Release Notes NET 13.1

Summary

Version NET 13.1 supports the creation of possible routes based on parcels in NET Design when using the Comsof Fiber optimiser. This allows a realistic route network to be generated automatically. It is still possible to create possible routes based on the road centrelines.

The data transmission to NET Build has been enhanced with validation functions to identify potential errors before transferring the data.

Additionally, there are numerous small improvements and bug fixes.

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 Licensing 13.0
  (Only required for a manual installation on the network license server)

Release NET 13.1 in Detail

NET Design

atesio integration

- With the planning setting of the atesio Optimizer "Split trenches", no lead ins, crossings and transitions are split. In addition, street trenches are no longer divided into sections shorter than 1 meter.

Comsof Fiber integration

- New function: Trench creation options
  As of version 23, Comsof Fiber supports the creation of trenches not only based on the street center lines (StreetDoubler) with offset, but also takes parcel information into account using the new (TrenchesFromContours) command.
  To ensure that no data loss occurs between street center lines and trenches, a new setting has been

introduced in the advanced options of Comsof Fiber. Here you can now choose between creation based on the street center lines or the parcels.

Dialogs

- Planning attribute value is now also displayed for the object classes parcel, rollout phases area and subarea.
- In the "Cable Type" form in the planning data, a button for the missing references is displayed after the structure update, which allows you to jump to the form for the respective object class.

Low level design

- The general export scheme no longer exports buildings without a device connection.
  The custom export schemes that export all buildings now correctly mark buildings without a device connection as such.

GIS-Nebenbestimmungen export

- The output of the house number and the house number suffix has been corrected.
- Links to the corresponding help pages have been added to the GIS-NB workflows.
- Handling of non-mandatory columns for version 5.0.1 corrected.
- Category for GIS-NB workflows renamed.
- Support GIS Nebenbestimmungen version 5.1.

NET Engineering

Workflows

- There has been a performance improvement in the "Verify FO cable geometries" and "Verify TP cable geometry" workflows.
- In the "Verify FO cable geometries" and "Verify TP cable geometry" workflows, cables assigned twice were not recognised as geometry errors. This error has been fixed.
- The duct length calculation is now carried out in the correct order and therefore correctly for inner ducts.
- The "Check split factor" workflow has been renamed "Check split ratio". In addition, some names within the workflow have been adapted and standardized.
- After execution, the "Check split ratio" workflow shows all FO Fibers for which the specified split ratio is not maintained. This form is no longer pushed into the background, but remains in the foreground.
- A question has been added in "Assign segments and ducts" as to whether the geometry should be created for elements that currently have no geometry.

Reports

- The text in the first and the last column of the "Duct Connection" reports was not correctly vertically aligned. This issue has been fixed.
- The sorting of the Endings overview has been optimized so that the order of the outgoing splitter paths is now also taken into account.
- The display of the "FO Splitter", "Duct Insertion" and "Duct Fitting" forms has been optimized by displaying all existing controls on all tabs.
- During the replacing of placeholders, e.g. in the information text of the detailed splice plan, relations to geometry features are now correctly resolved.

Dialogs

- The field for the "NET Build object" was too short in the redlining forms and the content was partially visible. This problem is has been solved.
- Redlining measurement points can now be relationally linked to buildings.
- In the redlining extension, the forms for the survey line types and the survey point types have been revised. This enables a finer gradation and therefore differentiation of the various measurement points and measurement lines.
- The "Splice type" is now also displayed in the "FO Splice" form ("Stored fiber", "Uncut bundle", "Uncut fiber" or "Splice"). The "Execute filter" function can also be used to filter according to the "Splice type".

Data Model

- The redlining data model has been extended so that the relationship between structure and closure can be mapped.

NET Build integration

Transferring data to NET Build

- The settings for data transfer to NET Build contain a new option for updating user-defined fields for planning objects with at least one work item. There is no standard configuration, but the update is defined individually.
- When transferring data to NET Build, the names of the objects are now output in the log messages instead of the FIDs.
- The NET Build push has been expanded to include the option of performing data checks before the transfer.
  - A new validation has been added, that checks whether an attempt is made to transfer ducts that are not assigned to a segment to NET Build. If such ducts are detected, they are listed in the form of messages in the validation dialogue and the user can switch to the relevant form or have these objects highlighted on the map.
  - The validation "cables without start and end device" has been added for data transfer to NET Build. This checks If a cable is connected to only one or no device, a validation message is displayed for each affected cable.
  - A new validation that checks whether an attempt is made to transfer drop ducts with the same name to NET Build. If such drop ducts are detected, they are listed in the form of messages in the validation dialogue and the user can switch to the relevant form or have these objects highlighted on the map.
  - A new validation that checks whether an attempt is made to transfer buildings with the same address to NET Build. If such buildings are detected, they are listed in the form of messages in the validation dialogue and the user can switch to the relevant form or have these objects highlighted on the map.

Synchronizing field reports

- When synchronizing NET Build field reports, the additional option "Load completed planning objects without work" can now be selected. This means that planning objects can now also be transferred from NET Build that do not have work items.

