

# What's New In SA

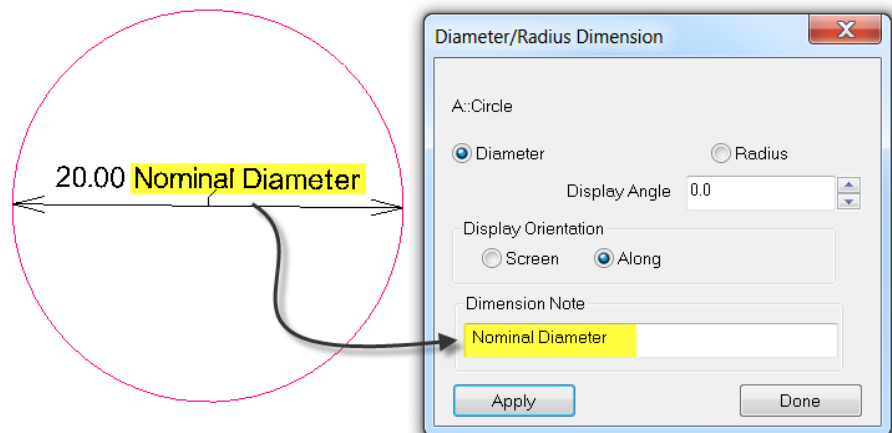
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## SA 2014.11.11

### Dimensions

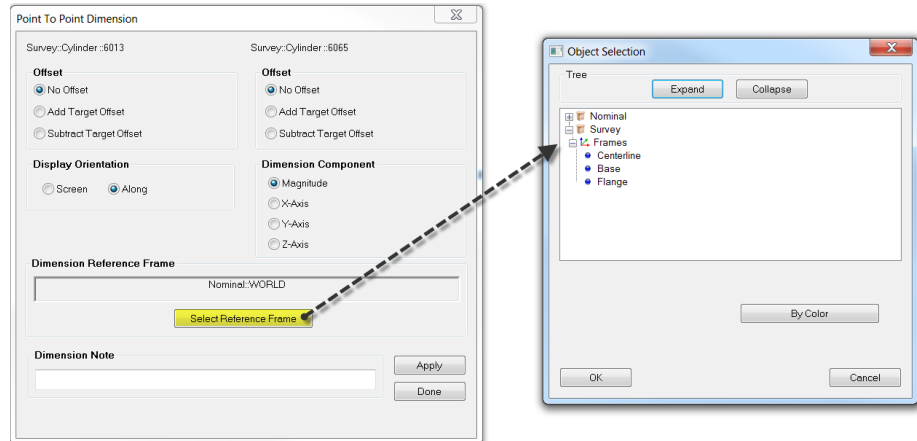
#### Notation

The ability to append notes to dimensions has been added. Simply double-click on the dimension in the tree and add a note to be displayed in the graphical view.



## Referencing Frames

With regard to point-to-point dimensions, you now have the option to select a reference frame different from that of the current working frame. Double-click the dimension in the tree and choose **Select Reference Frame** in the **Point to Point Dimension** properties dialog.



## Reporting

Dimensions have been added to reports in a tabular form.

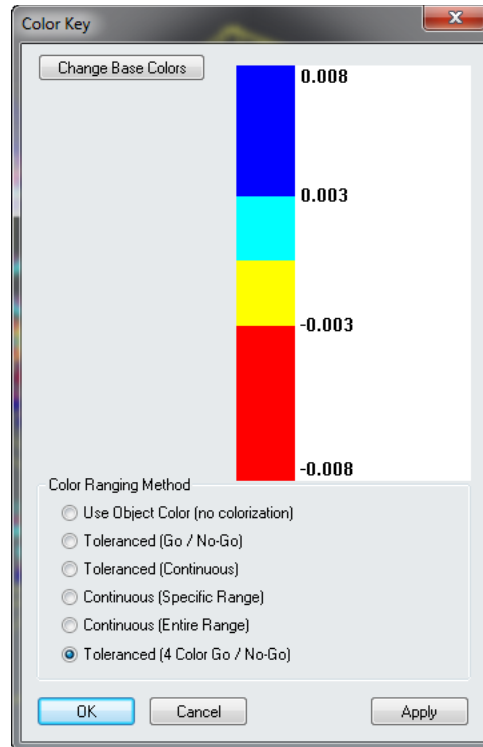
Point To Point Dimension Survey::Dim0	
Point A	Point B
Survey::Cylinder::6013	Survey::Cylinder::6065
Offset None	Offset None
Reference Frame:	Nominal::WORLD
Magnitude:	7.1980

## Common Properties

By right-clicking on a dimension and selecting **Manage Settings > Apply Settings to Other Dimensions**, you can set common properties for all dimensions of that same type in a collection.

