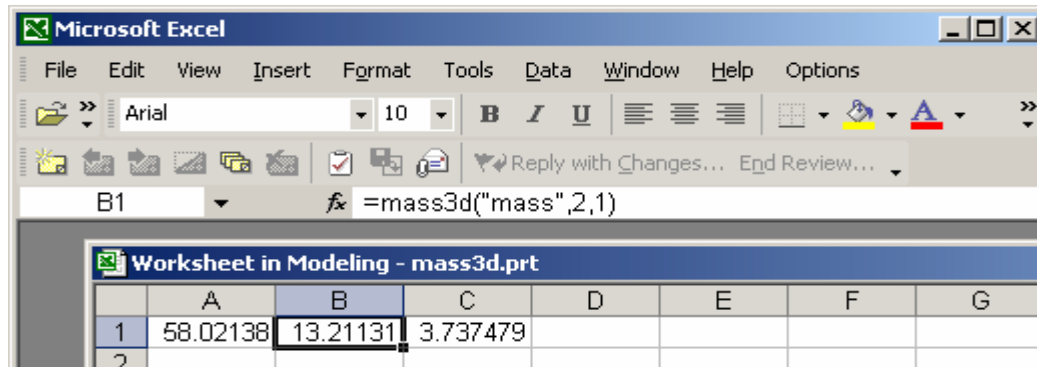


Continued from previous At a later time, a modeling change is made. In this case, *C'Bore* depths were modified.

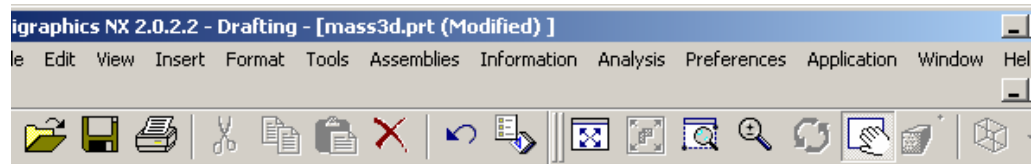
Open the **Modeling Spreadsheet** and Save it to update the spreadsheet. Now, when entering Drafting, the **Tabular Note** is updated.

Since the **Tabular Note** is reading from the imported Spreadsheet it is necessary to update that spreadsheet. Once this is done the **Tabular Note** will automatically update its values.

After the Modeling update, updating the spreadsheet changes the values as follows:



And, when entering the Drafting application, we see the **Tabular Note** now reads:



**Julie Josias**

AREA	VOLUME	MASS		
58.02138	13.21131	3.737479		

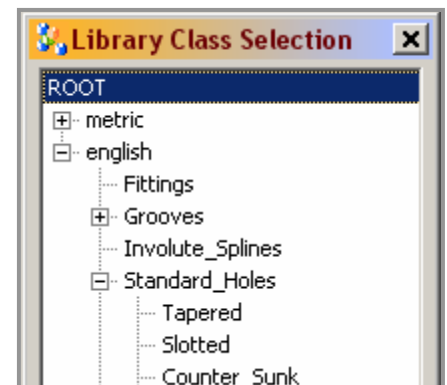
## Setting up UDF Libraries in NX 1 and NX 2

The method of storing UDF's in the NX versions of Unigraphics has changed. The **library\_dir.txt** has been replaced with **udf\_database.txt** and the file that used to define multiple libraries (pointed to using Solids\_UdfLibraryFile) has been replaced with **dbc\_udf\_ascii.def**. Note, however, that **Solids\_UdfLibraryFile** has not been removed and can still be used to some extent (explained later).

It is still advisable to create a separate UDF folder, for example, **C:\nx\_udfs\** and this folder will contain the **udf\_database.txt** and **dbc\_udf\_ascii.def** files.

The only difference between the **udf\_database.txt** and the old **library\_dir.txt** files is that the **udf\_database.txt** has a library path appended to each entry, for example, **"/Metric;"** or **"/UNC;"**. An example is given below:

**standard\_thread\_inch;standard\_thread\_inch.prt;**  
**standard\_thread\_inch.cgm; /English/Standard\_Holes;**



## >> Unigraphics

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The library path defines where the UDF is listed in the UDF hierarchy when the UDF dialog is displayed. The hierarchy is defined by the **dbc\_udf\_ascii.def**; each branch has its own class definition in this file. In the above example, the **standard\_thread\_inch** will be found under **English Standard\_Holes** in the UDF Hierarchy.

A class definition for the above would appear in the **dbc\_udf\_ascii.def** as:

```

CLASS English
{
    TYPE English
    QUERY "[DB(udf_lib_name)] &= [English]"
    FILE "$UGII_UDF_LIBRARY_DIR"
    DIALOG udf_name
    RSET udf_file_name

    CLASS Standard_Holes
    {
        TYPE Standard_Holes
        QUERY "[DB(udf_lib_name)] &= [Standard_Holes]"
        FILE "$UGII_UDF_LIBRARY_DIR"
        DIALOG udf_name
        RSET udf_file_name
    }
}

