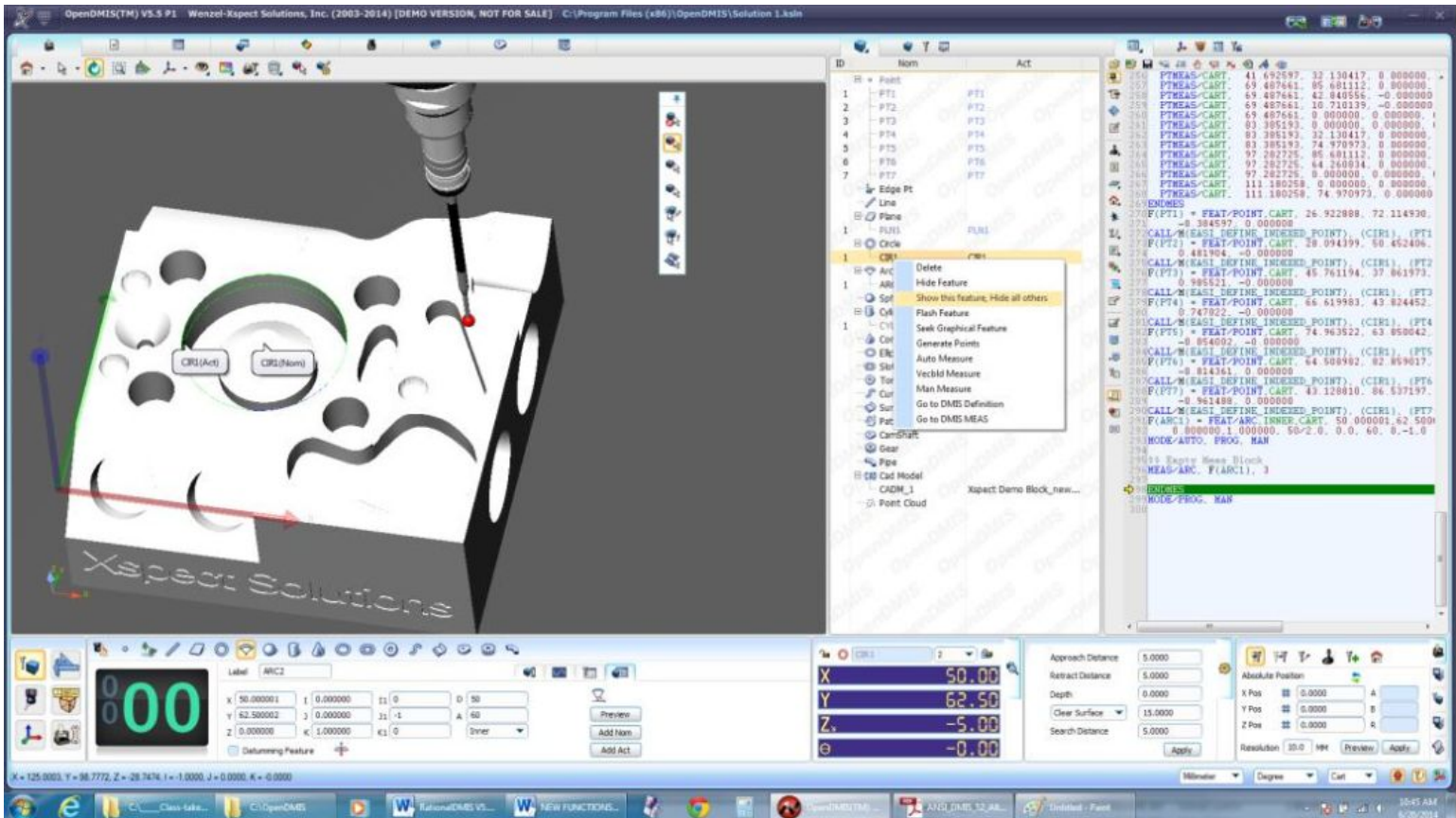


OpenDMIS 5.5 Enhancements



User Interface and usability improvements

- 1) Start-up programs can be called to preconfigure OpenDMIS at start up.
- 2) Error recovery in the middle of a measurement has been added. If a bad touch or any other error occurs while measuring the program can be asked to measure again.
- 3) Star Probe calibration has been greatly enhanced.
- 4) Adjustable angles for the knuckle probe have been added to the BUILD SENSOR functionality.
- 5) Disk probes can now be AUTOMATICALLY calibrated on the calibration sphere as well as a ring gage.
- 6) Quick updates of the Graphic Viewer window. A new function "Show this feature, Hide all others" quickly clears unwanted graphics when viewing complex parts.
- 7) Circular runout to an end-plane when datumed to a cylinder has been added.
- 13) MRS rack functionality is supported in OpenDMIS Version 5.5.
- 14) The feature fitting method can be changed from Property page for all supported prismatic features.
- 15) Calibration warnings now can be set to change more often. This is helpful for customers that calibrate sensors on each shift.
- 16) Drag and Drop, DND for feature construction continues to be expanded.
- 17) Default tolerances can now be set with a Right Mouse Click as well as DND to the default area.
- 18) Programs not generated in OpenDMIS do not always programmatically generate clear surface commands. When there are no clear surface commands in a program OpenDMIS offers two options to resolve this.
 1. There is a built-in macro "EASI_CLEARPLN_GOTO", where EASI stands for External Array Software Incorporated.

