Updating Legacy Set Datum Tags to New Datum Feature Symbols

This article describes the recommended process for datum feature symbol conversion from old style set datum tags to the Creo 4.0 datum feature symbols.

Old behavior:
Legacy Set Datum Tags in Creo 3.0 and earlier could be created in several ways:

a. By creating a *set datum tag annotation* via the set datum tag option (datum properties) or by creating a *set datum tag annotation element* from inside an annotation feature

b. Via the legacy *set datum tag* option (datum properties), resulting in set datum tags of the following style

New behavior:
With Creo 4.0, Datum Feature Symbols are now available as a regular annotation and are not a property of a plane or axis feature of the model. You can create a Datum Feature Symbol either as a standalone annotation, in which case it will appear at the top of the model tree under the Annotations node, or you can create a Datum Feature Symbol inside of an annotation feature. For more context, please refer to: https://community.ptc.com/t5/Model-Based-Enterprise-MBE-Blog/Datum-Feature-Symbols-in-Creo-4-0/ba-p/444554

This means in particular that it is no longer possible to derive a set datum tag annotation from a datum plane or axis which begs the question on how to convert from old to new without breaking existing GTOLs that reference legacy set datum tags.
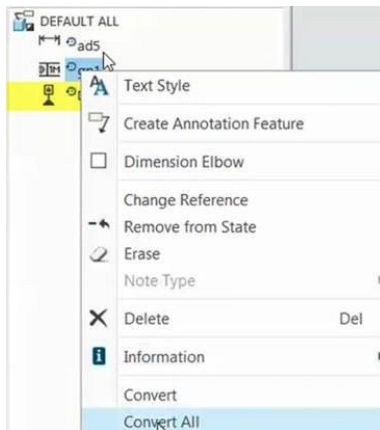
Updating Legacy Set Datum Tags to New Datum Feature Symbols (DFS)

The required steps depend on the type of legacy set datum tags as described above.

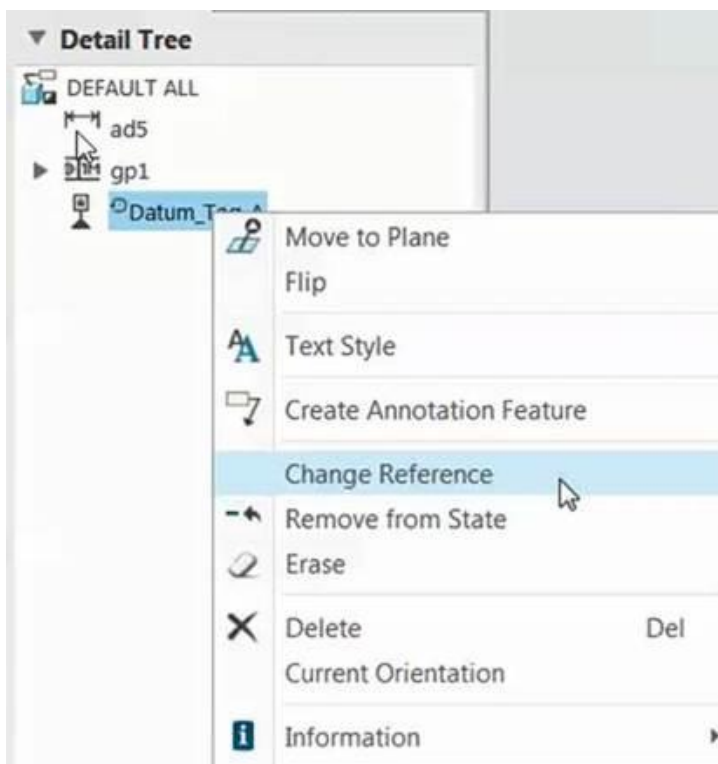**In case of a)** **(Set datum tag annotations placed on datum plane or axis)**

Step 1: Convert all outdated GTOLs and dimensions via the right mouse menu "Convert All"

Note: note the icon modifier indicating outdated annotations

Step 2: Use "Change Reference" for each set datum tag annotation via its right mouse menu to define the new geometric reference for the new *datum feature symbols*.
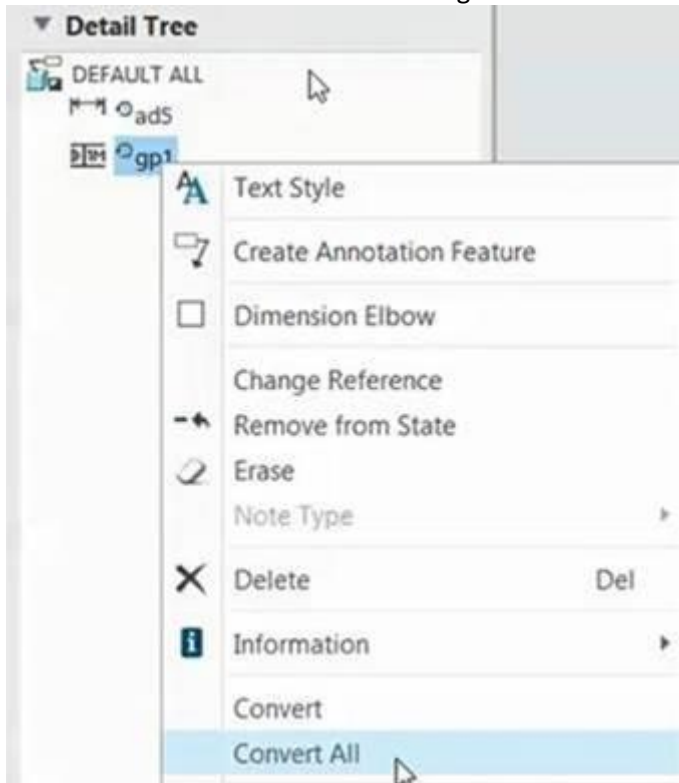
Note: Change reference will implicitly do a conversion first, and then allow to select new placement references. Change reference will work in a way similar to creating a new DFS.

In case of b) ⬛ -A- (legacy set datum tag)

Step 1: Convert all outdated GTOLs and dimensions via the right mouse menu "Convert-All"
Note: note the icon modifier indicating outdated annotations

Step 2: Create new *datum feature symbol* with the same name

Step 3: Select the original *legacy set datum* and unset it (right mouse menu -> Properties -> A)

Note: As Datum Feature Symbols (DFS) can no longer be placed a datum plane or datum axis, a conversion from legacy set datum tags cannot be done in a single step. Therefore a new DFS needs to be created and the legacy set datum tag needs to be unset.

The above steps result in new datum feature symbols and maintains the integrity of references from GTOLs to them.