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Feature Comparison of Simpleware Software Products
Version W-2024.12

Note: The following tables provide a high-level summary of which Simpleware software features are included in each tier. This comparison should only be used as a guide, as not all features are listed and/or grouped into broader definitions. Individual technical datasheets should be consulted for verifying all features and functionalities.

Image Processing

Feature	Simpleware		Simpleware Medical		Simpleware Research / University
	Base	Elite	Base	Elite	
Import Image Data (incl. DICOM, DICONDE, Stack of Images, 3D/Volume Image…)	✓	✓	✓	✓	✓
Store, Manage, and Anonymize DICOM Tags	✓	✓	✓	✓	✓
Image Transforms (Crop, Resample, Align, Morph…)	✓	✓	✓	✓	✓
Volume Rendering	✓	✓	✓	✓	✓
Range of Manual/Semi-Automated Segmentation Tools	✓	✓	✓	✓	✓
Animations Toolbox	✓	✓	✓	✓	✓
Log History	✓	✓	✓	✓	✓
Annotations	✓	✓	✓	✓	✓
Image Space Filters for Artifact Removal and Correction	✓	✓	✓	✓	✓
Scripting API (C#, Python)*	✓	✓	✓	✓	✓
Enhanced PACS (Two-Way) Communication	✓	✓	✓	✓	✓
4D Image Support (Import, Visualize, Cine Modes…)	✓	✓	✓	✓	✓
Import and Register 2D X-Ray Images	✓	✓	✓	✓	✓
Generate Virtual X-Rays	✓	✓	✓	✓	✓
Customizable GUI Profiles	✓	✓	✓	✓	✓
CE Marked and FDA (510k) Cleared			✓	✓	

* Please note that some tools may not currently be compatible with scripting. Please contact us for further details.

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Auto Segmentation

Feature	Simpleware		Simpleware Medical		Simpleware Research / University
	Base	Elite	Base	Elite	
Heart CTA Segmentation and Landmarking				✓	✓
Heart Valve Analysis (Location and Dimensions)				✓	✓
Craniomaxillofacial (CMF) CT Segmentation and Landmarking				✓	✓
Spine CT Segmentation				✓	✓
Shoulder CT Segmentation and Landmarking				✓	✓
Hip CT Segmentation and Landmarking				✓	✓
Hip Revision CT Segmentation and Landmarking				✓	✓
Knee CT Segmentation and Landmarking				✓	✓
Knee MRI Segmentation and Landmarking				✓	✓
Ankle CT Segmentation and Landmarking				✓	✓
Automatic Region of Interest Detection for Auto Segmentation				✓	✓
Import and Run Externally Trained AI Models (MONAI Bundles, Total Segmentator)		✓		✓	✓

Fully Customized Automated Image Processing Solutions are also available in our Simpleware Apex and Simpleware Medical Apex tier. Please contact your Synopsys Account Manager for more information.

Please note that Auto Segmentation tools are intended for non-clinical research use only, and have not been cleared for use as a medical device in accordance with U.S. Food & Drug Administration (FDA) 510(k) or European Union CE marking standards.

Measurements

Feature	Simpleware		Simpleware Medical		Simpleware Research / University
	Base	Elite	Base	Elite	
Measurements (Point, Line, Angle)	✓	✓	✓	✓	✓
Image Analysis (Histogram and Profile Line)	✓	✓	✓	✓	✓
Quick Statistics Tools (Volumes, Surface Area etc.)	✓	✓	✓	✓	✓
Statistics Framework (Masks, Models and Centerlines)	✓	✓	✓	✓	✓
2D Contour Measurement	✓	✓	✓	✓	✓
Shape Fitting and Stats	✓	✓	✓	✓	✓
Wall Thickness Analysis	✓	✓	✓	✓	✓
Pores, Particles and Fiber Analysis	✓	✓	✓	✓	✓
Generate and Probe Centerline Networks	✓	✓	✓	✓	✓

