Scope of Performance
On-Premise Licensing

CadnaA is available with On-Premise Licensing for purchase or with Cloud Licensing on subscription basis. In case of On-Premise Licensing (CadnaA PL), CadnaA is obtainable in three different main configurations: **Standard, Basic and Modular**. All three are fully featured and vary only in the number of noise types and number of implemented standards. The range of powerful features includes grid noise maps (horizontal, vertical), building noise maps, grid arithmetic, distributed calculation (PCSP), 64-bit program version, multithreading up to 16 cores, GIS integration, web export, Dynamic-3D, plot designer and numerous import and export interfaces such as AutoCAD DXF, ArcView Shape, MapInfo, Open Street Map, ASCII, QSI, etc. Additionally, CadnaA CALC allows to outsource the calculation to external machines.

The information presented in this document refers to **CadnaA 2023 MR2** (July 2023) and is subject to changes without notice.

1 CadnaA with On-Premise Licensing main configurations overview

CadnaA **Standard**

- ✓ Noise types industry, road and railway
- ✓ All implemented calculation standards and guidelines for these noise types included

CadnaA **Basic**

- ✓ Noise types industry, road and railway
- ✓ One calculation standard or guideline for each noise type included

CadnaA **Modular**

- ✓ One noise type (industry, road or railway)
- ✓ One calculation standard for this noise type

2 CadnaA Options overview (available for all CadnaA PL main configurations)

BMP (Bitmap and other interfaces)

- ✓ Bitmap handling (more than 40 different file formats).
- ✓ Google Maps interface.
- ✓ Connection with Web Mapping Services (WMS).
- ✓ Import and visualization of 3D symbols in the 3D special view.
- ✓ Export of results to Google Earth (.kmz).

PRO (Extended Multithreading and additional tools which enhance efficiency)

- ✓ Multithreading up to 64 cores.
- ✓ Additional tools to speed up and facilitate your work like e.g: Migration assistant, Transfer attributes, Find errors in DTM, Thin out height points, Automatic closing of polygon points.

BPL (Back-tracing of sound power levels)

- ✓ Manual or automatic optimization of noise emission.
- ✓ Calibration of area sources of which the sound power level is unknown.
- ✓ Automatic fixation of noise quota for urban development projects.

X (Extended analysis and postprocessing features)

- ✓ Extended features for analysis and postprocessing, especially valuable for e.g. noise mapping: Object-scan, population density estimation, monetary evaluation, conflict maps.
- ✓ LUA scripting language for automation of CadnaA tasks and many more user-definable functionalities.
- ✓ Additional features: automatic closing of polygons, thin out height points.

Requires CadnaA Standard or CadnaA Basic

L (Large scale projects)

- ✓ Calculation with unlimited number of screening objects (16 Mio. Buildings, 16 Mio. screens) for large scale projects.

Requires CadnaA Standard or CadnaA Basic

SET (Sound Emission & Transmission)

- ✓ Calculation of frequency spectra of radiated sound power determined from the technical parameters of a sound source.
- ✓ Modeling of complex devices with multiple sound sources and radiating areas, reproducing their inner sound flux and transmission to connected parts.
- ✓ User-defined sound source models.

FLG (Aircraft noise)

- ✓ Calculation of noise contours around airports.
- ✓ Calculation of evaluation parameters such as the number of exceedances or flight statistics.

Requires CadnaA Standard or CadnaA Basic

FLG-Radar Tracks

- ✓ Aircraft noise calculation based on radar data.
- ✓ RADAR Import formats: Fanomos, Stanly, Topsonic, user-defined.
- ✓ Time period selection.
- ✓ Group classification according to ICAO-code.
- ✓ Automatic filtering of RADAR tracks.

Requires Option FLG

APL (Air pollution)

- ✓ Calculation of air pollutants distribution for more than 50 pollutants.
- ✓ Exposure maps for air pollutants for industrial and road sources.
- ✓ Import of annual or multi-annual statistics of meteorological parameters.
- ✓ Standardized emission factors for road traffic.

