

Populating the DDP Default Library

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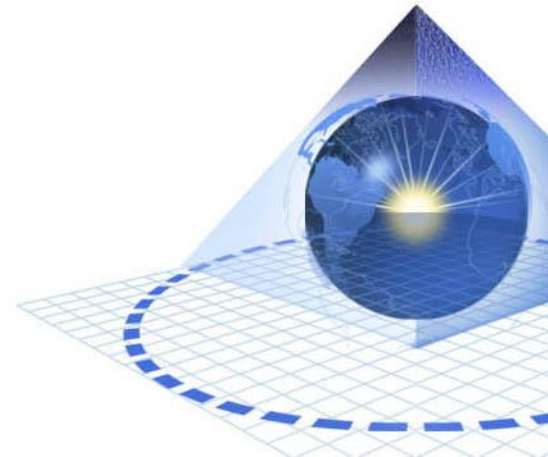
Capturing and Reusing
DDP Information

Ron Jackson, SPI SME



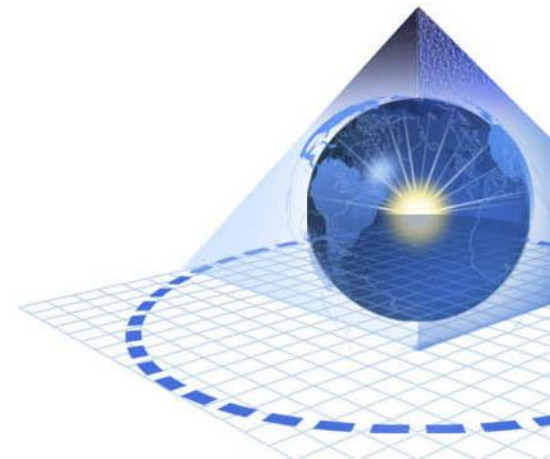
Topics

- ◆ Dimensional Data Re-use
- ◆ Purpose of Default Library
- ◆ Default vs. Vendor
- ◆ DDP Information Structure
- ◆ Importing into a Master Default Library
- ◆ Importing into a Project Default Library
- ◆ What's the next step?



Dimensional Data Re-use

- ◆ Previous project “Certified” information sufficient as new project “Preliminary” information..
- ◆ Less data entry by designers.
- ◆ Quicker transfer to piping for preliminary iso’s.
- ◆ Kept in dedicated SPI database

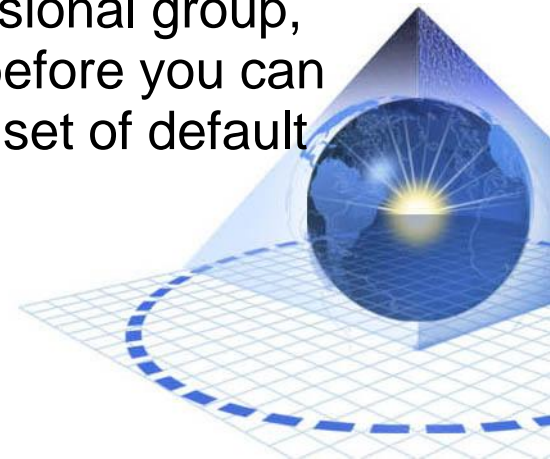


Default Dimensional Data

“This feature enables you to store and manage preliminary dimensional data for your instrumentation design. You can use standard (default) dimensions of known manufacturers who are likely to supply the instruments. This Default data is stored in the Default Library which allows you browse through the data, modify it, and copy it to the Working data as needed. Once sufficient Default data is available, the DDP designer can provide this data to the piping designers for their preliminary design. The Default data will then be replaced or modified according to the actual dimensional data received from the manufacturers.

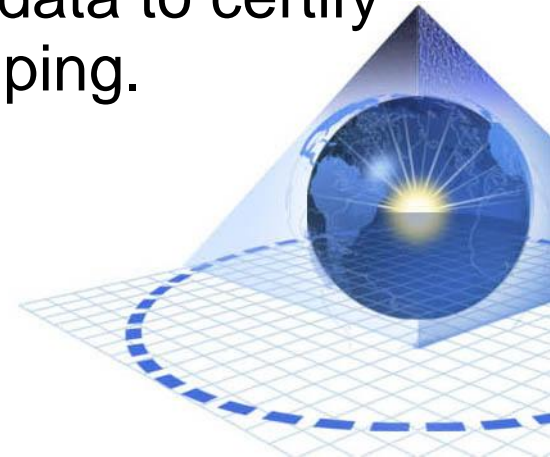
Note that you must first define the appropriate dimensional group, the process connection data, and the manufacturer before you can start entering default data. Remember that only one set of default dimensional data can exist for a domain.”

