



Version history

- V. 1.0 date: 22.2.2023
 - Original version
- V. 2.0 date: 22.04.2025
 - Updated version



INFRAKIT

Basic Guide

Part 1



Features and functions

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3. Overview of the map page
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Part 2



Features and functions

16. Files page

17. As-built page

- Adding as-built points
- Filtering as-built points
- Editing as-built points
- Information of as-built points
- Downloading as-built points

18. Photos page

19. Equipment page

- Usage statistics
- Assignments
- Accuracy

20. Visualization page (3D)



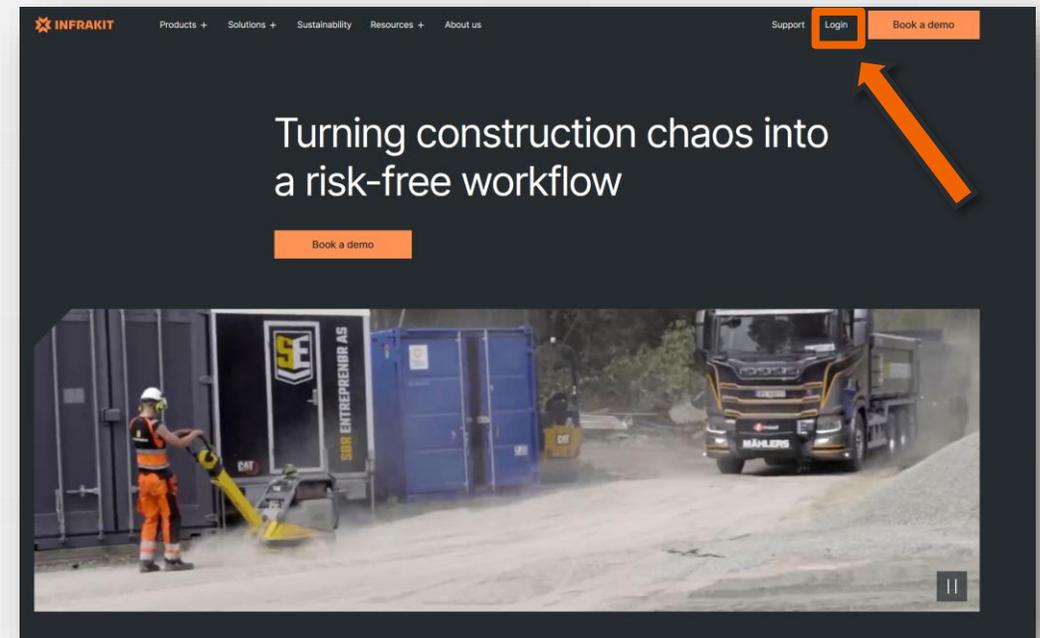
Knowledge base

- This guide explains basic functionality of InfraKit OFFICE
- For more in-depth guides and frequently updated specific instructions go to InfraKit Knowledge base
- <https://support.infrakit.com>

The screenshot shows the top navigation bar of the InfraKit website. On the left is the InfraKit logo (an orange star) and the name 'INFRAKIT' in orange. On the right are two links: 'Back to site »' and 'Back to InfraKit Office »'. Below the navigation is a dark grey section with the heading 'How can we help?' in white. Underneath the heading is the text 'Search our knowledge base for answers or contact support@infrakit.com / +358 9 4257 9297'. A white search bar with a magnifying glass icon and the placeholder text 'Search...' is positioned below this. At the bottom of the screenshot, two white boxes are visible. The first box is titled 'Featured articles' and contains the text '6 articles'. The second box is titled 'InfraKit LINK™ for machine control system integrations' and contains the text '11 articles'.

Login

1. Type the url in the browser:
<https://infrakit.com/>
 2. Select "Login" in the upper right corner
 3. Enter your username and password
 - **You will receive your username**
 - Either from your organization's administrator
 - Or from Infrakit support@infrakit.com
- On this page you can also
 - Change the language from the top bar
 - Choose SSO login
 - Login to Infrakit tablet version
 - Request a new password



Čeština Deutsch Eesti English Español Français Magyar Nederlands Norsk Polski Português Русский Srpski Suomi Svenska



Sign In

Username:

Password:

Login

SSO login

Login to tablet version

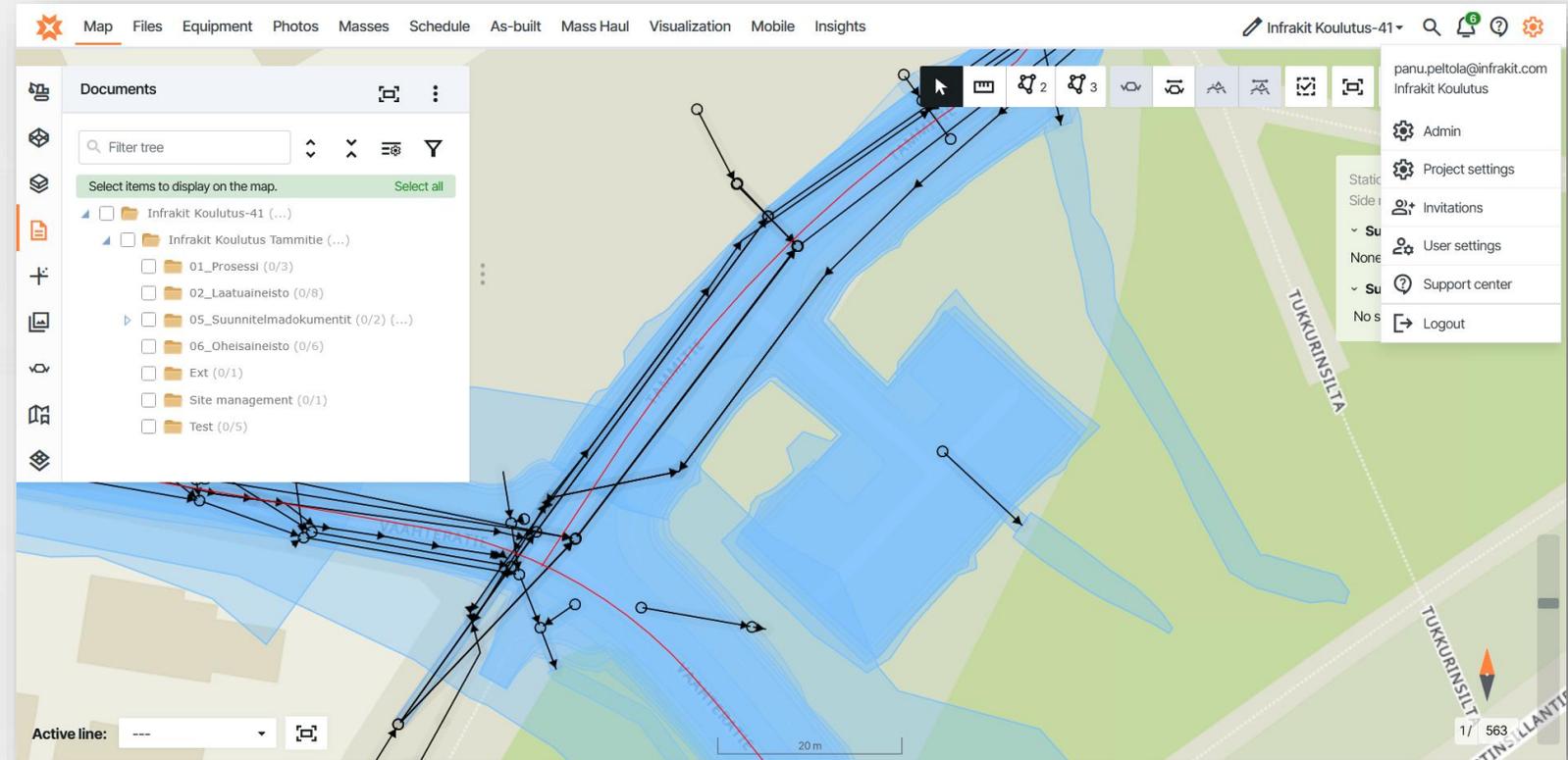
Did you forget your password? [Click here.](#)



Settings

Settings are located under “gear” button:

- Admin
 - Manage organization settings
- Project settings
 - Manage project settings
- User settings
 - Manage personal information and change of language and password
- Project invitations
 - Accepted and pending project invitations
- Support center
 - Open InfraKit Knowledge base
- Log out



Project settings



Basic settings



Groups

Coordinate system

This setting defines the coordinate system of the project

Local offset

If a local transformation has been made to the coordinate system, the offset is entered here

7 parameters

Configure the coordinate system using the 7 parameter conversion

Height system

Affects height in FIELD application - Set correctly

Main alignment

Default active alignment for the project (FIELD)

Base drawing

Base map for Trucks application

Terrain model

The terrain model of the initial data is always shown as a dashed line in the cross sections

Terrain bedrock model

The bedrock surface model of the initial data is always shown as a dashed line in the cross sections

Project border drawing

Break lines of the 2D plane are shown as vertical lines for cross-sections, e.g. takeover boundaries

Default photos folder

Select the default root folder for photos taken in Field application

Codelist

Interprets the legend for measurement codes

Coordinate system

ETRS-GK25

or EPSG code EPSG:

EPSG:3879
ETRS89 / GK25FIN

Datum transformation grid file:

-

Local offset:

northing (m):
0.0

easting (m):
0.0

7 parameters:

tX (m):

0.0

tY (m):

0.0

tZ (m):

0.0

rX (rad):

0.0

rY (rad):

0.0

rZ (rad):

0.0

Scale (ppm):

0.0

Test coordinate conversion

proj.4

Height system (Geoid)

Finland - N2000

Cross Section

Width:

60 m

Y scale:

1.0

Logpoint search displacement:

2.5 m

Main alignment

No main alignment selected

Select main alignment:

Empty

Base drawing

No base drawing selected

Select base drawing:

Empty

Terrain model

No terrain model selected

Select terrain model:

Empty

Bedrock model

No bedrock model selected

Select bedrock model:

Empty

Border drawing

9002_tonttirajatBG.dxf (version 2)

Choose border drawing:

9002_Taustakartat/9002_tonttirajatBG.dxf (version 2)

Default photos folder

No default photos folder set

Choose default photos folder:

Empty

Codelist

Infra_Rakentajakoodaus_v.2.35.nfcl (version 1)

Choose codelist file:

01_Prosesti/Infra_Rakentajakoodaus_v.2.35.nfcl (version 1)

Update

Overview of the map page

Pages for different functions

Project selection
Search function
Help Center
Settings



Map Files Equipment Photos Masses Schedule As-built Mass Haul Visualization Mobile Insights

Infrakit_Perusteet_Koulutusha... 🔍 🔔 ? ⚙️

Mode **Equipment**

- Models
- Drawings
- Documents
- As-Built
- Photos
- Masses
- Saved views
- Map tile layers

👁️ 2 3 📏 📐 📏 📏 📏 📏 📏 📏 📏 3D Google hybrid maps ⋮

Measurement
- Distance
- Area
- DEM volume measuring

Cross and long sections
- Based on active line
- Free select

- Logpoint approval
- Zoom to extends
- Activate 3D view
- Map tile layer selection

Station: 697.7 m
Side measure: 86.3
Height: 25.6 m
Surface elevation
None
Surface properties
No surface selected

Extra tools
- Map image
- Clear map state

Tabs

Active alignment

Active line: M2_ml_tg.xml

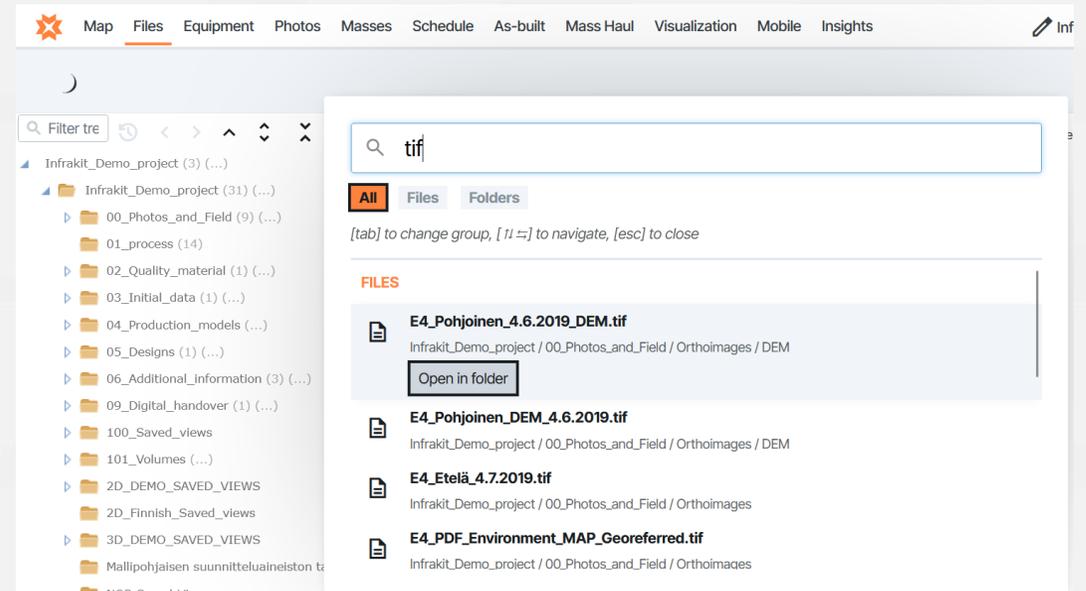
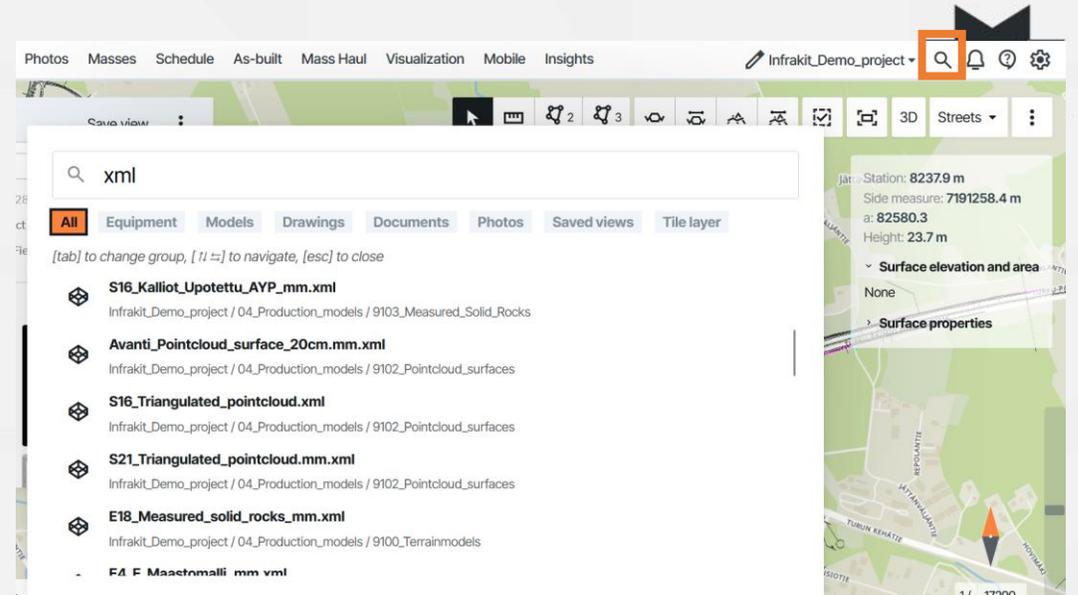
Compass

Scale
You can change the scale manually

1/ 345

Search function

- Open the search function by clicking on the magnifying glass in the upper right corner of the screen or by pressing CTRL+Spacebar
- The search function searches from all tabs on the page
 - Search function searches from file names and descriptions
- Add search results to the map by selecting "Load" next to the file name
- The search window can be navigated by using a mouse or keyboard buttons as instructed by the window
- Different kinds of files can be filtered by changing the file type in the file search window
- Note that using the search function in "Map" page and "Files" page may give different results. The map page only shows files you can normally choose from the map page and files page searches from the documents on files page
 - For example, searching on map page does not find video files and searching on files page does not find pictures



Filters



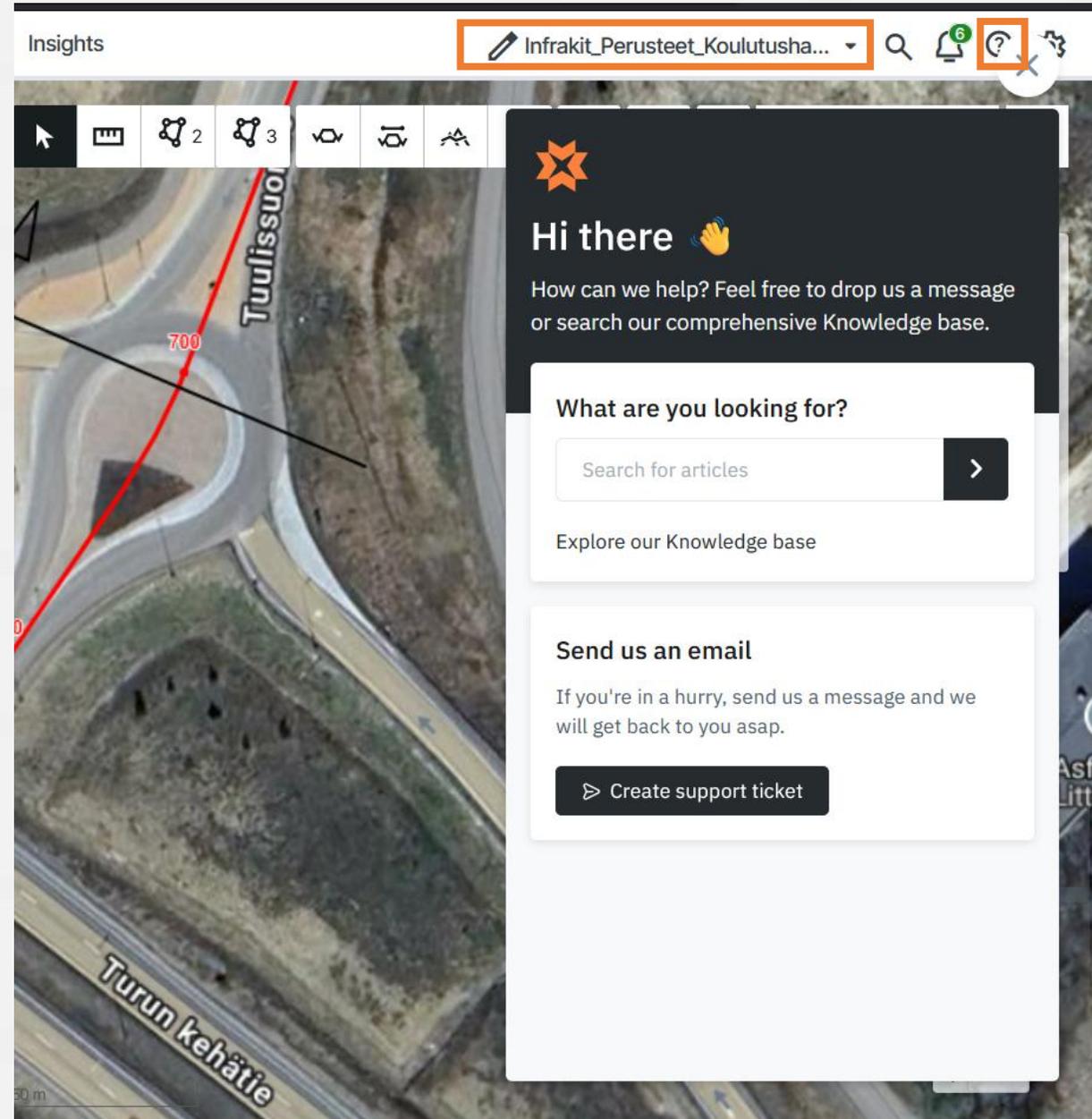
- Another way to search and filter files is by using filters on a tab
- Each tab has its own filter selection

- Every tab has a field to filter by name
- In this you can search by:
 - File name
 - Example 1: Search all files containing string ".xml"
 - Folder name
- The Documents, As-built, and Photos tabs have more filters connected to the page. For example:
 - Date added
 - Type
 - User
 - Attached alignment
 - Properties
- Note that filters only work for the tab they are set to
- Different filters can be set to different tabs at the same time
- The easiest way to save filters is to create a saved view after configuring the filters

The screenshot shows a software interface with a file tree on the left and a filter panel on the right. The file tree is titled "As-built" and contains a search bar with ".xml" entered. The filter panel on the right has a "Filters" section with various dropdown menus for filtering files. The search bar and the filter panel are highlighted with orange boxes.

Notifications and projects

- You can find project notifications behind the “bell” icon in the upper right corner
- The number on top of the bell indicates the number of activities that took place between login times by event type
 - All – All events of the project
 - Files – Added / Removed files
 - Folders – Added / Removed folders
 - Photos – Added / Removed photos
 - Service – Infrakit's general announcements, e.g. new application version
 - Chat – The project's conversation, which everyone in the project can see
- Selecting the question mark opens a support window in which you can:
 - Search articles from the Infrakit Knowledge base
 - Create a support ticket to Infrakit support
- You can select a project from the drop-down menu on the left side of the bell
- If you are the admin of the project, you can press the pencil symbol next to the project listing to access the admin page of the project, where you can:
 - Edit the coordinate system, height system, organization, truck mode
 - Edit and download log the user list by inviting users
 - Edit and download log of equipment (machines)
 - Integrate the project into different machine control systems



Insights

Infrakit_Perusteet_Koulutusha...

Hi there 🙌

How can we help? Feel free to drop us a message or search our comprehensive Knowledge base.

What are you looking for?

Search for articles

Explore our Knowledge base

Send us an email

If you're in a hurry, send us a message and we will get back to you asap.

▶ Create support ticket

Measuring tools

Distance measurement



You can measure distances by selecting the start point and the end point with the mouse.

- End measuring by double-clicking, the line remains visible



For example, the distance between wells

Area measurement



You can measure the areas by selecting the desired area point by point with the mouse.

