New Features of CadnaA 4.2

Calculation/Configuration

- Industry - BS5228: For receivers, the correction of +3 dB for reflections at facades is now applied provided the string variable FACADE=1 is set on the receiver's memo-window.

- Road - NMPB08: specification of Year of Calculation/Year of Construction, new road surfaces and road types

- Railway – CRN: new train classes available (C59F, C60F, C390, C220, C221, C170)

- Railway - FTA/FRA: data for train classes „Conv. AGT - Steel Wheel" and „Conv. AGT - Rubber Wheel" modified

- Tab „Ground Absorption": The option „Use map of ground absorption" offers settings „No/Yes/Auto" (default: Auto, resolution: 2 m).

CadnaA-Objects

- all objects: The command **Undo** (**Edit** menu) applies now also to changes of object parameters or object geometry (besides the deletion of objects). Up to 256 actions can be undone.

- all objects: The format of **CadnaA** object tables is now editable.

- objects **Point, Line, Area sources**: From the list box "Type" predefined source modules from the local SET-S library can be selected. A number of source modules is delivered with **CadnaA** (ventilators, motors, pumps, transformators).

- object **Tennis**: The default height of the tennis source is now 2.0 m (accord. to VDI-guideline 3770)

- object **Receiver**: The action/command „Generate Floors" offers now up to 99 floors (formerly 49).

- object **Auxiliary Polygon**: Auxiliary polygons may now have an arrow head.

Further New features

- attribute abbreviations in dialogs and list boxes now have a designation attached

- dialog **Object-Scan**: scanning occurs now for up to four evaluation parameters

- dialog **Object-Scan**: Predefined-Scan for LEG now per km²

- Result Table: Column width can be defined via options „auto/in mm/in char".

- Wall Optimization occurs now for up to four evaluation parameters (previously just for parameters 1 and 2).
- dialog **Plot-Designer**, cell type „Caption": additional option „Caption uses Grid-Level-Range" restricts caption displayed to the level range on the grid
- dialogs **Grid Appearance** and **Appearance|Color** (Objects): Shift-click on the file selector symbols opens the local library of color palettes.

Miscellaneous

- **CadnaA**-Help converted to HTML-Help, topics extended and updated
- **CadnaA**-INI-file is no longer saved to the program directory in case of the first installation, but in directory APPDATA (location depends on system installed, see the manual „Introduction to **CadnaA**" for details)
- The precision of levels displayed on dialog **Receiver** and Table **Partial Level** is editable via INI-file (section [Main] dBOutPrec=X where X=number of decimals).

Import

- import format **CadnaA** (*.cna): When importing new data for aircraft groups the current aircraft group data can be replaced.
- ODBC-import: When importing objects the ID part resulting from the ObjectTree is ignored when synchronizing data (This can be activated via the file CADNAA.INI in section [Main] OdbcUseObjtreePart=1).

Export

- export of SET-Graphs now using the new format *.gv (GraphViz)

CadnaA-Options

- FLG: With AzB08/ICAN selected the propagation can alternatively be calculated according to SAE AIR 5662 „Method for Predicting Lateral Attenuation of Airplane Noise" (2006).
- FLG: When calculating the propagation according to SAE AIR 5662 the parameter „Engine Mount", type „Fuselage Mount can be defined using the string variable ENG_FUSELAGE=1 on the Memo-Window of the respective aircraft group.
  NOTE – The further types „Wing Mount" and „Prop" can be distinguished by existing properties of the aircraft group.
- FLG: With AzB08/ICAN, each circuit flown at civil and military airports is counted as one take-off and one landing event within the statistics of flight movements.

- FLG: With AzB08/ICAN, the consistency of Gamma and flight movements is checked prior to calculation, displaying a message in case of inconsistency.
- FLG: With AzB08/ICAN, the option „Automatic Calculation of Gamma" enables to enforce the recalculation of the Gamma-values.
- FLG: When calculating maximum levels using AzB08/ICAN the threshold level based on a given number of exceedances NAT can be evaluated (default: NAT=6).
- FLG: When importing new data for aircraft groups using import format **CadnaA** (*.cna) the current aircraft group data can be replaced.
- SET: export of SET-Graphs now using the new format *.gv (GraphViz)