

# **Release Notes NET 13.0**

## Summary

NET 13 brings support for AutoCAD Map 3D 2024 to all included products.

In addition, there are many bug fixes and improvements to workflows in NET Engineering, and NET Build integration has been significantly improved.

Part of the new version is an update to our licensing solution, which fixes some minor issues.

Users of the TKI PostgreSQL provider must update to version 4.1 of the new provider to ensure compatibility with NET.

## Supported Software

- Autodesk AutoCAD Map 3D
  - Autodesk AutoCAD Map 3D 2022.0.1 Autodesk AutoCAD 2022.1.3 or later
  - Autodesk AutoCAD Map 3D 2023.0.2 Autodesk AutoCAD 2023.1.1 or later
  - Autodesk AutoCAD Map 3D 2024.0.1 Autodesk AutoCAD 2024.1 or later
- TKI PostgreSQL Provider 4.1.0
- Comsof Fiber Designer 2019.2.2 Comsof Fiber Designer 22.2
- Comsof Fiber 23.1
- TKI Lizenzierung 13.0 (Only required for a manual installation on the network license server)

## Release NET 13.0 in detail

AutoCAD Map 3D 2024 is supported for NET Field Survey, NET Design, NET Engineering and NET Operations.

## **NET Design**

## Conversion to low level design

• When a splicing error occurs, the affected cable and target device are now explicitly displayed.



## **NET Engineering**

## General

- Fixed an issue that caused the network tracing to get stuck and ever finished. Mainly reports are affected by this bugfix.
- The user interface of NET Engineering Options has been improved so that the texts are easily readable at different screen scales.

## Workflows

- The texts of the selected options in the Duct connection editor workflow and in the NET Engineering options have been adjusted so that they are now consistent.
- If the option "Connect only ducts of the same color" is activated in the NET options, ducts of the same color can now be connected without errors in the "Set duct fitting" workflow.
- In the "Set duct fitting" workflow, it is now no longer possible to create invalid fittings.
- An error of the automatic duct length calculation within the "Edit segment und duct assignments" function has been fixed.
- The selection of an incorrect object in the map led to the abortion of the workflow "Set duct insertion". The workflow has been adapted so that a corresponding message now informs the user if an incorrect object has been selected.
- An error when applying the color scheme in the "Create and assign ducts (w/o geometry)" workflow has been fixed.
- A note text in the "Split segment" workflow has been adjusted.
- A message with the result is now displayed in the "Create duct insertion" workflow after execution.
- The workflows "Create FO cable loop" and "Create telephony cable loop" have been completely revised to improve the output on high-resolution displays and in the dark colour theme.
- The feature selection of the workflows has been standardized so that it is now also possible to transfer features from the form filter for some workflows.

## Reports

- In the "Duct Connections" report, the name is now displayed left-justified and on all pages.
- When displaying the report "Duct connections", the first page displayed was always a blank page. This error has been fixed.
- The text in the field "Info" in the report "FO Splice Plan" is now limited and truncated if it is too long, so that display errors no longer occur when the report is output.
- The designation of the connectors and pins in the report "Work order" is now uniform. In addition to the connector or pin, the name, number or FID of the same is displayed.

## Forms

- The copy and paste function using F7 and F8 works again in the forms.
- In the form "FM Pin" the field "Name" is now editable.
- Fixed a problem when creating a device with a switching point.

## Structure updates

• Fixed a structure update error under Oracle that always occurred when the SQL statement "SDO\_FILTER " was stored for a control.



## **NET Build integration**

- The NET Build Push function for NET Engineering projects now supports buried/aerial cables.
- The NET Build Push function for NET Engineering projects now supports the transfer of connector type, tray type and closure side for splice information.
- The NET Build push function causes an exception when pushing empty trenches (without ducts inside). This error is fixed now.
- The call of the function for data transfer according to NET Build has been changed internally so that users now no longer need admin or service rights to execute the data transfer.
- During data transfer to NET Build, planning objects of the type "Closure" receive a new attribute to map the relationship to the building structure.
- Segments without cables are now also transmitted to NET Build.
- When synchronising the field reports, connector types, tray types and closure sides of the trays for the splice information are now also transferred to NET Engineering.
- Synchronize NET Build field reports in the NET Engineering now supports Datepicker options with the NET Build object type "Production Report" which allows to choose desired start and end date.