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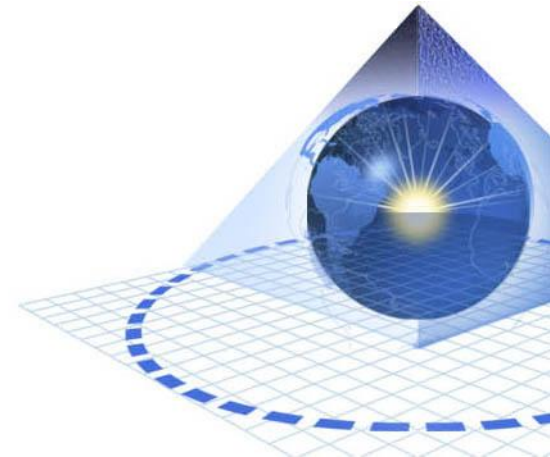
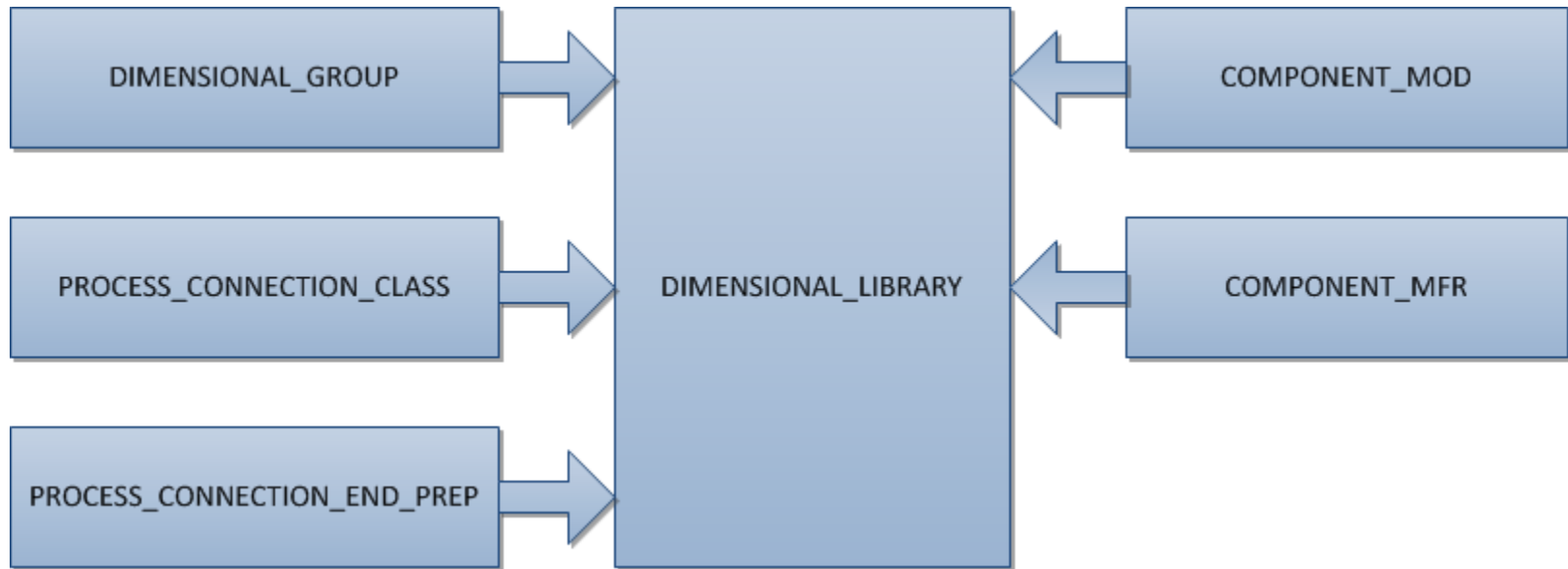
Default vs. Vendor Libraries

- ◆ Default Library - Store and manage preliminary dimensional data for your instrumentation design. You can use standard (default) dimensions of known manufacturers who are likely to supply the instruments.
- ◆ Vendor Library - Store and manage certified vendor dimensional data. Vendor data is used for data validation and verification purposes of dimensional data for piping design. You use Vendor data to certify the Working data prior to its release to piping.