- End measuring by clicking on the starting point or by double-clicking, the area remains visible



For example, asphalt squares from an orthoimage

DEM measurement



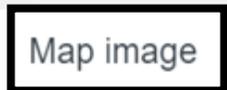
Measure volumes between a DEM model and design or self defined height

- Same controls as area measurement



Follow earthworks, calculate pile volumes

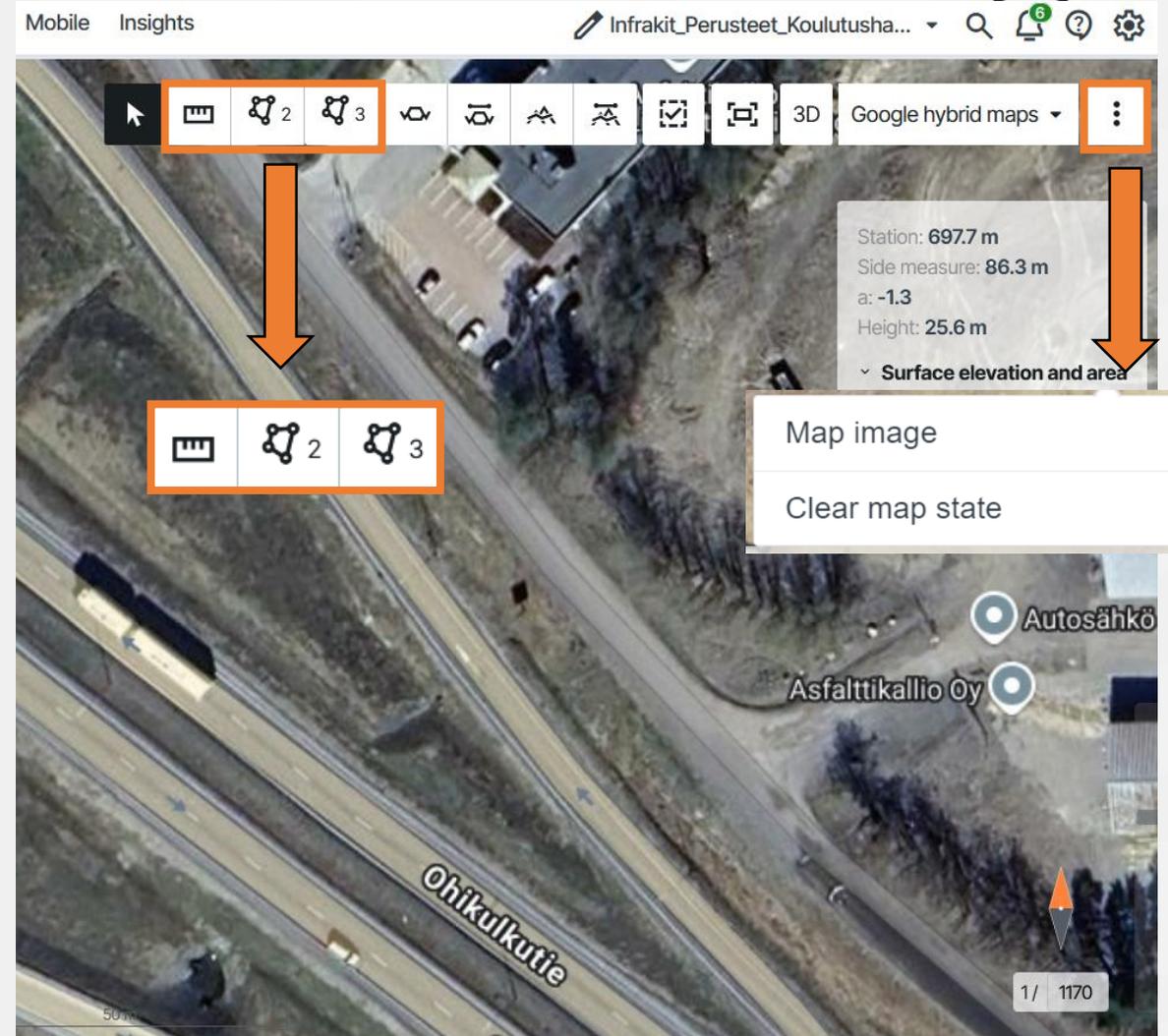
Map image



You can take a screenshot of the map page view from behind the "more" button by selecting "Map image"



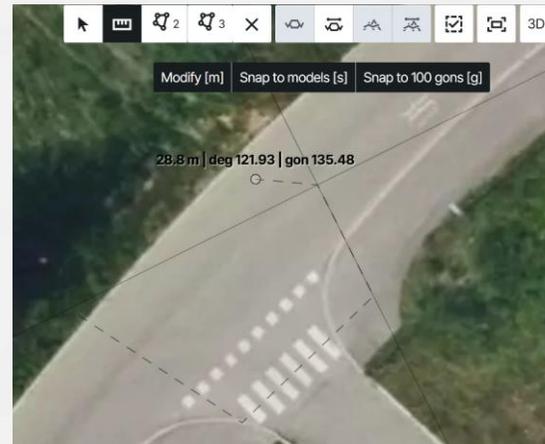
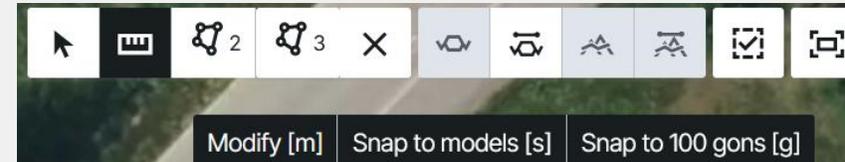
E.g. to include in documents or as an e-mail attachment



Distance measuring



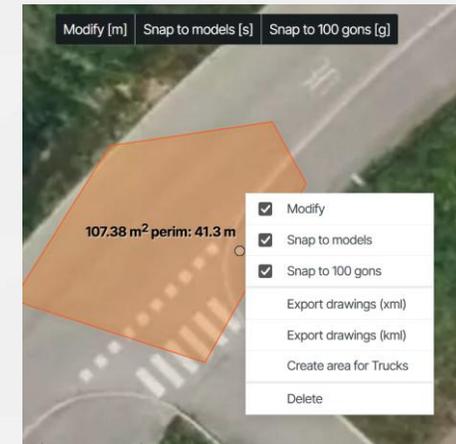
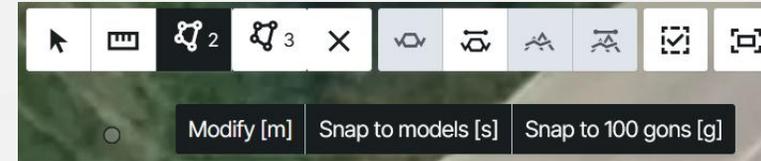
- Select the distance measuring tool icon
- After choosing the tool options can be toggled:
 - Modify → Modify a finished measurement by clicking and dragging it from its corner points or create new corner points by double clicking while hovering cursor above a line
 - Snap to models → Cursor snaps to edges of models
 - Snap 100 gons → Infrakit draws assist lines, and the cursor snaps those lines. The lines form a cross and each line has an angle of 100 gons (90 degrees) from the last one. If a line is drawn outside of the assist lines, it will be oriented perpendicular to the last line drawn.
- Many lines can be drawn into one measurement
- End the measurement by double clicking left mouse button
- Infrakit shows the total length of the line and angle compared to the last line
- Line can be drawn freely by pressing and holding the shift-key
- Measurements can be deleted by clicking a measurement with the right mouse button and selecting delete. All measurements can be deleted by clicking the cross next to the tool menu



Area measuring

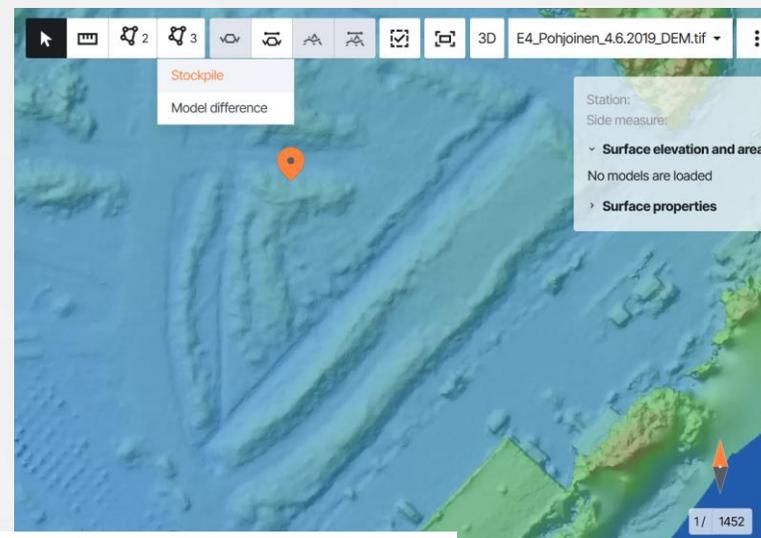


- Select Area measuring icon from the toolbar
 - Area measuring tool has otherwise the same controls as the distance measuring, except double clicking left mouse button completes the shape
 - The selected area can be downloaded as xml or kml format and the area can be converted as an area for the Trucks application
- ✓ Tip 1: Use a kml file created with the area measuring tool for example to create flight programs for DJI drones
- ✓ Tip 2: Area and distance measurements can be saved into a saved view or map image



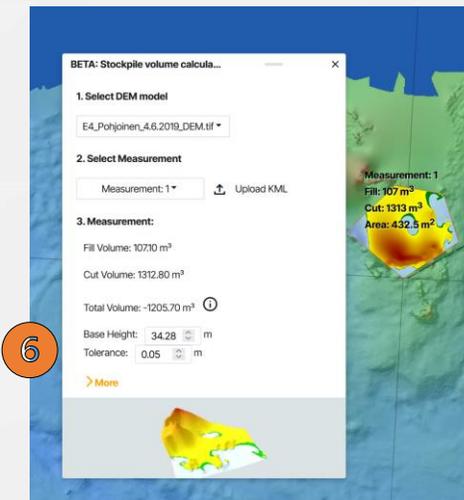
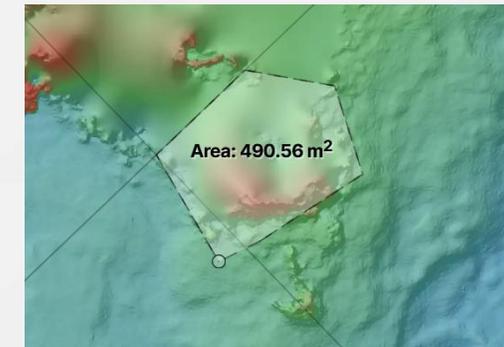
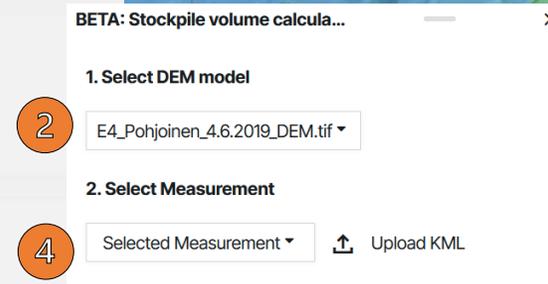
Volume Calculation 1/2 ¹

- Volume calculation can measure volumes from height models (DEM, DSM and DTM), that are in .tif or .tiff format
- The volume can be compared against a reference height or model



Stockpile:

1. Select volume measuring tool and choose “Stockpile” from the drop-down menu
2. Choose a model from which the volume will be measured from
3. Draw the area on the map (controls are the same as area tool)
4. Choose the wanted area measurement from the volume measuring menu
5. The measurement, it’s volume and area will be drawn on the map. The height will be calculated by using the average height of the perimeter.
6. Reference height and tolerance can be changed from the menu. The drawn 3D model can be rotated by pressing and holding the left mouse button

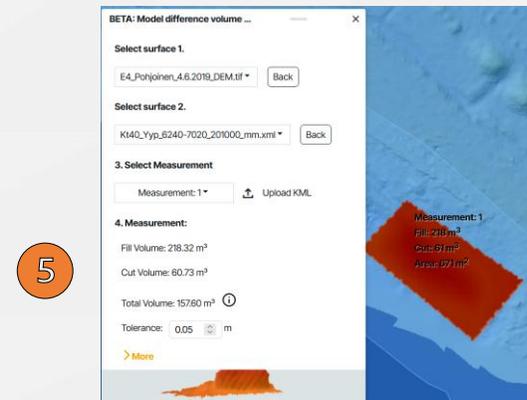
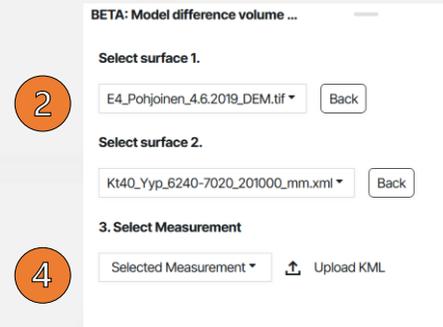
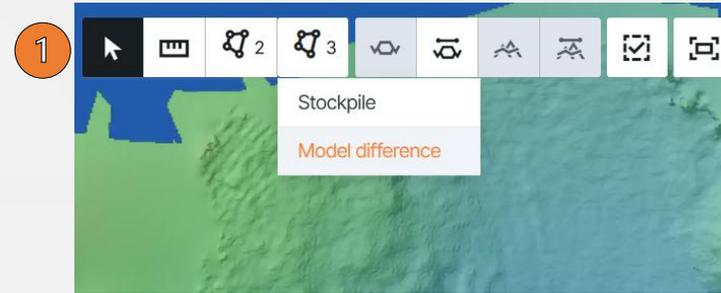


Volume Calculation 2/2



Model difference:

1. Select volume measuring tool and select “Model difference”
2. Select the height model and reference model. Only active models will be shown on the reference model menu
3. Draw the area on the map
4. Choose the wanted measurement from the volume calculation menu
5. The measurement, it's volume and area will be drawn on the map and the drawn 3D model can be rotated by pressing and holding the left mouse button



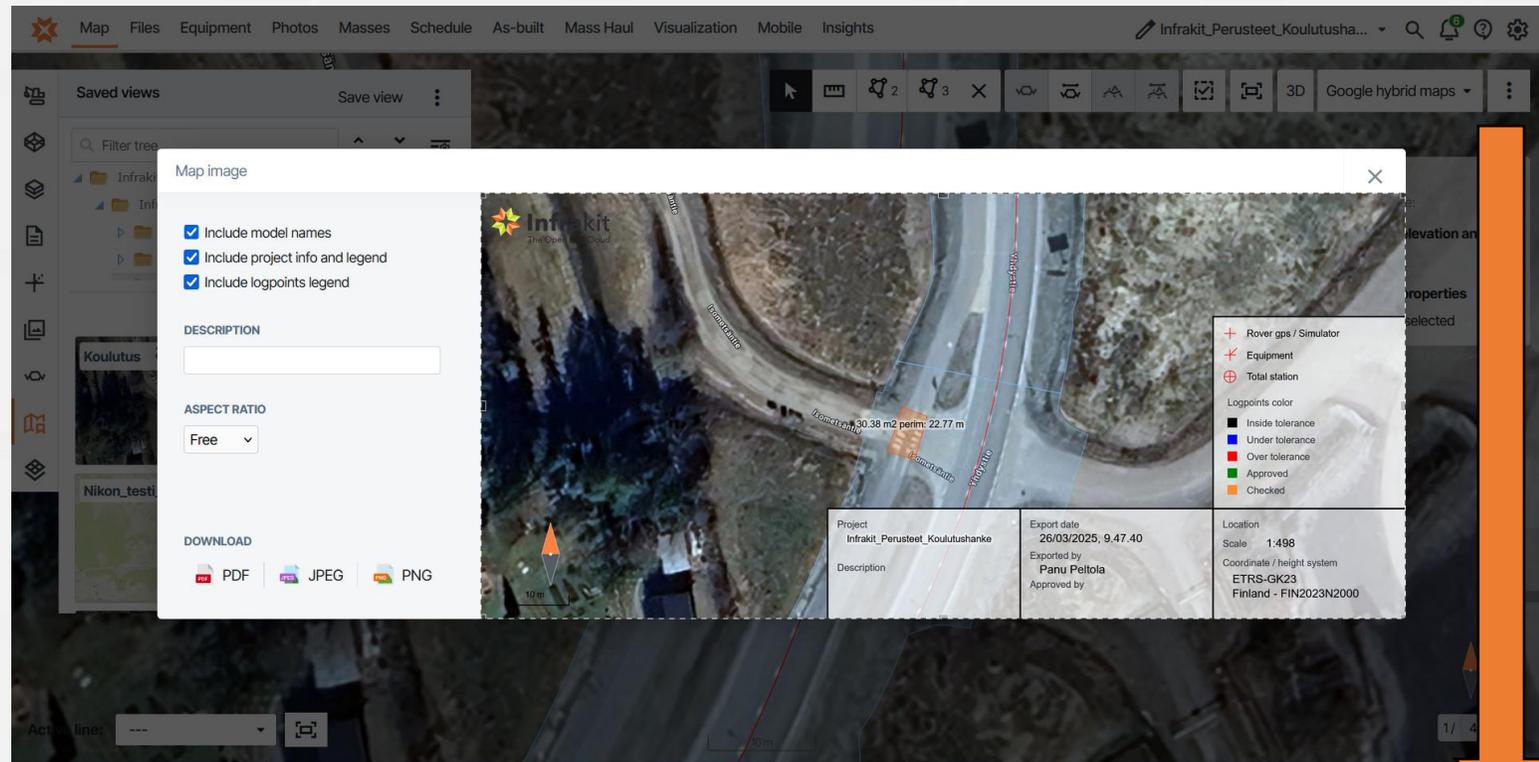
Map image



- Map image (takes a screenshot *.png / *.pdf)
 - You can take a screenshot of the map page view
 - Add a title / legend and description to the map image
 - You can use the map image as an e-mail attachment
- All the information displayed on the screen will be included in the map image
 - Comments on the saved view
 - Measurements taken on the screen (length, area)
 - Models
 - Drawings
 - Document symbols
 - As-built points
 - Photo symbols

— Workflow (example on the right)

- Activate the desired elements on the map
- Measure the distances and areas you need
- Save view
- Comment/Draw → "Send"
- Take a map image of the view
- Select "PDF"



Map image

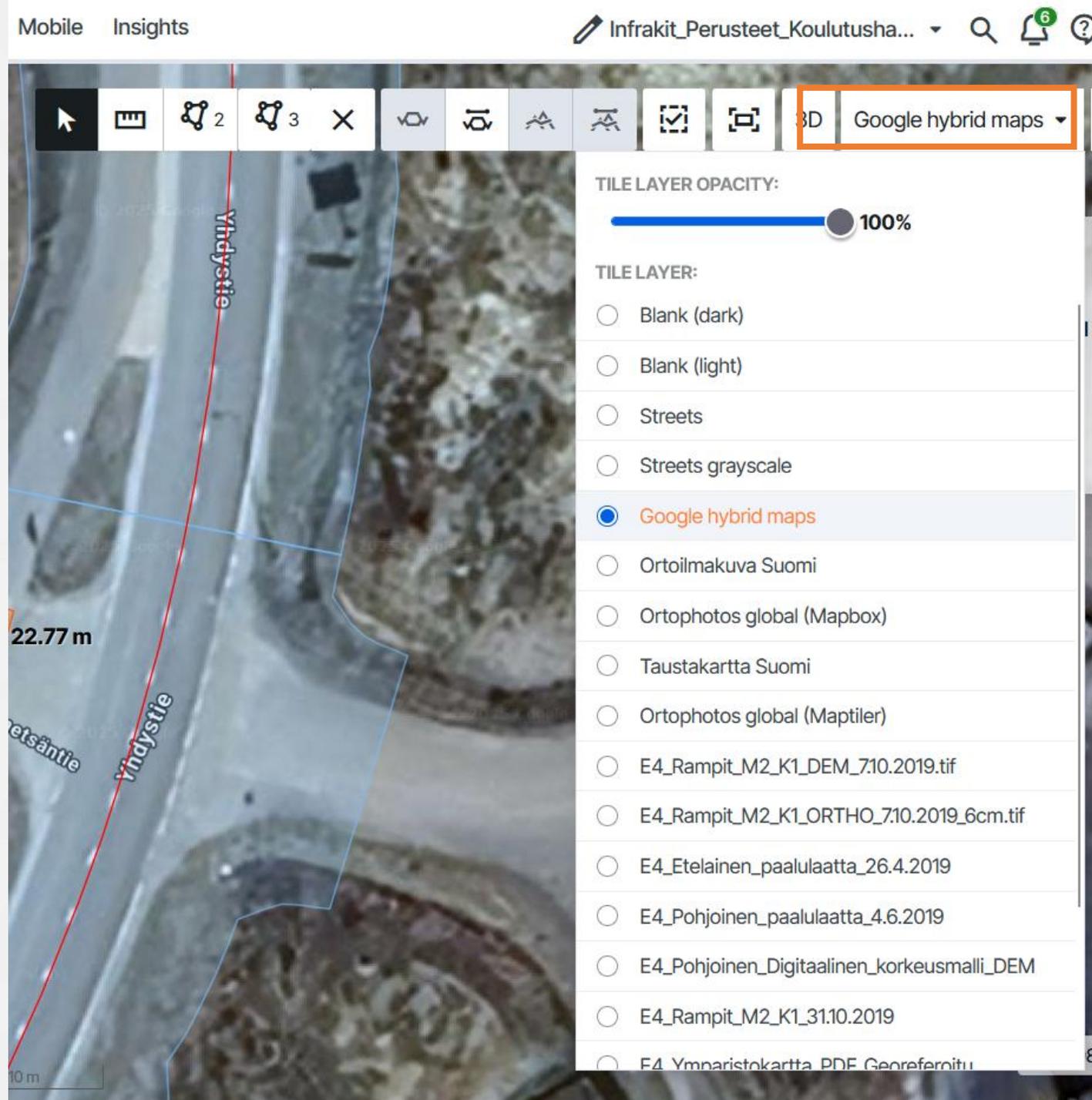
Clear map state

Map tile layers

- You can change individual map tile layers to be the background map from the pull-down menu
- The transparency of the individual map tile level is adjustable
- Infrakit has different standard layers for map tiles by default, for example:
 - Blank (light) – Empty (light background)
 - Blank (dark) – Empty (dark background)
 - Streets – Street map (in colors)
 - Streets Grayscale – Street map (gray scale)
 - Ortoilmakuva Finland - Aerial image Finland
 - Orthophotos global (Mapbox) – Global aerial view provided by Mapbox
 - Background map of Finland – Street map
 - Orthophotos global (Maptiler) – Global aerial view provided by Maptiler
- From the pull-down menu you can also find project-specific map tile layers added to the project, e.g. aerial photos produced by drone or open data map layers

*Support for open map services, WMS, WMTS, XYZ

*see separate instructions: "Map layers: Project settings"