## Redlining

- The "Redlining Measurement Point Type" has been supplemented with the "Ball marker" type.
- The relationship between the survey points and the parent objects (closure,trench,terminator, structure, fitting) is now set correctly.
- When synchronising the field reports, connector types, tray types and closure sides of the trays for the splice information are now also transferred to NET Engineering.
- Increased the performance of redlining to engineering data transfer. It will now only load the required objects via a spatial filter instead of loading everything.

## Connection editor

• When working with work orders now the tray connection is counted and displayed correctly.

## Licensing

- The version of the network license server by Revenera is being updated from Version 2022.09.0 to 2023.10.0.
- There was an error when creating the request file for the offline activation of a licence in the network licence server. This error has been fixed.
- A spelling error in the TKI licensing has been fixed.

## Changes to the data model since NET 12.0

## NET Field Survey

- New entries in the domain table TC\_DF\_CONNECTION\_TYPE\_TBD :
  - 13 Infrastructure up to the property line (HP+)
  - 14 Infrastructure up to the property line (HP+) without distribution cable



- New column IS\_PRIVATE in table TC\_DF\_TRENCH
- New entry in domain table TC\_DF\_CABLE\_CLASS\_TBD
  - 4 unknown
- New entry in domain table TC\_DF\_PROVIDER\_TBD
  - 4 unknown
- New entry in domain table TC\_DF\_TRENCH\_CLASS\_TBD
  - 4 unknown

## 12.4

- New columns SOURCE\_KEY and SOURCE\_LAYER in the tables:
  - TC\_DF\_CLUSTER
  - TC\_DF\_DUCT\_TYPE\_CONSTR
  - TC\_DF\_STREET
- New column SYNC\_DATE in table TC\_DF\_CLUSTER
- New column ZIPCODE in table TC\_DF\_PERSON
- Column FID\_DUCT\_TYPE\_CONSTRAINT removed from table TC\_DF\_STREET

## 12.5

• No changes to the data model - structure update only for new forms and reports

## 13.0

• No changes to the data model - structure update only for new forms and reports

## NET Field Survey - BMVI Data Model

- Extension of the TC\_DF\_ADDRESS\_POINT table with the following columns:
  - BMVI\_AMOUNT\_SOCIOECONOMICS
  - BMVI\_CONSTR\_COMP
  - BMVI\_IS\_AGRICULTURE
  - BMVI\_IS\_BUSINESS\_AREA
  - BMVI\_IS\_MEV\_AGAIN
  - BMVI\_IS\_SEE
  - BMVI\_IS\_SUPPLY
  - BMVI\_SOCIOECONOMICS\_COM



- BMVI\_SUPPLY\_COM
- BMVI\_TECH\_1\_YEAR
- BMVI\_TECH\_3\_YEAR
- BMVI\_TECH\_IS
- BMVI\_UID
- ID\_BMVI\_FTTH\_B with relation to TC\_DF\_BMVI\_TECH\_TBD
- ID\_BMVI\_HFC with relation to TC\_DF\_BMVI\_TECH\_TBD
- ID\_BMVI\_MEV\_IS with relation to TC\_DF\_BMVI\_SUPPLY\_PLAN\_TBD
- ID\_BMVI\_MEV\_PLAN with relation to TC\_DF\_BMVI\_SUPPLY\_PLAN\_TBD
- ID\_BMVI\_MEV\_PLAN1 with relation to TC\_DF\_BMVI\_SUPPLY\_PLAN\_TBD
- ID\_BMVI\_SOCIOECONOMICS with relation to TC\_DF\_BMVI\_SOCIOECONOMIC\_TBD
- Extension of the TC\_DF\_STRUCTURE table by the column BMVI\_IS\_COLLOCATION
- New domain table TC\_DF\_BMVI\_SOCIOECONOMIC\_TBD
- New domain table TC\_DF\_BMVI\_SUPPLY\_PLAN\_TBD
- New domain table TC\_DF\_BMVI\_TECH\_TBD

• Column BMVI\_UID in table TC\_DF\_ADDRESS\_POINT was renamed BMVI\_UUID

#### 12.4

• No changes to the data model - structure update only for new forms and reports

## NET Design

#### 12.0.3

- New table TC\_PL\_HOME\_POINT
- New column FID\_HOME\_POINT in table TC\_PL\_RESIDENT

