

# Comparison and Functionality

AviPLAN



## Version Comparison

Not sure which AviPLAN™ version is right for you? Consult the feature comparison below!

## Major Features

|  | AviPLAN<br>Turn | AviPLAN<br>Turn Pro | AviPLAN<br>Airside | AviPLAN<br>Airside Pro |
|--|-----------------|---------------------|--------------------|------------------------|
| <b>LIBRARIES</b>   |                 |                     |                    |                        |
| 2D commercial, cargo and military airplanes and helicopters - top view               | •               | •                   | •                  | •                      |
| 2D commercial, cargo and military airplanes - front and side views                   |                 | •                   |                    | •                      |
| 3D commercial, cargo and military airplanes  |                 | •                   |                    | •                      |
| 2D pushback tractors and ground service equipment - top view                         | •               | •                   | •                  | •                      |
| 3D pushback tractors and ground service equipment                                    |                 | •                   |                    | •                      |
| 2D critical design airplanes for each FAA TDG - top view                             | •               | •                   | •                  | •                      |
| 2D passenger boarding bridges - top view   |                 |                     | •                  | •                      |
| 3D passenger boarding bridges  |                 |                     |                    | •                      |
| <b>CUSTOMIZATION</b>   |                 |                     |                    |                        |
| Create and edit 2D custom vehicles   | •               | •                   | •                  | •                      |
| Create and edit 2D custom passenger boarding bridges                                 |                 |                     | •                  | •                      |
| Create and store groups of airplanes, e.g. airline fleet mix                         |                 | •                   |                    | •                      |
| Create and store user-defined service vehicle arrangements                           | •               | •                   | •                  | •                      |
| <b>AIRSIDE DESIGN</b>  |                 |                     |                    |                        |
| FAA, EASA or ICAO airplane classification and minimum clearance regulations          | •               | •                   | •                  | •                      |
| Airplane filtering and sorting options, compare and/or select critical airplane(s)   | •               | •                   | •                  | •                      |
| <b>PATH</b>  |                 |                     |                    |                        |
| Simulate 2D maneuvers with a single airplane, helicopter or vehicle                  | •               | •                   | •                  | •                      |
| Simulate 2D maneuvers with a group of airplanes                                      |                 | •                   |                    | •                      |
| Simulate 2D and 3D airplane and vehicle maneuvers on a terrain or Z≠0 plane          |                 | •                   |                    | •                      |
| Perform pushback or pull maneuvers with airplanes and compatible tractors            | •               | •                   | •                  | •                      |
| Follow nose gear or cockpit ground markings (CAD line and arc elements)              | •               | •                   | •                  | •                      |
| Maneuver manually or specify direction (value or inherited from CAD element)         | •               | •                   | •                  | •                      |
| Alternate between arc, direct and oversteer turn types                               | •               | •                   | •                  | •                      |
| Vary speed and (nose gear) steering angle, even when reversing                       | •               | •                   | •                  | •                      |
| Select from multiple construction points, e.g. airplane nose gear or cockpit         | •               | •                   | •                  | •                      |
| Review heads-up display of projected path and airplane or vehicle position           | •               | •                   | •                  | •                      |
| Edit/modify path parameters, e.g. turn types and speed                               | •               | •                   | •                  | •                      |
| View real-time path information, e.g. distance, duration                             | •               | •                   | •                  | •                      |
| Automate conflict detection between airplanes and e.g. pavement edge                 |                 | •                   |                    | •                      |
| Design nose gear or cockpit centerline markings                                      |                 | •                   |                    | •                      |
| Set path start/end by clicking objects in existing simulations                       |                 | •                   |                    | •                      |
| Change steering angle dynamically to optimize maneuvers                              |                 | •                   |                    | •                      |
| <b>PATH DISPLAY ELEMENTS</b>   |                 |                     |                    |                        |
| Paths and clearances e.g. nose gear, main gear, engines or wingtips                  | •               | •                   | •                  | •                      |
| Merged paths and clearances for nose gear, main gear, engines and wingtips           |                 | •                   |                    | •                      |
| 3D paths e.g. wing tips, engine undersides, tail tip (minimum/maximum heights)       | •               | •                   |                    | •                      |
| Jet blast velocity contours and impact areas for various engine thrust levels        | •               | •                   | •                  | •                      |
| Merged jet blast velocity contours and impact areas for various engine thrust levels |                 | •                   |                    | •                      |
| ICAO/FAA/EASA/User-defined nose gear, main gear or wing tip clearances               | •               | •                   | •                  | •                      |

