What's New In SA

CHAPTER 2

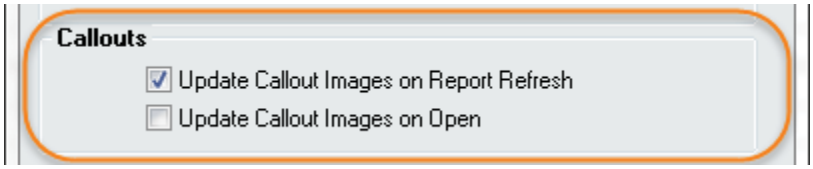
One of the advantages of SpatialAnalyzer is that development occurs at a brisk pace. New feature requests, bug fixes, and changes are implemented quickly, giving you the opportunity to start taking advantage of newly implemented features in a very short period of time.

2016.02.18

Dynamic Callout Image Replacement

Callout Images can now be Dynamically Updated

Callout images can now be updated within SA reports easily and automatically. The refresh button has been enhanced to refresh all the callout view images in the report. You can also set callout images to refresh automatically when you open a report. Individual Callout images can also be locked if you wish to save previous views. These optional controls have been added to the Report Settings Dialog.



Callout Images Maintain Proportions within Report

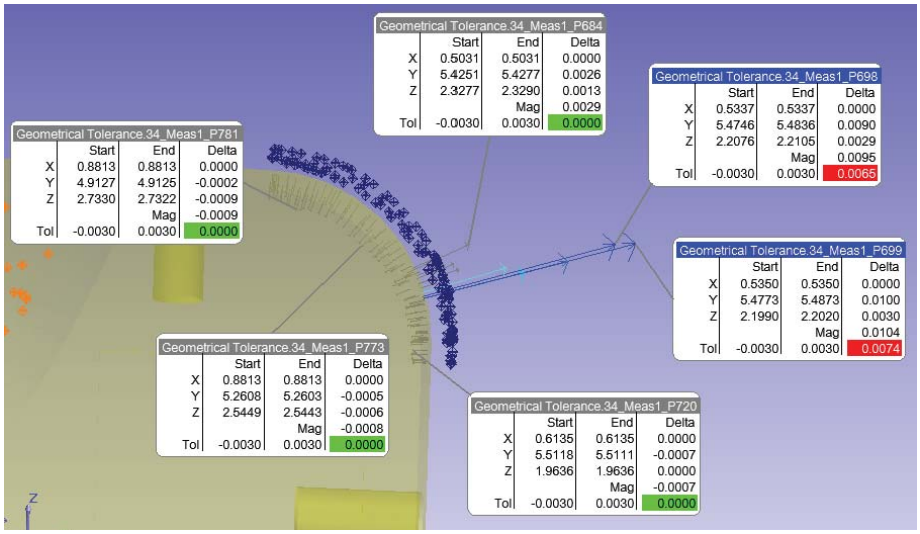
One challenge in updating callout images is that when the size of the graphics window changes, so do the callout image proportions. Callout images can now be added to a report and refreshed without fear of changing the proportions of those images, making it easier to place labels exactly where desired.

New Image Callout Added

This new callout type allows you to add an image as an overlay directly within the SA graphics. This can be very useful in prompting operators during a measurement process with visual aids.

