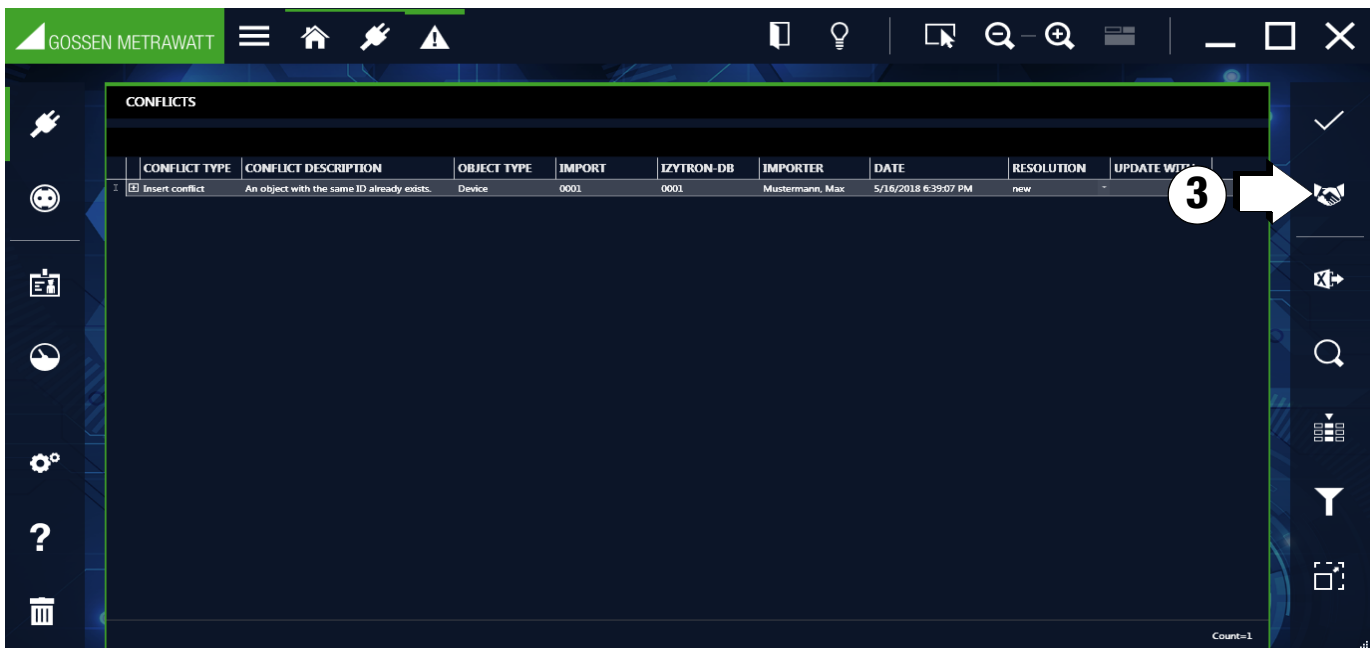
Conflicts are edited here. There is a description for each conflict. The details for the conflict objects are shown (1) by selecting the detail symbol (+).





Users are shown possible methods to resolve the conflict by clicking several times on the handshake symbol (2): Ignore, merge or new. These depend on the specific conflict. Alternatively, users can click on the column "Resolution" to open a pull-down menu with a selection of possible solutions.

The red marking is hidden when a method is selected. The conflict is resolved by saving the changes. The resolved entry is then no longer shown in the conflict manager, and the corresponding object is integrated in the main database. The conflict manager is closed once all conflicts in the list have been resolved.



Resolution options

Designation	Description
Ignore	Data import will be ignored.
Update with source ID (of the imported object).	All data stored in IZYTRONIQ for this object will be overwritten.
Update with target ID (of the existing object)	All data stored in IZYTRONIQ for this object will be overwritten, apart from the ID.
Merge	The object's master data will be synchronized.
New	The object will be imported and a new ID will be issued.
...	

Functions of the toolbar



Resolution of the conflict





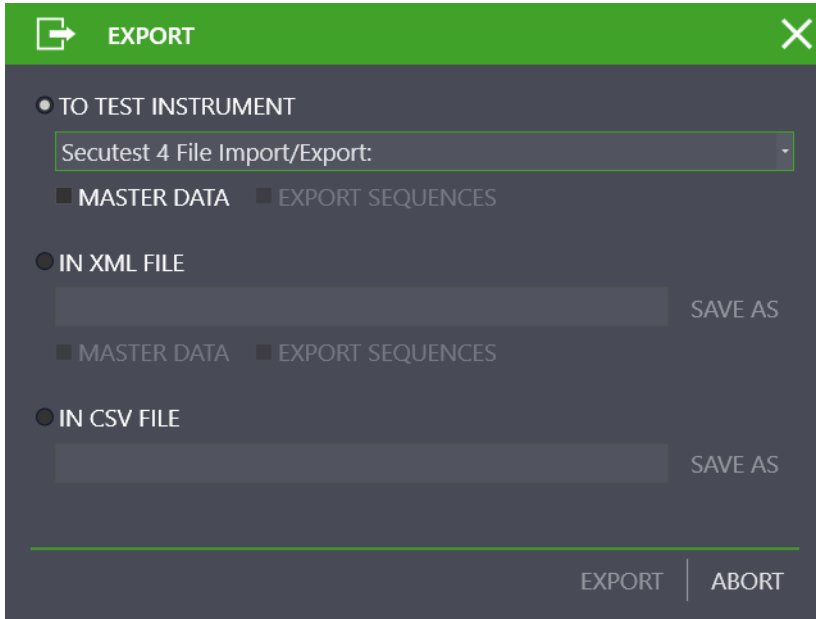
Selection of the solution method

This index card is a list, so it is subject to the functions of the list view. The list symbols are also enabled in the toolbar; refer to “Lists”.

Video „Conflict manager method“

12.1.5 Data export function to the test device

The export function is used to transfer data to a test device or a file. The function is found under “EXPORT” in the menu  “PORTABLE OBJECTS” . Selecting this function opens the export assistant.



The export assistant asks whether the data should be exported to a connected test device or an XML or CSV file.

- TO THE TEST DEVICE: here you can choose between connected devices. You can select OBJECTS and/or SEQUENCES.
- TO AN XML/CSV FILE: Touch the field “SAVE AS” to select the file in which you wish to save the data.



Take note!




Export deletes all data on the connected test device. You are therefore shown a warning before export.

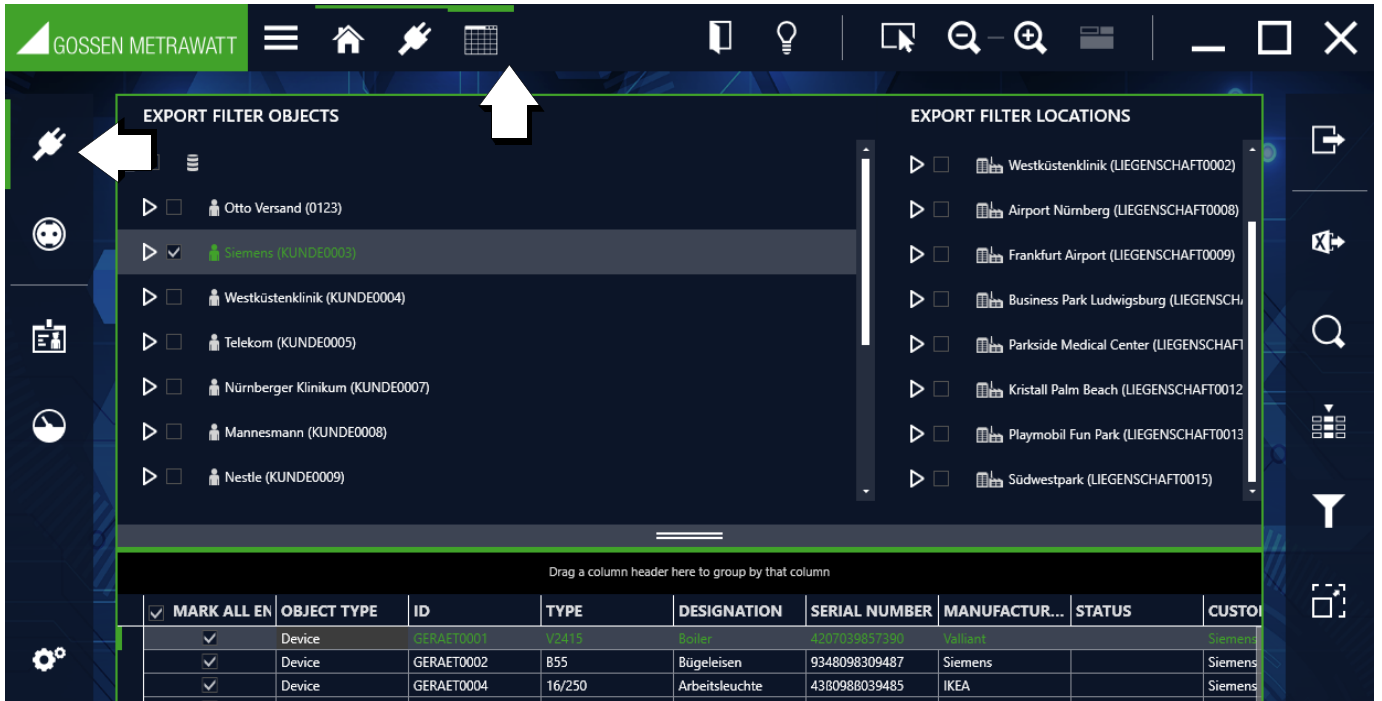
Selecting EXPORT starts the EXPORT FILTER.

Export filter

The export filter consists of two filter menus:

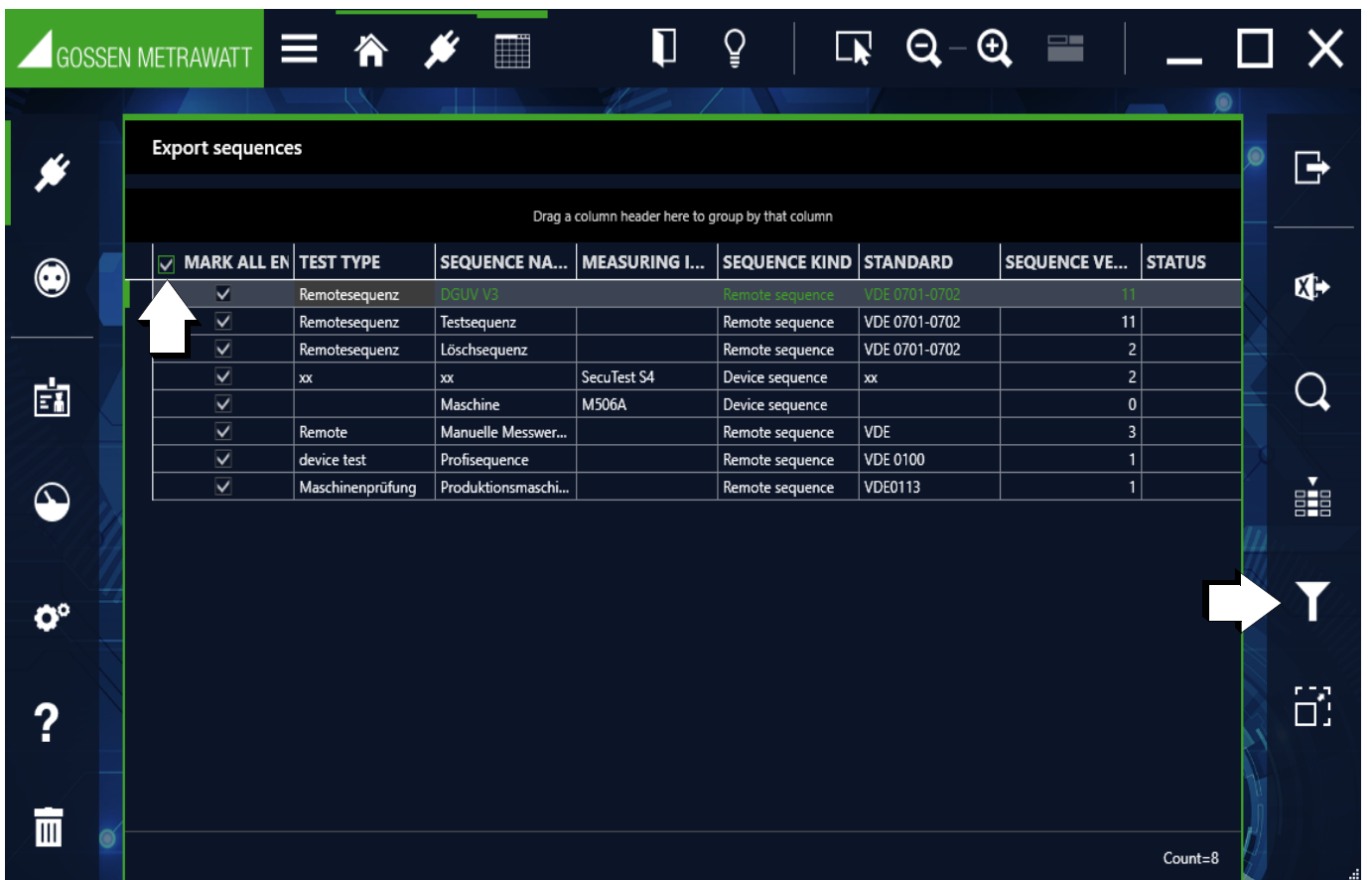
- EXPORT FILTER OBJECTS
- EXPORT SEQUENCES

When more than one filter menu is selected, the user switches between the views using the buttons  “NEXT”, i.e.  “BACK”. By selecting the  “EXPORT” button in the toolbar, the selected data and the corresponding customers and locations are transferred to the connected test device. The current operation is shown during export. Users are shown a message once all data has been transferred successfully.



Select and filter objects

The export filter OBJECTS consists of a two-part view. The upper half contains the two tree views, while the lower half shows a list of objects selected. Activating the checkboxes in front of the elements in the tree views is used to make a preselection based on customers and locations. Here, users can select the objects in the electric tree that they wish to transfer, which they then narrow down by selecting locations in the location tree. Additional filters in the lower list can be applied to the element selected in this way (refer to "Lists").



Select and filter sequences

The sequences for export can be selected and filtered here.

12.1.6 Test templates function

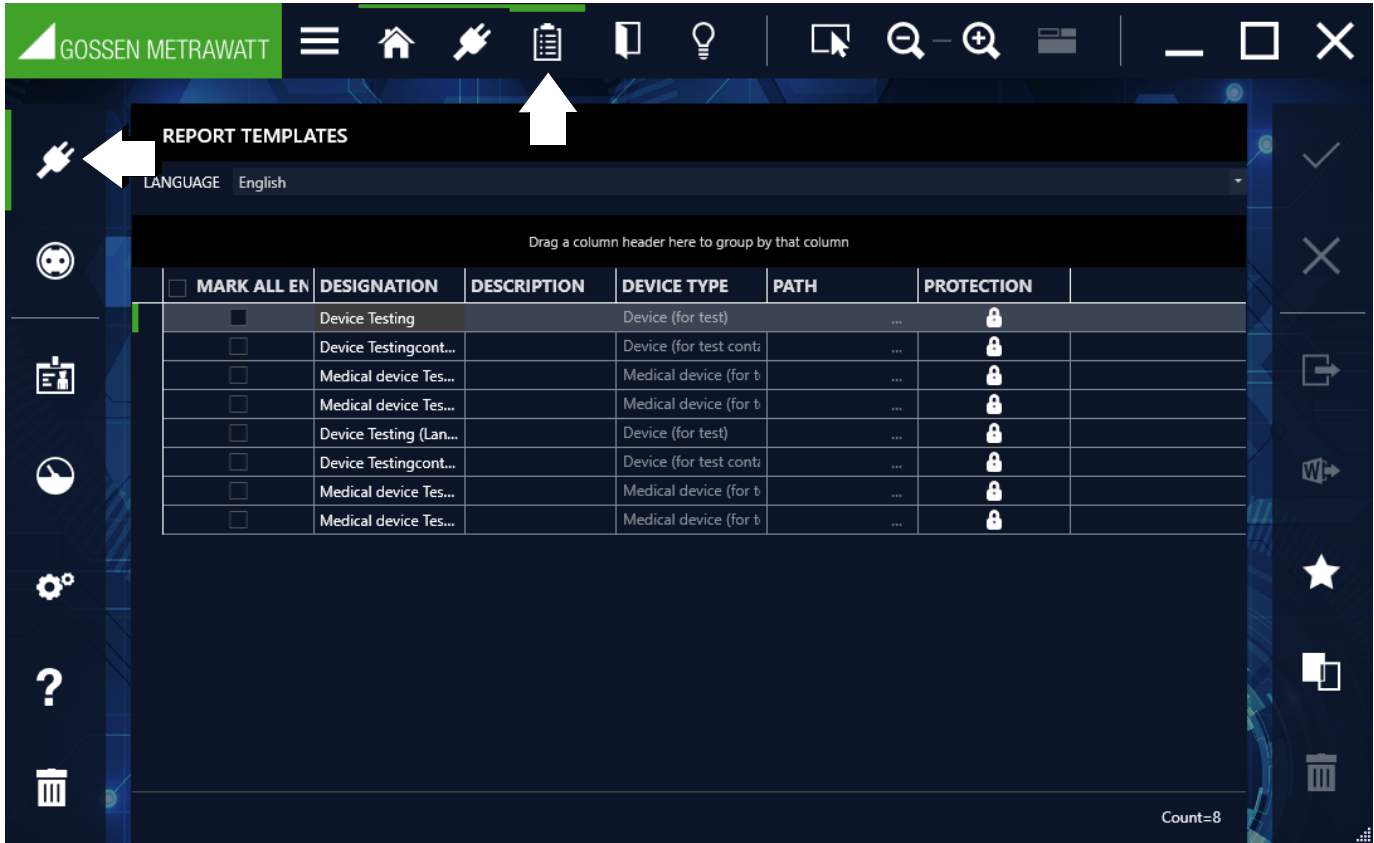
The test templates are used to document, e.g. tests, or as acceptance or handover records, among other things. They use variable data from the selected measurements, combined with object-related data (e.g. customer data). Report templates either comply with statutory requirements or standards, or have been, i.e. are prepared to standardize documentation. **IZYTRONIQ** contains factory-configured, standard records that can neither be edited nor deleted.

You can create new templates or copy and edit existing templates.

From version **BUSINESS Advanced** and above, a company logo or a scanned signature can be integrated in the report templates. They are stored in setup under global or personal settings; refer to “Global settings” and “Personal settings”.

The templates are created in MS Word, and placeholders can be used to arrange the test data in any way; refer to “Editing report templates”.


You will find reports management for portable objects under “REPORT TEMPLATES” in the  “PORTABLE OBJECTS”  menu.










Selection list of report templates

All available report templates are shown in record management.

If users wish to print out a test record, the report templates associated with the respective object type (device, medical device) are shown.

A record must be created in advance using MS Word in order to add a new record. New records are included in the list using the button  “ADD REPORT TEMPLATE”. Clicking on this symbol opens a system-specific menu to open Word documents. Users then select their chosen report template and confirm the choice to add a new entry in the management table. To save the new report template, users must select the device type for which the report template will apply and then add the name of the report template.

Functions of the toolbar

-  Save changes
-  Cancel editing
-  Save report template as an MS Word file
-  Open the report template as an MS Word file
-  Add a new report template
-  Duplicate the report template:
This command copies the marked report template. The name of the report template is adopted, with the suffix "Copy".
-  Delete the report template:
This deletes the sequence. If the sequence has already been assigned to one or several objects, all assignments must be deleted before the sequence is deleted.

This index card is a list, so it is subject to the functions of the list view. The list symbols are also enabled in the toolbar; refer to "Lists".

12.2 Module for stationary objects

This module is used to structure, organize and manage locations, customers and test objects.

In addition, test sequences are managed, created and assigned to test objects here.


Tests are conducted in a dialog with measurement and test devices and then imported from the measurement and test devices. Data can also be exported from the application to the measurement and test devices. Users have the option of comparing test results and creating test reports.

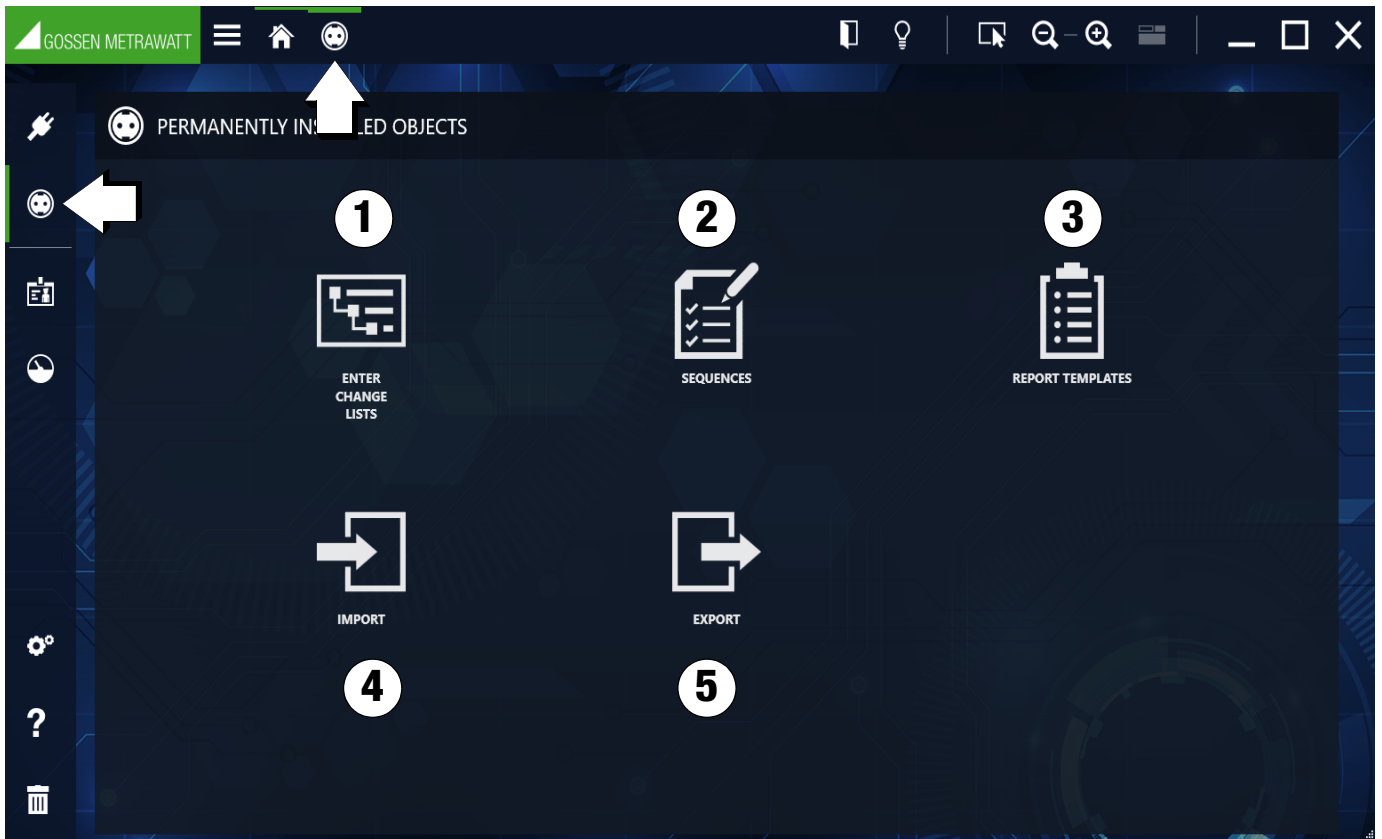
It is also possible to create and manage report templates for test reports.

The object modules contain two main categories:

- Facility
- Machine

12.2.1 Structure of the home screen

Selecting the object module symbol for stationary devices  in the home screen or in the navigation bar opens the start screen of the object module for stationary devices.



Start screen - stationary objects

The following functions are available:

- | | |
|--------------------------|--|
| (1) Input, change, list: | Input, change and filter objects. Management of test sequences and tests |
| (2) Sequences: | Creating and managing test sequences |
| (3) Report templates: | import (Word file) and manage test templates |
| (4) Import: | Import objects |
| (5) Export: | Export objects and sequences |

12.2.2 Function “Input, change, list”

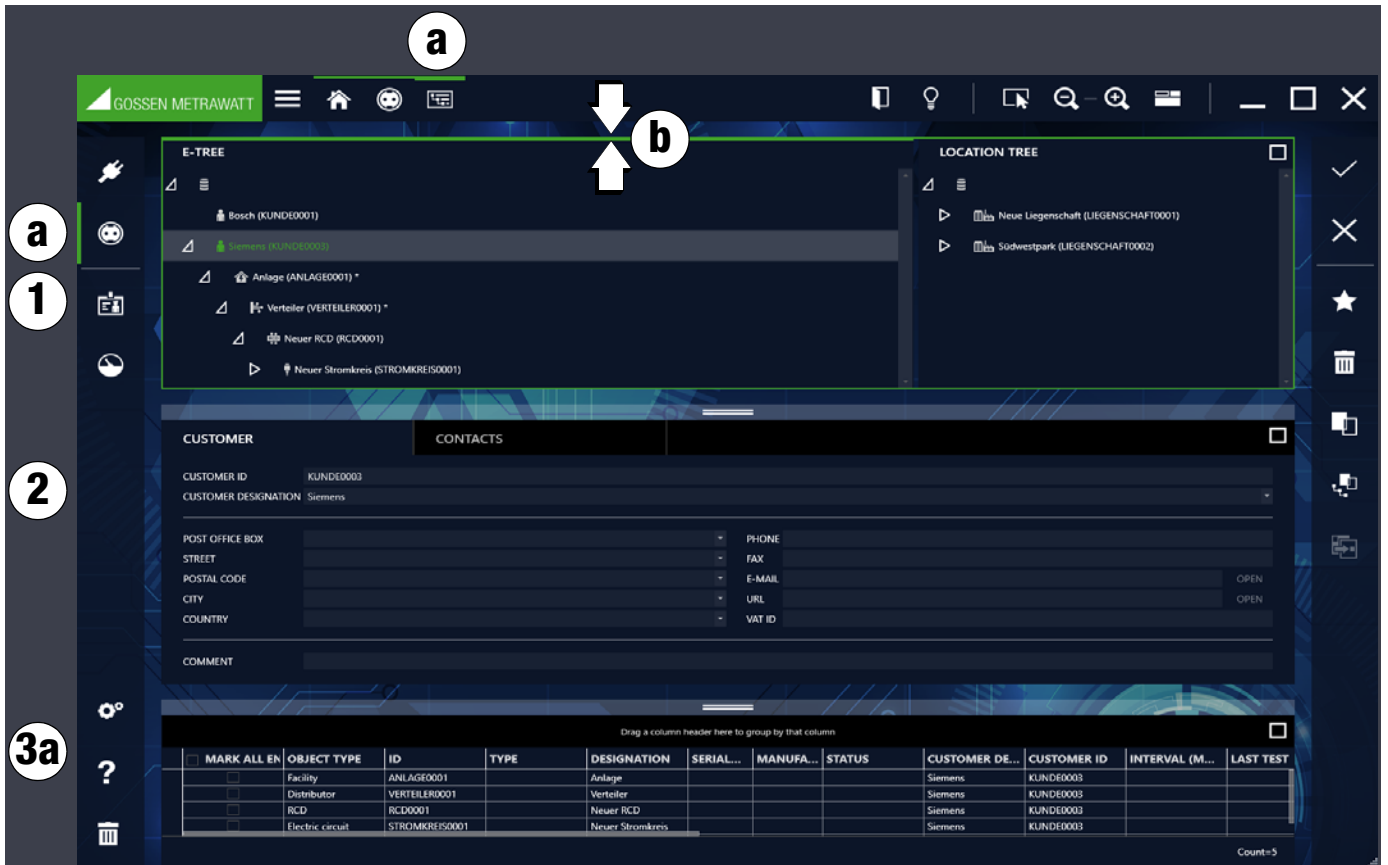
This module is used to structure, organize and manage locations, customers and test objects. The sequences and tests can be managed and assigned to test objects. Test results can be compared and test reports printed out.

The module view consists of the following 3 parts:

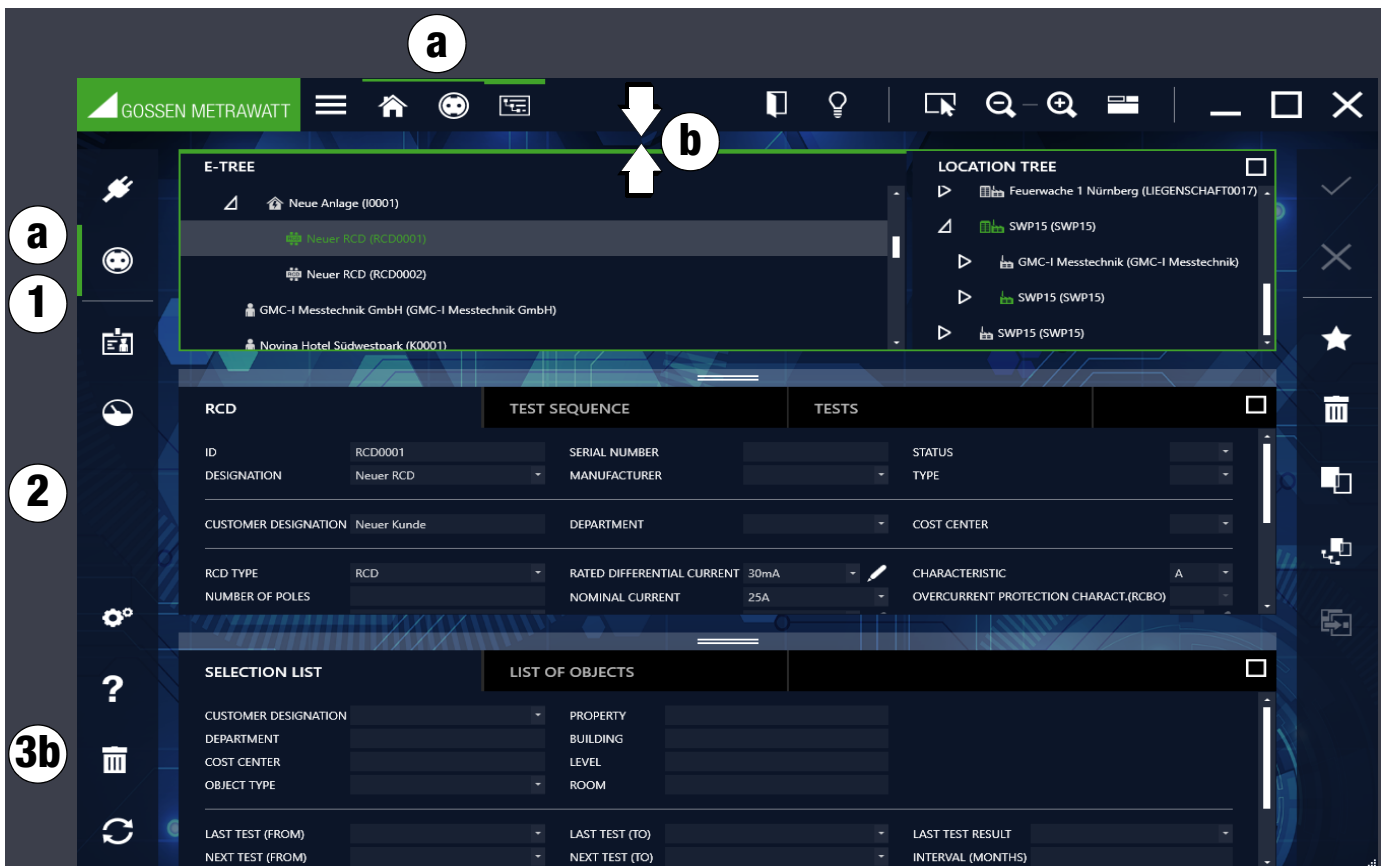
4. **Tree view:** This view consists of two sub-trees, namely the electric tree on the left and the location tree on the right. All customers, test objects and locations – as well as their mutual relationships – can be registered, shown and managed here. Objects can be selected here. Refer also to “Tree view”.
5. **Detailed view:** All details for the selected object are shown in this view. Once the test object has been selected, the test sequences used for this object, as well as all tests conducted on this test object, are shown in various tabs. Refer also to “Detailed view:”.
6. **a) List view:** This view shows a list of all test objects located in the branch below the selected object in the tree view. A variety of criteria can be defined to filter this list so that only the required data is shown. Objects can also be selected here. Refer also to “List view – Standard function” or “Lists”.

b) List view – extended search function (for large data volumes): If you work with large data volumes, it is useful to make a pre-selection of those data which are currently relevant for you. This helps to improve system performance. In this view, 2 index cards are shown. A selection has to be made via the first index card „SELECTION LIST“ as to which test objects are to be displayed in the „LIST OF OBJECTS“ index card. This list, in turn, can be filtered further by means of various criteria. See also “List view – extended search function” or “Lists”.

Video „Basic operation of the three views“ using the example of portable objects



(1) Tree view (2) Detailed view (3a) List view – standard search; (a) Marking of active view; (b) Active sub-function



(1) Tree view (2) Detailed view (3b) List view – extended search; (a) Marking of active view; (b) Active sub-function

The active view is always shown with a green border.
 Within the border, the active sub-function is indicated by a bold green bar at the top.

12.2.2.1 Tree view

The tree view shows all registered test objects, customers and locations. They are displayed hierarchically as two tree structures, namely the electric tree (on the left) and the location tree (on the right).

Selecting the node symbol opens a closed node or closes an open node.

Electric tree

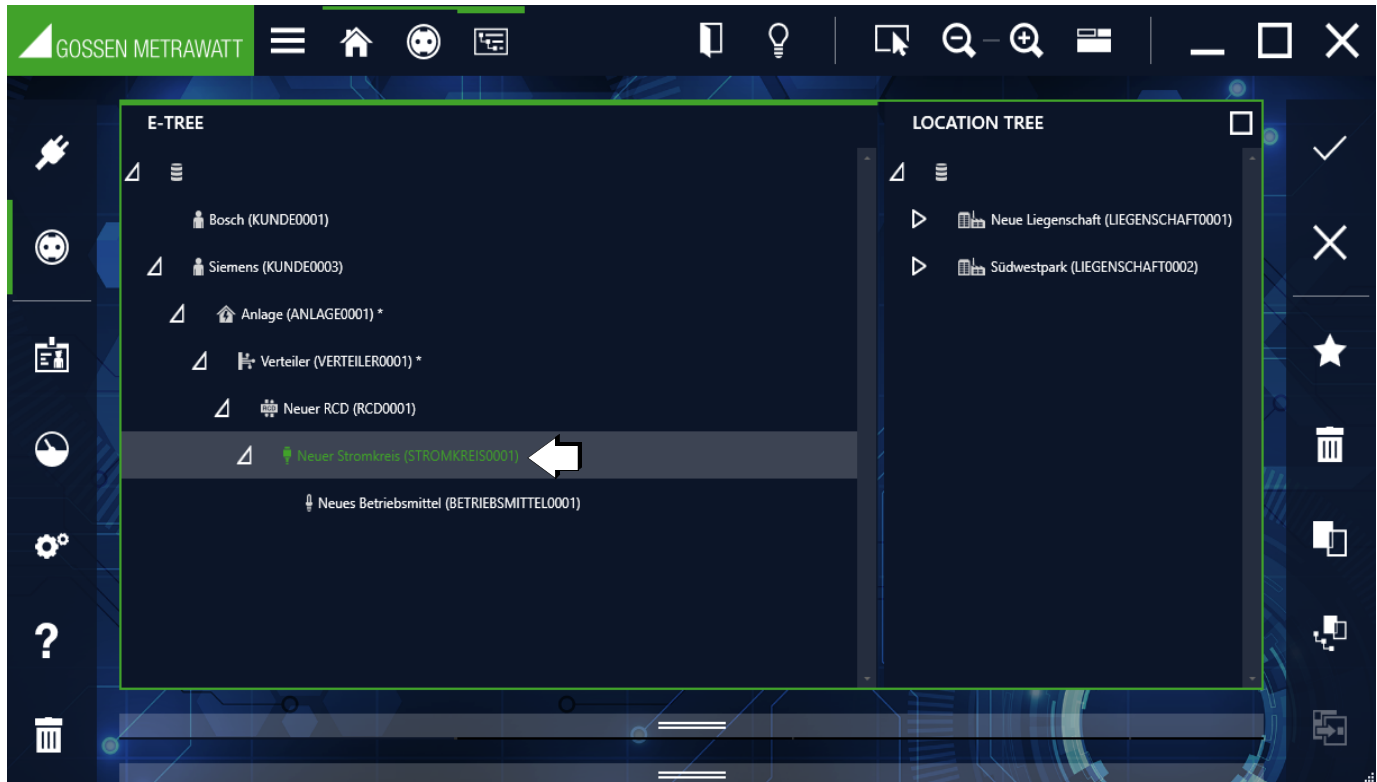
This displays all customers and test objects. The objects are always assigned to a customer.

The system does not accommodate test objects that are not assigned to a customer.



Note

Although all customers are shown, regardless of the type of test object (portable and stationary), it is only possible to access stationary test objects.



Selected test object in the e-tree

Location tree

The registered locations are shown in a hierarchical form here. Test objects can be assigned to these locations, although it is not mandatory. The location tree has the 4 defined hierarchy levels of property, building, level and room. It is not mandatory to use all levels of the hierarchy.

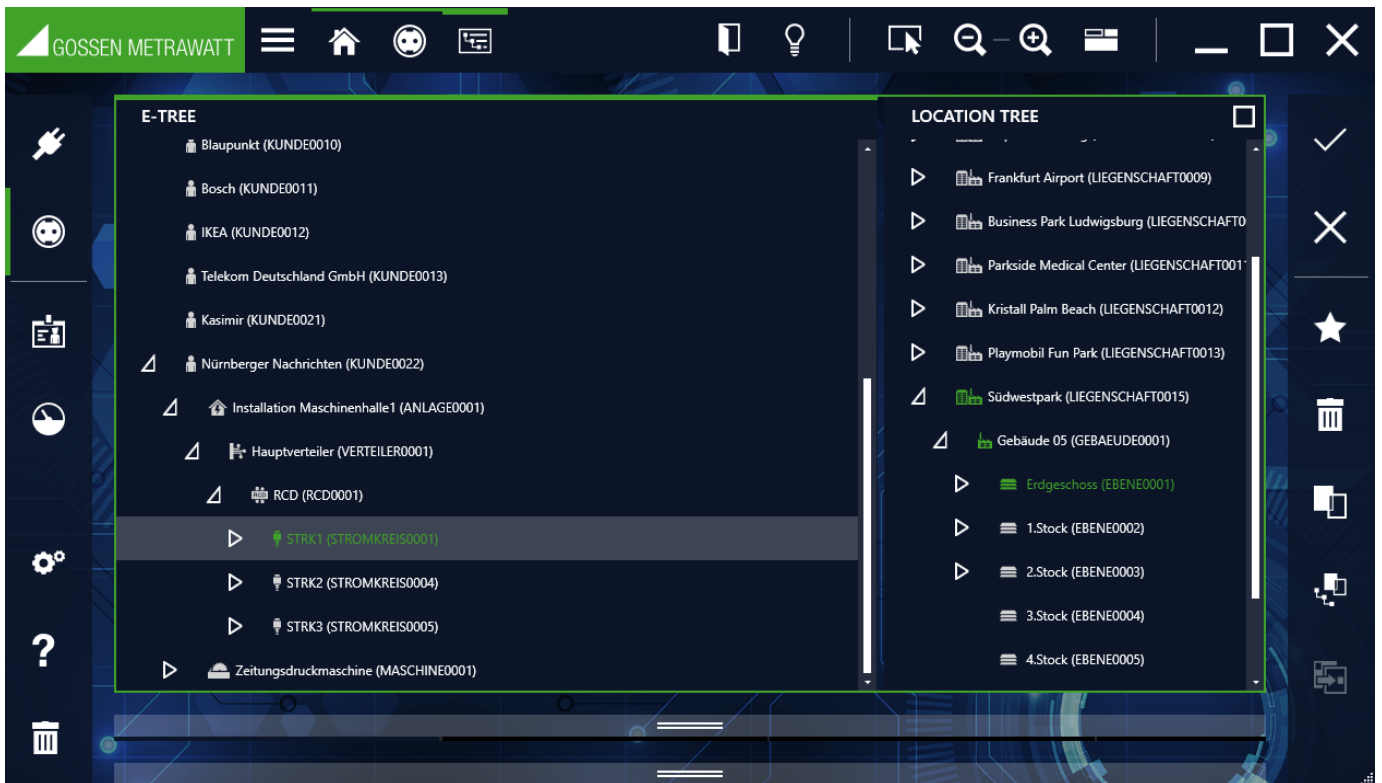


Image 1 Tree view: Location tree is selected

Interdependency of the tree structures

A test object can be linked to precisely one object in the location tree (although this is not necessary).

