

Comparison and Functionality

AviPLAN



Version Comparison

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

Major Features	AviPLAN Turn	AviPLAN Turn Pro	AviPLAN Airside	AviPLAN Airside Pro
LIBRARIES				
2D commercial, cargo and military airplanes, helicopters and VTOL - 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 passenger boarding bridges - top view			•	•
3D passenger boarding bridges				•
CUSTOMIZATION				
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	•	•	•	•
AIRSIDE DESIGN				
FAA, EASA or ICAO airplane classification and minimum clearance regulations	•	•	•	•
Airplane filtering and sorting options, compare and/or select critical airplane(s)	•	•	•	•
PATH				
Simulate 2D maneuvers with a single airplane, helicopter, VTOL 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 limit, 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 limit dynamically for heads-up path optimization		•		•
Split paths into multiple sections to display changes e.g., jet blast transition		•		•
PATH DISPLAY ELEMENTS				
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 points 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		•		•

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 fixed apron service facilities, e.g., fuel pits, 400 Hz, and preconditioned 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				•
Define bridge-mounted service facilities, e.g., 400 Hz, PCA, or ducting				•
Automate conflict detection between bridges and airplanes (and other bridges)				•
Automate conflict detection between stands (adjacency)				•
Automate conflict detection between airplanes and apron safety markings				•

DISPLAY ELEMENTS FOR STAND AND PARKING

Service points 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		•		•
Define min. taxiway and shoulder edge requirements to 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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REPORTING				
Create CAD text block reports	•	•	•	•
Create Microsoft Word® (.odt) reports	•	•	•	•
Create Microsoft Excel® (.csv) reports		•	•	•
ANIMATION AND VISUALIZATION				
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 video file size		•		•
Produce video presentations for platform independent playback		•		•
DATA MANAGEMENT				
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				•
COMPATIBILITY AND TECHNOLOGY				
Workstation: Windows® 8.1 – 11	•	•	•	•
Network server: Windows® Server 2012 – 2022	•	•	•	•
Autodesk AutoCAD® 2017 - 2023 (except AutoCAD LT)	•	•	•	•
Autodesk Civil 3D® 2017 – 2023		•		•
Bentley® MicroStation® CONNECT Edition		•		•
Bentley® MicroStation PowerDraft® CONNECT Edition	•	•	•	•
Bentley® OpenRoads Designer® CONNECT Edition		•		•
Bricsys BricsCAD® Pro V17 – V23, Platinum V17 – V20	•	•	•	•
Server-based license with checkout (License pool sharing)	•	•	•	•
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)	•	•	•	•

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