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|--|--------------|------------------|-----------------|---------------------|

### PATH DISPLAY ELEMENTS CONTINUED

|  |   |   |   |   |
|--|---|---|---|---|
| Service connections and vehicle arrangements                                   | • | • | • | • |
| Clearance box and engine-intake danger area                                    | • | • | • | • |
| Vehicle body and wheel envelope  | • | • | • | • |
| Static airplane/vehicle at set point(s) along path                             |   | • | • | • |
| Nose gear or cockpit centerline marking  |   | • |   | • |
| Path sections (split into multiple sections) showing e.g. jet blast transition |   | • |   | • |

### STAND (CONTACT AND REMOTE) AND PARKING

|   |   |   |   |   |
|---|---|---|---|---|
| Park static 2D aircraft and vehicles  | • | • | • | • |
| Park static 2D and 3D aircraft and vehicle maneuvers on a terrain or Z≠0 plane  |   | • |   | • |
| Design 2D contact or remote stands  |   |   | • | • |
| Design 2D and 3D contact or remote stands on a terrain or Z≠0 plane             |   |   |   | • |
| Specify bridge characteristics, e.g. envelope limits, cabin rotation and stairs |   |   | • | • |
| Specify settings for docking parameters, e.g. maximum slope                     |   |   | • | • |
| Specify a margin of error to allow for airplane misparking                      |   |   | • | • |
| Define (manually) and/or reposition stop lines, using range indicator assistant |   |   | • | • |
| Drag airplane(s) along lead-in line and monitor bridge slope and other results  |   |   | • | • |
| Review heads-up display when (re)positioning bridges, lead-in or stop lines     |   |   | • | • |
| View detailed real-time numerical results, including warning indications        |   |   | • | • |
| Dynamically isolate or highlight individual or multiple airplanes               |   |   | • | • |
| Add multiple bridges and lead-in lines (MARS)                                   |   |   |   | • |
| Review 'many to many' bridge/door scenarios, e.g. bridge to doors L1 and L2     |   |   |   | • |
| Define apron service installations, e.g. fuel pits, 400 Hz and conditioned air  |   |   |   | • |
| Automate stop line creation process (considers all specified parameters)        |   |   |   | • |
| Automate airplane positioning (considers all specified parameters)              |   |   |   | • |
| Automate stop line usage (minimize number of stop lines used)                   |   |   |   | • |
| Automate bridge slope or length minimization                                    |   |   |   | • |

### DISPLAY ELEMENTS FOR STAND AND PARKING

|  |   |   |   |   |
|--|---|---|---|---|
| Service connections and vehicles, clearance box(es), engine-intake area(s)   | • | • | • | • |
| Bridge envelope(s), parked and docked bridges, airplanes and vehicles        |   |   | • | • |
| Lead-in line(s) with stop lines, (custom) labels and limits (front and rear) |   |   | • | • |
| Airplane cloud and merged clearance box (all airplanes on a lead-in line)    |   |   | • | • |
| Fuel pit(s) and other installations, with safety and/or operational radius   |   |   |   | • |

### FILLET

|   |  |   |  |   |
|---|--|---|--|---|
| Define taxiway intersection routes/entries                            |  | • |  | • |
| Calculate taxiway and shoulder edges in accordance with ICAO/FAA/EASA |  | • |  | • |
| View results indicating the critical design airplane(s) by route      |  | • |  | • |

### DISPLAY ELEMENTS FOR FILLET DESIGN

|  |  |   |  |   |
|--|--|---|--|---|
| Entries and route centerlines                  |  | • |  | • |
| Calculated taxiway and shoulder edges          |  | • |  | • |
| Paths and clearances for main gear and engines |  | • |  | • |