In contrast, an object in the location tree may be connected to several test objects in the electric tree. When a location is marked in the location tree, all elements in the electric tree that are situated at this location will be marked in green.

When a test object is selected in the electric tree, its assignment to a particular location is shown by a green marking on the corresponding location object.

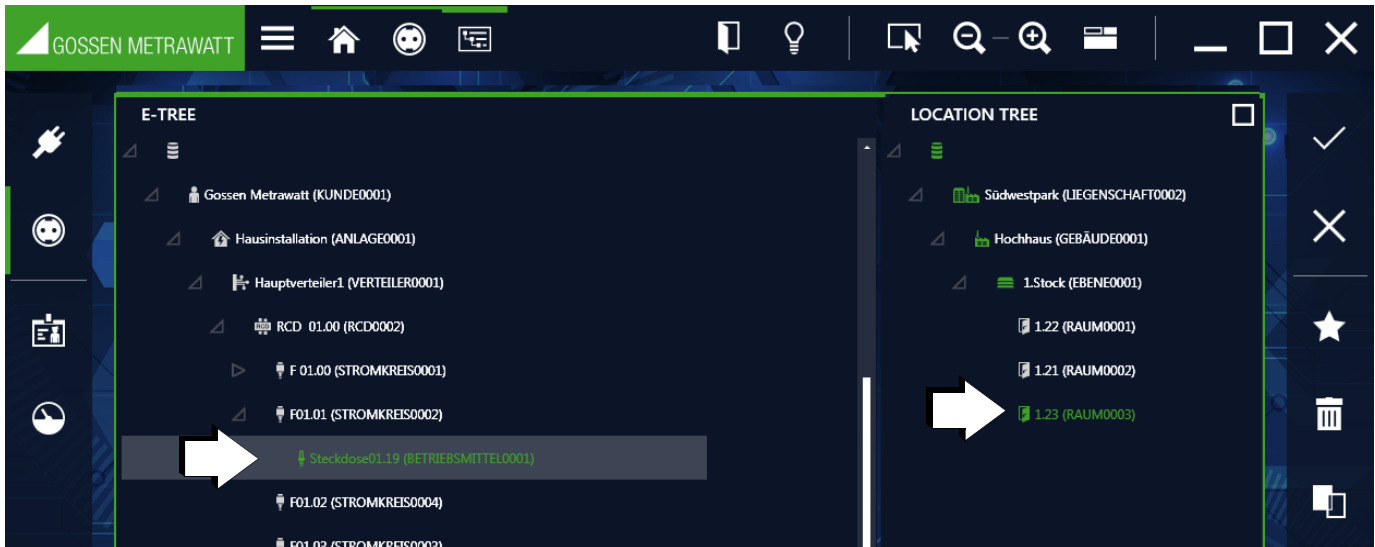
Connection logic for the tree elements

By selecting an object in a particular tree, the tree to which it is assigned will become the active tree. As described above, this is indicated by a green border around the tree window and a bold green bar at the top. Only one object can be marked in the active tree. By doing so, the symbol and text color of the object turn green, and the matching line is shaded in gray.

In the other tree, the matching elements are indicated by the color of the symbol and text turning green. The parent objects are always indicated by a green symbol, while the color of the text remains white.

Example for the e-tree:

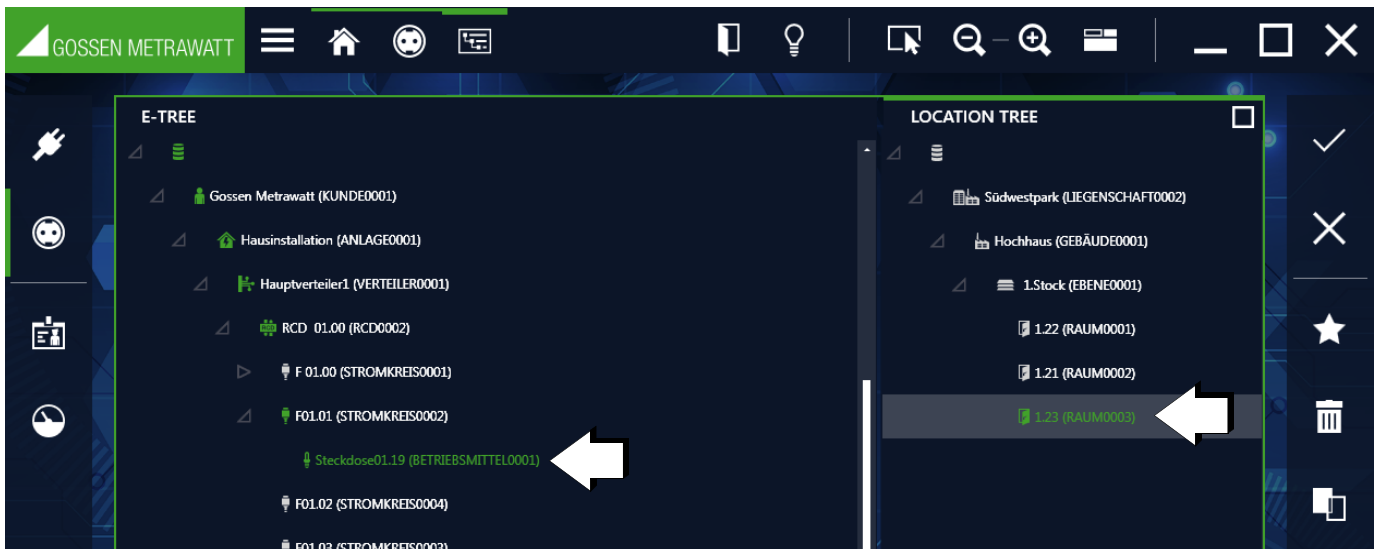
The electric tree is active; the socket 01.19 is selected. Therefore, the symbol and text are green and shaded gray. The location tree now indicates that this socket is situated in room 1.23. The parent objects Südwestpark, High-rise, 1st floor are indicated by the green symbol, which means it is possible to identify where the socket is located, even when the node is closed.



Example: assignment of the socket




Example for the location tree:

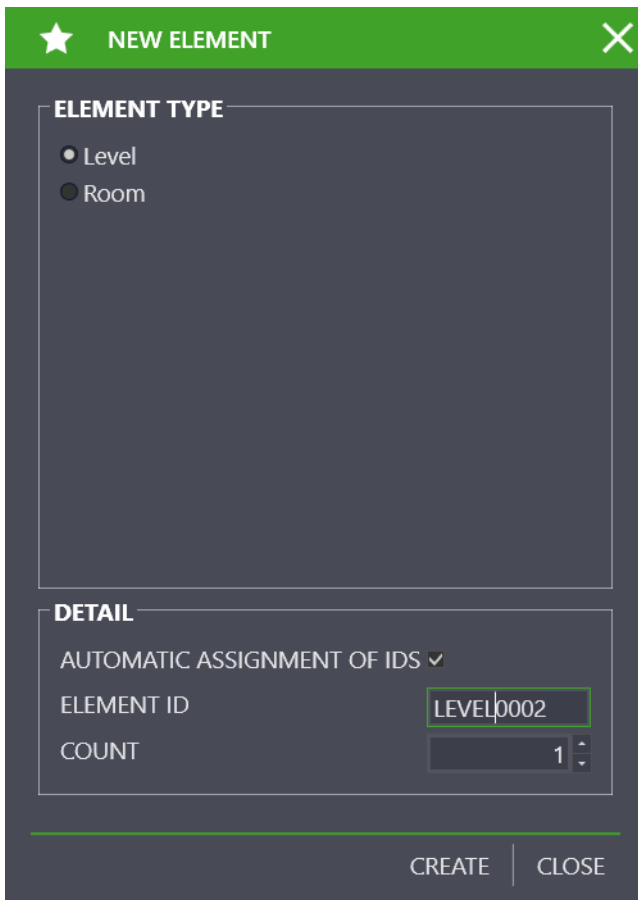
The location tree is active, and room 1.23 is selected. Therefore, the symbol and text are green and shaded gray. The electric tree indicates that only the socket 01.19 is located in this room. The parent objects Customer Gossen Metrawatt, House installation, Main distributor 1, RCDO1.00, F01.01 are indicated by the green symbol, which means it is possible to identify that an object belonging to this parent node is located in the selected room, even when the node is minimized.



Example: objects in room 1.23

Functions of the toolbar in the tree view

-  Save changes
-  Cancel editing
-  Create new element:



NEW ELEMENT

ELEMENT TYPE

- Level
- Room


DETAIL

AUTOMATIC ASSIGNMENT OF IDS





ELEMENT ID

COUNT

CREATE | CLOSE

To create a new element, the object under which this new element is to be added must be marked in advance. The marked object is then shaded gray. After selecting , a “New Element” popup opens in which the user is offered the selection of elements that are possible for the chosen position in the tree (e.g., if it is included in the hierarchy level “building” of the location tree, it is possible to create “levels” or “rooms”). Once the required element type has been selected, it is then necessary to define an element ID and the number of elements to be created. The element ID can also be created automatically by a logic defined in the settings; this is mandatory to create several elements of the same type. After creating one or several elements, the newly created element is selected automatically (the first one if several elements are created) and the creation of a subordinate element starts. The process is only concluded when the user explicitly closes (command CLOSE) the popup “New Element”. The newly created element/s is/are marked with a “+” until they have been saved.





Example for a new element in the location tree

-  Delete element
-  Copy element
-  Copy element with sub-elements
-  Paste copied element (is inserted in the hierarchy below the marked element)

12.2.2.1.1 Available tree elements

LOCATION TREE

In the location tree, the following elements can be created for stationary objects in the hierarchy shown below.

Symbols	Significance
Location tree	
	Property
	Building
	Level
	Room

Creating elements is hierarchy-dependent. If the user marks an existing location in the tree, only the elements available at the selected position in the tree are shown when a new location is created.

E-TREE

The following elements can be created in the electric tree for stationary objects:

Symbols	Significance
Electric tree – stationary objects	
	Electric facility
	Machine
	Distributor
	Electric circuit
	RCD
	RCM
	IMD
	Equipment
	Equipotential bonding rail
	Equipotential bonding conductor
	Ground connector
	Measurement point

12.2.2.2 Detailed view:

The most important parameters for the object marked in the tree view (customer, device, machine, distributor, electric circuit, RCD, RMD, IMD, equipment, equipotential bonding rail, equipotential bonding conductor, ground connector, measurement point and location) are managed in the detailed view of stationary devices. The objects cannot be created or deleted here.

Important data such as the object ID, object designation and parameters for the individual objects can be created and edited in the index cards. It is also possible to attach documents such as images, certificates and operating instructions.

When the input fields are clicked on, content can be added by entering text or making selections from a drop-down menu. Newly created objects in the electric tree are marked with a "+", and edited objects with a "*", until the changes have been saved.




Note

IZYTRONIQ does not define a limit for the number of characters in the respective data fields, but the connected test devices themselves may limit the number of characters. Please check the technical parameters of the test device. A restriction of transferable data fields may apply, depending on the connected test device. Please check the technical parameters of the test device.

Compulsory fields

Some fields in the input screens are compulsory.

Compulsory fields that are left blank are marked with the following symbol: .

As a result, the object cannot be saved.

The tab names and all associated displays are shown in red writing until the corresponding compulsory fields have been completed.

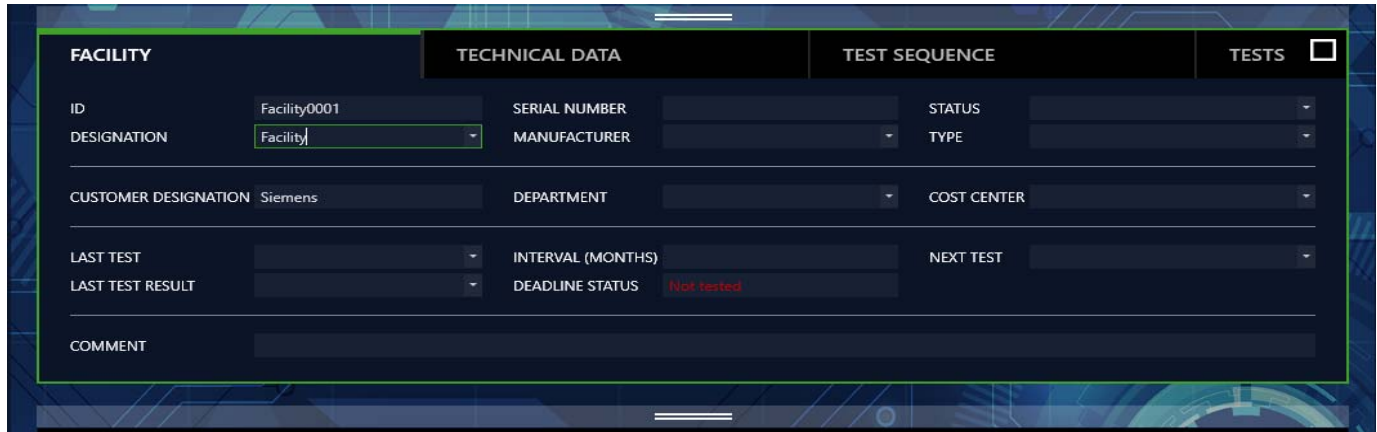
12.2.2.2.1 Structure of the index cards

The master data consists of a differing number of index cards and contents, depending on the marked object in the tree view.

Customer: Two index cards: Customer and contacts.

Location: One index card: Master data

Test objects Three index cards: Element, test sequence and tests. Additionally, the index card “Technical Data” for the test object facility/machinery.







The image shows a screenshot of a software interface for a facility index card. The interface is divided into four main sections: FACILITY, TECHNICAL DATA, TEST SEQUENCE, and TESTS. The FACILITY section contains fields for ID (Facility0001), DESIGNATION (Facility), CUSTOMER DESIGNATION (Siemens), LAST TEST, LAST TEST RESULT, and COMMENT. The TECHNICAL DATA section contains fields for SERIAL NUMBER, MANUFACTURER, DEPARTMENT, and DEADLINE STATUS (Not tested). The TEST SEQUENCE section contains fields for STATUS, TYPE, COST CENTER, INTERVAL (MONTHS), and NEXT TEST. The TESTS section is currently empty, indicated by a small square icon in the top right corner.

Example of the index card for a facility

Object: Customer**Index card CUSTOMER**

This can be used to add address and contact details for a selected customer:







Functions of the toolbar – index card for a CUSTOMER

-  Save changes
-  Discard changes (with prompt)
-  Manage attachments (add, display and delete a file/photo)
-  Print, refer to "Print"

Index card CONTACTS

This is used to manage contacts at the respective customer.

Functions of the toolbar – index card for CONTACTS

-  Save changes
-  Discard changes (with prompt)
-  Create new contact
-  Delete contact
-  Manage attachments (add, display and delete a file/photo)
-  Print, refer to "Print"

This index card is a list, so the functions of the list view will apply; the list symbols will be active in the toolbar as well; refer to "Lists".

Object: Location





Index card Location

The address and building data are entered here.

Locations are divided into the four hierarchies of property, building, level and room.
The following data can be added, depending on the main object:

Property:	Address data, comments
Building:	Address and architectural data, comments
Level:	ID and designation, comments
Room:	ID and designation, comments

Functions of the toolbar – index card for a Location

-  Save changes
-  Discard changes (with prompt)
-  Manage attachments (add, display and delete a file/photo)
-  Print, refer to "Print"

Test object





The test object is structured into three, i.e. four index cards (TEST OBJECT, TEST SEQUENCE, TESTS and (for facilities, i.e. machinery) also the TECHNICAL DATA).

Index card TEST OBJECT <Name>

Important data such as the object ID, object designation and parameters for the individual objects can be created and edited in the index cards. It is also possible to attach documents such as images, certificates and operating instructions.

When the input fields are clicked on, content can be added by entering text or making selections from a drop-down menu. Newly created objects in the electric tree are marked with a "+", and edited objects with a "*", until the changes have been saved.





Functions of the toolbar – index card TEST OBJECT

-  Save changes
-  Discard changes (with prompt)
-  Manage attachments (add, display and delete a file/photo)
-  Print, refer to "Print"

Index card TECHNICAL DATA (only for facilities and machinery)

An additional index card is necessary, as test objects of this type require extensive data. The data to describe the facility can be entered here.

Functions of the toolbar – index card TECHNICAL DATA

-  Save changes
-  Discard changes (with prompt)
-  Manage attachments (add, display and delete a file/photo)
-  Print, refer to "Print"

Video „Creation of machines and systems“

Index card TEST SEQUENCE

The test sequence index card is used to assign text sequences to the selected object.

Several test sequences can be assigned to one object.

The view of assigned test sequences is shown in a list. A marked checkbox in the column STANDARD indicates the test sequence with which the object is to be tested.

The test sequences themselves are managed in a parent sequence pool; refer to “Sequences function”.



Note

Deleting only removes the link, but not the sequence. The sequence remains present in the sequence pool.

Sequence steps

Users can show the details (individual steps) of a sequence by double-clicking on the sequence or by marking the sequence and then selecting the symbol . This opens a list of sequence steps, which is shown instead of the sequence list.

Users return to the original screen by selecting the symbol .

Functions of the toolbar – index card for a TEST SEQUENCE

- Save changes
- Discard changes (with prompt)
- Show sequence details (if the user is in the sequence list)
- Show sequence list (if the user is in the sequence detailed view)
- Add sequences from the sequence pool
- Delete sequence assignment; the sequence itself remains present in the sequence pool.
- Manage attachments (add, display and delete a file/photo)
- Print, refer to “Print”

This index card is a list, so the functions of the list view will apply; the list symbols will be active in the toolbar as well; refer to “Lists”.

Index card TESTS

The index card for tests is used to manage and create tests for the selected object. The view of assigned tests conducted is shown in a list.

The tests listed here are created in a variety of ways:

- Import of measurements from the test device or from a file
- Direct execution of tests by different methods

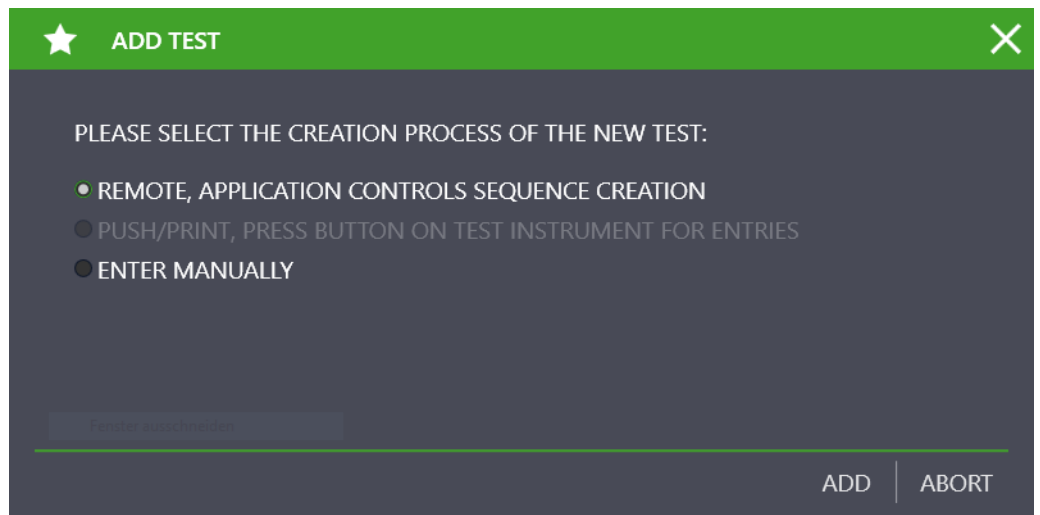
Test details – show elements with lower hierarchy

Users can show the details of a test by double-clicking on the test or by marking the test and then selecting the symbol . This opens the detailed view for the test. If a “+” symbol is placed in front of the line, additional information is available by selecting the symbol or by double-click, whereby users can switch between MEASURED VALUES and PARAMETERS.

Users return to the original screen by selecting the symbol .

Direct execution of tests

Selecting the tool symbol opens the popup “Add Test”, which offers the following options:



► **REMOTE:**

The application controls the sequence process (refer to “Automatic process control for a test – remote function”) Here you can execute, control and analyze test sequences in IZYTRONIQ. You can conduct remote testing with a variety of test devices and then analyze the results. Attachments such as circuit diagrams, drawings, instruction photos etc. can also be shown. Measurements can be conducted and reported using any test devices; refer to “Document management”.

► **PUSH/PRINT:**

Input at the push of a button on the test device (refer to “Push/Print – first steps”): The push/print function allows users to send measured results directly to the selected test object in the IZYTRONIQ and to save them there in the Tests tab at the push of a button on the test device.

► **Manual input:**

This function allows tests to be conducted with any test devices that are not connected to IZYTRONIQ. It is also possible to create tests that do not require a test device, e.g. stating a number. Users select the function “Manual Input” and then click on “ADD” to open the window “MANUAL INPUT”. They enter a test name and the test device used in the upper content section. The tester and the date are added automatically.

Take note: Only test devices registered in test device management are eligible for selection.

Manual tests can be created in each row in the lower content section. To do this, users select the function ★ “ADD TEST STEP” in the toolbar. This is used to document current tests, whereby the following fields can be completed. Only the field “Test step” is compulsory.


No.	Sequential number of the test step (automatic)
Step type	Manual (automatic)
Test device	Test device used (automatic)
Test step	Test step, e.g. measurement
Min.	Minimum value
Max.	Maximum value
Result	Result value
Analysis	Analysis
Attachment	Shows any documents that are added.

The manual measurement is completed by saving ✓ the entries, and the screen returns to the index card “TESTS”. The created measurement is now shown here.

Video „Manual input of measured values“














Create container, grouping of available tests

This function is used to group several tests for a selected object in one container. A joint report of these tests can therefore be created. The individual tests include the name of the responsible tester; the creator is responsible for the container.

The first step in creating a container is to mark the tests that will be included in the container. Afterwards, the user selects "CREATE TEST CONTAINER"  in the toolbar. Clicking on "ADD" opens an input screen to create the container name and to add the tester responsible for the container. Clicking again on "ADD" creates the container, and the program returns to the index card for tests.

Video „Creation of Container“

Functions of the toolbar – index card for a TEST

-  Save changes
-  Discard changes (with prompt)
-  Show tests/container details (if the user is in the matching tests)
-  Skip to one level higher (if the user is in the test/container details screen)
-  Creating tests according to the methods outlined above
-  Delete tests and containers
-  Create containers
-  Add tests to the container
-  Cancel the container
-  Compare tests:
Two or more similar tests can be compared. Users click on the symbol and then mark the tests they wish to compare. After confirming, the results are shown as a table or a diagram.
-  Manage attachments (add, display and delete a file/photo)
-  Print, refer to "Print"
-  Print reports

This index card is a list, so it is subject to the functions of the list view. The list symbols are also enabled in the toolbar; refer to "Lists".

12.2.2.3 List views

Two list views are available which differ with regard to the type of selection and search function:

- standard function
- extended search function

For large data volumes we recommend the extended search function which conforms to the default setting.

The respective selection has to be made in the following menu path:

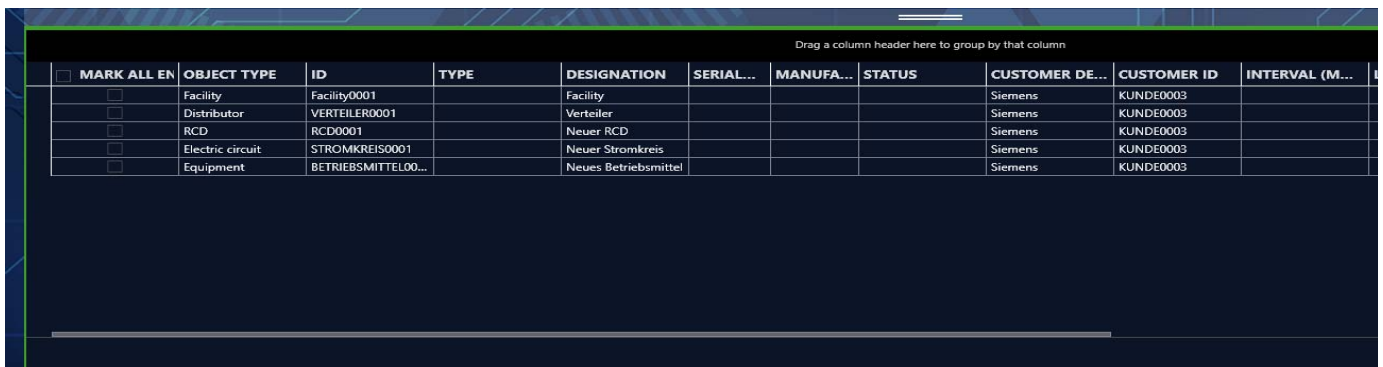
SETTINGS > PERSONAL SETTINGS > GENERAL SETTINGS >

Parameter **ACTIVATE EXTENDED SEARCH FUNCTION (FOR LARGE DATA VOLUMES)**

The extended search function is active when the appropriate tick mark is set.







List view – Standard function

The list view shows all objects located in the tree view hierarchy below the selected element. This means, for example, that all test objects for one customer or all test objects located in the room can be listed. Here, only one element can be selected in the tree view. The number of currently listed elements is shown in the window at the bottom right.



<input type="checkbox"/>	MARK ALL EN	OBJECT TYPE	ID	TYPE	DESIGNATION	SERIAL...	MANUFA...	STATUS	CUSTOMER DE...	CUSTOMER ID	INTERVAL (M...
<input type="checkbox"/>		Facility	Facility0001		Facility				Siemens	KUNDE0003	
<input type="checkbox"/>		Distributor	VERTEILER0001		Verteiler				Siemens	KUNDE0003	
<input type="checkbox"/>		RCD	RCD0001		Neuer RCD				Siemens	KUNDE0003	
<input type="checkbox"/>		Electric circuit	STROMKREIS0001		Neuer Stromkreis				Siemens	KUNDE0003	
<input type="checkbox"/>		Equipment	BETRIEBSMITTEL00...		Neues Betriebsmittel				Siemens	KUNDE0003	


Functions of the toolbar

-  Save changes
-  Cancel editing
-  Delete objects
-  Print, refer to "Print"
-  Print reports
-  Multi-assistant (from **BUSINESS Professional**)

This index card is a list, so it is subject to the functions of the list view. The list symbols are also enabled in the toolbar; refer to "Lists".

List view – extended search function

This list view is useful if you work with large data volumes. In order to use it, you have to make a pre-selection of the data which are currently relevant for you.

In this view, 2 index cards are shown. A selection has to be made via the first index card „SELECTION LIST“ as to which test objects are to be displayed in index card „LIST OF OBJECTS“. Open the extended search function afterwards by pressing the key . A window pops up showing a progress bar. The list, which is subsequently created, is opened in index card LIST OF OBJECTS and can be filtered further by means of various filter criteria.





Index card SELECTION LIST



The screenshot shows the 'SELECTION LIST' index card with the following fields:

SELECTION LIST		LIST OF OBJECTS	
CUSTOMER SIGNATURE	GOSSEN METRAWATT (KUNDE0023)	PROPERTY	
DEPARTMENT		BUILDING	
COST CENTER		LEVEL	
OBJECT TYPE		ROOM	
LAST TEST (FROM)		LAST TEST (TO)	
NEXT TEST (FROM)		NEXT TEST (TO)	
		LAST TEST RESULT	
		INTERVAL (MONTHS)	
ID		SERIAL NUMBER	
DESIGNATION		MANUFACTURER	
		STATUS	
		TYPE	

Functions of the toolbar

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







This index card is a list, so it is subject to the functions of the list view. The list symbols are also enabled in the toolbar; refer to "Lists".

Index card LIST OF OBJECTS

SELECTION LIST		LIST OF OBJECTS							
Drag a column header here to group by that column									
<input type="checkbox"/> MARK ALL EN	OBJECT TYPE	ID	TYPE	DESIGNATION	SERIAL NUMBER	MANUFACTUR...	STATUS	CUSTOMER DE...	CUSTOMER ID
<input type="checkbox"/>	Device	GERAET0004	MIXI	Mixer	2398094875	Phillips		GOSSEN METRAW...	KUNDE0023
<input type="checkbox"/>	Device	GERAET0010	MIXI	Mixer	2398094875	Phillips		GOSSEN METRAW...	KUNDE0023
<input type="checkbox"/>	Device	GERAET0011		Kühlschrank				GOSSEN METRAW...	KUNDE0023
<input type="checkbox"/>	Device	GERAET0001	AFA33	Geschirrspülmaschi...	8765876576	Miele		GOSSEN METRAW...	KUNDE0023
<input type="checkbox"/>	Device	GERAET0007		Geschirrspülmaschi...	23865645	Blomberg		GOSSEN METRAW...	KUNDE0023
<input type="checkbox"/>	Device	GERAET0005		Geschirrspülmaschi...	23865645	Blomberg		GOSSEN METRAW...	KUNDE0023
<input type="checkbox"/>	Device	GERAET0015	rtz88	Mikrowelle		Conrad		GOSSEN METRAW...	KUNDE0023
<input type="checkbox"/>	Device	GERAET0003	BH7	Bohrhammer	348763498764	Siemens		GOSSEN METRAW...	KUNDE0023
<input type="checkbox"/>	Device	GERAET0002	xxxt	Bohrmaschine	6654657463656	Black&Decker		GOSSEN METRAW...	KUNDE0023

Count=16

Functions of the toolbar

-  Save changes
-  Cancel editing
-  Delete objects
-  Print, refer to "Print"
-  Print reports
-  Multi-assistant (from **BUSINESS Professional**); refer to "Multi-assistant (from BUSINESS Professional)"

This index card is a list, so it is subject to the functions of the list view. The list symbols are also enabled in the toolbar; refer to "Lists".

12.2.3 Sequences function

Miscellaneous

Sequences can be assigned to each electric test object. A sequence consists of individual test steps in a certain order. The use of test sequences is advisable if a set of freely programmed test steps will be performed one after the other.

Visual inspections, instructions, checks and individual measurements can be grouped to create automatic test sequences.

The sequences are specific to a test device and are saved to a sequence pool. They are transferred to the matching test device when needed.

A distinction is always made between the following types of sequence:

Test device sequences

These are test sequences that were created for a specific test device type, e.g. PROFITEST or SECUTEST.

Test device sequences are easy to program in the sequence editor and can be transferred to the test device later on.

IZY sequences

The sequences can only be executed in the **IZYTRONIQ**. They may contain test steps from device sequences, but also come with many other functions. For instance, manual measurement input, push/print tests, remote measurements, instructions and visual inspections can be integrated as well. Helpful images can also be saved for each test, which are then shown to the user step-by-step during the test. Sequences that have already been programmed can be used to cascade an IZY sequence; additionally, measurement steps for various test devices can also be programmed within one sequence. When a measurement step is programmed for a remote test, it then controls the matching test device, whereby the test device merely transfers the measured data. Display and control are managed in the **IZYTRONIQ**.



Note

Factory sequences

These are assigned test sequences whose process and parameters cannot be changed and that are configured as factory settings. GMC-I Messtechnik GmbH can make the sequences available as test device sequences and as IZY sequences.

12.2.3.1 Structure and operation of sequence management

The overview/index card for sequence management is divided into two parts, namely the list and detailed view.

List view

The upper window shows the list of sequences in the sequence pool (in the sequence storage).

Detailed view

The lower window shows the individual test steps for the sequence marked in the upper window.

The screenshot displays the GOSSEN METRAWATT software interface for sequence management. It is divided into two main sections: 'SEQUENCES' (List view) and 'DETAIL' (Detailed view). The 'SEQUENCES' section shows a table with columns: MARK ALL EN, TEST TYPE, SEQUENCE NA..., MEASURING I..., SEQUENCE KIND, STANDARD, SEQUENCE VE..., STATUS, and DOCUMENTS. The 'DETAIL' section shows a table with columns: MARK ALL EN, NO., STEP TYPE, MEASURING I..., TEST STEP, and DOCUMENTS. The interface includes a top toolbar with icons for home, search, and other functions, and a left sidebar with icons for sequence management. The 'SEQUENCES' view is marked with a green border and a '1' in a circle, while the 'DETAIL' view is marked with a green border and a '2' in a circle.

Sequence view: (1) List view, (2) Detailed view

The respective view has a green border, and the active part of the view is marked by a bold green bar in the top left part of the view. The toolbar only shows the symbols that are valid and can be activated for the selected view.

Toolbar functions in the list view

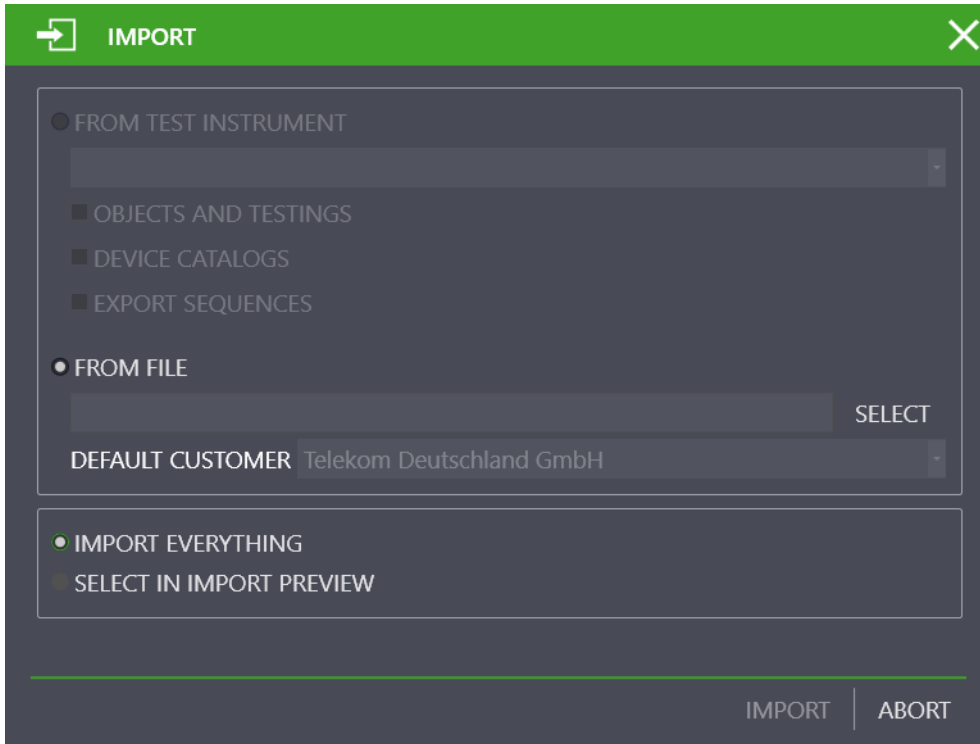
- ✓ Save changes
- ✗ Cancel editing
- ★ Add new sequences: The sequence editor is launched (refer to “Sequence editor”). This enables the creation of a new sequence, which is added to the sequence pool (sequence storage).
- ✎ Edit sequence: The marked sequence can be edited in the sequence editor.
- 📄 Duplicate sequence: This command copies the marked sequence. The name of the sequence is adopted, with the suffix “Copy”.
- 🗑 Delete sequence: This deletes the sequence. If the sequence has already been assigned to one or several objects, all assignments must be deleted before the sequence is deleted.
- 📎 Manage attachments (add, display and delete a file/photo)

This index card is a list, so it is subject to the functions of the list view. The list symbols are also enabled in the toolbar; refer to “Lists”.

12.2.4 Data import function

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


The function is found under  "IMPORT" in the menu  "STATIONARY OBJECTS". Selecting this function opens the import assistant.



The import assistant asks whether the data should be imported from a connected test device or a file (XML).

- FROM THE TEST DEVICE: here you can choose between connected devices.
 - OBJECTS AND TESTS are selected for import in the default setting.
 - DEVICE CATALOGS can be selected for import.
 - SEQUENCES can be selected for import.
- FROM A FILE: Touch the field "SELECT" to select the XML file to which you wish to import the data.

To start import, select **IMPORT EVERYTHING** or **SELECT IN IMPORT PREVIEW**.

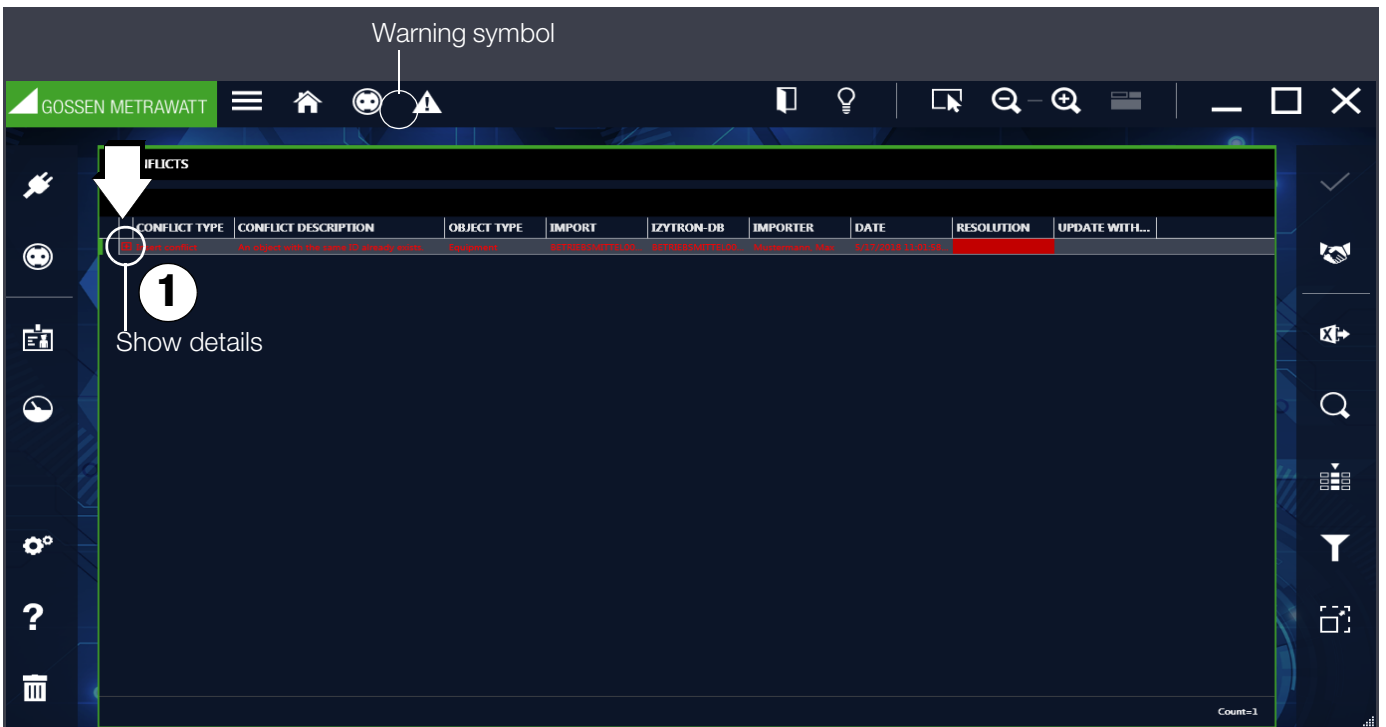
- Import takes place automatically if you select **IMPORT EVERYTHING** and then click on **IMPORT**.
- **SELECT IN IMPORT PREVIEW** initially shows the data in the **IMPORT PREVIEW**. The data can then be selected and edited. The objects are then imported to the **IZYTRONIQ** database by selecting the function .

A message is shown confirming successful import and any transmission errors.