3 Implemented standards and guidelines

Industrial noise	Road noise	Railway noise	Aircraft noise (Option FLG required)
ISO 9613-2, VBUI CONCAWE VDI 2714, VDI 2720 DIN 18005 (1987) ÖAL Richtlinie Nr. 28 (1987) BS 5228 Nordic General Prediction Method (1996) Nord 2000 Ljud från vindkraftverk Harmonoise, P2P model NMPB08-Industry HJ2.4 (2009 & 2021) Schall 03 (2014) CNOSSOS 2015/996 EU CNOSSOS 2021/1226 EU	NMPB-Routes-96 RLS-90, VBUS RLS-19 DIN 18005 (1987) RVS 04.02.11 (2006) STL 86 SonRoad SonRoad 18 CRTN (1998) TemaNord 1996:525 Czech Method (1996) NMPB-Routes-08 TNM 2.5 (2004) HJ2.4 (2009 & 2021) CNOSSOS 2015/996 [1] CNOSSOS 2021/1226 EU CNOSSOS 2021/1226 DE (BUB 2021) CNOSSOS 2021/1226 AT (RVS 2021)	RMR, SRM II Schall 03 (1990), VBUSch Schall03 2014 DIN 18005 (1987) ONR 305011 Semibel NMPB-Fer CRN TemaNord 1996:524 FTA/FRA (2018) NMPB08-Fer HJ2.4 (2021) CNOSSOS 2015/996 [1] CNOSSOS 2021/1226 EU CNOSSOS 2021/1226 DE (BUB 2021) CNOSSOS 2021/1226 AT (RVE 2022) CNOSSOS 2021/1226 BE (Infrabel 2022) CNOSSOS 2021/1226 FR (SCNF 2022)	DIN 45684 AzB 2008 / ICAN ÖAL 24 ECAC Doc. 29 2nd Edition 1997 ECAC Doc. 29 3rd Edition ECAC Doc. 29 4th Edition Integrated Noise Model (INM 7.0d) AzB 1975, AzB-MIL, LAI-Landeplatzlinie VBUF CNOSSOS 2015/996 EU & DE (BUF 2018) CNOSSOS 2021/1226 EU & DE (BUF 2021)
	[1] containing: CNOSSOS 2015/996 EU CNOSSOS 2015/996 DE (BUB 2018) CNOSSOS 2015/996 AT (RVS 2019)	[1] containing: CNOSSOS 2015/996 EU CNOSSOS 2015/996 DE (BUB 2018) CNOSSOS 2015/996 AT (RVE 2019) CNOSSOS 2015/996 FR (SCNF 2021)	

4 Technical Specifications of CadnaA with On-Premise Licensing main configurations

4.1 Calculation technology

Feature	Main configurations			Options								
	Modular	**Basic**	**Standard**	**BMP**	**BPL**	**PRO**	**X**	**L**	**FLG**	**FLG-Radar Tracks**	**SET**	**APL**
64-Bit program version	☑	☑	☑									
Multi-threaded calculation (up to 16 cores)	☑	☑	☑									
Multi-threaded calculation (up to 64 cores)	☐	☐	☐			☑						
Ray Tracing calculation method	☑	☑	☑									
Angle Scanning calculation method	☑	☑	☑									
Projection at line and area sources	☑	☑	☑									
Maximum order of reflection	20	20	20									
Batch calculation	☑	☑	☑									
PCSP distributed calculation	☑	☑	☑									
Maximum 2000 buildings and 2000 barriers per project	☑	☑	☑									
Unlimited number (16 Mio.) of buildings and barriers per project	x	☐	☐					☑				
DYNMAP Update of calculated noise maps based on measurements	☑	☑	☑									
Air Pollution AUSTAL2000 Calculation Method	☐	☐	☐									☑

☑ included (in main configuration or Option)

☐ needed as pre-requisite (in case of multiple entries in the section “main configurations” only one of them is needed)

