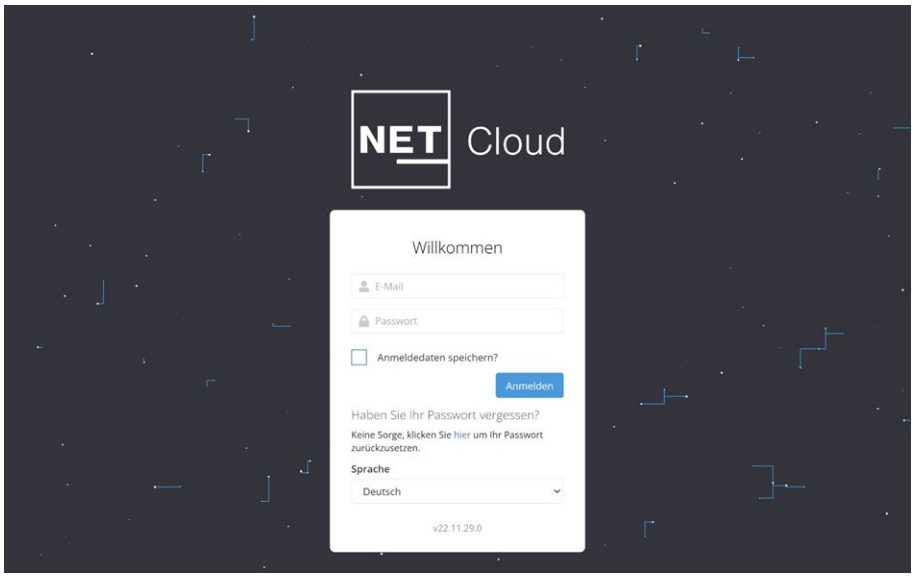
NET Cloud Portal manual

1. General

1.1. Call and registration

To make it easier to get started, this section describes how to access and use the NET Cloud web portal.

The URL consists of the following elements https://{Instancename}.netcloud.run These URL can also be used to log in to the NET Scan app. As it is a browser-based application, it can be opened in any standard browser. Precise instructions provide support when entering the user name and password.



1 Illustration: Login via e-mail address and password

1.2. Reset password

The password can be reset by clicking on "here" in the login screen. After entering a valid e-mail address, a link to set a new password will be sent by e-mail. Please note that the e-mail address must already be stored in the NET Cloud system.

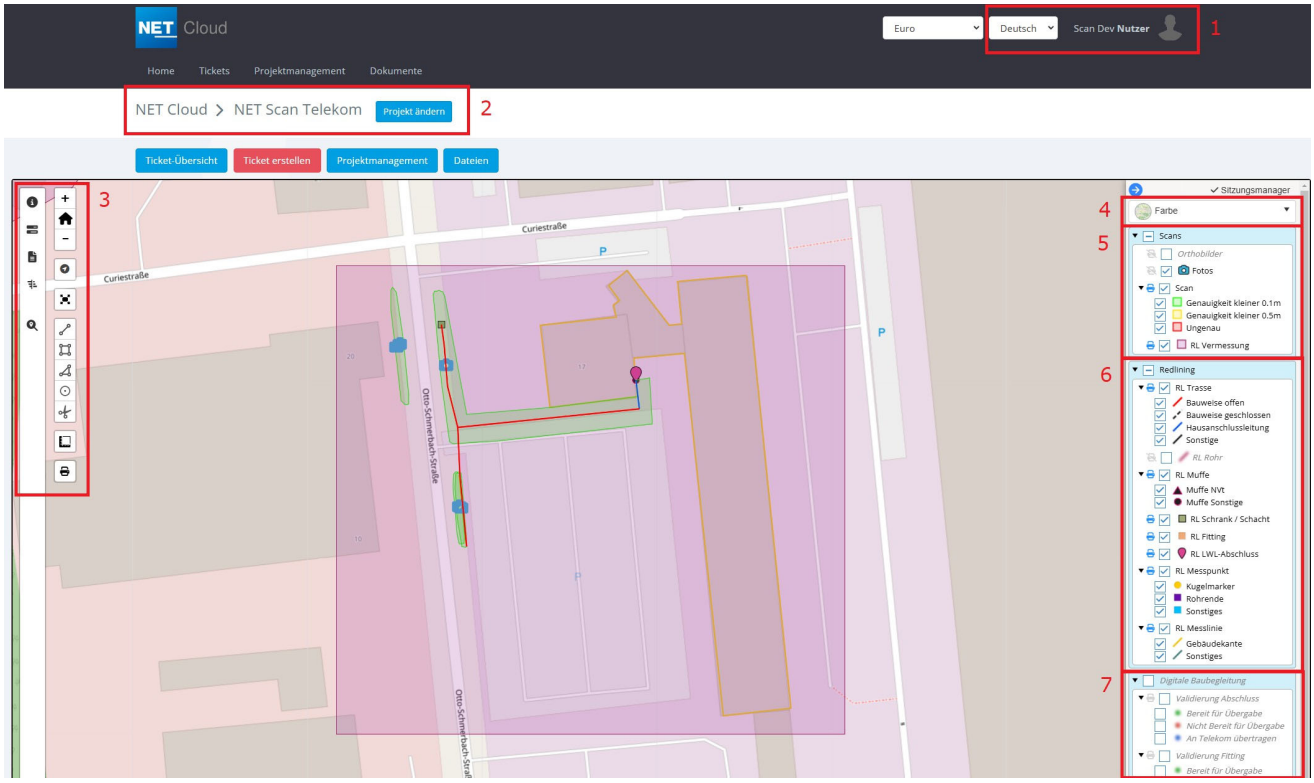
2 Figure: Entering the e-mail address to send the password link, which is valid for 30 minutes

2. Main functions of the GIS website

2.1. Map display

In NET Cloud, the map is the focus of the application. The following actions are accessible via the control elements:

1. **Language settings**: Switch between German and English, make changes to your user account, change your password and log out.
2. **Project change**: Selection and change of the current project.
3. **Navigation and tools**: Navigation buttons, full screen mode, drawing tools, object-specific actions and the search function.
4. **Change background map**: Choose between OpenStreetMap and satellite images.
5. **Scan Layer**: Management and display of scans, orthophotos, photos and the survey areas.
6. **Redlining Layer**
7. **Redlining Views**



3 Figure: Map display

2.2. Navigation

This section describes the various navigation options within the map view, including the use of zoom and pan functions and searching for specific locations or addresses.

