DAT/EM Systems International offers a unique option to suit the needs of the photogrammetry, GIS and engineering professionals in the United States Federal Government. Summit Evolution Federal provides a set of powerful tools for discovering and capturing 3D information from stereo data. The software includes CAD and GIS interfaces, 3D stereo vector superimposition, automated feature editing, contour generation and many more tools. Through the Capture™ interface, image features from a Summit Evolution project are digitized directly into AutoCAD®, MicroStation®, ArcGIS® or Global Mapper®. With DAT/EM SuperImposition™, those image features are overlaid on the Summit Evolution project for immediate feature verification. A Digital Point Positioning Data Base project type is also available for Summit Evolution users in the United States government.

- Several product levels which can be mixed and matched within a department based on staff needs. (see table on left)
- Supports monochromatic, panchromatic, three- and multi-channel multispectral imagery.
- Supports scanned aerial film, matrix and push-broom digital airborne cameras, small- and medium-format metric cameras, close-range imagers, orthophotos, RPC satellites, LiDAR, UAS imagery and synthetic aperture radar.
- Imports third-party softcopy and pre-processed UAS projects, aerotriangulation results and other orientation files for quick setup.
- Full range of manual and automatic image orientation capabilities. (excludes aerotriangulation)
- Digitizes 3D vectors directly into AutoCAD, MicroStation, ArcGIS or Global Mapper using DAT/EM’s Capture interface.
- LandScape™ point cloud editor optionally integrates with Summit Evolution to display a point cloud superimposed over stereo imagery.
- Bird’s-eye, close-up, project overview, 3D vector split window and multiple viewports offer a variety of visualization and feedback tools.
- Ability to apply coordinate transformation.
- Unlimited zoom levels, fast pan and automatic loading of adjacent stereo models with DAT/EM SuperImposition of CAD and GIS vectors over the image view.
- DAT/EM Ortho+Mosaic™ module for easy and precise creation of orthomosaics.
- Terrain Visualizer tool for dynamic, real-time preview of contours while DTM and breakline objects are created and edited.
- Contour Creator™ for creating and writing the finished contours to the CAD file.
- Interface to the DAT/EM-PCI ProPack to allow use of PCI Geomatica GDB data. (Requires PCI license)
- Airfield3D™ standards-compliant airspace obstruction mapping tool when paired with ArcGIS.
- Point Translator for importing, regridding and converting point data, including LiDAR and other DTM features.
- Includes DAT/EM Interior Orientation Distortion Removal Tool to remove camera lens distortions from raw aerial imagery.