Map tile layers tab

- In map layers tab you can :
 - Activate several map layers simultaneously
- In the Activated page you can:
 - Set layer-specific transparency
 - Change the order of map layers – layers listed above on the list will be on top on the map
- Organize map layers based on creation date (timeline)
- Ortho + street maps
- You can display more information by activating several map layers on top of each other and changing transparencies

Map tile layers

All Activated

Filter tree

- Infrakit_Koulutushanke (...)
- Blank (dark)
- Blank (light)
- Streets
- Streets grayscale
- Google hybrid maps
- Ortoilmakuva Suomi
- Ortophotos global (Mapbox)
- Taustakartta Suomi
- Ortophotos global (Maptiler)
- E4_Etelainen_paalulaatta_26.4.2019
- E4_Pohjoinen_paalulaatta_4.6.2019
- E4_Pohjoinen_Digitaalinen_korkeusmalli_DEM
- E4_Rampit_M2_K1_31.10.2019
- E4_Ymparistokartta_PDF_Georeferoitu

Settings

3 layers selected

You can change order by dragging

Map tile layers

All Activated

- E4_Etelainen_paalulaatta_26.4.2019 100%
- Ortophotos global (Mapbox) 50%
- Google hybrid maps 70%

Transparency slider 20% - 100%

Map layers : Project's settings XYZ maps

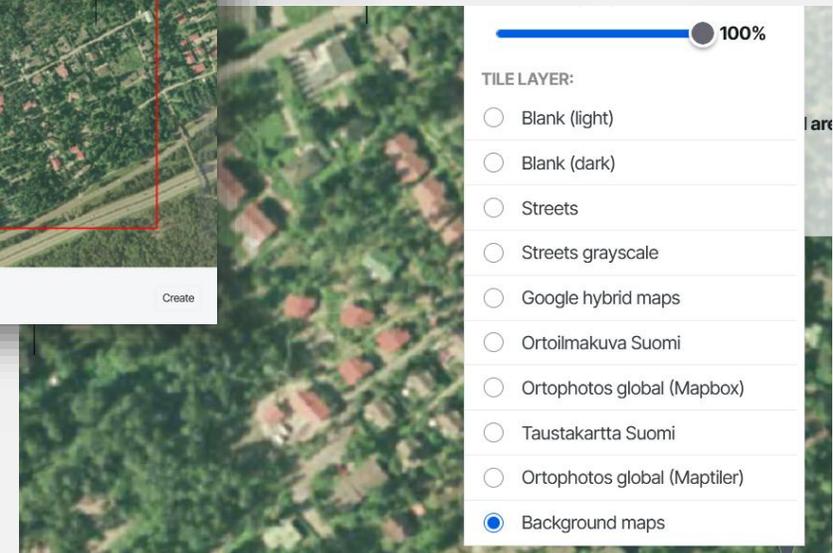
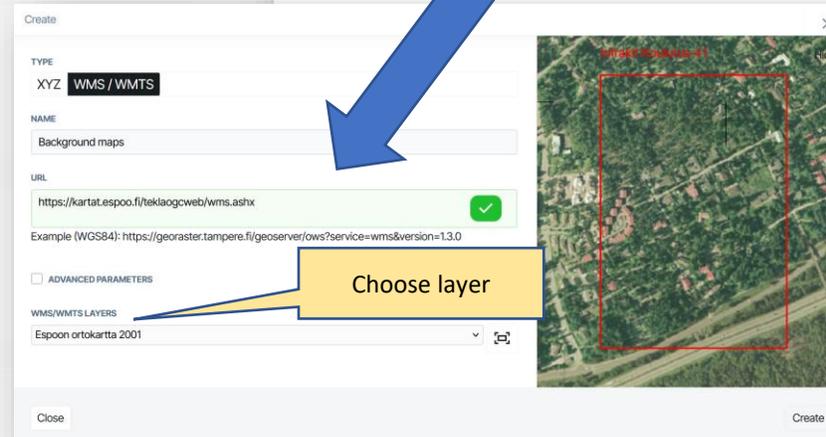
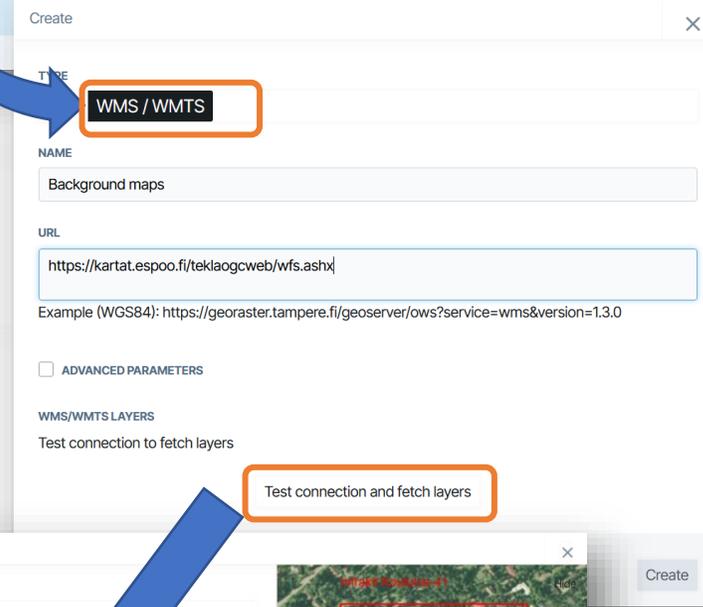
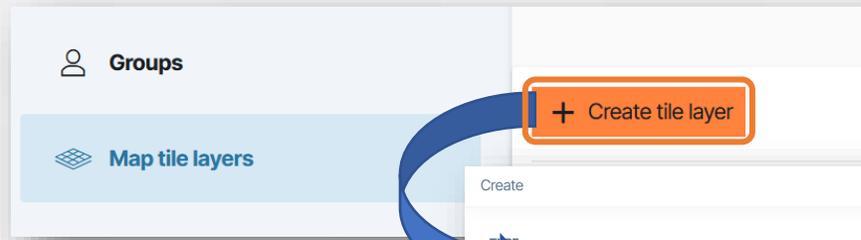
- You can add XYZ maps in the project settings
- Choose
 - Map tile layers
 - Create a new map tile layer (XYZ)
 - Enter the name for the layer
 - Enter the URL
 - Test connection and fetch layers
 - If the connection fails, make sure service address is correct
 - After clicking create, the layer should be added to the list
 - Map tile layers can be edited and deleted from project settings
 - If authentication is needed, it can be added in the “Advanced parameters” menu

The screenshot illustrates the process of adding a new XYZ map tile layer to a project's settings. The interface shows a sidebar with 'Groups' and 'Map tile layers'. A 'Create tile layer' dialog is open, allowing the user to specify the layer's type (XYZ), name (Cycling map), and URL (https://c.tile-cyclosm.openstreetmap.fr/cyclosm-lite/{z}/{x}/{y}.png). A 'Test Connection' button is highlighted, indicating the next step in the process. Below the dialog, a map shows a red bounding box around a specific area. A 'Create' button is visible at the bottom right of the dialog. In the bottom right corner, a list of map layers is shown, with 'Cycling map' selected.



Map layers : Project's settings WMS/WMTS maps

- You can add WMS/WMTS maps in the project settings
- Choose
 - Map level
 - Create a new map level (WMS/WMTS)
 - Enter the URL
 - Test connection and fetch layers
 - If the connection fails, make sure the service address is correct
 - Choose wanted layer and name it
- Added map levels are visible also to other users and in Infrakit FILED application
- If authentication is needed, it can be added in the “Advanced parameters” menu



Map layers: Orthophotos and point clouds

- Add an orthophoto or point cloud to the "Files page"
- Once the file has been added, Infrakit automatically processes it into a map tile layer
- Note that the point cloud can only be opened in 3D view
- Large files can take several hours to process
- The map layers processed by Infrakit can be shared to third-party services as XYZ or WMS map tile layers.
- Using the WMS layers from Infrakit in a third-party software requires identification with Infrakit account that has access to the project



The screenshot displays the Infrakit interface for file management. At the top, a window titled "Folder: O2_Laatu" shows a list of files, with "E4_Rampit_M2_K1_ORTHO_7.10.2019_6cm.tif" (694 MB) selected. Below this, a detailed view of the selected file is shown, including its version (1), size (693.71 MB), and creation time (22.4.2025 08.20). The file is marked as "Presentable" and has a "File link" section with "Download" and "Copy to clipboard" options. A "Reparse" button is also visible. At the bottom, a table lists various map tile layers (WMTS, WMS) with their respective URLs and "Copy to clipboard" buttons. The "Processing" status is indicated for the WMS layer.

Layer Type	URL	Action
WMTS (REST)	https://api.test.infrakit.com/external_map_proxy/29c7t	Copy to clipboard
WMTS (KVP)	https://api.test.infrakit.com/external_map_proxy/29c7t	Copy to clipboard
WMS	https://api.test.infrakit.com/external_map_proxy/29c7t	Copy to clipboard
WMS-C	https://api.test.infrakit.com/external_map_proxy/29c7t	Copy to clipboard

Models tab

On the models tab, you can find all the project's models

1. Model selection

- Put a check mark in the box in front of the model name, Infrakit will visualize the model area on the map in blue color
- By clicking on the model name, Infrakit focuses the view on the selected model
- You can select all models in a folder by holding down the "Shift" key and putting a check mark in the box in front of the folder
- If you wish, you can also select all models on the screen at once by selecting "select all"

2. Limiting the number of visible folders

- You can also choose whether the directory is expanded every time a tab is opened

Additional functions / information for models

3. Infrakit shows additional model information by clicking on the model (height at the cursor position, 2D surface area, and 3D surface area when you hover the mouse cursor over the 2D surface area reading)
4. Right-click on the model to open an additional menu. In the menu you can
 - Display the triangle mesh of the model
 - Show the breka lines of the model
 - Fit the selected model to the map
 - Select the model file from the directory
 - Open the model in files page
 - Download the model to your computer
 - Load the as-built points attached to the model
 - Create a manual as-built point at the point indicated by the marker
 - Open the menu that shows the models at the cursor position and the models in the surrounding environment
 - Open the selected point in Google Maps (models will not be displayed)

Map Files Equipment Photos Masses Schedule

Models

Filter tree

(11 / 209) Clear selection

Surface elevation and area		
E4R2_Yyp_201000_mm.xml	24.46m	5843m ²
E4R2_Sitk_213100.xml	24.42m	2366m ²
E4R2_Jak_212100_mm.xml	24.27m	3321m ²
E4R2_Ayp_201200_mm.xml	23.16m	4330m ²
Paalulaatta_E4_E_kaivuutaso_162900.mm.xml	18.8m	10559m ²

Context menu options:

- Show triangle mesh
- Show model lines
- Fit into view
- Select in files tree
- Open in Files page
- Download
- Load attached logpoints
- Draw cross section
- Draw long section
- Create logpoint
- 5 models in this location
- 20 nearby models
- Open in Google Maps

Coordinates: lat: 60.4436693 lon: 22.4888514
n: 6703613.88 e: 23471860.86

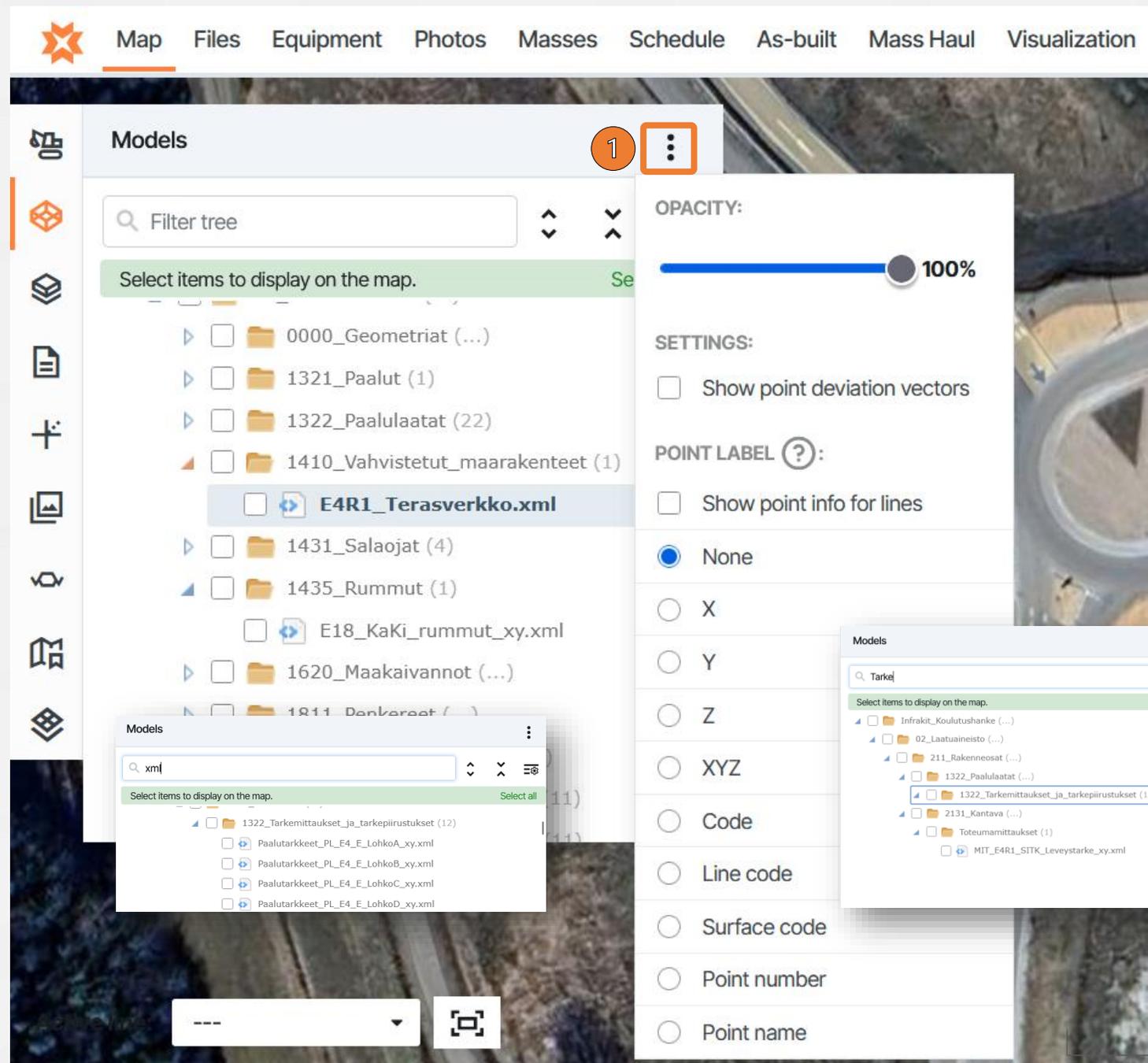
Models tab

1. Model settings

You can adjust the transparency of the models you choose and the information displayed about the models* (*point data only)

Tip 1 : Use the search function on the map page and open the file "files page" by pressing the right mouse button and selecting or download it directly

-  Download file
-  Open in Files page
-  Show details



The screenshot displays the software's main interface with the 'Models' tab selected. The top navigation bar includes 'Map', 'Files', 'Equipment', 'Photos', 'Masses', 'Schedule', 'As-built', 'Mass Haul', and 'Visualization'. The 'Models' panel on the left contains a search bar labeled 'Filter tree' and a list of model folders and files, including '0000_Geometriat (...)', '1321_Paalut (1)', '1322_Paalulaatat (22)', '1410_Vahvistetut_maarakenteet (1)', 'E4R1_Terasverkko.xml', '1431_Salaojat (4)', '1435_Rummut (1)', 'E18_KaKi_rummut_xy.xml', '1620_Maakaivannot (...)', and '1811_Benkeret (...)'. A context menu is open over the 'E4R1_Terasverkko.xml' file, showing options: 'Download file', 'Open in Files page', and 'Show details'. A settings panel is also open, showing 'OPACITY: 100%' with a slider, 'SETTINGS: Show point deviation vectors' (unchecked), and 'POINT LABEL (?)' options: 'None' (selected), 'X', 'Y', 'Z', 'XYZ', 'Code', 'Line code', 'Surface code', 'Point number', and 'Point name'. A smaller 'Models' panel is visible in the bottom right corner, showing a search for 'Tarkel' and a list of items to display on the map.

Drawings tab

- Drawings refer to 2D materials in vector form, which are most commonly known as CAD images or design files. The most common formats for drawings are DWG, DXF, but there are other formats as well.
- On the Drawings tab, you can find all 2D vector drawings recognized by Infrakit

1. Selection of drawing

Put a check mark in the box in front of the name of the drawing, Infrakit visualizes the drawing in the map view

By clicking on the name of the drawing, Infrakit focuses the view on the selected drawing

You can select all the drawings in the folder by holding down the "Shift" key and putting a checkmark in the box in front of the folder

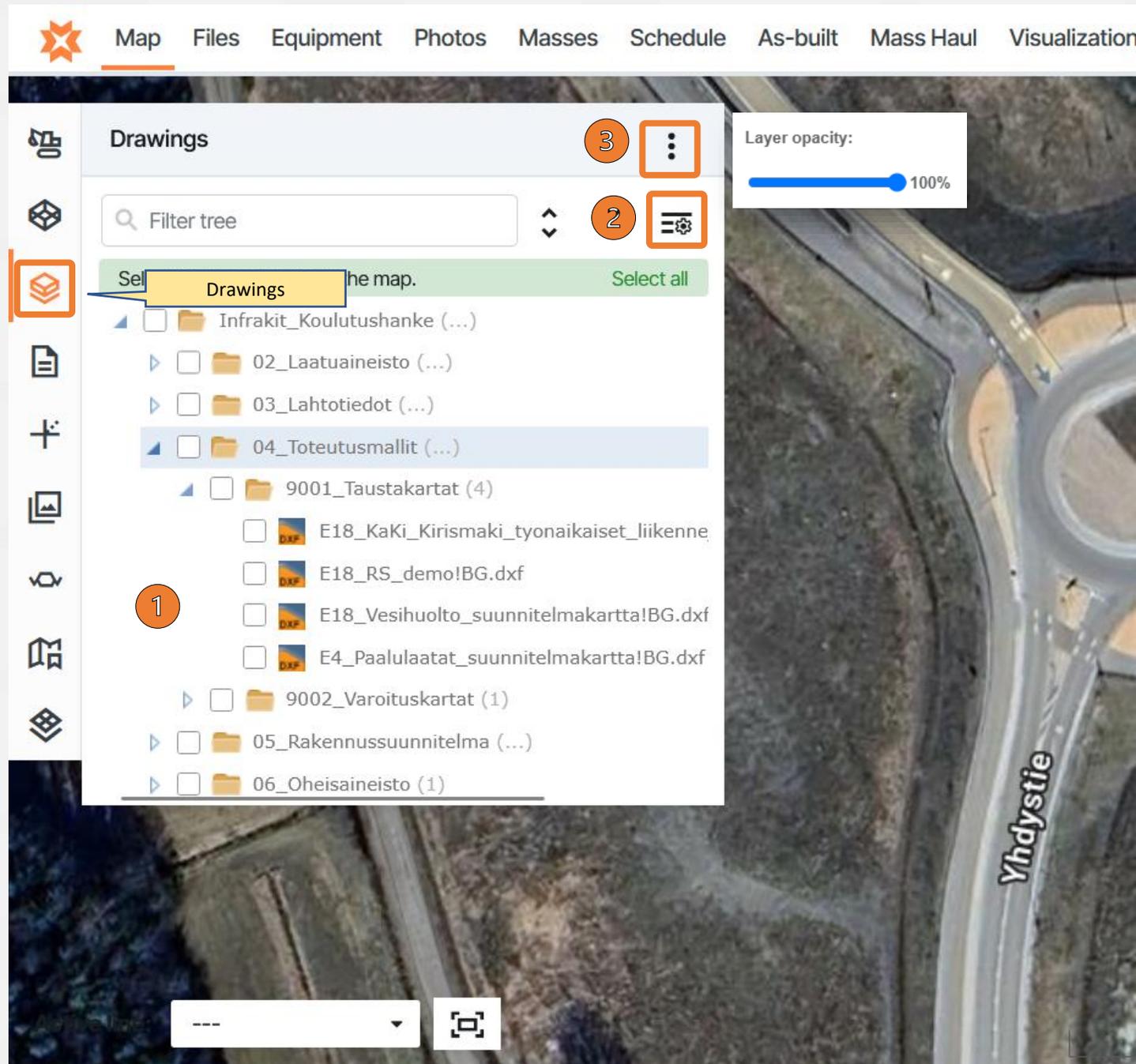
If you wish, you can also select all drawings on the screen at once by selecting "select all"

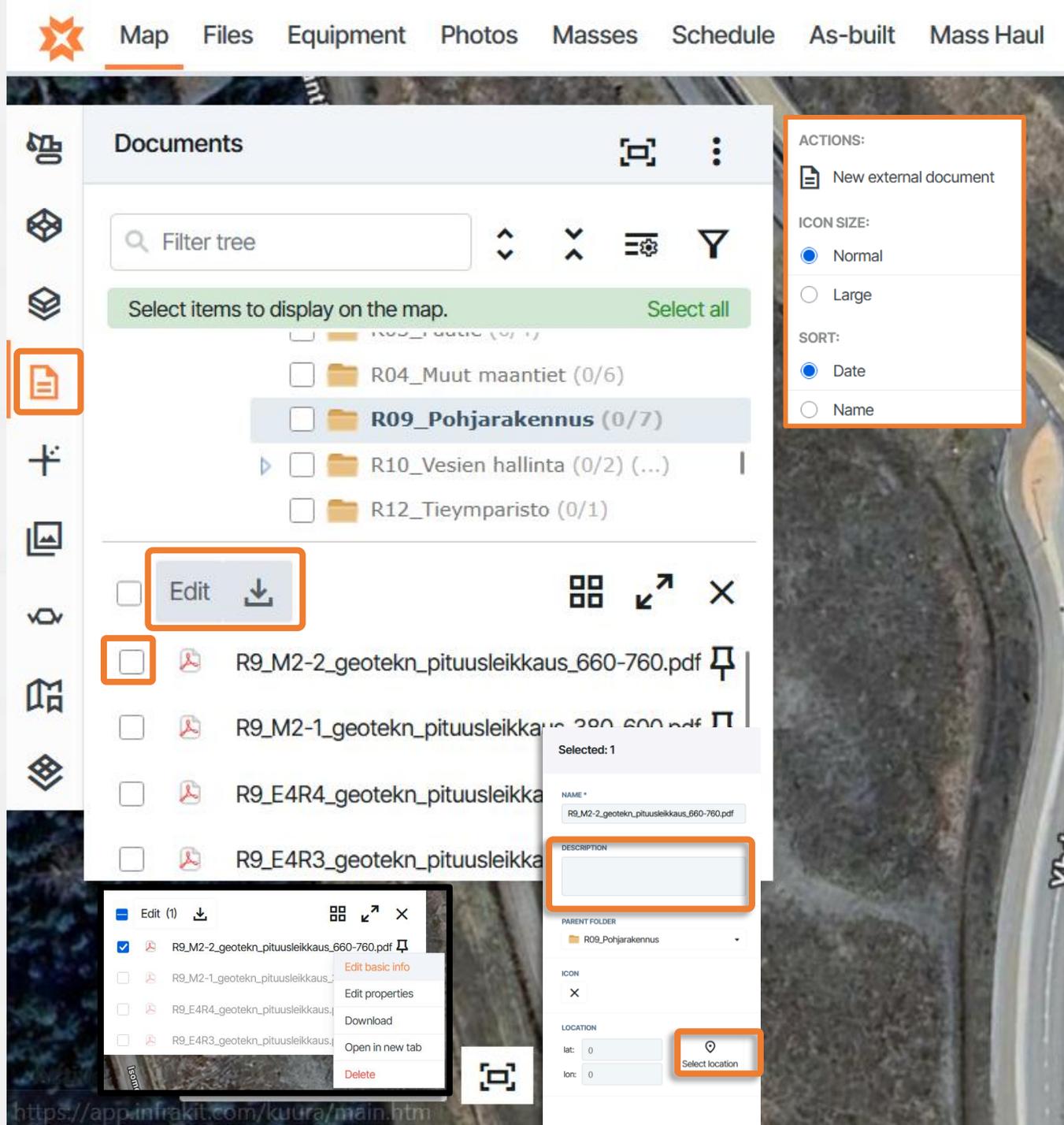
2. Limiting the number of visible folders

