

SpaceClaim 2018 and SCDM (R19) Supported Import & Export Operations

Operation	File type (EXTENSION)	Supported versions	Supported actions	Engineer ¹	DX I	DX II	Catia V5	JT Open	PDF	SCDM ¹⁴	
Import	ACIS (SAT, SAB, ASAT, ASAB)	R1 - 2018 1.0	Open and insert parts and assemblies	✓						✓	
	Acrobat (PDF)	Geometry(PRC B-Rep, Facets)	Open and insert parts and assemblies ^{1,15,24}						✓		
	AMF	V1.0 (Facets)	Open and insert parts and assemblies	✓						✓	
	ANSYS Electronics Database (DEF)		Open and insert parts and assemblies	✓						✓	
	AutocAD (DWG, DXF)	R12 to 14, 2000, 2004, 2007, 2010, 2013, 2016	Open and insert modelspace entities ¹⁸ and layout space entities (including Solids) ¹⁸	✓						✓	
	Cadence SPB (BRD, MCM, SIP)		Open and insert parts and assemblies ²⁸	✓						✓	
	CATIA (MODEL, EXP CATPart, CATProduct, CGR)	V4 4.1.9 to 4.2.4	Open and insert parts and assemblies		✓						
	CATIA V6 (3DXML)	V5 R8 to R25, V5-6R2017 R2010x - R2017x ²⁴	Open and insert parts and assemblies ^{17,7,8,10,24}				✓				
	Creo Elements/Direct Modeling (CoCreate) (PKG)	18.1 & 19 ²⁶ Creo 4.0	Open and insert parts and assemblies							✓	
	DesignModeler (AGDB)	Up to 16	Open and insert parts and assemblies ^{5,27}							✓	
	ECAD (IDF, IDB, EMN)	IDF 3.0 and IDF 4.0	Open IDF and PADS files	✓						✓	
	ECAD - Other									✓	
	ODB++ (TGZ)		Open and insert parts and assemblies	✓						✓	
	EDB (DEF)		Open and insert parts and assemblies	✓						✓	
	IPC2581 (XML, CVG)		Open and insert parts and assemblies	✓						✓	
	GDSII (GDS, SF, STRM)		Open and insert parts and assemblies	✓						✓	
	Fluent Mesh (MSH, TGZ)		Open and insert parts and assemblies	✓						✓	
	ICEM CFD (TIN)		Open and insert parts and assemblies	✓						✓	
	IGES (IGS, IGES)	Up to v5.3	Open and insert parts and assemblies ¹⁶	✓						✓	
	Inventor (IPT, IAM)	V6 to V2017	Open and insert parts and assemblies		✓					✓	
	JT Open (JT)	V6.4, 7.0, 8.0, 8.1, 8.2, 9.0 to 10.0	Open and insert parts and assemblies ^{4,7,8,10,24}						✓		
	NX (PRT)	NX1 to NX11 ^{4,29} & UG v11 to 18	Open and insert parts and assemblies							✓	
	OpenVDB			✓						✓	
	Parasolid (X_T, X_B, XMT_TXT, XMT_BIN)	V10.0 to V29	Open and insert parts and assemblies			✓				✓	
	PLY (PLY)	V1.0	Open and insert parts	✓						✓	
	Creo Parametric (PRT, ASM, XPR, XAS)	Pro/E 16 to Wildfire 5 (Creo 1.0 to Creo 4.0)	Open and insert parts and assemblies ³¹		✓					✓	
	QIF (.qif)	V2.0	Open and insert parts and assemblies ²⁹	✓						✓	
	Rhino (3DM)	V4.0, V5.0 ²⁰	Open and insert parts and assemblies	✓						✓	
	RS Components	V2015.0 SPO ³²	Open and insert parts and assemblies	✓						✓	
	SketchUp	Up to SketchUp 8, V2013, V2014, V2015	Open and insert parts and assemblies	✓						✓	
	SolidEdge (PAR,PSM,ASM)	V18 - S19	Open and insert parts and assemblies			✓				✓	
	SOLIDWORKS (SLDPRT, SLDASM)	SW 98 to SW 2017	Open and insert parts and assemblies			✓				✓	
	STEP (STP, STEP)	AP203, AP214, AP242 (geometry)	Open and insert parts and assemblies ^{12,31}	✓						✓	
	STL	Facets or solids	Open and insert parts and assemblies	✓						✓	
	VDA-FS (VDA)	1.0 & 2.0	Open and insert parts		✓					✓	
	Wavefront (OBJ)	Facets	Open and insert parts and assemblies	✓						✓	
	VRML (WRL)	Facets	Open and insert parts and assemblies	✓						✓	
	Image (BMP, JPG, PCX, PNG, TIF, GIF)		Insert images	✓						✓	
	Video (wmv, avi, flv, mkv, mov, mp4, mpg, mpeg, ogm, vob)		Insert video ³¹	✓						✓	
	Export	ACIS (SAT, SAB)	V6, 7, 15-28 (V27 default)	Export parts and assemblies ³	✓						✓
		Acrobat (PDF 3D)	Facets	Export parts and assemblies ²	✓						✓
		Acrobat (PDF 3D)	Geometry(PRC B-Rep, Facets)	Export parts and assemblies ^{2,24}						✓	
Acrobat (PDF 2D)			Print to or save drawings	✓						✓	
AMF		V1.0	Export parts and assemblies	✓						✓	
ANF				✓						✓	
AutocAD (DWG, DXF)		R12 to 14, 2000, 2004, 2007, 2010, 2013	Export as 2D snapshot and AutoCAD Solids ¹⁸	✓						✓	
CATIA V5/V6 (CATPart, CATProduct)		R15 to V5-6R2017 (R25 default)	Export parts and assemblies ^{14,21,24}				✓				
EXCEL (XLS, XLSX) ^{13,25}		MS Office 2003, 2007, 2013		✓						✓	
Fluent Mesh (MSH, TGZ)			Export parts and assemblies	✓						✓	
IGES (IGS, IGES)		V5.3, JAMA-IS, Types: 186, 144, 143	Export parts and assemblies	✓						✓	
JT Open (JT)		V6.4, 7.0, 8.0, 8.1, 8.2, 9.0 to 10.0	Export parts and assemblies ^{4,7,8,10,24}						✓		
KeyShot (BIP)			Export parts and assemblies	✓						✓	
OpenVDB				✓						✓	
Parasolid (X_T, X_B)		V12 to V29 (V27 default)	Export parts and assemblies			✓				✓	
PLY (PLY)		V1.0	Export and insert parts	✓						✓	
POV-Ray		3.6	Export parts and assemblies ¹⁷	✓						✓	
PowerPoint (PPT)		MS Office 2003, 2007, 2013	Export 3D markup slides ¹⁵	✓						✓	
QIF (.qif)		V2.0	Export parts and assemblies ²⁹	✓						✓	
Rhino (3DM)		V4.0, V5.0 ²⁰	Export parts and assemblies	✓						✓	
SketchUp		SketchUp V3.0 to V8.0, V2013 - V2015	Export parts and assemblies	✓						✓	
STEP (STP, STEP)		AP203, AP214, AP242 (geometry)	Export parts and assemblies	✓						✓	
STL			Export parts and assemblies ¹⁴	✓						✓	
VDA-FS (VDA)		2.0	Export parts			✓				✓	
VRML (WRL)			Triangles ³⁰	✓						✓	
Wavefront (OBJ)			Triangles ³⁰	✓						✓	
XAML			Export part and assembly solids only	✓						✓	
XPS			Export 3D markup slides	✓						✓	
Image (GIF, JPG, PNG, BMP, TIF)			Export as 2D snapshot	✓						✓	