## 12.0.4

- New column IS\_PRIVATE in table TC\_PL\_STREET\_CL
- New column ABBREVIATION in table TC\_PL\_HOME\_POINT
- New column CITY in table TC\_PL\_HOME\_POINT
- New column HOUSENR in table TC\_PL\_HOME\_POINT
- New column POSTCODE in table TC\_PL\_HOME\_POINT
- New column STREET in table TC\_PL\_HOME\_POINT
- New entries in the domain table TC\_PL\_DEMAND\_CONN\_TYPE\_TBD :
  - 13 Infrastructure up to the property boundary (HP+)



- 14 Infrastructure up to the property boundary (HP+) without distribution cables
- New column DIRECT\_CABLES in view TC\_PL\_V\_OUT\_DUCT

## 12.1.1

- New domain table TC\_PL\_DUCT\_LAYOUT\_TBD
- New column ID\_DUCT\_LAYOUT in TC\_PL\_DUCT with relation to TC\_PL\_DUCT\_LAYOUT\_TBD

#### 12.2

- New column FID\_FORCED\_CABLE\_TYPE in TC\_PL\_BUILDING with relation to TC\_PL\_CABLE\_TYPE
- New column FID\_FORCED\_CABLE\_TYPE in TC\_PL\_DEMAND\_POINT with relation to TC\_PL\_CABLE\_TYPE
- New table TC\_PL\_ROLLOUT\_AREA
- New column DEPLOYMENT in the tables:
  - TC\_PL\_OUT\_CABLE
  - TC\_PL\_OUT\_DEVICE
  - TC\_PL\_OUT\_DUCT
  - TC\_PL\_OUT\_SPLITTER
  - TC\_PL\_OUT\_STRUCTURE
  - TC\_PL\_OUT\_USED\_TRENCH

## 12.3

• New column EXCLUDED\_LAYERS in table TC\_DF\_DUCT

#### 12.4

- No changes to the data model structure update only for new forms and reports
- 12.5
  - No changes to the data model structure update only for new forms and reports

#### 13.0

• No changes to the data model - structure update only for new forms and reports

## NET Design - BMVI Data Model

## 12.2

- Extension of the table TC\_PL\_DEMAND\_POINT by the following columns:
  - BMVI\_CONSTR\_COMP
  - BMVI\_IS\_AGRICULTURE

6



- BMVI\_IS\_BUSINESS\_AREA
- BMVI\_IS\_MEV\_AGAIN
- BMVI\_IS\_SEE
- BMVI\_IS\_SUPPLY
- BMVI\_SOCIOECONOMICS\_COM
- BMVI\_SUPPLY\_COM
- BMVI\_TECH\_1\_YEAR
- BMVI\_TECH\_3\_YEAR
- BMVI\_TECH\_IS
- BMVI\_UID
- ID\_BMVI\_BUSINESS with relation to TC\_PL\_BMVI\_YESNORESIDENT\_TBD
- ID\_BMVI\_FTTH\_B with relation to TC\_PL\_BMVI\_TECH\_TBD
- ID\_BMVI\_HFC with relation to TC\_PL\_BMVI\_TECH\_TBD
- ID\_BMVI\_HOSPITAL with relation to TC\_PL\_BMVI\_YESNORESIDENT\_TBD
- ID\_BMVI\_MEV\_IS with relation to TC\_PL\_BMVI\_SUPPLY\_PLAN\_TBD
- ID\_BMVI\_MEV\_PLAN with relation to TC\_PL\_BMVI\_SUPPLY\_PLAN\_TBD
- ID\_BMVI\_MEV\_PLAN1 with relation to TC\_PL\_BMVI\_SUPPLY\_PLAN\_TBD
- ID\_BMVI\_SCHOOL with relation to TC\_PL\_BMVI\_YESNORESIDENT\_TBD
- ID\_BMVI\_SOCIOECONOMICS with relation to TC\_PL\_BMVI\_SOCIOECONOMIC\_TBD
- Extension of the table TC\_PL\_STRUCTURE by the column BMVI\_IS\_COLLOCATION
- New domain table TC\_PL\_BMVI\_SOCIOECONOMIC\_TBD
- New domain table TC\_PL\_BMVI\_SUPPLY\_PLAN\_TBD
- New domain table TC\_PL\_BMVI\_TECH\_TBD
- New domain table TC\_PL\_BMVI\_YESNORESIDENT\_TBD
- New domain table TC\_PL\_RESIDENT\_TYPE\_TBD