- You can also choose whether the directory is expanded every time a tab is opened

3. Settings for drawings

You can adjust the transparency of the selected drawings in the settings menu





Documents tab

- Infrakit's map page has a separate documents tab that shows the PDF documents brought to the project
 - An external document can be added by clicking the three dots in the upper right corner of the menu and choosing "New external document"
 - The document can be placed on the map by editing the document
 - Select the document and alternatively press "Edit" at the bottom of the opened document or select "Edit" from the three dots after the file name
 - After that, press the "Select location" tool and click on the map to indicate the location of the document on the map and save
 - In document basic settings editing menu you can:
 - Change the file name of the document
 - Give the document additional information such as a "description" of the document's content, a free caption, etc.
 - Change the folder of the document
 - In document properties editing menu you can:
 - Edit file properties
- ✓ **Tip 1** : Place e.g. the well maps, installation photos, etc. needed by the site near the object, this way the documents are easy to open in the field by clicking on the map in Infrakit FIELD application

External documents

- External documents can be added from the map page's document tab by selecting the three dots in the upper right corner of the menu and choosing "New external document"
- Select the name and URL for the external document
- An description can be added to the document
- Select the folder for the external file to be saved in
- An icon and location can be configured to the external file
- After the file is created, it can be opened from the documents tab on the map page and on the "Documents" page
- Note that not all sites can be opened as an embedded link due to security reasons

New external document

NAME *

URL *

DESCRIPTION

PARENT FOLDER

R09_Pohjarakennus

ICON



ACTIONS:

 New external document

ICON SIZE:

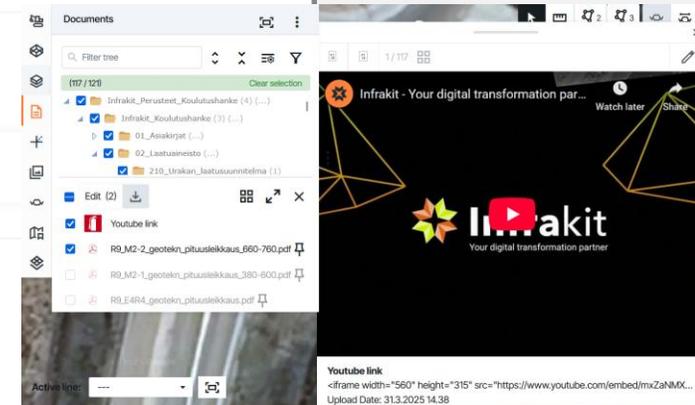
Normal

Large

SORT:

Date

Name



The screenshot shows a 'Documents' page with a file list and a video player. The file list includes folders like 'InfraKit_Perustiet_Kouluishanke' and files like 'R0_M2-2_geotekn_pituusleikkaus_660-760.pdf'. The video player shows a YouTube video with the InfraKit logo and the text 'InfraKit - Your digital transformation partner'.

As-built tab

On the as-built tab, you can find the measurements taken directly into Infrakit's database with work machines and/or measuring devices.

- Here you will not find points uploaded as files (e.g. *.gt, *.xml, *.kof ...), they can be found on the models tab

The visibility of the as-built point and the displayed information can be adjusted from the settings menu

- Color
- Size of as-built points
- Text to display for points

Tip 1: Free text is often used in the coding of as-built points. To search for as-built points based on the code, select all folders and open the "Code" filter → you can see all the codes used in the as-built points, e.g. "Base courses", "Base", "Basecourse" = the same thing, slightly different name

In Infrakit, the symbols used for as-built points

- + Rover gps / Simulator
- + Equipment
- + Total station

The screenshot shows the 'As-built' tab in the Infrakit software. The left sidebar contains a file tree with folders like 'Infrakit_Perusteet_Koulutushanke' and 'Infrakit_Koulutushanke'. A settings menu is open on the right, showing options for 'ACTIONS' (Bulk edit, Draw line, Download), 'SETTINGS' (Show lines), 'COLOR' (Time heatmap, Tolerance, Tolerance and approval), 'LOGPOINT SIZE' (Normal, Large), and 'LOGPOINT LABEL' (dZ, X, Y, Z, XYZ, Code, Line code, Surface code, Point name, Point number, Side measure, Date, Dont show property names). A filter panel at the bottom right shows filters for 'All', 'Today', 'This week', 'Last week', 'Last 14 days', and a list of codes including '110kA (L) (Kaapelin suojaputki 110mm keltainen A-luokka)' and 'AS_BUILT'. A star logo is in the top right corner.

Newer logpoints
Older logpoints

Inside tolerance
Under tolerance
Over tolerance

Approved
Checked

Labels are shown when map is zoomed in
Shift+Click to select multiple

Filters

All Today This week Last week Last 14 days ...

From: To: - +

Code

All

All

null

110kA (L) (Kaapelin suojaputki 110mm keltainen A-luokka)

AS_BUILT

All

Show only out of tolerance

As-built tab

You can edit several as-built points by selecting

 Bulk edit

A menu opens where you can choose

Do you select points individually or

Do you draw the area inside which the points are selected

After selection, a new side menu opens where you can

See e.g. dZ averages of the points you selected

Download the as-built points as a file in different formats

Change the status of the selected point group -> checked / approved

(note. The selection cannot be cancelled)

Change properties of the selected point group

Folder

Model connection

Alignment

Equipment

Linecode (T2)

Point number (T4)

Point name

Code (T3)

Surface code (T1)

After making the desired changes, press "Save" and the changes will be saved in the Infrakit database

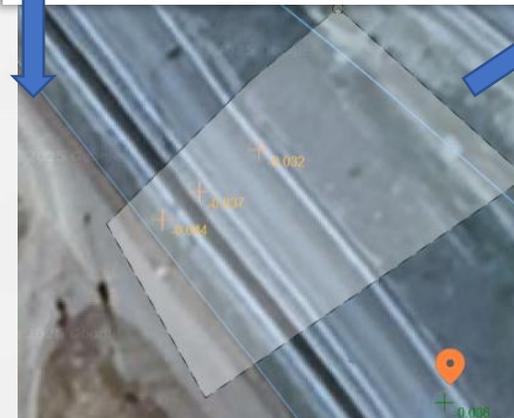
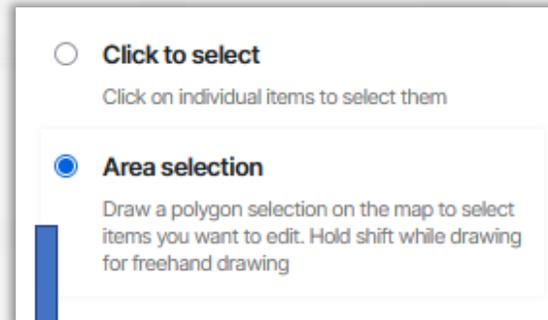
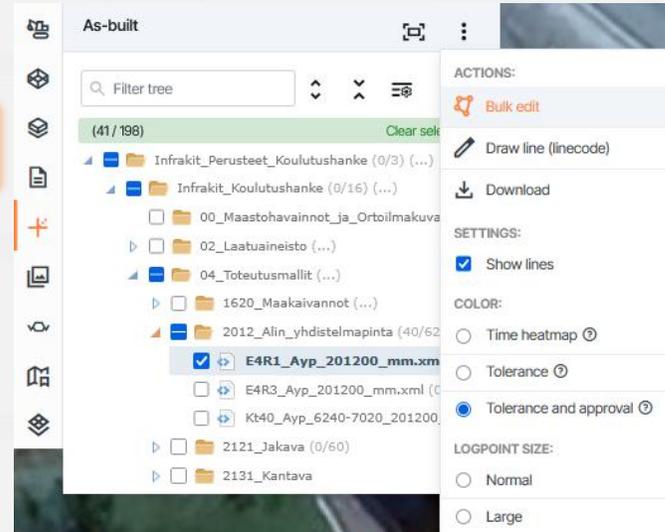
You can also draw a break line between the as-built points by selecting

 Draw line (linecode)

You can fit the selected as-built points on the screen by pressing



Tip 1 : The points can be restored with the help of Infrakit's technical support if you delete as-built points from Infrakit's database by accident. Data can ALWAYS be returned from the database back to the project.



Selected: 3



Average Dz: -0.0376
Dz std. deviation: 0.0
In tolerance: 3/3
Checked: 3/3
Approved: 0/3

APPROVAL STAGE

DON'T CHANGE

CHECKED (CURRENT VALUE)

APPROVED

FOLDER

2012_Alin_yhdistelmäpinta

MODEL

E4R1_Ayp_201200_mm.xml

ALIGNMENT

E4R1_ml_tg.xml

EQUIPMENT

No equipment

LINE CODE

0

POINT NUMBER

Multiple values

POINT NAME

CODE

AS_BUILT

SURFACE CODE

201200

Alin yhdistelmäpinta



Close

Save

Approval of as-built points

You can approve and check as-built points either:

1. By editing the point/points
 - From the edit menu, select the approval status as checked or approved, depending on the agreement
2. By selecting a point on the map and clicking Check or Approve from the menu that opens

Line code: 0
Number: 27
Name: null
Code: AS_BUILT

Folder: 2012_Alin_yhdistelmäpinta
Model: E4R1_Ayp_201200_mm.xml
Alignment: E4R1_ml_tg.xml
Station: 299.8
Km station:
Side measure: -5.07m
Surface code: 201200
dE: 0 dN: 0 dZ: -0.046

x: 6704580.965
y: 23469945.846
z: 19.853

Date: 17.4.2024 08.43
Point source: Rover gps
User: tero.majjala@infrakit.com

There are no approvals for this logpoint.

 Check  Approve

Selected: 3



Average Dz: -0.0134
Dz std. deviation: 0.0
In tolerance: 2 / 3
Checked: 0 / 3
Approved: 0 / 3

APPROVAL STAGE

- DON'T CHANGE
 CHECKED
 APPROVED

FOLDER

2012_Alin_yhdistelmäpinta

MODEL

E4R1_Ayp_201200_mm.xml

ALIGNMENT

E4R1_ml_tg.xml

EQUIPMENT

No equipment

LINE CODE

0

POINT NUMBER

Multiple values

POINT NAME

CODE

AS_BUILT

SURFACE CODE

201200

Alin yhdistelmäpinta



Close

Save

Photos tab

Infrakit's map page has a separate photos tab which shows the photos uploaded to the project.

Click on the image to enlarge the image



You can change the way the images are presented from the folder structure by clicking on the "hamburger menu" or the four squares on the side of the image menu

Photos that contain location information are automatically placed on the map at the location defined by the location information

Photos that do not contain location information can be placed on the map by selecting a photo from the directory and editing the image's properties

- Select a photo and press either "Edit" at the bottom of the opened photo or alternatively select "Edit" from the three dots after the file name
- After that, press the "Select location" tool and click on the map to indicate the location of the photo on the map and save

In photo editing menu you can also:

- Changes the name of the photo
 - A name template can be chosen to rename photos
- Give the photo additional information such as a "description" of the content, a free caption, etc.
- Change the photo folder
- Change the alignment the photo is attached to
- Edit the heading of the photo

Tip 1 : When you use the Infrakit mobile version either with a browser or with the FIELD application, the images automatically get the correct location and are immediately visible in the browser version.

Tip 2: Report safety observations, deviations, plan changes, sudden obstacles such as a surprising cable, pipe or rock directly from the construction site to the project office.

The screenshot displays the Infrakit Photos tab interface. At the top, there is a navigation bar with tabs: Map, Files, Equipment, Photos, Masses, Schedule, As-built, Mass Haul, Visualization, Mobile, and Insights. The Photos tab is active, showing a search bar labeled "Filter tree" and a "Clear selection" button. Below this, a folder structure is visible: "Infrakit Koulutus-40 (0/1) (...)" and "Infrakit Koulutus Tammitie (0/5) (...)", with a sub-folder "00_Valokuvat (78)" selected. A sidebar on the left contains icons for various actions, with the "Edit" icon highlighted in an orange box. The main area shows a grid of photo thumbnails. An "Edit" menu is open over a photo, listing options: "Edit basic info", "Edit properties", "Download", "Open in new tab", and "Delete" (highlighted in orange). To the right, a "Photo Properties" dialog is open, showing fields for NAME, DESCRIPTION, FOLDER, ALIGNMENT, LOCATION (with latitude and longitude), and HEADING IN DEGREES. A "Select location" map is also visible.



Photos tab Actions

By selecting the three dots in the photos tab, you will get the "Actions" menu open

 Bulk edit

By selecting "Bulk edit" you will open the same checkbox as for As-built points and you can select several images to edit at once

This allows you to choose an image template for several images at once, for example

 Upload

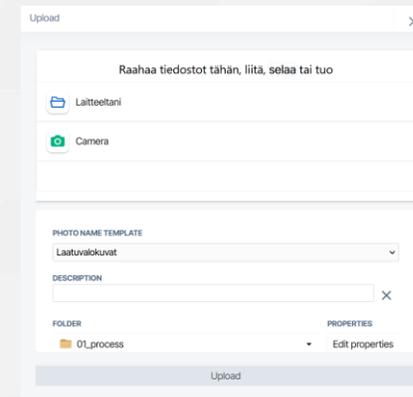
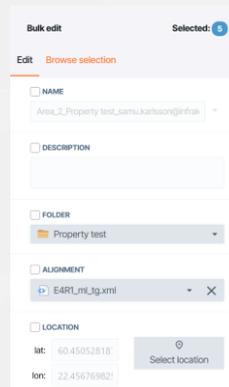
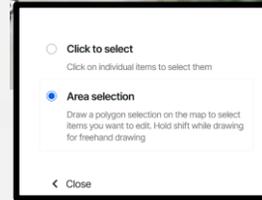
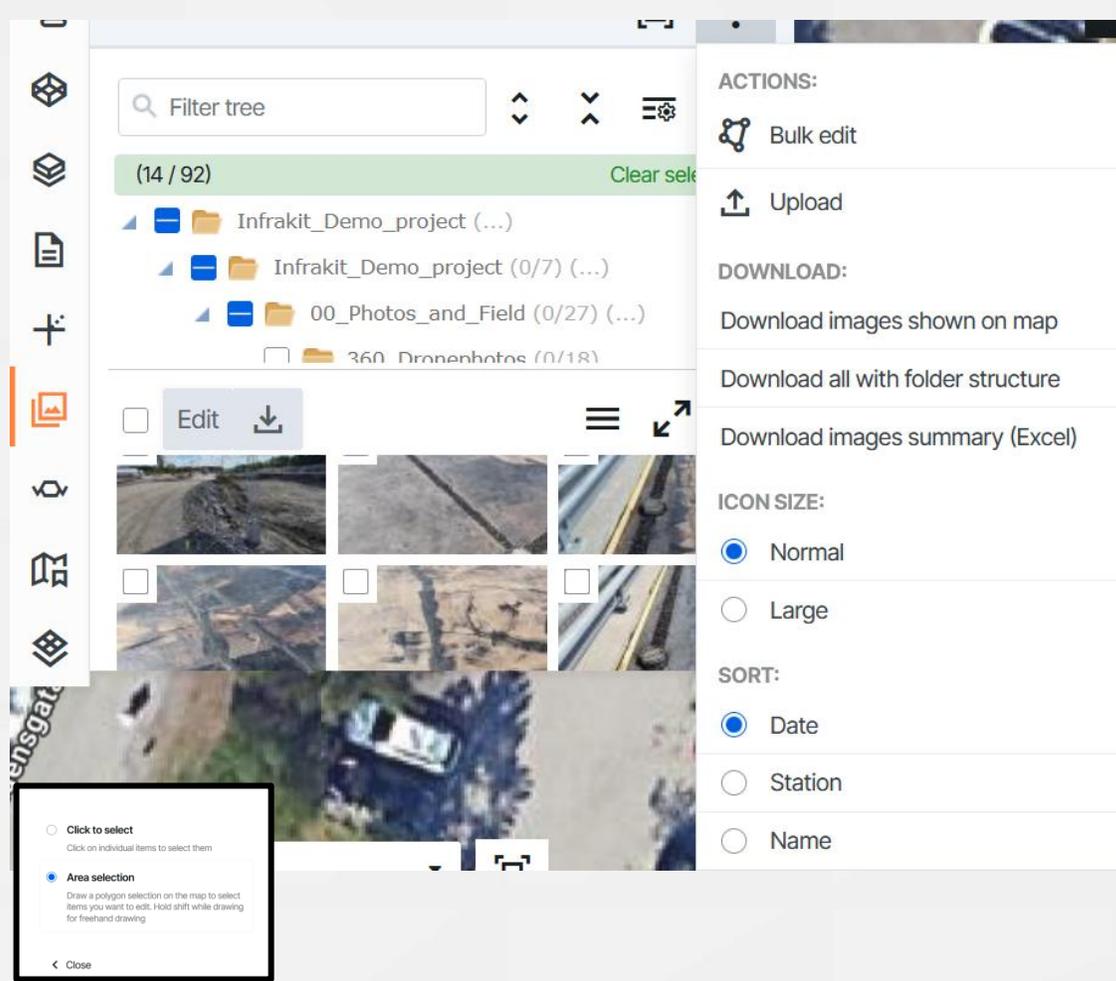
By selecting "Upload", you can add images to the project

DOWNLOAD:

Download images shown on map

Download all with folder structure

Download images summary (Excel)



You can also download multiple images at a time to your device

Viewing photos

Infrakit photo formats (*.jpg / *.jpeg / *.tiff / *.tif / *.gif)

- A regular photo
- 360° photo
- Animated GIF image

Photo symbols on the map



A regular photo



360 - photo (panorama)

Regular photo

- The photo preview opens by moving the mouse over a single image
- By clicking on the image symbol, the image opens larger
- You can also open the image in a larger size by clicking it from the menu on the photos tab of the map
- The image opens in a new tab by pressing in the upper right corner
- You can switch to editing the image by pressing the "Edit" button
- You can move to the location of the image on the map by pressing the "Search on map" button
- To upload the image, press the "Download" button



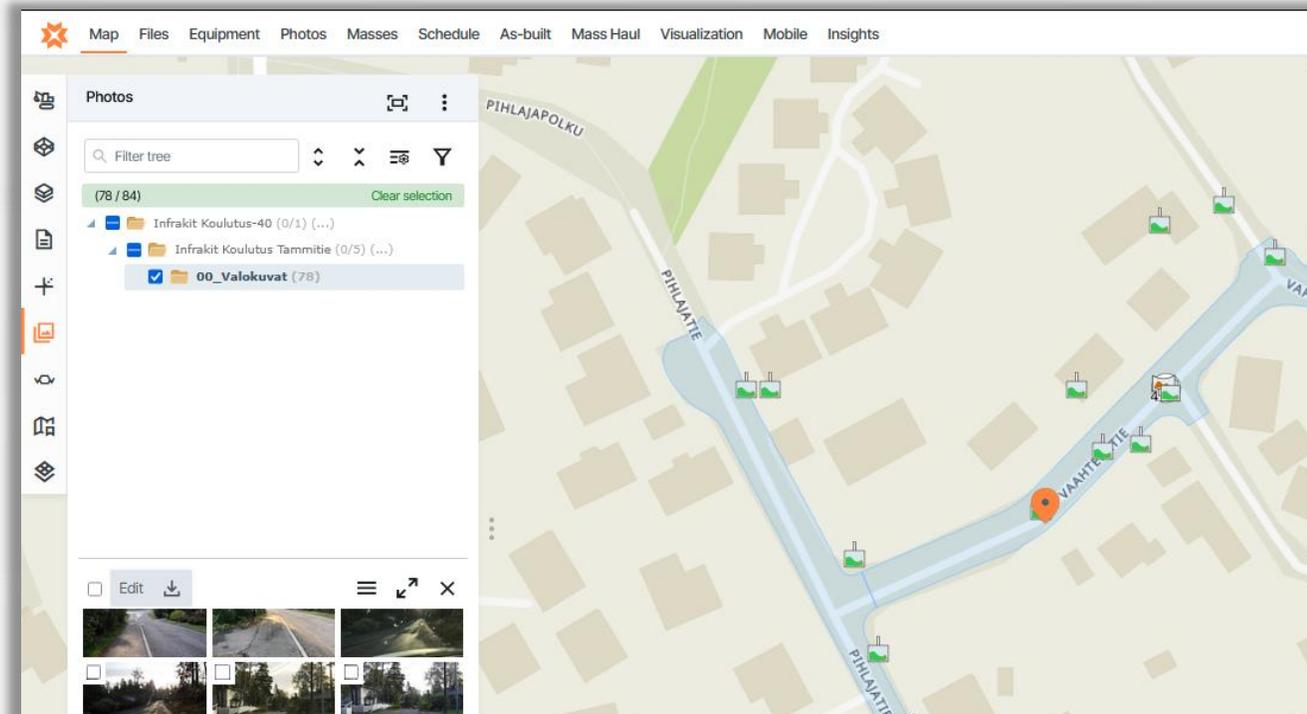
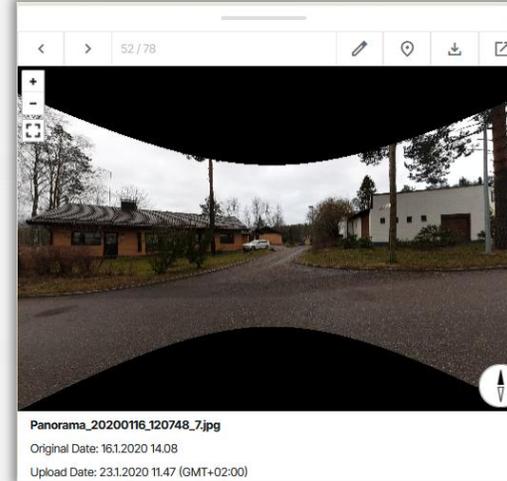
360 - photo