- 8) The multiple point bestfit coordinate system interface has been enhanced.
- 9) Sensor Label right mouse menu adds <Copy label> option. This is useful when creating a logical name for tools defined in the UCCServer.
- 10) Feature Pattern has been added.
- 11) A new CAD export function has been added. The IGES output window adds a new option to export just the measurement points.
- 12) OpenDMIS now allows translation without first leveling or setting a directional alignment.

- 2. Applications Setup adds an option of Apply Clear Surface in MODE/PROG, MAN.
- 19) The diameter of Chamfers can easily be computed with the new construct circle at current coordinate elevation function.
- 20) In the Feature Data base multiple curves can be selected and using DND a single curve can be constructed. However from time to time it is possible for the curve components to assemble the new curve out of order. The Fix Edge Order tool will automatically resolve this.

Reporting

- 1) OpenDMIS Version 5.5 now supports tolerance symbols in the Graphics Report.
- 2) OpenDMIS Version 5.5 now supports multiple auto arrangements in the Graphics Report from a new drop down menu shown below.
- 3) Output setup adds new option to output PTMEAS with calculated dx, dy, dz, dr.
- 4) DMIS output supports feature GSURF and GCURVE RAWDAT output format.
- 5) Graphical report and Form Error report PDF output adds an option to include file path on the PDF file.
- 6) The Sensor Mount Calibration tool is in the interface by default.

- 7) The FEATURE WATCH window, available in recent versions of OpenDMIS allows users to view measurement data in real time without the need to output the measurement.
- 8) Pictures can be programmatically added to reports.
- 9) There are new short cut keys to turn windows on and off in OpenDMIS.
- 10) The symmetry tolerance implements callouts to a single axis to the reference axis.
- 11) Cone angle display changes from half included angle to full included angle.

For the programmer

- 1) OpenDMIS Version 5.5 adds support of Version 5.2 of the DMIS standard.
Go to <http://www.dmsc.org> to order the newest DMIS code reference manual.
- 2) With one click code can be added to your program. Here is how it works:
 - i. In your OpenDMIS directory find the Configuration directory and make a sub directory called DMIS, in the DMIS directory make a sub directory called Comment.
 - ii. Insert your programs in the Comment directory, make sure the extension is DMI and the programs will become available under the "Insert Comment Line" Icon in the programming area.

- 3) The intrinsic function SDATETIME() is now available.
- 4) The DMIS Command generator has been greatly enhanced.
- 5) OpenDMIS continues to support Q-DAS, the grouping of Q-DAS output has changed.
- 6) Variables are updated within a do loop.
- 7) Automatic DMIS code generation adds option to remove all comment lines and empty lines
- 8) New functionality for the PTMEAS command adds approach and retract to desired measurement Points.
- 9) The OpenDMIS editor now supports Ctrl+A
- 10) When a model is aligned from the UI code is inserted into the program, if learn is on. It is no longer necessary to enter the alignment command in the DMIS editor.

For Network Management

- 1) OpenDMIS has always supported and continues to support the Microsoft UNC, Universal Naming Convention, and resolves all path names without ambiguity.
- 2) OpenDMIS can be installed in C:\. This allows an install that avoids all the Microsoft functions for installs in the (X86) directory.
- 3) In our latest release, Version 5.5, each log user has a unique registry key in Current_User, the change was implement in beta version 5.3.6.
- 4) . New users read a mutual source configuration from the Local Machine key and can then build unique configurations without impacting other users.

- 5) In order to avoid any possible conflicts with Microsoft future implementation the following file names have been changed. No runtime errors have been reported or found in testing.
syntaxdmis.cfg changes to syntaxdmis.dcfg
ProbeRenishaw.cfg changes to
ProbeRenishaw.scfg
ComponentRenishaw.cfg changes to
ComponentRenishaw.scfg
ProbeOther.cfg changes to ProbeOther.scfg
ComponentOther.cfg changes to
ComponentOther.scfg
- 6) Variables are updated within a do loop.

REVO, Turbine Blade Inspection, Gear Inspection

- 1) For 5 axis machines, new licenses are supported. REVO users must check their OpenDMIS license dongle for license status before updating to OpenDMIS version 5.4.20 or later. Contact Wenzel America before upgrading OpenDMIS on your REVO machine to verify your status or to arrange to upgrade to 5-axis functionality.
- 2) Head touch is supported for REVO probe. All User Interface for PH20 is now available to REVO.
- 3) 5-axis GOTO is added to the Measurement Histogram window. The DMIS generated now has 5-axis GOTO.

- 4) The A-5003-5278 (Thread 5 for SP80) is now available for use. Like the SK knuckle for indexing heads the angle can be defined prior to calibration.
- 5) OpenDMIS does not require that programs be created in real-time, after measuring a program can be generated using Drag and Drop (DnD). For manual mode or full auto commands a full measurement command can be generated with one mouse click, creating an empty VECBLD meas block.