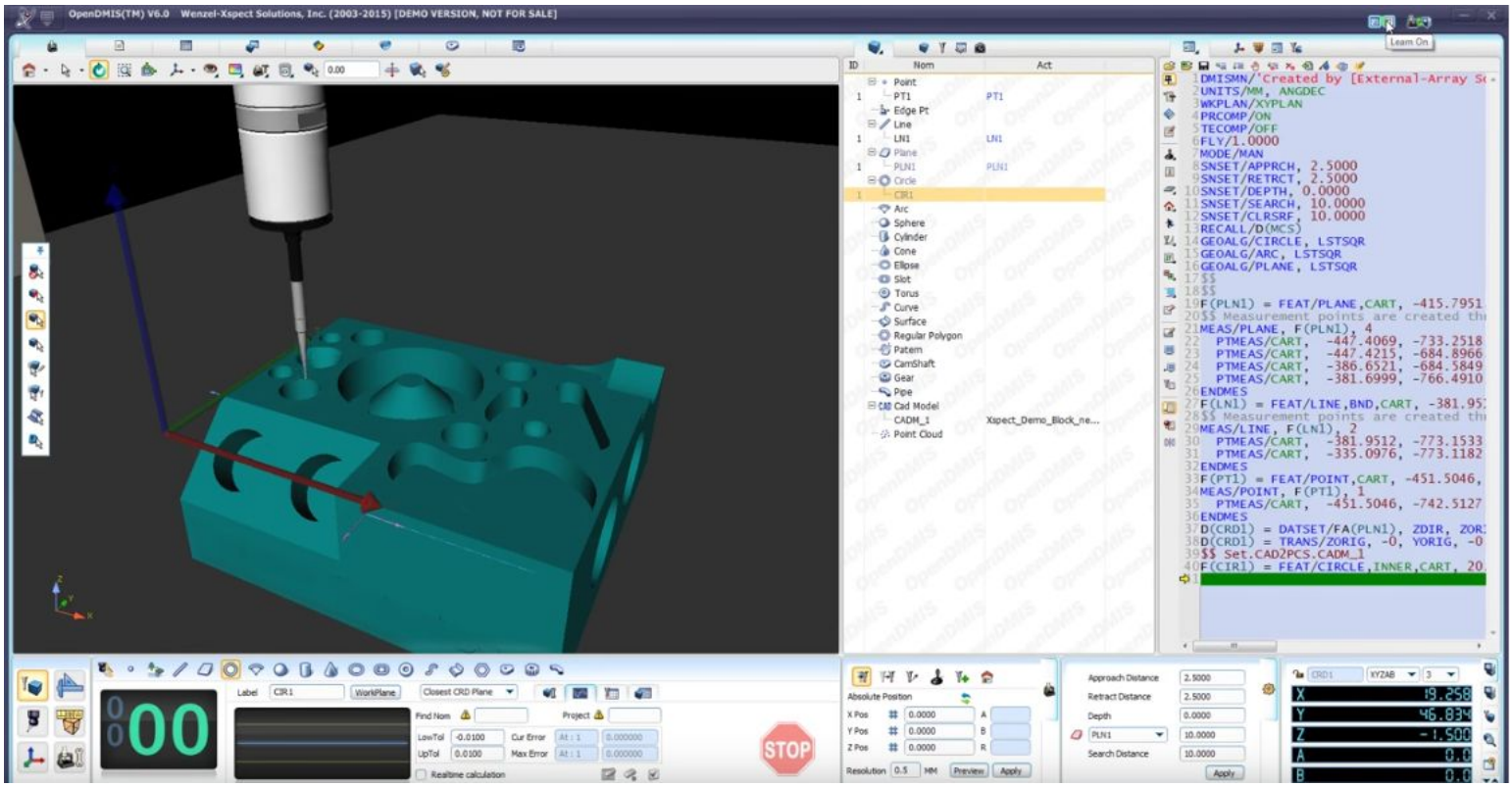
OpenDMIS 6.5 Enhancements



Point Cloud Inspection

With the addition of over 15 new functions, OpenDMIS now allows the virtual measurement of an object from a point cloud. The data can be ASCII XYZ data, or STL data. OpenDMIS will display the STL as triangulated data. A surface can be fitted from the point data.	Real time measurement is then supported from a new Icon Pick and Measure on Point Cloud Mesh. With a point cloud mesh from STL, the part can be measured offline, as if it were being probed by the CMM. Prismatic features can be fitted using a series of selectable algorithms.

Body in White

OpenDMIS 6.5 has a unique function that optimizes CMM communication and reduces cycle time called

Group Point Measurement

This feature allows large numbers of points to be processed in a batch rather than individually, meaning less communication back and forth between the controller and the software. Group Point Measurement can dramatically reduce cycle time.	Group measure can be applied to two or more points. Group point functionality supports all program search functions. Group point can be applied to 5 axis measurement for machines with REVO and PH20

Dual Arm systems

There are over 20 enhancements for Dual Arm systems.

Compatibility Enhancements

Enhancements within Open DMIS CAD make it easier to load very large CAD models.
OpenDMIS now offers a 64bit version for use with large CAD models. Standard OpenDMIS uses a 32 bit format and is compatible with 64bit operating systems; upgrades should only be considered for instances of very large CAD files.

Productivity Enhancements

Enhanced program execution error checking is available for DMIS. This allows the programmer to check for multipoint coordinate systems, units of measure, and work planes, simplifying the debugging process.
For ease of interactive programming and real time inspection, screen clutter can now be reduced: quickly change the graphical size of vector indicators and also the size of the coordinate trihedron.
Selecting multiple entities in the CAD window is simplified now with the addition of Window Selection. Just click with your mouse, and drag a selection window across multiple entities. This is helpful for tolerancing multiple features, selecting multiple free curves, and modifying reporting, in addition to a host of other items.
The Support Tool window adds a new utility that will calculate Euler Angles when entering the A and B angles you want to move the probe to.

Slots measured on a Cylinder can be ‘unfolded’ and toleranced as a standard feature.
DRF Tolerancing adds Compound Patterns including curves and patterns of circles.
Material Condition modifiers have been added for Concentricity.
5 Axis Programming with OpenDMIS using Revo and PH20 has always allowed for the use of Euler angles for probe articulations.
When using Euler angles, the probe will automatically update the selected angle so it is always in the same orientation to the part even when the part is rotated.
OpenDMIS has always supported Datum Reference Frame (DRF) tolerancing.
Surfaces can be used as a secondary datum for Profile of a Surface.Blade Inspection

Blade Inspection

19 new functions available in the OpenDMIS release 6.5 Blade Inspection.
The inspection of ‘Open’ blades is supported.
Datum methods based on ‘Weight’.
Enhancements to the ‘Fir Tree’ weighted profile tolerances offered in OpenDMIS 6.0.
Reporting in ‘.MEA’ format.

Reporting of the blade characteristics to Excel.
Unique points can also be exported to Excel.
OpenDMIS supports the following industry calculations:
Pratt and Whitney United Technologies
Rolls Royce
G.E.
Snecma

Reporting

Multiple Q-DAS reports can be opened and closed in a single program. C3DF format has been added. Form and Graphic reports can add multi-line comments. Graphical XY deviation has been added for Position Reporting	Form Error reports can be saved as Excel as well as PDF. OpenDMIS is fully Q-DAS compliant. OpenDMIS will also output to QC-CALC S.P.C. software from Pro Link software.