Zoom in / out on the map and return to the initial view

Jumps to the current GPS position. The "Use location" function must be activated

Full screen mode

3. Drawing tools

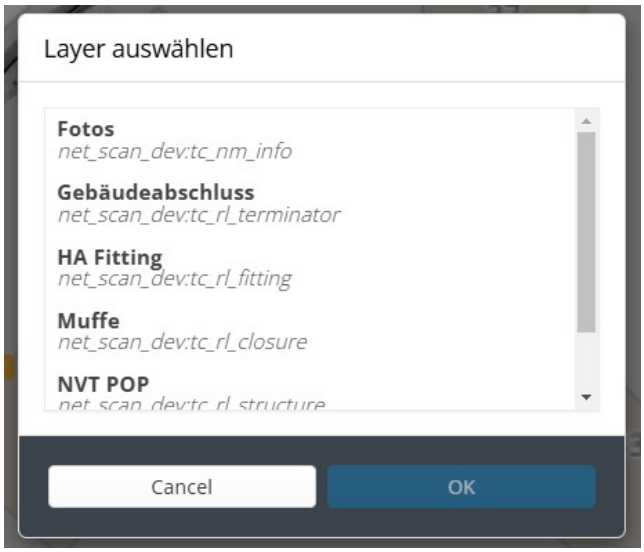
3.1. Drawing tools

This section describes all the tools that can be used to draw on the map, including the selection of lines, shapes and text tools and their specific applications.

Line, polygon and point objects are drawn using the buttons on the left-hand side. This includes routes, building edges, building ends, fittings, sleeves, NVTs, PoPs, ball markers and pipe ends. After selecting the appropriate geometry, the layer must be selected to start the drawing mode. Further information on this can be found in section 3.3.

The scissors are used to split line objects. Linked documents are transferred, but not subordinate objects such as pipes.

The last symbol allows you to measure distances or areas on the map. These measurements are not saved and are no longer available when the page is reloaded.



4 Illustration: Selecting the layer for drawing

3.2. Object-related tools

This section provides an overview of the toolbar, explains the functions of the individual icons and how to use them effectively to create and edit drawings.

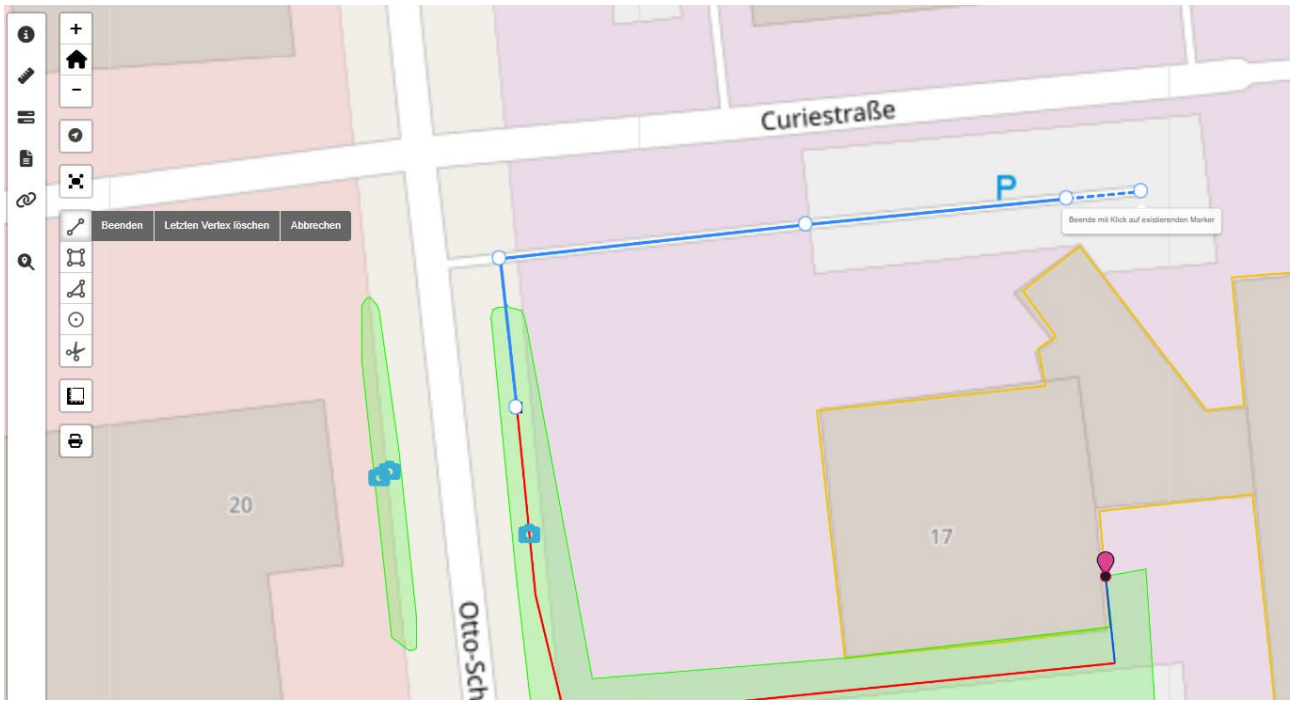
The **i symbol** shows information about the respective object, such as creation date, creator and FID (unique identifier of the object within the database). **The second icon** contains links to tickets, if tickets have been created within NET Cloud. The **document icon** provides links to photos, documents or scans that are linked to the object.

The **chain symbol** refers to linked or subordinate objects, such as the pipes in a route.