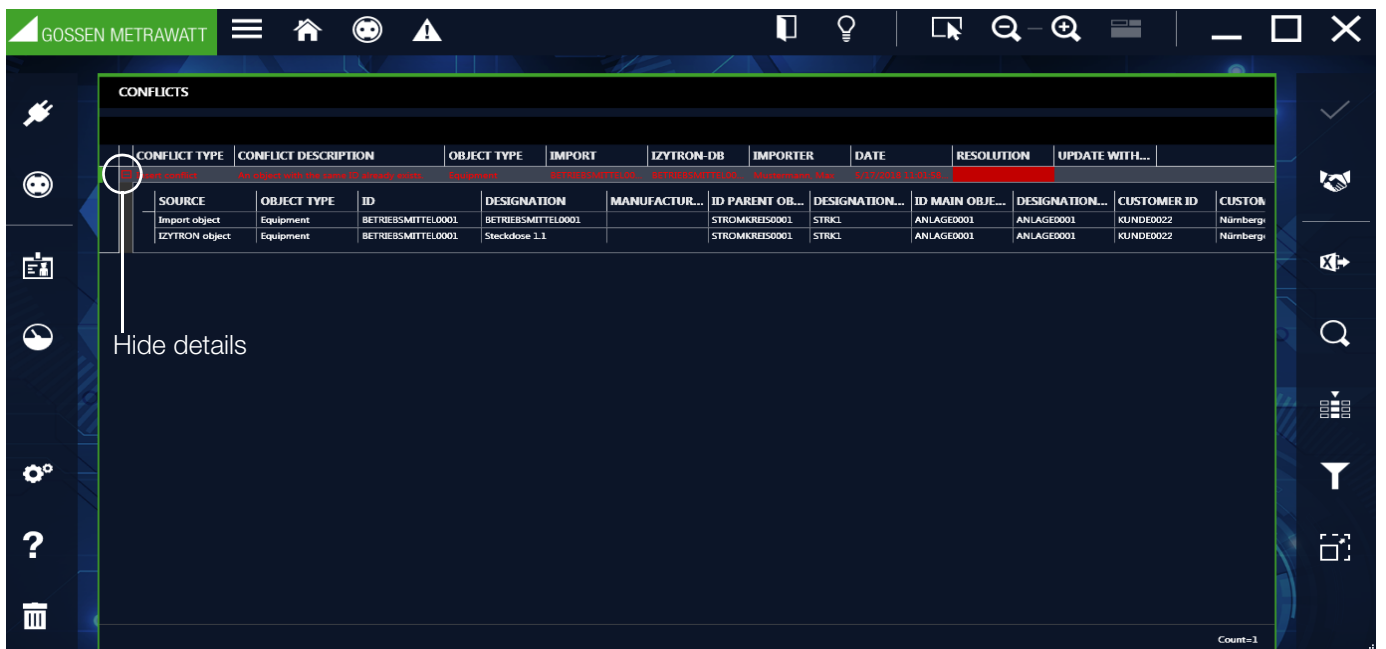
The conflict manager is activated when there are conflicts between existing and imported data that cannot be resolved automatically.

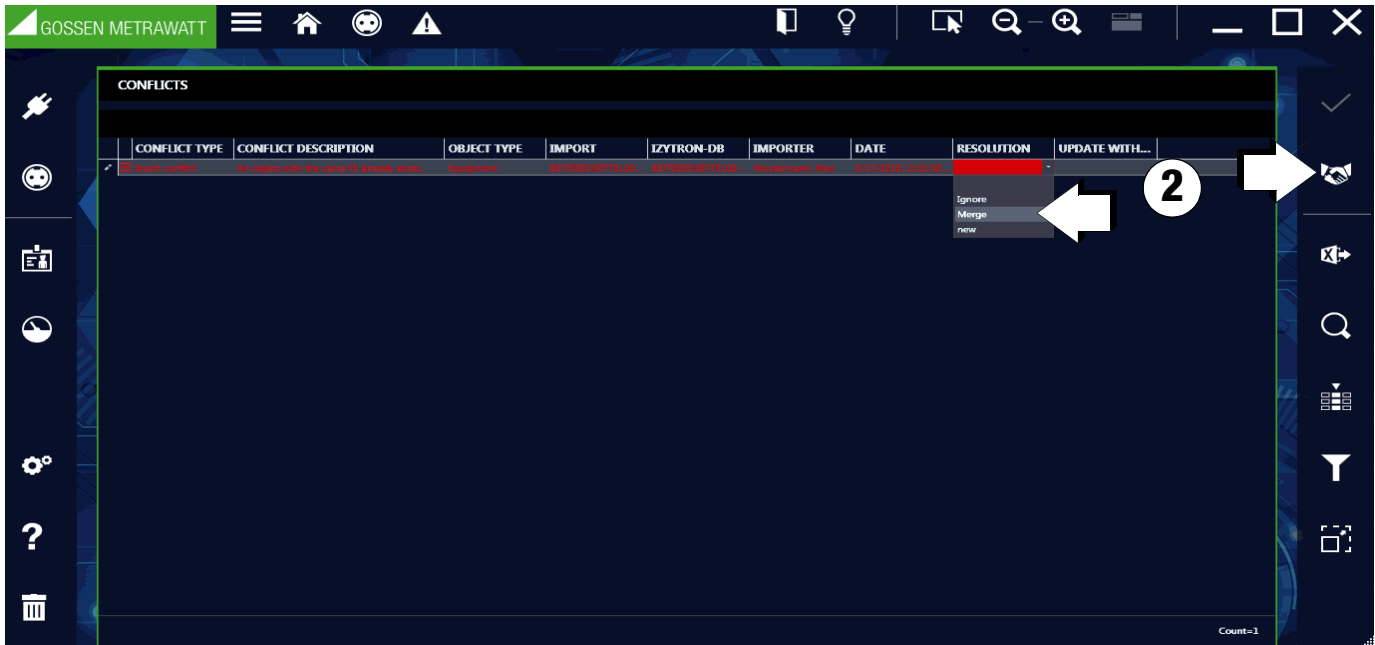
12.2.4.1 The conflict manager

Where there are conflicts during import that prevent transfer of the objects, these objects are not simply discarded. Instead, an attempt is made to resolve these conflicts manually. To do this, the relevant objects are copied to a separate folder/table. At the same time, a warning symbol is shown in the status bar and the entries are marked in red.



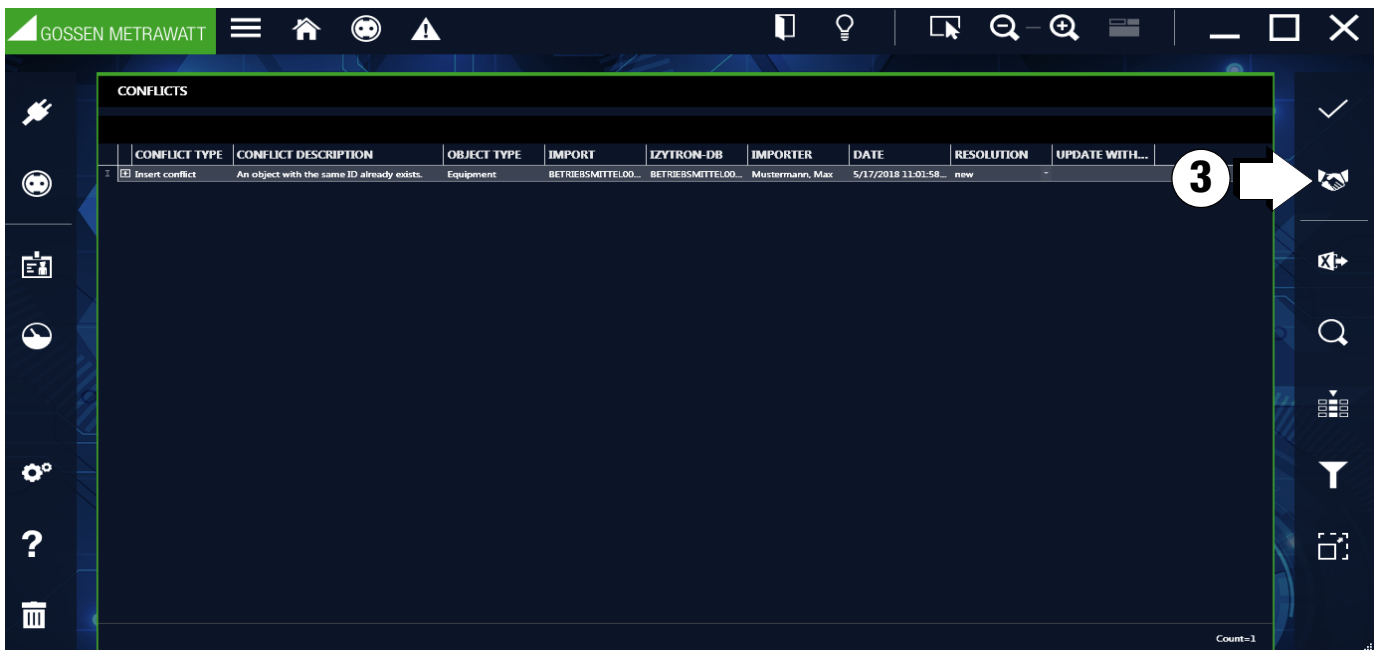
Conflicts are edited here. There is a description for each conflict. The details for the conflict objects are shown (1) by selecting the detail symbol (+).





Users are shown possible methods to resolve the conflict by clicking several times on the handshake symbol (2): Ignore, merge or new. These depend on the specific conflict. Alternatively, users can click on the column "Resolution" to open a pull-down menu with a selection of possible solutions.

The red marking is hidden when a method is selected. The conflict is resolved by saving the changes. The resolved entry is then no longer shown in the conflict manager, and the corresponding object is integrated in the main database. The conflict manager is closed once all conflicts in the list have been resolved.



Resolution options

Designation	Description
Ignore	Data import will be ignored.
Update with source ID (of the imported object).	All data stored in IZYTRONIQ for this object will be overwritten.
Update with target ID (of the existing object)	All data stored in IZYTRONIQ for this object will be overwritten, apart from the ID.
Merge	The object's master data will be synchronized.
New	The object will be imported and a new ID will be issued.
...	

Functions of the toolbar





Resolution of the conflict



Selection of the solution method

This index card is a list, so it is subject to the functions of the list view. The list symbols are also enabled in the toolbar; refer to "Lists".

12.2.5 Data export function

The export function is used to transfer data to a test device or a file. The function is found under “EXPORT” in the menu  “STATIONARY OBJECTS” . Selecting this function opens the export assistant.



The export assistant asks whether the data should be exported to a connected test device or an XML file.

- TO THE TEST DEVICE: here you can choose between connected devices. OBJECTS, DEVICE CATALOGS and SEQUENCES are each selected by default.
- TO AN XML FILE: Touch the field “SAVE AS” to select the file in which you wish to save the data.



Take note!


Export deletes all data on the connected test device. You are therefore shown a warning before export.

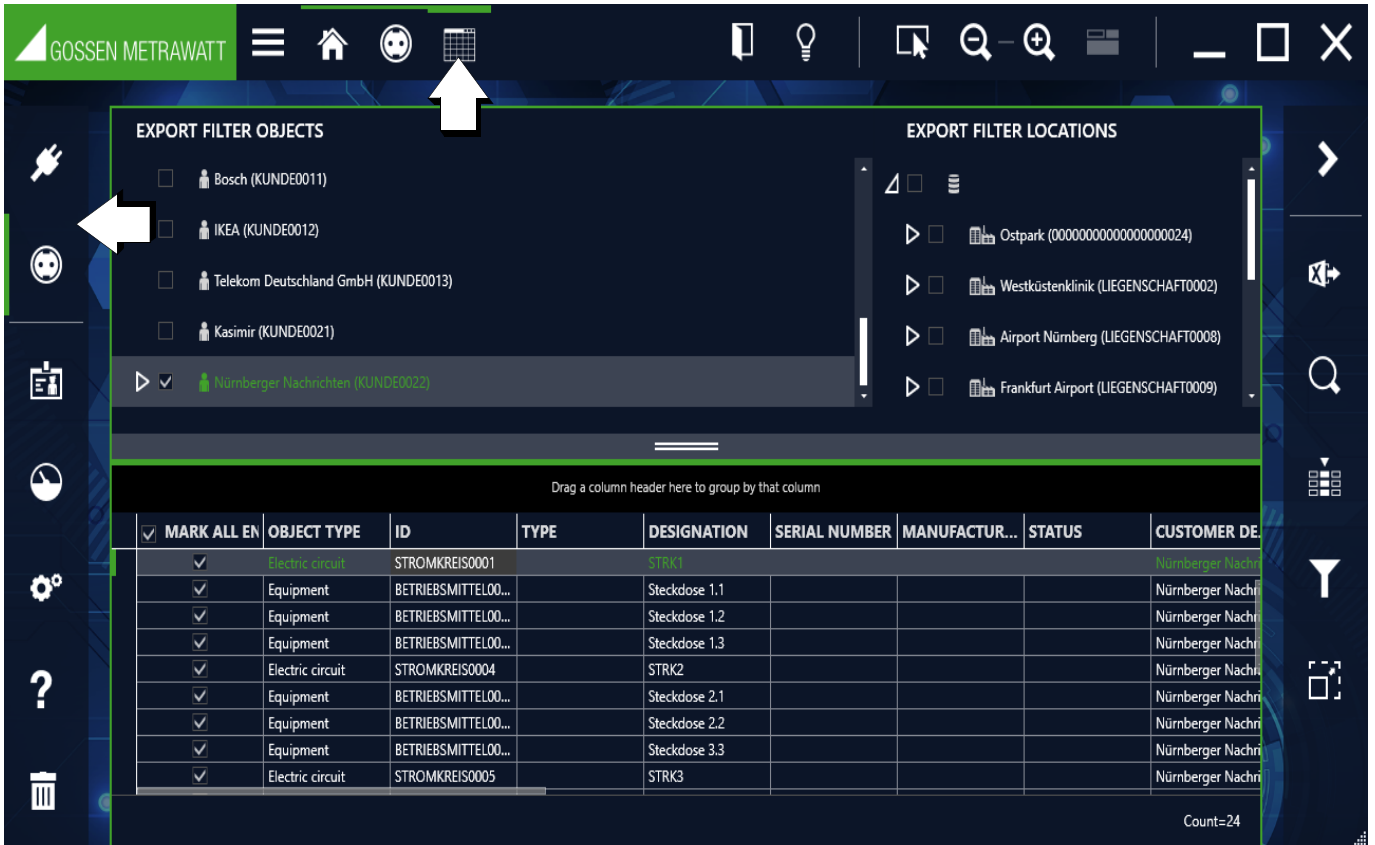
Then the export filter is started by selecting “EXPORT”.

Export filter

The export filter consists of three filter menus:

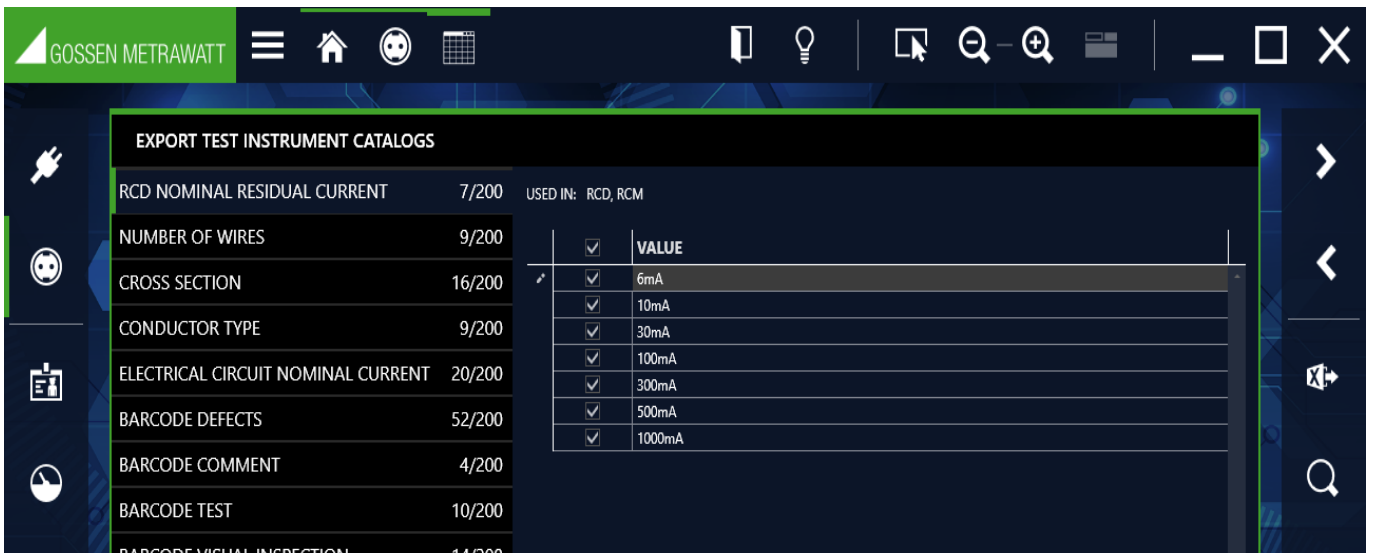
- EXPORT FILTER OBJECTS
- EXPORT TEST DEVICE CATALOGS
- EXPORT SEQUENCES

When more than one filter menu is selected, the user switches between the views using the buttons > “NEXT”, i.e. < “BACK”. By selecting the  “EXPORT” button in the toolbar, the selected data and the corresponding customers and locations are transferred to the connected test device. The current operation is shown during export. Users are shown a message once all data has been transferred successfully.



Select and filter objects

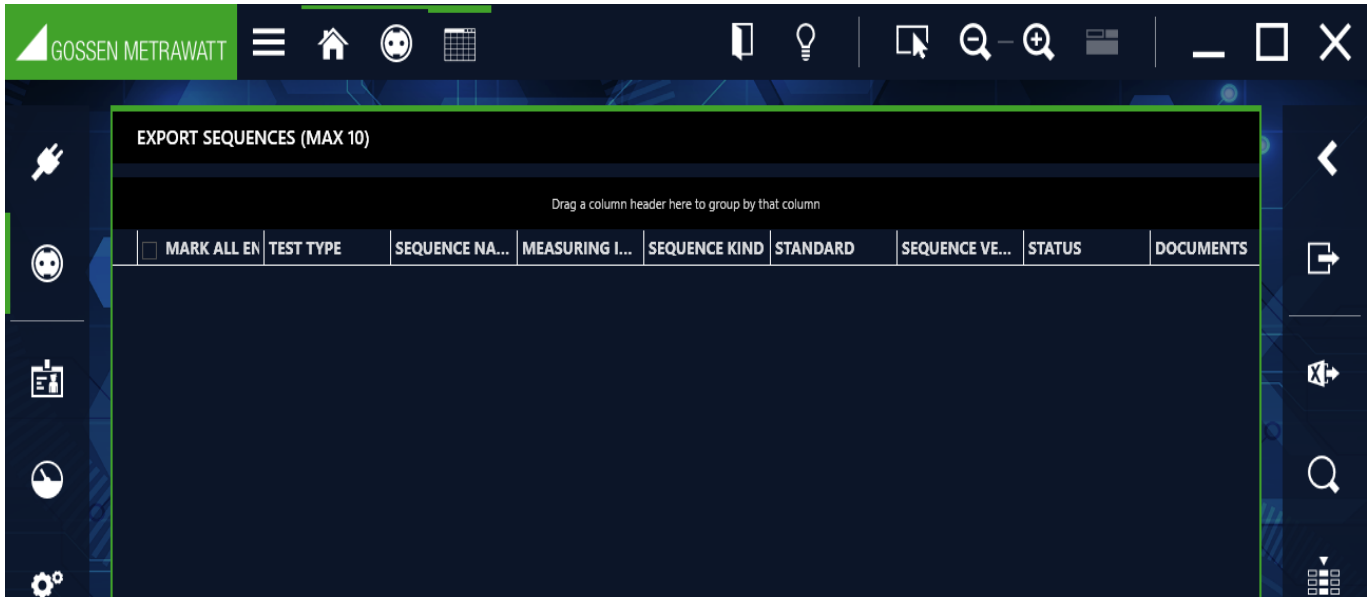
The export filter OBJECTS consists of a two-part view. The upper half contains the two tree views, while the lower half shows a list of objects selected. Activating the checkboxes in front of the elements in the tree views is used to make a preselection based on customers and locations. Here, users can select the objects in the electric tree that they wish to transfer, which they then narrow down by selecting locations in the location tree. Additional filters in the lower list can be applied to the element selected in this way (refer to "Lists").



Select and filter test device catalogs

The catalog selection consists of a two-part view.

The various catalogs are shown on the left-hand side, while the matching catalog entries are found on the right. There are different methods of selecting the catalogs. A checkbox can be used to make a selection and export the catalog entries. Filters are available to restrict the selection.



Export sequences

The sequences for export can be selected and filtered here.

12.2.6 Test templates function

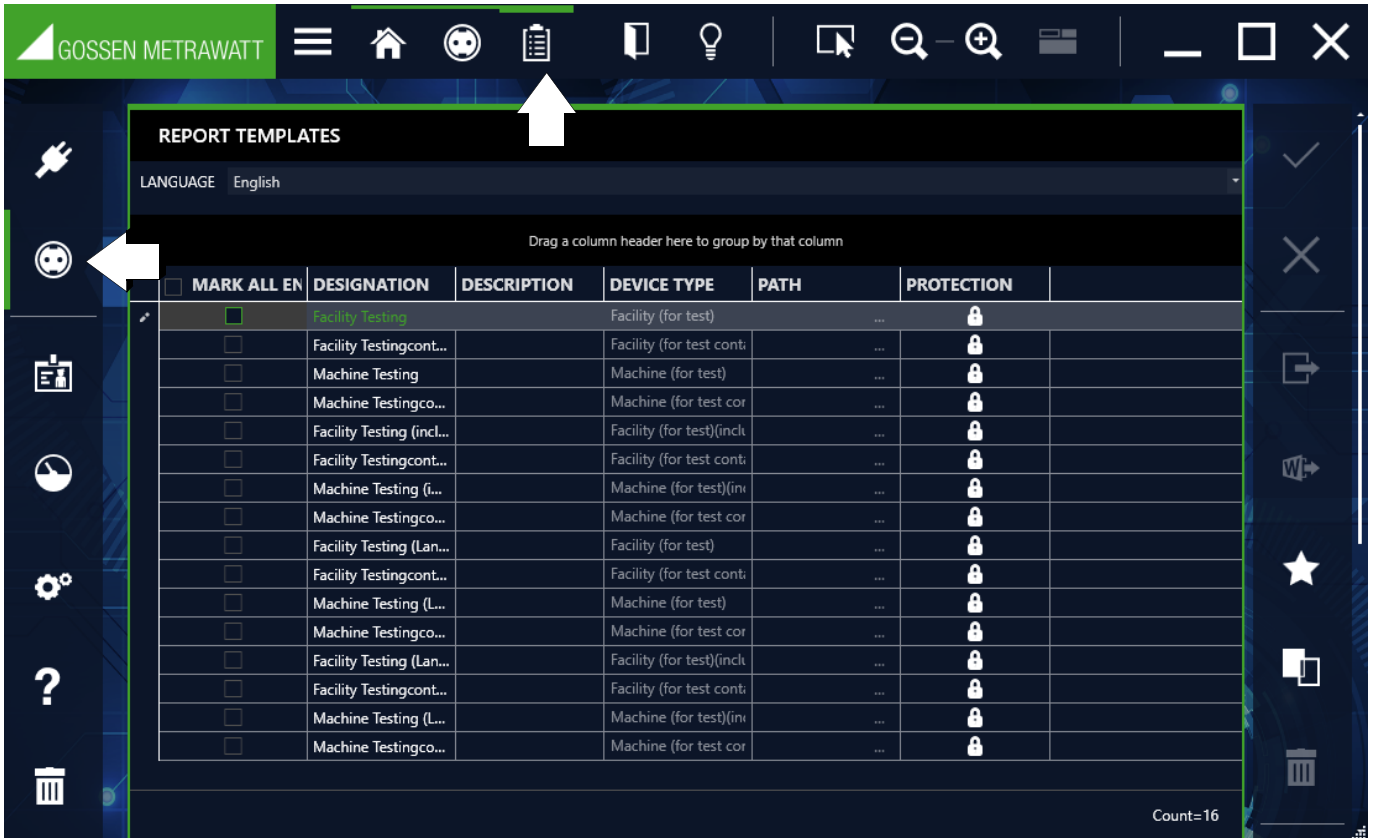
The report templates are used to document, e.g. tests or as acceptance or handover records, among other things. They use variable data from the selected measurements, combined with object-related data (e.g. customer data). Report templates either comply with statutory requirements or standards, or have been, i.e. are prepared to standardize documentation. **IZYTRONIQ** contains factory-configured, standard records that can neither be edited nor deleted.

You can create new templates or copy and edit existing templates.

From version **BUSINESS Advanced** and above, a company logo or a scanned signature can be integrated in the report templates. They are stored in setup under global or personal settings; refer to “Global settings” and “Personal settings”.

Custom templates are created in MS Word, and placeholders can be used to arrange the test data in any way.

You will find records management for stationary objects under “REPORT TEMPLATES” in the  “STATIONARY OBJECTS”  menu.




MARK ALL EN	DESIGNATION	DESCRIPTION	DEVICE TYPE	PATH	PROTECTION
<input type="checkbox"/>	Facility Testing		Facility (for test)	...	🔒
<input type="checkbox"/>	Facility Testingcont...		Facility (for test cont...	...	🔒
<input type="checkbox"/>	Machine Testing		Machine (for test)	...	🔒
<input type="checkbox"/>	Machine Testingco...		Machine (for test cor	...	🔒
<input type="checkbox"/>	Facility Testing (incl...		Facility (for test)(incl	...	🔒
<input type="checkbox"/>	Facility Testingcont...		Facility (for test cont...	...	🔒
<input type="checkbox"/>	Machine Testing (i...		Machine (for test)(inl	...	🔒
<input type="checkbox"/>	Machine Testingco...		Machine (for test cor	...	🔒
<input type="checkbox"/>	Facility Testing (Lan...		Facility (for test)	...	🔒
<input type="checkbox"/>	Facility Testingcont...		Facility (for test cont...	...	🔒
<input type="checkbox"/>	Machine Testing (L...		Machine (for test)	...	🔒
<input type="checkbox"/>	Machine Testingco...		Machine (for test cor	...	🔒
<input type="checkbox"/>	Facility Testing (Lan...		Facility (for test)(incl	...	🔒
<input type="checkbox"/>	Facility Testingcont...		Facility (for test cont...	...	🔒
<input type="checkbox"/>	Machine Testing (L...		Machine (for test)(inl	...	🔒
<input type="checkbox"/>	Machine Testingco...		Machine (for test cor	...	🔒







Selection list of report templates

All available report templates are shown in record management.

If users wish to print out a test record, the report templates associated with the respective object type (device, medical device) are shown.

A record must be created in advance using MS Word in order to add a new record. New records are included in the list using the button  “ADD REPORT TEMPLATE”. Clicking on this symbol opens a system-specific menu to open Word documents. Users then select their chosen report template and confirm the choice to add a new entry in the management table. To save the new report template, users must select the device type for which the report template will apply and then add the name of the report template.

Functions of the toolbar

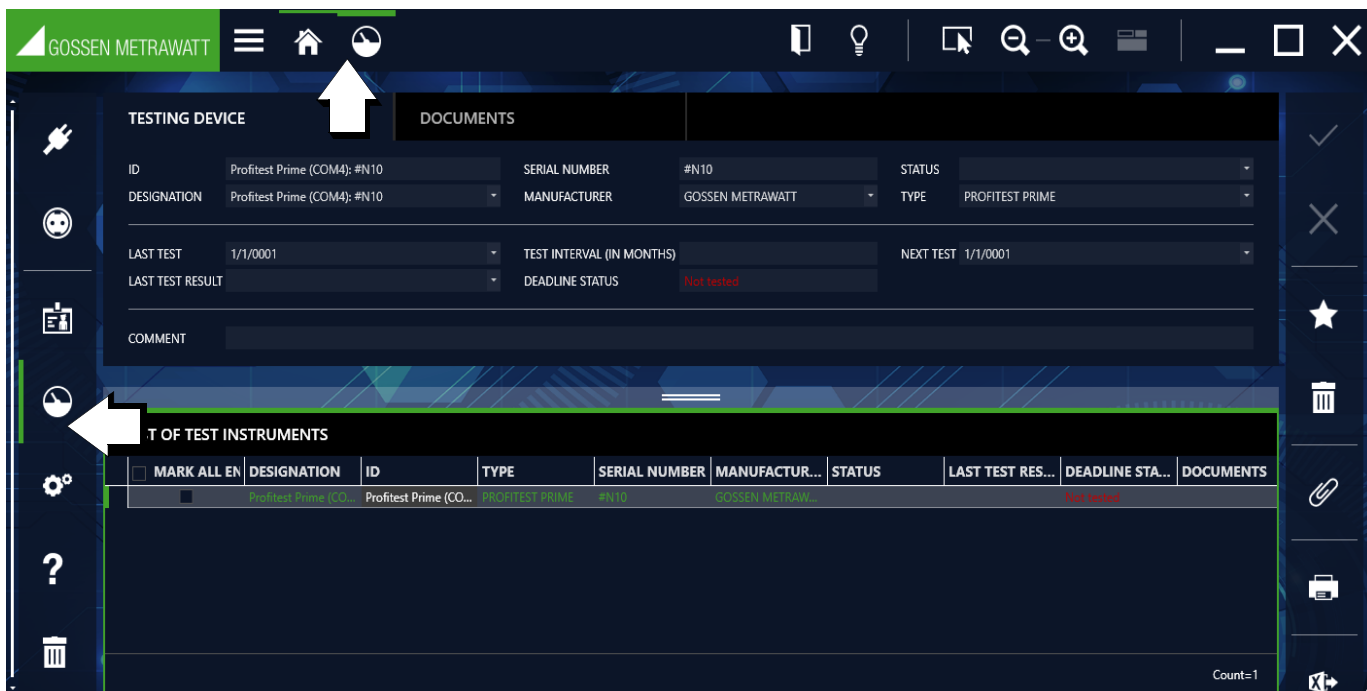
-  Save changes
-  Cancel editing
-  Save report template as an MS Word file
-  Open the report template as an MS Word file
-  Add a new report template
-  Duplicate the report template:
This command copies the marked report template. The name of the report template is adopted, with the suffix “Copy”.



Delete the report template:

This deletes the sequence. If the sequence has already been assigned to one or several objects, all assignments must be deleted before the sequence is deleted.

This index card is a list, so it is subject to the functions of the list view. The list symbols are also enabled in the toolbar; refer to “Lists”.



IZYTRONIQ can be used to manage measurement and test devices for the testing of objects (devices, medical devices, machines and facilities). Device properties like device designation, manufacturer, type, serial number and calibration data can be created, imported, displayed and edited.

When a test device is connected, the program checks whether it is a measuring instrument by GOSSEN METRAWATT. If so, the serial number and device type are imported. The program checks whether the test device is already present in the **IZYTRONIQ**, and a new one is created if necessary.

The calibration data in the database is monitored, and users are alerted of upcoming or pending calibration deadlines in the home screen.

Test device management consists of two index cards:

Test device Master and calibration data

Documents Calibration certificates







The list of registered test devices is shown additionally in the lower section of the screen.

Index card: Test device

All master and calibration data can be added to the index card for test devices.

“Compulsory fields” are the “identification number”, “designation”, “serial number” and “type”.







Functions of the toolbar

-  Save changes
-  Cancel editing
-  Add user
-  Delete user: Exception: the current user cannot be deleted.
-  Manage attachments (add, display and delete a file/photo)
-  Print, refer to “Print”

Index card: Documents

All calibration certificates can be added to the index card for documents.

Functions of the toolbar

-  Save changes
-  Cancel editing
-  Add calibration certificate
-  Remove calibration certificate
-  Manage attachments (add, display and delete a file/photo)
-  Print, refer to "Print"







This index card is a list, so it is subject to the functions of the list view. The list symbols are also enabled in the toolbar; refer to "Lists".

List of test devices

All registered test devices are shown in the list of test devices.

The matching master data and documents are shown by selecting a test device in the list.

Functions of the toolbar

-  Save changes
-  Cancel editing
-  Add user
-  Delete user:
Exception: the current user cannot be deleted.
-  Manage attachments (add, display and delete a file/photo)
-  Print, refer to "Print"

This index card is a list, so it is subject to the functions of the list view. The list symbols are also enabled in the toolbar; refer to "Lists".

Video „Management and creation of test instruments“

12.4 User management

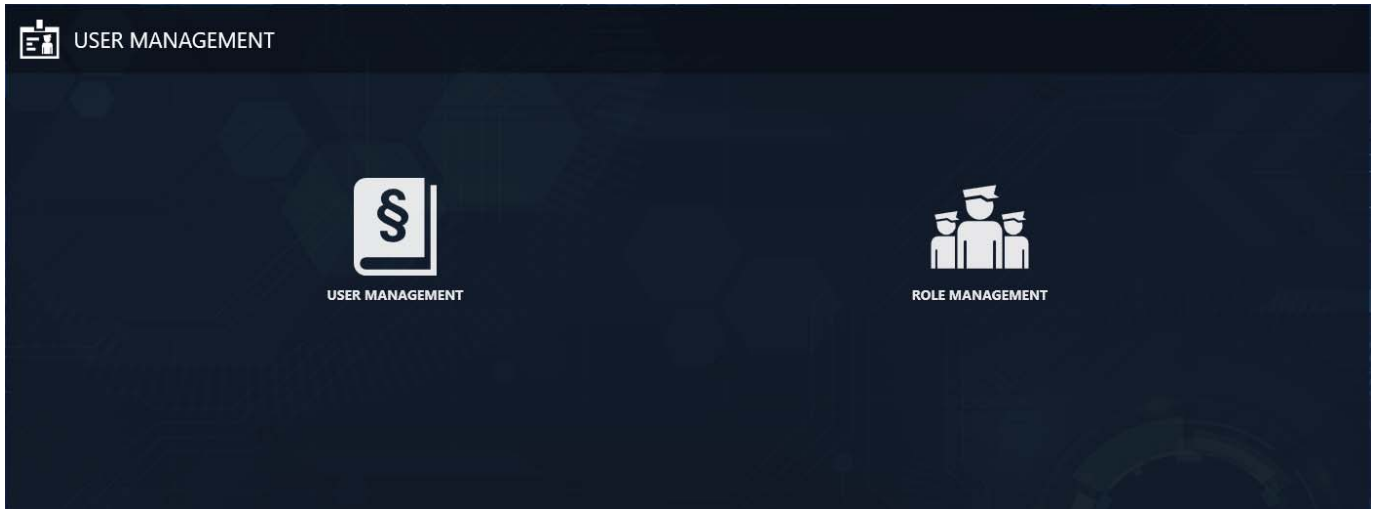
Users for IZYTRONIQ are created in user management.

Apart from in **BUSINESS Premium**, all users have the same rights in the Business versions.

Users can be allocated additional roles and rights in the version **BUSINESS Premium** and **ENTERPRISE Premium and higher**.

The user assigned the admin role can create and manage other users with defined roles and associated permissions; refer to “Role management – BUSINESS Premium and ENTERPRISE Version”.

Menu selection between “User management – BUSINESS Premium Version and ENTERPRISE Version” and “Role management – BUSINESS Premium and ENTERPRISE Version”



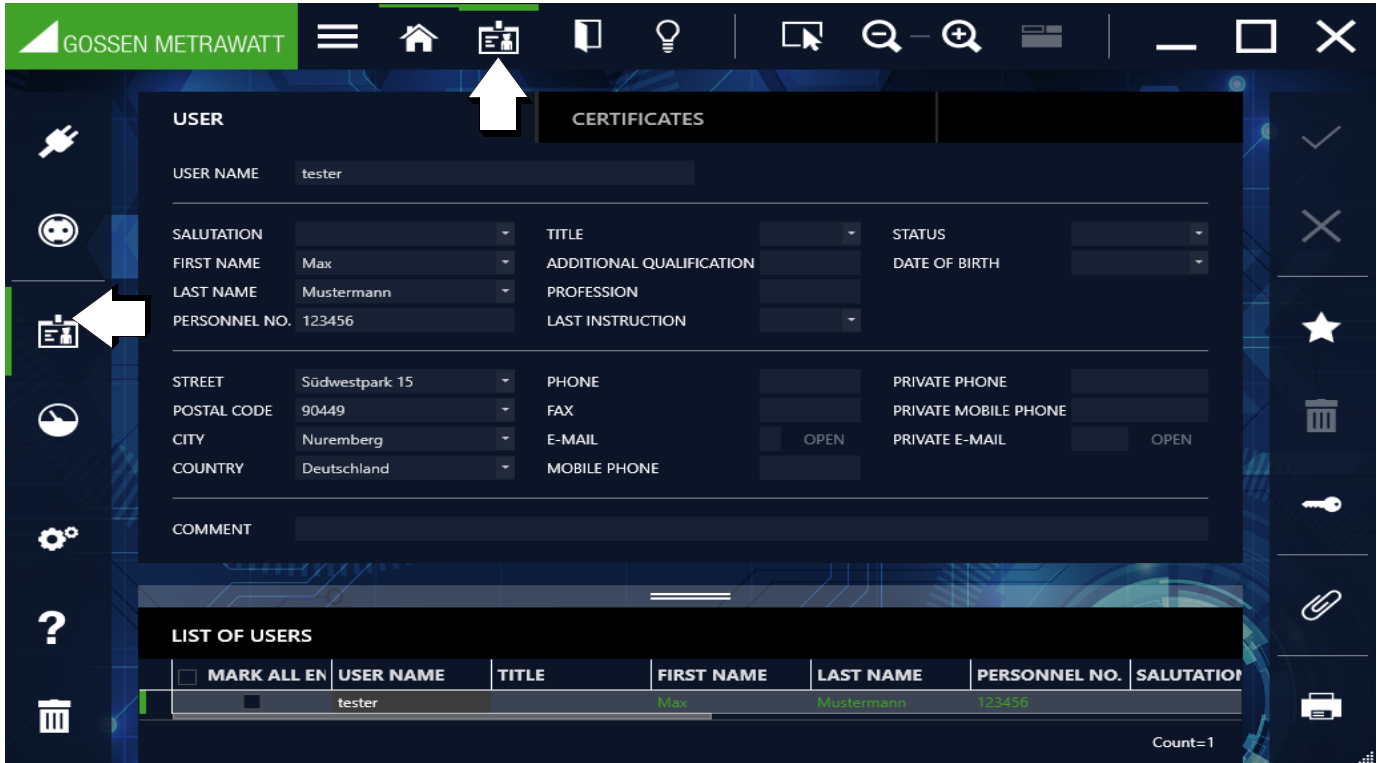
12.4.1 User management – BUSINESS version except Premium variant

User management consists of two index cards:

Users Personal data, address data and qualifications

Certificates Qualification documents

The list of registered users is shown additionally in the lower section of the screen.



The screenshot shows a software interface for user management. At the top, there is a green header with the text "GOSSSEN METRAWATT" and a navigation bar with icons for home, user management, and search. The main content area is divided into two sections: "USER" and "CERTIFICATES". The "USER" section contains a form for editing user details, including fields for user name, salutation, first name, last name, personnel number, street, postal code, city, country, title, additional qualification, profession, last instruction, status, date of birth, phone, fax, e-mail, private phone, private mobile phone, private e-mail, and mobile phone. A "COMMENT" field is also present. Below the form is a "LIST OF USERS" table with columns for "MARK ALL EN", "USER NAME", "TITLE", "FIRST NAME", "LAST NAME", "PERSONNEL NO.", and "SALUTATION". The table contains one entry for the user "tester". A "Count= 1" indicator is visible at the bottom right of the table.








MARK ALL EN	USER NAME	TITLE	FIRST NAME	LAST NAME	PERSONNEL NO.	SALUTATION
<input type="checkbox"/>	tester		Max	Mustermann	123456	

Index card: Users

All personal data can be added to the index card for users.

“Compulsory fields” here are the “USERNAME” and “SURNAME”.






Functions of the toolbar

-  Save changes
-  Cancel editing
-  Add user
-  Delete user:
Exception: the current user cannot be deleted.
-  Password:
A password can be issued for each user.
-  Manage attachments (add, display and delete a file/photo)
-  Print, refer to “Print”

Index card: Certificates

All documents on qualifications – for instance training, qualifications, references and suchlike – can be added to the index card for certificates. “Compulsory fields” are “DESIGNATIONS” here.

Functions of the toolbar

-  Save changes
-  Cancel editing
-  Add certificate
-  Remove certificate
-  Manage attachments (add, display and delete a file/photo)
-  Print, refer to “Print”

This index card is a list, so it is subject to the functions of the list view. The list symbols are also enabled in the toolbar; refer to “Lists”.








List of users

All registered users are shown in the list of users.

The matching master data and certificates are shown by selecting a user in the list.

Read-only rights for user-specific data can be restricted by means of roles and rights.

Functions of the toolbar

-  Save changes
-  Cancel editing
-  Add user
-  Delete user:
Exception: the current user cannot be deleted.
-  Password:
A password can be issued for each user.
-  Manage attachments (add, display and delete a file/photo)
-  Print, refer to “Print”

This index card is a list, so it is subject to the functions of the list view. The list symbols are also enabled in the toolbar; refer to “Lists”.

Issue password

Each user must create and change a personal password using the function .

In addition, each user assigned the role of admin can reset and change passwords for all other users in the Business versions Starter to Professional.

From **BUSINESS Premium** and above, users require the necessary permission to issue passwords.

