

SpaceClaim 2017.1 and SCDM (R18.1) Supported Import & Export Operations

Operation	File type (EXTENSION)	Supported versions	Supported actions	Engineer	DXF	DXB	Catia V5	JT Open	PDF	SCDM <sup>14</sup>
Import	ACIS (SAT, SAB, ASAT, ASAB)	Up to R27 (2017.1.0)	Open and insert parts and assemblies	✓						✓
	Acrobat (PDF)	Geometry(PRC B-Rep, Facets)	Open and insert parts and assemblies <sup>1,16,24</sup>						✓	
	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 <sup>18</sup> and layout space entities (including Solids) <sup>18</sup>	✓						✓
	Cadence SPB (BRD, MCM, SIP)		Open and insert parts and assemblies <sup>24</sup>	✓						✓
	CATIA (MODEL, EXP, CATPart, CATProduct, CGR)	V4 4.1-9 to 4.2.4	Open and insert parts and assemblies		✓					
	CATIA V5 (3DXML)	V5 R8 to R25, V5-6R2016	Open and insert parts and assemblies <sup>19,21,22,23,24</sup>				✓			
	Crea Elements/Direct Modeling (CoCreate) (PKG)	R2010x - R2016x <sup>25</sup>	Open and insert parts and assemblies							✓
	DesignModeler (AGDB)	Up to 16	Open and insert parts and assemblies <sup>1,27</sup>							✓
	ECAD (IDF, IDB, EMN)	IDF 3.0 and IDF 4.0	Open IDF and PADS files	✓						✓
	ECAD - Other									
	EQS (IGS)	QDB++ (TIG2)	Open and insert parts and assemblies	✓						✓
	EQS (IGS)	EQS (IGS)	Open and insert parts and assemblies	✓						✓
	IGES (IGS, IGES)	IPC2581 (XML, CVG)	Open and insert parts and assemblies	✓						✓
	Fluent Mesh (MESH, TIG2)	GDSII (GDS, SF, STRM)	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 <sup>18</sup>	✓						✓
	Inventor (IPT, IAM)	Version 6 to Version 10	Open and insert parts and assemblies		✓					✓
	JT Open (JT)	Versions 11 to 2017	Open and insert parts and assemblies		✓					✓
	JT Open (JT)	VE.4, 7.0, 8.0, 8.1, 8.2, 9.0 to 10.0	Open and insert parts and assemblies <sup>18,28,29</sup>					✓		✓
	NX (PRT)	NX1 to NX11 <sup>30,31</sup> & UG v11 to 18	Open and insert parts and assemblies				✓			✓
	OpenVDR			✓						✓
	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	✓						✓
	Pro/E (PRT, ASM, XPR, XAS)	Pro/E 16 to Wildfire 5 (Creo 1.0 to Creo 3.0)	Open and insert parts and assemblies <sup>1,32</sup>		✓					✓
	QIF (QIF)	V2.0	Open and insert parts and assemblies <sup>33</sup>	✓						✓
	Rhino (3DM)	V4.0, V5.0 <sup>34</sup>	Open and insert parts and assemblies	✓						✓
	RS Components	V2015.0 SRP <sup>35</sup>	Open and insert parts and assemblies	✓						✓
	SketchUp	Up to SketchUp 8, V2013, V2014, V2015	Open and insert parts and assemblies	✓						✓
	SolidEdge (PAR, PDM, ASM)	V10 - S19	Open and insert parts and assemblies	✓			✓			✓
	SolidWorks (SLDPRT, SLDSM)	SW R8 to SW 2017	Open and insert parts and assemblies	✓			✓			✓
	STEP (STEP, STEP)	AP203, AP214, AP242 (geometry)	Open and insert parts and assemblies <sup>36,37</sup>	✓						✓
	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 (VRML)	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, ogg, web)		Insert video <sup>31</sup>	✓						✓
	ACIS (SAT, SAB)	VE, 7, 15-27 (V27 default)	Export parts and assemblies <sup>1</sup>	✓						✓
	Acrobat (PDF 3D)	Facets	Export parts and assemblies <sup>2</sup>	✓						✓
	Acrobat (PDF 3D)	Geometry(PRC B-Rep, Facets)	Export parts and assemblies <sup>2</sup>	✓						✓
	Acrobat (PDF 2D)	Geometry(PRC B-Rep, Facets)	Export parts and assemblies <sup>2, 24</sup>						✓	
	AMF	V1.0	Print to or save drawings	✓						✓
	ANF		Export parts and assemblies	✓						✓
AutoCAD (DWG, DXF)	R12 to 14, 2000, 2004, 2007, 2010, 2013	Export as 2D snapshot and AutoCAD Solids <sup>18</sup>	✓						✓	
CATIA V5/V6 (CATPart, CATProduct)	R15 to V5-6R2016 (R25 default)	Export parts and assemblies <sup>19,21,22</sup>	✓			✓			✓	
EXCEL (XLS, XLSX) <sup>38</sup>	MS Office 2003, 2007, 2013	Export parts and assemblies	✓						✓	
Fluent Mesh (MESH, TIG2)		Export parts and assemblies	✓						✓	
IGES (IGS, IGES)	v5.3, JAMA-15, Types: 186, 144, 143	Export parts and assemblies <sup>18</sup>	✓						✓	
JT Open (JT)	VE.4, 7.0, 8.0, 8.1, 8.2, 9.0 to 10.0	Export parts and assemblies <sup>18,28,29</sup>					✓		✓	
KeyShot (BIP)		Export parts and assemblies	✓						✓	
OpenVDR			✓						✓	
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 <sup>39</sup>	✓						✓	
PowerPoint (PPT)	MS Office 2003, 2007, 2013	Export 3D markup slides <sup>40</sup>	✓						✓	
QIF (QIF)	V2.0	Export parts and assemblies <sup>33</sup>	✓						✓	
Rhino (3DM)	V4.0, V5.0 <sup>34</sup>	Export parts and assemblies	✓						✓	
SketchUp	SketchUp V3.0 to V8.0, V2013, V2014, V2015	Export parts and assemblies	✓						✓	
STEP (STEP, STEP)	AP203, AP214, AP242 (geometry)	Export parts and assemblies	✓						✓	
STL		Export parts and assemblies <sup>37</sup>	✓						✓	
VDA-FS (VDA)	2.0	Export parts		✓					✓	
VRML (VRML)	Triangles <sup>41</sup>	Export parts		✓					✓	
Wavefront (OBJ)	Triangles <sup>41</sup>	Export parts		✓					✓	
XAML		Export part and assembly solids only	✓						✓	
XPS		Export 3D markup slides	✓						✓	
Image (GIF, JPG, PNG, BMP, TIF)		Export as 2D snapshot	✓						✓	