- The photo preview opens by moving the mouse over a single image
- By clicking on the image symbol, the image opens larger
- You can rotate the image by moving the mouse over the image and holding down the first mouse button at the same time
- The image opens in full screen size by pressing the top right corner or by pressing the one on the left side of the image
- You can zoom in on the photo by rotating the mouse wheel button or by using the tools on the left side of the image



Animated GIF image

- The photo preview opens by moving the mouse over a single image
- The animation does not work in the preview phase, the GIF image is opened in a new tab by pressing from the bottom right corner



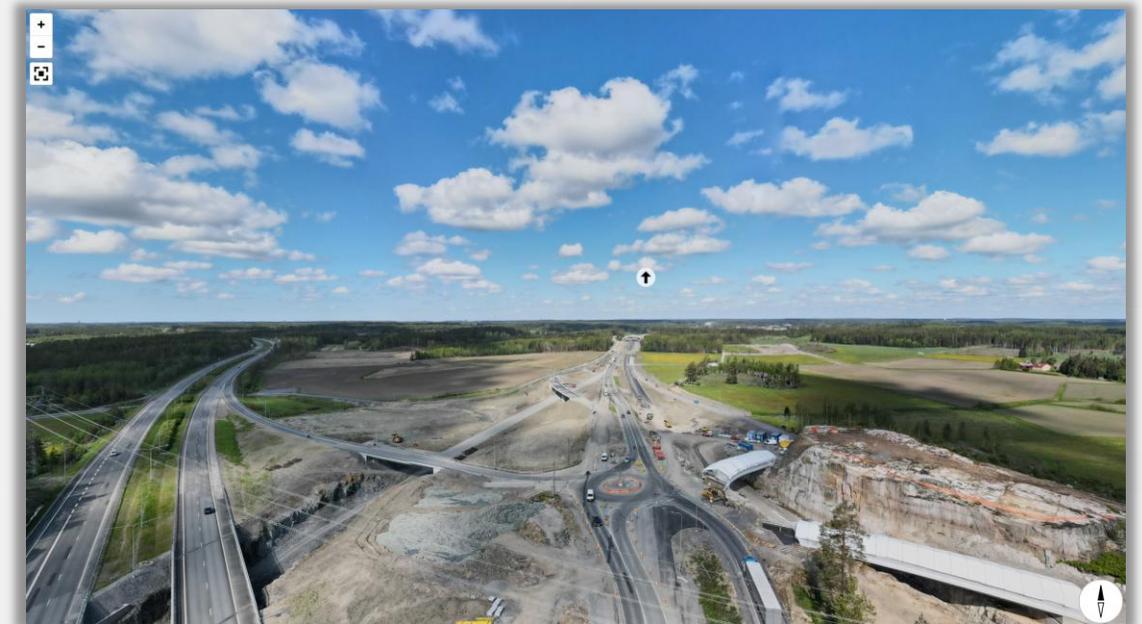
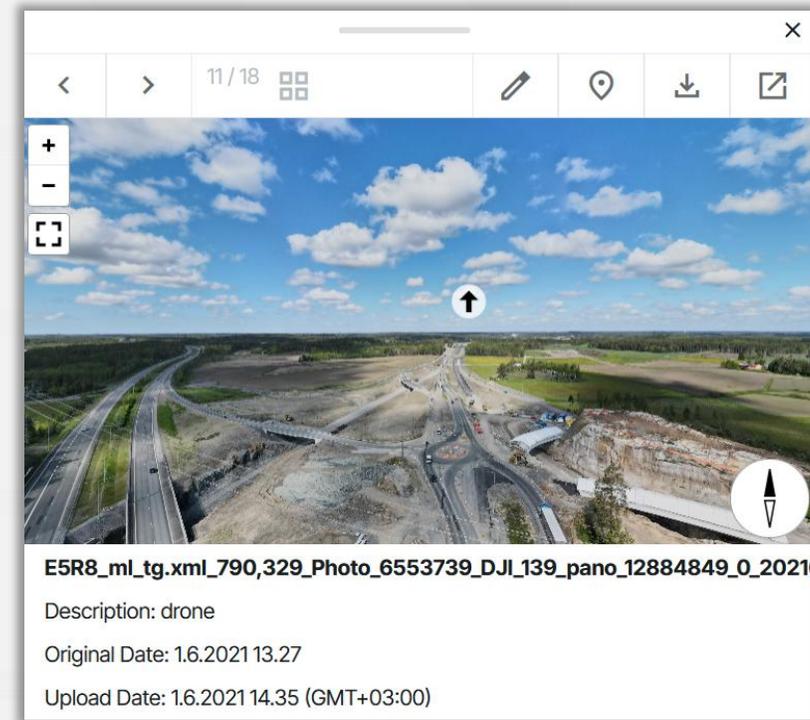
Viewing photos

360 – photo

- To open a photo preview, hover over an individual image
- Click on the image symbol to enlarge the image
- To rotate the image, hover over the image and hold down the left mouse button at the same time
- You can also rotate the image with the WASD buttons and zoom forward and backward with the Shift and CTRL buttons
- To open the image in full screen, press in the upper right corner or by pressing the
- You can zoom in on the photo by rotating the mouse wheel button or using the tools on the left side of the image
- To switch between 3D images, click the arrow button



Tip 1: Use 360° photos to create a real-time observation image for e.g. the project's weekly meetings



Saved views

- The saved views tab allows you to create different ready-made views to share or create your own personal views.

- Infrakit saves all your choices from different tabs and you can return to the situation you saved by clicking on the view

- You can create a saved view of any situation shown on the map and save it in the folder of your choice

- Take note that a new saved view will not have a name and the name needs to be changed in the “Edit” menu

- The saved view can be commented;

- To text dialogue
- By writing text on the map
- By drawing symbols or freehand

- Additional information can be attached to a saved view:

- Attachments (PDF documents)
- Links to websites

- ✓ **Tip 1** : Add a link to the saved view, which takes you for example to the Infrakit file folder (e.g. the folder containing the quality documents and files related to the view)

- ✓ **Tip 2**: Share the saved view to workgroups, the subscriber, the supervisor, the view also works in a mobile browser.

The screenshot displays the Infrakit software interface. At the top, there is a navigation bar with tabs: Map, Files, Equipment, Photos, Masses, Schedule, and As-built. The 'Map' tab is active. Below the navigation bar, the 'Saved views' panel is visible. It features a search bar labeled 'Filter tree' and a list of folders: 02_Laatuaineisto (...), 06_Oheisaineisto (...), 99_Tallennetut_nakymat (8) (...), 392_Uudet_toiminnot (10), Infrakit-päivä 28.11.2024 (4), Kouluttaja (18), Saved views (1), and Villen näkymät (1). The 'Saved views (1)' folder is highlighted. Below the folder list, there is a map view labeled 'As-built piles'. A blue arrow points to a context menu icon on the map, which is also highlighted with an orange box. The context menu is open, showing options: Edit, Share, Details / Partial load, Open in 3D map, Download files, and Delete. The 'Delete' option is highlighted in red. At the bottom of the interface, there is a section labeled 'Active line:' with a dropdown menu and a zoom icon.

Creating and editing saved views

Creating a saved view in the "Saved views" tab

- Select the files you want to display from the other tabs, zoom, center the view and then go to the "Saved views" tab
- Select the folder where you want to save your view
- Press "Save view" at the top → a preview of the view appears at the bottom
- Click the button in the upper right corner of the view preview icon and select "Edit"
- Name the view as you wish, write a description, you can still change the folder and choose visibility Public / Secret
 - Public, visible to all project users
 - Secret, only visible for the one who saved the view

Sharing a saved view as a link

- Click the button in the upper right corner of the view preview icon and select "Share"
- Only accounts with existing access to the project can open the saved view
- Saved views can be hidden by using access controls on the folders in the "Files" page

✓ **Tip1** : Add a link to the saved view, which takes you for example to the Infrakit file folder (e.g. the folder containing the quality documents and files related to the view)

✓ **Tip2**: Share the saved view to workgroups, the owner, the supervisor, the view also works in a mobile browser.

The screenshot displays the Infrakit software interface. At the top, a navigation bar includes tabs for Map, Files, Equipment, Photos, Masses, Schedule, As-built, Mass Haul, and Visualization. The 'Saved views' tab is active, showing a list of folders: 02_Laatuaineisto (...), 06_Oheisaineisto (...), 99_Tallennetut_nakymat (8) (...), 392_Uudet_toiminnot (10), Infrakit-päivä 28.11.2024 (4), Kouluttaja (18), Saved views (1), and Villen näkymät (1). The 'Save view' button is highlighted with an orange box. Below the list, a preview of a saved view titled 'As-built piles' is shown. A context menu is open over the preview, with the 'Share' option highlighted. A blue arrow points from the 'Share' option to a sharing dialog box. The dialog box contains the text 'Share the map state URL with others on the same project or bookmark it for yourself.' and a URL: <https://app.infrakit.com/kuura/main.htm?state=4a>. The 'Copy to clipboard' button is also highlighted with an orange box. To the right, the 'Edit' dialog box is visible, showing fields for NAME (As-built piles), DESCRIPTION, FOLDER (Saved views), and VISIBILITY (Public selected).

Commenting on saved views

- After opening a saved view it can be commented by users

- To create a comment click on “Send comment/Draw”

- The username and timestamp of the comment will be saved

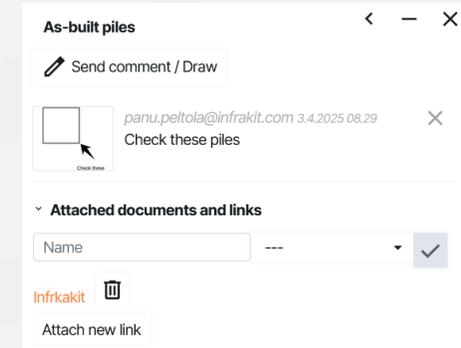
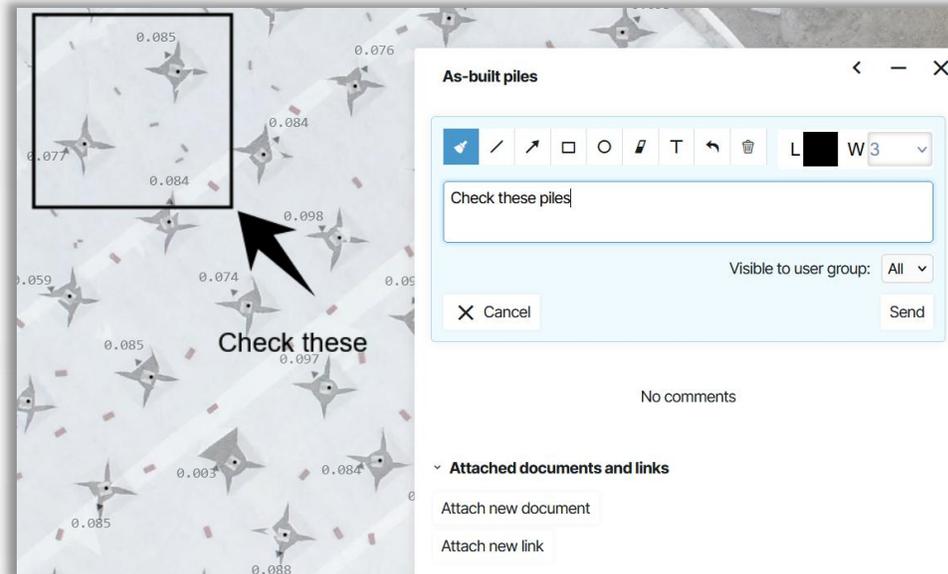
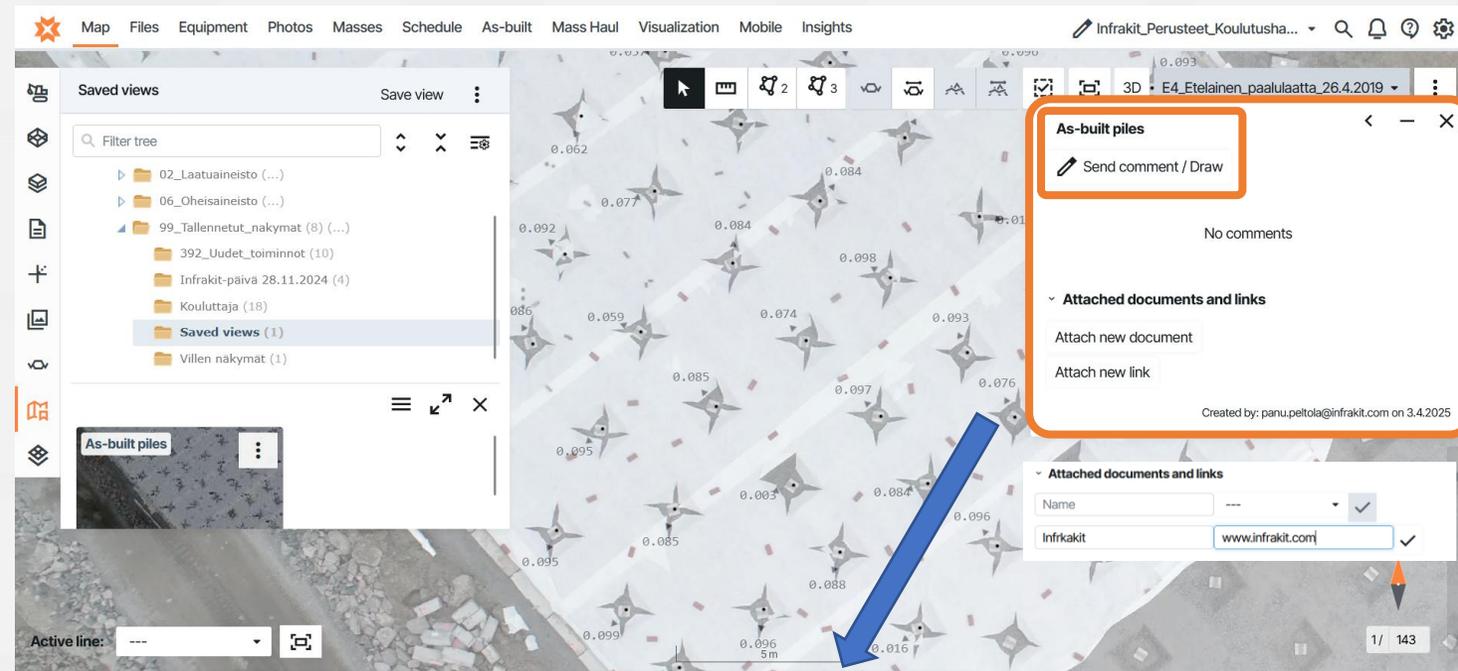
- On the comment you can:

- Write text in the comment field
- Mention people on the comment field (A notification will be sent to the user inside Infrakit)
- Add shapes and text on the map
- Attach documents from the project files to the saved view
- Attach links to the saved view

- ✓ **Tip 1 :** Add a link to the saved view, which takes you for example to the Infrakit file folder (e.g. the folder containing the quality documents and files related to the view)

- ✓ **Tip 2:** Share the saved view to workgroups, the owner, the supervisor, the view also works in a mobile browser

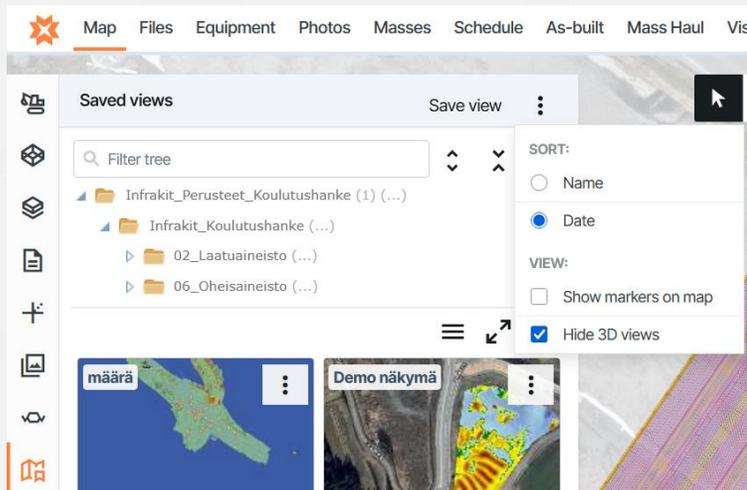
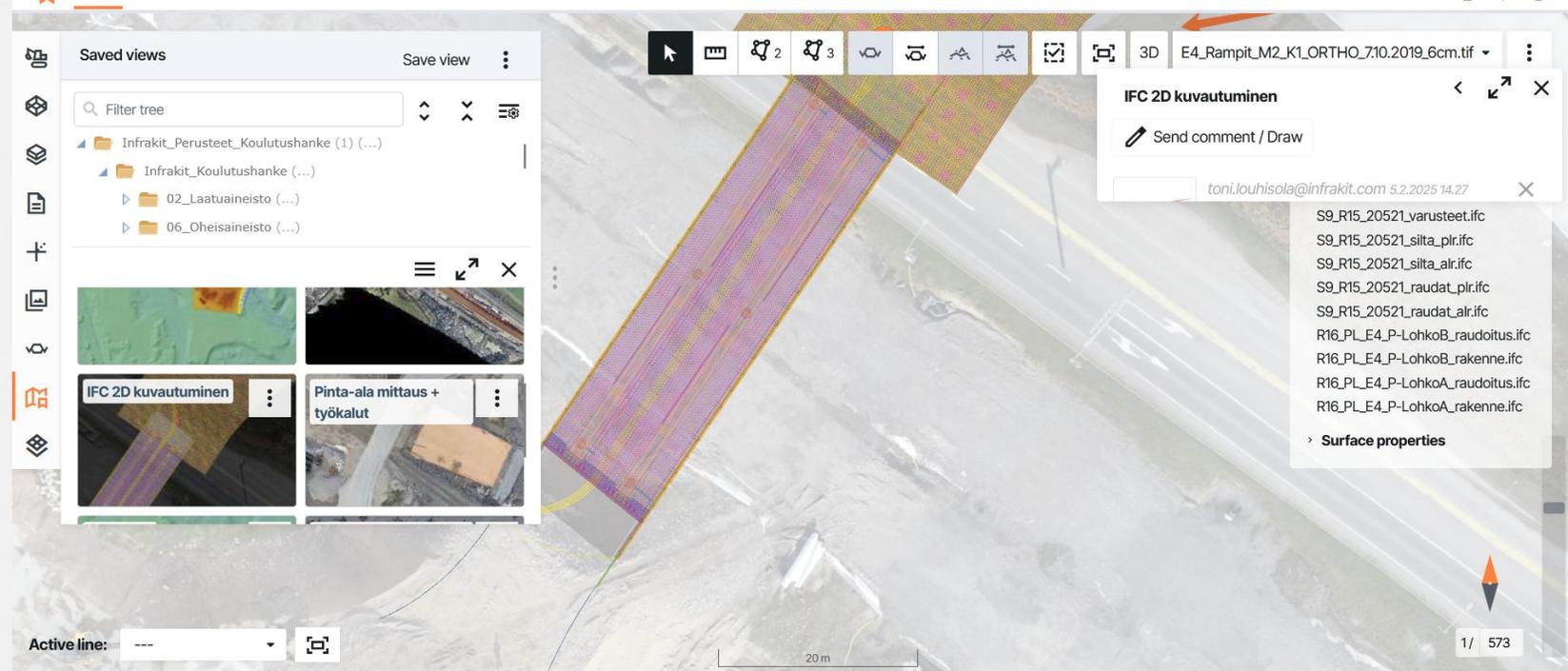
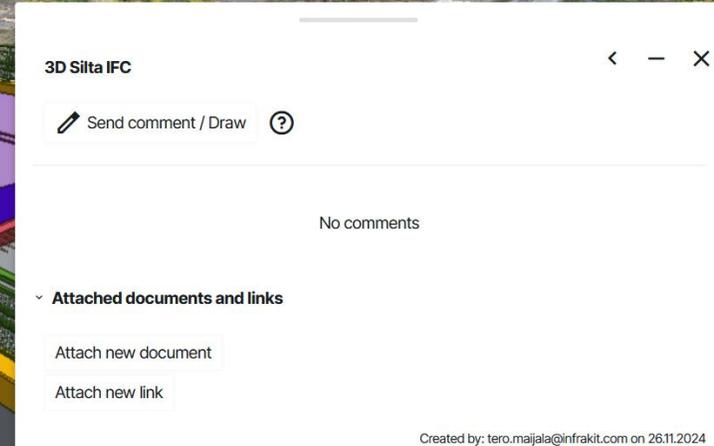
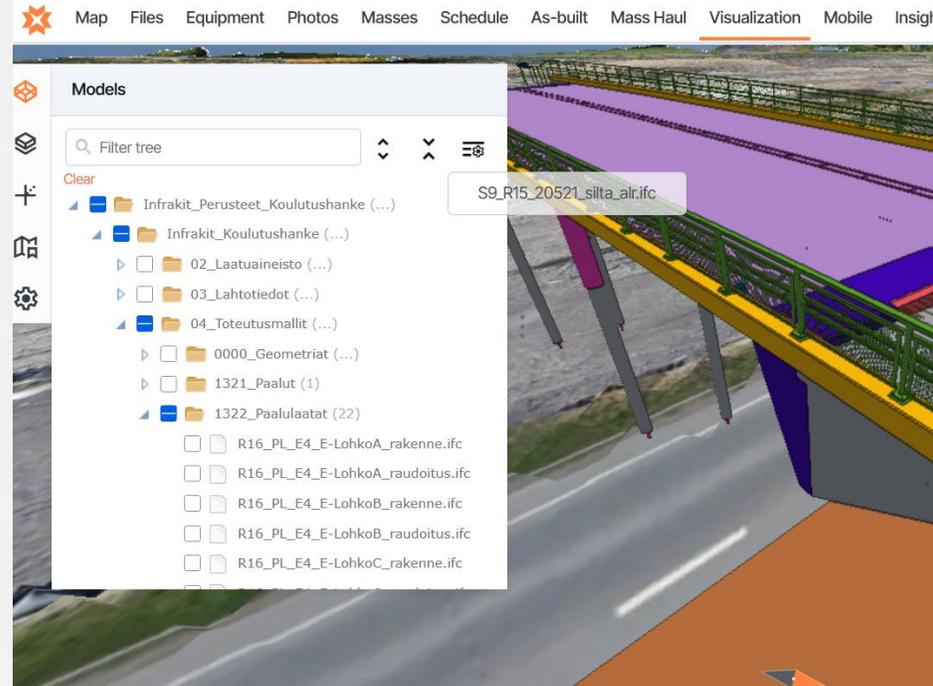
- ✓ **Tip 3:** Use saved views to collect material and save for easy access on the Field-application



Saved views

Saved views work on both 2D (Map) and 3D (Visualization) pages with same logic

- Choose the files you want and save view
- To display saved 3D views on the map page or to show the markers of saved views on the map choose the settings behind the three dots



Equipment

- On the Equipment tab, you can see an overview of the equipment connected to the project
- You can choose whether the equipment are displayed on the map from the filter menu
- You can filter the equipment based on name, type and vendor
- You can sort the equipment listing by name, last connection, vendor or type
- Color explanations:



The device is online and the models are up to date



The device is offline /passive for more than 15 minutes, the models are up to date



The device models have not been updated or there is another problem, e.g. a connection problem



The device is set "on hold" and the assignment remain ready when the device returns

The screenshot shows the 'Equipment' tab in a software interface. The top navigation bar includes 'Map', 'Files', 'Equipment', 'Photos', 'Masses', 'Schedule', 'As-built', 'Mass Haul', and 'Visual'. The sidebar on the left contains icons for 'Equipment', 'Overview', and 'Assignments'. The main content area displays a list of equipment items with status indicators (colored circles):

- Nikon_Novatron_Simulaattori (Yellow)
- Teezi_Dumper (Yellow)
- Teezin Kaivuu Oy - Landnova X (Yellow)
- Equipment without position:**
 - MP (Yellow)
- Moved to other project:**
 - BIM-007-TRUCK (Grey)
 - ouluzone7ik (Grey)

A filter menu is open on the right, showing '1 filter applied' and 'Clear filters'. The 'Show equipment on map' checkbox is checked and highlighted with an orange box. Below the filter menu, there are dropdown menus for 'Active in last', 'Type', and 'Vendor'.