• Column BMVI\_UID in table TC\_PL\_DEMAND\_POINT was renamed BMVI\_UUID

12.4

• No changes to the data model - structure update only for new forms and reports

## 12.5

• No changes to the data model - structure update only for new forms and reports



## **NET Engineering and Operations**

#### 12.0.2

- New view TC\_REP\_SEGMENTCOSTS support for report "Segment costs"
- New view TC\_REP\_CABLECOSTS support for report "Cable costs"

## 12.0.4

Relation of FID\_DEVICE in table TC\_BMVI\_SUPPLY\_AREA is now "D" (delete if parent object is deleted)

#### 12.1

• Adaptation of view TC\_M\_SP\_DUCT - internal change, no changes to columns

## 12.2

• No changes to the data model - structure update only for new forms and reports

#### 12.3

- Column ID\_TYPE in TC\_NR\_SCHEME may no longer contain the value zero, new default value is 1
- New view TC\_V\_CONN database optimised view for topological connections in which the **\*\_FROM** part is always the line object.
- Changed view TC\_V\_CONN\_DETAILS\_PERF output identical, only internal changes.
- New column VALUE\_SHORT in TC\_COLOR
  - Short name for all standard colours is also filled in the update.
- Relation of FID\_PATCH\_PANEL in table TC\_FO\_CONNECTOR is now "P" (deny deletion if relation exists) Patch panel must not be deleted if a connector is assigned.
- Optimisation of the label definitions of TC\_SP\_DUCT\_INSERTION and TC\_SP\_SEGMENT . No changes to the output.

- New column ARGB\_COLOR in view TC\_COLOR
- Service specifications removed The following tables have been deleted:
  - TC\_SD\_SERVICE\_DICT
  - TC\_SD\_SERVICE\_DICT\_ITEM
  - TC\_SD\_SERVICE\_FEATURE
  - TC\_SERVICE\_POSITION\_TYPE\_TBD
- New field STATUS\_NAME in the views TC\_M\_SP\_DUCT\_INSERTION and TC\_M\_SP\_FITTING
- Relation of fields COLOR and COLOR2 in TC\_SP\_DUCT changed from TC\_V\_COLOR to TC\_COLOR
- Label definitions of Duct Insertion for name and color in duct bundle adapted, no change in content



• No changes to the data model - structure update only for new forms and reports

## 13.0

 The views TC\_REP\_W0\_F0\_PATCH, TC\_REP\_W0\_F0\_SPLICE, TC\_REP\_W0\_TP\_PATCH and TC\_REP\_W0\_TP\_SPLICE have been updated.
The contents of the columns ELEMENT\_EROM and ELEMENT\_T0 were changed to improved the

The contents of the columns ELEMENT\_FROM and ELEMENT\_TO were changed to improved the related reports.

## NET Engineering and Operations - BMVI Data Model

#### 12.4

- New table TC\_BMVI\_FUNDING\_PROJECT
- Update of view TC\_BMVI\_M\_BUILDING
- Update of view TC\_BMVI\_M\_SP\_SEGMENT
- New column FID\_FUNDING\_PROJECT in tables
  - TC\_FO\_CABLE
  - TC\_FO\_CLOSURE
  - TC\_FO\_TERMINATOR
  - TC\_SP\_DUCT
  - TC\_SP\_CABINET
  - TC\_SP\_MANHOLE
  - TC\_SP\_POLE
  - TC\_SP\_SEGMENT
  - TC\_TG\_BUILDING

## 12.5

• No changes to the data model - structure update only for new forms and reports

## Documentation Pack

## 12.0.3

- Type of FID\_SEQUENCE column in TC\_PLOT\_SEQUENCE\_ELEMENT changed to numeric (10)
- Type of POSITION column in TC\_PLOT\_SEQUENCE\_ELEMENT changed to numeric (10)

## 12.0.4

• Adaptation of column changes from 12.0.3 in the fdo\_columns table for SQLite industry models

ТКІ



## Changes to forms/reports since NET 12.0

## NET Design

12.0.4

- The width of the controls for the references in the "Demand point" form has been increased.
- The new column "Is Private" has been added to the Street centerline form. Is only visible for the atesio optimizer.
- The designations for the "Duct Type Restriction" have been unified in all forms.