Surface Tools

Feature	Simpleware Base	Simpleware Elite	Simpleware Medical Base	Simpleware Medical Elite	Simpleware Research / University
Import Surface Objects (STL, STEP, IGES…)	✓	✓	✓	✓	✓
Check and Fix Surface Objects	✓	✓	✓	✓	✓
Create Primitive Shapes	✓	✓	✓	✓	✓
Position & Register Surface Objects	✓	✓	✓	✓	✓
Surface Filters (Smooth, Decimate…)	✓	✓	✓	✓	✓
Surface Editing (Extrude, Clip, Hollow, Sweep…)	✓	✓	✓	✓	✓
Convert Surfaces to Masks, Masks to Surfaces	✓	✓	✓	✓	✓
Robust Booleans Between Surface Parts	✓	✓	✓	✓	✓
Surface Deviation	✓	✓	✓	✓	✓
Import SOLIDWORKS® Parts or Assemblies		✓		✓	✓
Dynamic Link with SOLIDWORKS® (Pull, Position, Orientation…)		✓		✓	✓
Push Measurements to SOLIDWORKS®		✓		✓	✓

Volume Mesh Tools

Feature	Simpleware Base	Simpleware Elite	Simpleware Medical Base	Simpleware Medical Elite	Simpleware Research / University
Generate High-Quality Volume Meshes (Hex/Tet or All Tet)		✓		✓	✓
Automatic and/or User-Defined Mesh Refinement		✓		✓	✓
Automatically Combine Image-Based and Surface Objects with Robust Boolean Operations		✓		✓	✓
Grayscale-Based Material Property Assignment		✓		✓	✓
Generate FE Meshes (Shells, Contacts, Node Sets, Boundary Layers)		✓		✓	✓
Generate CFD Meshes (Boundary Conditions and Boundary Layers)		✓		✓	✓
Import Existing Volume Meshes		✓		✓	✓
Position and Scale Volume Meshes		✓		✓	✓

3D Printing Toolkit

Feature	Simpleware Base	Simpleware Elite	Simpleware Medical Base	Simpleware Medical Elite	Simpleware Research / University
Dataset Conversion (Mask to Surface)	✓	✓	✓	✓	✓
Model Preparation (Emboss Text, Hollow, Cut)	✓	✓	✓	✓	✓
Model Connectors (Connectors and Pin & Sockets)	✓	✓	✓	✓	✓
Cutting Guide Creation (Design a Base, Cutting Track and Pin/Drill Guides)	✓	✓	✓	✓	✓
Grayscale Visualization	✓	✓	✓	✓	✓
Inspection (Check Printability, Color Proofing)	✓	✓	✓	✓	✓
Export Surface Mesh (STL, OBJ, 3MF …)	✓	✓	✓	✓	✓

Please note that Cutting Guide Creation tools are intended for non-clinical research use only, and have not been cleared for use as a medical device in accordance with U.S. Food & Drug Administration (FDA) 510(k) or European Union CE marking standards.

Exports

Feature	Simpleware Base	Simpleware Elite	Simpleware Medical Base	Simpleware Medical Elite	Simpleware Research / University
Export Surface Meshes (STL, OBJ, 3MF…)	✓	✓	✓	✓	✓
Export 3D Scenes (3D PDF, VRML, STL, OBJ, PLY, 3MF)	✓	✓	✓	✓	✓
Export Background Images and Segmentation Masks (DICOM, Metaimage, Raw, Stack of Images)	✓	✓	✓	✓	✓
Export Background Images via PACS	✓	✓	✓	✓	✓
Export DICOM Encapsulated STL / OBJ Format	✓	✓	✓	✓	✓
Export NURBS Surfaces (STEP & IGES) Incl. a Choice of NURBS Algorithms		✓		✓	✓
Export FE Meshes (Ansys, Abaqus, LS-Dyna, COMSOL…)		✓		✓	✓
Export CFD Meshes (Fluent, COMSOL…)		✓		✓	✓
Export Encrypted 3D PDF Files			✓	✓	

Any Questions?

For more details on any of these options, please contact us at simpleware@synopsys.com.