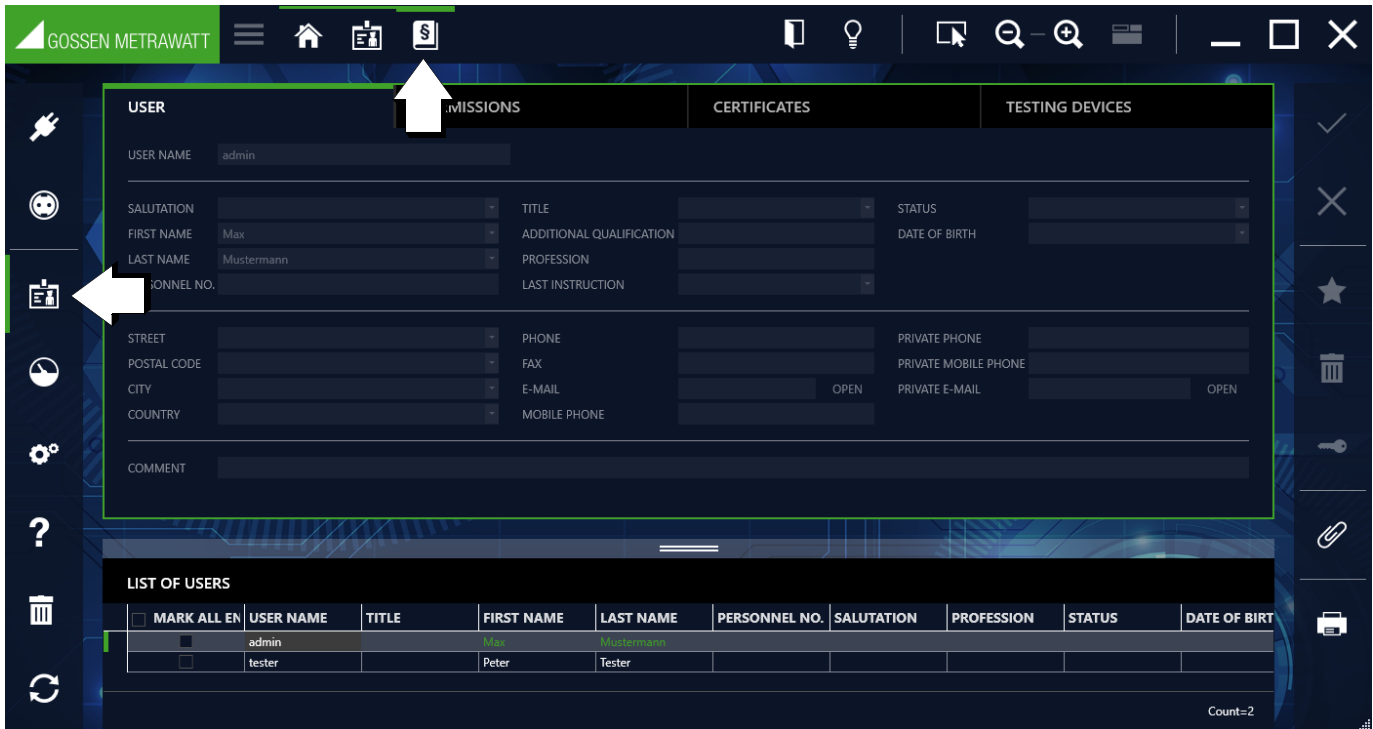
Video „Creation of additional user with password and certificates“

12.4.2 User management – BUSINESS Premium Version and ENTERPRISE Version

User management in the ENTERPRISE version consists of four index cards:

- User** Personal data, address data and qualifications
- Permissions** Read and/or write permission for customers can be assigned to the selected inspector here.
- Certificates** Qualification documents
- Testing Devices** In preparation








The list of registered users is shown additionally in the lower section of the screen.



Index card: User

All personal data can be added to the index card for users.
“Compulsory fields” here are the “USERNAME” and “SURNAME”.

Functions of the toolbar


-  Save changes
-  Cancel editing
-  Add user
-  Delete user:
Exception: the current user cannot be deleted.
-  Password:
A password can be issued for each user.
-  Manage attachments (add, display and delete a file/photo)
-  Print, refer to “Print”

Index card: Permissions

The index card Permissions lists all existing customers. Read or write permission can be assigned to a selected customer by ticking in the READ and/or WRITE columns.

Functions of the toolbar

 Save changes

 Cancel editing

This index card is a list, so it is subject to the functions of the list view. The list symbols are also enabled in the toolbar; refer to “Lists”.


Index card: Certificates


All documents on qualifications – for instance training, qualifications, references and suchlike – can be added to the index card for certificates. “Compulsory fields” are “DESIGNATIONS” here.


Functions of the toolbar


 Save changes

 Cancel editing

 Add certificate

 Remove certificate

 Manage attachments (add, display and delete a file/photo)

 Print, refer to “Print”

This index card is a list, so it is subject to the functions of the list view. The list symbols are also enabled in the toolbar; refer to “Lists”.








List of users

All registered users are shown in the list of users.

The matching master data and certificates are shown by selecting a user in the list.

Read-only rights for user-specific data can be restricted by means of roles and rights.

Functions of the toolbar

-  Save changes
-  Cancel editing
-  Add user
-  Delete user:
Exception: the current user cannot be deleted.
-  Password:
A password can be issued for each user.
-  Manage attachments (add, display and delete a file/photo)
-  Print, refer to "Print"

This index card is a list, so it is subject to the functions of the list view. The list symbols are also enabled in the toolbar; refer to "Lists".

Issue password

Each user must create and change a personal password using the function .

In addition, each user assigned the role of admin can reset and change passwords for all other users in the Business versions Starter to Professional.

From **BUSINESS Premium** and above, users require the necessary permission to issue passwords.

12.4.3 Role management – BUSINESS Premium and ENTERPRISE Version

An **IZYTRONIQ** floating license model means defining a maximum number of users that are permitted to access the same database simultaneously. Hence, the **IZYTRONIQ** floating license model differs from the workstation-based license model, in which the workstation license is coupled with the hardware. In the concurrent user license model, the software itself can be installed on an infinite number of computers. A central server manages the licenses, which are also called floating licenses or network licenses. The server registers the number of currently issued licenses and grants to each eligible user the right to access the database in principle. But once all licenses have been issued, an additional, competing user must wait until another user ends a session, freeing up a license to be used elsewhere.

In the role management menu, permissions can be assigned to users by enabling a check box. Permissions can be revoked by disabling the check box again. Roles are assigned to a user on the basis of which he is granted his permissions. Additional restrictions can be made stipulating that these permissions shall only apply to certain customers. To this end, a read and/or write permission can be assigned to various customers in the user management menu under tab Permissions, see “User management – BUSINESS Premium Version and ENTERPRISE Version”. If the Admin enables the corresponding check box there, the permissions defined in the roles only apply to those customers who are added in the list.

Several roles can be assigned to users. These are shown in column ROLES. Column ACTIVE shows the person who owns the role currently selected in the upper window (in stored condition).

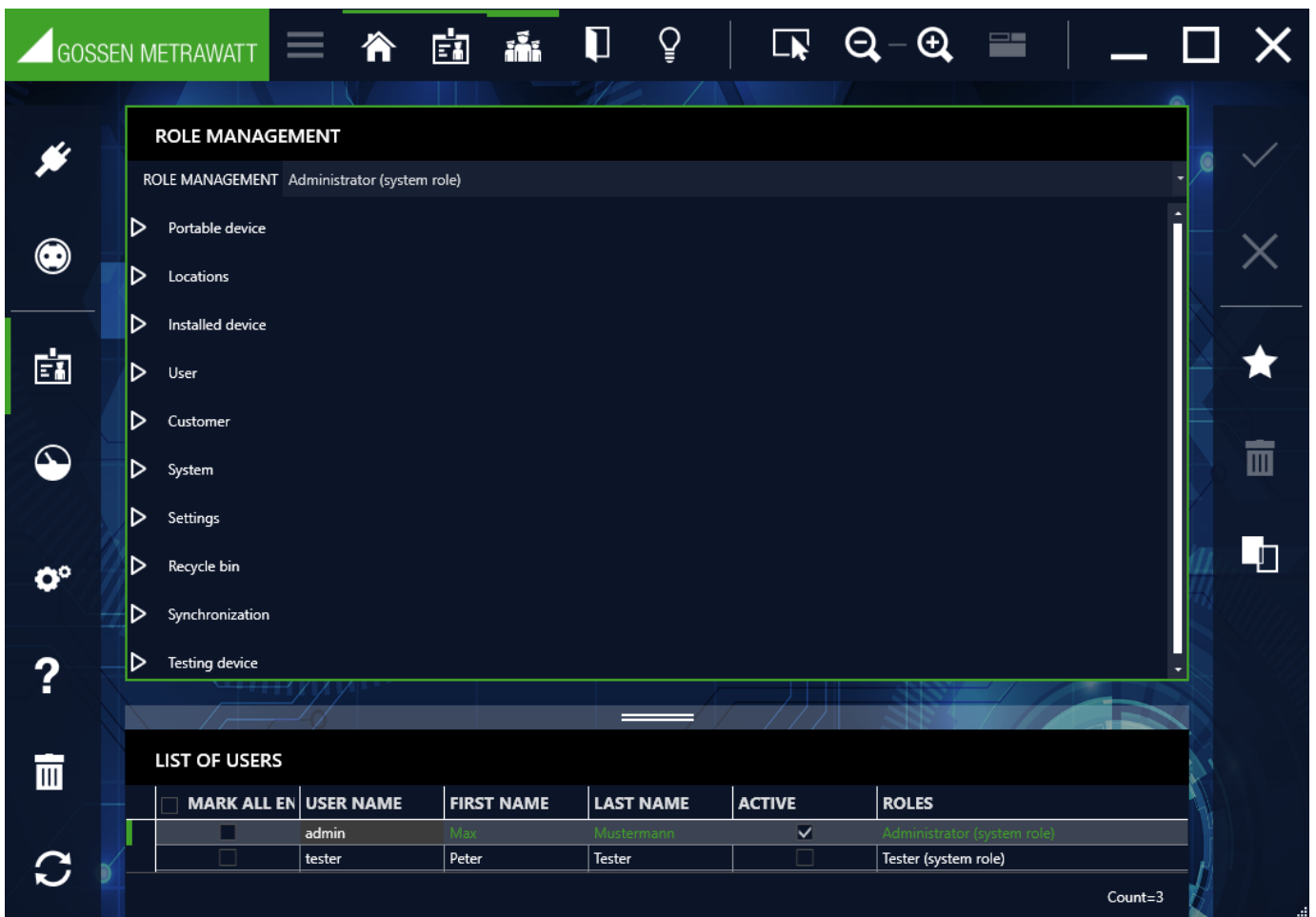
The following roles are predefined by default:

- administrators,
- inspectors,
- clerks.

Additional roles can be defined.

By ticking the permissions in the different categories, it is possible to assign a role to each of these categories.

The bottom section shows the list of registered users which has been prepared in the User management menu.








The screenshot displays the 'ROLE MANAGEMENT' window. At the top, there is a navigation bar with the 'GOSSEN METRAWATT' logo and various icons. The main area is divided into two sections:

- ROLE MANAGEMENT**: A list of categories with expandable arrows on the left and a list of items on the right. The items include: Portable device, Locations, Installed device, User, Customer, System, Settings, Recycle bin, Synchronization, and Testing device.
- LIST OF USERS**: A table with columns for 'MARK ALL EN', 'USER NAME', 'FIRST NAME', 'LAST NAME', 'ACTIVE', and 'ROLES'. The table contains two rows of user data.

MARK ALL EN	USER NAME	FIRST NAME	LAST NAME	ACTIVE	ROLES
<input type="checkbox"/>	admin	Max	Mustermann	<input checked="" type="checkbox"/>	Administrator (system role)
<input type="checkbox"/>	tester	Peter	Tester	<input type="checkbox"/>	Tester (system role)

Count=3

Functions of the toolbar

-  Save changes
-  Cancel editing
-  Add Role
-  Delete Role:
Exception: the current user cannot be deleted.
-  Duplicate role:
This command copies the marked role. The name of the role is adopted, with the suffix "Copy".

Procedure to add a role

1. Select the desired role you wish to assign to a certain user in the upper window in line Role management by means of the pull-down menu (e. g. administrator, inspector or clerk). Optionally, you can create a new role, which will then also appear in the pull-down menu.
In the list of users you can see afterwards for which users this selected role permission is already active or existing, which is shown by a check mark in the ACTIVE column in this case.
2. Proceed by ticking the check mark in the ACTIVE column next to the user who is to be assigned the role with the associated permissions selected beforehand. The current role permissions are shown in the ROLES column.
3. By storing, the new role is definitely transferred to the selected user.

Procedure to remove a role

1. Select the desired role you wish to cancel for a certain user in the upper window in line Role management by means of the pull-down menu (e. g. administrator, inspector or clerk).
In the list of users you can see afterwards for which users this selected role permission is already active or existing, which is shown by a check mark in the ACTIVE column in this case.
2. Proceed by removing the check mark in the ACTIVE column next to the user for whom you wish to cancel the role with the associated permissions selected beforehand. The current role permissions are shown in the ROLES column.
3. By storing, the removed role is definitely deleted.

12.5 Recycle bin

Data/objects that are deleted in the **IZYTRONIQ** are moved to the recycle bin. This means that the data is not irretrievably erased and can be restored. To do this, users open the recycle bin, mark the data they wish to restore and then press the button “Restore”.

Note

Take note that subordinate elements and dependencies are also deleted.

Only the main object is shown here if data with subordinate elements is deleted.

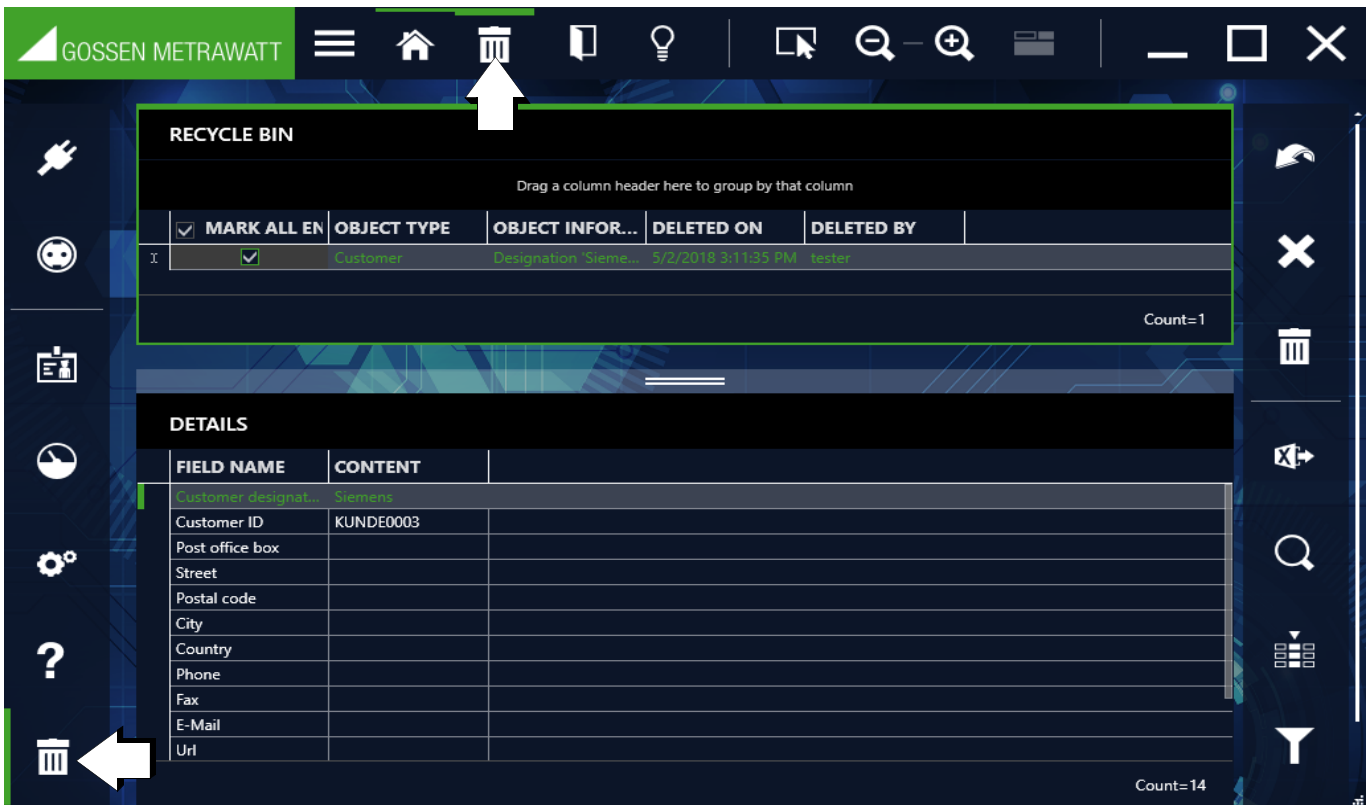
The recycle bin view is divided into two parts, namely the list and detailed view.

List view

The deleted data/objects are shown as a list in the top section.

Detailed view




The details for marked elements are displayed in the bottom section.



MARK ALL EN	OBJECT TYPE	OBJECT INFOR...	DELETED ON	DELETED BY
<input checked="" type="checkbox"/>	Customer	Designation 'Sieme...	5/2/2018 3:11:35 PM	tester

FIELD NAME	CONTENT
Customer designat...	Siemens
Customer ID	KUNDE0003
Post office box	
Street	
Postal code	
City	
Country	
Phone	
Fax	
E-Mail	
Url	

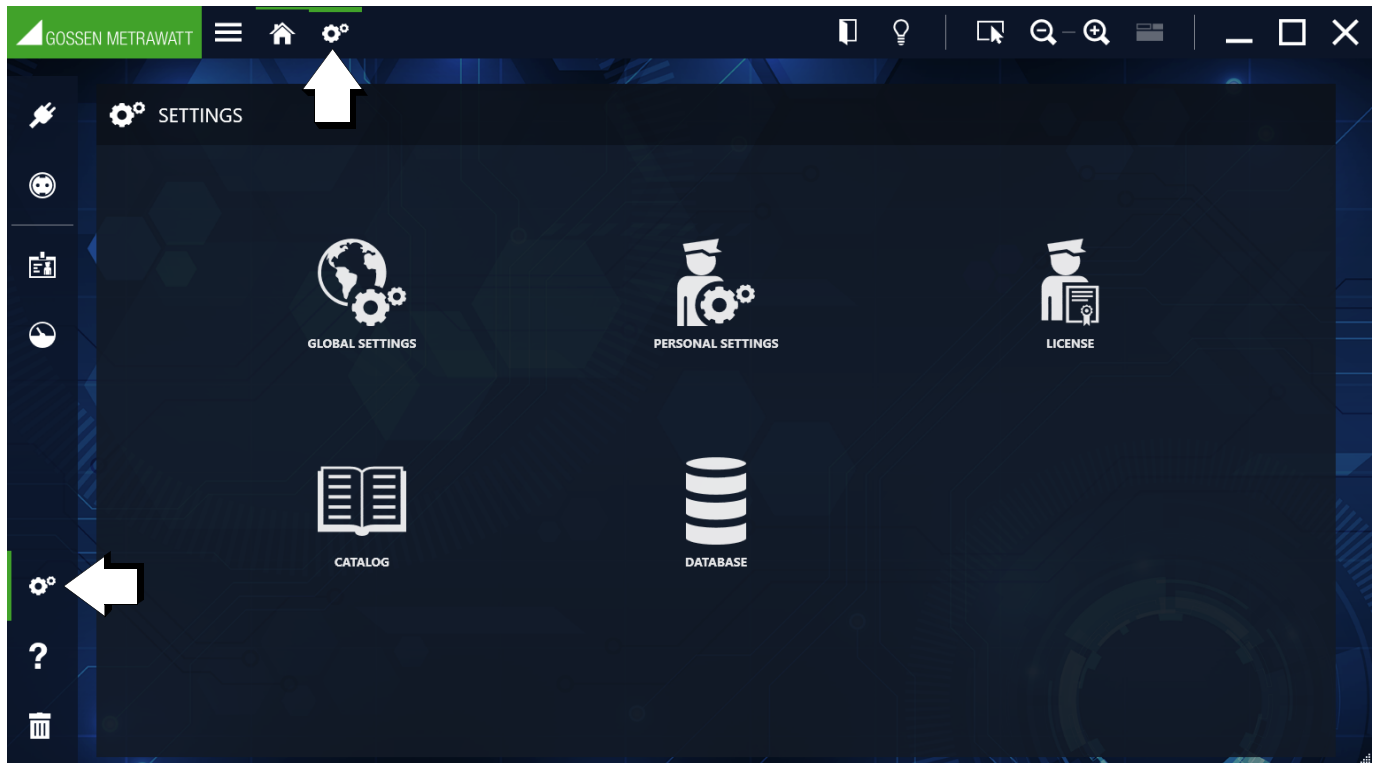
Functions of the toolbar

-  Restore: selected objects are restored
-  Delete: selected objects are deleted
-  Empty recycle bin: all elements in the recycle bin are irretrievably erased

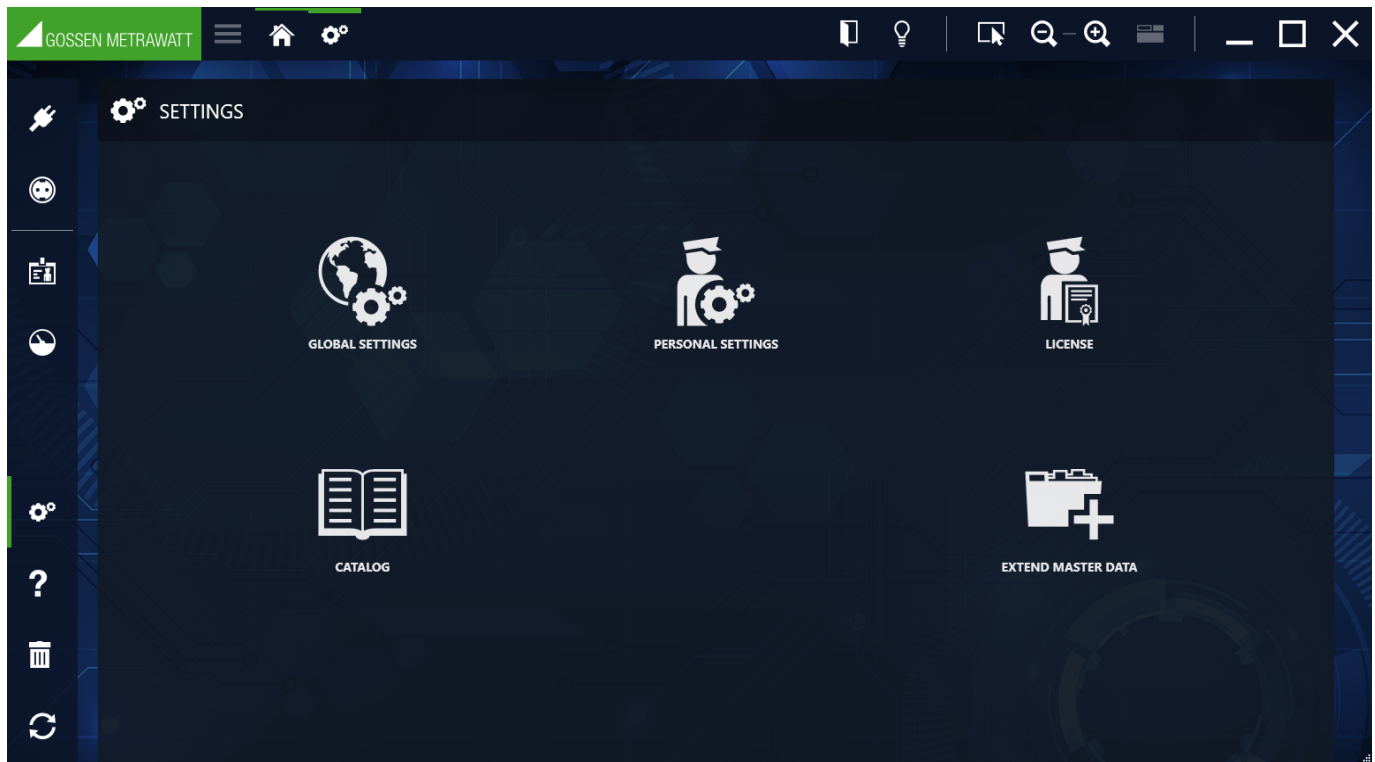
This index card is a list, so it is subject to the functions of the list view. The list symbols are also enabled in the toolbar; refer to “Lists”. These functions apply only to the list view.

12.6 Settings

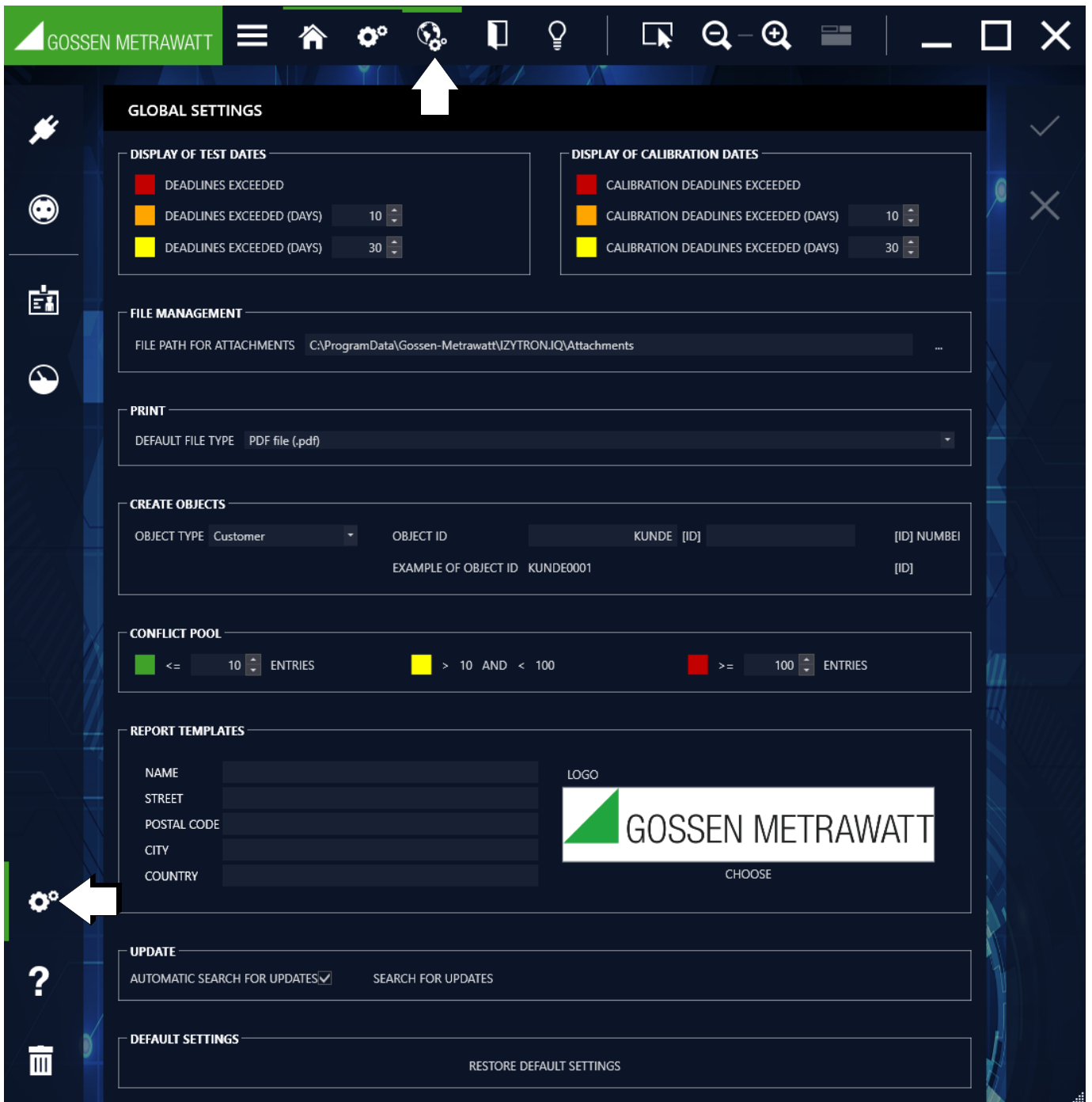
The general settings for working with **IZYTRONIQ** are defined in this module. Licenses and catalogs can be managed, and databases backed up or restored.



ENTERPRISE Version:



All settings that apply globally to all users are found here.



**Show test deadlines/
calibration deadlines**

Periods/colors for deadlines:
Default values:
Red: Deadline exceeded
Orange: Deadline exceeded in xx days
Yellow: Deadline exceeded in yy days

File management

The default path for file attachments is the same path as in the database.
The installation for ENTERPRISE and higher differs from BUSINESS; refer to “Initial installation of the ENTERPRISE Variant”.

Print

From **BUSINESS Advanced**: In this case, the pre-settings can be selected to define the file format (.pdf, .doc or .docx) in which selected data in the print menu (Save as) will be saved; refer also to “Print”.

Create objects

This section is used to define how the object IDs are created in the tree structure. A proprietary logic can be created for each object type – selectable using the pull-down menu. The format and increment of the object IDs must be selected to define the composition of the object name. For object IDs, the name of the object type is added as a prefix (start of the object name in the field to the left of [ID]) or as a suffix (end of the object name in the field to the right of [ID]). The prefix or suffix are freely selectable. The result of the presetting is shown simultaneously as an example for an object ID. In addition, the number of digits in the ID number and number of digits in the ID increment must also be stated.

Conflict pool

Colors for the display in conflict manager, depending on the number of entries:

Factory settings:

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

Report templates

The following details and attachments are accepted for all test records:

Contractor: The address of the relevant contractor with name, street, postal code, town/city and country (pull-down menu) are added here.

Logo: The logo for all future test records is integrated using the button “SELECT” (available from BUSINESS Advanced). Selecting “SELECT” opens an Explorer window with suggested image formats (*.jpg, *.jpeg, *.bmp), in which you can search for a user-defined logo file.

Video „Exchange of logo and company adress“

Updating

Automatic search for updates:

Here, users can define whether **IZYTRONIQ** should search automatically for updates at each start.

Search for updates:


This button is used to trigger a manual search for available updates.

Restore default settings

All global settings are restored to the default values.

The additional permission “System settings” is required to restore default values.

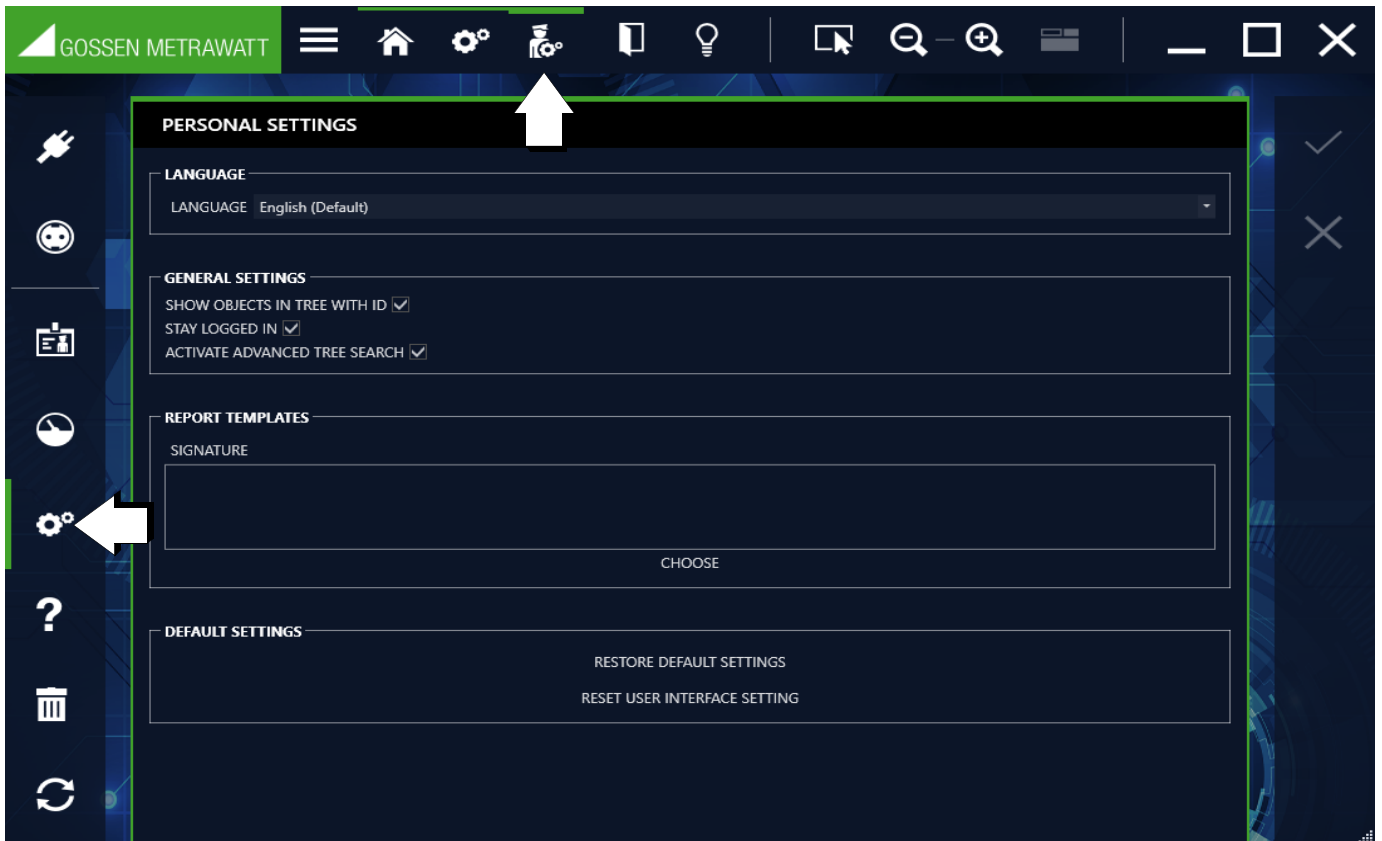
Functions of the toolbar

 Save changes

 Cancel editing

12.6.2 Personal settings

Here, users can make personal settings that only apply to them, e.g. change language, show or hide IDs, save files with signatures or restore **IZYTRONIQ** to factory settings.



Language

Here you can change the language for user navigation in the pull-down menu.

General settings

SHOW OBJECTS IN TREE WITH ID: Here you can preset whether the objects in the tree should be shown with an ID number (default setting = yes, with ID)

STAY CONNECTED: If you have selected „STAY CONNECTED“ in the login window, you can reverse this option here. Remove the check mark next to the „STAY CONNECTED“ parameter by ticking the field once more and by acknowledging this change.

ACTIVATE EXTENDED SEARCH FUNCTION (FOR LARGE DATA VOLUMES):
Refer to “List view – extended search function” (default setting = yes) for the meaning of this setting.

Report templates

Here you can add your signature to attachments for report templates. Selecting “SELECT” opens an Explorer window with suggested image formats (*.jpg, *.jpeg, *.bmp), in which you can search for the file.

Default settings

Selecting “**Restore default settings**” allows you to reset all of your personal settings (language, show IDs in the tree structures).

Selecting “**Restore window settings**” allows you to reset all of your personal settings referring to this interface (list displays, window sizes, window positions).

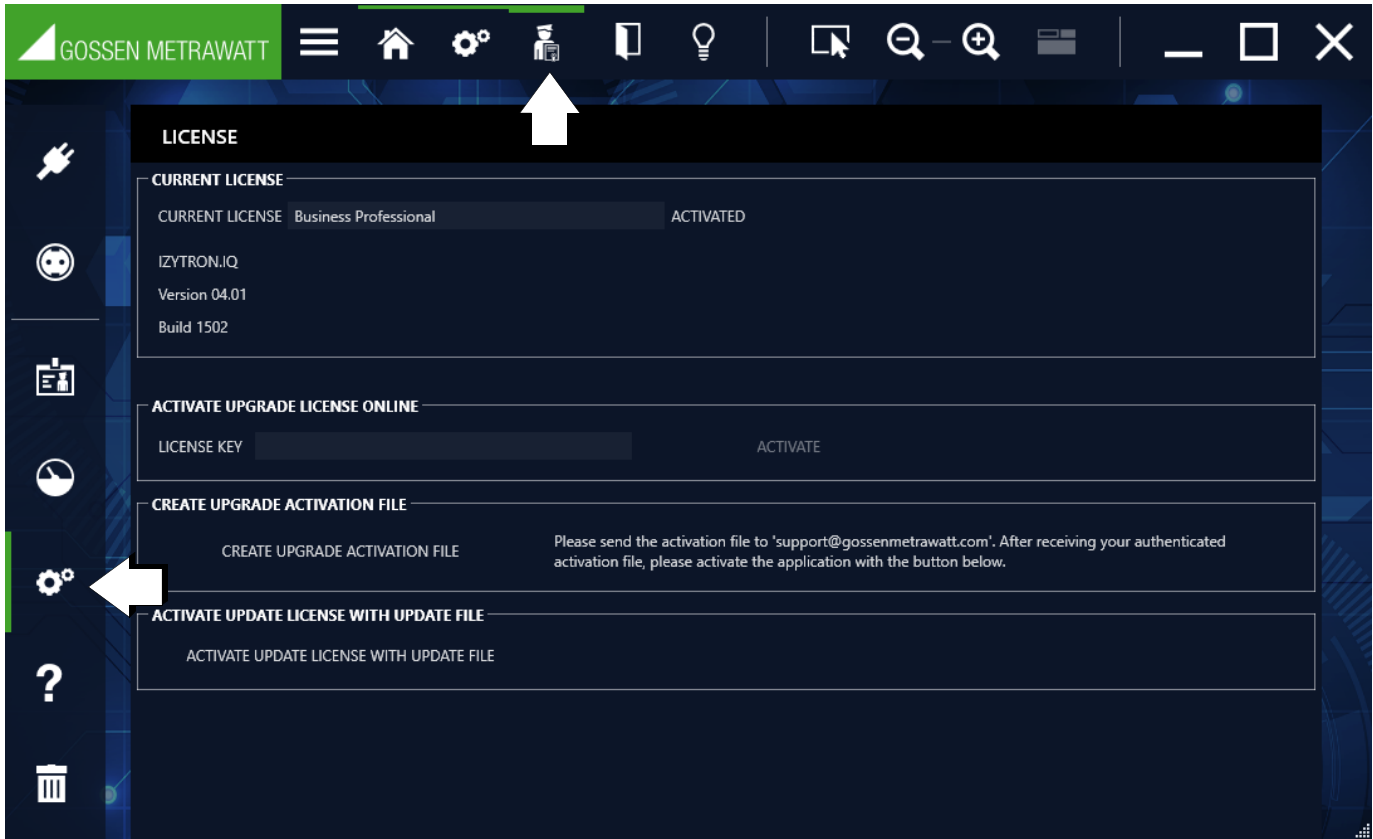
Functions of the toolbar

 Save changes

 Cancel editing

12.6.3 License

This shows the current license and provides the opportunity to purchase an upgrade.



Current license

The currently active license is shown here.

Activate – Upgrade license online

This requires an Internet connection. Enter the license key and then select the button “ACTIVATE”. A connection is then established with the license server for the purpose of authentication. Your hardware (MAC address of your computer) is coupled to the license key during this process. The permissions are activated if the license key is correct. Refer also to “Licensing”.

Create upgrade activation file

An activation file can be used to upgrade **IYZTRONIQ** if an Internet connection is not available. To do this, select the button “CREATE UPGRADE ACTIVATION FILE”. Save the license file (License.lic) and follow the instructions provided here.

Kindly contact our product support in regard to the activation file.