Dimensional Default Library Structure

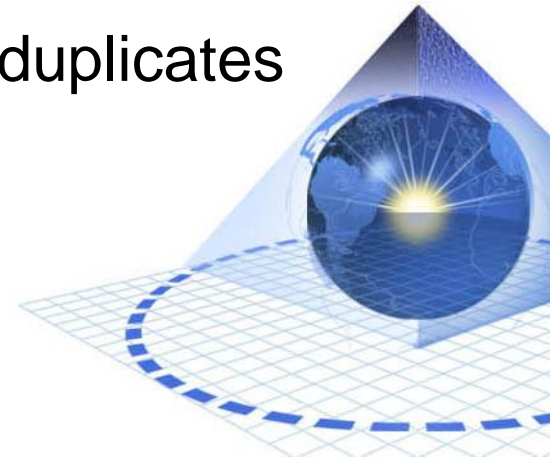
◆ Default Library table relationship



Importing into a Master Default Library

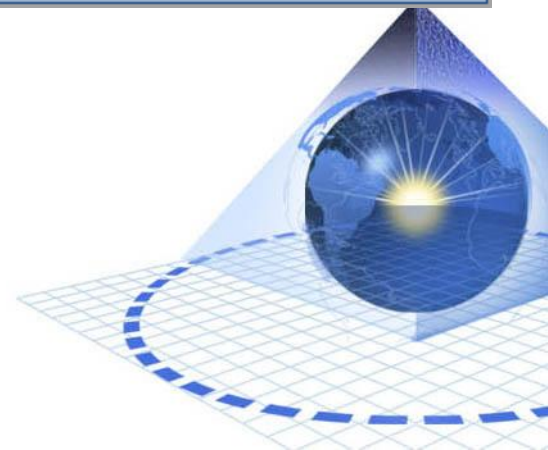
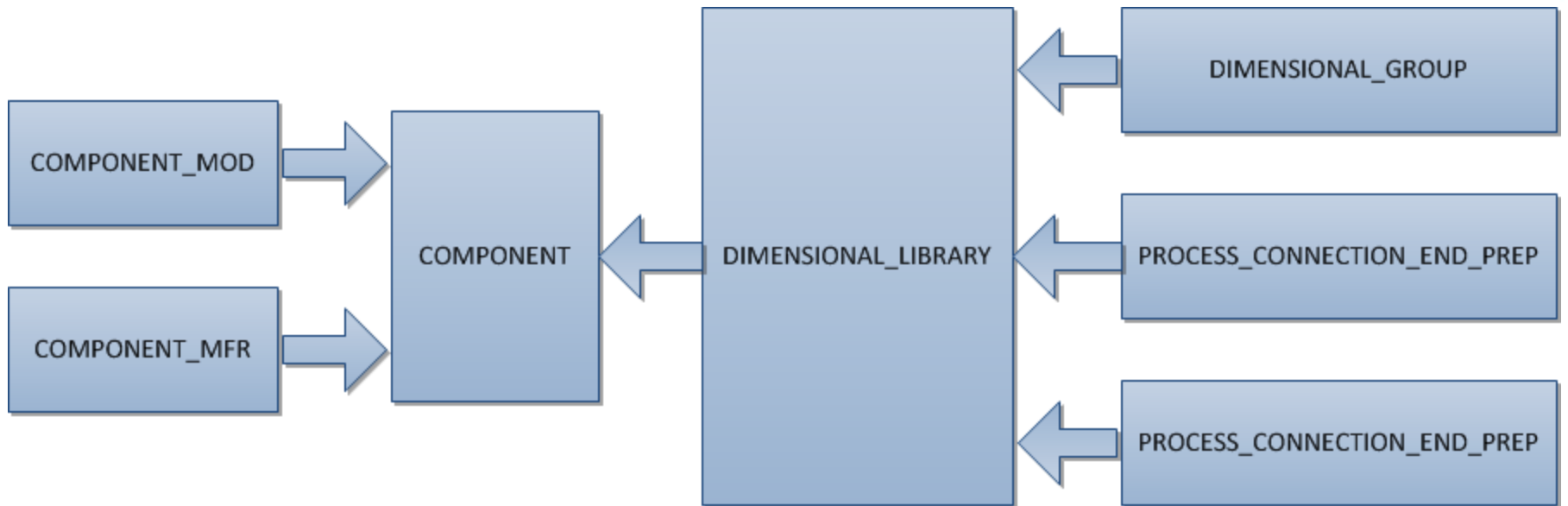
- ◆ Import Module used to link to other databases.
- ◆ Three imports needed per database.
 - ✓ PROCESS_CONNECTION_END_PREP (table)
 - ✓ PROCESS_CONNECTION_CLASS (table)
 - ✓ DDP_EXPORT_VIEW (view)(delivered with database)
- ◆ Information captured from component dimensional information.
- ◆ Import Module validates data to prevent duplicates

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Importing into a Master Default Library

- ◆ DDP_EXPORT_VIEW table relationship



Importing into a Master Default Library

◆ Creating import links

The image displays three sequential screenshots of the 'Link Definitions' dialog box, illustrating the steps to create import links for different tables. Each dialog box has a blue title bar and a close button (X) in the top right corner.