#### 12.2

- Forms "Building" and "Demand point" have been adjusted to show the forced cable type as well.
- New form for rollout phases.
- Forms for "Cable", "Duct", "Structure", "Splitter" and " Used Trench" in the planning result have been adjusted to show the attribute "Provision".
- The label for the length in the forms for "Cable", "Duct" and " Used Trench" in the planning result has been correctly translated to German.

## 12.3

• Added "Excluded network layers" controls in the "Duct" form

#### 12.4

• Forms have been changed internally in the basic concept. This has changed the positioning and size of the forms, as well as the tab order. In addition, the forms for the views have been removed and a redirection to the main forms has been stored.

## 12.5

- Changed the identifier from "m<sup>2</sup>" to "m<sup>2</sup>". The following forms are affected:
  - TC\_PL\_BUILDING
  - TC\_PL\_CLUSTER
  - TC\_PL\_OUT\_CLUSTER
  - TC\_PL\_PARCEL
  - TC\_PL\_ROLLOUT\_AREA
  - TC\_PL\_SUBAREA
- The General and General tabs are combined if they exist in existing projects.
- In existing projects the General tab is sorted, if necessary, to the first position in the form.

13.0

• FID field in all forms has been locked to allow the copy and paste function using F7 and F8 to work.



## **NET Engineering and Operations**

12.0.1

• The identifier for the STOP\_SERVICE field has been adjusted in the splitter type form (TC\_FO\_SPLITTER\_TYPE).

## 12.1

- The identifier "Building" has been changed to "Installation location". Affected are the forms TP Terminator (TC\_TP\_TERMINATOR), TP Cable Section (TC\_TP\_CABLE), TP Closure (TC\_TP\_CLOSURE), FO Terminator (TC\_FO\_TERMINATOR), FO Cable Section (TC\_FO\_CABLE) and FO Closure (TC\_FO\_CLOSURE).
- Control for cable assignment in fiber optic cable reserve and TP cable reserve is now a drop-down list.
- Text for attached fiber and attached wire in fiber optic Connector and TP wire has been improved. Missing separators and spaces have been added.
- Selection field for manufacturer in fiber optic measuring device (TC\_FO\_MEASUREMENT\_DEVICE), device rack type (TC\_SP\_RACK\_PANEL\_MODEL) and patch panel type

(TC\_SP\_PATCH\_PANEL\_MODEL) has been corrected. The filter for the selection options and the display of the values has been corrected.

## 12.2

• Show status in duct point form.

## 12.3

- Revised report: Network route overview
- New report: Blow-in report for cable trunk
- Tab ID of controls in cluster form corrected.
- Form Building: Arrangement of "Cluster" and "House number" in the form corrected.
- Form Pole: Alignment of controls corrected to avoid collision of field calculations with the left margin.
- Form FO Terminator: Field for "Total connectors" corrected only the number in the text field.
- Form FO splitter type: Position of "Manufacturer information" corrected to avoid collision with the separator line.
- FO splitter data: Length of separator line corrected
- Forms for "Cabinet", "Manhole" and "Pole": New buttons under "Details" to display the referenced objects for all current objects in the filter.
- Form for "Cluster": New buttons to open buildings, points, and lines for all clusters in the filter.
- Form "Document management": Identifier of field for name of creator corrected.

## 12.4

• Forms have been changed internally in the basic concept. This has changed the positioning and size of the forms, as well as the tab order. In addition, the forms for the views have been removed and a redirection to the main forms has been stored.



- The "General" and "General" tabs are combined if they exist in inventory projects.
- The General tab is sorted to the first position in the form in inventory projects, if necessary.
- Dynamic line breaks have been added to some reports to better display very long identifiers.
  - NET Engineering FO Splice overview closure
  - NET Engineering FO Splice overview terminator
  - Duct connections

- FID field in all forms has been locked to allow the copy and paste function using F7 and F8 to work.
- The field NAME in the "TP pin" form has been changed from a SqlLabel to a SqlTextBox . This allows the name editing the name directly.