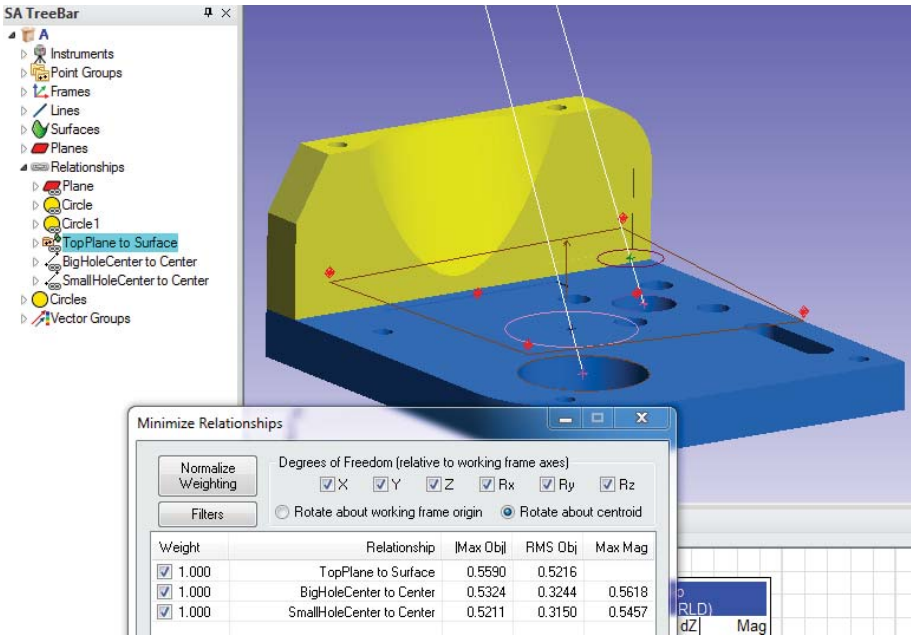
Tolerances and Color Controls Added to Vector Callouts

Vector Callouts can now have the vector name colorized to match the vector color, helping to identify which vector is being referenced. Also, tolerances can be shown numerically in the callout and the distance out of tolerance shown in either of two color schemes.



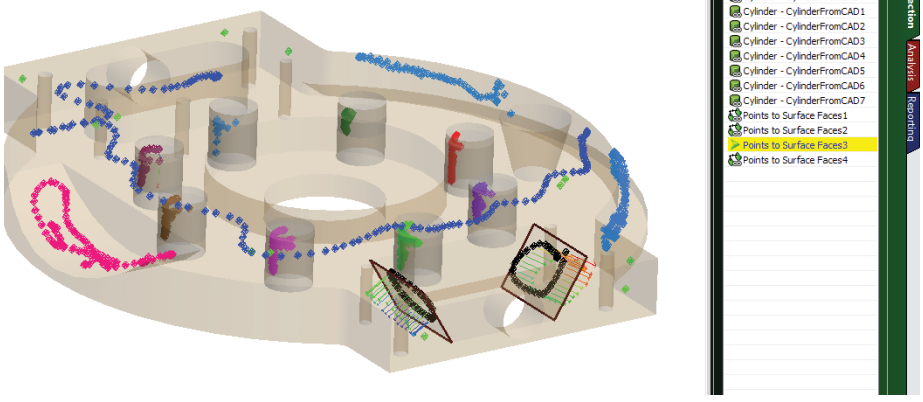
Cardinal Points Can Now be Used for Instrument Alignment

The Cardinal Points built from Geometry Relationships can now be used directly for instrument alignment. As long as all the measured points used to build a feature were measured from a single instrument, the cardinal points are automatically associated with that instrument. This allows SA to treat these points as measured points from that instrument in alignment operations.



Enable Trapping Vectors

A new function has been added to the Relationship Category in the tree that allows you to display the auto-vectors for any relationship currently set as the active trapping target. A placeholder vector group will be built and updated with each relationship that is selected unless an auto-vector groups has already been built. In that case, the existing vector group will be displayed and then hidden when you move to the next relationship.



Right-Click Menu Icons have been Added

A selection of commonly used functions in object right-click menus now have icons. This was added to make it easier to find items in the ever expanding right-click menus.

Objects from CAD Toolkit Menu Expanded for Offset Points

The point construction options have been expanded to include both surface points and vertex points as well as hole center points in the objects from CAD menu. Offsets can now be added to both surface points and hole center points through the toolkit menu. These shifted points allow direct comparison with measurements that contain offsets.

Reporting Frames Enhancements

GD&T Feature Checks now have Reporting Frames

Each individual feature check can now have a reporting frame assigned to it. This makes it easier to report the XYZ deviations relative to a nominal feature.