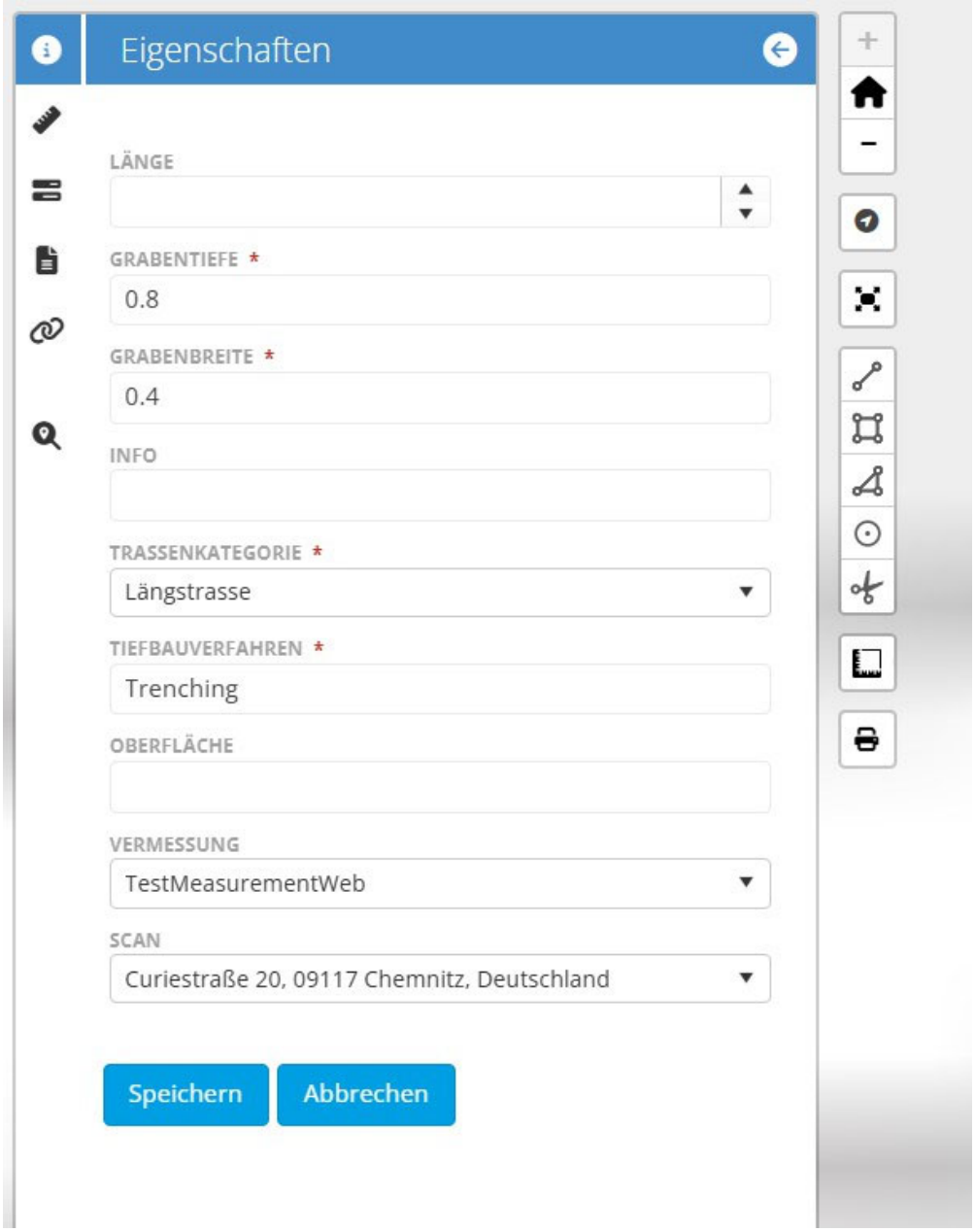
The **search icon** allows you to search for an address in the respective country or a detailed object search, which is set up differently from layer to layer.

3.3. Drawing and editing

After selecting the layer on which you want to draw, you are taken to the digitizing mode. All points can be set intuitively here. Use the right mouse button to delete support points and double-click to complete the line. The latter is also possible via the "Finish" button. The attribute fields of the object must then be filled in. Mandatory fields are marked with a red asterisk. The object creation process cannot be completed without filling in these fields. The entries are then confirmed with "Save". Subsequent editing is possible.