2D Cross Section



Cross-section from the alignment

- You can get a cross-section from any point on the alignment. The cross-section is always perpendicular to the alignment.
- You need an alignment and it should be selected as active from the bottom left of the map view.



Free cross-section

- You can get a cross-section from any point by first selecting the left and then the right edge of the cross-section
- You don't need an alignment.
- By default, the models and vector files visible on the map are drawn to the cross section (vector files are generally at 0 level)
 - If models or vector data are not selected, all models located at that point are drawn in the cross section

The 2D Cross Section window opens automatically after selecting the drawing point of the cross section

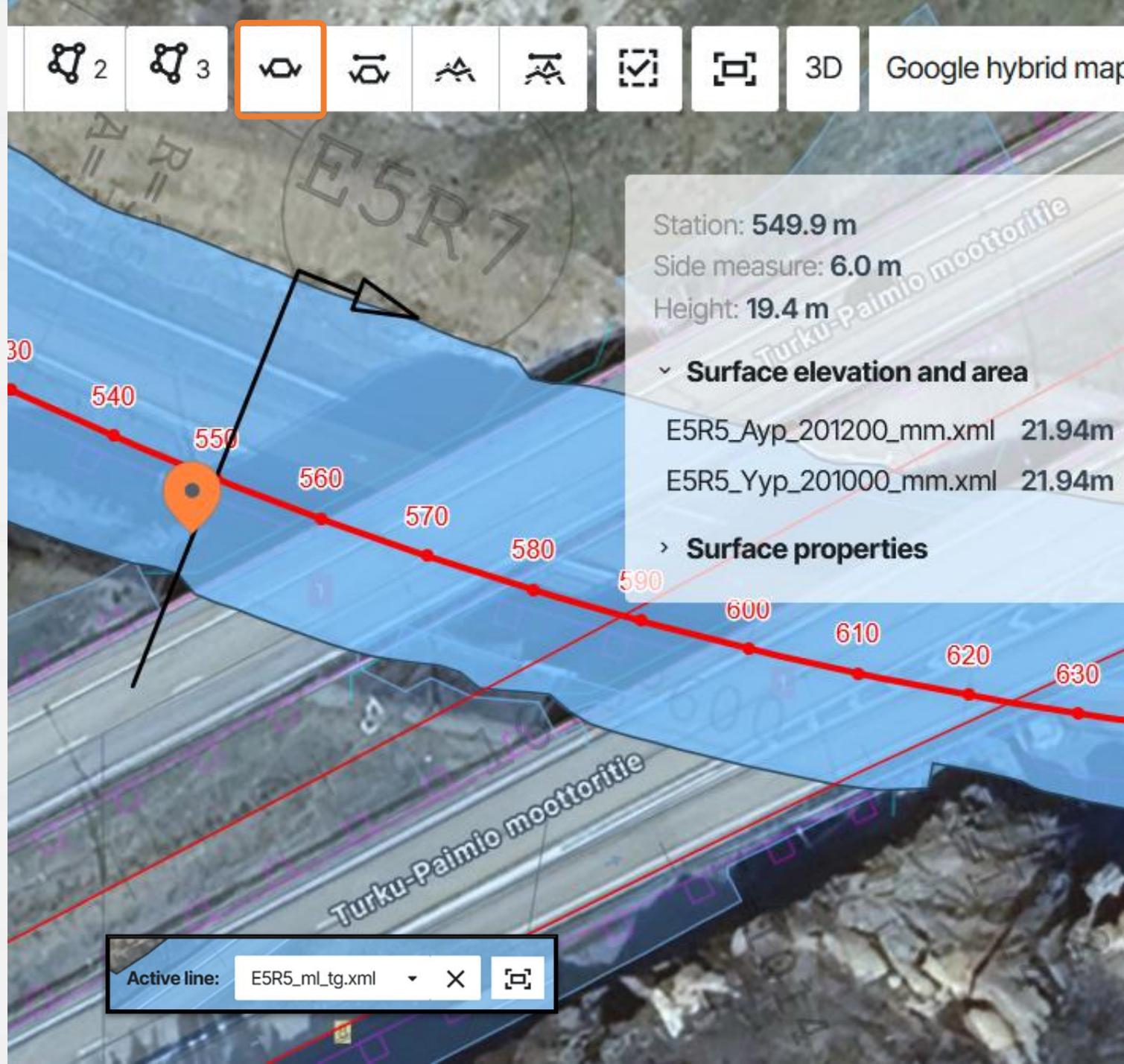
- ✓ **Tip 1** : You can activate the alignment by pressing the first mouse button over the red line
- ✓ **Tip 2** : You can draw a cross-section by pressing the right mouse button on the map and selecting from the menu that opens

Draw cross section

- ✓ **Tip 3**: You can choose if the cross-section opens in a pop-up window or a new tab by toggling the setting "Open cross sections in new tab" behind the three dots next to the active layer in the top right corner

SETTINGS:

Open cross sections in new tab



Cross section window

In the cross-section window, you can view the models of the selected station as a 2D cross-section

Note the type of cross-section

- perpendicular to the line of measure
- free cross-section

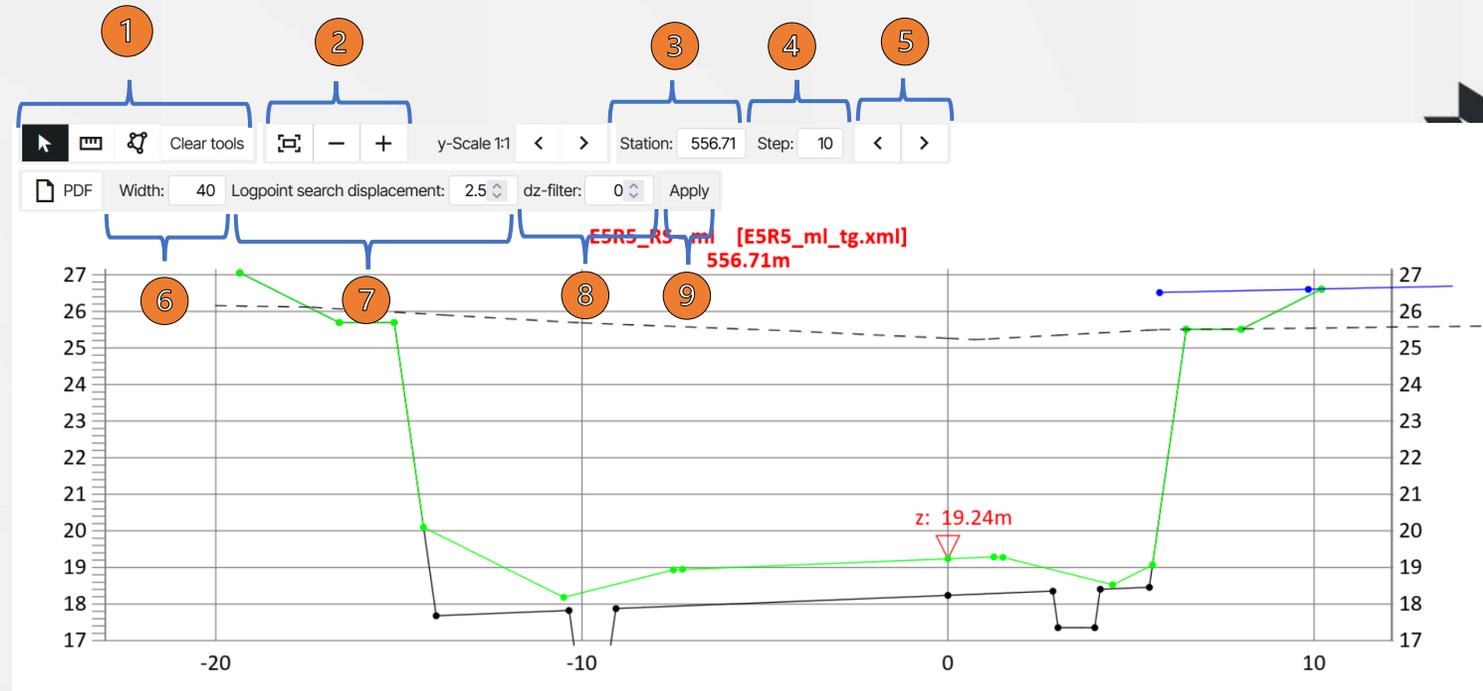
At the top of the page you will find the tools:

1. Measuring tools
 - Distance
 - Surface area
2. Zoom and fit to view
3. Set the station
4. Set the step interval (e.g. 10 = 10m)
5. Forward and backward scrolling buttons
6. Sets the cross-section width and height factor
7. Search distance for as-built points (forward and backward, m)
8. dZ of the height filter of as-built points (the value beyond which as-built points are not shown in the cross-section)
9. Apply changes

At the bottom, you can see a cross-section of the materials shown as a list

The color of the text is the same as the surface visible in the cross-section

You can hide models individually by removing the check mark in front of the name



Showing only selected surfaces

Use all project's models



- E5R5_Ayp_201200_mm.xml (Surface code: 201200 (S) (A lin yhdistelmäpinta))
 - E5R5_Ayp_201200_mm - Alin yhdistelmäpinta
- E5R5_Yyp_201000_mm.xml (Surface code: 201000 (S) (Y lin yhdistelmäpinta))
 - E5R5_Yyp_201000_mm - Ylin yhdistelmäpinta
- V1_Yyp_201000.mm.xml (Surface code: 201000 (S) (Ylin yhdistelmäpinta))
 - V1_Yyp_201000 - Ylin yhdistelmäpinta

	Turns the pipe symbols on/off in the cross-section (Pipenetworks xml file)
	Switch as-built points on/off in the cross-section By default all on
	Switch models on/off in the cross-section By default all on

Cross section measurement tools

In the cross-section window, you can measure with three tools

1. Free selection

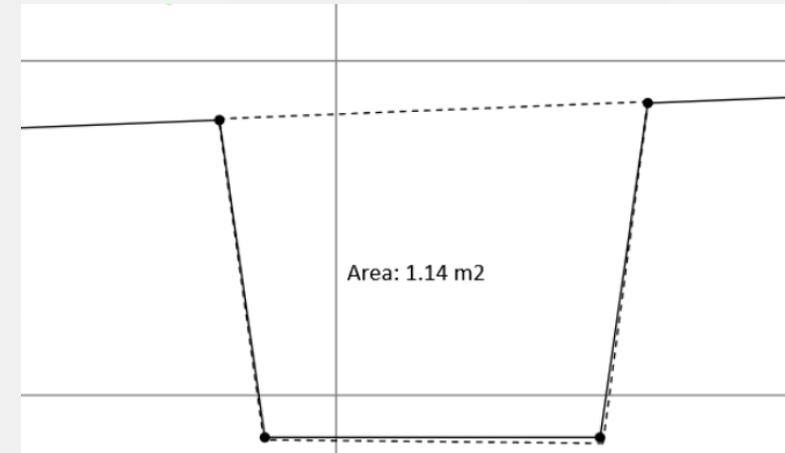
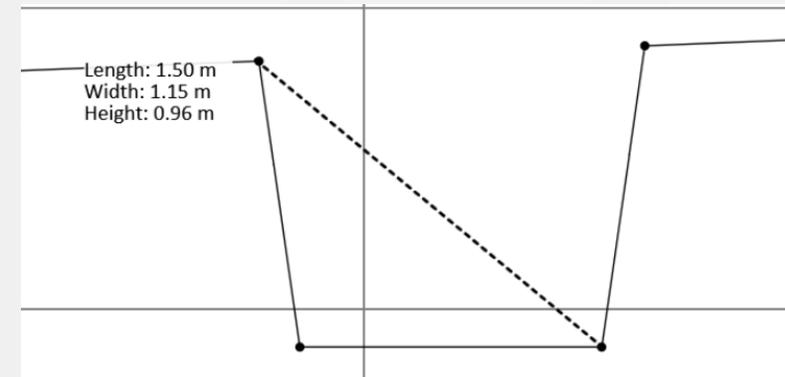
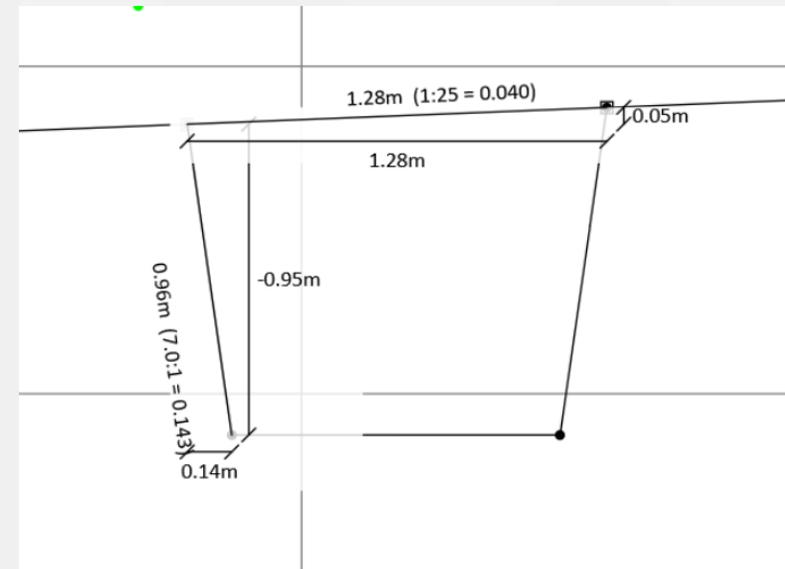
- Choose two breakpoints and measure the distance and grade between them
- Multiple selections can be chosen at the same time

2. Distance tool

- Freely select two points from the cross-section
- Only one measurement can be visible at the time, new measurement will delete the old one

3. Area measuring tool

- Measure the area between chosen points
- Only one measurement can be visible at the time, new measurement will delete the old one



Long section

Long section along the entire length of the alignment 

- You get a long section along the entire length of the alignment
- You need an alignment and the alignment should be selected as active

Bounded long section between stations you choose 

- You can choose the start and end station from the active line, the long section is shown between these stations
- You need an alignment and the alignment should be selected as active

By default, the models you have selected to the map are drawn to the long section

- If no model is selected, only the geometry in the area of the long section is drawn to the long section window.

The long section window opens automatically after clicking the icon

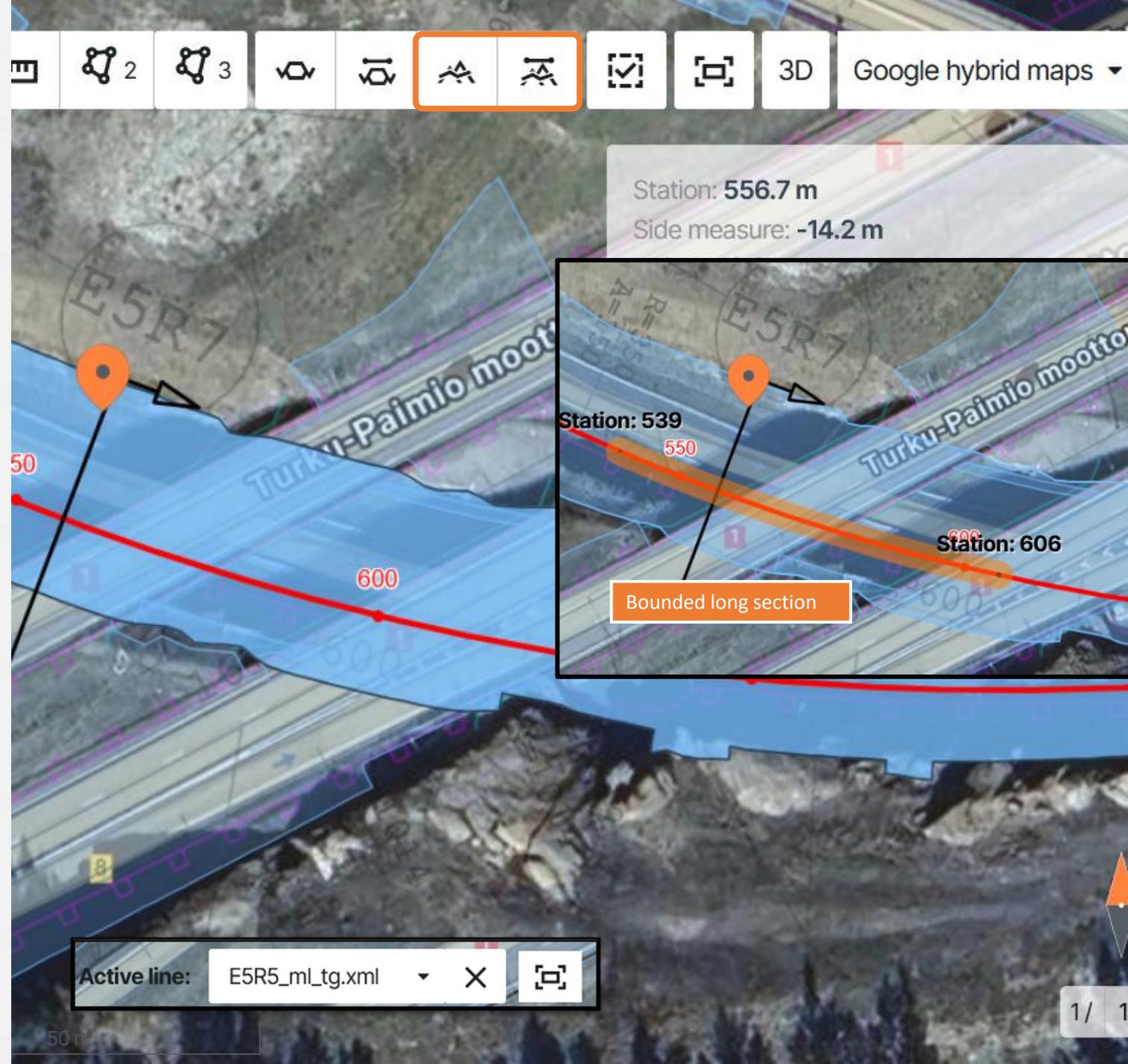
Tip1 : You can activate the alignment by pressing the first mouse button over the red line

Tip2 : You can draw a longitudinal section by pressing the right mouse button on the map and selecting from the menu that opens

 Draw long section

Tip 3: You can choose if the cross-section opens in a pop-up window or a new tab by toggling the setting “Open cross sections in new tab” behind the three dots next to the active layer in the top right corner

SETTINGS:
 Open cross sections in new tab



Long section window

In the long section window, you can view the models of the alignment you have chosen (= usually the center line of the street, road) as a long section