<sup>1</sup>Supported on Windows 7 64-bit OS, Windows 8 64-bit OS, Windows 10 64-bit OS

Notes:

- <sup>1</sup>SpaceClaim Home Edition is issued free of charge with SpaceClaim Engineer and is watermarked with "Restricted License: Home Use Only"
- <sup>2</sup>No Adobe Acrobat required for BRP import and export, 32-bit and 64-bit platforms supported, Adobe Acrobat X Pro is not supported
- <sup>3</sup>ACIS entities can be imported using the standard system, layout space entities can be imported using the "high" system, nested curves and can be imported into Design, 3D entities can be imported to Drawing Functions, Polyfile meshes can be imported
- <sup>4</sup>Assemblies are flattened
- <sup>5</sup>Including Product Manufacturing Information (PMI) placed on the imported Annotation Planes
- <sup>6</sup>Wildfire 5 (Creo 1.0, 2.0) PMI is not supported
- <sup>7</sup>Import and Export of Free points supported
- <sup>8</sup>Semantic and PolyView PMI is supported
- <sup>9</sup>Faceted PMI
- <sup>10</sup>JT Open V5.4 and V7.0 imported and exported as faceted data
- <sup>11</sup>Associate video codec required for all but WMV and AVI
- <sup>12</sup>CATIA V6 process part and product data must be exported as V5CATPart and CATProduct to be read into SpaceClaim
- <sup>13</sup>If MS Office is installed
- <sup>14</sup>STL export can be performed directly from lightweight visualization only SpaceClaim document
- <sup>15</sup>3D PDF via PRC requires file along with Semantic PMI (if PMI data is present)
- <sup>16</sup>Import of IGES curves and curve colors is supported
- <sup>17</sup>Export of mesh objects is supported
- <sup>18</sup>Solids in ACIS v7 format
- <sup>19</sup>IGES imports Facets as mesh objects, SpaceClaim recommends editing meshes on a 64-bit OS
- <sup>20</sup>The SpaceClaim plug-in for Rhino is only supported for Rhino v5.0
- <sup>21</sup>Export as hybrid design is supported
- <sup>22</sup>Stds can only be imported for the first 30 days after SC activation. After 30 days, a limit of 100 individual file imports is enforced.
- <sup>23</sup>SCDM is a separate product, which can be purchased from Ansys
- <sup>24</sup>SCDM optional modules JT Open, 3D PDF and Catia V5/V6 are available
- <sup>25</sup>Table Export: Web page (html, html, xml, document), xml, CSV file (csv)
- <sup>26</sup>CREO Elements/CoCreate software must be installed locally to open this file type
- <sup>27</sup>DesignModeler software must be installed locally to open this file type
- <sup>28</sup>Delcam Trainers requires an installation of Cadence SPB be locally available
- <sup>29</sup>PMI import and export is supported
- <sup>30</sup>Body and face colors
- <sup>31</sup>Pro/E semantic PMI import is supported. For Pro/E Wildfire 3.0 and above, PMI display information import is partially supported.
- <sup>32</sup>Origin import and export supported
- <sup>33</sup>PMI import is supported
- <sup>34</sup>Teamcenter is not available in SCDM

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