```

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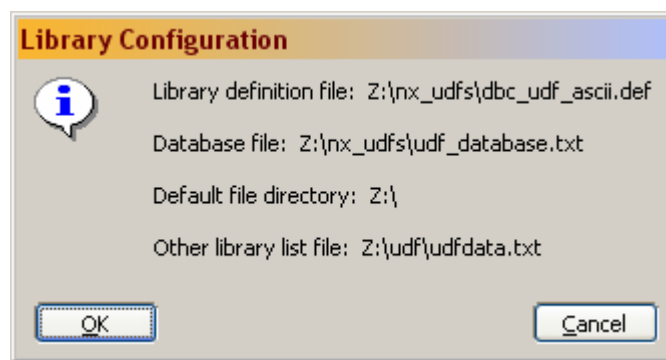
Once you have decided which UDF's you want to add to your database, you can add your own classes to define them by editing the **dbc\_udf\_ascii.def**. You can position them in this file relative to the existing UDF hierarchy. The above example was taken from the default **dbc\_udf\_ascii.def**. Note that the **path defined for FILE is using the variable "\$UGII\_UDF\_LIBRARY\_DIR"**. By default this points to the default installation path "**%UGII\_BASE\_DIR%/ugii**" and then to the following directory "**/udf/resource/english**".

### Defining the location of your UDF files.

By default the UDF definition files reside in the Unigraphics installation folder where you do not have write access. As soon as you attempt to create UDF's in this location you will be informed that you do not have necessary permissions to do so, hence you need to define your own location for these files.

Before you start creating UDF's **you need to define the location of the *dbc\_udf\_ascii.def* and the *udf\_database.txt* files**. Choose **Tools => User Defined Feature => Configure**. You will be prompted to define the locations of these files. Use your folder **C:\nx\_udfs\** for this purpose.

Once you have specified the location for these files, you can redefine or reload them at any time by choosing **Tools => User Defined Feature => Configure**. Once defined or reloaded, the following summary dialog is displayed. Note the third line, the **Default file directory**. This is where your UDF files (.prt and .cgm) will be placed when creating new UDF's using the UDF wizard and this is defined based on the locations of the database files.

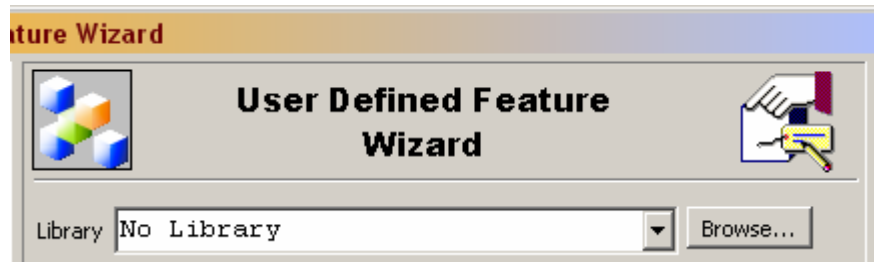


Continued from previous

If the summary (see above image) contains a fourth line **Other library list file**, this means that the setting **Solids\_UdfLibraryFile** has been defined in the customer default file (**ug\_English.def/ug\_metric.def**). This can be used to set the path to legacy libraries and points to the pre-NX library file that was used to define the locations of the UDF libraries. Ideally, you have already defined your pre-NX UDF's in the **udf\_database.txt** file and edited the **dbc\_udf\_ascii.def** file to add new branches to the hierarchy to accommodate them.

It should be pointed out at this time that if you have set **Solids\_UdfLibraryFile** to point to a legacy file, then you will not be able to create UDF's using the old method; selecting a library. Using the new hierarchical method, a branch should be selected to define where the UDF is to be referenced. If **Solids\_UdfLibraryFile** is undefined, then "No library" is an option when creating UDF's – this will

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create a pre-NX style **library\_dir.txt** in the users home directory along with the **.prt** and **.cgm** files. If the setting is defined then although legacy libraries can be accessed, the only way a UDF can be created is by inserting it into the hierarchy and the relevant files are placed in the Default file directory (in this case, **C:\nx\_udfs**).

If you have created UDF's using the No Library option and then decide that you want to add these to the hierarchy follow these steps.

1. Copy the **.prt** and **.cgm** files for each UDF to the Default file directory (in this case **C:\nx\_udfs**).
2. Edit the **dbc\_udf\_ascii.def** file if a new class is to be created, for example:  
**CLASS My\_UDFs (The name as it appears in the hierarchy)**  
{  
    **TYPE my\_udfs**  
    **QUERY "[DB(udf\_lib\_name)] &= [my\_udfs]"**  
    **FILE "Z:\nx\_udfs\"** (path to the **.prt** and **.cgm** files)  
    **DIALOG udf\_name**  
    **RSET udf\_file\_name**  
}
3. Edit the **udf\_database.txt** file and add a new line for each UDF making sure that you add the correct library path to identify its position in the hierarchy.  
**2x1\_boss;2x1\_boss.prt;2x1\_boss.cgm;/my\_udfs;**
4. Select **Tools => User Defined Features => Configure Library => Reload** to reload your user defined UDF's from the hierarchy.
5. Delete the **library\_dir.txt** file and original **.prt** and **.cgm** UDF definition files.

This method also applies for legacy, pre-NX UDF's.

If you choose to define a location for standard UDF's on your network for users to point to then consider the following variables:

**UGII\_UDF\_DATABASE\_FILE** => Points to the **dbc\_udf\_ascii.def**  
**UGII\_UDF\_DEFINITION\_FILE** => Points to the **udf\_database.txt**  
**UGII\_UDF\_LIBRARY\_DIR** => Points to the directory containing the **.prt** and **.cgm** files.

**Ben Broad**



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