## 4 Color Vector Group Colorization

A new 4-color go/no-go vector group colorization option has been added to the vector group colorization options.



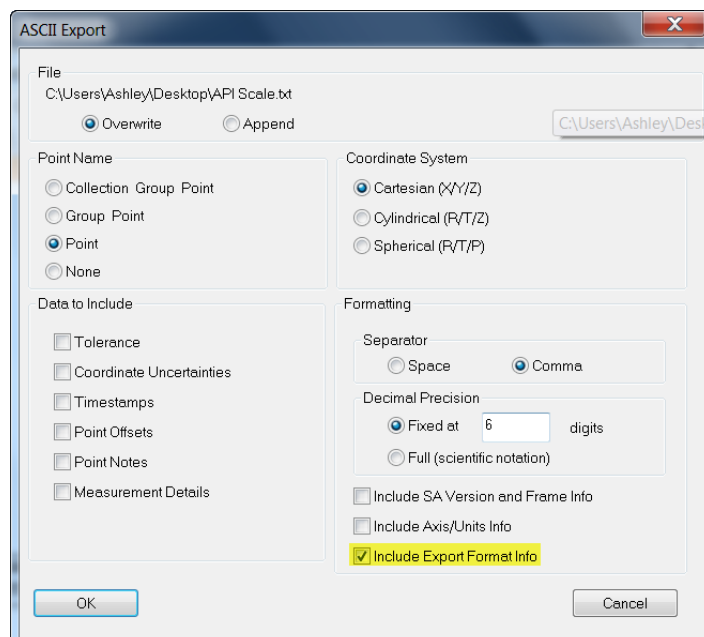
## ASCII Related Improvements

### New Formats

Ten new ASCII import formats have been added, some of which allow importing point notes.

### Exporting

An *Export Format Info* option has been added to the **File > Export > Points (ASCII File)** dialog.



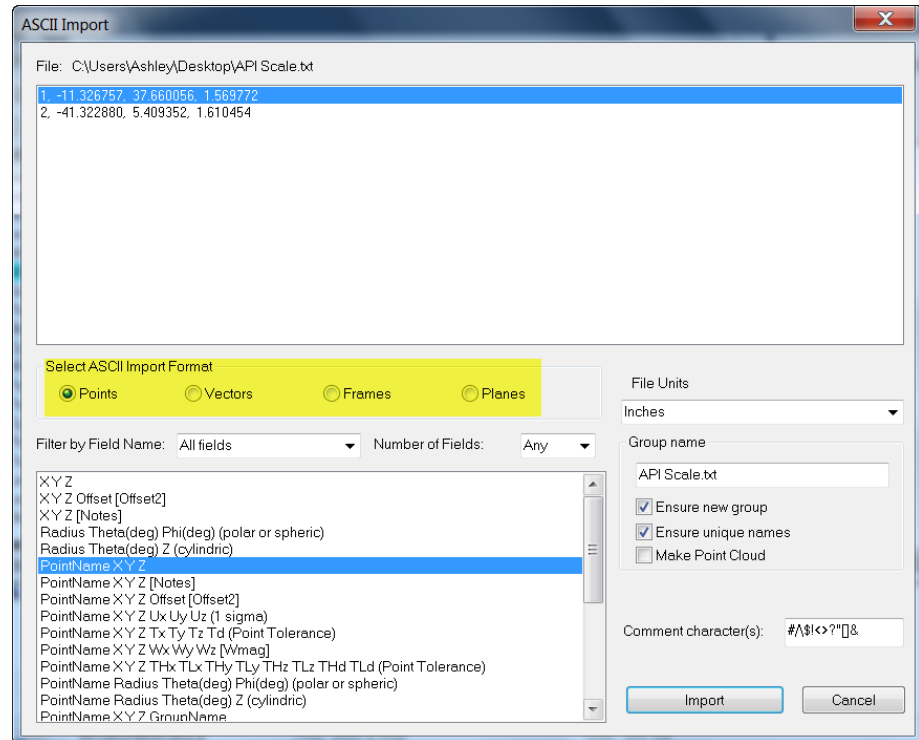
You now have the capability to export multiple vectors to a single file. This applies to Excel files as well.

## Euler Angle Support

Importing and exporting frames now supports Euler angle formats.

## Filtering

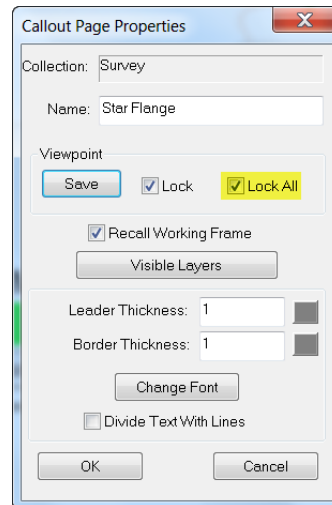
A field filter has been added to simplify the import selection from the list of available formats. These filters include: points, vectors, frames and planes.



