

SpaceClaim 2019 R1 and SCDM 2019 R1 Supported Import & Export Operations

Operation	File Type (EXTENSION)	Supported versions	Supported actions	Engineer*	DX I	DX II	Catia V5	JT Open	PDF	SCDM**
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 <sup>1,2,13,24</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, 2018	Open and insert modifiable entities <sup>25</sup> and layout space entities (including Solids) <sup>26</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-GR2019 R2010a - R2017a <sup>28</sup>	Open and insert parts and assemblies <sup>29,30,31,32,33</sup>				✓			
	Creo Elements/Direct Modeling (CoCreate) (PKG)	18.1 & 19 <sup>34</sup> Creo 5.0	Open and insert parts and assemblies							✓
	DesignModeler (AGDB)	Up to 16	Open and insert parts and assemblies <sup>3,27</sup>							✓
	ECAD (BDF, IDB, EMN)	IDF 3.0 and IDF 4.0	Open IDF and PADS files	✓						✓
	ECAD - Other			✓						✓
	ODB++ (TC2)		Open and insert parts and assemblies	✓						✓
	EDB (DEF)		Open and insert parts and assemblies	✓						✓
	IPC2581 (XML, CWG)		Open and insert parts and assemblies	✓						✓
	IGES (IGES, SF, STRM)		Open and insert parts and assemblies	✓						✓
	Fluent Mesh (MESH, Tgz)		Open and insert parts and assemblies	✓						✓
	CFM FTO (TIN)		Open and insert parts and assemblies	✓						✓
	IGES (IGES, IGES)	Up to v5.3	Open and insert parts and assemblies <sup>35</sup>	✓						✓
	Inventor (IPT, IAM)	V6 to V2019	Open and insert parts and assemblies		✓					✓
	JT Open (JT)	V1 to V2019	Open and insert parts and assemblies		✓					✓
	JT Open (JT)	VS.4, T.0, B.0, R.1, B.2, B.0 to 10.2	Open and insert parts and assemblies <sup>36,37,38,39</sup>					✓		✓
	NX (PRT)	NX1 to NX12 <sup>40,41</sup> & V6 v1 to 18	Open and insert parts and assemblies				✓			✓
	OpenVDB			✓						✓
	Parasolid (X, T, X, B, XMT, TXT, XMT, BIN)	v10.0 to V30	Open and insert parts and assemblies			✓				✓
	PLY (PLY)	V1.0	Open and insert parts	✓						✓
	Creo Parametric (PRT, ASM, XPR, KAS)	ProE116 to Wildfire 5 (Creo 1.0 to Creo 5.0)	Open and insert parts and assemblies <sup>42,43</sup>		✓	✓				✓
	QIF (QIF)	V2.0	Open and insert parts and assemblies <sup>44</sup>	✓						✓
	Rhino (3DM)	v4.0, v5.0 <sup>45</sup> , V6.0	Open and insert parts and assemblies	✓						✓
	R3 Components	V2015.0 SP0 <sup>46</sup>	Open and insert parts and assemblies	✓						✓
	SketchUp	Up to SketchUp 8, V2013, V2014, V2018	Open and insert parts and assemblies	✓						✓
	SolidEdge PAR (PSM,ASM)	V18 - ST10	Open and insert parts and assemblies			✓				✓
	SOLIDWORKS (SLODRY, SLDASM)	SW-98 to SW 2018	Open and insert parts and assemblies				✓			✓
	STEP (STEP, STEP)	AP203, AP214, AP242 (geometry)	Open and insert parts and assemblies <sup>47,48</sup>	✓						✓
	STL		Facets or solids	✓						✓
	VDA-PS (VDA)	2.0 & 2.0	Open and insert parts and assemblies			✓				✓
	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, mpg4, mpeg, mpeg, ogm, web)		Insert video <sup>49</sup>	✓						✓
	Export	ACIS (SAT, SAB)	V6, 7, 15-28 (V27 default)	Export parts and assemblies <sup>5</sup>	✓					
Acrobat (PDF 3D)		Facets	Export parts and assemblies <sup>5</sup>	✓						✓
Acrobat (PDF 3D)		Geometry(PRC B-Rep, Facets)	Export parts and assemblies <sup>5, 24</sup>	✓					✓	
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, 2018	Export as 2D snapshot and AutoCAD Solids <sup>51</sup>	✓						✓
CATIA V5/V6 (CA Part, CATProduct)		R15 to V5-GR2018 (R25 default)	Export parts and assemblies <sup>52,53</sup>				✓			✓
ENCLOSURE (XML)		MS Office 2003, 2007, 2013	Export parts and assemblies <sup>54</sup>	✓				✓		✓
Fluent Mesh (MESH, Tgz)			Export parts and assemblies	✓						✓
FM Database (fmd)			Export parts and assemblies	✓						✓
GLTB (glb)			Export parts and assemblies	✓						✓
IGES (IGES, IGES)		V5.3, JAMA-IGES, Types: 186,144,143	Export parts and assemblies	✓						✓
JT Open (JT)		VS.4, T.0, B.0, R.1, B.2, B.0 to 10.2	Export parts and assemblies <sup>36,37,38,39</sup>	✓				✓		✓
KeyShot (BIP)			Export parts and assemblies	✓						✓
OpenVDB				✓						✓
Parasolid (X, T, X, B)		V12 to V30 (V27 default)	Export parts and assemblies			✓				✓
PLY (PLY)		V1.0	Export and insert parts	✓						✓
POV-Ray		3.6	Export parts and assemblies <sup>55</sup>	✓						✓
PowerPoint (PPT)		MS Office 2003, 2007, 2013	Export 3D markup slides <sup>56</sup>	✓						✓
QIF (qif)		V2.0	Export parts and assemblies <sup>57</sup>	✓						✓
Rhino (3DM)		v4.0, v5.0 <sup>45</sup>	Export parts and assemblies	✓						✓
SketchUp		SketchUp V3.0 to V8.0, V2013 - V2018	Export parts and assemblies	✓						✓
STEP (STEP, STEP)		AP203, AP214, AP242 (geometry)	Export parts and assemblies	✓						✓
STL			Export parts and assemblies <sup>58</sup>	✓						✓
VDA-PS (VDA)		2.0	Export parts			✓				✓
VRML (WRL)			Triangles <sup>60</sup>	✓						✓
Wavefront (OBJ)			Triangles <sup>60</sup>	✓						✓
MKM			Export part and assembly solids only	✓						✓
MPS			Export 3D markup slides	✓						✓
Image (GIF, JPG, PNG, BMP, TIF)		Export as 2D snapshot	✓						✓	

