

## Reference Transform

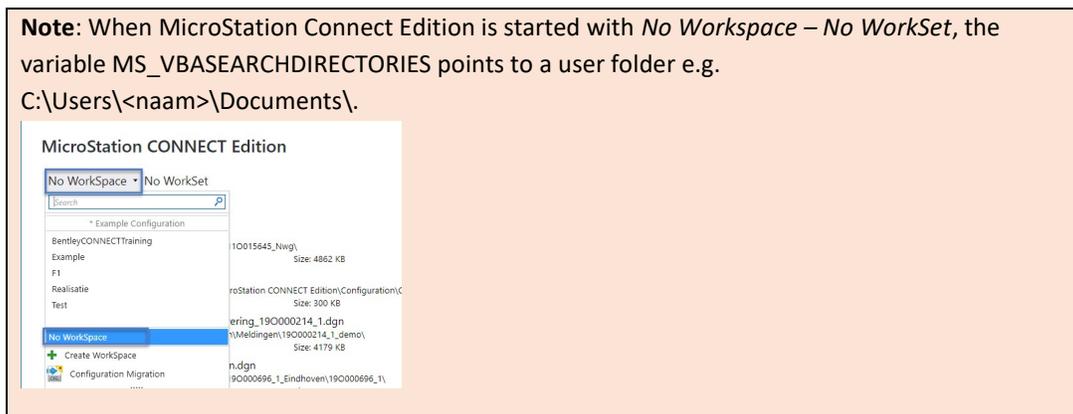
MicroStation VBA tool            Dirk Boonstra Bentley   14-01-2011, modified 01-01-2019.

Move, Rotate and Scale a reference. Based on **two** points in reference and two corresponding points in the active model.

### Installation

Install the VBA file *ReferenceTransform.mvba* in a folder pointed by the variable MS\_VBASEARCHDIRECTORIES.

E.g. C:\ProgramData\Bentley\MicroStation CONNECT Edition\Configuration\Organization\Macros\  
(or C:\ProgramData\Bentley\MicroStation V8i (SELECTseries)\Workspace\Standards\vba\).



### Run

To start the tool, key-in this:

**vba run [referenceTransform]modReferenceTransform.reftrans**

Better to put this key-in under a function key or button in the ribbon.

### Workflow:

- Attach a reference model (e.g. dgn, dwg, ifc) to be transformed.
- Open two views; Window Tile; zoom in on both views on the area of interest.
- Switch AccuSnap On.



- Start the tool (from menu or function key).

- Select an element in the reference to transform.
- Snap to point 1 in reference; Snap to corresponding point 1 in master.
- Snap to point 2 in reference; Snap to corresponding point 2 in master.
- You can zoom in/out while selecting the transformation points.
- The reference attachment is Moved, Scaled and Rotated to the master.

A Reset during the entering of the points will bring the program back to the first point to be entered.

To stop the tool while entering transformation points; just select another command.

The transformation can be undone with Undo (CTRL Z). Use Undo twice; once for the attachment and once for the temporary line.

The Scaling of the attachment is done proportional; same scale for X and Y.

Tool is tested in MicroStation Connect Edition and MicroStation v8i, in a 2D file.

Tool works correct when rotated views are used.