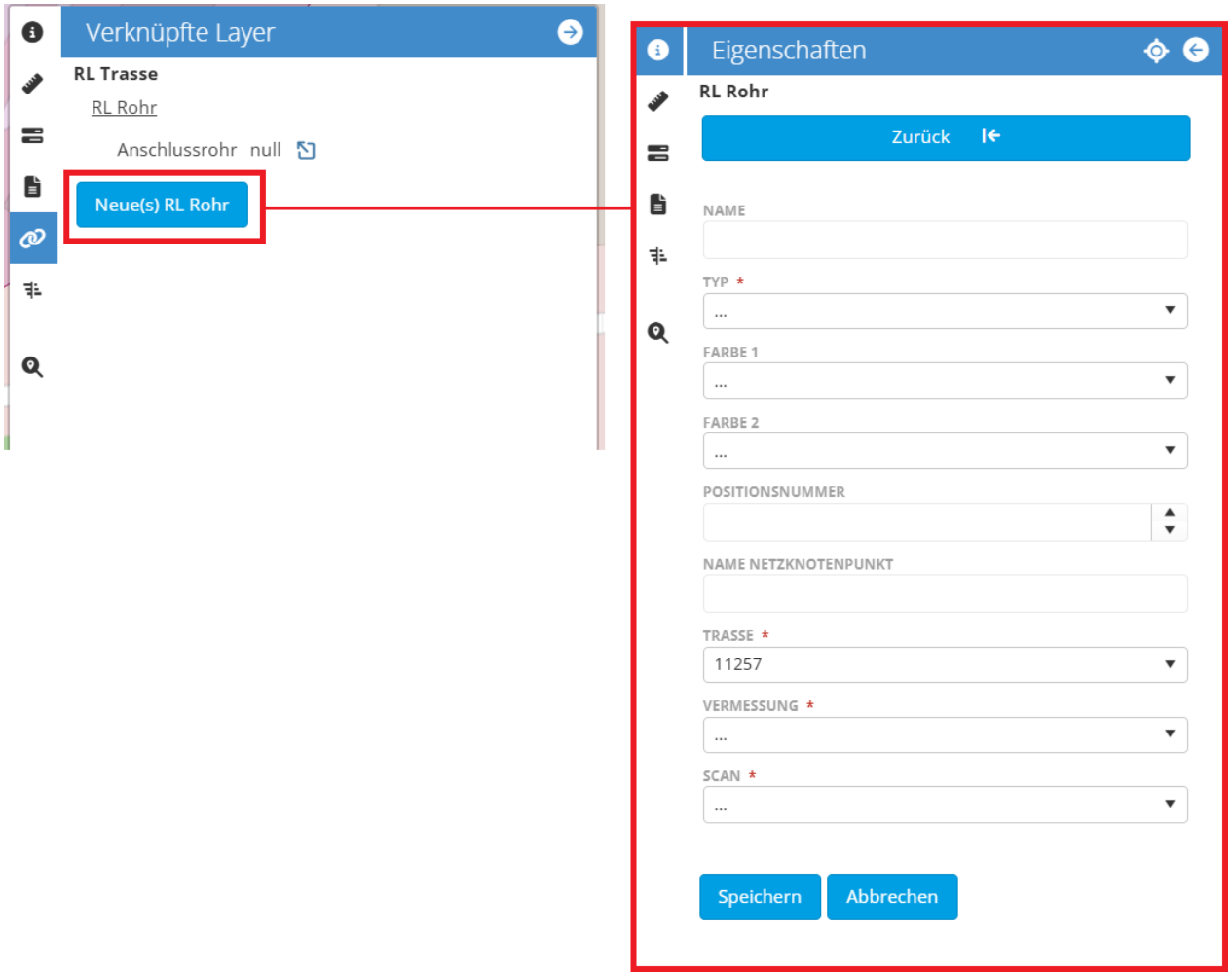
5 Figure: Digitize route



6 Illustration: Editing the attributes of the object. Please enter the depth and width in meters. The length is determined automatically.

3.4. Digitize pipes in routes

The following is about creating pipes in routes. To avoid incorrect assignment, the pipe must be created within the route. To do this, use the chain symbol in the left-hand bar in the route. There you will find a button for creating a new pipe. An input screen for the pipe attributes then appears. The type, route, measurement and scan are mandatory fields. The route is automatically taken from the parent element. After saving, the pipe is created and assigned to the route. All changes to the pipe are discarded by clicking "Cancel".



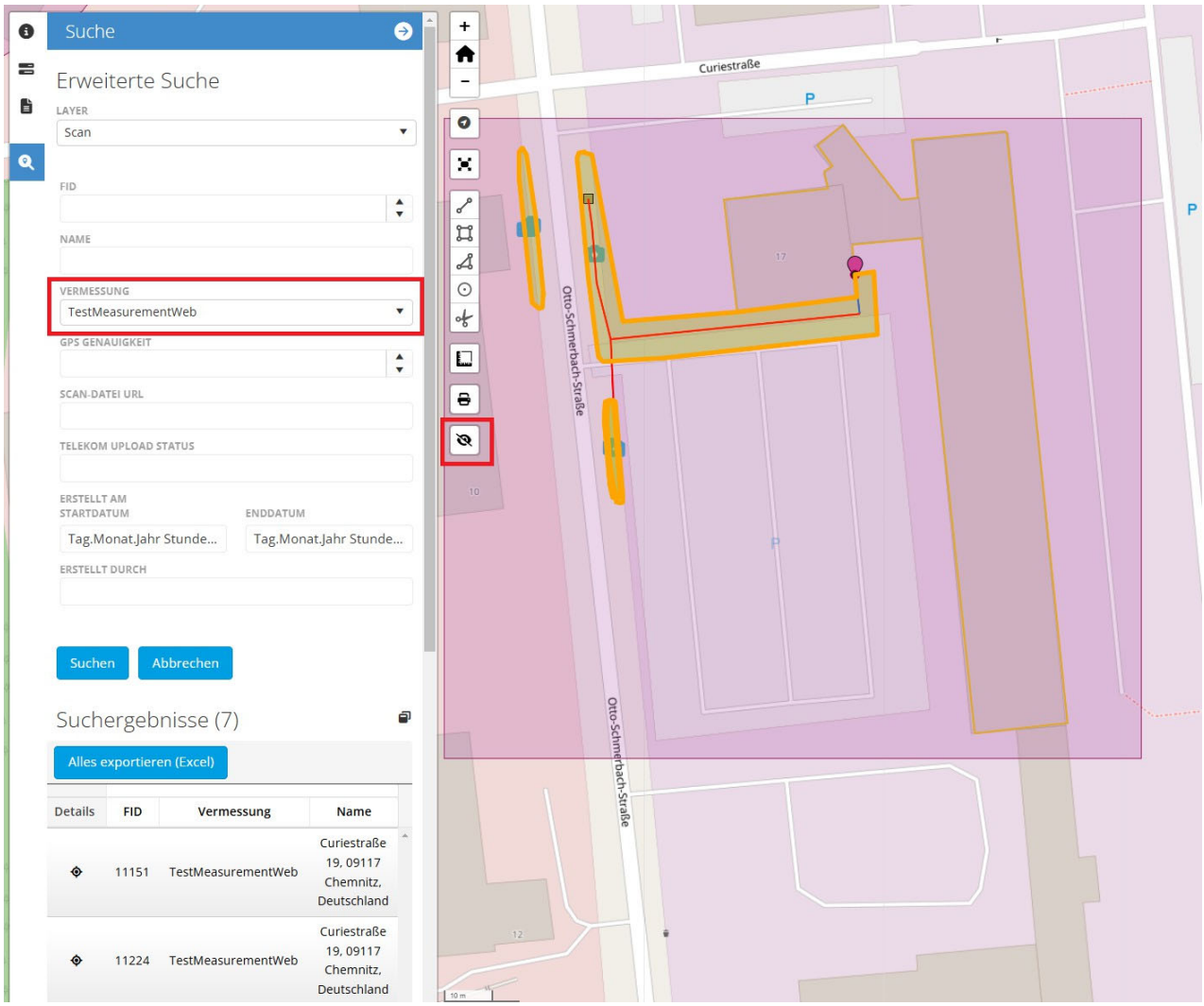
7 Figure: Digitizing pipes in routes

3.5. Search, find and export objects

The address search can be used in a similar way to other map services. The city, street and house numbers are entered and possible hits are displayed. When a data record is selected, the map jumps to the GPS position.

8 Illustration: The two variants of the search

The **advanced search** makes it possible to search objects in the database for specific values, for example all scans within a survey. To do this, the "Scan" layer must be selected under "Layer" and the desired region to be filtered under "Survey". By clicking on the "Search" button, all results are listed in a table and highlighted on the map. To remove the highlighting, you can use the new button with the crossed-out eye. For an export to Excel, there is a button in the table that downloads the results directly as an Excel file.