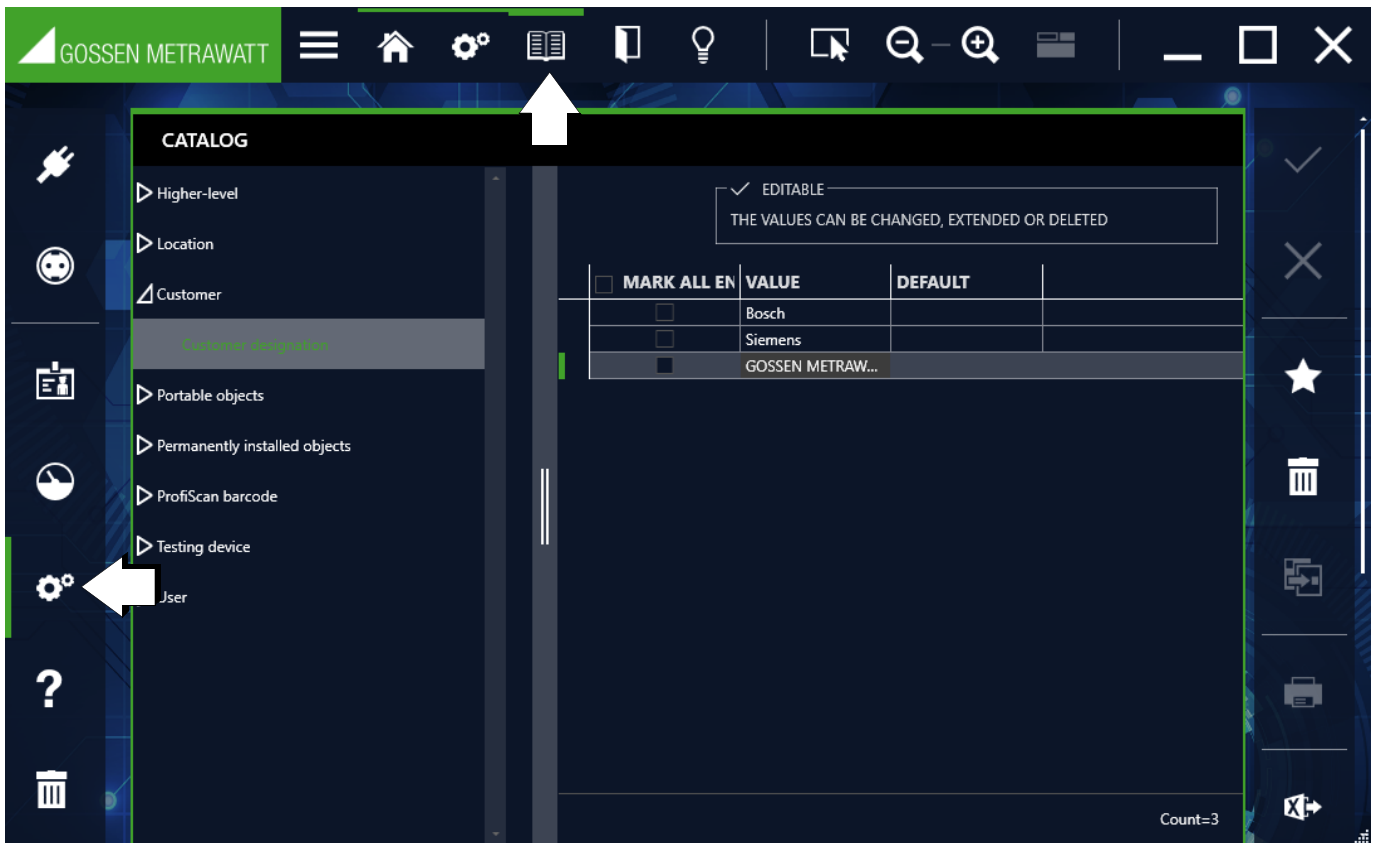
GMC-I Messtechnik GmbH
Product support hotline
Telephone +49 911 8602-0
Fax: +49 911 8602-709
email: support@gossenmetrawatt.com


Activate update license with update file

Once you have received the authenticated activation file back from our support, you activate the license using the button “ACTIVATE UPDATE LICENSE WITH UPDATE FILE”.

12.6.4 Catalogs

Catalogs exist for certain data fields. Some of the catalogs are stored as factory settings that cannot be changed. These are catalogs that the Profitest test device requires to analyze its measured values. Other catalogs can be freely edited. For instance, these catalogs are used to auto-complete field entries, but can also be transferred to the Profitest as inventory tools (e.g. lead type).




The catalog view consists of two fields. The left-hand field shows a hierarchical view of input fields in a tree structure. The input field opens on the right-hand side when the input fields are selected. A message is shown in each case in the top-right section, indicating whether the matching values can be changed. If so, the command  is used to make additional entries.

There are five types of catalog entry:

Alphanumerical input fields – individual input

Input fields in which any sequence of numerals and characters can be entered. Each complete entry is then added to the matching catalog. These catalogs are used for auto-complete.

Numerical input fields with or without unit – individual input

Input fields in which numerical values can be added within defined limits. Set units can also be selected from a list. Values are entered by selecting the pen symbol .






These catalogs are used for auto-complete.

Input fields ProfiScan barcode – individual input

Predefined barcodes (CODE 128 and Q code) are available as tools for the following functions in the test device series PROFITEST MASTER/PRIME. ProfiScan extends the test documentation options. The respective barcodes are scanned conveniently to save a categorized comment for each electric object in the tree structure. The following categories are available:







- Defects (visual defect)
- Test (reason for test: new facility, repeat test)
- Inspections (documentation of visual inspections)
- Trial (function)
- Recording (scope of test)

Users have the option of creating their own barcodes with the **IZYTRONIQ**, which can then be added at the end of the catalog list. The matching texts can be assigned to a test object in the test device **PROFITEST ...** by conveniently scanning the relevant barcode.

MÄNGEL	BARCODES
Abdeckung schadhaft	
Abdeckung fehlt	
Betriebsmittel nicht ordnungsgemäß eingebaut	
Betriebsmittelbezeichnung fehlt	
Gehäuse defekt	

Example for ProfiScan (print preview/PDF)

Functions of the toolbar

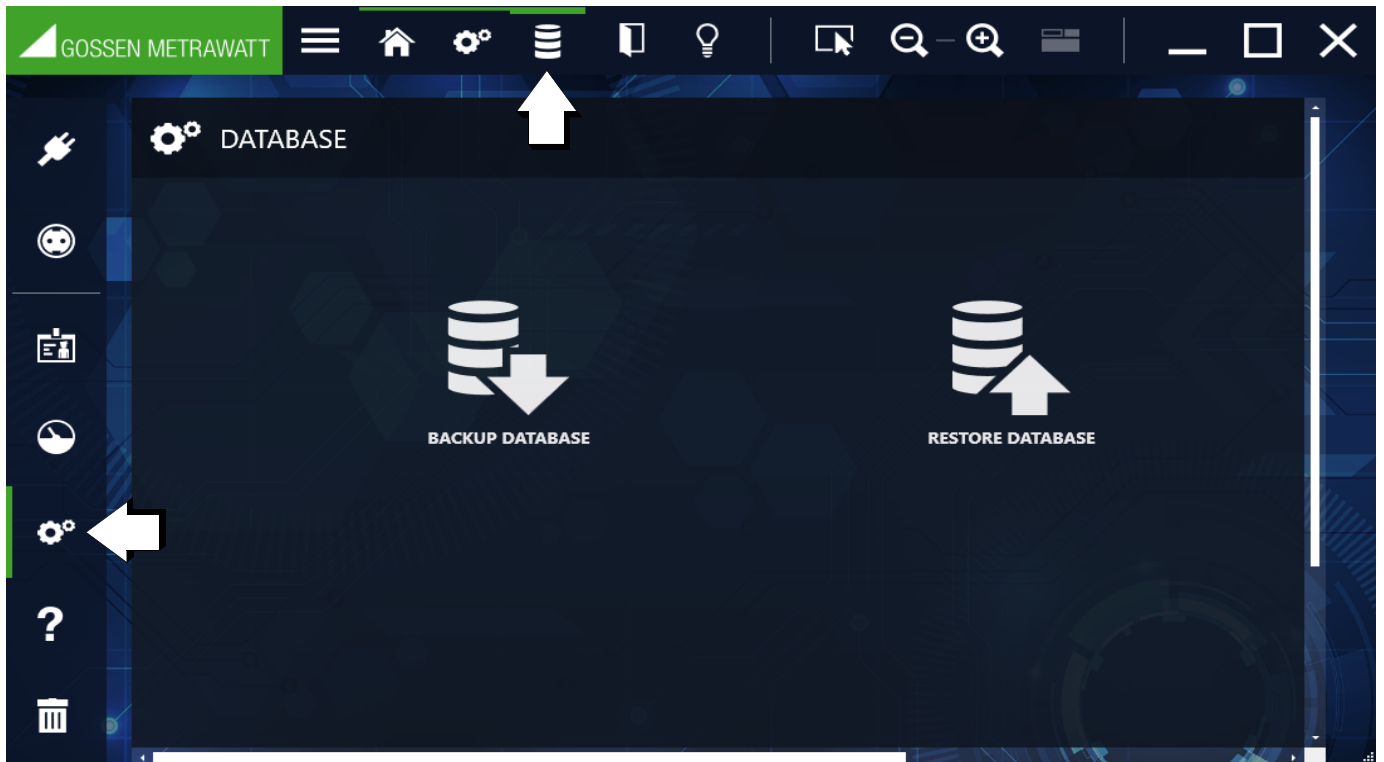
-  Save changes
-  Cancel editing
-  Add element
-  Remove element
-  Paste: paste from cache
-  Print:
Print and save the selected barcode list or all lists
if the main menu item "Barcode was selected"; refer to "Print"

This index card is a list, so it is subject to the functions of the list view. The list symbols are also enabled in the toolbar; refer to "Lists".

Video „Excel to catalog, Profiscan catalog processing“

12.6.5 Database (description for Business versions)

The internal database can be backed up here, or a previous version can be restored.



Backup database

The internal database is backed up, and a backup date and time are added.

The default path for file attachments is the same path as in the database.

The backed up database is saved at the specified storage location, and the backup date is added to the file name.

The current date is automatically added as the backup date and cannot be changed.

Restore database

Users can restore the internal database to an earlier state by selecting the relevant database in the list of backups and by subsequently clicking on „Restore“. The application is then restarted after a confirmation prompt.

Take note: Make sure you backup the current database before selecting a new backup (refer to “Backup database”).

Update of previous database versions

If you wish to restore a database which has been stored under a previous version of IZYTRONIQ, this database must be migrated to the current version of IZYTRONIQ. During the restart of IZYTRONIQ, an update is performed upon request. Confirm this command prompt with „yes“.

Upgrade of Database Version from BUSINESS to ENTERPRISE

Perform an update to the current BUSINESS version first. Update your database as described in section „Update of previous database versions“ and perform a database backup as described in section „Backup database“. Perform an upgrade to the ENTERPRISE version afterwards.

Now you can import the database as follows:

1. Select the main module „Portable objects“ or „Stationery objects“.
2. Select the „Import“ function.
3. Select „FROM FILE“.
4. Activate „SELECT“.
5. Set the file format to „Backup files“ (*.zip)“ in the opening window.
6. Select the database (*.zip) which has been saved before.
7. Select „Open“.
8. Activate selection „IMPORT“ in the „IMPORT“ window.

12.6.6 Extending the Master Data – ENTERPRISE Version

A new index card can be added for each object type (1) in the detailed view with function „Extending Master Data“, see “Function “Input, change, list””. The user can define the name of the respective index card (2) at his discretion, depending on the language to be selected (3).

A maximum number of 30 entry fields can be added on the index card. 5 entry formats are available for these fields: Boolean (yes/no), Date, Decimal number, Integer and Text.

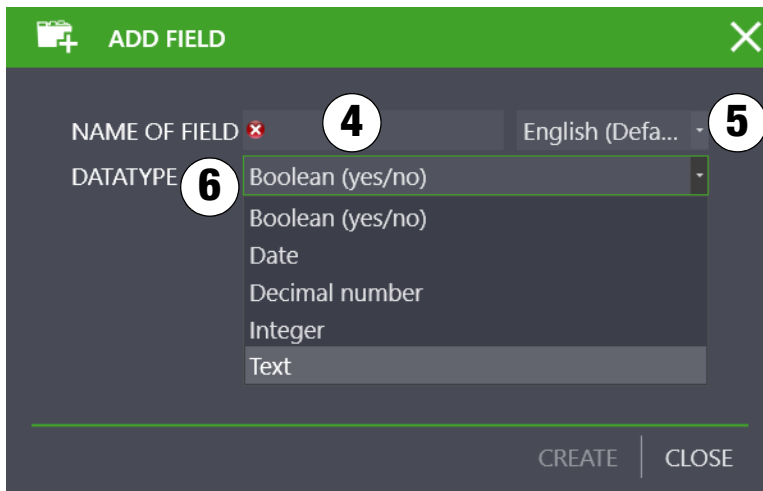
The screenshot displays the 'EXTEND MASTER DATA' configuration window. At the top, the 'GOSSEN METRAWATT' logo is visible. The main area contains the following configuration options:

- OBJECT TYPE:** Earth electrode (labeled with a circled '1')
- NAME OF TAB:** Additional data (labeled with a circled '2')
- Language:** English (Default) (labeled with a circled '3')
- ACTIVE:** A checkbox that is currently unchecked.

Below these options is a table with 10 rows and 3 columns of empty input fields, intended for defining data entry formats. The interface also features a top navigation bar with various icons and a left sidebar with a vertical menu.

Adding a field

Select symbol ★ in the toolbar. Enter the name of the new field (4) depending on the language to be selected (5). Under DATA TYPE (6), 5 different entry formats are available. The new field is added at the next free position with „CREATE“. By saving, the new field is adopted.



Positioning a field

The occupied fields can be selected with the cursor – a green frame appears – and positioned as desired per drag and drop. By saving the new position is adopted.

Enabling a field

Only by enabling the „ACTIVATED“ field is the index card shown with all created fields in the detailed view of the respective object type.

Functions of the toolbar

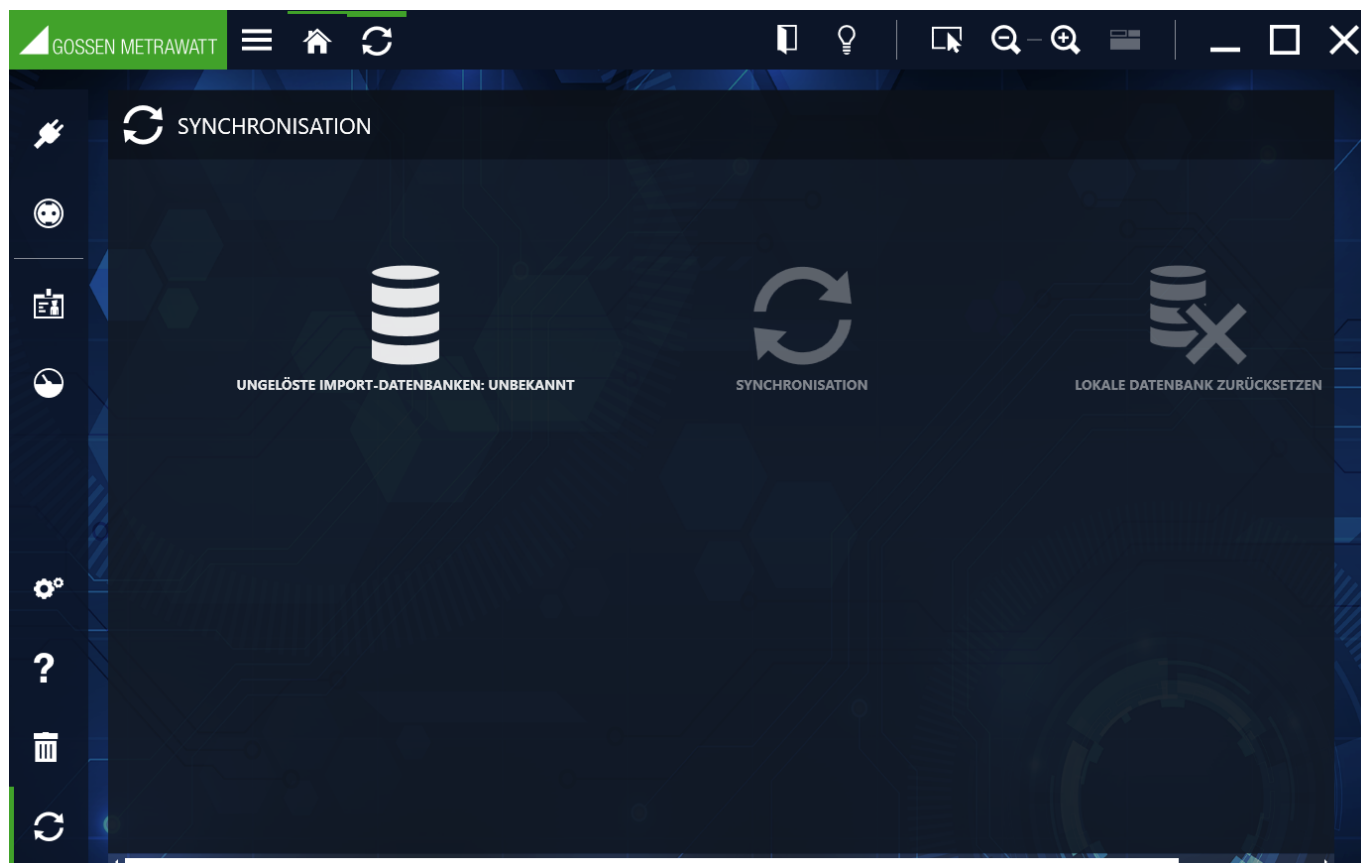
- ✓ Save the changes
- ✗ Cancel editing
- ★ Add a field
- 🗑 Delete a field
- ✎ Edit a field

12.7 Synchronization (ENTERPRISE Ultimate only)

In preparation

In order to make the required customer and/or object data available at the respective field location, it is necessary to perform a synchronization of the data between the server database and the local database of the respective laptop/notebook.

Upon completion of the on-site tests, the test and measurement data stored locally must be saved back to the server database afterwards by way of synchronization.



12.8 Help ?

Help can be accessed, depending on the screen in which you are currently located.

The following options are available:

- Home screen: Select the help symbol
- All other screens: select the help symbol in the navigation bar
- Alternatively: use the keyboard shortcut F1

In addition, users have the option of accessing online help on the landing page, which they open in their browser: help.izytron.com

The screenshot displays the IZYTRONIQ help interface. On the left is a dark sidebar with a table of contents (TOC) for the 'Login / Logout' section. The 'Login / Logout' item is highlighted in green. The main content area on the right is titled 'Login / Logout' and contains the following sections:

- Initial login**: Explains that the first step is to create a user if none are set up. The login screen has a heading 'Create User'. Required information includes first and last name, a personal username, and a password (repeated). The user is assigned the role 'Admin'. Below this text is a 'CREATE USER' dialog box with fields for USER NAME, FIRST NAME, LAST NAME, PASSWORD, and REPEAT PASSWORD, and buttons for CREATE and ABORT.
- Subsequent login**: States that users can only access the software if registered. When launched after the first time, it opens a login screen for username and password. Below this is a 'LOGIN' dialog box with fields for USER NAME and PASSWORD, and buttons for LOGIN and ABORT.
- Switching users**: Mentions that users can switch users using a button in the status bar.
- Log out – close**: Lists two ways to close the application: selecting the Close Window function (X) in the status bar, or using the help symbol (H) in the status bar. A confirmation prompt will appear, and 'ABORT' should be selected to close the application.

The main topics are shown in the left-hand column (TOC (table of content)). The selected main topic is marked in green. A cursor arrow indicates if there are any subtopics. The subtopics are shown automatically when this arrow is selected. Selecting the cursor arrow again hides the subtopics.

The content for the selected topic is shown on the right-hand side.

Significance of the elements in the header



Show/hide:
Selecting this symbol shows or hides the left-hand column.



Search:
This is used to filter online help according to selected keywords.



Print:
The content on the right-hand side can be printed.



Scroll: Users can scroll up or down in the left-hand column (TOC).

Version: 27.08.19

13 Lists

The following functions are available in all modules in which lists are shown.

“Sort”

“Filtering (simple)”

“Group”

“Filter editor function”

“Multi-assistant (from BUSINESS Professional)”

13.1 Sort

Users can click on the column and then sort it in ascending ▲ or descending ▼ order. The matching symbol indicates the direction (see below). Only one column can be sorted at one time. Clicking on the other column will sort this column.

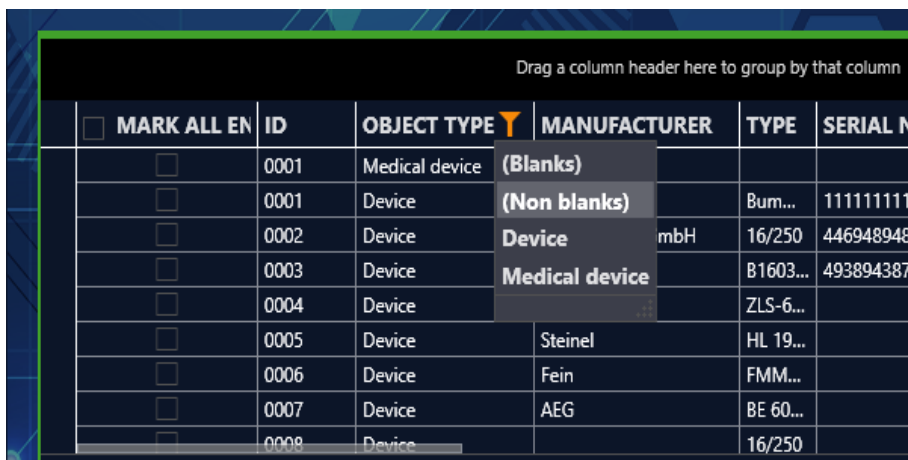


Drag a column header here to group by that column

<input type="checkbox"/> MARK ALL EN	ID	OBJECT TYPE	MANUFACTURER	TYPE	SERIAL NU...	▲	STATUS	LAST TEST RESULT
<input type="checkbox"/>	0003	Device	IKEA	B1603...	49389438759			Not passed
<input type="checkbox"/>	999999	Device	bosch	zzt	888888888888			
<input type="checkbox"/>	SCH0178	Device	Dell	Dell 1...	CN-0VUJCH5			
<input type="checkbox"/>	0555	Device	ASTEC	DA2-...	D484R20444C6			
<input type="checkbox"/>	0131	Device	HP	KTC H...	F12941218050923			
<input type="checkbox"/>	SCH0071	Device	HP	KTC H...	F12941218051001			
<input type="checkbox"/>	0129	Device	HP	KTC H...	F12941224061692			
<input type="checkbox"/>	0128	Device	HP	KTC H...	F12941224067470			
<input checked="" type="checkbox"/>	0556	Device	Dell	CN-0...	N06C3W2			

13.2 Filtering (simple)

When the mouse cursor is hovering above an element, the filter symbol ▼ is shown. Selecting this symbol changes its color from white to orange, and a filter menu with the following options is shown. Several columns can be filtered at the same time.



Drag a column header here to group by that column

<input type="checkbox"/> MARK ALL EN	ID	OBJECT TYPE ▼	MANUFACTURER	TYPE	SERIAL N
<input type="checkbox"/>	0001	Medical device			
<input type="checkbox"/>	0001	Device		Bum...	1111111111
<input type="checkbox"/>	0002	Device	mbH	16/250	446948948
<input type="checkbox"/>	0003	Device		B1603...	493894387
<input type="checkbox"/>	0004	Device		ZLS-6...	
<input type="checkbox"/>	0005	Device	Steinel	HL 19...	
<input type="checkbox"/>	0006	Device	Fein	FMM...	
<input type="checkbox"/>	0007	Device	AEG	BE 60...	
<input type="checkbox"/>	0008	Device		16/250	

(Blank) Filter for rows that do not have an entry in the selected column.

(Not blank) Filter for rows that have an entry in the selected column.

(Entries) Filter for rows that have the selected entry in the selected column.

Refer also to “Filter editor function”.

13.3 Group

Entries in the selected column can be grouped. This means that elements of the same type in the selected column can be assembled in a group.

Example: The object type column has 15 elements, 10 belonging to the **device** type and 5 to the **medical device** type. Grouping this column will create two groups, one of which consists of 10 device elements and the other that consists of 5 medical devices.

Users can group several columns at the same time. Columns are grouped by drag-and-drop of the column heading into the grouping box. Grouping can be undone by drag-and-drop of the column heading back into the list header. An orange double arrow marks the position at which the column will be inserted.



Note

A ☒ is shown if the user moves the column heading to a position outside of the header, and the matching column is moved to do column editor so that it is no longer visible in the current list.

Grouping box

Grouping lists according to object type

Result of the grouping

Grouping for several columns

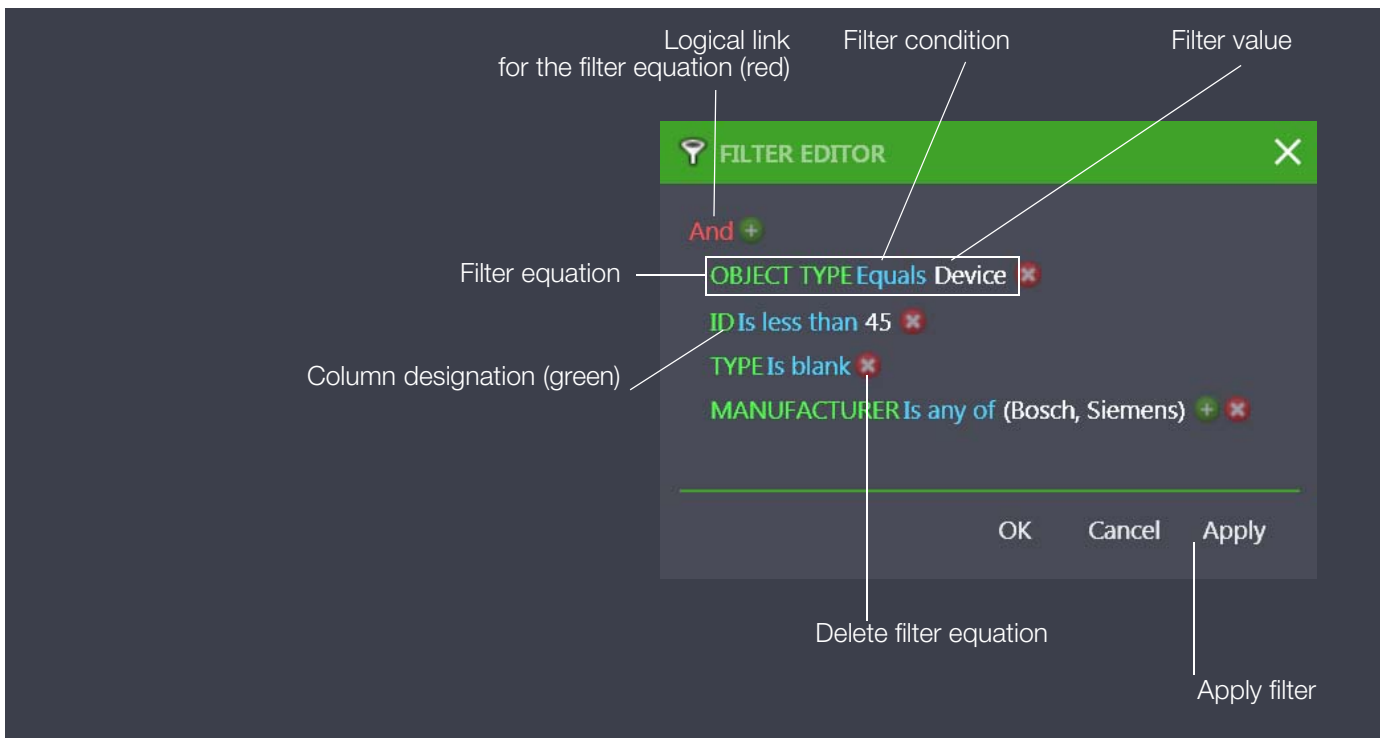
Other editing functions are available in the toolbar for the list view:

13.4 Filter editor function

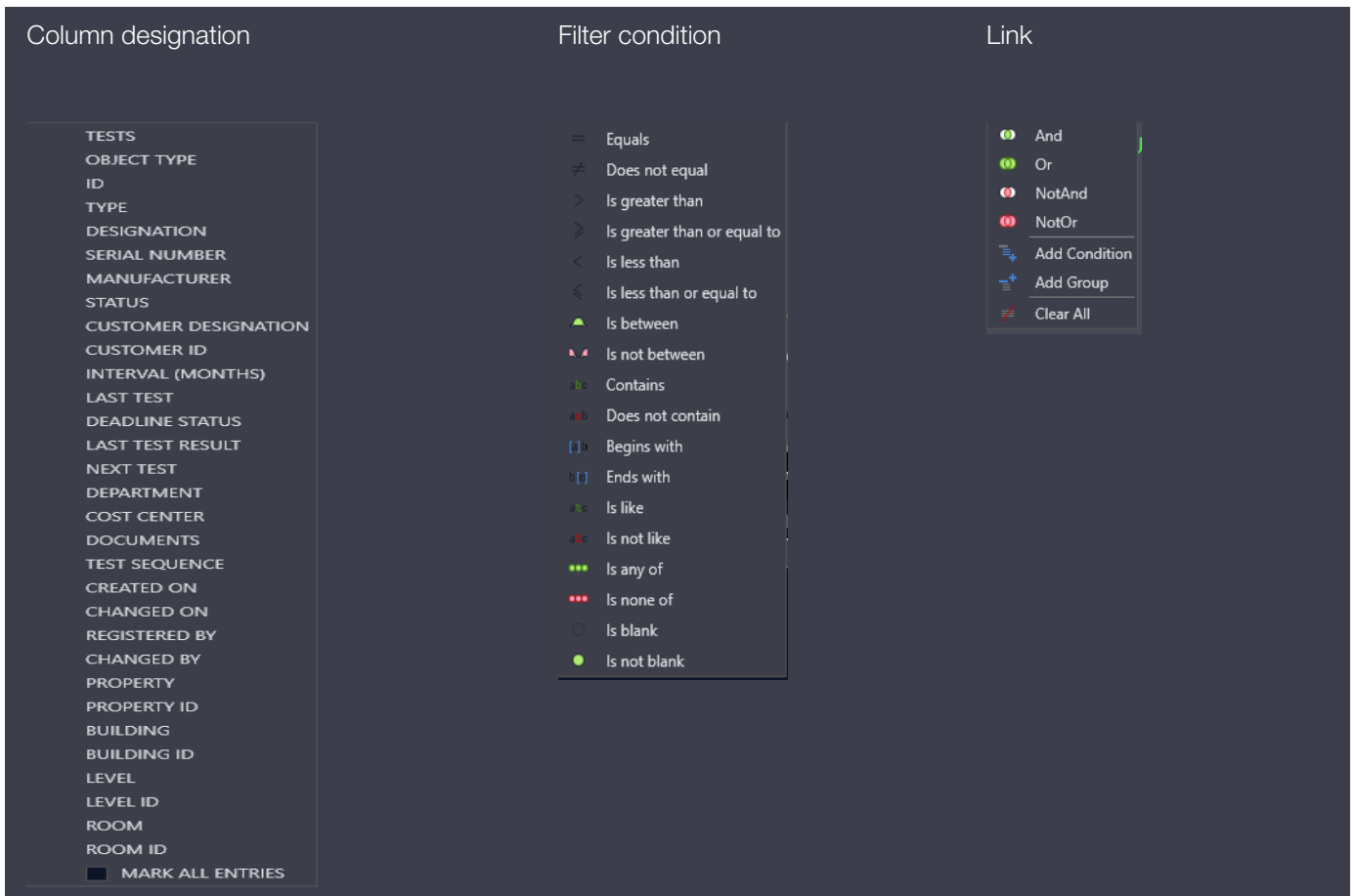
The filter editor is used to filter the list entries in any degree of complexity. The filter editor is opened by selecting the symbol in the toolbar.

A filter consists of filter equations and their logical links.

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






The column designation, filter condition and logical link are selected in the matching fields. This opens a list of selection options for each case.

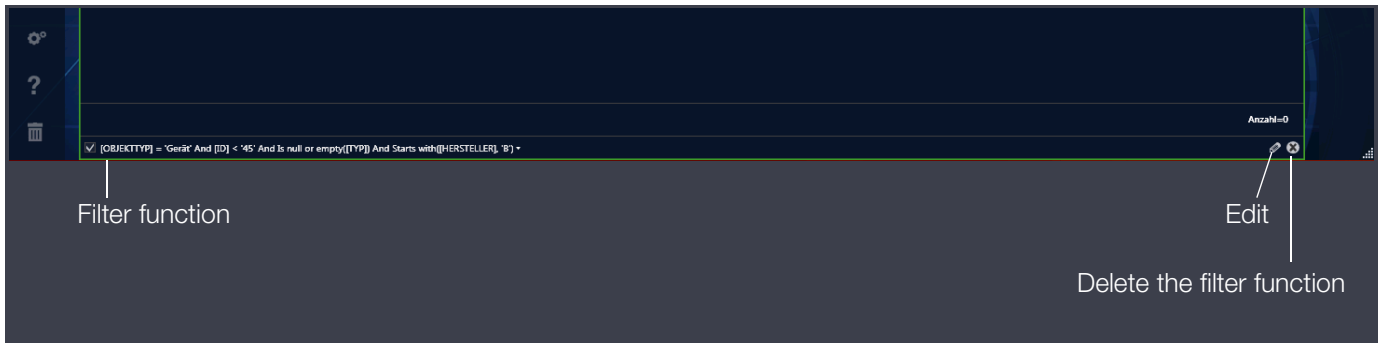


Selection lists

Show, enable/disable, edit and delete filter functions

An active filter is marked accordingly:

1. The filter function is shown in the footer of the left-hand list view.
2. All filtered columns are marked with the filter symbol .
3. A symbol to edit  the filter function is shown on the right-hand side of the footer.
4. A symbol to delete  the filter function is shown on the right-hand side of the footer.



Functions of the toolbar

✓ Save changes

✗ Cancel editing


 **Print**, refer to “Print”

The filter list can be sent to a printer here or saved as a .pdf, .doc or .docx file. Barcodes and master data for selected objects can be printed out or saved.

 **Export to Excel**

This function is used to export the filter list to Excel as a CSV file. Clicking on the symbol opens the Windows menu “Save as”. Users can select the preferred storage location here. Then they must add a file name. Export is completed by clicking on “Save”.

 **Search**

The search function is used to locate search terms in all columns. Clicking on this search symbol opens a search window in the header of the list view. After selecting the input field, the search term is added here. The search results are marked in yellow. The search term and therefore the markings are deleted by clicking on the delete symbol . The search is closed by selecting “Close”.

 **Column editor**

Selecting this symbol opens a column editor that contains all column designations. You can use drag-and-drop to pull the columns from the container to the chosen position in the list header. This will delete the entry in the container. An orange double arrow marks the position at which the new column will be inserted. Columns can be deleted from the list (moved to the column editor) by pulling them out of the list header by drag-and-drop.



 **Filter editor function**

See above for the description

 **Resize**

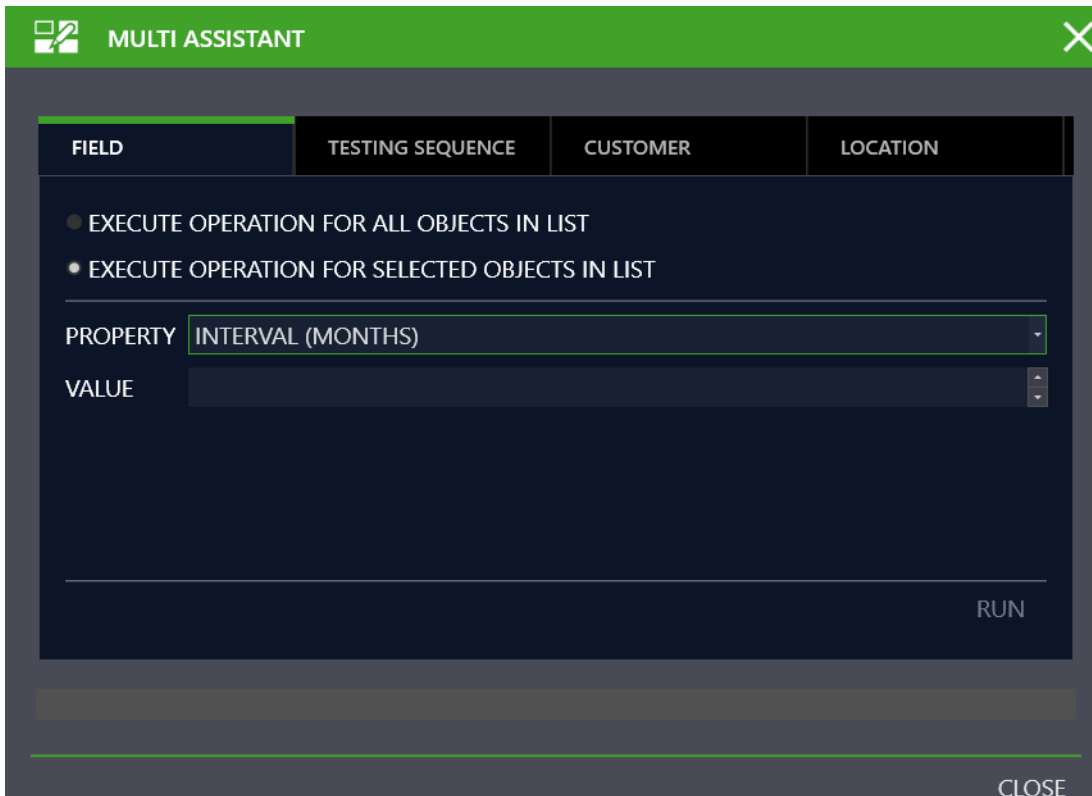
This function is used to optimize the column width for all columns.

Video „Working with the list filter functions, sorting, filter editor and column assistant“

Video „Working with the list, creation of Excel file“

13.5 Multi-assistant (from BUSINESS Professional)

The multi-assistant function is used to make simultaneous changes to the properties of several objects. For instance, test intervals can be changed for all objects in the list view.




The multi-assistant is available in the view “Input, Change, List” for portable and stationary objects under the activated list view (green border); refer to “Function “Input, change, list””. The multi-assistant is also available in the test data preview. The multi-assistant consists of four index cards: FIELDS, TEST SEQUENCES, CUSTOMER and LOCATION.

Index card FIELDS

This is used to enter or change field contents for selected object properties in a list of devices.

- ▶ First, use the various selection functions to select the required devices, e.g. via tree selection or “Filter editor function”.

The selected devices are shown in the list view.

- ▶ You must mark the relevant rows if you only want to add new field content to selected devices. The selection will otherwise apply to all devices in the list.
- ▶ Clicking on the symbol  opens the index card menu “Multi-assistant”.
- ▶ The index card “FIELDS” is the default setting.
- ▶ Now select whether the operation should be carried out for all objects or only the marked objects.
- ▶ Select an entry from the pull-down menu in the field PROPERTY.
- ▶ Add the chosen alphanumerical value to the field VALUE.
- ▶ Select “Execute” to confirm.


Take note: The multi-assistant is a powerful tool. It enables users to deliberately change data fields for many objects. All of the edited data is irretrievably altered once the changes have been saved.

Index card TEST SEQUENCES

This is used to assign or remove test sequences from a list of devices.

- ▶ First, use the various selection functions to select the required devices, e.g. via tree selection or “Filter editor function”.

The selected devices are shown in the list view.

- ▶ You must mark the relevant rows if you only want to assign or delete a test sequence for selected devices. The selection will otherwise apply to all devices in the list.
- ▶ Clicking on the symbol  opens the index card menu “Multi-assistant”.
- ▶ Select the index card TEST SEQUENCES.
- ▶ Now select whether the operation should be carried out for all objects or only the marked objects.

Remove test sequences

- ▶ Click on “Remove test sequences”.
- ▶ From the shown list of test sequences, select those that should no longer be assigned to the devices.
- ▶ Select “Execute” to confirm.

Assign test sequences


- ▶ Click on “Assign test sequences”.
- ▶ From the shown list of test sequences, select those that should be assigned to the devices.
- ▶ You can also mark a test sequence as the default test sequence.
- ▶ Select “Execute” to confirm.

Index card CUSTOMER

This is used to assign customers to a list of devices.

- ▶ First, use the various selection functions to select the required devices, e.g. via tree selection or “Filter editor function”.

The selected devices are shown in the list view.


- ▶ You must mark relevant rows if you only want to add selected devices to a new customer. The selection will otherwise apply to all devices in the list.
- ▶ Clicking on the symbol  opens the index card menu “Multi-assistant”.
- ▶ Select the index card CUSTOMER.
- ▶ Now select whether the operation should be carried out for all objects or only the marked objects.
- ▶ Select an entry from the pull-down menu in the field CUSTOMER.
- ▶ Select “Execute” to confirm.

Index card LOCATION

This is used to assign or remove locations from a list of devices.

- ▶ First, use the various selection functions to select the required devices, e.g. via tree selection or “Filter editor function”.

The selected devices are shown in the list view.

- ▶ You must mark the relevant rows if you only want to assign or delete a location for selected devices. The selection will otherwise apply to all devices in the list.
- ▶ Clicking on the symbol  opens the index card menu “Multi-assistant”.
- ▶ Select the index card LOCATION.
- ▶ Now select whether the operation should be carried out for all objects or only the marked objects.

Remove location


- ▶ Click on “Remove locations”.
- ▶ Select “Execute” to confirm.

Change or create locations

- ▶ Click on “Change locations”.
- ▶ From the displayed location tree, select the location that should be assigned to the selected objects.
- ▶ Select “Execute” to confirm.