× not available

4.2 Source object types

Feature	Main configurations			Options								
	Modular	**Basic**	**Standard**	**BMP**	**BPL**	**PRO**	**X**	**L**	**FLG**	**FLG-Radar Tracks**	**SET**	**APL**
Point source **Line source** **Area source (horizontal)** **Vertical area source** **Tennis point of serve**	☐ Module Industry	☑	☑									
Optimizable area source	☐ Module Industry	☐	☐		☑							
Sound power level input modes: Direct PWL, PWL based on interior sources, PWL based on sound pressure level	☐ Module Industry	☑	☑									
Sound power level based on moving machinery for line and area industrial sources	☐ Module Industry	☑	☑									
Sound power level estimation based on transmission loss and interior level	☐ Module Industry	☑	☑									
Estimation of sound power from the technical parameters of a sound source (32 modules) Fans and Blades (5) | Diesel Motors (4) | Electric Motors (6) | Pumps (13) | Trafo (4)	☐ Module Industry	☑	☑									
Extended database of source modules based on technical parameters (306 source modules included)	☐ Module Industry	☐	☐								☑	
User-defined sound source modules based on technical parameters	☐ Module Industry	☐	☐								☑	
Calculation of sound power level of complex interconnected source systems, accounting for Radiation and Transmission	☐ Module Industry	☐	☐								☑	
Road source **Traffic light-controlled road crossing** **Parking lot**	☐ Module Road	☑	☑									
Railway source	☐ Module Railway	☑	☑									
Airport **Air route source**	×	☐	☐						☑			
RADAR track	×	☐	☐						☐	☑		

☑ included (in main configuration or Option)

☐ needed as pre-requisite (in case of multiple entries in the section “main configurations” only one of them is needed)

× not available

4.3 Further object types

Feature	Main configurations			Options								
	Modular	**Basic**	**Standard**	**BMP**	**BPL**	**PRO**	**X**	**L**	**FLG**	**FLG-Radar Tracks**	**SET**	**APL**
Receiver	☑	☑	☑									
Building evaluation	☑	☑	☑									
Barrier **Barrier with cantilever** **Barrier with curved cantilever (3D)** **Floating barrier** **Roof edge (3D)**	☑	☑	☑									
Building	☑	☑	☑									
Embankment	☑	☑	☑									
Bridge plate	☑	☑	☑									
3D-Reflector	☑	☑	☑									
Area of ground absorption	☑	☑	☑									
Foliage area	☑	☑	☑									
Built—up area	☑	☑	☑									
Cylinder	☑	☑	☑									
Contour line	☑	☑	☑									
Line of fault	☑	☑	☑									
Height point	☑	☑	☑									
Area of designated land use	☑	☑	☑									
Bitmap Object	☐	☐	☐	☑								
Section	☑	☑	☑									
Text box	☑	☑	☑									
Level box	☑	☑	☑									
Auxiliary polygon	☑	☑	☑									
Symbol	☑	☑	☑									
3D Symbol	☐	☐	☐	☑								
Station	☑	☑	☑									
Calculation area (horizontal)	☑	☑	☑									
Vertical calculation area	☑	☑	☑									
CadnaB building Sound source and obstacle object for the interoperability with CadnaB (requires CadnaB as additional separate software)	☐ Module Industry	☑	☑									

☑ included (in main configuration or Option)

☐ needed as pre-requisite (in case of multiple entries in the section “main configurations” only one of them is needed)