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 BREP import and export, 32-bit and 64-bit platforms supported, Adobe Acrobat X Pro is not supported
- <sup>3</sup>ACIS bodies can be imported using the ReadDWG option, Layout space entities can be imported using the Ypaths option, Sketch curves and text can be imported into Design, 2D entities can be imported to Drawing Formats, Polyface meshes can be imported
- <sup>4</sup>Assemblies are flattened
- <sup>5</sup>Including Product Manufacturing Information (PMI) placed on the Imported Annotation Panels
- <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 Polyline PMI is supported
- <sup>9</sup>Part-level PMI
- <sup>10</sup>JT Open V6 and V7 is imported and exported as Faceted data
- <sup>11</sup>Appropriate video codec required for all but WMV and AVI
- <sup>12</sup>CATIA V5 precise part and product data must be exported as V5CATPart and CATProduct to be read into SpaceClaim
- <sup>13</sup>SCDM is a separate product, which can be purchased from Ansys
- <sup>14</sup>SCDM optional modules (T-CAD, 3D PDF and Catia V5) are available
- <sup>15</sup>Table Export: Web oasx (.htm, .xml), XML Document (.xml), CSV File (.csv)
- <sup>16</sup>CREO Elements/CoCreate software must be installed locally to open this file type
- <sup>17</sup>DesignModeler software must be installed locally to open this file type
- <sup>18</sup>PMI import and export is supported
- <sup>19</sup>Body and face colors
- <sup>20</sup>ProE semantic PMI import is supported. For ProE Wildfire 3.0 and above, PMI display information import is partially supported.
- <sup>21</sup>Origin import and export supported
- <sup>22</sup>PMI import is supported
- <sup>23</sup>Teamcenter is not available in SCDM
- <sup>24</sup>SpaceClaim meets the ISO 9001 and ISO 14001 certification requirements for verifying open source content in software: OpenSSL, MySQL, and Xerces