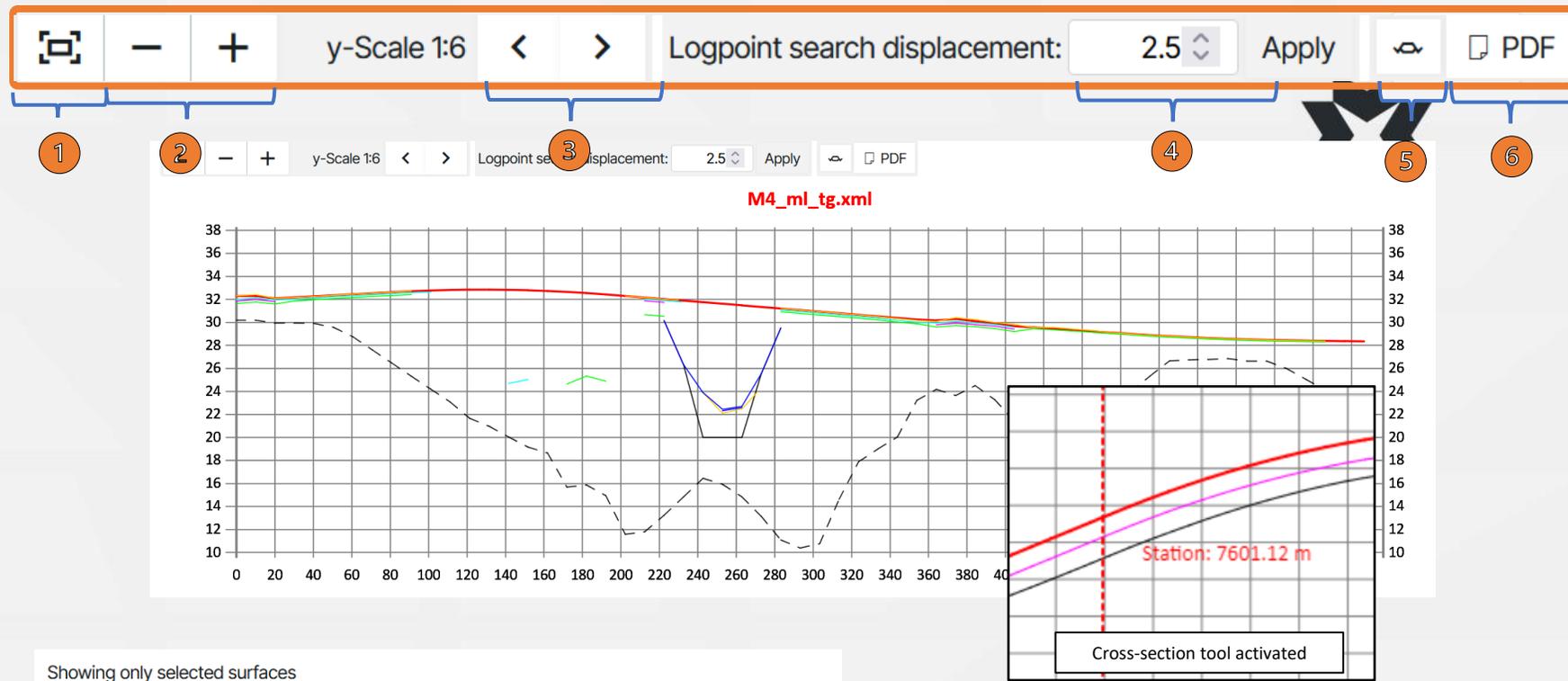
- The long section draws the elevation plane of the surfaces at alignment

At the top of the page you will find the tools:

1. Returns the view to the moment the window was opened and zoom
2. Zoom buttons
Adjust the view
Zoom out (-) / Zoom in (+)
3. Sets the height factor of the long section
4. The search distance of the objects from the long section to the lateral direction (m)
5. Cross-section tool, which can be pressed to activate the possibility to search for the desired stake point from the long section
6. PDF button – Prints the longitudinal section in PDF format

At the bottom, you can see a list of the models shown in the long section

- The color of the text is the same as the surface visible in the long section
- You can hide models/surfaces individually by removing the checkmark in front of the model



Showing only selected surfaces

Use all project's models



- M4_ml_tg.xml
- E5R5_Ayp_201200_mm.xml (Surface code: 201200 (S) (Alin yhdistelmäpinta))
- M4_Ayp_201200_mm.xml (Surface code: 201200 (S) (Alin yhdistelmäpinta))
- E5R5_Sitk_213100_mm.xml (Surface code: 213100 (S) (Kantava kerros))
- M4_Sitk_213100_mm.xml (Surface code: 213100 (S) (Kantava kerros))
- E5R5_Jak_212100_mm.xml (Surface code: 212100 (S) (Jakava kerros))
- M4_Jak_212100_mm.xml (Surface code: 212100 (S) (Jakava kerros))
- E5R1_Yyp_201000_mm.xml (Surface code: 201000 (S) (Ylin yhdistelmäpinta))
- E5R5_Yyp_201000_mm.xml (Surface code: 201000 (S) (Ylin yhdistelmäpinta))
- M4_Yyp_201000_mm.xml (Surface code: 201000 (S) (Ylin yhdistelmäpinta))
- V1_Yyp_201000.mm.xml (Surface code: 201000 (S) (Ylin yhdistelmäpinta))

Switch as-built points on/off in the long section
By default all on

Models, select All/None

Part 2



Features and functions

16. Files page

17. As-built page

- Adding as-built points
- Filtering as-built points
- Editing as-built points
- Information of as-built points
- Downloading as-built points

18. Photos page

19. Equipment page

- Usage statistics
- Assignments
- Accuracy

20. Visualization page (3D)

Files page



1. On the Files page, you can manage and view the project's files



Create new folder or subfolder

Add file to chosen folder

Download folders and files summary excel

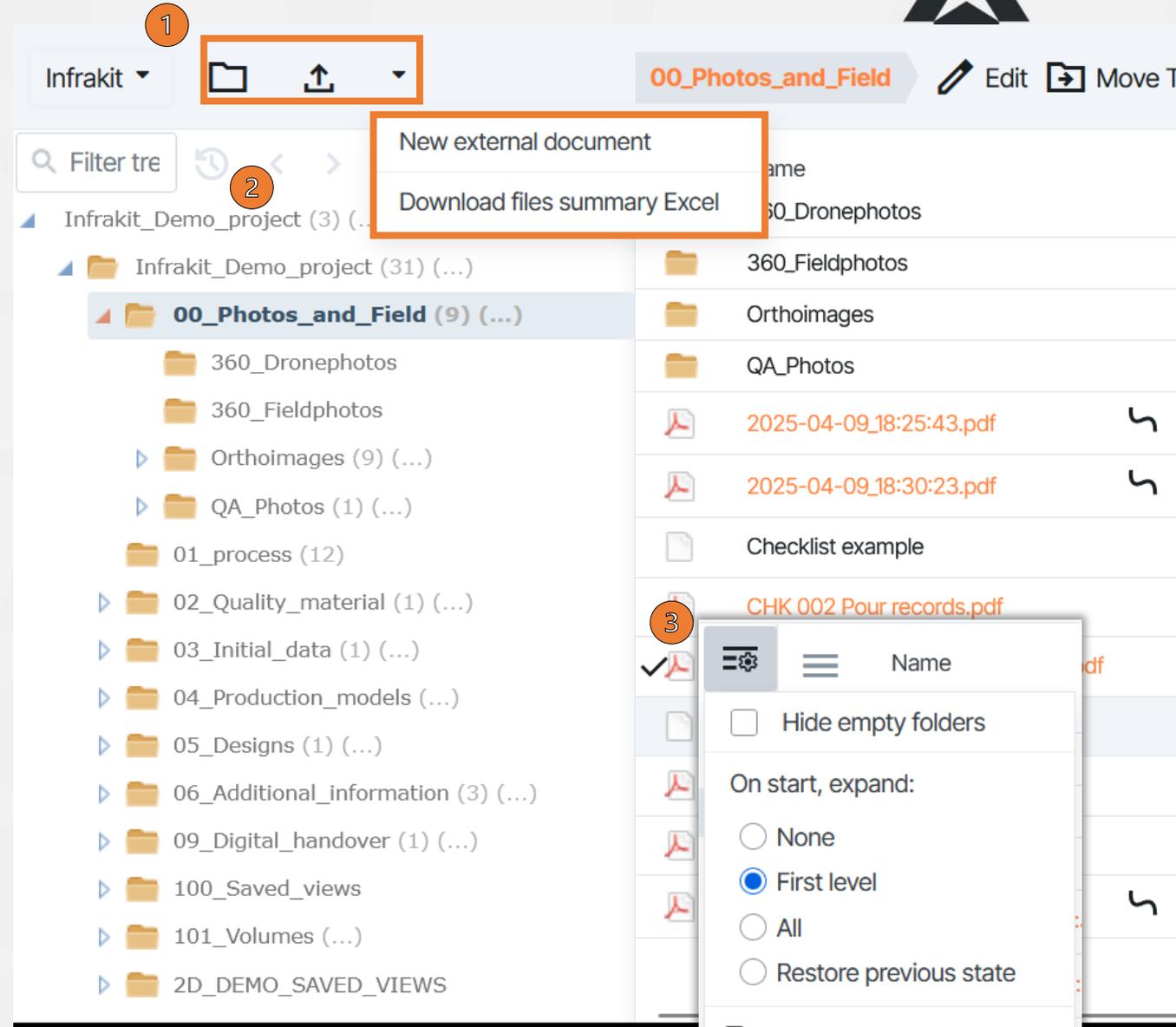
Add an external document

2. Buttons to move in directory and filter



First opens all folders and subfolders.
Second reduce all subfolders.

3. Behind the cogwheel is a button that can be used to hide all empty folders. From there you can also choose whether the files page automatically opens all subfolders or just the title level.



Files page

1. You can edit, move, download and delete the selected folder
2. The selected folder can be attached to an alignment, so that the future as-built points for this model will automatically be attached to alignment, the stakenummer and the offset.
You can set properties for the folder or limit its visibility to the groups defined in the project settings
3. Select which columns are visible in the file tree
4. You can upload entire directory, zip file or multiple files by dragging them

00_Photos_and_Field

1

2

3

Name	Type	Creation time	Version	Size
360_Dronephotos		28.5.2021 11:16		0 B
360_Fieldphotos		21.8.2023 11:51		0 B
Orthoimages		31.10.2023 09:17		4032.03 MB
QA_Photos		15.8.2023 13:05		2.67 MB
2025-04-09_18:25:43.pdf	pdf	9.4.2025 19:29	pavle@infrakit.c	433.12 kB
2025-04-09_18:30:23.pdf	pdf	9.4.2025 19:30	pavle@infrakit.c	435.68 kB
Checklist example		31.1.2025 11:12	pavle@infrakit.cc	433.12 kB
CHK 002 Pour records.pdf	pdf	14.3.2025 11:23	samu.karlsson@	148.18 kB
<input checked="" type="checkbox"/> MVR_Lomake-20240425_145518.pdf	pdf	25.4.2024 14:55	mikko.siivola	103.57 kB
qa template		31.1.2025 11:14	pavle@infrakit.cc	788.09 kB
QP-20250319_095102.pdf	pdf	19.3.2025 09:51	samu.karlsson@	3.29 MB

4

Drag file

Adding Files

- While adding files you can:
 1. Add them to assignments
 2. Send them as an email to selected users in the project
 3. Add a description and Email comment



Folder: 00_Photos_and_Field

1 tiedosto valittu

Presentation.pptx
37 KB

Add to assignments **Email users**

	Name	Equipment
<input type="checkbox"/>		
<input type="checkbox"/>	All models	10ed3929-b9d4-4df5-b6ea-26fb463e882...

<< < 1 2 3 4 > >>

Selected: 0

Upload

Add to assignments **Email users**

	Role	Group	Name
<input type="checkbox"/>	All	All	
<input type="checkbox"/>	SUPER USER		Samu Karlsson
<input type="checkbox"/>	SUPER USER		Samu Karlsson
<input type="checkbox"/>	SUPER USER		Samu Karlsson

Selected: 0

Folder: 00_Photos_and_Field

Peruuta Muokataan Presentation.pptx

Description

Email comment

Peruuta Tallenna muutokset

Files page

Adding a new version

A new version of the file with the same name can be added by dragging the new file into the window where the old version is.

Infrakit automatically creates a new version of the file.

New version of the file with different name is added as follows:

1. Click the file name
2. Click the pen
3. Select the new file

The file name can also be changed instead of selecting a new file.

1

	R16_PL_E4_E_Lohkot_A_B_G_H_J_mittapiirustus.dwg	dwg
	S21_Edge_beam.dwg	dwg
	<u>S21_Quality_measurements_demand_compilation.pdf</u>	pdf



S21_Quality_measurements_demand_compilation.pdf



2

Version	1
Size	431.71 kB
Creation time	12.8.2022 00.34 (tero.maijala@infrakit.com)
Description	
Presentable ⓘ	<input checked="" type="checkbox"/>
File link	 Download <input type="button" value="Copy to clipboard"/>
	<input type="button" value="Reparse"/>

3

ements_demand_compilation.pdf

No file selected.

Files page

After clicking on the file name, you can also:

1. Write description for the file

For example additional information about the file

2. Download the file

3. Copy the file link to the clipboard

4. Reparse the file

The file is read into the system again

E4R1_ml_tg.xml 

×

Version 1
Size 5.67 kB
Last modified 06/07/2021, 2:14 PM (tero.maijala@infrakit.com)

Description



File link



Download

Copy to clipboard

File contents

1 alignments



Reparse

LAYER TYPE	NAME	CODE	SURFACE CODE	TERRAIN CODE
ALIGNMENT	E4R1_RS - ml			

INFO - landxml.units | metric | 1 | 1 | 1 | 1

INFO - application | 3D-Win | 6.5.1.9

INFO - landxml.alignment | E4R1_RS - ml

Files page

The version history is managed behind the clock icon

1. Click on the line of the file and it will turn gray
2. Click on the clock icon
3. Set active version
4. Previous versions can also be downloaded
5. All versions of the file can be downloaded

Name	Type	Creation time	Version	Size	Des
E4R1_Yyp_201000_mm.xml	xml	23.1.2024 12.28 mikko.siivola	4	584.8 kB	
E4R2_Yyp_201000_mm.xml	xml	7.6.2021 14.18 tero.maijala@infre	1	449.32 kB	
E4R3_Yyp_201000_mm.xml	xml	7.6.2021 14.18 tero.maijala@infre	1	395.37 kB	

Comments:
server 27.3.2024 11.21
Version: 4 added by: mikko.siivola
Load older comments

Version History

Version: 4 **Active version**

E4R1_Yyp_201000_mm.xml (584 KB)
Creation time: 23.1.2024 12.28 (mikko.siivola)

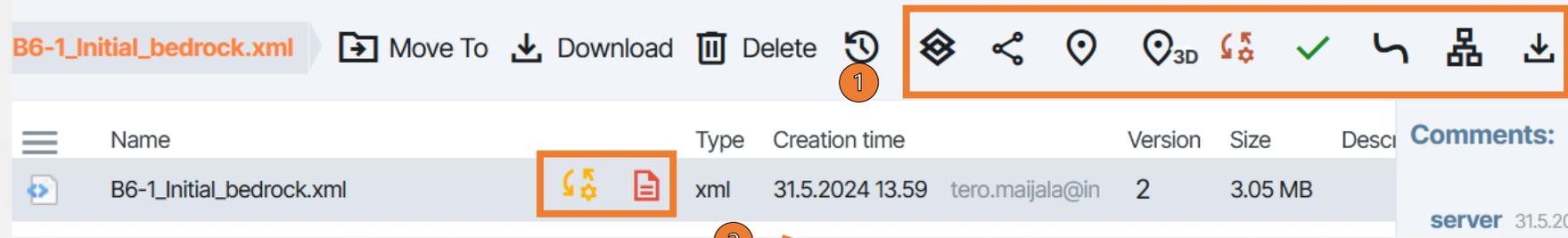
Version: 3

E4R1_Yyp_201000_mm.xml (584 KB)
Creation time: 13.6.2023 09.34 (mikko.siivola)

Download All

Set As Active Version

Files page



1. File Tools:

-  Create shortcut of the file to another folder
-  Email another user a link to the file
-  View the file on a map or in a 3D view (opens a new tab)
-  Reparse the file
-  Approve the file
-  Attach alignment to the file
-  Set file properties
-  Download the InfraModel surface model inspection report

```
INFO - landxml.units | metric | 1 | 1 | 1 | 1
INFO - application | 3D-Win | 6.6.4.5
WARNING - model contains duplicate triangles
```

2. Additional file information:

Warning about file parsing error

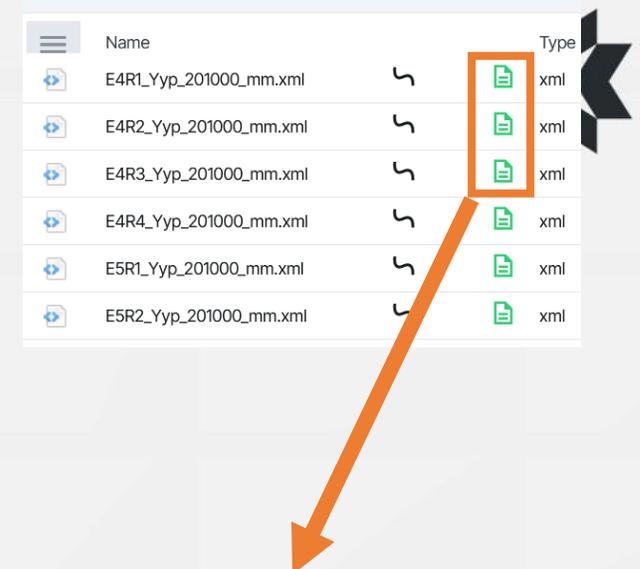
Model inspection service

With the help of the service, you can check whether the file that has been downloaded is compliant with Inframodel format

Symbols:

-  OK, the model passed the inspection
-  The model did not pass the inspection, serious flaws or errors that might prevent the use of the model during the construction phase

You can download a pdf report on the model inspection by clicking on the document symbol.



Name	Type
E4R1_Yyp_201000_mm.xml	xml
E4R2_Yyp_201000_mm.xml	xml
E4R3_Yyp_201000_mm.xml	xml
E4R4_Yyp_201000_mm.xml	xml
E5R1_Yyp_201000_mm.xml	xml
E5R2_Yyp_201000_mm.xml	xml

Infrakit_BIM_Services

InfraModel tarkastusraportti

23/01/2024, 12.29.19

Infrakit_Demo_project

Tiedosto: E4R1_Yyp_201000_mm.xml

Yhteenveto tarkistetuista osioista

Elementti	Pisteet	Yhteensä	%
1.1 LandXML	6	6	100.00%
1.2 Units	3	3	100.00%
1.3 CoordinateSystem	1	1	100.00%

As-built page

From the folder structure on the left side, choose which folder's points you want to view

(...) after the folder name tells you that there are points in its subfolders, and the number in brackets tells you how many as-built points are in that folder

You can view all the points by clicking the box of the topmost folder while pressing shift-key

Map Files Equipment Photos Masses Schedule **As-built** Mass Haul Visualization Mobile Insights

Import logpoints

Filter tree

InfraKit_Demo_project (120) (...)

InfraKit_Demo_project (187) (...)

00_Photos_and_Field (14)

02_Quality_material (...)

001_Road_structures (...)

2012_Lowest_surface (7) (...)

K11_As_built (97)

Deviation_reports (1)

003_Other_concrete_structures (...)

04_Production_models (3) (...)

06_Additional_information (13)

other (...)

point_clouds (10)

Property test (54)

Add filter

Showing all 97 logpoints | Download logpoints | Clear filters

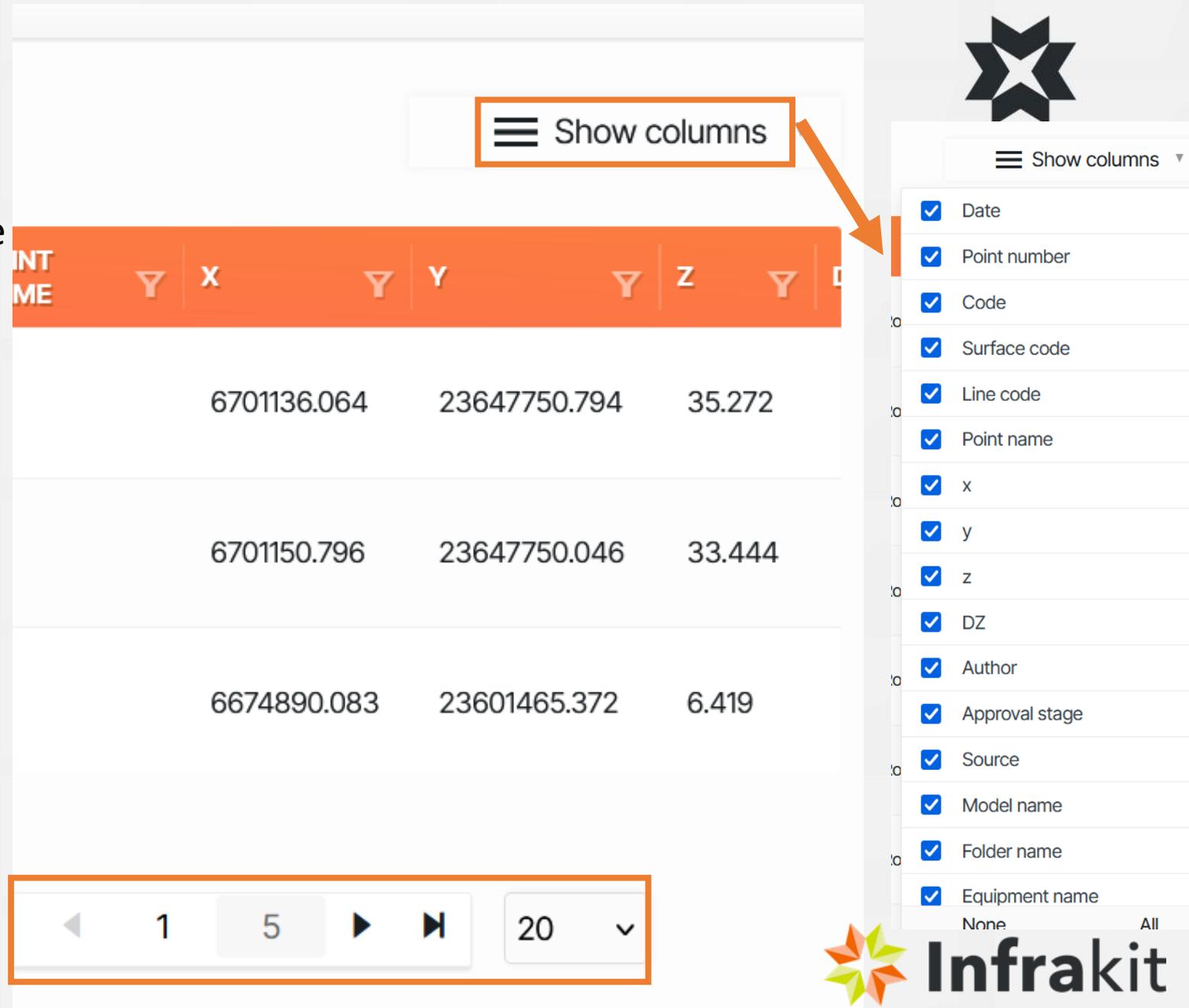
Change... | [Icon] | [Icon]

ACTIONS	DATE	POINT NUMBER	CODE	SURFACE CODE	LINE CODE	POINT NAME
<input type="checkbox"/> [Icon] [Icon]	13.4.2023 15.09	2			0	
<input type="checkbox"/> [Icon] [Icon]	13.4.2023 15.07	1			0	
<input type="checkbox"/> [Icon] [Icon]	21.3.2023 10.45	6	1 (S) (Maastomalli)		0	
<input type="checkbox"/> [Icon] [Icon]	21.3.2023 10.45	5	1 (S) (Maastomalli)		0	
<input type="checkbox"/> [Icon] [Icon]	21.3.2023 10.42	4	1 (S) (Maastomalli)		0	
<input type="checkbox"/> [Icon] [Icon]	21.3.2023 10.42	3	1 (S) (Maastomalli)		0	
<input type="checkbox"/> [Icon] [Icon]	21.3.2023 10.42	2	1 (S) (Maastomalli)		0	

As-built page

From the "Show columns" button at the top, you can choose which properties of the point is shown in the table

From the bottom, you can scroll through the pages of the table, and change how many points are displayed on the page



The screenshot displays a web interface for an 'As-built page'. At the top right, there is a logo consisting of a stylized star or flower shape. Below the logo is a 'Show columns' button with a dropdown arrow. An orange arrow points from this button to a dropdown menu on the right side of the page. The dropdown menu lists various properties with checkboxes, all of which are checked. The table below the dropdown has a header row with columns: 'POINT NAME', 'X', 'Y', 'Z', and 'D'. The table contains three rows of data. At the bottom of the page, there is a pagination control with a left arrow, the number '1', a highlighted '5', a right arrow, a double right arrow, the number '20', and a dropdown arrow. The 'Infrakit' logo is located at the bottom right corner.