Video „Working with Multi assistant“

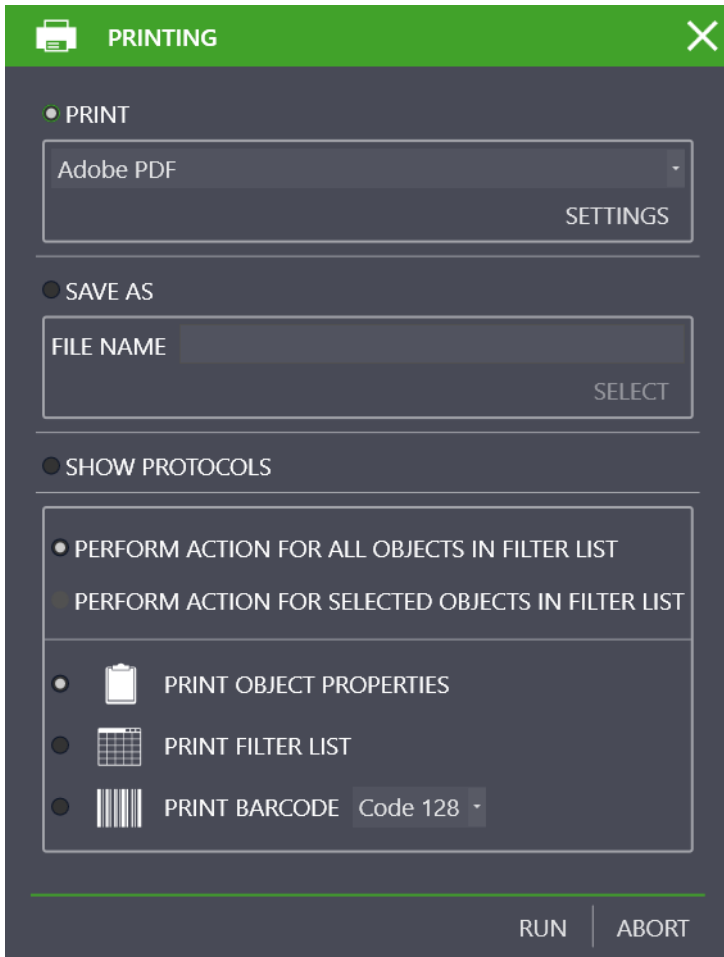
14 Print

Selecting the printer symbol  in the toolbar opens the print assistant. The range of functions offered differs, depending on the window in which this takes place.

When printing, you can select from the options offered by the system.

From version **BUSINESS Advanced**, you can also select whether the operation should be saved. You can choose between the formats .pdf, .doc and .docx.

The following operations are possible:



Print object properties

This operation prints the data from the selected index card.

Print filter list

This operation prints the selected filter list.

Print barcode

This operation prints the device ID as a barcode.



Note

Print settings which are to be retained (default settings) must be entered directly under Windows (Windows settings > Devices > Devices and Printers > Printers).

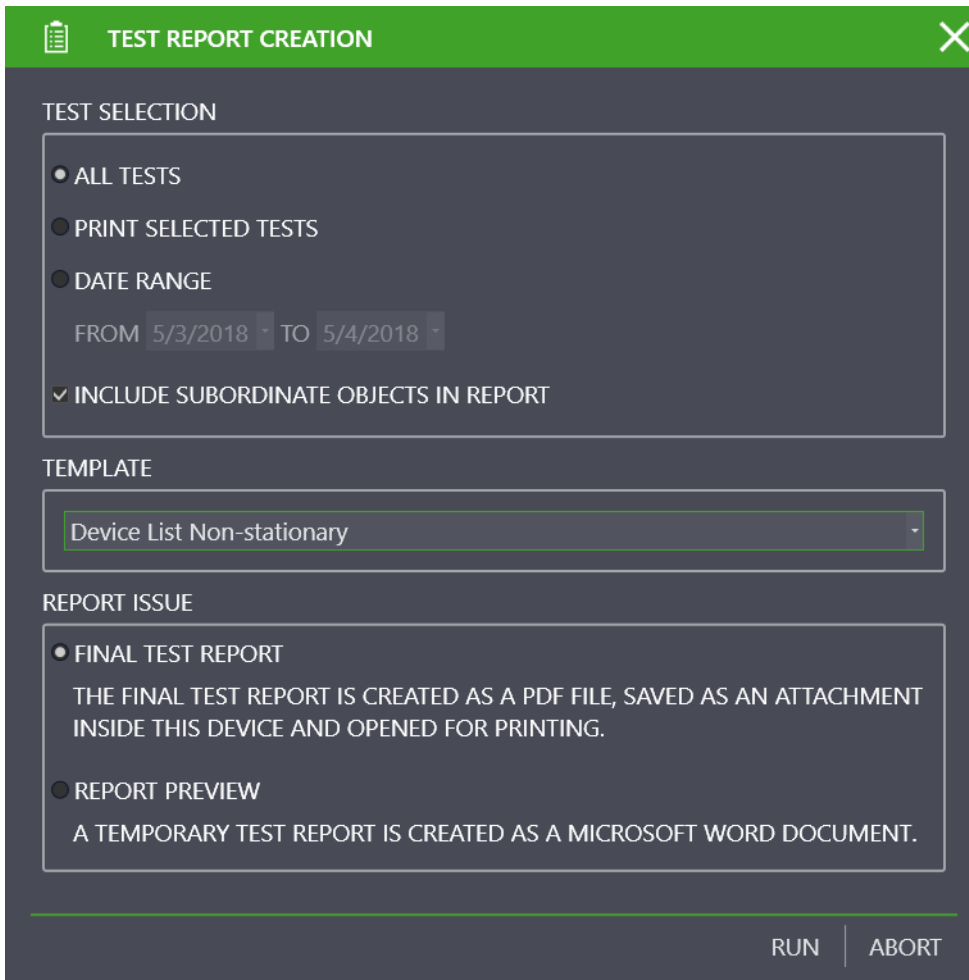
14.1 Creating a test report

Reports can be generated under the index card for tests in the detailed view and in the list view.

The test report assistant opens after selecting the tests in the detailed view of the index card protests and then clicking on the test record symbol in the toolbar. Reports can also be generated simultaneously for several objects in the list view by clicking on the test report symbol in the toolbar.

From version **BUSINESS Advanced**, users can select between Word documents as record preview for PDF documents.

The following operations are possible:



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

TEST SELECTION

Here, users can select whether reports should be generated for all tests, selected tests or tests in a specified period. Reports can also be generated for subordinate objects assigned to stationary objects.

REPORT TEMPLATE

The template is used to define the appearance of the printout, its data and its structure. There are default templates that conform to relevant standards. Users can also create their own templates; refer to “Editing report templates” [from version **BUSINESS Advanced**].

RECORD OUTPUT


Users can create a final (non-editable) test record in PDF format or a record preview as an editable Word document. The final test record is automatically attached to the selected test object.

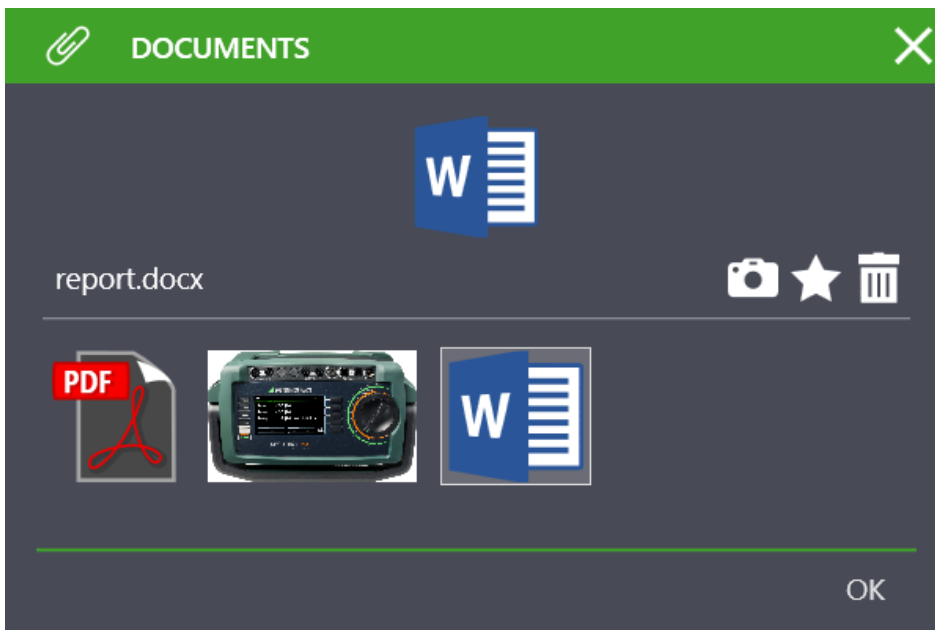
Video „Generation of test report with photo documentation“




15 Document management

You can add documents to the objects, sequences and tests. These documents are file attachments and include images (.jpg, .jpeg, .png, .bmp), PDF documents (.pdf), Word documents (.doc, .docx) or Excel documents (.xls, .xlsx). There is no restriction to the number of document attachments. These documents are stored in an application folder. The storage location of this folder can be defined under “Global Settings” in Setup.


15.1 Viewing documents

A document symbol  is shown in the toolbar if a document already exists, or if it is possible to create a document. The document window is shown when you click on this symbol. This window has two sections. The current document is shown in the top section. All documents available for the object are shown in the bottom section.



Clicking on one of the lower documents selects it and moves it to the top display, where the file name is shown. Clicking on this document then opens it in the matching application. The symbols to photograph , create  and delete  documents are located on the right-hand side of the top window. Clicking on “OK” closes the window.

15.2 Creating documents



This symbol to create  new documents is located on the right-hand side of the document window. By clicking on the symbol, you can create a document in the aforementioned format using the menu to open files that is offered by the system. You return to the original page by clicking on “OK”.



Take note!

Adding attachments changes the current dataset. You must save these changes before closing the page.

15.3 Deleting documents

The symbol to delete  documents is located on the right-hand side of the document window. To delete a document, first select it in the lower section and then click on  to delete. You return to the original page by clicking on “OK”.



Take note!

Adding attachments changes the current dataset. You must save these changes before closing the page.



Take note!

Deleting an attachment only removes the link to this attachment. The attachment itself is preserved.

16 PUSH/PRINT

The **Push/Print** function is a convenient way of sending test results directly to the **IZYTRONIQ** database by pressing a button on the test device. The measurement results are placed in the index card for tests under the selected test object and can be saved there.

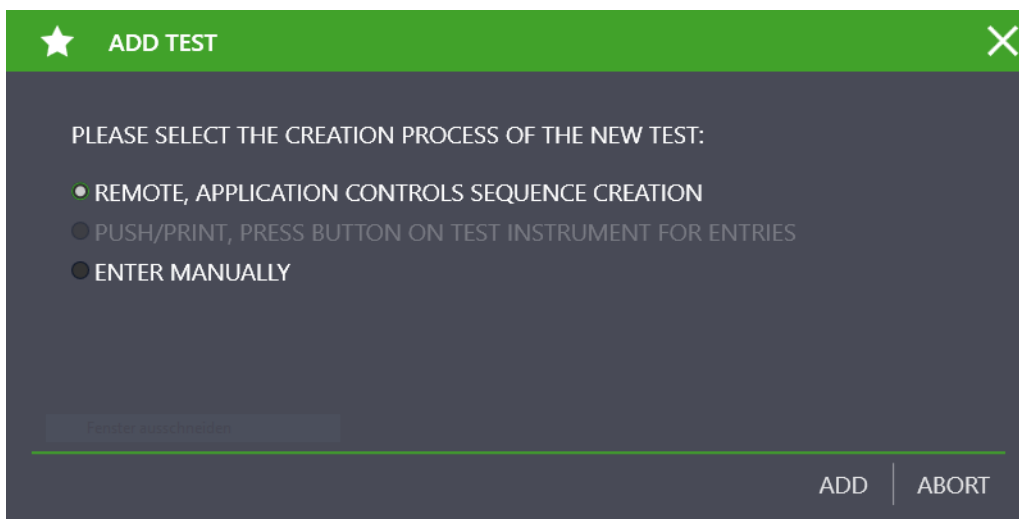
Global test device support

The test results from test devices for any categories, i.e. standards, do not have to be stored and saved in the same categories (e.g. stationary or portable). For instance, measured values for a protective conductor test, measured by the test device **PROFITEST PRIME**, can be assigned to a portable test object.

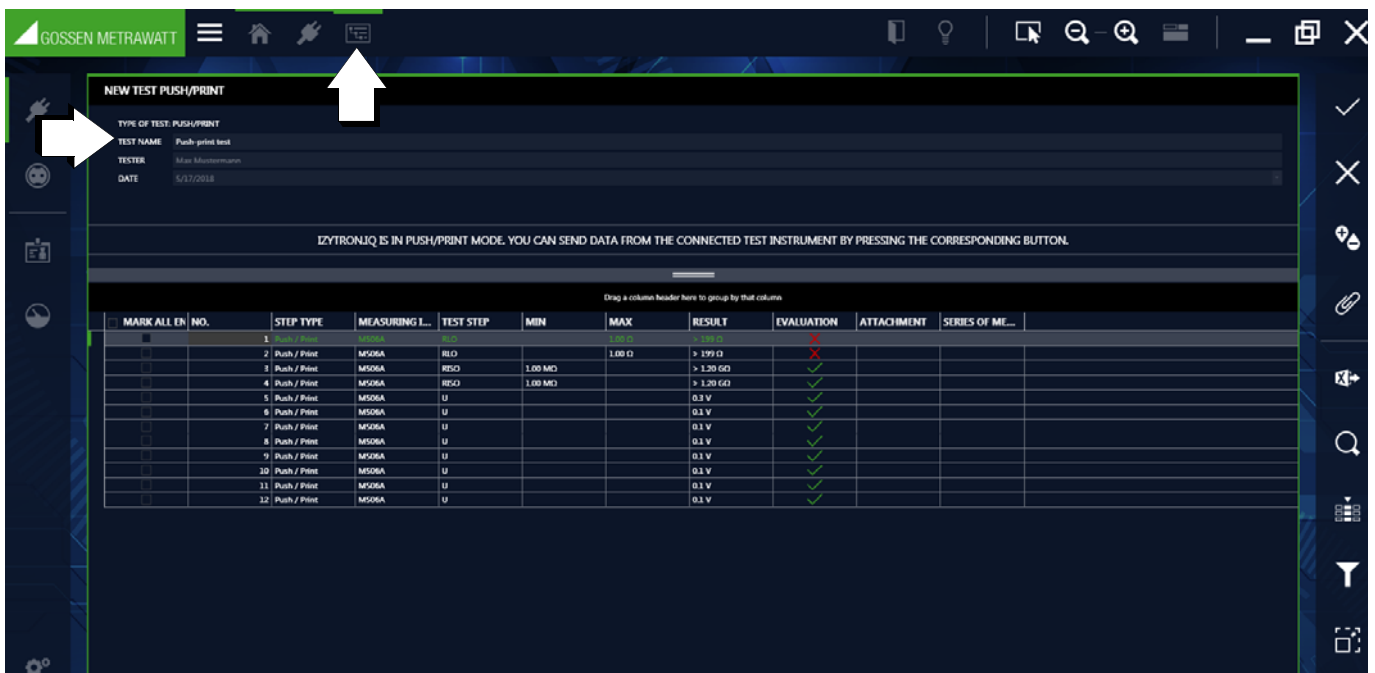
16.1 Conducting a push/print test

A push/print tests can only be conducted with a test device that is push/print-capable. A push/print measurement cannot be selected if the test device does not have this function.

In order to conduct a push/print test, the test device and **IZYTRONIQ** must be set to push/print mode. This is completed by creating a new **push/print** test in the index card for tests, which is found in the detailed view for the selected test object.







As soon as the button “ADD” is selected, **IZYTRONIQ** all connected push/print-capable test devices are in the operating mode push/print. This opens a two-part push/print window and the **IZYTRONIQ** is ready to receive. The master data for the push/print test is located in the upper section, where the name of the test must be added. The measured data transfer is shown in the lower section once the measurement is complete.





MARK ALL EN	NO.	STEP TYPE	MEASURING L...	TEST STEP	MIN	MAX	RESULT	EVALUATION	ATTACHMENT	SERIES OF ME...
	1									
	2	Push / Print	MS08A	REO		1.00 Ω	> 199 Ω	✗		
	3	Push / Print	MS08A	RESO	1.00 MΩ		> 1.20 GΩ	✓		
	4	Push / Print	MS08A	RESO	1.00 MΩ		> 1.20 GΩ	✓		
	5	Push / Print	MS08A	U			0.1 V	✓		
	6	Push / Print	MS08A	U			0.1 V	✓		
	7	Push / Print	MS08A	U			0.1 V	✓		
	8	Push / Print	MS08A	U			0.1 V	✓		
	9	Push / Print	MS08A	U			0.1 V	✓		
	10	Push / Print	MS08A	U			0.1 V	✓		
	11	Push / Print	MS08A	U			0.1 V	✓		
	12	Push / Print	MS08A	U			0.1 V	✓		


From then on, measurements can be sent to the selected test object in the **IZYTRONIQ** at the push of a button on any device that is in push/print mode.

Once the respective measurement is complete, the display shows a push/print symbol  instead of the save symbol. Measured data is not saved on the test device in this operating mode and is instead transferred to the **IZYTRONIQ** by pressing the correct button (depending on the test device). This data is then shown as a table in the lower window. Users must select  to back up the transferred datasets once all push/print measurements are complete. This deactivates push/print mode. At the same time, all test steps are compiled as one push/print test and then shown in the index card "Tests". The individual measurements can be shown using the button  in the toolbar or by double-clicking on the push/print test. You can select  to return to the test view from the individual measurement view.

Push/print mode is deactivated by:

- Saving the measured data transferred by selecting 
- Cancelling the push/print measurement by selecting 

Functions of the toolbar

-  Save changes
-  Cancel editing
-  Manage attachments (add, display and delete a file/photo)

Video „Push & Print“

17 Sequence editor

The sequence editor is used to program individual test sequences. A test sequence consists of one or several test steps. In principle, the sequence editor can be used to create different types of test sequences.

Some test devices allow import of the sequences created in the sequence editor (PROFITEST, SECUTEST). Other test devices support computer-assisted remote testing (SECUTEST, SECULIFE). Alternatively, entirely computer-based sequences can be programmed that do not require a separate test device (testing conductors, fire extinguishers ...). The range of functions available in the connected test device is imported when the sequence editor's editing function starts.

Each test device has its own specific test steps. Therefore, the test device must be connected to the PC in order to create a test sequence.

If the user wishes to create an IZY sequence (see below), it is only necessary to connect a test device if device-specific test steps will be included in the IZY sequence. In this case, executing the sequences will require the use of these test devices. The IZY sequence only provides the sequence editor with the sequence steps that it requires.

Video „Sequencing for Profitest Prime with Sequence Editor“

Video „Sequencing for SECUTEST“

17.1 Sequence types

Test device sequences

These are test sequences that are created for a specific type of test device and that will only run on these devices, or alternatively remote controlled by **IZYTRONIQ**. Here, a distinction is made according to:

- **Variable device sequences:** The sequences can be created using the sequence editor, then modified and transferred to a suitable test device.
- **Factory sequences:** These are pre-set test sequences whose process and parameters cannot be changed and that are configured as factory settings. However, the sequences can be duplicated and then saved and edited as variable device sequences.

The **IZYTRONIQ** can transfer variable device sequences and factory sequences to suitable test devices.

IZY sequence

The restricted scope of functions for test device sequences can be combined with many other test steps within an IZY sequence. Besides the device-specific functions, the following IZY sequence test steps are then available to users.

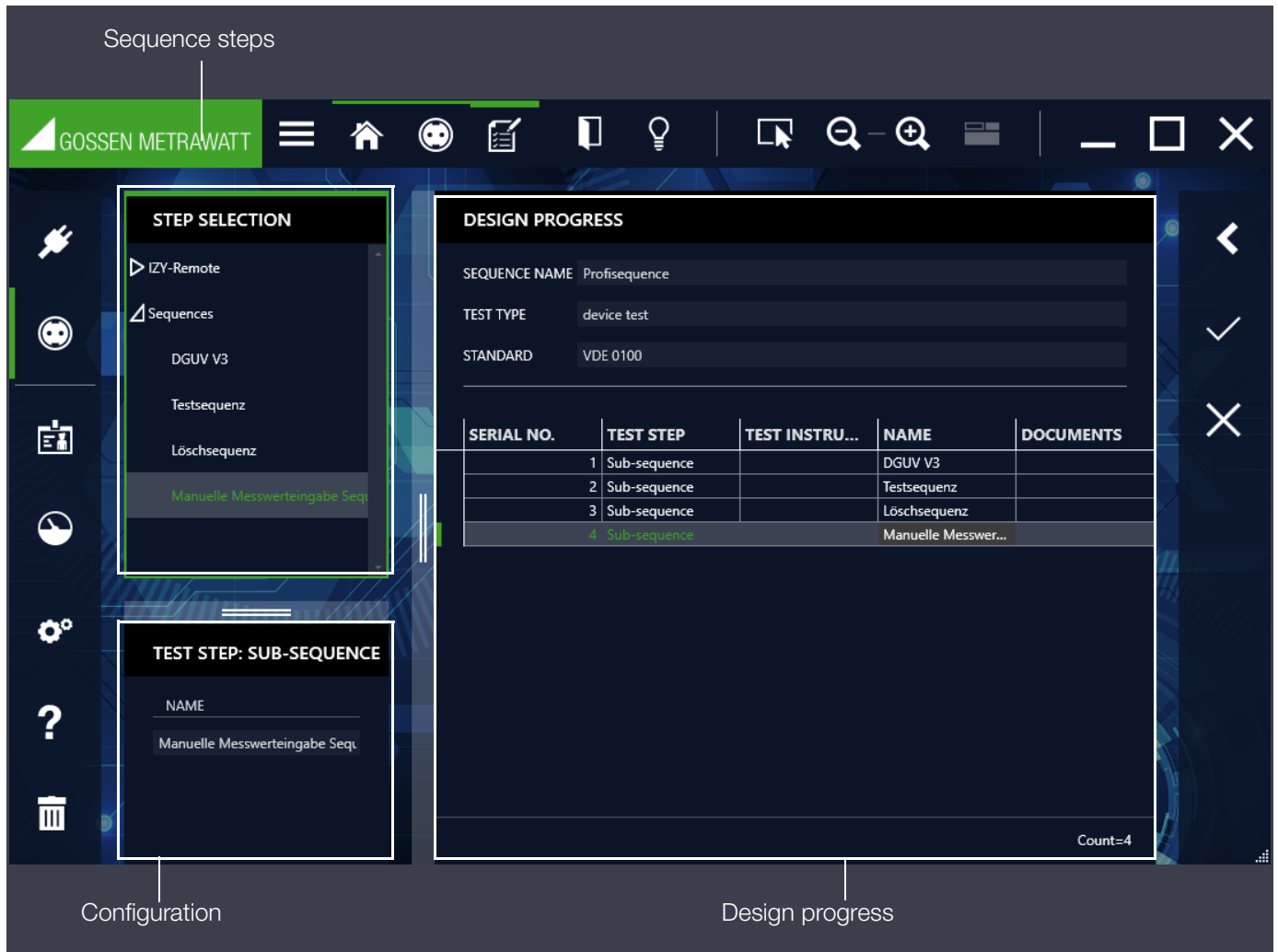
- Manual input
- Push/print
- Visual inspection
- Test instruction

IZY sequences can only be executed in the **IZYTRONIQ**. They may contain steps from device sequences and will then control the test device in remote mode, whereby the test device only provides the measured values. Display and control are managed via the **IZYTRONIQ**. This means that a help image can be added to each test step.

17.2 Structure and operation of the sequence editor

The sequence editor consists of three parts:

1. Top-left window: List of the available sequence steps: This shows the sequence steps that can be used to create the sequence, depending on the connected devices and type of sequence (IZY/device sequence).
2. Bottom-left window: Configuration of the sequence step: The configuration and parameterization options for the selected step are offered here.
3. Right-hand window: Display of design progress. This section shows a list with the current sequence progress.



Attention!

The sequences and/or the individual sequence steps may only be created by a **qualified electrician** or under the supervision or instruction of a qualified electrician by means of the sequence editor. GMC-I Messtechnik GmbH assumes no liability for sequences created by unqualified persons!



Attention!

Applying line voltage to the test socket of a SECUTEST or SECULIFE test instrument as well as a function test are only permitted if the DUT has passed all **safety test steps** beforehand! Depending on the safety class of the DUT, this means that visual inspection, protective conductor resistance and insulation resistance measurement must have been passed successfully.



Attention!

When creating the sequence steps, please observe that the limit values entered always comply with the currently applicable standard!

Procedure to create a sequence

- ▶ Select the “PORTABLE OBJECTS” or “STATIONARY OBJECTS” menu.
- ▶ Select the menu “SEQUENCES”.
- ▶ Create a new sequence by selecting .
- ▶ Enter the following parameters: SEQUENCE NAME, TEST TYPE, STANDARD and FOR DEVICE, and then select “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 last settings .
- ▶ Mark the sequence that you want to edit.
- ▶ Open the sequence editor .
- ▶ Select a sequence step from the step selection window.
- ▶ Move it to the design progress window by drag-and-drop. Now you will see all options to configure the selected step in the configuration window. This step will be shown in red lettering and the relevant fields will be marked with an error symbol until the step has been correctly configured. The sequence step is completed by filling out these fields. Now a new step can be added to the sequence by drag-and-drop. In this step sequence, the following operations can be executed in the design progress window:
- ▶ Save the test sequence by selecting .

Functions of the toolbar in the DESIGN PROGRESS window

- Save the test sequence
- Cancel editing
- Delete test step: The selected test step is deleted
- Move the selected test step upward
- Move the selected test step downward
- Back to the sequence manager
- Manage attachments (add, display and delete a file/photo)

This window is a list, so it is subject to the functions of the list view. The list symbols are also enabled in the toolbar; refer to “Lists”. These functions apply only to the list view.

17.3 Step types in a sequence

The various sequence steps are offered in order to create a test sequence. They depend on the connected test device and the selected sequence type (device/IZY sequence). The sequence steps can be divided into the following types:

Measurements (analyzed automatically)

These sequence steps are measurements that run on the test device. They require one or several thresholds. The measurement can be analyzed automatically by comparing the measured values with these thresholds. This step type can be used in device sequences and in IZY sequences with a connected test device.



Attention!

Please observe the operating instructions of the respective test instrument.

User-analyzed measurements

Like measurements with automatic analysis, the measurements run on the test device in these sequence steps. However, they do not require thresholds, as the user conducts analysis at the end. This sequence step can also be used in device sequences and in IZY sequences with a connected test device.

Manual input

This sequence step does not require a test device. An input screen is created in which the measurement task is described and a field is shown for manual entry of the measured value. The measured value can be analyzed automatically by configuring the sequence step with a threshold and an analysis criterion. This sequence step can only be used in IZY sequences.

Checks

This sequence step can be used to conduct checks in the connected test device that require a positive result in order to progress to the following steps. The next step will not be executed in the case of a negative result. However, users can configure manual skip or repeat check functions. The sequence step can be used in device sequences and in IZY sequences with a connected test device.

- **Probe check for probe connector P1:** Please perform a probe check after each test.

If probe P1 is used in a test sequence, it is imperative that a test step „probe check“ with PROBE: „Probe connector P1“ be performed in the corresponding test sequence. Background: In addition to assuring that a probe is connected to probe connector P1, the probe check verifies at connector P1 as to whether the probe fuse is in faultless condition.



Attention!

If there is a fuse defect in test probe P1 after having started the test, all subsequent measurements which are performed with this measurement path are erroneously rated as good!

- **Fuse check AP*** (for test instruments with application part jacks)

If the AP jacks are used in a test sequence (regardless of whether the connections are used for measuring or for implementing test condition „AP > PE“ (application part to earth)), it is necessary to perform an additional test step „fuse check AP“ for verification purposes. This test step is to ensure that the two AP fuses are faultless.



Attention!

Performing measurements for which AP connections are used, while one or both AP fuses are faulty, may lead to incorrect measured values.

Visualized checks

This sequence step can be used to conduct checks in the connected test device that may have several prescribed results. Users specify which results are required to pass the check during configuration of the sequence step. The sequence step can be used in device sequences and in IZY sequences with a connected test device.

Trigger time

This sequence step triggers a test procedure for PRCDs in the connected test device. The measured value can be analyzed automatically by configuring the sequence step with a threshold, analysis criterion and display texts. The sequence step can be used in device sequences and in IZY sequences with a connected test device.

Visual inspection

This sequence step relates to device sequences in the test device or IZY sequences in the **IZYTRONIQ**. It shows several analyzable visual inspection questions – that can be defined during configuration of the step – which the tester must answer when performing the step. This step can be used in a device sequence and in an IZY sequence.

Test instruction

This sequence step relates to device sequences in the test device or IZY sequences in the **IZYTRONIQ**. It issues an alert that must be confirmed by the tester when performing the step. This step can be used in a device sequence and in an IZY sequence.

Push/print

This sequence step switches all connected test devices to PUSH/PRINT mode. This means that tests that have been performed can be transferred from the test devices to **IZYTRONIQ** at the push of a button and then saved there. This step type can only be used in an IZY sequence with connected test device/s.

Subsequenz

A sequence can be designed modular. To this, repeatedly occurring test steps can be integrated into one subsequence, which can be embedded into another sequence, if required.

18 Automatic process control for a test – remote function

Automatic test processes can be executed with the **IZYTRONIQ** in the index card for tests in the detailed view. A sequence is required in order to execute this kind of process (refer to “IZY sequence”).

The following options are available in addition to the device test processes:

- Manual input
- Push/print
- Visual inspection
- Test instruction

18.1 Processes without test devices

In order to conduct automated process control, you require an IZY remote sequence.

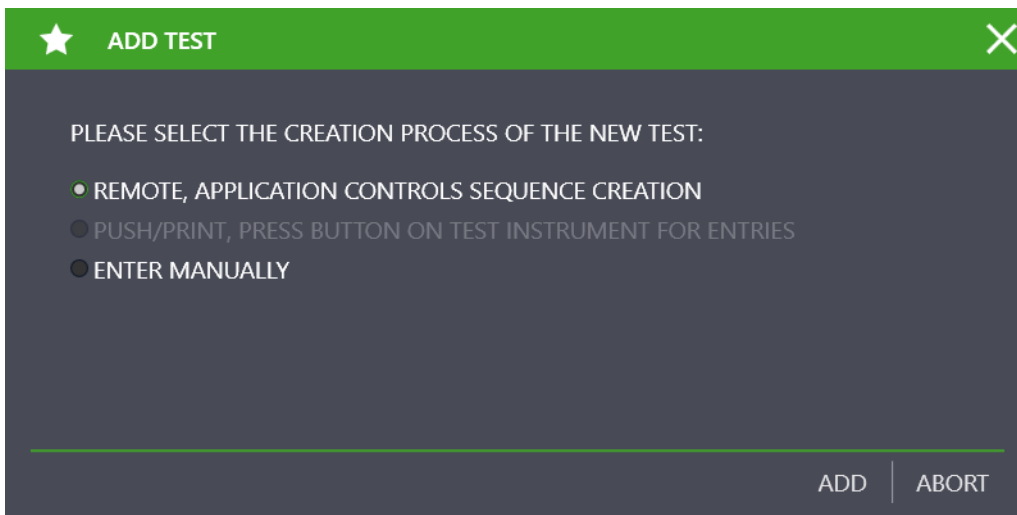
The following condition must be satisfied:

- At least one IZY remote sequence exists.
- The IZY remote sequence is assigned to the test object in the index card.

Procedure:

- ▶ Select portable or stationary objects.
- ▶ Select the menu “INPUT, LIST, CHANGE”
- ▶ Select the relevant test object in the tree view.
- ▶ Select the index card for tests in the tree view.
- ▶ Select the symbol for ★ “ADD TEST” in the toolbar.

This opens the drop-down menu “ADD TEST”:



- ▶ Select “REMOTE, APPLICATION CONTROLS SEQUENCE CREATION”
- ▶ Select ADD to confirm.

18.2 Processes with remote steps

Some test devices have a remote control function. This is used by **IZYTRONIQ** to send the test device a control command that then executes the selected measurement.

- The test device is connected with the PC by USB or Bluetooth interface.
- The test device is shown in the dashboard under "TEST DEVICE MANAGEMENT".
- The test device must support the remote function (e.g. test devices SECUTEST, SECULIFE).



Attention!

A CPU operating at full capacity may cause data loss if measured values are transmitted simultaneously (polling). A worst case, that is possibly relevant, may not be recorded as a consequence, which, in turn, may lead to a wrong test result. Any programs which are running in the background and stressing the CPU excessively should therefore be deactivated during remote operation if possible.



Attention!

Only start the measurements at your test instrument if you have visual contact with the DUT and the test instrument. Do not apply line voltage to the test socket of your SECUTEST or SECULIFE test instrument unless the surroundings are protected.

18.3 Processes with push/print steps

Some test devices and multimeters support a push/print function. The sequence editor can be used to insert the test steps for pushed/print into the overall process.

Where push/print test steps are included in the process, the program checks whether a push/print-capable test device is connected to the interface before executing the respective push/print step.

- The test device is connected with the PC by USB or Bluetooth interface.
- The test device is shown in the dashboard under "TEST DEVICE MANAGEMENT".
- The test device must support the remote function (e.g. test devices PROFITEST PRIME, METRAHIT IM XTRA, SECUTEST, SECULIFE).

19 Working in multi-user mode (floating license)

An **IZYTRONIQ** floating license model means defining a maximum number of users that are permitted to access the same database simultaneously. Hence, the **IZYTRONIQ** floating license model differs from the workstation-based license model, in which the workstation license is coupled with the hardware. In the concurrent user license model, the software itself can be installed on an infinite number of computers. A central server manages the licenses, which are also called floating licenses or network licenses. The server registers the number of currently issued licenses and grants to each eligible user the right to access the database in principle. But once all licenses have been issued, an additional, competing user must wait until another user ends a session, freeing up a license to be used elsewhere.

In other words, the software for a floating license with five concurrent users can be used by more than five users, but no more than five users can access the software simultaneously at any time.

20 Data replication using the server

Data replication describes multiple saving of the same data at different locations and the downstream synchronization of these data sources. In general, **IZYTRONIQ ENTERPRISE Ultimate** replication is used to make data available both on- and offline at several locations. Here, the user can transfer a subset of the main **IZYTRONIQ ENTERPRISE Premium** database to a local database or notebook/tablet and then work with this data, even when offline. The data collected locally can be synchronized with the main database at a later stage. When working in a larger testing team, the interaction between **IZYTRONIQ ENTERPRISE Premium** and **IZYTRONIQ ENTERPRISE Ultimate** ensures that data conflicts are largely prevented, and that they are detected when the data is transferred back at the latest.

21 Editing report templates

21.1 Miscellaneous

The report templates in **IZYTRONIQ** are used to create test reports from the collected tests. They include individual and batch records, which mainly differ in terms of the datasets that are used.

Here, individual records are created for individual tests of one device (stationary or portable), and they exclusively contain the data from this test. In addition to the details of the test in the test steps, this also includes the device details and general information about the customer.

In contrast, batch records can always contain several tests. These tests may be assigned to different devices, although they must be located under the customer's same main device in the e-tree. For instance, it is possible to create a record of all tests of a facility or machine for stationary devices, even if individual distributors, electric circuits, measuring points and suchlike were recorded and tested separately.

21.2 Object, i.e. template types

The object types or template types in template management determine where a template can be used and which data is collected and prepared for the record. These types are formed based on the possible combinations of the properties of device type, record type (individual record or batch record) and with or without device hierarchy,

The available device types (portable) are devices and medical devices; the available device types (stationary) are facilities and machines.

Given that portable devices cannot be modelled in a hierarchy, the option "Incl. hierarchy" does not apply in this case. In practical terms, this means that the device details for each parent device are listed up to the actually tested device, and the location information is then hidden.

The following object types can be selected in template management:

Designation	Device type	Individual or batch report	Incl. hierarchy?
Portable devices			
Device (for testing)	Device	Individual report	No
Device (for device container)	Device	Batch report	No
Medical device (for testing)	Med. Device	Individual report	No
Medical device (for test container)	Med. device	Batch report	No
Stationary devices			
Facility (for testing)	Facility	Individual report	No
Facility (for test container)	Facility	Batch report	No
Facility (for testing) (incl. device hierarchy)	Facility	Individual report	Yes
Facility (for test container) (incl. device hierarchy)	Facility	Batch report	Yes
Machine (for testing)	Machine	Individual report	No
Machine (for test container)	Machine	Batch report	No
Machine (for testing) (incl. device hierarchy)	Machine	Individual report	Yes
Machine (for test container) (incl. device hierarchy)	Machine	Batch report	Yes

Two standard templates are available for each of these template types in the standard scope of delivery. They differ in terms of their format (portrait and landscape). In this regard, showing the test steps in landscape format allows the user to add images to each test step. The data structure provided is identical in all cases.

Video „Editable test report with photo documentation“

21.3 Report template management

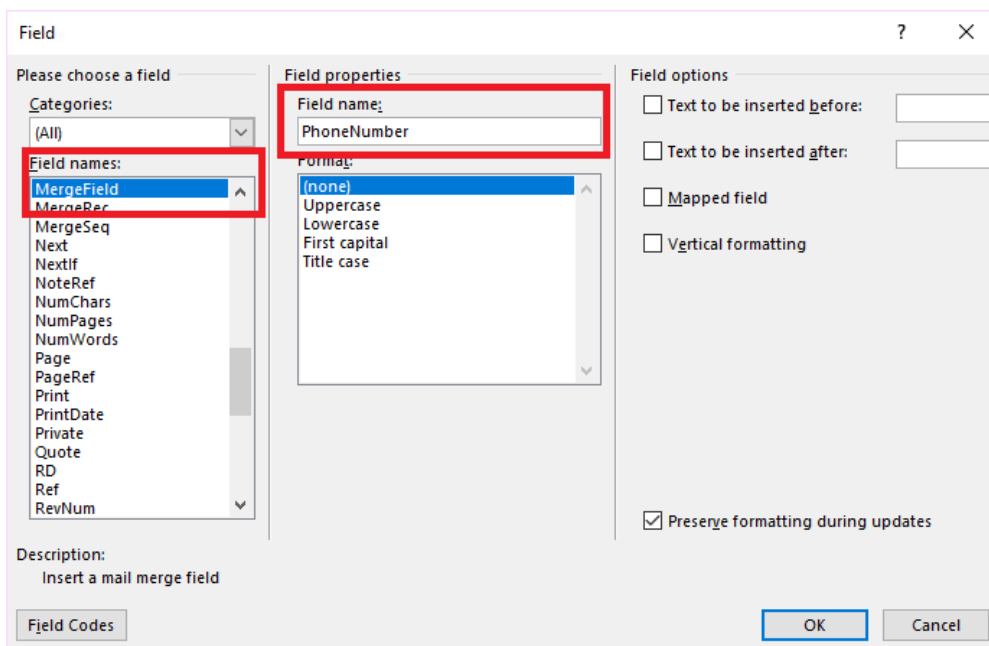
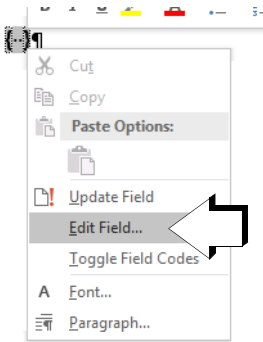
The screenshot displays the 'REPORT TEMPLATES' management window. At the top, there is a header with the company name 'GOSSEN METRAWATT' and a language dropdown set to 'English'. Below the header is a table of report templates. The table has the following columns: 'MARK ALL EN', 'DESIGNATION', 'DESCRIPTION', 'DEVICE TYPE', 'PATH', and 'PROTECTION'. The 'MARK ALL EN' column contains checkboxes, with the second row checked. The 'DESIGNATION' column lists various template names, some ending in ellipses. The 'DEVICE TYPE' column lists 'Device (for test)' and 'Medical device (for b...'. The 'PATH' column shows '...' and 'C:\ProgramDa...'. The 'PROTECTION' column shows lock icons. On the right side of the table, there are four red numbered icons: 1 (duplicate), 2 (export), 3 (open in Word), and 4 (import). At the bottom right of the window, it says 'Count=10'.

MARK ALL EN	DESIGNATION	DESCRIPTION	DEVICE TYPE	PATH	PROTECTION
<input type="checkbox"/>	Device Testing		Device (for test)	...	🔒
<input checked="" type="checkbox"/>	Device Testingcont...		Device (for test cont:	...	🔒
<input type="checkbox"/>	Medical device Tes...		Medical device (for b	...	🔒
<input type="checkbox"/>	Medical device Tes...		Medical device (for b	...	🔒
<input type="checkbox"/>	Device Testing (Lan...		Device (for test)	...	🔒
<input type="checkbox"/>	Device Testingcont...		Device (for test cont:	...	🔒
<input type="checkbox"/>	Medical device Tes...		Medical device (for b	...	🔒
<input type="checkbox"/>	Medical device Tes...		Medical device (for b	...	🔒
<input type="checkbox"/>	Device Testingcont...		Device (for test conti	C:\ProgramDa: ...	🔒
<input checked="" type="checkbox"/>	Device Testingcontair		Device (for test conti	C:\ProgramDa: ...	🔒

Users can duplicate (1), export (2) and open standard reports directly in Word (3) in template management in order to adapt the test report templates to suit their wishes. In addition, the button “...” (4) is used to import a Word file directly as a template. To edit the template, users are advised to give the templates a suitable name immediately after duplication and to export the actual Word document to a folder in which it is easy to find (e.g. own Desktop). Duplication, renaming and loading a template in **IZYTRONIQ** are actions that must be saved by selecting ✓.