Supported on Windows 7 64-bit OS, Windows 8.x 64-bit OS, Windows 10 64-bit OS

Notes:

- ¹SpaceClaim Home Edition is issued free of charge with SpaceClaim Engineer and is watermarked with "Restricted License: Home Use Only"
- ²No Adobe Acrobat required for BREP import and export, 32-bit and 64-bit platforms supported, Adobe Acrobat X Pro is not supported
- ³ACIS bodies can be imported using the RealDWG option, Layout space entities can be imported using the Teigha option, Sketch curves and text can be imported into Designs, 2D entities can be inserted to Drawing Formats, Polyface meshes can be imported
- ⁵Assemblies are flattened
- ⁶Including Product Manufacturing Information (PMI) placed on the Imported Annotation Planes
- ⁶Wildfire 5 (Creo 1.0, 2.0) PMI is not supported
- ⁷Import and Export of free points supported
- ⁸Semantic and Polyline PMI is supported
- ⁹Part-level PMI
- ¹⁰JT Open V6.4 and V7.0 imported and exported as faceted data
- ¹¹Appropriate video codec required for all but WMV and AVI
- ¹²CATIA V6 precise part and product data must be exported as V5CATPart and CATProduct to be read into SpaceClaim
- ¹³If MS Office is installed
- ¹⁴STL export can be performed directly from lightweight (visualization only) SpaceClaim document
- ¹⁵3D PDF via a PRC neutral file along with Semantic PMI (if PMI data is present)
- ¹⁶Import of IGES curves and curve colors is supported
- ¹⁷Export of mesh objects is supported
- ¹⁸Solids in ACIS v7 format
- ¹⁹CGR imports Facets as mesh objects. SpaceClaim recommends editing meshes on a 64bit OS.
- ²⁰The SpaceClaim plug-in for Rhino is only supported for Rhino v5.0
- ²¹Export as hybrid design is supported
- ²²RSolids can only be imported for the first 30 days after SC activation. After 30 days, a limit of 100 individual file imports is enforced.
- ²³SCDM is a separate product, which can be purchased from Ansys
- ²⁴SCDM optional modules JT Open, 3D PDF and Catia V5/V6 are available
- ²⁵Table Export: Web page (.htm, .html), XML Document (.xml), CSV File (.csv)
- ²⁶CREO Elements/CoCreate software must be installed locally to open this file type
- ²⁷DesignModeler software must be installed locally to open this file type
- ²⁸Cadence translators require an installation of Cadence SPB be locally available
- ²⁹PMI import and export is supported
- ³⁰Body and face colors
- ³¹Pro/E semantic PMI import is supported. For Pro/E Wildfire 3.0 and above, PMI display information import is partially supported.
- ³²Origin import and export supported
- ³³PMI import is supported
- ³⁴Teamcenter is not available in SCDM

SpaceClaim meets the USAF and DOD certification requirements for verifying open source content in software; OpenSSL, SysSSL, and Xerces