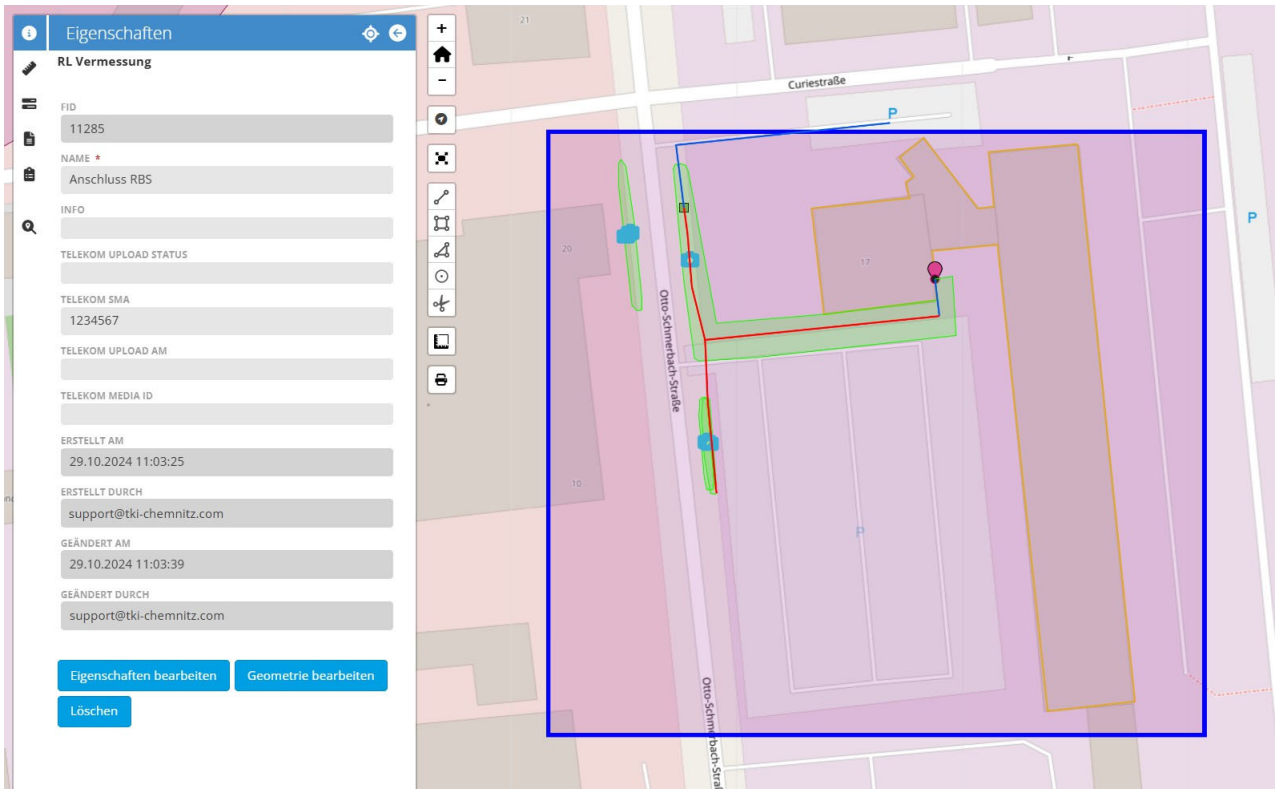


9 Advanced search

4. Upload to Telekom

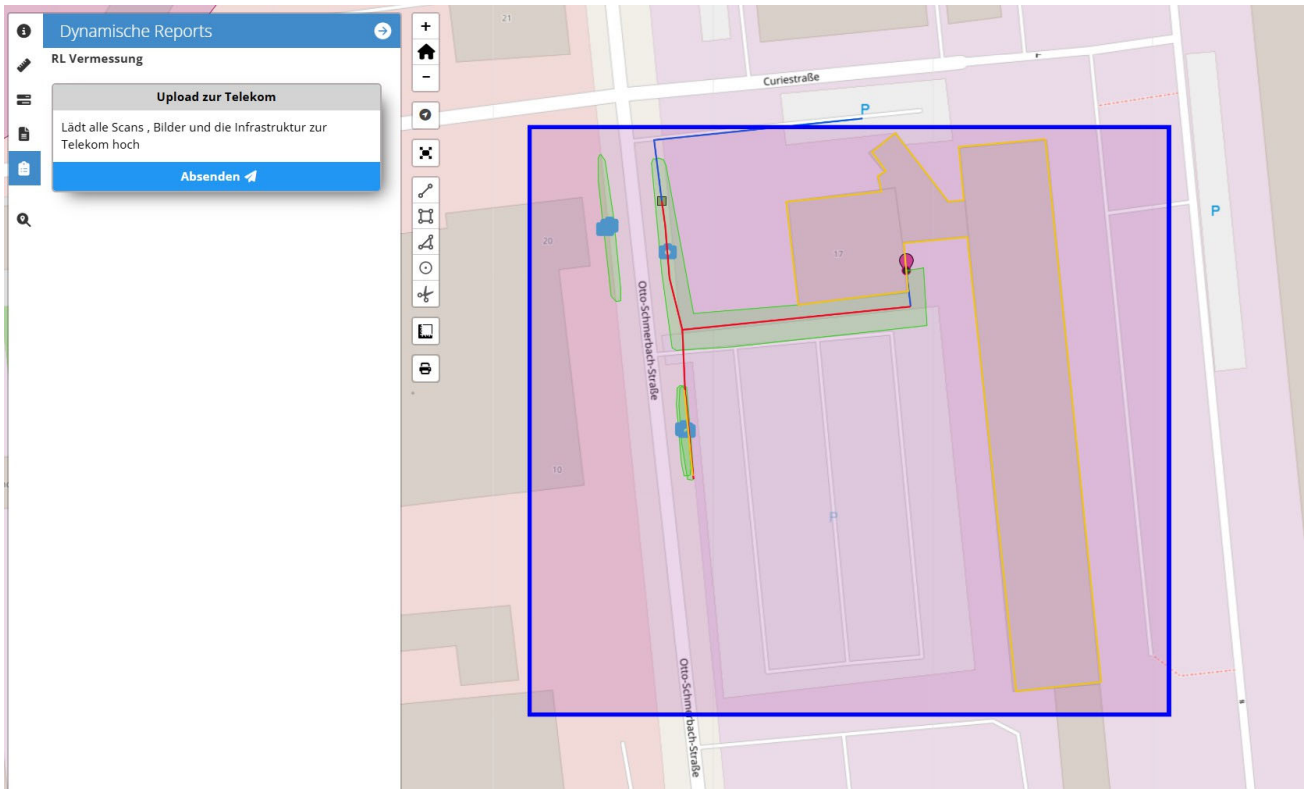
4.1. Requirements and upload

Some layers and attributes are required for the upload to Telekom. These are marked as mandatory fields in the corresponding objects and are automatically filled in from the NET Scan app if the data was entered directly in the field. First of all, it is important that there is an **RL measurement** that has a **name** and an **SMA** (assigned by Telekom). If a new object (such as a scan, route, etc.) is created within this survey, the two objects are automatically linked. It is therefore advisable to create the survey first. Subsequent linking is more difficult to implement.