- First Dialog:** The 'Link' field contains '1. PROC_CONNECTION_END_PREP'. The 'Import method' is set to 'Single table'. The 'Name of module or table' dropdown is set to 'PROCESS_CONNECTION_END_PREP'. The 'Table' field is empty.
- Second Dialog:** The 'Link' field contains '2. PROC_CONNECTION_CLASS'. The 'Import method' is set to 'Single table'. The 'Name of module or table' dropdown is set to 'PROCESS_CONNECTION_CLASS'. The 'Table' field is empty.
- Third Dialog:** The 'Link' field contains '3. DIMENSIONAL_LIBRARY'. The 'Import method' is set to 'Single table'. The 'Name of module or table' dropdown is set to 'DIMENSIONAL_LIBRARY'. The 'Table' field is set to 'DDP_EXPORT_VIEW'. There are 'Connect' and 'View...' buttons next to the table dropdown.

Common fields across all dialog boxes include 'Database type' (O10 ORACLE), 'Service name' (INR3GCSI), 'User name' (r3gc_spi), and 'Password' (masked with asterisks). A 'Save as new link' checkbox is present at the bottom of each dialog. The 'Apply' and 'Close' buttons are visible at the bottom of the first two dialogs, while the third dialog also includes a 'Help' button.

Importing into a Master Default Library

◆ PROCESS_CONNECTION_END_PREP properties.

The screenshot shows the 'Link Properties' dialog box for the link '1. PROC_CONNECTION_END_PREP'. The 'General' tab is selected. The 'General parameters' section contains the following options:

- Generate rejected data report
- Insert data into reference tables
- Messages off
- Ignore duplicate source rows
- Use reserved symbols with import
- Match case

The 'Undefined NOT NULL fields' section contains the following options:

- Use default value
- Reject rows

Buttons at the bottom: OK, Cancel, Table Definition..., Help.

The screenshot shows the 'Link Properties' dialog box for the link '1. PROC_CONNECTION_END_PREP'. The 'Import Mode' tab is selected. The 'Target database import mode' section contains the following options:

- Insert
- Insert and update
- Delete
- Move

The 'Target database update conditions' section contains the following options:

- Update for source containing a NULL value
- Update for source containing a space or a zero value
- Do not insert

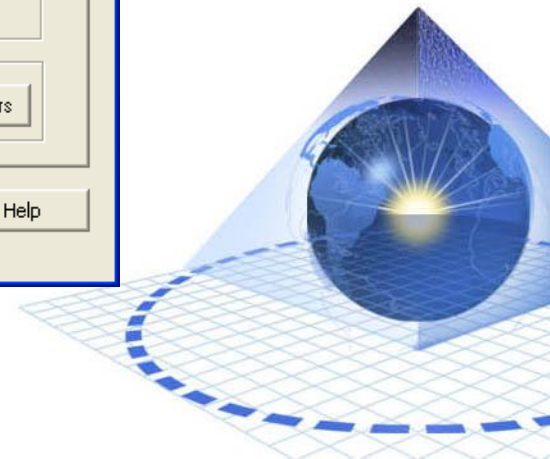
The 'Deletion option' section contains the following options:

- Delete associated tags

The 'Refresh from source' section contains the following options:

- Apply
- Parameters

Buttons at the bottom: OK, Cancel, Table Definition..., Help.



Importing into a Master Default Library

◆ PROCESS_CONNECTION_END_PREP mapping.

Import Link (table) - 1. PROC_CONNECTION_END_PREP

Source PROCESS_CONNECTION_END_PREP			Target PROCESS_CONNECTION_END_PREP Definition: Default			
Name	Type	Length	Source Name	Target Name	Type	Length
area_id	decimal	0	proc_connect_end_prep_des_cod	PROC CONNECT END PREP DES COD	char	15
chg_date	datetime		proc_connect_end_prep_desc	PROC CONNECT END PREP DESC	char	50
chg_num	decimal	0	proc_connect_end_prep_name	PROC CONNECT END PREP NAME	char	30
chg_status	char	1	proc_connect_end_prep_suffix	PROC CONNECT END PREP SUFFIX	char	10
plant_id	decimal	0				
proc_connect_end_prep_des_cod	char	15				
proc_connect_end_prep_desc	char	50				
proc_connect_end_prep_id	decimal	0				
proc_connect_end_prep_name	char	30				
proc_connect_end_prep_suffix	char	10				
proj_id	decimal	0				
site_id	decimal	0				
unit_id	decimal	0				
user_name	char	30				

Importing into a Master Default Library

◆ PROCESS_CONNECTION_CLASS properties.