× not available

4.4 Calculation results and postprocessing

Feature	Main configurations			Options								
	Modular	**Basic**	**Standard**	**BMP**	**BPL**	**PRO**	**X**	**L**	**FLG**	**FLG-Radar Tracks**	**SET**	**APL**
Calculation at receiver points	☑	☑	☑									
Partial levels at receiver points	☑	☑	☑									
Calculation protocol for receiver points	☑	☑	☑									
Building noise maps	☑	☑	☑									
Horizontal grid calculations	☑	☑	☑									
Vertical grid calculations	☑	☑	☑									
Unlimited number of grid receivers	☑	☑	☑									
Calculation of up to 4 evaluation parameters	☑	☑	☑									
Arithmetic of grids Up to 7 grid collections (4 eval. parameters and terrain)	☑	☑	☑									
Noise evaluation parameters L_{day} | $L_{evening}$ | L_{night} | L_{dn} | L_{de} | L_{en} | L_{den} | L_{10} (CRTN)	☑	☑	☑									
Calculation of the loudest hour level L1hMax for day, evening and night	☑	☑	☑									
Calculation of L_{max} for industrial sources	☑	☑	☑									
User defined noise evaluation parameters	☑	☑	☑									
Partial noise-type related evaluation parameters e.g. Industry Noise Map in projects with other types of noise sources (such as roads)	☑ Need 2 modules	☑	☑									
Multiple source effect Calculation according to VDI3722, Miedema and EU Directive 2020/367	☑	☑	☑									
Frequency maps	☑	☑	☑									
Uncertainty maps (combined uncertainty for source and propagation) SigmaD | SigmaE | SigmaN	☑	☑	☑									
Calculation of terrain maps	☑	☑	☑									
Automatic optimization of noise barriers	☑	☑	☑									
Pass-by level calculation time-based sound pressure levels based on passing sound sources like cars or trains.	☑	☑	☑									
Pass-by level based auralization	☑	☑	☑									
Aircraft related noise evaluation parameters DNL | CNEL | LAEQ | LAEQd | LAEQn | SEL | LAMAX | EPNL | PNLTM *relevant with INM/ECAC 3rd/CNOSSOS Standards	×	☐	☐						☑			
Calculation of wake-up reactions during night period	×	☐	☐						☑			
Number of Aircraft Events Above Threshold NATd | NATe | NATn | SigmaNATd | SigmaNATe | SigmaNATn	×	☐	☐						☑			
Evaluation of maximum Level statistics FlgStatD | FlgStatE | FlgStatN | SigFlgStatD | SigFlgStatE | SigFlgStatN	×	☐	☐						☑			
Automatic generation of noise protection zones	×	☐	☐						☑			
Automatic generation of conflict maps	×	☐	☐				☑					

☑ included (in main configuration or Option)

☐ needed as pre-requisite (in case of multiple entries in the section “main configurations” only one of them is needed)

× not available

Feature	Main configurations			Options								
	Modular	**Basic**	**Standard**	**BMP**	**BPL**	**PRO**	**X**	**L**	**FLG**	**FLG-Radar Tracks**	**SET**	**APL**
Estimation of the population density	×	☐	☐				☑					
Monetary evaluation according to BUWAL method Evaluation of noise reduction measures with regards to the reduction in value of rented flats caused by high noise levels	×	☐	☐				☑					
Noise impact evaluation by single number ratings	×	☐	☐				☑					
Object Scan Statistical Evaluation of object attributes or calculated values by using expressions. Includes predefined settings for EU-Directives 2015/996, 2020/367 and 2021/1226 as well as BEB 2021	×	☐	☐				☑					
3D animated noise maps Noise map video captured from the 3D view for moving sources	×	☐	☐				☑					
Air pollution maps for different components: Benzene, F, NH3, NO, NO2, NOx, SO2, Tetrachlorethylen, As, Cd, Hg, Ni, Pb, Tl, PM10 (fine particles), and odor	☐	☐	☐									☑

☑ included (in main configuration or Option)

☐ needed as pre-requisite (in case of multiple entries in the section “main configurations” only one of them is needed)