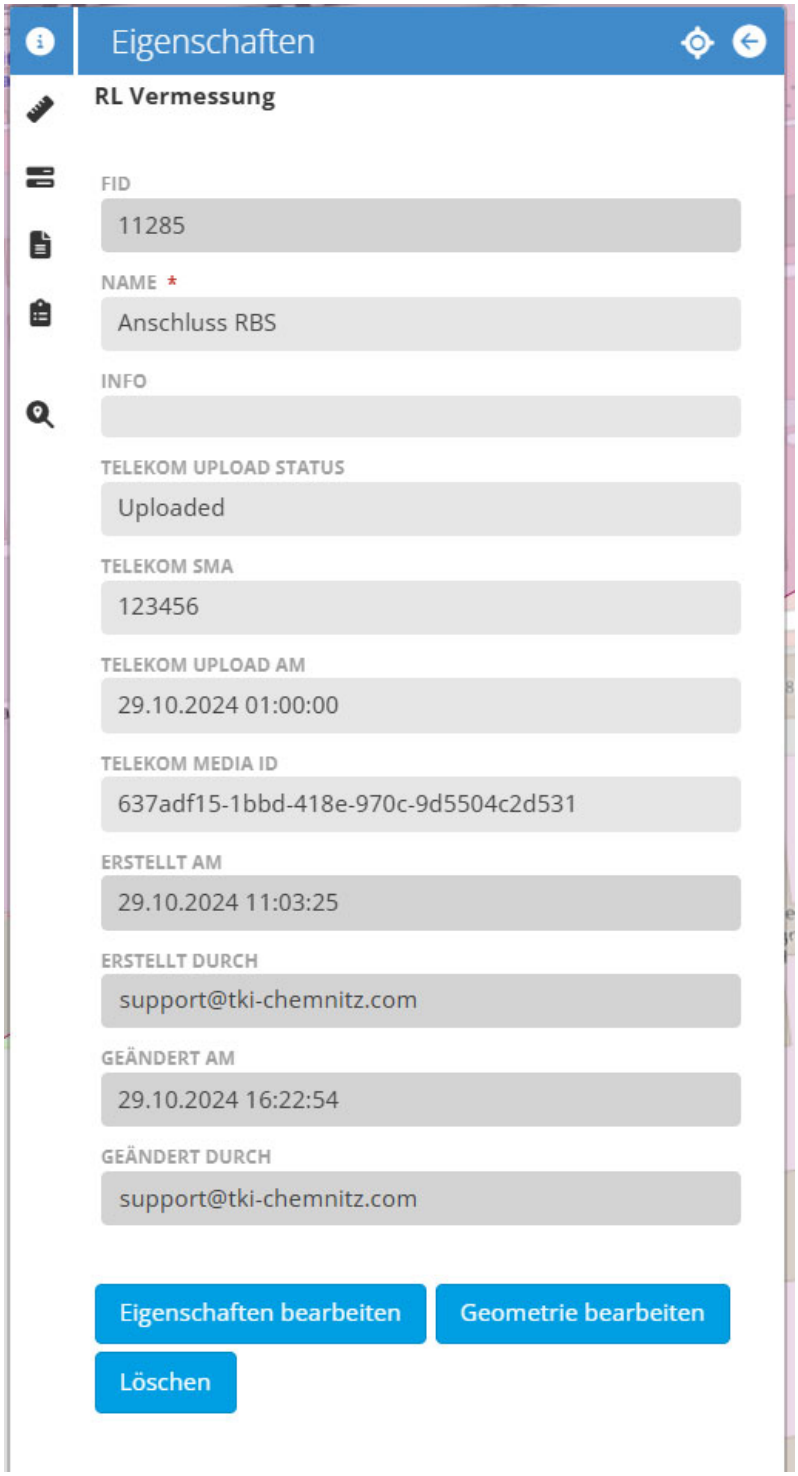
10 Figure: Measurement with name and SMA

There is another button in the measurement bar that can be used to send the data to Telekom. Sending should usually take no longer than one minute. The message "Successful" should then appear at the bottom right of the screen.



11 Figure: Upload button in the dynamic reports

If the upload was successful, there is now a "Telekom Status = Uploaded" attribute in the measurement. In addition, a MediaID has been received and the upload date has been set. If an "Unknown error" occurs, the MediaID can be deleted and the transfer can be attempted again.



12 Illustration: Attributes after a successful upload

4.2. Transfer data

The following data is transferred to Telekom if it is available. Repeated transfer is basically possible, as all scans and photos are given a MediaID in the NET Cloud and are therefore marked as "already uploaded". In contrast to the network map, these are not transferred again.

The starting point is the survey. All network objects that are **linked** to this **measurement** and that are **also linked to a scan** are selected for upload.

This affects the following layers:

Hausanschlussleitung / Längstrasse
- Tiefbauverfahren - Grabenbreite in Meter - Verlegetiefe in Meter - Erfasst am - Materialcodes der verbauten Rohre