The screenshot shows the 'Link Properties' dialog box for the link '2. PROC_CONNECTION_CLASS'. The 'General' tab is selected. The 'General parameters' section contains the following options:

- Generate rejected data report
- Insert data into reference tables
- Messages off
- Ignore duplicate source rows
- Use reserved symbols with import
- Match case

The 'Undefined NOT NULL fields' section contains the following options:

- Use default value
- Reject rows

Buttons at the bottom: OK, Cancel, Table Definition..., Help.

The screenshot shows the 'Link Properties' dialog box for the link '1. PROC_CONNECTION_END_PREP'. The 'Import Mode' tab is selected. The 'Target database import mode' section contains the following options:

- Insert
- Insert and update
- Delete
- Move

The 'Target database update conditions' section contains the following options:

- Update for source containing a NULL value
- Update for source containing a space or a zero value
- Do not insert

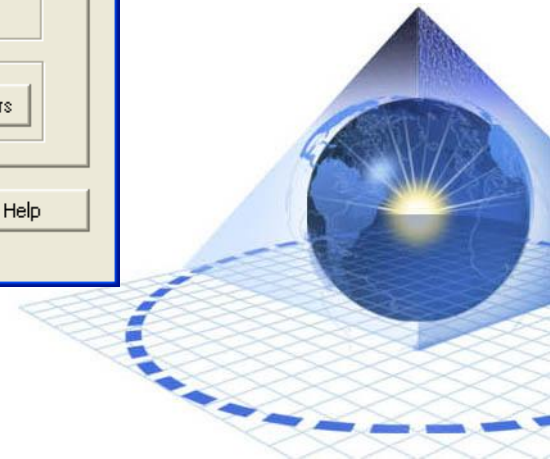
The 'Deletion option' section contains the following options:

- Delete associated tags

The 'Refresh from source' section contains the following options:

- Apply
- Parameters

Buttons at the bottom: OK, Cancel, Table Definition..., Help.



Importing into a Master Default Library

◆ PROCESS_CONNECTION_CLASS mapping.

Import Link (table) - 2. PROC_CONNECTION_CLASS

Source PROCESS_CONNECTION_CLASS				Target PROCESS_CONNECTION_CLASS Definition: Default			
Name	Type	Length		Source Name	Target Name	Type	Length
area_id	decimal	0		proc_connect_class_desc	PROC CONNECT CLASS DESC	char	30
chg_date	datetime			proc_connect_class_name	PROC CONNECT CLASS NAME	char	10
chg_num	decimal	0					
chg_status	char	1					
plant_id	decimal	0					
proc_connect_class_desc	char	30					
proc_connect_class_id	decimal	0					
proc_connect_class_name	char	10					
proj_id	decimal	0					
site_id	decimal	0					
unit_id	decimal	0					
user_name	char	30					

Importing into a Master Default Library

◆ DIMENSIONAL_LIBRARY properties

The screenshot shows the 'Link Properties' dialog box for the link '3. DIMENSIONAL_LIBRARY'. The 'General' tab is selected. The 'General parameters' section contains the following options:

- Generate rejected data report
- Insert data into reference tables
- Messages off
- Ignore duplicate source rows
- Use reserved symbols with import
- Match case

The 'Undefined NOT NULL fields' section contains the following options:

- Use default value
- Reject rows

Buttons at the bottom: OK, Cancel, Table Definition..., Help.

The screenshot shows the 'Link Properties' dialog box for the link '3. DIMENSIONAL_LIBRARY'. The 'Import Mode' tab is selected. The 'Target database import mode' section contains the following options:

- Insert
- Insert and update
- Delete
- Move

The 'Target database update conditions' section contains the following options:

- Update for source containing a NULL value
- Update for source containing a space or a zero value
- Do not insert

The 'Deletion option' section contains the following options:

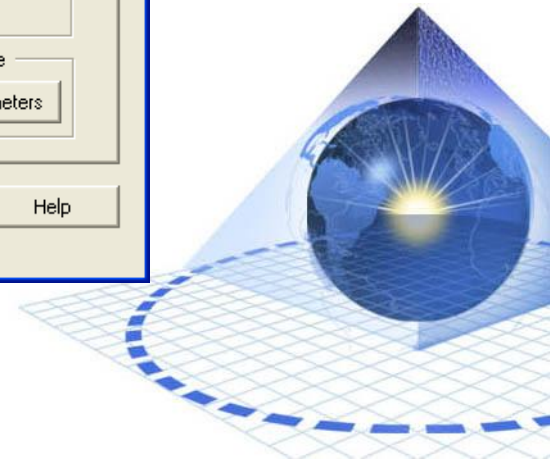
- Delete associated tags

The 'Refresh from source' section contains the following options:

- Apply
- Parameters

Buttons at the bottom: OK, Cancel, Table Definition..., Help.