## Callouts

### Lock All

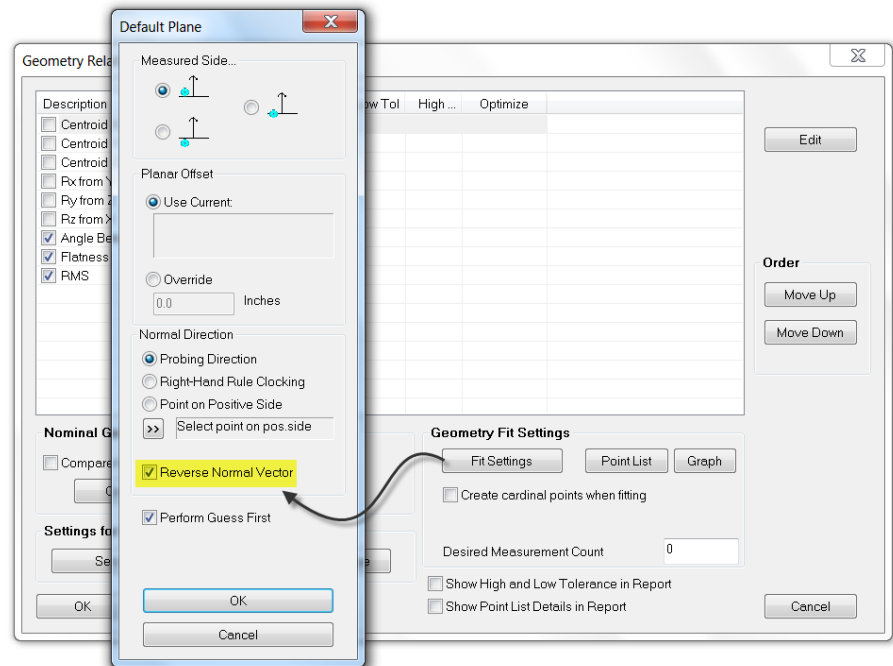
A *Lock All* option has been added to the *Callout Properties* dialog. When selecting this option, the viewpoint is locked and saved as well as the function Recall Working Frame.



## Geometry Relationships

### Reverse Normal Vector

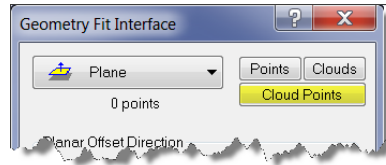
You now have the option to reverse the normal vector for planar geometry relationships in the *Properties* dialog. This can be accessed by double-clicking the planar relationship in the tree and selecting **Fit Settings**.



## Geometry Fit Interface Enhancements

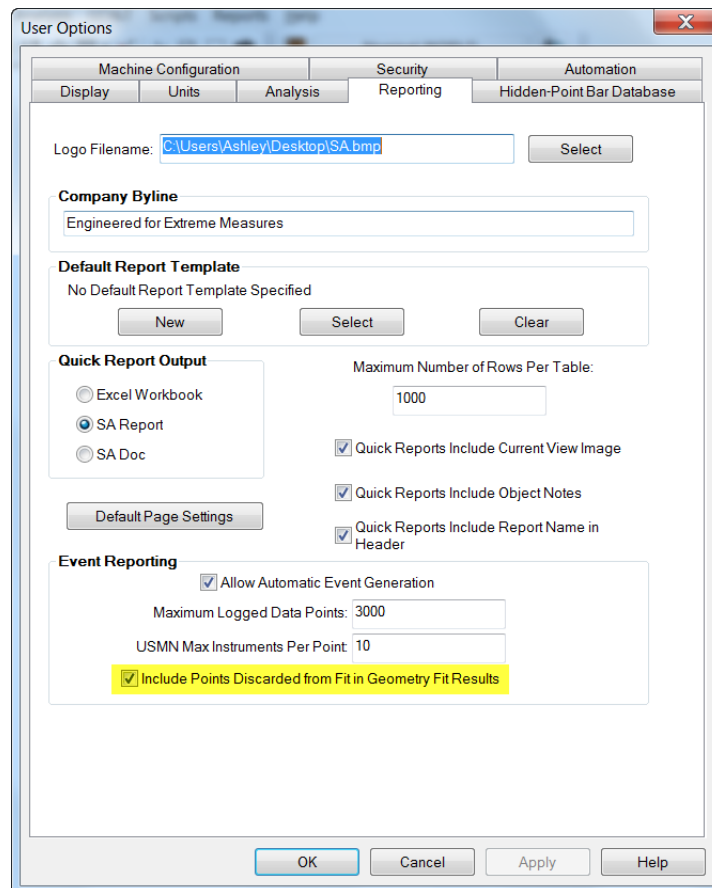
### Cloud Points

In addition to selecting **Clouds** or **Points** when constructing geometry, you can now choose **Cloud Points** to pick individual cloud points for fitting.