- When synchronizing the field reports between NET Build and NET Engineering, the connections between structures and closures are now supported and entered accordingly in NET Engineering in the "Redlining closure" form.
- For data transmission to and from NET Build, partially underground cables and fully underground cables are now supported.
- When synchronizing field reports from NET Build, underground/above-ground cables are now also supported.

Redlining

- In the dialogue for redlining data transfer there is now a new option for selecting the positional accuracy so that it can be transferred to the objects of the site plan object class.
- An error occurred when documenting the data transfer with the "Connect house connection lines" action. This issue has been solved.
- In the Data Transfer documentation, the validation execution progress bar is now used to show the progress of the validation execution and the execution of the validations can be canceled.

GIS-Nebenbestimmungen export

- Message added for splitting of trenches for protective ducts.
- Handling of non-mandatory columns for version 5.0.1 corrected.
- Category for GIS-NB workflows renamed.
- Support GIS Nebenbestimmungen version 5.1.

NET Field Survey

Validations

- The validation of trenches was adjusted for crossing trenches, so that it no longer fails when a crossing trench is directly connected to a leadin trench.

Changes to the Data Model since NET 13.0

NET Design

Base Data Model

13.1

- Added additional target tables in `FID_FEATURE` to the table `TC_PL_ATTR_VALUE`.

    - `TC_PL_BOUNDARY.FID`
    - `TC_PL_PARCEL.FID`
    - `TC_PL_ROLLOUT_AREA.FID`
    - `TC_PL_SUBAREA.FID`

GIS-Nebenbestimmungen Data Model

13.1

- Removed "BMVI" from all captions.
- Added new column `BMVI_IS_TECH` in `TC_PL_DEMAND_POINT` with relation to `TC_PL_BMVI_TECH_IS_TBD`.
- Added new column `BMVI_PLAN_AUSB` in `TC_PL_DEMAND_POINT` with relation to `TC_PL_BMVI_PLAN_AUSB_TBD`.
- Added new column `BMVI_TECH_1_YEAR_INT` in `TC_PL_DEMAND_POINT` with relation to `TC_PL_BMVI_TECH_IS_TBD`.
- Added new column `BMVI_TECH_3_YEAR_INT` in `TC_PL_DEMAND_POINT` with relation to `TC_PL_BMVI_TECH_IS_TBD`.
- Added new domain table `TC_PL_BMVI_PLAN_AUSB_TBD`.

    - 3 - Pre-marketing is carried out
- Added new domain table `TC_PL_BMVI_TECH_IS_TBD`.

    - 1 - FTTB/H
    - 2 - HFC
    - 8 - Other Technology

NET Engineering

Base Data Model

13.1

- *No changes to the data model - Structural update only for new forms and reports*

Duct Data Model

13.1

- *No changes to the data model - Structural update only for new forms and reports*

Fiber Optic Data Model

13.1

- *No changes to the data model - Structural update only for new forms and reports*

Telephony Data Model

13.1

- *No changes to the data model - Structural update only for new forms and reports*

GIS-Nebenbestimmungen Data Model

13.1

- Added new column `BMVI_IS_TECH` in `TC_TG_BUILDING` with relation to `TC_BMVI_TECH_IS_TBD.ID` .
- Added new column `BMVI_PLAN_AUSB` in `TC_TG_BUILDING` with relation to `TC_BMVI_PLAN_AUSB_TBD.ID` .
- Added new column `BMVI_TECH_1_YEAR_INT` in `TC_TG_BUILDING` with relation to `TC_BMVI_TECH_IS_TBD.ID` .
- Added new column `BMVI_TECH_3_YEAR_INT` in `TC_TG_BUILDING` with relation to `TC_BMVI_TECH_IS_TBD.ID` .
- Added new domain table `TC_BMVI_PLAN_AUSB_TBD` .
  - 3 - Pre-marketing is carried out
- Added new domain table `TC_BMVI_TECH_IS_TBD` .
  - 1 - FTTB/H
  - 2 - HFC
  - 8 - Other Technology

Redlining Data Model

13.1

- Added new column `FID_STRUCTURE` in `TC_RL_CLOSURE` with relation to `TC_RL_STRUCTURE.FID` .
- Additional target table for the relation from `TC_RL_MEASUREMENT_POINT.FID_FEATURE` to `TC_TG_BUILDING.FID` .
- Added new object class `TC_RL_MEASUREMENT_L_MODEL` .

- Added new column `FID_MODEL` in `TC_RL_MEASUREMENT_LINE` with relation to `TC_RL_MEASUREMENT_L_MODEL.FID` .

- Removed column `ID_TYPE` from `TC_RL_MEASUREMENT_LINE` .

- Adjusted the view `TC_M_RL_MEASUREMENT_LINE` to use `FID_MODEL` instead of `ID_TYPE` .

- Removed domain table `TC_RL_MEASUREMENT_L_TYPE_TBD` .

- Added new object class `TC_RL_MEASUREMENT_P_MODEL` .