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Importing into a Master Default Library

◆ DIMENSIONAL_LIBRARY mapping

Import Link (multi table) - 3. DIMENSIONAL_LIBRARY

Source				Target					
Name	Type	Length		Source Name	Target Name	Type	Length	Column Name	Table Name
chg_date	datetime			cmpnt_mfr_name	CMPNT_MFR_NAME	char	20	CMPNT_MFR_NAME	COMPONENT_MFR
cmpnt_id	decimal	0			CMPNT_MFR_DESC	char	40	CMPNT_MFR_DESC	
cmpnt_mfr_name	char	20			IP_ADDRESS	char	255	IP_ADDRESS	
cmpnt_mod_name	char	100			MFR_COMPANY_IDENTIFICATION	char	40	MFR_COMPANY_IDENTIFICATION	
cmpnt_name	char	50		cmpnt_mod_name	CMPNT_MOD_NAME	char	100	CMPNT_MOD_NAME	COMPONENT_MOD
dim_3_size_uid	char	10			PROC_FUNC_NAME/PROC_FUNC_ID	char	20	PROC_FUNC_NAME	
dim_4_size_uid	char	10			CMPNT_MOD_DESC	char	40	CMPNT_MOD_DESC	
dim_grp_cad_code	char	20			CMPNT_MOD_UDF_C01	char	20	CMPNT_MOD_UDF_C01	
dim_grp_name	char	20			CMPNT_MOD_UDF_C02	char	20	CMPNT_MOD_UDF_C02	
dim_inlet_size_uid	char	10			CMPNT_MOD_UDF_C03	char	20	CMPNT_MOD_UDF_C03	
dim_outlet_size_uid	char	10			CMPNT_MOD_UDF_C04	char	20	CMPNT_MOD_UDF_C04	
dim_param01	decimal	4			CMPNT_MOD_UDF_C05	char	20	CMPNT_MOD_UDF_C05	
dim_param02	decimal	4			CMPNT_MOD_UDF_C06	char	20	CMPNT_MOD_UDF_C06	
dim_param03	decimal	4			CMPNT_MOD_UDF_C07	char	20	CMPNT_MOD_UDF_C07	
dim_param04	decimal	4			CMPNT_MOD_UDF_C08	char	20	CMPNT_MOD_UDF_C08	
dim_param05	decimal	4			CMPNT_MOD_UDF_C09	char	20	CMPNT_MOD_UDF_C09	
dim_param06	decimal	4			CMPNT_MOD_UDF_C10	char	20	CMPNT_MOD_UDF_C10	
dim_param07	decimal	4			CMPNT_MOD_UDF_C11	char	20	CMPNT_MOD_UDF_C11	
dim_param08	decimal	4			CMPNT_MOD_UDF_C12	char	20	CMPNT_MOD_UDF_C12	
dim_param09	decimal	4			CMPNT_MOD_UDF_C13	char	20	CMPNT_MOD_UDF_C13	
dim_param10	decimal	4			CMPNT_MOD_UDF_C14	char	20	CMPNT_MOD_UDF_C14	
dim_param11	decimal	4			CMPNT_MOD_UDF_C15	char	20	CMPNT_MOD_UDF_C15	
dim_param12	decimal	4			CMPNT_MOD_UDF_C16	char	20	CMPNT_MOD_UDF_C16	
dim_param13	decimal	4			CMPNT_MOD_UDF_C17	char	20	CMPNT_MOD_UDF_C17	
dim_param14	decimal	4			CMPNT_MOD_UDF_C18	char	20	CMPNT_MOD_UDF_C18	
dim_param15	decimal	4			CMPNT_MOD_UDF_C19	char	20	CMPNT_MOD_UDF_C19	
dim_param16	decimal	4			CMPNT_MOD_UDF_C20	char	20	CMPNT_MOD_UDF_C20	
dim_param17	decimal	4			MOD_COMPANY_IDENTIFICATION	char	40	MOD_COMPANY_IDENTIFICATION	
dim_param18	decimal	4			DDP_FORM_NAME	char	20	DDP_FORM_NAME	DIMENSIONAL_FORM
dim_param19	decimal	4			DDP_FORM_DESC	char	40	DDP_FORM_DESC	
dim_param20	decimal	4		dim_grp_name	DIM_GRP_NAME	char	20	DIM_GRP_NAME	DIMENSIONAL_GROL
dim_param21	decimal	4			CONNECT_POINT_3	char	1	CONNECT_POINT_3	
dim_param22	decimal	4			CONNECT_POINT_4	char	1	CONNECT_POINT_4	
dim_param23	decimal	4		dim_grp_cad_code	DIM_GRP_CAD_CODE	char	20	DIM_GRP_CAD_CODE	
dim_param24	decimal	4			DIM_GRP_DESC	char	200	DIM_GRP_DESC	
dim_param25	decimal	4			DIM_GRP_PIC	char	10000000	DIM_GRP_PIC	
dim_param26	decimal	4			DIM_GRP_PIC_FLG	char	1	DIM_GRP_PIC_FLG	
dim_param27	decimal	4			DIM_GRP_PIC_TYPE	char	3	DIM_GRP_PIC_TYPE	
dim_param28	decimal	4		proc_conn2_end_prep_name	PROC_CONNECT_END_PREP_NAME/DIM_OUTLET_END_PREP_ID	char	30	PROC_CONNECT_END_PREP_NAME	DIMENSIONAL_LIBRA
dim_param29	decimal	4		proc_conn2_class_name	PROC_CONNECT_CLASS_NAME/DIM_OUTLET_CLASS_ID	char	10	PROC_CONNECT_CLASS_NAME	
dim_param30	decimal	4		proc_conn3_end_prep_name	PROC_CONNECT_END_PREP_NAME/DIM_3_END_PREP_ID	char	30	PROC_CONNECT_END_PREP_NAME	
dim_pipe_design_area	char	10		proc_conn4_class_name	PROC_CONNECT_CLASS_NAME/DIM_4_CLASS_ID	char	10	PROC_CONNECT_CLASS_NAME	
dim_revision_number	decimal	0		proc_conn4_end_prep_name	PROC_CONNECT_END_PREP_NAME/DIM_4_END_PREP_ID	char	30	PROC_CONNECT_END_PREP_NAME	
dim_status_name	char	20		proc_conn3_class_name	PROC_CONNECT_CLASS_NAME/DIM_3_CLASS_ID	char	10	PROC_CONNECT_CLASS_NAME	