## Discarded Points

If you would like to display points that were discarded in a fit, select the option *Include Points Discarded from Fit in Geometry Fit Results* under the *Event Reporting* section of the *Reporting* tab in User Options.



## Instrument Transformations

### Drag Graphically

You may now access the command **Drag Instrument Graphically** by right-clicking on the instrument either in the graphical view or treebar.

### Minimize Relationships

You may now access the **Minimize Relationships** command by right-clicking on the instrument either in the graphical view or treebar.

### Jump Instrument

Instrument uncertainty settings now persist when jumping an instru-

ment to a new location.

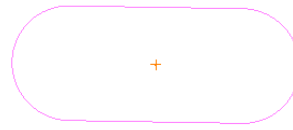
## Measure Nominals

Locating an instrument using **Measure Nominal Points** now has the option to disable rotations about Rx and Ry.

## Construct Menu Commands

### Point at Center of a Slot

The command **Construct > Points > Center > Slot(s)** has been added which will construct a point at the center of one or more selected slots.



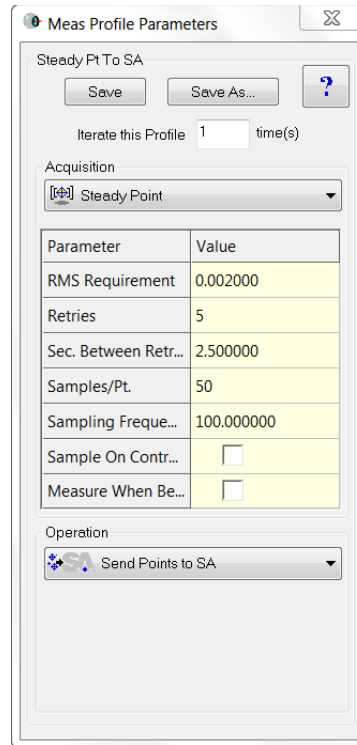
### Cylinders Along Lines

The command **Construct > Cylinder(s) > Along Line(s)** has been added which will construct a cylinder along one or more lines. After one or more lines is selected, you can input the diameter of the cylinder(s).

## Laser Tracker Interface Enhancements

### Steady Pt. to SA

A new acquisition mode and measurement profile has been added called *Steady Pt. to SA*. This allows you to set the RMS requirement, number of retries, and seconds between retries. This mode is primarily meant for automation measurements, so that a user can ensure that a measurement is within a given RMS. If the measurement is outside of the RMS tolerance, then this mode allows the tracker to keep trying until that RMS is reached.



## Leica AT960/AT930: New Interface

A new instrument interface has been added for the Leica AT960/AT930 laser tracker.



This interface supports the new features of this tracker, including IP discovery, updated video drive, and faster power lock. The 960 offers support for the T-Probe, and this is also supported in the interface with button programming, similar to the 901 interface. When using the Instrument Toolbar, you will see a probe icon for the T-Probe. When it is locked on, you can hover over this icon to see full T-Probe information.



## Leica T-Scan

Leica T-Scan 5 is now supported in the T-Scan interface. This requires T-Scan Collect v10.2.

## Assembly Guidance Laser Projector

### Filtering Data

You can now filter data by minimum angle, minimum distance, number of points, or none. *None* is the default and is the existing behavior.

### Function Keys

Function keys have been added for quick access to common functions:

- **F3.** AutoAlign
- **F4.** Project Next Pattern
- **F5.** Project Current Pattern
- **F6.** Project Previous Pattern
- **F7.** Pause Projection
- **F8.** Resume Projection

## Leica Nova MS50

The scanning properties dialog has been modified such that the horizontal/vertical scan resolution is now specified in job units versus device angular units.

## New Measurement Plan Commands

- **Object Existence Test (Check Only).** Returns a boolean indicating whether an object exists.
- **Add Collection Instruments to a Ref List - Wildcard Selection.** Adds instruments matching wildcard selection criteria to a collection instrument reference list.
- **Clear All ASCII Files.** Closes and clears out any open file handles.
- **Make Average Point Relationship.** Creates an Average Point or Average Point to Nominal relationship.

### Measurement Timeout

A new timeout argument has been added to the Configure and Measure command. For important details on this argument's behavior, refer to the SA Readme file.