Muffe / NVT
- Erfasst am - Materialcode

Rohrunterbrechung
- Erfasst am

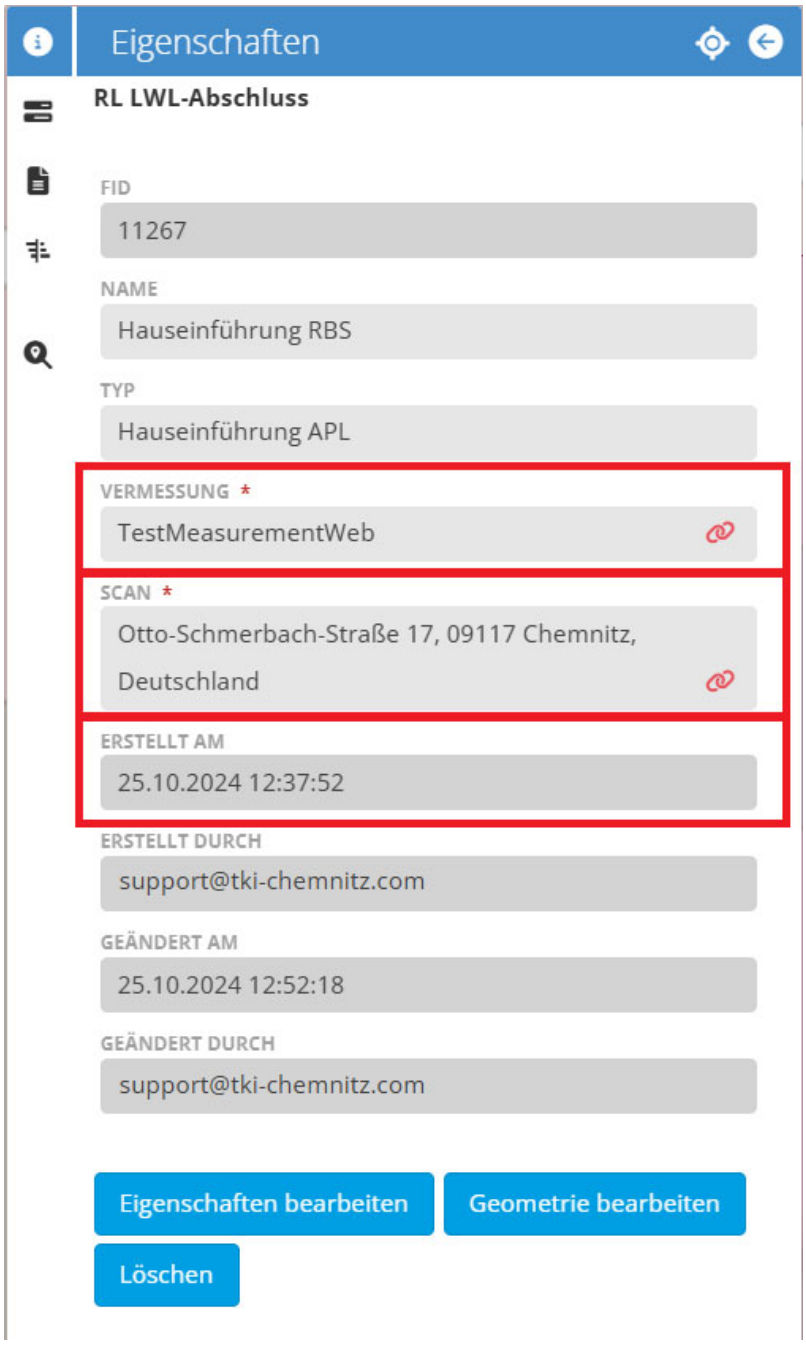
Hauseinführung APL
- Erfasst am

Gebäudekante
- Erfasst am

Kugelmarker
- Erfasst am

Rohrende
- Erfasst am

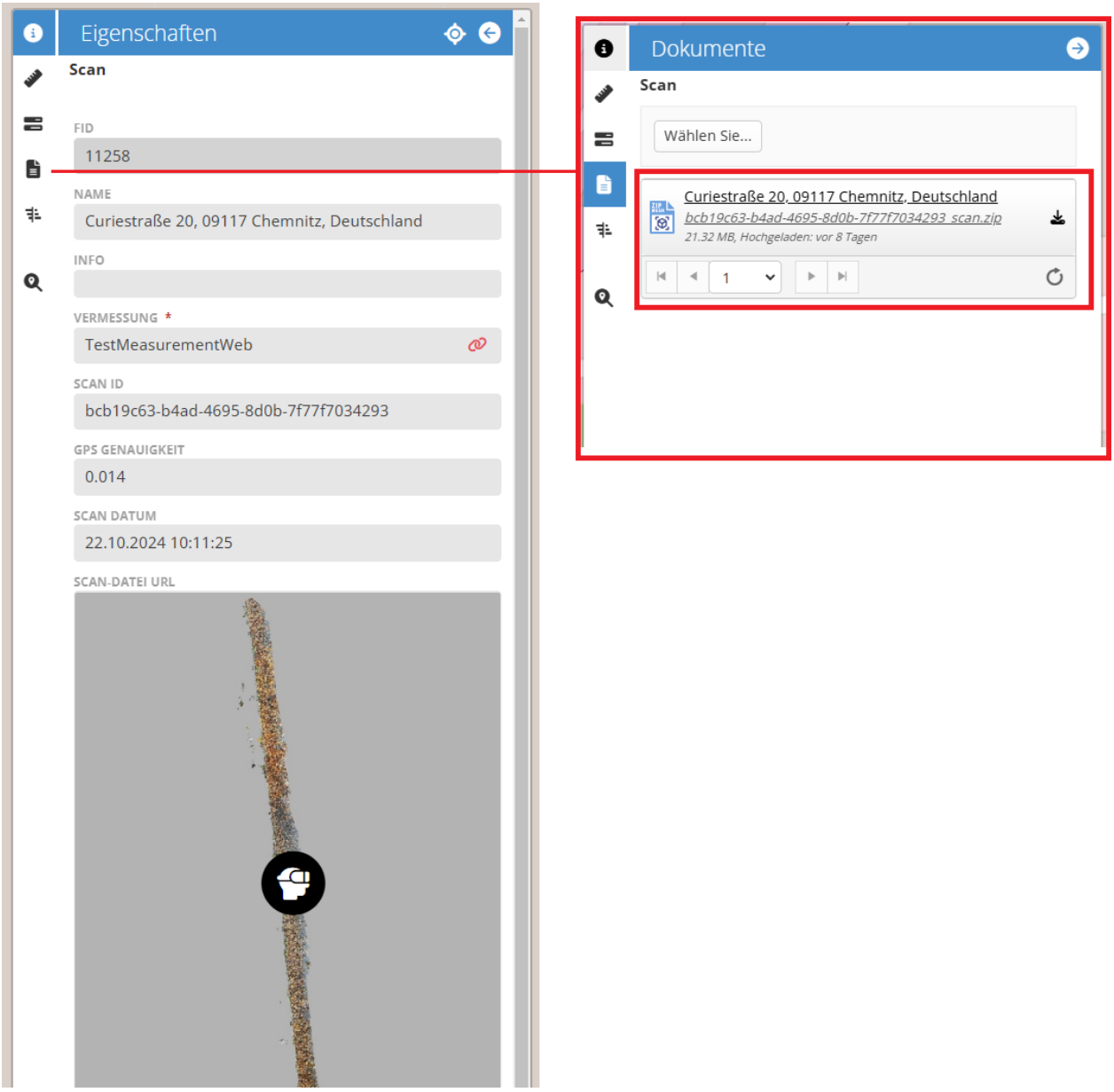
The following example shows a fiber optic termination. The fields **Measurement**, **Scan** and **Created on** must be filled in. The creation date is automatically filled in by the NET Cloud and cannot be changed by the user.