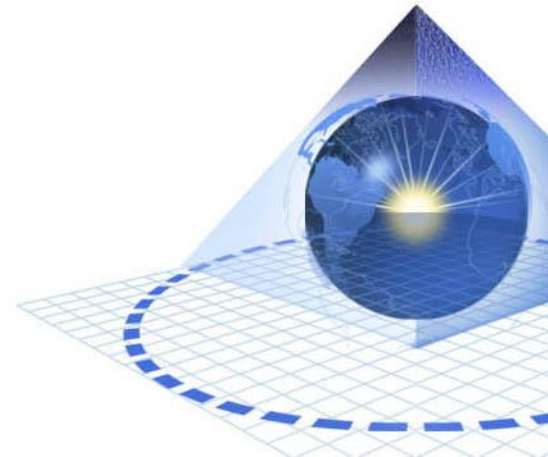
Importing into a Master Default Library

◆ DIMENSIONAL_LIBRARY mapping

proc_conn1_class_name	char	10	proc_conn3_size	DIM_3_SIZE	numbe	22	DIM_3_SIZE	
proc_conn1_end_prep_name	char	30	proc_conn4_size	DIM_4_SIZE	numbe	22	DIM_4_SIZE	
proc_conn1_end_suffix	char	15		UOM_CODE/UOM_ID	char	10	UOM_CODE	
proc_conn1_line_sched	char	10	dim_3_size_uid	DIM_3_SIZE_UID	char	10	DIM_3_SIZE_UID	
proc_conn1_size	decimal	4	dim_4_size_uid	DIM_4_SIZE_UID	char	10	DIM_4_SIZE_UID	
proc_conn2_class_name	char	10	dim_param01	DIM_GRP_UDFN01	numbe	22	DIM_GRP_UDFN01	
proc_conn2_end_prep_name	char	30	dim_param02	DIM_GRP_UDFN02	numbe	22	DIM_GRP_UDFN02	
proc_conn2_end_suffix	char	15	dim_param03	DIM_GRP_UDFN03	numbe	22	DIM_GRP_UDFN03	
proc_conn2_line_sched	char	10	dim_param04	DIM_GRP_UDFN04	numbe	22	DIM_GRP_UDFN04	
proc_conn2_size	decimal	4	dim_param05	DIM_GRP_UDFN05	numbe	22	DIM_GRP_UDFN05	
proc_conn3_class_name	char	10	dim_param06	DIM_GRP_UDFN06	numbe	22	DIM_GRP_UDFN06	
proc_conn3_end_prep_name	char	30	dim_param07	DIM_GRP_UDFN07	numbe	22	DIM_GRP_UDFN07	
proc_conn3_end_suffix	char	15	dim_param08	DIM_GRP_UDFN08	numbe	22	DIM_GRP_UDFN08	
proc_conn3_line_sched	char	10	dim_param09	DIM_GRP_UDFN09	numbe	22	DIM_GRP_UDFN09	
proc_conn3_size	decimal	4	dim_param10	DIM_GRP_UDFN10	numbe	22	DIM_GRP_UDFN10	
proc_conn4_class_name	char	10	dim_param11	DIM_GRP_UDFN11	numbe	22	DIM_GRP_UDFN11	
proc_conn4_end_prep_name	char	30	dim_param12	DIM_GRP_UDFN12	numbe	22	DIM_GRP_UDFN12	
proc_conn4_end_suffix	char	15	dim_param13	DIM_GRP_UDFN13	numbe	22	DIM_GRP_UDFN13	
proc_conn4_line_sched	char	10	dim_param14	DIM_GRP_UDFN14	numbe	22	DIM_GRP_UDFN14	
