

1.3 New Features of CadnaR 2.3

The list of new features offered by **CadnaR**, release 2.3, is subdivided into the following sections:

- Calculation/Configuration
- **CadnaR** Objects
- Further New Features/Miscellaneous
- Import / Export

Please note that some of the new features require the appropriate **CadnaR** option.

- **CadnaR** 64-bit version available
- „Calculation“ tab: calculator symbol enables the calculation of the recommended runtime based on the number of particles and vice versa.
- „Particle Model“ tab: global scattering coefficient of all room surfaces can be specified (default value 0.2 for new projects)
- user-defined air absorption can be entered in the local absorption library (with ID "SYS_ATM_ABSORB" and values in dB/km)
- Consistency Check: revised regrading scattering and transmission
- dialog **Modify Objects**: now optional numerical condition available
- Besides a single source, now also source groups can be assigned to a receiver by specifying its emissions-related workplace level (assigned automatically via the ObjectTree definition)

**Calculation/
Configuration**

CadnaR objects

Receiver

Receiver Chain

- new button „Reverberation“ displays reverberation times T10/T20/T30/EDT vs. frequency (for particle model with echogram evaluation), in addition the minimum and maximum reverberation times according to VDI guideline 2569 (draft 2015) or one of the five types of use RG A1 to A5 RG according to DIN 18041 (draft 2015).
- new object to calculate the A-weighted level and the speech transmission index STI at all polygon points, resulting from a point source assigned according to the requirements of ISO 3382-3: 2012
- graphs displaying level/STI/reverberation time, each with regression line and display of quality criteria, at reverberation time displaying in addition the limits for the minimum and maximum reverberation times for individual or open-plan offices according to VDI guideline 2569 (draft 2015) or one of the five types of use RG A1 to A5 RG according to DIN 18041 (draft 2015).

Calculation Area

- path evaluation according to VDI guideline 2569 (draft 2015) with respect to „Propagation Class“ and „Room Acoustics Class“
- new context menu command „Delete Grid Points: inside/outside Polygon“
- Transformation: now free rotation of area sources possible, for box-type obstacle/box-type source rotation in 90-degree steps possible

*Area source/Box-type obstacle/Box-type source***Further New Features/
Miscellaneous**

- object tables: table rows can be copied (CTRL+C) and pasted (CTRL+V)
- new keyword #(Table, IPK) to export/print the table **Receiver Chain**
- new keyword #(Range, ...): enables access to the name of a section in PlotDesigner

- new menu commands to display the spatially averaged reverberation time at receiver points and on the grid (for particle model with echogram evaluation)
- new command „Calc Receiver Chains“ (**Calculation** menu)
- new import formats *.dwg and *.dxf
- new import format SketchUp (*.skp)

Import / Export

