

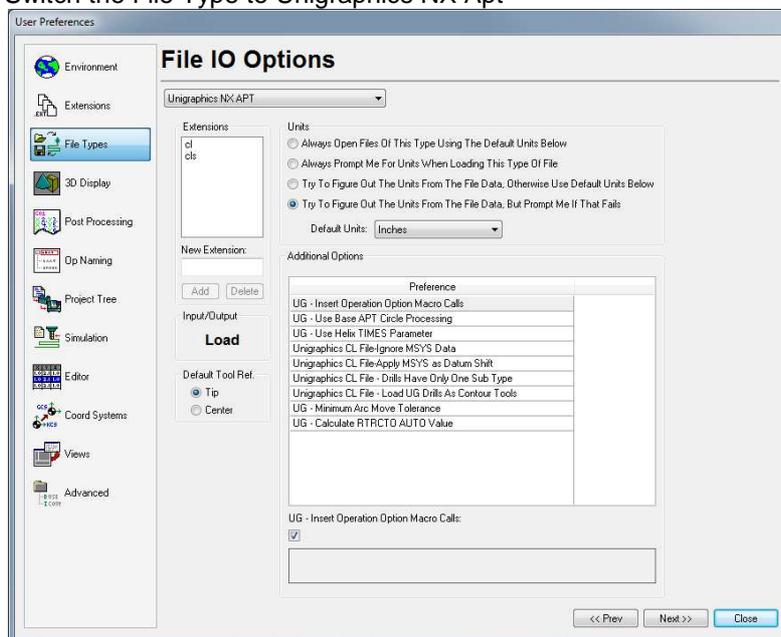
1.0 Selecting the Unigraphics CLS Post

UG NX uses a special config file to get CLS files that provide more information to CAMplete TruePath than is normally available from the default UG NX CLS export. This includes tool holder design info.

2.0 CAMplete TruePath CLS Import Settings

The major file IO options in CAMplete TruePath for UG NX CLS files are found in the user preferences dialog.

1. Make sure there are no other instances of CAMplete TruePath running on the computer
2. Start CAMplete TruePath
3. Go to Tools > Options
4. Click File Types
5. Switch the File Type to Unigraphics NX Apt



6. In the Additional Options section are the various UG loading options
7. You can make changes to these options as needed (See section 3.0)
8. When you have completed the changes, click Close to close the User Preferences dialog
9. Close CAMplete TruePath completely and restart it

3.0 UG File Loading Options

The main UG Loading options are:

UG – Insert Operation Macro Calls

Description: This allows the user to insert an NC Format macro item called “OP_TO_OP” which lets them control what happens whenever a new operation is declared in the CLS file. This is a very specific customization that looks for a tag in the CLS file that needs to be added by the customer. It would let the customer decide to do certain things in the program based on this.

Default: ON (But has no effect unless the UG CLS output is modified by the customer)

UG – Use Base APT Circle Processing

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Description: This tells the file loader to use APT specification circle processing instead of the standard UG arc processing. By default, most CLS files from UG contain non-APT specification arc data so this option should be off. However, if you are encountering arc problems on a UG system you can try switching this to ON.

Default: OFF – Do not modify this option unless told to do so by CAMplete Solutions.

UG - Use Helix TIMES Parameter

Description: This controls the processing the UG "TIMES" parameter in the CLS file. This allows the software to process helical arcs that are described as a helix with a certain number of revolutions.

Default: ON – You should not usually need to change this.

Unigraphics CL File-Ignore MSYS Data

Description: This tells the software to ignore the MSYS data from the CLS file. The MSYS is a coordinate system defined in every UG NX CLS file for every operation. Depending on the system configuration and UG project this can either mean that the CLS data should be transformed to this coordinate system or the coordinate system should be ignored. For example, if you are programming to a fixture location or to some other coordinate system in NX.

Default: OFF – This means that the MSYS data will be used to transform the operation data by the MSYS amount. Generally, you should toggle this value if your imported CLS data is not appearing in the correct place on the 3D screen.

Unigraphics CL File-Apply MSYS as Datum Shift

Description: This option requires the **Unigraphics CL File-Ignore MSYS Data** to be ON. When enabling **Unigraphics CL File-Apply MSYS as Datum Shift**, this will create a new work piece datum in TruePath for that MSYS. This can be used when programming multiple parts on a single setup where each part has a unique datum. This is an advanced function.

Default: OFF – Consult with CAMplete Solutions before attempting to use this option.

Unigraphics CL File - Drills Have Only One Sub Type

Description: Tells TruePath to process tool data in the UG CLS file that contains sub types. For example, TLDATA/DRILL,DRILL_D8. In that case, DRILL_D8 is a sub type for the tool.

Default: ON – Consult with CAMplete Solutions before attempting to use this option. This is usually only changed for backwards compatibility with certain versions of UG NX.

Unigraphics CL File - Load UG Drills As Contour Tools

Description: Tells TruePath to convert any UG center drills to contour tools in CAMplete rather than as basic drill types.

Default: ON – You should not usually need to change this option.

UG - Minimum Arc Move Tolerance

Description: This sets the minimum arc size that TruePath will create when reading arc moves from UG. UG can occasionally produce very small arc moves (depending on the arc conversion tolerances used in UG) that produce very small arcs that the machine controller cannot use. Instead of inserting a tiny arc, TruePath will just insert a linear move. For example, if you don't

want to see arcs that are 0.0005" in the output program, you would set this value to 0.001". Then any arcs that are smaller than 0.001" will be converted to linear moves.

Default: 0.0 Inches – When this value is set to 0, no small arc filtering is performed.

UG - Calculate RTRCTO AUTO Value

Description: This option tells CAMplete TruePath to calculate drilling cycle retract planes that are specified with the AUTO setting in UG NX. In this case, the software will look ahead in the CLS file to find the next Z height tool position and use that as the final clearance plane for the cycle, rather than it being specified directly in CLS data for the cycle. This is normally not necessary since the software will post a clearance position directly with a Z value.

Default: OFF – Use this only if the user is using the AUTO setting in UG for their retract planes. By default, most UG users are not using that option.