21.4 Basic functionality

To create test reports, IZYTRONIQ uses the Mail Merge feature by MICROSOFT® WORD. In this regard, template management has a data structure that is prepared by IZYTRONIQ and transferred to the Word document, regardless of the object type. So-called merge fields can be used to position the values from the transferred objects in the template for downstream use. To do this, users press the keyboard shortcut CTRL+F9 to create a new field, then right click on the field and select “Edit field” to make the necessary changes.



The field type “Merge field” is then set in the subsequent dialog box, and the name of the field is added on the right. The data structure provided by IZYTRONIQ prescribes which field names can be used.

This data structure consists of several objects. The area in which the object values can be used is delimited by two merge fields. They are called “TableStart: object name” and “TableEnd: object name” and are no longer visible when the document is completed.

The following subsection describes the precise object structure and the available fields.

Given the extensive data structure, it is advisable to use the available standard templates as a starting point for customization or at least to review functioning examples.

21.5 Data schema

Name	Type	Description
Data	Object	
- Container	Object	
- - ContainerItems	Object	
- - - Date	Date	Report created on
- - - ID	Text	Key for the created container
- - - QRCode	Image	QR code to identify the test
- - - Logo	Image	Company logo from settings
- - - Signature	Image	Signature
- - - Kind	Text	Type of test
- - - Report number	Text	Number of the report
- - - TestingDate	Date	Test date
- - - TesterDisplayName	Text	Name of the tester
- - - CreatedByUserName	Text	Name of the user who created the test
- - - ImportDate	Date	Date of import
- - - ImporterName	Text	Name of the importer
- - - Comment	Text	Comment on the test
- - - IsContainer	Text	Designation of whether the report is created for a container
- - - Locked	Text	Designation of whether the test is locked
- - - Name	Text	Name of the test
- - - TestingDeviceType	Text	Type of test device
- - - ResultString	Text	Result of the test
- - - ContactDisplayName	Text	Name of the customer contact
- - - Department	Text	Device department
- - - CostCenter	Text	Device cost center
- - - DeviceNumber	Text	Device serial number
- - - DeviceDescription	Text	Description of the device
- - - DeviceManufacturer	Text	Manufacturer of the device
- - - DeviceType	Text	Device type
- - - DeviceNominalVoltage	Text	Device voltage
- - - DeviceNominalCurrent	Text	Current strength for the device
- - - DevicePower	Text	Power of the device
- - - DevicePowerFactor	Text	Power factor for the device
- - - CustomerName	Text	Name of the customer
- - - CustomerStreet	Text	Street where customer is located
- - - CustomerPostalCode	Text	Postal code of the customer
- - - CustomerCity	Text	Town/city where the customer is located
- - - CustomerCountry	Text	Country where the customer is located
- - - ContractorName	Text	Name of the contractual partner
- - - ContractorStreet	Text	Street where the contractual partner is located
- - - ContractorPostalCode	Text	Postal code of the contractual partner
- - - ContractorCity	Text	Town/city where the contractual partner is located
- - - ContractorCountry	Text	Country where the contractual partner is located
- - - Property	Text	Property where the device is located
- - - Building	Text	Building where the device is located
- - - Level	Text	Level where the device is located
- - - Room	Text	Room where the device is located
- - - InspectionInterval	Text	Test interval
- - - NextInspection	Text	Next test
- - - DevicesWithTestings	Object	Tests in the selection, grouped according to device
- - - - Testing	Object	
- - - - - Items	Object	Object to model an individual test
- - - - - - Date	Date	Report created on

Name	Type	Description
- - - - - ID	Text	Name of the test
- - - - - QRCode	Image	QR code to identify the test
- - - - - Logo	Image	Company logo from settings
- - - - - Signature	Image	Signature
- - - - - Kind	Text	Type of test
- - - - - ReportNumber	Text	Number of the report
- - - - - TestingDate	Date	Test date
- - - - - TesterDisplayName	Text	Name of the tester
- - - - - CreatedByUserName	Text	Name of the user who created the test
- - - - - ImportDate	Date	Date of import
- - - - - ImporterName	Text	Name of the importer
- - - - - Comment	Text	Comment on the test
- - - - - IsContainer	Text	Designation of whether the test is a container
- - - - - Locked	Text	Designation of whether the test is locked
- - - - - Name	Text	Name of the test
- - - - - TestingDeviceType	Text	Type of test device
- - - - - Result	Text	Result of the test
- - - - - ResultString	Text	Results string for the test
- - - - - ContactDisplayName	Text	Name of the customer contact
- - - - - Department	Text	Device department
- - - - - CostCenter	Text	Device cost center
- - - - - DeviceName	Text	Description of the device
- - - - - DeviceId	Text	Device code
- - - - - ParentDeviceName	Text	Designation of the parent device
- - - - - ParentDeviceId	Text	Code of the parent device
- - - - - DeviceNumber	Text	Device serial number
- - - - - DeviceDescription	Text	Description of the device
- - - - - DeviceManufacturer	Text	Manufacturer of the device
- - - - - DeviceType	Text	Type of device
- - - - - DeviceNominalVoltage	Text	Device voltage
- - - - - DeviceNominalCurrent	Text	Current strength for the device
- - - - - DevicePower	Text	Power of the device
- - - - - DevicePowerFactor	Text	Power factor for the device
- - - - - InspectionInterval	Text	Test cycle
- - - - - NextInspection	Date	Next test
- - - - - Location	Object	Location of the device – is blendet out, if report is created with command structure
- - - - - Property	Text	Property where the device is located
- - - - - Building	Text	Building where the device is located
- - - - - Level	Text	Level where the device is located
- - - - - Room	Text	Room where the device is located
- - - - - CustomerName	Text	Name of the customer
- - - - - CustomerStreet	Text	Street where customer is located
- - - - - CustomerPostalCode	Text	Postal code of the customer
- - - - - CustomerCity	Text	Town/city where the customer is located
- - - - - CustomerCountry	Text	Country where the customer is located
- - - - - ContractorName	Text	Name of the contractual partner
- - - - - ContractorStreet	Text	Street where the contractual partner is located
- - - - - ContractorPostalCode	Text	Postal code of the contractual partner
- - - - - ContractorCity	Text	Town/city where the contractual partner is located
- - - - - ContractorCountry	Text	Country where the contractual partner is located
- - - - - DeviceDetails	Object	List of Device objects. consists of several devices, if report is created with command structure
- - - - - DetailsNonStationaryDevice	Object	Device object if the device is portable
- - - - - DeviceName	Text	Name of the device
- - - - - DeviceId	Text	Device code
- - - - - ParentDeviceName	Text	Name of the parent device
- - - - - ParentDeviceId	Text	Code of the parent device
- - - - - DeviceNumber	Text	Device serial number
- - - - - DeviceDescription	Text	Description of the device
- - - - - DeviceManufacturer	Text	Manufacturer of the device

Name	Type	Description
- - - - - DeviceType	Text	Device type
- - - - - ProtectionClass	Text	Protection class
- - - - - Voltage	Text	Voltage
- - - - - Current	Text	Current strength
- - - - - Power	Text	Power
- - - - - PowerFactor	Text	Power factor
- - - - - Remark	Text	Comment
- - - - - DetailsMedicalDevice	Object	Device object if the device is a medical device
- - - - - DeviceName	Text	Name of the device
- - - - - DeviceId	Text	Device code
- - - - - ParentDeviceName	Text	Name of the parent device
- - - - - ParentDeviceId	Text	Code of the parent device
- - - - - DeviceNumber	Text	Device serial number
- - - - - DeviceDescription	Text	Description of the device
- - - - - DeviceManufacturer	Text	Manufacturer of the device
- - - - - DeviceType	Text	Device type
- - - - - ProtectionClass	Text	Protection class
- - - - - Voltage	Text	Voltage
- - - - - Current	Text	Current strength
- - - - - Power	Text	Power
- - - - - PowerFactor	Text	Power factor
- - - - - Remark	Text	Comment
- - - - - TrackingNumber	Text	Tracking number
- - - - - Responsible	Text	Responsible party
- - - - - ApplicationPartCountB	Text	Number AWT B
- - - - - ApplicationPartCountBF	Text	Number AWT BF
- - - - - ApplicationPartCountCF	Text	Number AWT CF
- - - - - CeMark	Text	CE mark (number)
- - - - - DetailsStationaryFacility	Object	Device object if the device is a facility
- - - - - DeviceName	Text	Name of the device
- - - - - DeviceId	Text	Device code
- - - - - ParentDeviceName	Text	Name of the parent device
- - - - - ParentDeviceId	Text	Code of the parent device
- - - - - DeviceNumber	Text	Device serial number
- - - - - DeviceDescription	Text	Description of the device
- - - - - DeviceManufacturer	Text	Manufacturer of the device
- - - - - DeviceType	Text	Device type
- - - - - NetSystem	Text	Network system
- - - - - NetVoltage	Text	Network voltage
- - - - - NetFrequency	Text	Network frequency
- - - - - NominalCurrent	Text	Nominal current
- - - - - Characteristic	Text	Characteristic
- - - - - VnbEvu	Text	Distribution network operator
- - - - - LeadTypeId	Text	Lead type
- - - - - LeadCount	Text	Number of leads
- - - - - CrossSection	Text	Cross-section
- - - - - Remark	Text	Comment
- - - - - DetailsStationaryMachine	Object	Device object if the device is a machine
- - - - - DeviceName	Text	Name of the device
- - - - - DeviceId	Text	Device code
- - - - - ParentDeviceName	Text	Name of the parent device
- - - - - ParentDeviceId	Text	Code of the parent device
- - - - - DeviceNumber	Text	Device serial number
- - - - - DeviceDescription	Text	Description of the device
- - - - - DeviceManufacturer	Text	Manufacturer of the device
- - - - - DeviceType	Text	Device type
- - - - - NominalVoltage	Text	Nominal voltage
- - - - - NominalCurrent	Text	Nominal current
- - - - - PowerFactor	Text	Power factor
- - - - - NetSystem	Text	Network system

Name	Type	Description
- - - - - - - - NominalPower	Text	Nominal power
- - - - - - - - Characteristic	Text	Characteristic
- - - - - - - - LeadInType	Text	Lead type
- - - - - - - - LeadCount	Text	Number of leads
- - - - - - - - CrossSection	Text	Cross-section
- - - - - - - - Remark	Text	Comment
- - - - - - - - DetailsStationaryDistributor	Object	Device object if the device is a distributor
- - - - - - - - DeviceName	Text	Name of the device
- - - - - - - - DeviceId	Text	Device code
- - - - - - - - ParentDeviceName	Text	Name of the parent device
- - - - - - - - ParentDeviceId	Text	Code of the parent device
- - - - - - - - DeviceNumber	Text	Device serial number
- - - - - - - - DeviceDescription	Text	Description of the device
- - - - - - - - DeviceManufacturer	Text	Manufacturer of the device
- - - - - - - - DeviceType	Text	Device type
- - - - - - - - NetSystem	Text	Network system
- - - - - - - - ProtectionClass	Text	Protection class
- - - - - - - - ProtectionKind	Text	Type of protection
- - - - - - - - Remark	Text	Comment
- - - - - - - - DetailsStationaryRcd	Object	Device object if the device is an RCD
- - - - - - - - DeviceName	Text	Name of the device
- - - - - - - - DeviceId	Text	Device code
- - - - - - - - ParentDeviceName	Text	Name of the parent device
- - - - - - - - ParentDeviceId	Text	Code of the parent device
- - - - - - - - DeviceNumber	Text	Device serial number
- - - - - - - - DeviceDescription	Text	Description of the device
- - - - - - - - DeviceManufacturer	Text	Manufacturer of the device
- - - - - - - - DeviceType	Text	Device type
- - - - - - - - RcdType	Text	RCD type
- - - - - - - - MeasDiffCurrent	Text	Measure differential current
- - - - - - - - Characteristic	Text	Characteristic
- - - - - - - - PoleCount	Text	Number of poles
- - - - - - - - NominalCurrent	Text	Nominal current
- - - - - - - - OvrCurrProtCharacteristic	Text	Overcurrent protection (RCBO)
- - - - - - - - LeadType	Text	Lead type (RCBO)
- - - - - - - - LeadCount	Text	Number of leads (RCBO)
- - - - - - - - CrossSection	Text	Lead cross-section (RCBO)
- - - - - - - - Remark	Text	Comment
- - - - - - - - DetailsStationaryRcm	Object	Device object if the device is an RCM
- - - - - - - - DeviceName	Text	Name of the device
- - - - - - - - DeviceId	Text	Device code
- - - - - - - - ParentDeviceName	Text	Name of the parent device
- - - - - - - - ParentDeviceId	Text	Code of the parent device
- - - - - - - - DeviceNumber	Text	Device serial number
- - - - - - - - DeviceDescription	Text	Description of the device
- - - - - - - - DeviceManufacturer	Text	Manufacturer of the device
- - - - - - - - DeviceType	Text	Device type
- - - - - - - - RcmType	Text	RCM type
- - - - - - - - MeasDiffCurrent	Text	Measure differential current
- - - - - - - - Characteristic	Text	Characteristic
- - - - - - - - PoleCount	Text	Number of poles
- - - - - - - - NominalCurrent	Text	Nominal current
- - - - - - - - AlarmThreshold	Text	Alarm threshold (mA)
- - - - - - - - Remark	Text	Comment
- - - - - - - - DetailsStationaryRcd	Object	Device object if the device is an IMD
- - - - - - - - DeviceName	Text	Name of the device
- - - - - - - - DeviceId	Text	Device code
- - - - - - - - ParentDeviceName	Text	Name of the parent device
- - - - - - - - ParentDeviceId	Text	Code of the parent device

Name	Type	Description
- - - - - DeviceNumber	Text	Device serial number
- - - - - DeviceDescription	Text	Description of the device
- - - - - DeviceManufacturer	Text	Manufacturer of the device
- - - - - DeviceType	Text	Device type
- - - - - ImdType	Text	IMD type
- - - - - MeasureVoltage	Text	Measured voltage
- - - - - WarningValue	Text	Value at which a warning is triggered
- - - - - AlarmValue	Text	Value at which an alarm is triggered
- - - - - MeasureCurrent	Text	Measured current
- - - - - NetNominalVoltage	Text	Network nominal voltage
- - - - - Remark	Text	Comment
- - - - - DetailsStationaryCircuit	Object	Device object if the device is an electric circuit
- - - - - DeviceName	Text	Name of the device
- - - - - DeviceId	Text	Device code
- - - - - ParentDeviceName	Text	Name of the parent device
- - - - - ParentDeviceId	Text	Code of the parent device
- - - - - DeviceNumber	Text	Device serial number
- - - - - DeviceDescription	Text	Description of the device
- - - - - DeviceManufacturer	Text	Manufacturer of the device
- - - - - DeviceType	Text	Device type
- - - - - LeadType	Text	Lead type
- - - - - LeadCount	Text	Number of leads
- - - - - CrossSection	Text	Lead cross-section
- - - - - Characteristic	Text	Characteristic
- - - - - NominalCurrent	Text	Nominal current
- - - - - PoleCount	Text	Number of poles
- - - - - Remark	Text	Comment
- - - - - DetailsStationaryPaBar	Object	Device object if the device is an equipotential bonding rail
- - - - - DeviceName	Text	Name of the device
- - - - - DeviceId	Text	Device code
- - - - - ParentDeviceName	Text	Name of the parent device
- - - - - ParentDeviceId	Text	Code of the parent device
- - - - - DeviceNumber	Text	Device serial number
- - - - - DeviceDescription	Text	Description of the device
- - - - - DeviceManufacturer	Text	Manufacturer of the device
- - - - - DeviceType	Text	Device type
- - - - - Remark	Text	Comment
- - - - - DetailsStationaryPaConductor	Object	Device object if the device is an equipotential bonding conductor
- - - - - DeviceName	Text	Name of the device
- - - - - DeviceId	Text	Device code
- - - - - ParentDeviceName	Text	Name of the parent device
- - - - - ParentDeviceId	Text	Code of the parent device
- - - - - DeviceNumber	Text	Device serial number
- - - - - DeviceDescription	Text	Description of the device
- - - - - DeviceManufacturer	Text	Manufacturer of the device
- - - - - DeviceType	Text	Device type
- - - - - LeadType	Text	Lead type
- - - - - CrossSection	Text	Cross-section
- - - - - LeadMaterial	Text	Number of leads
- - - - - Remark	Text	Comment
- - - - - DetailsStationaryGround	Object	Device object if the device is a ground connector
- - - - - DeviceName	Text	Name of the device
- - - - - DeviceId	Text	Device code
- - - - - ParentDeviceName	Text	Name of the parent device
- - - - - ParentDeviceId	Text	Code of the parent device
- - - - - DeviceNumber	Text	Device serial number
- - - - - DeviceDescription	Text	Description of the device
- - - - - DeviceManufacturer	Text	Manufacturer of the device
- - - - - DeviceType	Text	Device type

Name	Type	Description
- - - - - GroundType	Text	Ground connector type
- - - - - GroundComposition	Text	Ground properties
- - - - - Purpose	Text	Use
- - - - - Material	Text	Material
- - - - - GroundQuality	Text	Ground characteristics
- - - - - CrossSection	Text	Cross-section
- - - - - Remark	Text	Comment
- - - - - DetailsStationaryMeasurePoint	Object	Device object if the device is a measurement point
- - - - - DeviceName	Text	Name of the device
- - - - - DeviceId	Text	Device code
- - - - - ParentDeviceName	Text	Name of the parent device
- - - - - ParentDeviceId	Text	Code of the parent device
- - - - - DeviceNumber	Text	Device serial number
- - - - - DeviceDescription	Text	Description of the device
- - - - - DeviceManufacturer	Text	Manufacturer of the device
- - - - - DeviceType	Text	Device type
- - - - - Remark	Text	Comment
- - - - - DetailsStationaryWorkingFund	Object	Device object if the device is an item of equipment
- - - - - DeviceName	Text	Name of the device
- - - - - DeviceId	Text	Device code
- - - - - ParentDeviceName	Text	Name of the parent device
- - - - - ParentDeviceId	Text	Code of the parent device
- - - - - DeviceNumber	Text	Device serial number
- - - - - DeviceDescription	Text	Description of the device
- - - - - DeviceManufacturer	Text	Manufacturer of the device
- - - - - DeviceType	Text	Device type
- - - - - WorkingfundType	Text	Type of equipment
- - - - - ProtectionKind	Text	Type of protection
- - - - - ProtectionClass	Text	Protection class
- - - - - LeadType	Text	Lead type
- - - - - LeadCount	Text	Number of leads
- - - - - CrossSection	Text	Cross-section
- - - - - Remark	Text	Comment
- - - - - TestingDevices	Object	List of test devices used
- - - - - TestingDevices	Object	Test device object
- - - - - Description	Text	Description of the test device
- - - - - Manufacturer	Text	Manufacturer
- - - - - Type	Text	Type
- - - - - SerialNumber	Text	Serial number
- - - - - LastCalibration	Date	Date of most recent calibration
- - - - - CombinedTestingSteps	Object	List of test steps
- - - - - GenericNumber	Text	Sequential number of the test steps
- - - - - Description	Text	Designation
- - - - - Number	Text	Step number
- - - - - Type	Text	Type of test step
- - - - - TypeName	Text	Type name of the test step
- - - - - SequenceStepType	Text	Type of sequence step
- - - - - Criteria	Text	Criterion
- - - - - Minimum	Text	Minimum
- - - - - Maximum	Text	Maximum
- - - - - TestingDeviceType	Text	Type of test device
- - - - - Comment	Text	Comment on test step
- - - - - Result	Text	Result of the step
- - - - - ResultsBoolean	Text	Text "Wrong" if the result is not a Boolean value
- - - - - HasPassed	Text	Test step was passed: "True" or "False"
- - - - - Status	Text	Status of test step
- - - - - Beside Measures	Object	List of beside measures
- - - - - Name1	Text	Name of the first beside measure
- - - - - Value1	Text	Value of the first beside measure

Name	Type	Description
Name2	Text	Name of the second beside measure
Value2	Text	Value of the second beside measure
Parameters	Objekt	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	Objekt	List of images for the test step
AttachmentImage	Image	Image for the test step
CombinedTestingStepsWithImages	Objekt	List of test steps that contain images as separate entries
GenericNumber	Text	Sequential number of the test steps
Description	Text	Designation
Number	Text	Step number
Type	Text	Type of test step
TypeName	Text	Type name of the test step
SequenceStepType	Text	Type of sequence step
Criteria	Text	Criterion
Minimum	Text	Minimum
Maximum	Text	Maximum
TestingDeviceType	Text	Type of test device
Comment	Text	Comment on test step
Result	Text	Result of the step
ResultsBoolean	Text	Text "Wrong" if the result is not a Boolean value
HasPassed	Text	Test step was passed: "True" or "False"
Status	Text	Status of test step
Beside Measures	Objekt	List of beside measures
Name1	Text	Name of the first beside measure
Value1	Text	Value of the first beside measure
Name2	Text	Name of the second beside measure
Value2	Text	Value of the second beside measure
Parameters	Objekt	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	Objekt	List of images for the test step
AttachmentImage	Image	Image for the test step
Steps	Objekt	Simple list of test steps
Criteria	Text	Criterion
Minimum	Text	Minimum
Maximum	Text	Maximum
TestingDeviceType	Text	Type of test device
Type	Text	Type of test step
Result	Text	Result of the test step
HasPassed	Text	Test step was passed: "True" or "False"
SequenceStepType	Text	Type of sequence step
Images	Objekt	
Item	Image	Image for the test step
Questions	Objekt	Questions for visual inspections
Question	Text	Question
Result	Text	Response
SubTestings	Objekt	Where the test contains sub-tests, the fields are repeated at this point from "Testing" onwards (in practice, this is a purely theoretical case that is not covered by the standard templates)
TestingImages	Objekt	Images directly linked to the test
Images3Cols	Objekt	List of test images for which three images are shown per row.
Column1	Image	Image in the first column
Column2	Image	Image in the second column
Column3	Image	Image in the third column
Images5Cols	Objekt	List of test images for which five images are shown per row.

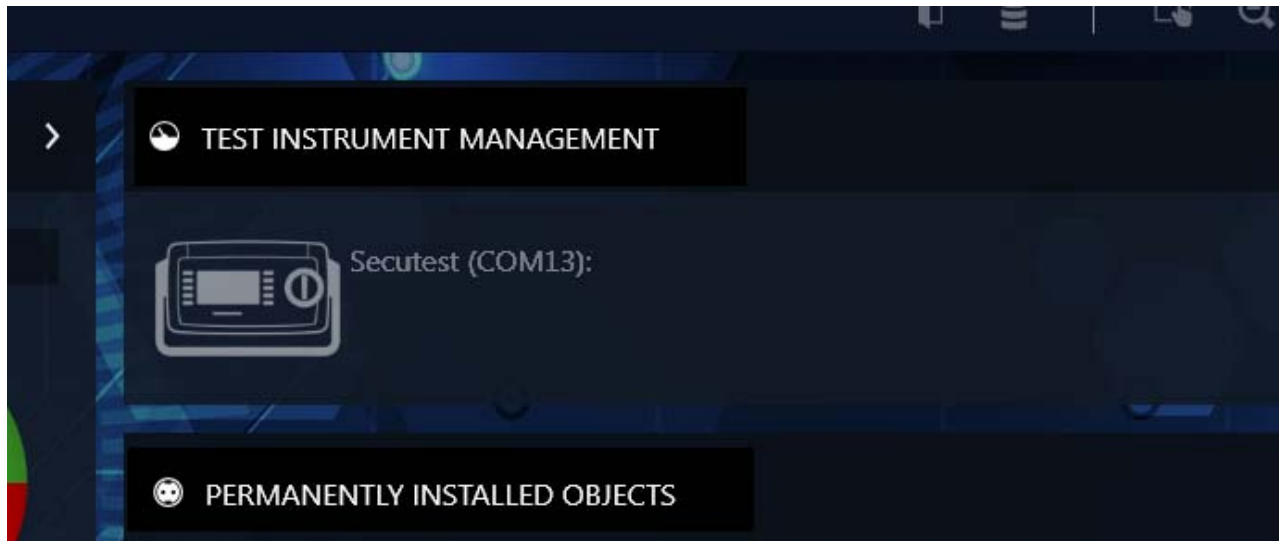
Name	Type	Description
- - - - - Column1	Image	Image in the first column
- - - - - Column2	Image	Image in the second column
- - - - - Column3	Image	Image in the third column
- - - - - Column4	Image	Image in the fourth column
- - - - - Column5	Image	Image in the fifth column
- - - TestingDevices	Object	List of test devices used
- - - - TestingDevice	Object	Test device object
- - - - - Description	Text	Description of the test device
- - - - - Manufacturer	Text	Manufacturer
- - - - - Type	Text	Type
- - - - - SerialNumber	Text	Serial number
- - - - - LastCalibration	Date	Date of most recent calibration
- - - Testings	Object	All tests in the selection, without grouping according to device. The object "Testing" is repeated here (see above)
- - - TestingSteps	Object	All tests steps of all tests in the selection as a flat list.
- - - - GenericNumber	Text	Sequential number of the test steps
- - - - Description	Text	Designation
- - - - Number	Text	Step number
- - - - Type	Text	Type of test step
- - - - TypeName	Text	Type name of the test step
- - - - SequenceStepType	Text	Type of sequence step
- - - - Criteria	Text	Criterion
- - - - Minimum	Text	Minimum
- - - - Maximum	Text	Maximum
- - - - TestingDeviceType	Text	Type of test device
- - - - Comment	Text	Comment on test step
- - - - Result	Text	Result of the step
- - - - ResultsBoolean	Text	Text "Wrong" if the result is not a Boolean value
- - - - HasPassed	Text	Test step was passed: "True" or "False"
- - - - Status	Text	Status of test step
- - - - SteplImages	Object	List of images for the test step
- - - - - AttachmentImage	Image	Image for the test step
- - - TestingStepsWithImages	Object	All tests steps of all tests in the selection are flat lists, where they contain images for the test steps as separate entries.
- - - - GenericNumber	Text	Sequential number of the test steps
- - - - Description	Text	Designation
- - - - Number	Text	Step number
- - - - Type	Text	Type of test step
- - - - TypeName	Text	Type name of the test step
- - - - SequenceStepType	Text	Type of sequence step
- - - - Criteria	Text	Criterion
- - - - Minimum	Text	Minimum
- - - - Maximum	Text	Maximum
- - - - TestingDeviceType	Text	Type of test device
- - - - Comment	Text	Comment on test step
- - - - Result	Text	Result of the step
- - - - ResultsBoolean	Text	Text "Wrong" if the result is not a Boolean value
- - - - HasPassed	Text	Test step was passed: "True" or "False"
- - - - Status	Text	Status of test step
- - - - SteplImages	Object	List of images for the test step
- - - - - AttachmentImage	Image	Image for the test step

22 SECUTEST/SECULIFE ST – first steps

The following devices are necessary to exchange data with **IZYTRONIQ**:



- **SECUTEST BASE** and **SECUTEST BASE10** with database extension Z853R.
- **SECUTEST PRO / SECULIFE ST BASE(25)**

The relevant test device must be connected with the PC using the USB slave. Once SECUTEST ... is switched on, **IZYTRONIQ** will automatically recognize the device.



If the device is not yet registered in test device management, the user is asked whether it should be saved automatically. The test device is now ready to share data with the **IZYTRONIQ**.

22.1 Creating a tree structure

To create test objects for the **SECUTEST...** / **SECULIFE...**, navigate to the menu  "PORTABLE OBJECTS" and select the function  "INPUT/CHANGE/LIST". There you will find a screen consisting of three windows arranged one above the other. You can enlarge and reduce the size of the windows by moving the upper, i.e. lower border that is marked by two short horizontal lines.

Upper window

- Left-hand side: E-TREE (electric tree)
- Right-hand side: Location tree

Central window: Detailed view of the master data for the test object

Lower window: List view of the objects

Electric tree

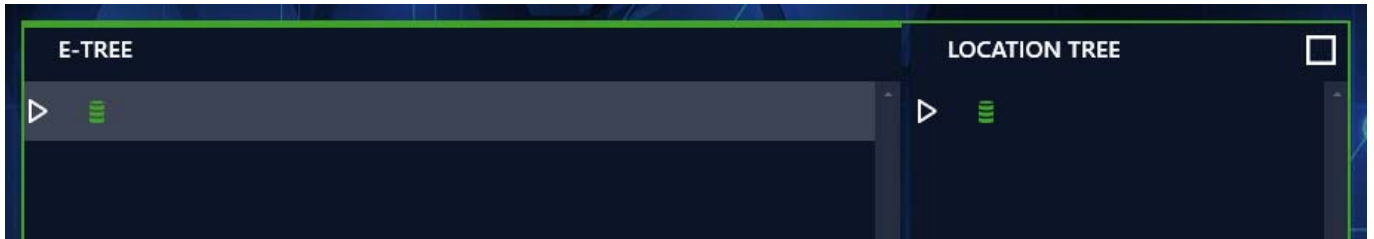
This is used to create, i.e. show customers and **portable** (possibly medical) **devices**. The **devices** must always be assigned to a customer and are all located on the same hierarchy level.

Location tree

This shows the locations to which devices from the electric tree can be assigned.

Active window

Each window is activated by selecting it. The active view is always shown with a green border. Within the border, the active sub-function is indicated by a bold green bar at the top.



Tree window with activated e-tree

Creating a new object

The following steps must be performed to create a new object:

1. Activate the electric tree.
2. Select the element under which you wish to create the new element.
3. Select ★“Create new element” from the toolbar on the right-hand side of the screen.
Alternatively, you can display the toolbar by right clicking on the mouse after selecting the element, and then select your operation by left clicking on the mouse.
4. A pop-up now opens in which you select the correct element type “NEW ELEMENT”.
The pop-up always shows all possible elements that can be created under the element shown in each case.
5. Select the number and ID of the new element.
The ID can also be assigned automatically, provided this function is enabled.
6. Select “CREATE”.
7. You can create additional elements by following the same instructions.
8. Complete the operation by selecting “CLOSE”.
9. Do not forget to select the uppermost symbol ✓ in the toolbar to save the new structure.

The same procedure is applied to create locations in the location tree.

Test objects can now be assigned to the locations by drag-and-drop.

Adding master data

You can add the master data once you have created all elements in the tree view. To do this, select the chosen element in the tree and you will be shown all of the data available for the respective element in the “Master data detailed view”. Select the matching field to add the data for the element.

Do not forget to select the uppermost symbol ✓ in the toolbar to save the new master data.





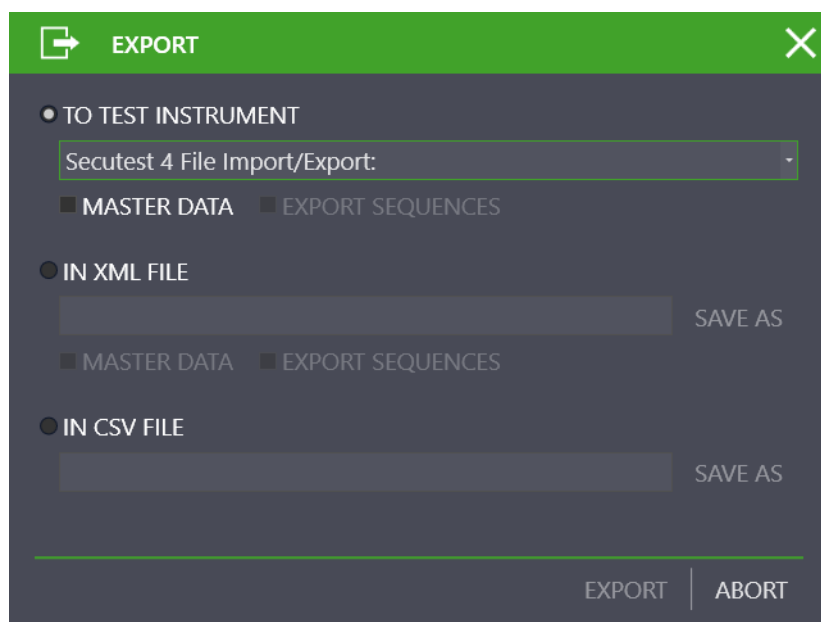
Take note!

Some fields are compulsory fields and must be completed in order to save the master data. Where a field is left empty, it is marked by a ✕.

The “Device list view” window (lower window) shows all devices located in the tree view hierarchy below the selected element.

22.2 Data export to the test device

The export function is used to transfer data to a test device or a file. The function is found under “EXPORT” in the menu  “PORTABLE OBJECTS” . Selecting this function opens the export assistant.



The export assistant asks whether the data should be exported to a connected test device or an XML or CSV file.

- TO THE TEST DEVICE: here you can choose between connected devices. You can select OBJECTS and/or SEQUENCES.
- TO AN XML/CSV FILE: Touch the field “SAVE AS” to select the file in which you wish to save the data.



Take note!




Export deletes all data on the connected test device. You are therefore shown a warning before export.

Selecting EXPORT starts the EXPORT FILTER.

Export filter

The export filter consists of two filter menus:

- EXPORT FILTER OBJECTS
- EXPORT SEQUENCES

When more than one filter menu is selected, the user switches between the views using the buttons  “NEXT”, i.e.  “BACK”. By selecting the  “EXPORT” button in the toolbar, the selected data and the corresponding customers and locations are transferred to the connected test device. The current operation is shown during export. Users are shown a message once all data has been transferred successfully.

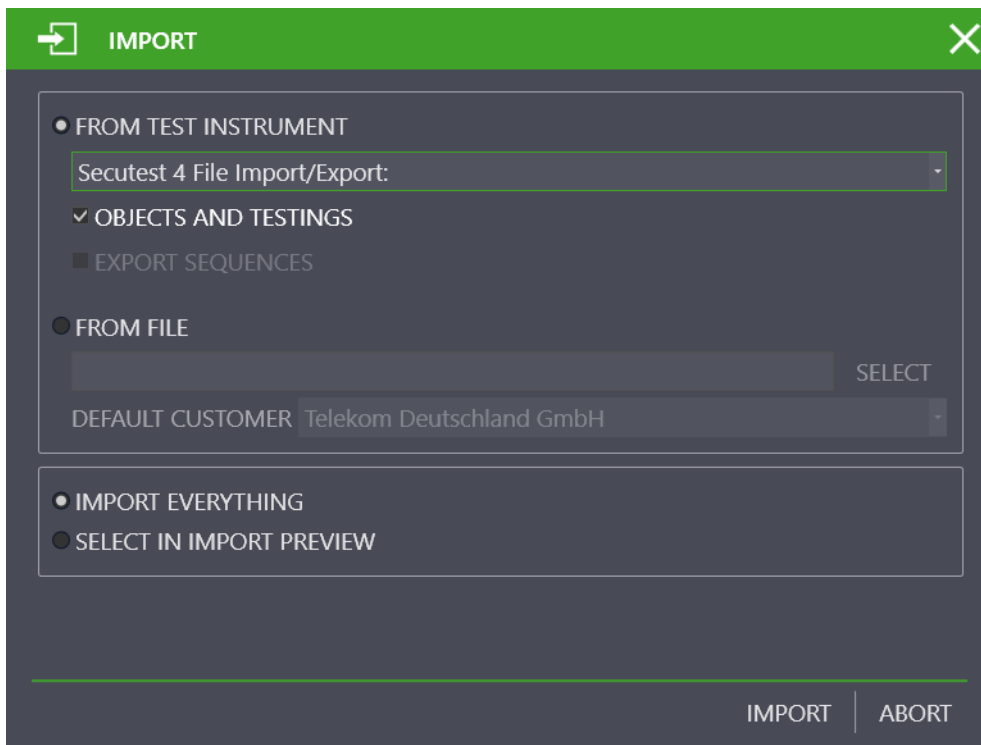
22.3 Data import from the test device

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


The function is found under "IMPORT" in the menu  "PORTABLE OBJECTS" . Selecting this function opens the import assistant.

Test devices in the SECUTEST series support two alternative methods to exchange data:

- Data exchange with a flash drive
 - Direct data exchange using a USB cable
- ▶ In both cases, you select "FROM THE TEST DEVICE" in the import window. You can switch between "Secutest 4 File Import" and your SECUTEST in the drop-down menu.



To start import, select **IMPORT EVERYTHING** or **SELECT IN IMPORT PREVIEW**.




- Import takes place automatically if you select **IMPORT EVERYTHING** and then click on **IMPORT**.
- **SELECT IN IMPORT PREVIEW** initially shows the data in the **IMPORT PREVIEW**. The data can then be selected and edited. The objects are then imported to the **IZYTRONIQ** database by selecting the function .

A message is shown confirming successful import and any transmission errors.

The conflict manager is activated when there are conflicts between existing and imported data that cannot be resolved automatically.

22.4 Test documentation – creating test reports

Existing tests can be printed out and saved as a PDF file for documentation purposes. The display and content of documentation is based on the selected template, which can be managed in the **IZYTRONIQ**. There are defined report templates in the default setting. Users can also create their own templates.

To create test reports for the **SECUTEST...** / **SECULIFE....**, navigate to the menu  “PORTABLE OBJECTS” and select the function  “INPUT/CHANGE/LIST”. Then it is necessary to select the test object/s for which a test report should be created. To do this, either select a parent object like a customer or a location in the tree view in order to receive a list of test objects; alternatively, you can select a test object directly. Next, navigate to the master data detailed view if you have selected an individual test object, or go to the master data list view if you have selected a parent object. In these two views, users can select the command  “Report” in the toolbar in order to generate the test reports. The following pop-up is shown:

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.

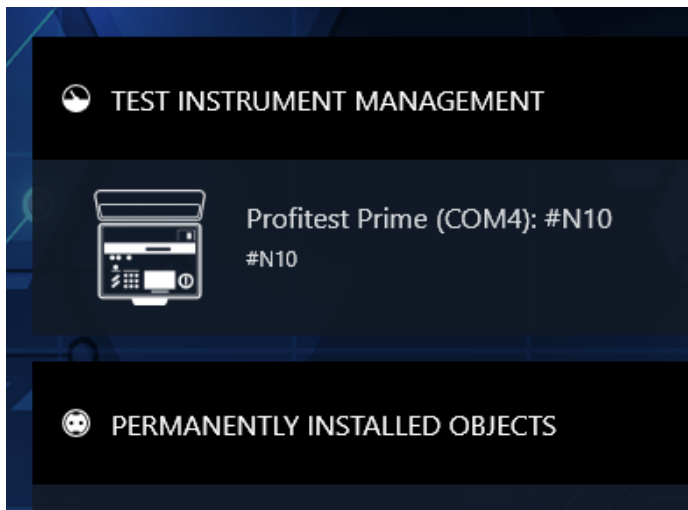
RUN | ABORT

For the description, refer to “Creating a test report”.

23 PROFITEST – first steps


The following devices are necessary to exchange data with **IZYTRONIQ**:

- PROFITEST INTRO < in preparation >
- PROFITEST MBASE+, PROFITEST MTECH+
- PROFITEST MPRO, PROFITEST MXTRA
- PROFITEST PRIME, PROFITEST PRIME AC
- SECULIFE Ip



If the device is not yet registered in test device management, the user is asked whether it should be saved automatically. The test device is now ready to share data with the **IZYTRONIQ**.

23.1 Creating a tree structure

To create test objects for the **PROFITEST ...**, navigate to the menu "STATIONARY OBJECTS" and select the function  "INPUT/CHANGE/LIST". There you will find a screen consisting of three windows arranged one above the other. You can enlarge and reduce the size of the windows by moving the upper, i.e. lower border that is marked by two short horizontal lines.

Upper window

– Left-hand side: E-TREE (electric tree)

– Right-hand side: Location tree

Central window: Detailed view of the master data for the test object

Lower window: List view of the objects

Electric tree

The **stationary objects, machines** or **facilities** are created here. Unlike with portable devices, **IZYTRONIQ** enables the creation of complex tree structures. In this regard, PROFITEST and **IZYTRONIQ** have a broad variety of electrical sub-objects that can be freely selected and introduced to an electric tree structure. In addition, a main object may possess another similar main object within this structure (machine has a machine, or a facility has a facility). The following objects can be transferred with PROFITEST:

- Customer
- Facility
- Machine
- Distributor
- RCD
- RCM
- IMD
- Electric circuit
- Equipment
- Measurement point
- Equipotential bonding rail
- Equipotential bonding conductor
- Ground connector

Take note: The objects possess an internal hierarchy, which means that not every object can be placed below each other object. The objects must always be assigned to a customer.

Location tree

This shows the locations to which electrical objects from the electric tree can be assigned.

Active window

Each window is activated by selecting it. The active view is always shown with a green border.

Within the border, the active sub-function is indicated by a bold green bar at the top.