Objects can be used directly as reporting frames

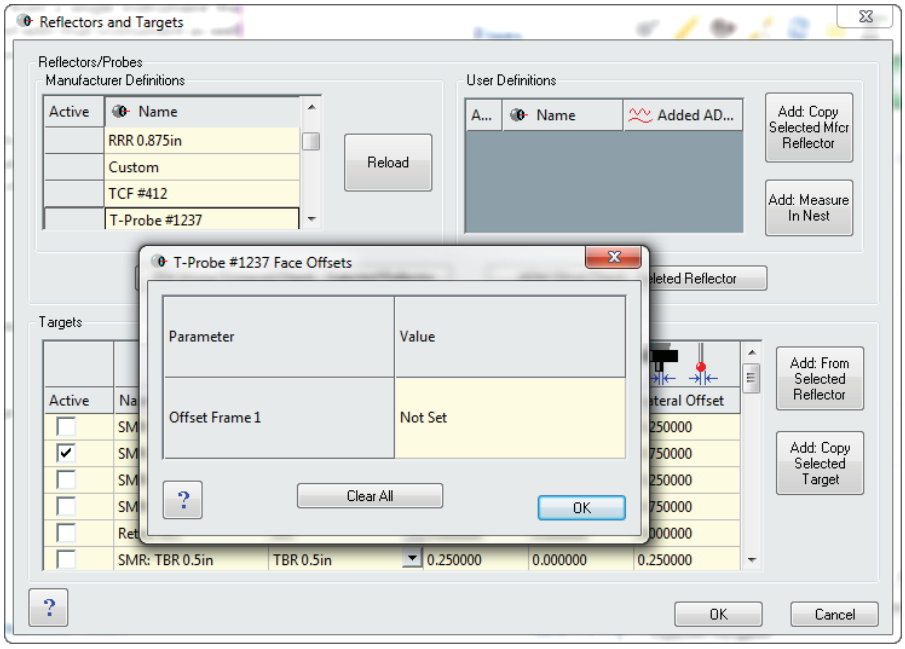
Any object can now be used as a reporting frame for another object or point group. This makes it easy to see the deviations between nominal and measured features. It also makes it quick and easy to see points in cylindrical/spherical coordinates relative to a particular circle or cylinder, for example.

Added Support for the Leica Absolute Scanner (LAS) 20-8

The LAS scanner is the first scanner to be added as part of a Tracker Interface and can be run directly as a custom target. It requires the installation of a new RDS version available on our website and a Tracker firmware update. An instrument Quick-Start guide can be found in the Measuring with Laser Trackers Chapter.

6D Targets now Include Default Offsets

If you have a multi-faced target that you need to calibrate or if you would like to have a default offset always included in a 6D target, you can now define these offsets directly within the Reflectors and Targets Database.



MP Improvements

Angular representation in MP has been improved

Angular representation settings of 0/360 or 180/-180 now apply to MP commands as well.

New MP editor has been improved

Search plane can now be sized in the MP Editor

New MP Commands

OPC DA Server

- **Set OPC DA Tag Value String**
- **Get OPC DA Tag Value String**

Construction Operations>Other MP Types...

- **Make a Vector Name Ref List - Runtime Select"**
- **Make Vector Names Unique In Vector Group**

Analysis Operations

- **Get Number of Vectors in Vector Name Ref List**
- **Construct a Vector Group From Vector Name Ref List**

- **Add a Vector To Vector Name Ref List**
- **Get i-th Vector From Vector Name Ref List**
- **Delete Vector by Name**
- **Delete Vectors**

Relationship Operations

- **Set Geom Relationship Criteria**

Reporting Operations

- **Refresh Callout Views in SA Report**

Instrument Operations

- **Synchronized Measurement (Master/Slave)**

Utility Operations

- **Get Calibration Appliance Data**
- **Set Calibration Appliance Data**
- **Get Angular Unit Representation**
- **Set Angular Unit Representation**