- Added new column `FID_MODEL` in `TC_RL_MEASUREMENT_POINT` with relation to `TC_RL_MEASUREMENT_P_MODEL.FID` .

- Removed column `ID_TYPE` from `TC_RL_MEASUREMENT_POINT` .

- Adjusted the view `TC_M_RL_MEASUREMENT_POINT` to use `FID_MODEL` instead of `ID_TYPE` .

- Removed domain table `TC_RL_MEASUREMENT_P_TYPE_TBD` .

Changes to the dialogs since NET 13.0

NET Design

Base Data Model

13.1

- New dialog for Boundary (`TC_PL_BOUNDARY`): Attribute Value (`TC_PL_ATTR_VALUE`)
- New dialog for Parcel (`TC_PL_PARCEL`): Attribute Value (`TC_PL_ATTR_VALUE`)
- New dialog for Rollout Area (`TC_PL_ROLLOUT_AREA`): Attribute Value (`TC_PL_ATTR_VALUE`)
- New dialog for Subarea (`TC_PL_SUBAREA`): Attribute Value (`TC_PL_ATTR_VALUE`)
- New references from Cable Type (`TC_PL_CABLE_TYPE.FID`)
  - to Building (`TC_PL_BUILDING.FID_FORCED_CABLE_TYPE`)
  - to Demand Point (`TC_PL_DEMAND_POINT.FID_FORCED_CABLE_TYPE`)

GIS-Specifications Data Model

13.1

- Dialog for Demand Point (`TC_PL_DEMAND_POINT`):
  - Changed control for "Technology within one year" from text field to dropdown. Database field changed from `BMVI_TECH_1_YEAR` to `BMVI_TECH_1_YEAR_INT` .
  - Changed control for "Technology within three years" from text field to dropdown. Database field changed from `BMVI_TECH_3_YEAR` to `BMVI_TECH_3_YEAR_INT` .
  - Changed control for "Technology Is Supply" from text field to dropdown. Database field changed from `BMVI_TECH_IS` to `BMVI_IS_TECH` .
  - Added new dropdown "Expansion Plan" (`BMVI_PLAN_AUSB`)

NET Engineering

Fiber Optic Data Model

13.1

- Dialog for Fiber Optic Splice (`TC_FO_SPLICE`):
  - New named filters:
    - Show splices
    - Show stored fibers
    - Show uncut fibers in BA
    - Show uncut fibers
  - New SQL Label "Splice Type" (`$SQLLABELSPLICETYPE`)

- Corrected positioning of Document Management (`$DOCUMENTMANAGER`)

Redlining Data Model

13.1

- Dialog for Redlining Closure (`TC_PL_CLOSURE`):
  - New reference field for Redlining Structure (`FID_STRUCTURE`)
  - Corrected positioning of Redlining Source Object (`SOURCE_OBJECT`)
- Dialog for Measurement Line (`TC_RL_MEASUREMENT_LINE`):
  - Replaced reference to type `ID_TYPE` with `FID_MODEL`
  - Corrected positioning of all controls
- New dialog for Measurement Line Model (`TC_RL_MEASUREMENT_L_MODEL`)
- Dialog for Measurement Point (`TC_RL_MEASUREMENT_POINT`):
  - Extended target tables for parent object (`FID_PARENT`) to include Building (`TC_TG_BUILDING`)
  - Replaced reference to type `ID_TYPE` with `FID_MODEL`
  - Corrected positioning of all controls
- New dialog for Measurement Point Model (`TC_RL_MEASUREMENT_P_MODEL`)
- Corrected positioning of Source Object (`SOURCE_OBJECT`) in Redlining Segment (`TC_RL_SEGMENT`)
- Corrected positioning of Source Object (`SOURCE_OBJECT`) in Redlining Structure (`TC_RL_STRUCTURE`)
- Corrected positioning of Source Object (`SOURCE_OBJECT`) in Redlining Terminator (`TC_RL_TERMINATOR`)

GIS-Specifications Data Model

13.1

- Dialog for Building (`TC_TG_BUILDING`):
  - Changed control for "Technology within one year" from text field to dropdown. Database field changed from `BMVI_TECH_1_YEAR` to `BMVI_TECH_1_YEAR_INT` .
  - Changed control for "Technology within three years" from text field to dropdown. Database field changed from `BMVI_TECH_3_YEAR` to `BMVI_TECH_3_YEAR_INT` .
  - Changed control for "Technology Is Supply" from text field to dropdown. Database field changed from `BMVI_TECH_IS` to `BMVI_IS_TECH` .
  - Added new dropdown "Expansion Plan" (`BMVI_PLAN_AUSB`)

Changes of the reports since NET 13.0

NET Engineering

Base Data Model

13.1

- Support function to identify the location of images was updated in all reports.

Duct Data Model

13.1

- The vertical text alignment has been fixed in the columns for the start and end node in the "duct tap connections" report.
- Support function to identify the location of images was updated in all reports.

Fiber Optic Data Model

13.1

- Support function to identify the location of images was updated in all reports.

Telephony Data Model

13.1

- Support function to identify the location of images was updated in all reports.