× not available

4.5 Import formats

Feature	Main configurations			Options								
	Modular	**Basic**	**Standard**	**BMP**	**BPL**	**PRO**	**X**	**L**	**FLG**	**FLG-Radar Tracks**	**SET**	**APL**
AutoCAD (.dxf)	☑	☑	☑									
Trimble SketchUp	☑	☑	☑									
GIS formats ESRI Shape files (.shp) | Atlas GIS (.bna) | GYpSiNOISE | MapInfo (.mif) | AED-Sicad	☑	☑	☑									
ASCII formats ASCII-Objects | ASCII-Grid DTM (.asc) | ASCII-Spectra | Building Height Points | Winput-DGM | Numbers of Trains (.txt) | Height points (.xyz)	☑	☑	☑									
XML formats Open Street Map (.osm) | GML | CityGML | NMPB08-Trains (.xml)	☑	☑	☑									
Other formats EDBS | T-Mobil | Slip | SOSI | NTF | STRATIS (.cst) | Noise Mapping England (.nme)	☑	☑	☑									
QSI Interchange format according to DIN 45687	☑	☑	☑									
Other CAD formats AutoCAD (.dwg) | Microstation (.dgn)	☐	☐	☐	☑								
Google Maps interface	☐	☐	☐	☑								
Import from Web Mapping Services (WMS)	☐	☐	☐	☑								
Bitmap formats CALS Raster, DCX, DWF, ECW, IMG, GIF, ICA, JFIF, JPEG, JTIF, LEAD CMP, PCT, MAC, MSP, MPT, OS/2 Bitmap, PCD, PCX, PSD, PNG, PostScript Raster, RAS, TIFF, TIFF CCITT, LZW, TARGA, BMP, WMF), WinFax Group 3, WinFax Group 4, WPG WordPerfect raster files	☐	☐	☐	☑								
Raster formats CadnaA Grids (.cnr) | ESRI-ASCII Grids (.asc, .hdr) | ASCII-Grids (.rst) | LimA Grids (.ert) | SoundPLAN Grids | IMMI Grids (.ird) | AUSTAL Grids (.dmna) | Miskam Grids (.zwk) | NMGF Grids (.grd)	☑	☑	☑									
Aircraft INM import formats ANP Database | INM Study | INM Operations **Only with INM Calculation Standard*	×	☐	☐						☑			
Import of RADAR tracks FANOMOS | STANLY | Topsonic | User-Defined	×	☐	☐						☐	☑		
Import from MS Excel files	☑	☑	☑									
ODBC— interface Import of external databases of object´s attributes and libraries (I.e. Sound Power Levels, Absorptions, Noise Reduction Indices, directivities and measurements from sound analyzers.	☑	☑	☑									
Import of directivities of loudspeakers in CLF format (*.CF1 , *.CF2 and *.XHN)	☑	☑	☑									
Import of annual or multi-annual statistics of meteorological parameters (.akt, .akterm)	☐	☐	☐									☑

☑ included (in main configuration or Option)

☐ needed as pre-requisite (in case of multiple entries in the section “main configurations” only one of them is needed)

× not available

4.6 Modelling tools and project organization

Feature	Main configurations			Options								
	Modular	**Basic**	**Standard**	**BMP**	**BPL**	**PRO**	**X**	**L**	**FLG**	**FLG-Radar Tracks**	**SET**	**APL**
Actions applied to single objects Edit, Delete, Import here, Show on Google Maps, Zoom to Object, Duplicate, Force Rectangle, Orthogonalize, Convert to, Transformation, Generate Label, Parallel Object, Break Lines, Break Areas, Simplify Geo, Spline, Modify Order of Points, Change ObjectTree assignment, Break into Pieces, Connect Lines, Fit DTM to Object, Fit Object to DTM, Hyperlink, Generate Station, Edit Facades, Generate Radiating Building, Set Length, Generate Rails, Cross Section, Generate Floors, Snap Object to Façade	☑	☑	☑									
Actions applied to multiple objects ("modify objects" command) Delete, Modify Attributes, Duplicate, Force Rectangle, Orthogonalize, Object Snap, Modify order of Points, Spline, Simplify Geo, Break into Pieces, Connect Lines, Transformation, Convert to, Generate Rails, Generate Station, Generate Building Evaluation, Multiselect, Change ObjectTree assignment, Generate Label, Generate Floors, Parallel Object, Activation, Swap Name/ID, Delete Duplicates, Fit DTM to Object, Fit Object to DTM	☑	☑	☑									
Object Tree Project Organization in hierarchical structure	☑	☑	☑									
Up to 16 variants/scenarios per CadnaA project file	☑	☑	☑									
Assignment of groups to variants. Including copy group activation	☑	☑	☑									
User-defined Global and Local libraries Sound Levels (Sound Power Levels and Sound Pressure Levels), Absorptions, Sound Reduction Indices, Directivities, 2D & 3D Symbols, Diurnal Patterns, Road Surfaces, Road Types and Vehicle Classes, Parking Lot Movements, Train Classes, Color Palettes	☑	☑	☑									
Default Library Always includes latest datasets for many of the above-mentioned libraries including e.g. Road and Railway related Datasets for many national implementations of EU Directives 2015/996 and 2021/1226.	☑	☑	☑									
Library Manager	☑	☑	☑									
Lua scripting e.g. for task automation	×	☐	☐				☑					
Additional action for multiple objects ("modify objects" command) Lua command	×	☐	☐				☑					
Automatic closing of auxiliary polygons	×	☐	☐			☑	☑					
Thin out height points	×	☐	☐			☑	☑					
Find errors in DTM	☐	☐	☐			☑						
Transfer attributes	☐	☐	☐			☑						
Migration assistant RLS90->RLS19 data conversion for existing project file when switching calculation standard	☐	☐	☐			☑						
Automatic filtering of RADAR—tracks	×	☐	☐						☐	☑		