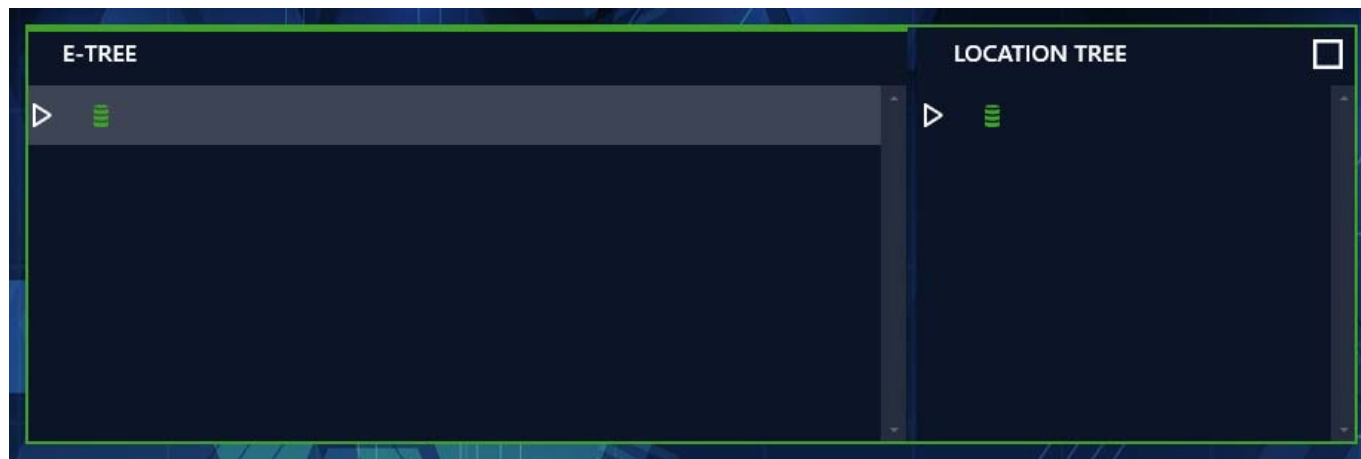


Image 2Tree window with activated e-tree

Creating a new object

The following steps must be performed to create a new object:

1. Activate the electric tree.
2. Select the element under which you wish to create the new element.
3. Navigate to ★“Create new element” in the toolbar on the right-hand side of the screen.
Alternatively, you can display the toolbar by right clicking on the mouse after selecting the element, and then select your operation by left clicking on the mouse.
4. A pop-up now opens in which you select the correct element type “NEW ELEMENT”.
The pop-up always shows all possible elements that can be created under the element shown in each case.
5. Select the number and ID of the new element.
The ID can also be assigned automatically, provided this function is enabled.
6. Select “CREATE”.
7. You can create additional elements by following the same instructions.
8. Complete the operation by selecting “CLOSE”.
9. Do not forget to select the uppermost symbol ✓ in the toolbar to save the new structure.

The same procedure is applied to create locations in the location tree.

Test objects can now be assigned to the locations by drag-and-drop.



Note

Not every object can be assigned to a location.

Adding master data

You can add the master data once you have created all elements in the tree view. To do this, select the chosen element in the tree and you will be shown all of the data available for the respective element in the “Master data detailed view”. Select the matching field to add the data for the element.

Do not forget to select the uppermost symbol ✓ in the toolbar to save the new master data.



Take note!

Some fields are compulsory fields and must be completed in order to save the master data. Where this kind of field is left empty, it is marked by a ⊗.

23.2 Data export to the test device

In order to manage bidirectional data exchange, test devices in the PROFITEST series support the exchange of tree structures, catalogs and sequences. These three export categories can be transferred separately or together. This description of the “PROFITEST First Steps” only deals with simplified data export of the tree structure.

If the electric tree of a facility or machine exists in the **IZYTRONIQ**, it can also be exported to the connected test device or to a file.

To do this, navigate to the menu  “STATIONARY OBJECTS” and select the function  “EXPORT”.

This opens an export assistant in which you can define whether export should take place to a file (select folder and specify file name) or to a test device, and whether the corresponding catalogs and/or sequences should be exported as well.

Once all options are defined, the user selects “EXPORT” to start exporting the object selection.

This opens a window with two parts. The upper half contains the two tree views, while the lower half shows a list of objects selected in the tree view. Both windows can be used to select the objects for export. Activating the checkboxes in front of the elements in the tree views is used to make a preselection based on customers and locations. To do this, you can select the objects in the electric tree that you wish to transfer, which you then restrict through your selection of locations in the location tree.



Take note!



All object data in the test device is deleted if the data is transferred to a test device.



Take note!

There must be no active measurement on the test device when you start data export.

23.3 Data import from the test device


Similar to data export, users find data import under the function  “IMPORT” in the  “STATIONARY OBJECTS” menu. This function is used to synchronize data from a test device or a file with the database in **IZYTRONIQ**. The import assistant asks whether the object data should be imported together with the tests. Users can also select whether the catalogs are transferred as well.



Take note!

There must be no active measurement on the test device when you start data import.

To start import, select IMPORT EVERYTHING or SELECT IN IMPORT PREVIEW.




- Import takes place automatically if you select IMPORT EVERYTHING and then click on IMPORT.
- SELECT IN IMPORT PREVIEW initially shows the data in the IMPORT PREVIEW. The data can then be selected and edited. The objects are then imported to the **IZYTRONIQ** database by selecting the function .

A message is shown confirming successful import and any transmission errors.

The conflict manager is activated when there are conflicts between existing and imported data that cannot be resolved automatically.

23.4 Test documentation – creating test reports

Existing tests can be printed out and saved as a PDF file for documentation purposes. The display and content of documentation is based on the selected template, which can be managed in the **IZYTRONIQ**. There are defined report templates in the default setting; they correspond to the statutory requirements and are therefore non-editable. Users can also create their own templates.

To create test reports for the **PROFITEST ...**, navigate to the menu  “STATIONARY OBJECTS” and select the function  “INPUT/CHANGE/LIST”. Then it is necessary to select the test devices for which a test report should be created. To do this, either select a parent object like a customer or a location in the tree view in order to receive a list of test objects; alternatively, you can select a test object directly. Next, navigate to the master data detailed view if you have selected an individual test object, or SWITCH to the master data list view if you have selected a parent object. In these two views, users can select the command  “Report” in the toolbar in order to generate the test reports. The following pop-up is shown:

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

For the description, refer to “Creating a test report”.

24 METRAHIT – first steps

The following devices are necessary for data communication with **IZYTRONIQ**:

- **METRAHIT IM XTRA BT**
- **METRAHIT IM E-DRIVE BT**

To pair the devices, the PC must have a Bluetooth function and the Bluetooth interface must be enabled.

If the device is not yet registered in test device management, the user is asked whether it should be saved automatically. The test device is now ready to share measured data with the **IZYTRONIQ** using the push/print function; refer to “Push/Print – first steps”.

24.1 Push/Print – first steps

The **Push/Print** function is a convenient way of sending test results directly to the **IZYTRONIQ** database by pressing a button on the test device. The measurement results are placed in the index card for tests under the selected test object and can be saved there.

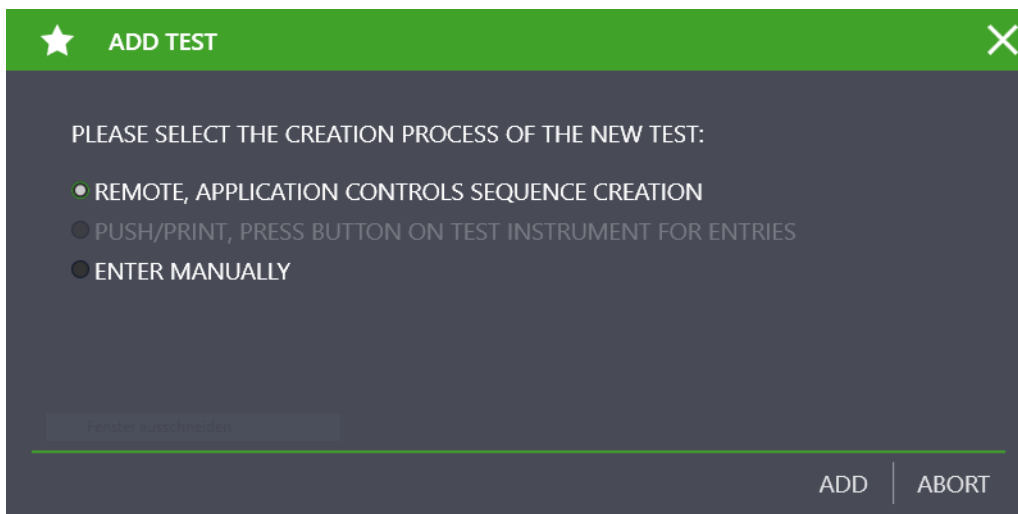
The following conditions must be satisfied:

- The test device is connected with the PC by USB or Bluetooth interface.
- The test device is shown in the dashboard under “TEST DEVICE MANAGEMENT”.
- The test device must support the function push/print.

Procedure:

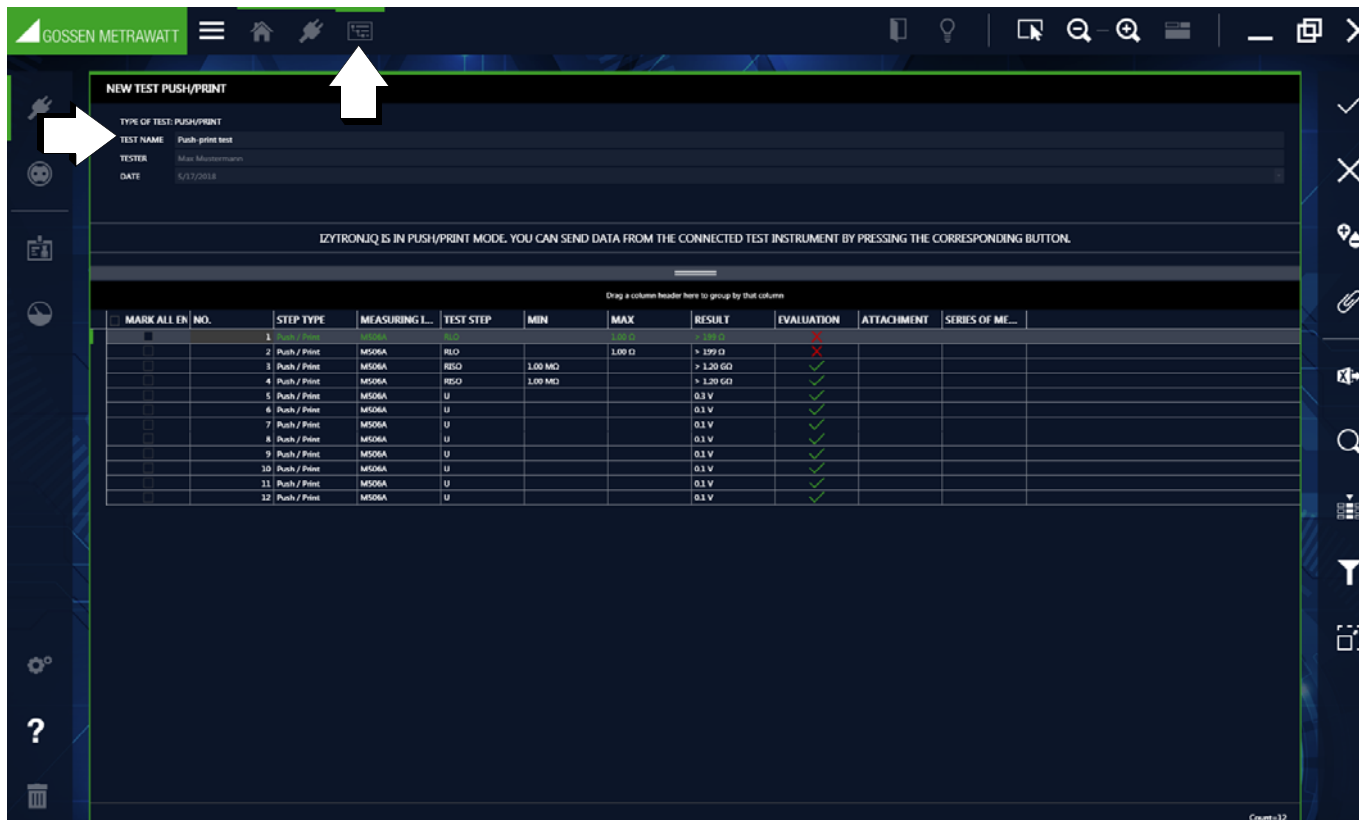
- ▶ Select portable or stationary objects.
- ▶ Select the menu “INPUT, LIST, CHANGE”
- ▶ Select the relevant test object in the tree view.
- ▶ Select the index card for tests in the tree view.
- ▶ Select the symbol for ★ “ADD TEST” in the toolbar.

This opens the drop-down menu “ADD TEST”:



- ▶ Here, select **Push/Print** and then ADD.

This opens a two-part window “NEW TEST PUSH/PRINT” and the **IZYTRONIQ** is ready to receive.



- ▶ Conduct the measurement on the test device.

Once the measurement is complete, the test device shows a push/print symbol instead of the save symbol.

- ▶ Press the push/print key and the measured data will be transferred to the IZYTRONIQ.
- ▶ Once the measurements are complete, add a test name in the upper section of the push/print window.
- ▶ Select the save symbol ✓ in the toolbar.

This closes the list, and the program skips back to the index card “TESTS” in the detailed view for the test object. The data is now grouped in the push/print container.

To see the individual measurements, double-click on the container or use the ≡ button in the toolbar. Select ≡ to return to the container view.

25 NEXONIQ

NEXONIQ is an optional module of the **IZYTRONIQ** software. On purchasing **NEXONIQ**, the user is provided with a dongle that is plugged into the USB port of a computer. The dongle-protected software regularly checks during use as to whether the dongle is attached to the USB port and denies service if this is not the case.

NEXONIQ software features two main functions:

- Read-out of veteran test instruments which are not compatible with **IZYTRONIQ** with simultaneous conversion to the **IZYTRONIQ** format.
- Conversion of ETC files to the **IZYTRONIQ** format

25.1 License – Right of Utilization – Activation

In contrast to **IZYTRONIQ**, the software is not bound to a local computer or server by means of a license code, but protected by a USB dongle. **NEXONIQ** can be installed on any local device as often as required. A USB dongle is the indispensable requirement for each work station which allows the user to work with the software. Rather than having to acquire a license for each computer or work station, the advantage of this solution for the customer is that several users can share one physical USB dongle. This dongle is the key required to work with the **NEXONIQ** software.

25.2 Download

NEXONIQ is available for download at www.gossenmetrawatt.com.

After downloading the zip file it must be unpacked into a directory (e. g. with WinZip) where the setup file will then be at your disposal. Proceed by following the installation instructions.

25.3 System Requirements of Local and Client Installation

The minimum requirements or recommendations are based on the **IZYTRONIQ** main module.

The **IZYTRONIQ** software runs under Windows 7, 8.1 and 10:

Minimum requirements

Software components

- Operating system: Windows 7
- .NET Framework 4.6.1*

Hardware

- CPU: Dual-core i3 > 3.4 GHz
- RAM: ≥ 2 GB
- Hard drive: at least 2 GB of free memory (depending on data volume)
- Resolution: 1280 x 800

Recommended

Software components

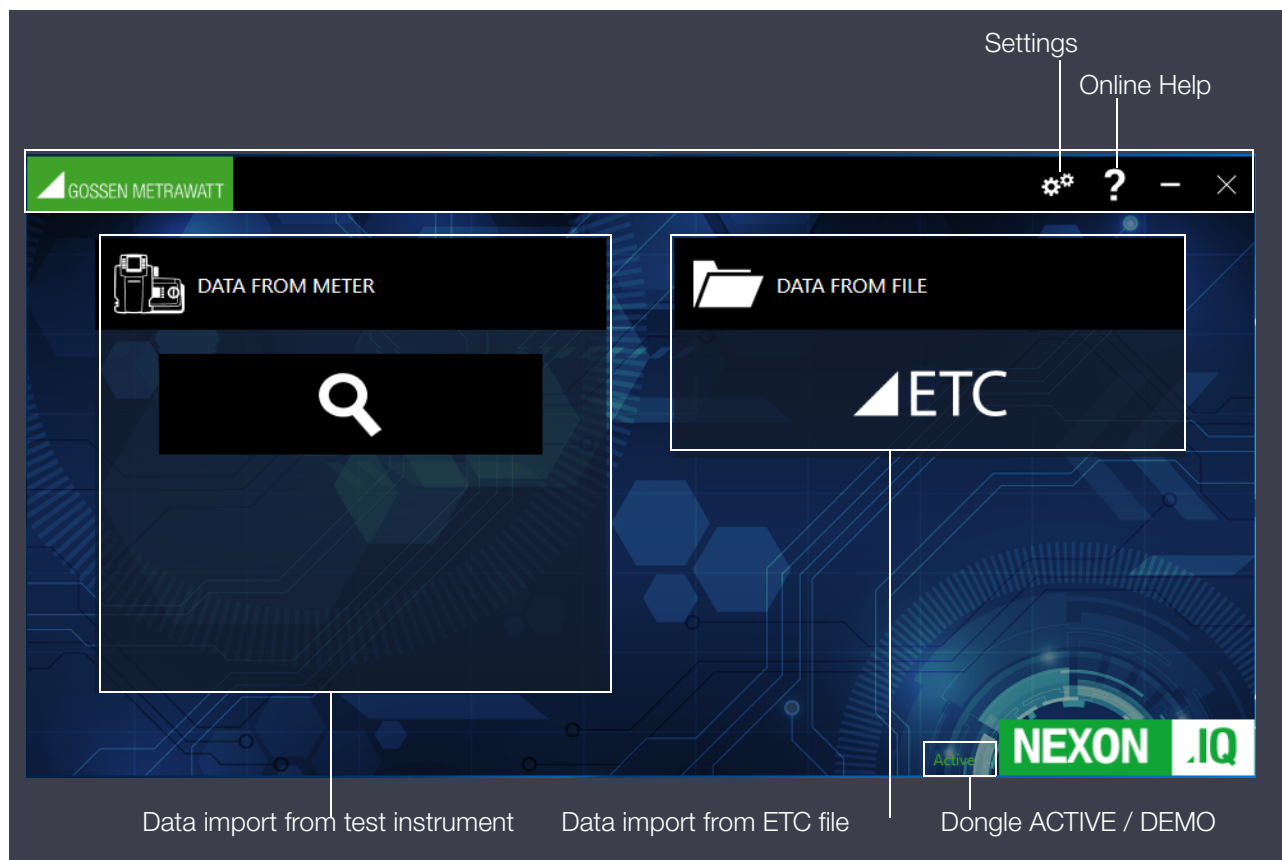
- Operating system: Windows 10
- .NET Framework 4.6.1*

Hardware

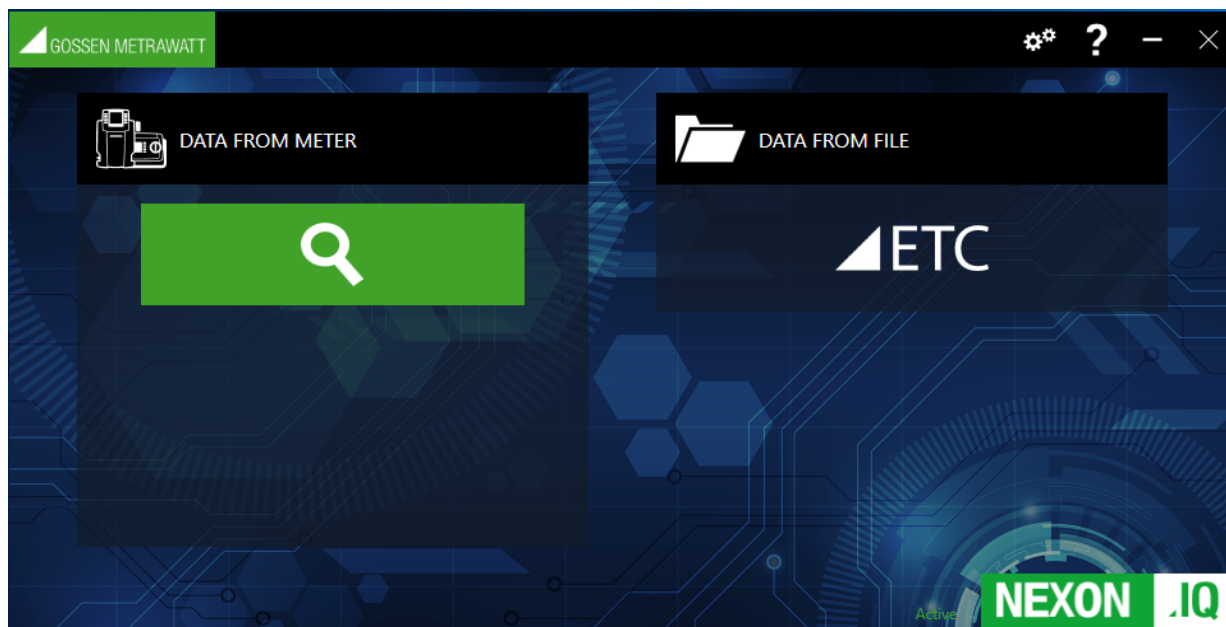
- CPU: Quad-core i7 2.8 GHz
- RAM: ≥ 4 GB
- Hard drive: at least 4 GB of free memory (depending on data volume)
- Resolution: 1920x1080
- Touch display and active pen

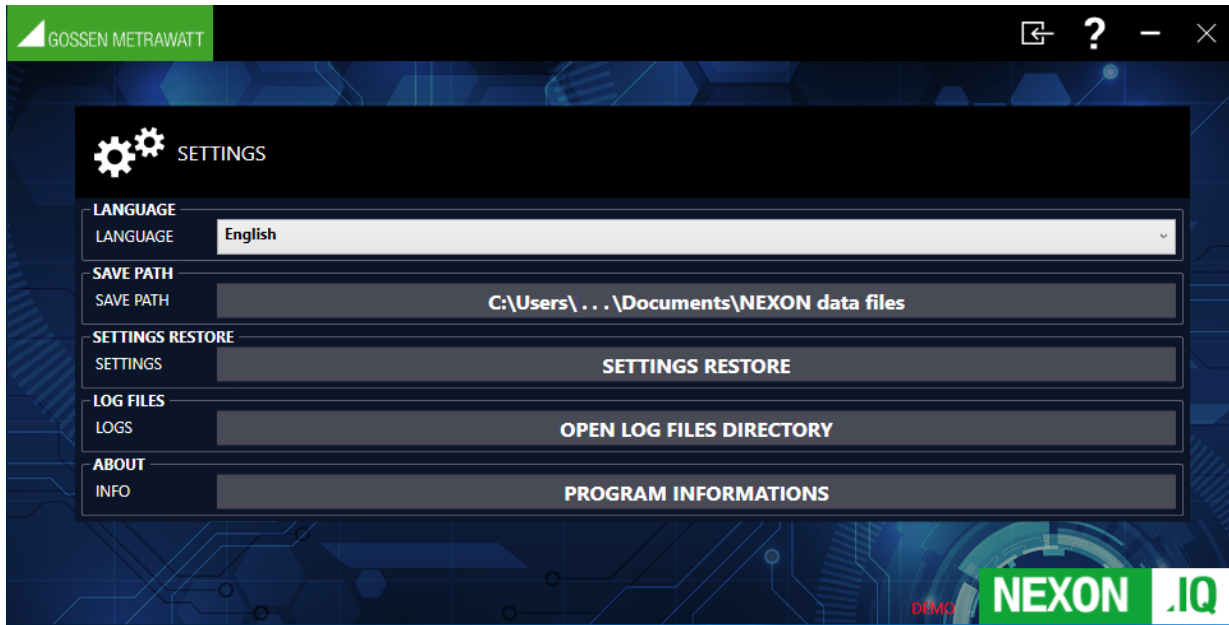
* Microsoft has an installation assistant for installing .NET Framework 4.6.1.

25.4 Setup of User Interface

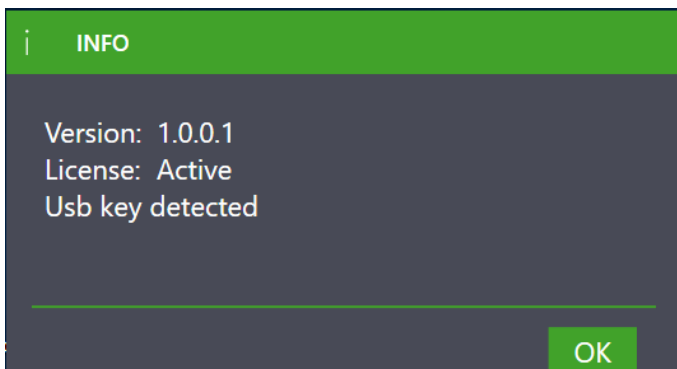



After selecting a field by mouse click, it is highlighted with a green background.

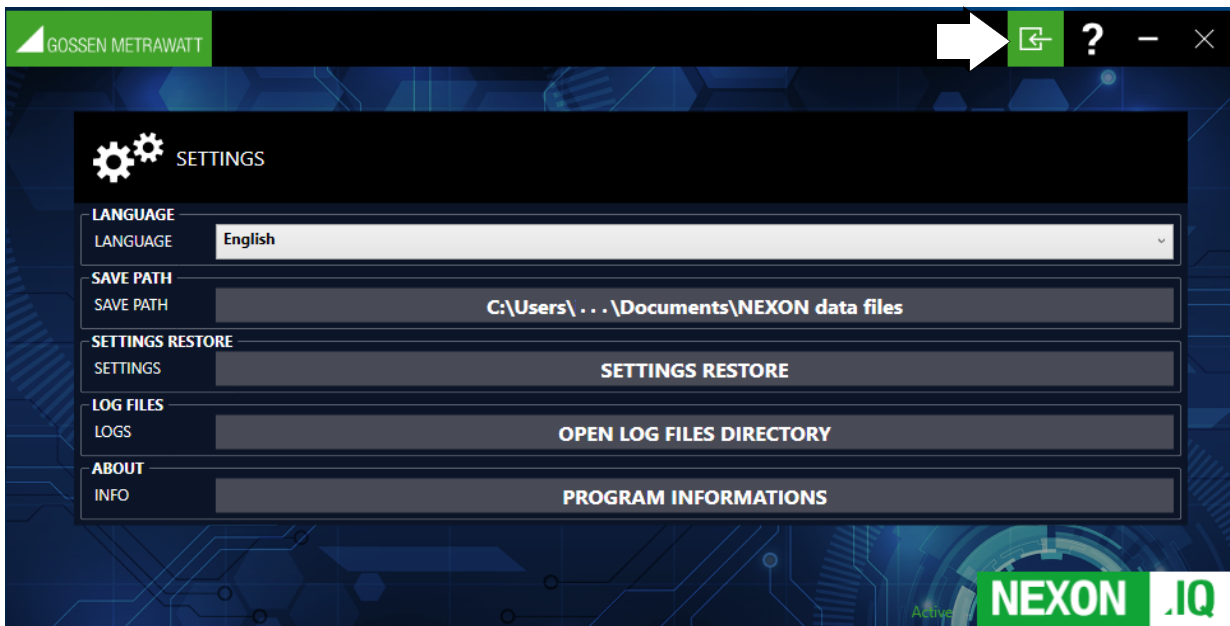




The user language for **NEXONIQ** can be changed in the „SETTINGS“ menu under menu item „LANGUAGE“.
 „SAVE PATH“ enables you to define the target directory.
 „SETTINGS RESTORE“ changes the target directory to the original directory (...\\Documents\\NEXON data files).
 „LOG FILES“ enables you to define the target directory of the log files.
 „ABOUT INFO“ provides information on the software version and the dongle status.



By clicking on the  symbol you are redirected to the start screen.



Start the online help in the browser by clicking on icon „?“.





In addition, users have the option of accessing the online help on the landing page, which they open in their browser at: help.izytron.com

The screenshot shows the online help interface for GOSSEN METRAWATT. The left-hand column (TOC) lists various topics, with 'Login / Logout' highlighted in green. The right-hand side shows the content for 'Login / Logout', including 'Initial login' and 'Subsequent login' sections. Two screenshots of the software's login screens are displayed: 'CREATE USER' and 'LOGIN'.

The main topics are shown in the left-hand column (TOC (table of content)). The selected main topic is marked in green. A cursor arrow indicates if there are any subtopics. The subtopics are shown automatically when this arrow is selected. Selecting the cursor arrow again hides the subtopics.

The content for the selected topic is shown on the right-hand side.

Significance of the elements in the header

-  Show/hide:
Selecting this symbol shows or hides the left-hand column.
-  Search:
This is used to filter online help according to selected keywords.
-  Print:
The content on the right-hand side can be printed.
-  Scroll: Users can scroll up or down in the left-hand column (TOC).

25.5 Reading out data from test instruments the formats of which are not compatible with IZYTRONIQ

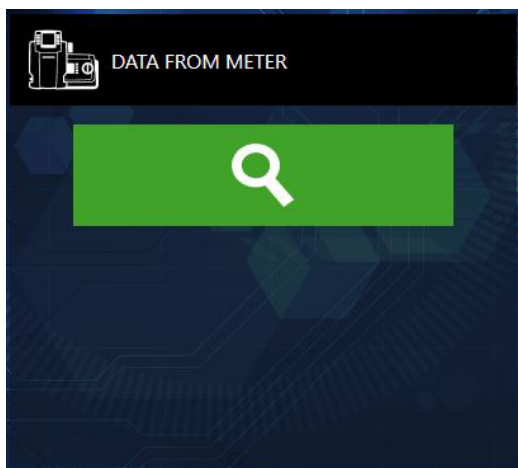
The following test instruments can be imported:

SECUTEST 0701-0702 S
SECUTEST 0701-0702 SII
SECUTEST SII
SECUTEST SII+
SECUTEST SIII
SECUTEST SIII+
SECUTEST SIII+M
SECUTEST SIII+H
SECUTEST SIII+MH
SECUTEST S2N
SECUTEST S2N+10
SECUTEST S2N+W
SECUTEST PSI module
SECUTEST SI module
SECUTEST SI+ module
SECUTEST Base (firmware < 1.8.X)
SECUTEST Base10 (firmware < 1.8.X)
SECUTEST PRO (firmware < 1.8.X)
METRAMASCHINE
PROFITEST 204
PROFITEST MTECH
PROFITEST MBASE
PROFITEST MBASE+ (firmware < 3.0)
PROFITEST MTECH+ (firmware < 3.0)
PROFITEST MPRO (firmware < 3.0)
PROFITEST MXTRA (firmware < 3.0)
METRISO PRIME 10
GEOHM XTRA
GEOHM PRO
PROFITEST PVSUN MEMO

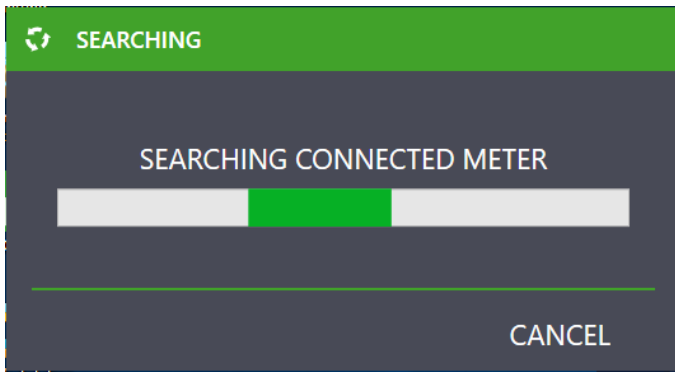
Medical test instruments to be imported into NEXONIQ software (available as from 4th Quarter 2018):

SECULFE DF PRO
SECULFE DF BASE
SECULIFE ES XTRA
SECULIFE ES PRIME
SECULIFE PS 300
SECULIFE PS200
SECULIFE BP PRO
SECULIFE IF PRO

Procedure:



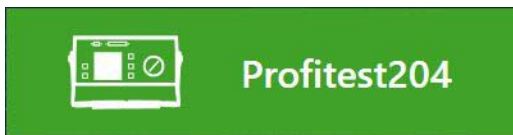
- ▶ Click on the magnifying glass symbol in order to search for a connected test instrument.



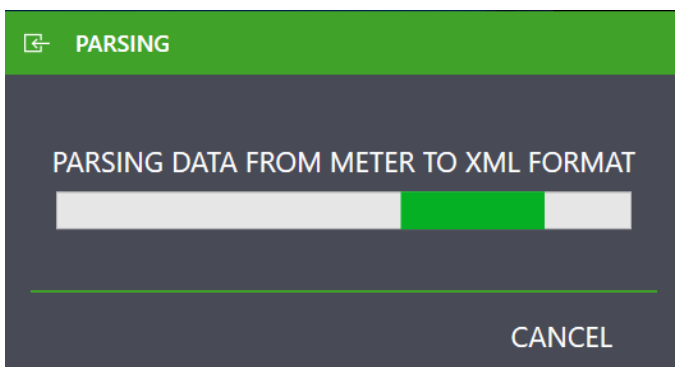
Note

Please observe the relevant import instructions of your test instrument. More detailed information is given in the operating instructions of your test instrument.

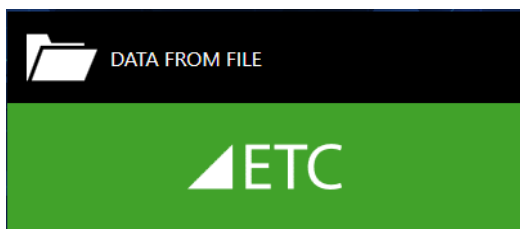
As soon as the test instrument has been recognized, a symbol is shown with the designation of the respective test instrument.



By clicking on the symbol with the test instrument, an XML file is automatically generated. It can be found in directory C:\Users\Benutzer\Documents\NEXON data files or under the user-defined target directory indicated in SETTINGS.



25.6 Data import from ETC file



The ETC file to imported can be selected in the following Windows sub menu by clicking on the ETC symbol.



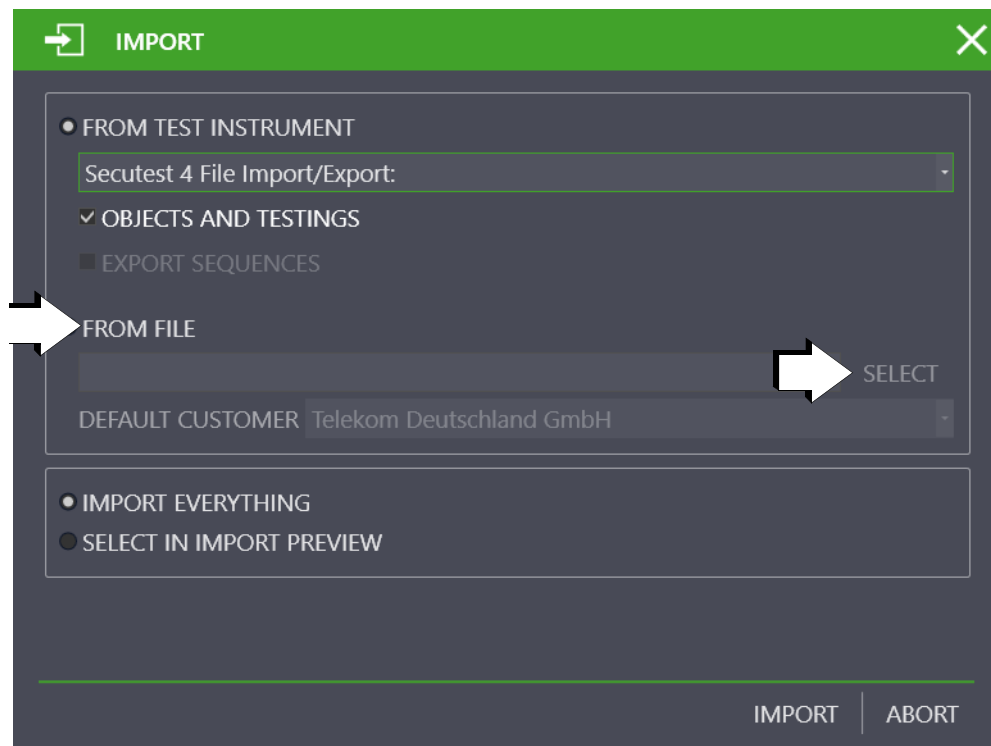
Upon selecting the ETC file, an XML file is automatically generated. These files can be found in the directory under C:\Users\Benutzer\Documents\NEXON data files or under the user-defined target directory indicated in SETTINGS.

25.7 Importing the converted files into IZYTRONIQ

▶ Start IZYTRONIQ

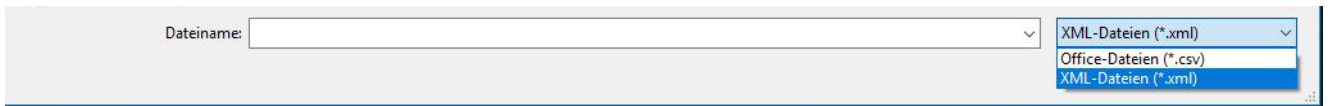
Before importing the requested XML file into IZYTRONIQ, please indicate whether they are „Portable objects“ (e. g. tests with SECUTEST) or „Stationary objects“ (e. g. tests with PROFITEST).

- ▶ Click on the „Import“ icon.
- ▶ Select item „FROM FILE“ and click on menu item „SELECT“:
The generated XML file can now be selected.






Note

It may be necessary to choose the correct file format (*.xml)



► Click on IMPORT now.

The data from the NEXONIQ file are now imported into the **IZYTRONIQ** database with the import function.

The function can be found under  "IMPORT" in the  "PORTABLE OBJECTS" or  "STATIONARY OBJECTS" menu. Selecting this function opens the import assistant.

A message is shown confirming successful import and any transmission errors.

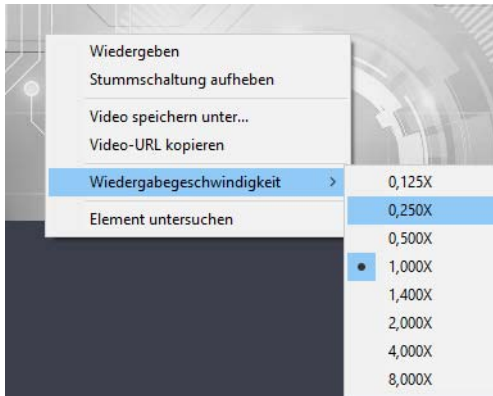
The conflict manager is activated when there are conflicts between existing and imported data that cannot be resolved automatically.

For further information please refer to the **IZYTRONIQ** online help.

26 VIDEOS – Tutorial

General

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.

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Main Chapters

- ““Sequence editor”Function “Input, change, list” – Portable Objects”
- “Structure of the index cards – portable objects”
- “File import – portable objects”
- “Conflict manager – portable objects”
- “Function “Input, change, list” – stationary objects”
- “Structure of the index cards – stationary objects”
- “Management and creation of test instruments”
- “User management – BUSINESS Version except Premium variant”
- “Global settings”
- “Catalogs”
- “Lists”
- “Generation of test report”
- “Push/Print”
- “Sequence editor”
- “Editing report templates”

26.1 “Sequence editor”Function “Input, change, list” – Portable Objects

Basic operation of the three views

Video „Basic operation of the three views“

26.2 Structure of the index cards – portable objects

“Creation of devices”

“Manual input of measured values”

“Creation of container”

“Test comparison”

26.2.1 Creation of devices

Video „Creation of devices“

26.2.2 Manual input of measured values

Video „Manual input of measured values“

26.2.3 Creation of container

Video „Creation of container“

26.2.4 Test comparison

Video „Test comparison“

26.3 File import – portable objects

Video „File import via preview“

26.4 Conflict manager – portable objects

Video „Conflict manager method“

26.5 Function “Input, change, list” – stationary objects

Video „Basic operation of the three views“

26.6 Structure of the index cards – stationary objects

“Creation of machines and systems”

“Manual input of measured values”

“Container”

26.6.1 Creation of machines and systems

Video „Creation of machines and systems“

26.6.2 Manual input of measured values

Video „Manual input of measured values“

26.6.3 Container

Video „Creation of container“

26.7 Management and creation of test instruments

Video „Management and creation of test instruments“

26.8 User management – BUSINESS Version except Premium variant

Video „Creation of additional user with password and certificates“

26.9 Global settings

Video „Exchange of logo and company address“

26.10 Catalogs

Video „Excel to catalog, Profiscan catalog processing“

26.11 Lists

“Working with the list filter functions, sorting, filter editor and column assistant”

“Working with the list, creation of Excel file”

“Working with Multi assistant”

26.11.1 Working with the list filter functions, sorting, filter editor and column assistant

Video „Working with the list filter functions, sorting, filter editor and column assistant“

26.11.2 Working with the list, creation of Excel file

Video „Working with the list, creation of Excel file“

26.11.3 Working with Multi assistant

Video „Working with Multi assistant“

26.12 Generation of test report

Video „Generation of test report with photo documentation“

26.13 Push/Print

Video „Push & Print“

26.14 Sequence editor

“Sequencing for PROFITEST”

“Sequencing for SECUTEST”

26.14.1 Sequencing for PROFITEST

Video „Sequencing for Profitest Prime with Sequence Editor“

26.14.2 Sequencing for SECUTEST

Video „Sequencing for SECUTEST“

26.15 Editing report templates

Video „Editable test report with photo documentation“

Edited in Germany • Subject to change without notice • A pdf version is available on the Internet

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