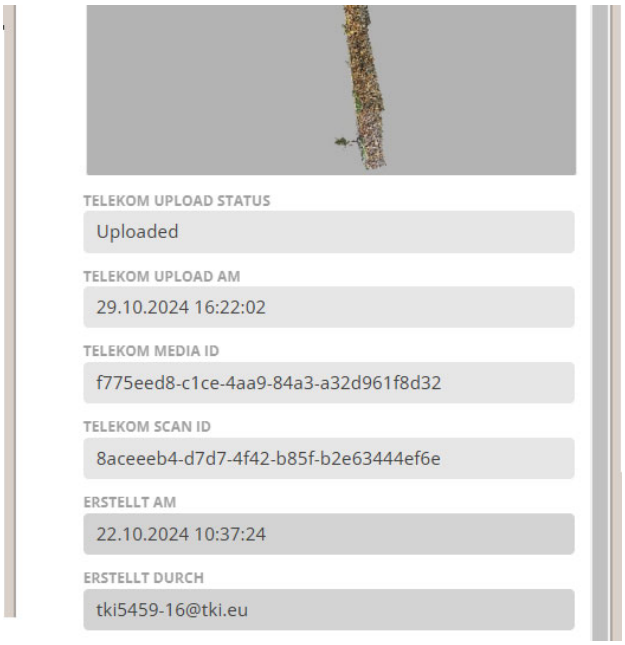


13 Figure: Mandatory attributes for FO terminations

4.3. Upload scans and photos

For the scans and photos to be uploaded successfully, the scans must be assigned to a measurement and linked to a 3D scan. If photos are also to be uploaded, these must also be assigned to the scan object. The scan ID is the unique reference of the 3D scan in the NET Cloud system and must not be confused with the Telekom Scan ID. The Telekom Scan-ID is the unique reference of the scan in the Digital Construction Monitoring. The GPS accuracy, specified in meters, describes the precision of the scan. The scan date is determined directly from the scan and indicates when it was recorded. The date on which the scan was uploaded to the NET Cloud is noted in the "Created on" field and cannot be changed. As soon as a 3D scan including photos has been transferred, this is noted as "Uploaded" in the "Telekom Upload Status". The date of the upload to Telekom and the media ID that the scan receives within the Telekom system are also noted. Each 3D scan and each photo is given its own media ID, which is stored in the NET Cloud blobs.





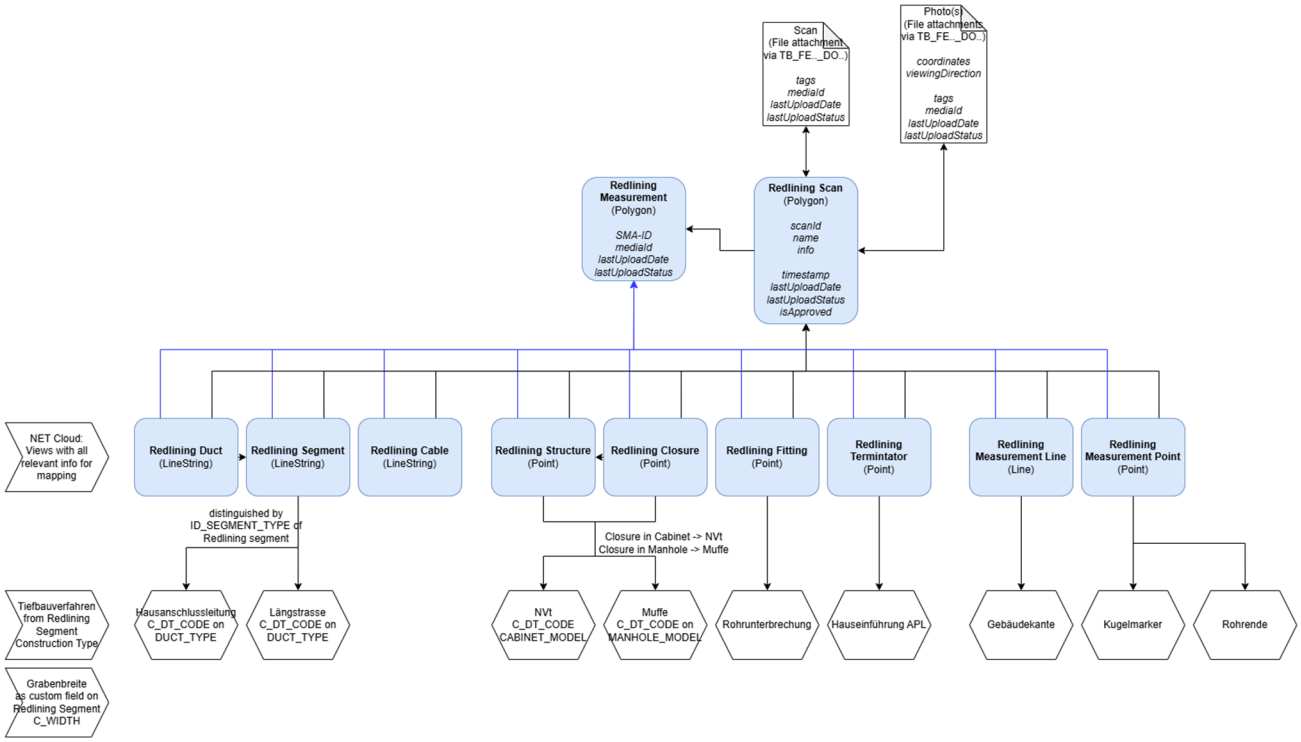
14 Figure: Successfully uploaded 3D scan

5. Support and help

Further detailed information on NET Cloud can be found in the TKI Helpdesk under NET Cloud
https://help.tki-chemnitz.de/hc/de/categories/4409540414610-NET-Cloud

6. Appendix

6.1. Data model specification



15 Figure: Data model specification