☑ included (in main configuration or Option)

☐ needed as pre-requisite (in case of multiple entries in the section "main configurations" only one of them is needed)

× not available

4.7 Presentation of results and 3D visualization

Feature	Main configurations			Options								
	Modular	**Basic**	**Standard**	**BMP**	**BPL**	**PRO**	**X**	**L**	**FLG**	**FLG-Radar Tracks**	**SET**	**APL**
Display of calculated rays in 2D view	☑	☑	☑									
2D Horizontal noise maps Iso dB-Lines, noise contours, Raster Oversampling	☑	☑	☑									
2D Vertical noise maps Iso dB-Lines, noise contours, Raster Oversampling	☑	☑	☑									
Building noise maps in 2D view Ribbons, Spheres, Octagons, Level boxes	☑	☑	☑									
Pass-by level graph	☑	☑	☑									
Pass-by level based auralization	☑	☑	☑									
2D animated noise maps for line moving sources	☑	☑	☑									
PlotDesigner	☑	☑	☑									
User defined table of results	☑	☑	☑									
Open-GL based 3D visualization	☑	☑	☑									
Selection and editing of objects in the 3D view	☑	☑	☑									
Recalculation of DTM and objects directly in 3D view	☑	☑	☑									
Free movement and save up to 10 predefined views	☑	☑	☑									
Appearance of objects in 3D depending on attributes	☑	☑	☑									
Display of calculated rays in the 3D view	☑	☑	☑									
Display of 3D directivities in the 3D view	☑	☑	☑									
Display of horizontal noise maps in 3D view Projected or at the real height	☑	☑	☑									
Display of vertical noise maps in 3D view	☑	☑	☑									
Noise map of buildings Color map, Spheres, Octagons, Level boxes	☑	☑	☑									
Display of text labels in 3D view	☑	☑	☑									
Display of ground maps in 3D view	☑	☑	☑									
Import and visualization of 3D symbols (*.obj format)	☐	☐	☐	☑								
Animation of 3D symbols (rotation)	☐	☐	☐	☑								
Stereoscopic 3D display with passive 3D glasses *Compatible 3D TV required	☑	☑	☑									
Interactive scene video recording (.avi) from 3D view	☑	☑	☑									
Display of light sources (street lights)	☑	☑	☑									
Import of skybox ambient images	☐	☐	☐	☑								
Import of facade images to the buildings	☐	☐	☐	☑								
Projection of background images i.e. Google Maps or aerial imagery	☐	☐	☐	☑								

☑ included (in main configuration or Option)

☐ needed as pre-requisite (in case of multiple entries in the section “main configurations” only one of them is needed)