POINT NAME	X	Y	Z	D
	6701136.064	23647750.794	35.272	
	6701150.796	23647750.046	33.444	
	6674890.083	23601465.372	6.419	

- Date
- Point number
- Code
- Surface code
- Line code
- Point name
- x
- y
- z
- DZ
- Author
- Approval stage
- Source
- Model name
- Folder name
- Equipment name
- None
- All

1 5 20



Adding as-built points

Add as-built points from the button in the upper left corner. The right folder must be first selected by clicking on the folder name.

Select the file from which you import the points and then select the correct equipment type.

You can choose alignment and model for the as-built points.

Note that the points do not have to be in the same folder as the used model.

The screenshot shows a software interface with a navigation bar at the top containing 'Map', 'Files', 'Equipment', 'Photos', 'Masses', 'Schedule', and 'As-built'. The 'As-built' tab is active. Below the navigation bar, there is a search bar labeled 'Filter tree' and a button labeled 'Import logpoints' which is highlighted with an orange box. An orange arrow points from this button to the 'Import Logpoints' dialog box. The dialog box has the following fields:

- FILE: 2012_Alin_yhdistelmäpinta-2025-04-16.gt
- FOLDER: Infrakit_Demo_project
- REFERENCE MODEL: ---
- ALIGNMENT: ---
- EQUIPMENT: ---

At the bottom of the dialog box, there are 'Cancel' and 'Import' buttons. In the background, a folder tree is visible with 'Infrakit_Demo_project (120) (...)' selected. To the right, a table shows logpoint data:

ACTIONS	DATE
	13.4.2023 15.09
	13.4.2023 15.07
	21.3.2023 10.45

Filtering as-built points

You can filter as-built points with the "Add filter" button at the top. There is a list of properties that can be used to filter points.

Filtering can be done with many properties at the same time, for example a specific date and surface code.

The number in brackets after the feature indicates the number of points that have that property.

The screenshot displays a software interface with a top navigation bar containing 'Map', 'Files', 'Equipment', 'Photos', 'Masses', 'Schedule', and 'As-built'. Below this, there is an 'Import logpoints' button and an 'Add filter' button, which is highlighted with an orange box. A 'Filter tree' search box is visible. The main area shows a hierarchical folder structure for 'Infrakit_Demo_project (120)'. A dropdown menu is open, listing various filterable properties with checkboxes: Date, Point number, Code, Surface code, Line code, Point name, x, y, z, DZ, Model name, Model on equipment, pdop, hdop, and vdop. An orange arrow points from the 'Add filter' button to the dropdown menu. In the foreground, a 'Select all' dialog box is open, listing numerous XML files with their respective point counts in brackets, such as '- (305)', 'A3-3_pisteet.gt (3)', 'E4R1_Ayp_201200_mm.xml (4)', 'E4R1_Jak_212100_mm.xml (1)', 'E4R1_Yyp_201000_mm.xml (3)', 'E4R2_Jak_212100_mm.xml (9)', 'E4R4_Ayp_201200_mm.xml (37)', 'E4R4_Jak_212100_mm.xml (29)', 'E5R1_Lightpoles_xy.xml (7)', 'E5R3_Ayp_201200_mm.xml (1)', 'E5R3_Jak_212100_mm.xml (2)', 'E5R4_Kiertotie_Ayp_201201_mm.xml (4)', 'E5R4_Kiertotie_Sitk_213101_mm.xml (2)', 'E5R5_Ayp_201200_mm.xml (10)', 'E5R5_Jak_212100_mm.xml (33)', 'E5R6_Paalulaatta_LohkoA_Ap_V2_132200_mm.xml (5)', 'E5R8_Jak_212100_mm.xml (27)', 'E5R8_Lightpoles_xy.xml (4)', and 'Infrakit_measuring_box mm.xml (11)'. The dialog box has 'Cancel' and 'Apply' buttons at the bottom.

Editing as-built points

You can change the properties of the selected points from the Change button. It opens a list of properties that can be edited with the tool. The tool writes new data over the old one.



Delete selected points



Selected points open on the map page

You can edit several points at once. Select several points at once from the - box in front of the row

The screenshot shows a software interface for managing logpoints. At the top, there is a filter section with 'Add filter' and 'Model name' (with a dropdown arrow and an 'x' to clear). Below this, it says 'Showing all 959 logpoints' and provides buttons for 'Download logpoints' and 'Clear filters'. A table of logpoints is displayed with columns: ACTIONS, DATE, POINT NUMBER, CODE, SURFACE CODE, and LINE CODE. The first row is selected, indicated by a blue checkmark in the ACTIONS column. A dropdown menu is open over the 'Change...' button in the ACTIONS column of the first row, listing properties: Model, Alignment, Equipment, Folder, Code, Surface code, Line code, Point number, and Point name. An orange box highlights the 'Change...', delete, and map icons in the ACTIONS column. An orange arrow points from the 'Change...' button in the table to the dropdown menu.

ACTIONS	DATE	POINT NUMBER	CODE	SURFACE CODE	LINE CODE
<input checked="" type="checkbox"/>	16.4.2025 08.42	1			0
<input checked="" type="checkbox"/>	7.4.2025 15.10	22		12100	
<input type="checkbox"/>	7.4.2025 15.06	21		12100	
<input checked="" type="checkbox"/>	24.3.2025 14.02	22		01200	

Information of as-built points



By clicking the location symbol, the point opens on the map page (opens new tab)



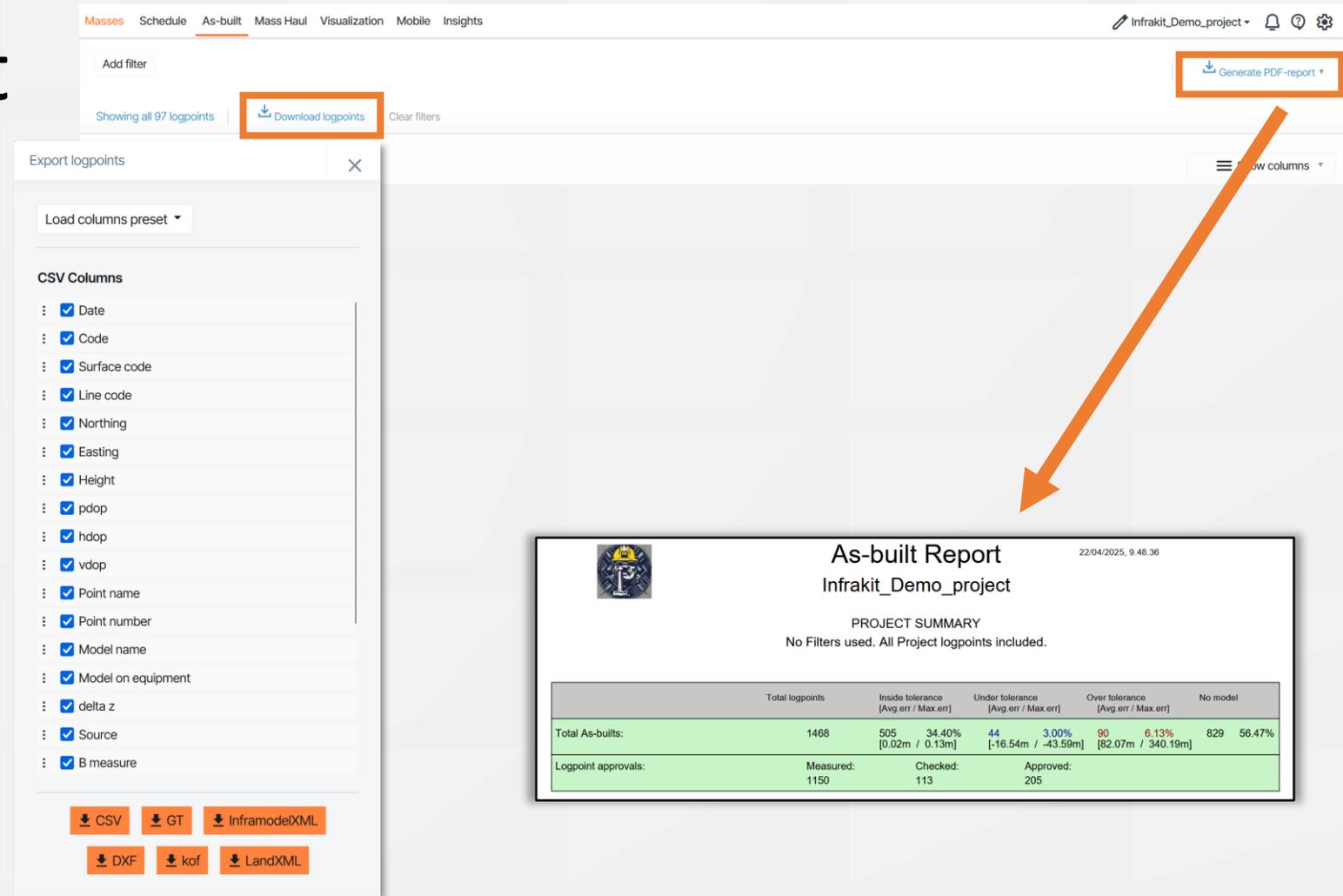
The edit history of the point opens by clicking the clock symbol

	ACTIONS	DATE	POINT NUMBER	CODE	SURFACE CODE
<input type="checkbox"/>	 	13.4.2023 15.09	2		
<input type="checkbox"/>	 	13.4.2023 15.07	1		
<input type="checkbox"/>	 	21.3.2023 10.45	6	1 (S) (Maastomalli)	

Activity history				✕
DATE	USER	ACTION	DESCRIPTION	
22.4.2025 09.40		Changed Alignment	from: K1J_ml_tg.xml, to: Y23_K23_jv_putket_ML_tg.xml	
2.5.2023 15.46		Created Logpoint		

Downloading as-built points

- You can use "Download logpoints" - button to download the as-built points to the computer in desired format. If no point is selected, all points in the table are downloaded. If something is selected, only the selected points are downloaded
- After selecting download option, you can choose which columns will be saved in a .csv file, other formats get their columns automatically based on the format
- "Generate PDF-report" button can be used to download the as-built report either for all or only selected/filtered points. The report shows how many points there are and how they are within tolerance



The screenshot shows the software interface with the 'As-built' tab selected. The 'Download logpoints' button is highlighted with an orange box. An orange arrow points from this button to the 'As-built Report' PDF document shown below.

Export logpoints

Load columns preset ▾

CSV Columns

- Date
- Code
- Surface code
- Line code
- Northing
- Easting
- Height
- pdop
- hdop
- vdop
- Point name
- Point number
- Model name
- Model on equipment
- delta z
- Source
- B measure

Download options: CSV, GT, InframodelXML, DXF, kof, LandXML

As-built Report 22/04/2025, 9:48:36
Infrakit_Demo_project

PROJECT SUMMARY
No Filters used. All Project logpoints included.

	Total logpoints	Inside tolerance [Avg. err / Max. err]		Under tolerance [Avg. err / Max. err]		Over tolerance [Avg. err / Max. err]		No model	
Total As-builts:	1468	505	34.40% [0.02m / 0.13m]	44	3.00% [-16.54m / -43.59m]	90	6.13% [82.07m / 340.19m]	829	56.47%
Logpoint approvals:	Measured: 1150	Checked: 113	Approved: 205						

Photos page



- Photos can be edited, uploaded, moved and downloaded on the Photos page
- Tools for managing photos are on the top of the page. Certain photo's properties can be edited from the top right corner of the selected photo
- Same tools are available on the "Map" page

Map Files Equipment **Photos** Masses Schedule As-built Mass Haul Visualization Mobile Insights

Infrakit_Demo_project

Add folder Add image Select images Move selected images to folder Download selected Download folder Download all images (132) Download images summary (Excel)

Download images with annotations

Infrakit_Demo_project

- 00_Photos_and_Field
 - 360_Dronephotos
 - 2024-11-29_17:20:22.jpg
 - DJI_0156.JPG
 - DJI_0157.JPG**
 - DJI_0158.JPG
 - E5R8_ml_tg.xml_540,382_Photo_6553750
 - E5R8_ml_tg.xml_580,823_Photo_6553746
 - E5R8_ml_tg.xml_604,014_Photo_6553747
 - E5R8_ml_tg.xml_761,123_Photo_6553753
 - E5R8_ml_tg.xml_766,485_Photo_6553751
 - E5R8_ml_tg.xml_785,31_Photo_6553752
 - E5R8_ml_tg.xml_790,329_Photo_6553731
 - E5R8_ml_tg.xml_790,329_Photo_6553732

DJI_0157.JPG Edit properties

Description: S10 Tunnel bridge

Original Date: 1.6.2021 18.33

Upload Date: 9.9.2021 21.02 (GMT+03:00)

Creator: tero.majjala@infrakit.com

+
-
[Crop]
[Pan]

Equipment page



2 Online	3.3% Efficiency	32h Work hours			
			Filter		Vendor
●	Base station 123	!	✎	↓	Infrakit
●	Champion 730	!	✎	↓	Trimble Earthworks
●	Huddig 1261	!	✎	↓	DigPilot
●	Hyundai W160 (300-564)	!	✎	↓	Makin 3D
●	Infrakit Demo Machine 1	!	✎	↓	Unicontrol
●	Infrakit Demo Machine 1 MSI	!	✎	↓	Unicontrol
●	Invoice 109555 - Maskin System Europe AB	!	✎	↓	Makin 3D
●	Jakob	!	✎	↓	Unicontrol
●	Jere_S_Simu		✎	↓	Infrakit
●	Jere_Super_truck		✎	↓	Infrakit
●	Jere_Super_truck		✎	↓	Infrakit
●	Makin_Excavator	!	✎	↓	Makin 3D
●	Mikko_Siivola_Simu	!	✎	↓	Novatron

1

- Online
- Offline
- Not in the project
- Not synced

1

2

! The machine's last accuracy calibration was over 2 weeks ago or its accuracy is over the tolerance or both

3

✎ Organization admin can access the equipment settings



Downloading the machine's as-built points from a certain time period



Link to Novatron Xsite manage

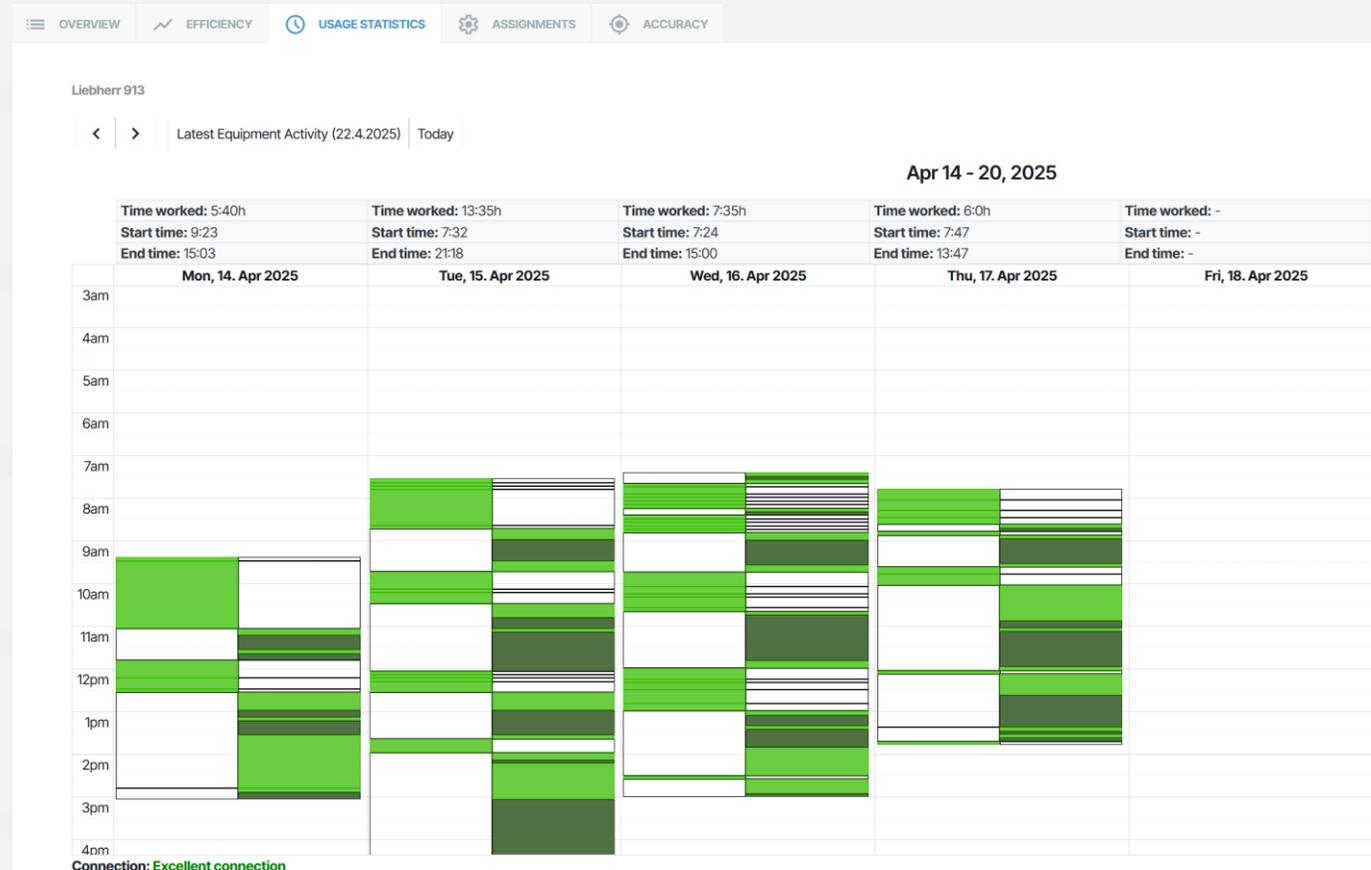
2

3

Usage statistics



- The usage statistics tab of the equipment page allows you see each machines workin statistics
- Select equipment from the list on the left, and the usage statistics opens in the calendar
- By clicking on the green bar, you can see which model the machine has been working on at that time
- Light green means that the machine has moved at that time, dark green means that the machine has not been moving
- Weeks can be changed with the arrows at the top
- The "Last connection" and "Today" buttons allow you to jump directly to the day in question



Assignments

Model assignments are used to manage which surface models and background maps are sent to machines

You can view machine's assignment by clicking the name of the machine on the left. All assignments are shown when no machine is selected

From the three points, you can assign it to different equipments or delete it

The screenshot shows the 'Assignments' tab in a software interface. The top navigation bar includes 'OVERVIEW', 'EFFICIENCY', 'USAGE STATISTICS', 'ASSIGNMENTS' (highlighted with an orange box), and 'ACCURACY'. Below the navigation, the machine name 'Infrakit Demo Machine 1' is displayed. On the left, a list of machines is shown: 'all files', 'Akea', 'Nåiden test' (highlighted with an orange box), 'One for all', 'Unicontrol', 'WBS1', and 'All models'. Each machine name has a three-dot menu icon to its right. A '+ Create assignment' button is also highlighted with an orange box. On the right side, there are three buttons: 'Save' (green), 'Reset changes' (grey), and 'Clear' (white). Below these buttons is a search bar labeled 'Filter tree'. The main content area displays a tree view of folders and files. The '04_Production_models' folder is expanded, showing sub-folders like '0000_Geometries' and 'A_Alignments' (both checked), and a list of XML files such as 'E4R1_Sitk_213100.xml' and 'E5R1_Sitk_213100_mm.xml'.

Equipment accuracy



1. The equipment accuracy tab shows the accuracy logpoints measured by the machine, and they can be also approved here

2. The machine accuracy logpoints can also be entered manually

The coordinates measured by the machine are entered in the “Measured” column

The coordinates measured by the surveyor are entered in the “Reference” column

3. In the settings, you can edit the tolerances of the project, download accuracy report and choose whether the coordinates of the measured point are showed

OVERVIEW EFFICIENCY USAGE STATISTICS ASSIGNMENTS ACCURACY

Measured Reference Delta

N: 0 N: 0 Dn: 0.000
E: 0 E: 0 De: 0.000
Z: 0 Z: 0 Dz: 0.000

Distance: 0.000

Code:

Comment:

Add point

Suggested points

No accuracy logpoints

Approved points

CODE	MEASURED	REFERENCE	DELTA	DISTANCE	MEASURED DATE	APPROVAL DATE	SOURCE	COMMENT
9999	Logpoint: 29358637	KnownPoint: GCP1	dn: 0.093 de: 0.433 dz: 0.104	0.455	27.3.2023 14.50	27.3.2023 14.53	mikko.silvola	
9999	Logpoint: 29358636	KnownPoint: GCP1	dn: 0.478 de: 0.001 dz: 0.104	0.487	27.3.2023 14.50	27.3.2023 14.53	mikko.silvola	
9999	Logpoint: 29358635	KnownPoint: GCP1	dn: 0.318 de: 0.129 dz: 0.104	0.359	27.3.2023 14.50	27.3.2023 14.53	mikko.silvola	
9999	Logpoint: 22757143	Manual	dn: 6704777.996 de: 23469717.250 dz: 20.076	24400000	3.11.2021 14.18	13.12.2021 11.48	tero.majjala@infrakit.com	

Visualization (3D)



All models in Infrakit can be viewed in 3D view

Supported formats

- ✓ IFC, PIPENETWORKS (XML), triangular surface models (XML, DWG, DXF...)
- ✓ Always have the projects models in right coordinate and height systems for visualization of all project related models **in one single view**





Thank you

**More instructions at
support.infrakit.com**