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## Major Features

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|---|--------------|------------------|-----------------|---------------------|
| <b>REPORTING</b>  |              |                  |                 |                     |
| Create CAD text block reports   | •            | •                | •               | •                   |
| Create Microsoft Word® (.odt) reports   | •            | •                | •               | •                   |
| Create Microsoft Excel® (.csv) reports  |              | •                | •               | •                   |
| <b>ANIMATION AND VISUALIZATION</b>  |              |                  |                 |                     |
| Animate 2D aircraft and vehicle maneuvers in CAD drawing                            | •            | •                | •               | •                   |
| Animate 2D and 3D aircraft and vehicle maneuvers in CAD drawing                     |              | •                |                 | •                   |
| Create 2D and 3D presentations with multiple simulations                            |              | •                |                 | •                   |
| Sequence/Set start and stop times for each simulation session                       |              | •                |                 | •                   |
| Follow a moving object or pan between fixed camera positions                        |              | •                |                 | •                   |
| Display static objects and path elements before and after animation                 | •            | •                | •               | •                   |
| Set properties for simulation sessions in presentation, e.g. fill color, line types |              | •                |                 | •                   |
| Select playback speed and display elapsed time in presentation                      |              | •                |                 | •                   |
| Set frames per second and video codec type to reduce AVI file size                  |              | •                |                 | •                   |
| Record presentations to AVI for playback using any compatible movie player          |              | •                |                 | •                   |
| <b>DATA MANAGEMENT</b>  |              |                  |                 |                     |
| Set colors, line type, layer/level and other properties for display elements        | •            | •                | •               | •                   |
| Create and store property templates, independent from drawing                       | •            | •                | •               | •                   |
| Export/Share custom objects   | •            | •                | •               | •                   |
| Store simulations with unique names and manage using folders                        | •            | •                | •               | •                   |
| Duplicate simulations within a drawing and place on desired location                | •            | •                | •               | •                   |
| Import simulations from the user database and place in a (new) drawing              |              | •                |                 | •                   |
| Store presentations with unique names and manage using folders                      |              | •                |                 | •                   |
| Export/Share simulations for use in other drawing(s) and/or CAD platform(s)         |              | •                |                 | •                   |
| Open compatible simulations created with a different AviPLAN product                |              | •                |                 | •                   |
| 'Run as...' to launch software as any AviPLAN product                               |              |                  |                 | •                   |
| <b>COMPATIBILITY AND TECHNOLOGY</b>   |              |                  |                 |                     |
| Workstation: Windows® 8 – 11  | •            | •                | •               | •                   |
| Network server: Windows® Server 2012 – 2022   | •            | •                | •               | •                   |
| Autodesk AutoCAD® 2015 - 2023 (except AutoCAD LT)                                   | •            | •                | •               | •                   |
| Autodesk Civil 3D® 2015 – 2023  |              | •                |                 | •                   |
| Bentley® MicroStation® V8i, CONNECT Edition   |              | •                |                 | •                   |
| Bentley® MicroStation PowerDraft® V8i, CONNECT Edition                              |              | •                |                 | •                   |
| Bentley® OpenRoads Designer® CONNECT Edition  | •            | •                | •               | •                   |
| Bentley® PowerCivil® V8i  |              | •                |                 | •                   |
| Bentley® Power GEOPAK® V8i  |              | •                |                 | •                   |
| Bricsys BricsCAD® Pro V16 – V22, Platinum V16 – V20                                 | •            | •                | •               | •                   |
| License server license with checkout (borrow)                                       | •            | •                | •               | •                   |
| Cloud-based license with user management  | •            | •                | •               | •                   |
| Automatic license updates (e.g. for MAP extensions)                                 | •            | •                | •               | •                   |
| Software notifications when software or library updates are available               | •            | •                | •               | •                   |
| Silent Install / Windows® Installer (MSI)   | •            | •                | •               | •                   |

Valid from 16 May 2022 until further notice