× not available

4.8 Export formats

Feature	Main configurations			Options								
	Modular	**Basic**	**Standard**	**BMP**	**BPL**	**PRO**	**X**	**L**	**FLG**	**FLG-Radar Tracks**	**SET**	**APL**
AutoCAD— DXF	☑	☑	☑									
GIS formats ESRI /ArcInfo (.shp) | ArcView Grid (.asc, .hdr) | GYpSiNOISE	☑	☑	☑									
ASCII formats Text Files (.txt) |Building Height Points | Numbers of Trains (.txt) | Rich Text Format (.rtf) | Compact Protocol	☑	☑	☑									
Export of full reports to Ms Office Ms Word (.docx) | Ms Excel (.xlsx)	☑	☑	☑									
QSI Interchange Format According to DIN 45687	☑	☑	☑									
Google SketchUp Materials (.skm)	☑	☑	☑									
Bitmap Files (.bmp)	☐	☐	☐	☑								
Google Earth (.kml)	☐	☐	☐	☑								
Web Bitmaps PNG files at different magnification levels	☐	☐	☐	☑								
AzB related export formats **Az**B-QSI, AzB-DES, AzB-XML, AzB-Lmax, AzB-Segment, AzB-Zones	×	☐	☐						☑			
SET-T Graph (.gv)	☐	☐	☐								☑	
Grid formats CadnaA Grids (.cnr) | ASCII-Grids (.rst) | LimA Grids (.ert) | NMGF Grids (.grd)	☑	☑	☑									
QSI Statistical Analysis report DIN 45687	☑	☑	☑									

☑ included (in main configuration or Option)

☐ needed as pre-requisite (in case of multiple entries in the section “main configurations” only one of them is needed)

× not available

5 Technical Specifications of CadnaA CALC with On-Premise Licensing

CadnaA CALC allows to outsource the calculation to external machines. With CadnaA CALC it is possible to open CadnaA in the so-called "Batch-Mode" which comes with a limited set of features exclusively for calculations. With CadnaA CALC it is possible to:

- automatically open CadnaA files which have previously been created with CadnaA Standard/Basic/Modular (or a CadnaA CL Light/Professional product with Cloud Licensing) and stored in a definable working directory,
- Automatically perform calculations of the opened files,
- Automatically save the files after the calculation.

The following calculations can be performed with CadnaA CALC:

- Calculation at receiver points (for the current variant or all variants)
- Calculation at grid receiver points (horizontal and vertical, for the current variant or all variants)

Which of the above listed calculations are to be executed is defined during the preparation of the CadnaA file (using CadnaA Standard/Basic/Modular or a CadnaA CL Light/Professional product with Cloud Licensing).

Regarding the noise types and calculation standards and guidelines, CadnaA CALC can calculate any file you were able to create with your CadnaA Standard/Basic/Modular main configuration or Cadna CL Light/Professional product. Which standard or guideline is used for the calculation is defined during the preparation of the CadnaA file (using CadnaA Standard/Basic/Modular or a CadnaA CL Light/Professional product with Cloud Licensing) and can not be changed during the use of CadnaA CALC.

The features of Option L are implicitly included in CadnaA CALC, therefore projects with up to 16 Mio. buildings and 16 Mio. barriers can be calculated.

Creating or editing projects, im- or exporting data, post-processing etc. are not possible with CadnaA CALC.

With CadnaA CALC, CadnaA can be opened in Batch-Mode at five machines in the same local network simultaneously to perform calculations as described above.

6 System requirements

CadnaA can be installed on any system which fulfils the following requirements:

- Multi-core processor from Intel (Core i series, 6th generation, „Skylake" architecture or newer) or from AMD (Ryzen series, starting from the 1st generation, „Zen" architecture or newer) with at least 4 cores, instruction set extensions SSE 4.2 and AVX as well as 64-bit extensions (Intel 64 or AMD64)
- 8 GB RAM
- OpenGL 3.3 graphics card with minimum 1 GB real graphic memory to use the hardware accelerated 3D-view. Using processor graphics or graphics card with no dedicated graphics memory ("shared memory") may result in display errors. When using CadnaA CALC or CadnaA in Batch-Mode, this requirement does not apply.
- Windows 64-bit operating system
    - Microsoft Windows 10 (Version 22H2)
    - Microsoft Windows 11 (Version 21H2 or newer)