proc_conn4_size	decimal	4	dim_param15	DIM_GRP_UDFN15	numbe	22	DIM_GRP_UDFN15	
unit_num	char	40	dim_param16	DIM_GRP_UDFN16	numbe	22	DIM_GRP_UDFN16	
weight_dry	number		dim_param17	DIM_GRP_UDFN17	numbe	22	DIM_GRP_UDFN17	
weight_wet	number		dim_param18	DIM_GRP_UDFN18	numbe	22	DIM_GRP_UDFN18	
			dim_param19	DIM_GRP_UDFN19	numbe	22	DIM_GRP_UDFN19	
			dim_param20	DIM_GRP_UDFN20	numbe	22	DIM_GRP_UDFN20	
			dim_param21	DIM_GRP_UDFN21	numbe	22	DIM_GRP_UDFN21	
			dim_param22	DIM_GRP_UDFN22	numbe	22	DIM_GRP_UDFN22	
			dim_param23	DIM_GRP_UDFN23	numbe	22	DIM_GRP_UDFN23	
			dim_param24	DIM_GRP_UDFN24	numbe	22	DIM_GRP_UDFN24	
			dim_param25	DIM_GRP_UDFN25	numbe	22	DIM_GRP_UDFN25	
			dim_param26	DIM_GRP_UDFN26	numbe	22	DIM_GRP_UDFN26	
			dim_param27	DIM_GRP_UDFN27	numbe	22	DIM_GRP_UDFN27	
			dim_param28	DIM_GRP_UDFN28	numbe	22	DIM_GRP_UDFN28	
			dim_param29	DIM_GRP_UDFN29	numbe	22	DIM_GRP_UDFN29	
			dim_param30	DIM_GRP_UDFN30	numbe	22	DIM_GRP_UDFN30	
			proc_conn1_size	DIM_INLET_SIZE	numbe	22	DIM_INLET_SIZE	
			dim_inlet_size_uid	DIM_INLET_SIZE_UID	char	10	DIM_INLET_SIZE_UID	
			dim_outlet_size_uid	DIM_OUTLET_SIZE_UID	char	10	DIM_OUTLET_SIZE_UID	
			weight_dry	DRY_WEIGHT	numbe	22	DRY_WEIGHT	
			weight_wet	FULL_WEIGHT	numbe	22	FULL_WEIGHT	
				PROC_CONNECT_CLASS_NAME	char	10	PROC_CONNECT_CLASS_NAME	PROCESS_CONNECT
				PROC_CONNECT_CLASS_DESC	char	30	PROC_CONNECT_CLASS_DESC	
				PROC_CONNECT_END_PREP_NAME	char	30	PROC_CONNECT_END_PREP_NAME	PROCESS_CONNECT
				PROC_CONNECT_END_PREP_DES_COD	char	15	PROC_CONNECT_END_PREP_DES_COD	
				PROC_CONNECT_END_PREP_DESC	char	50	PROC_CONNECT_END_PREP_DESC	
				PROC_CONNECT_END_PREP_SUFFIX	char	10	PROC_CONNECT_END_PREP_SUFFIX	

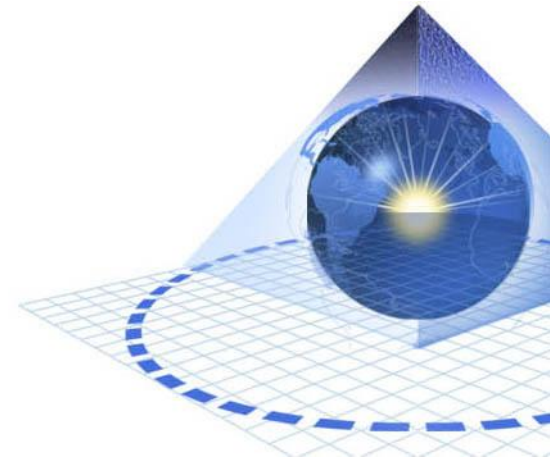
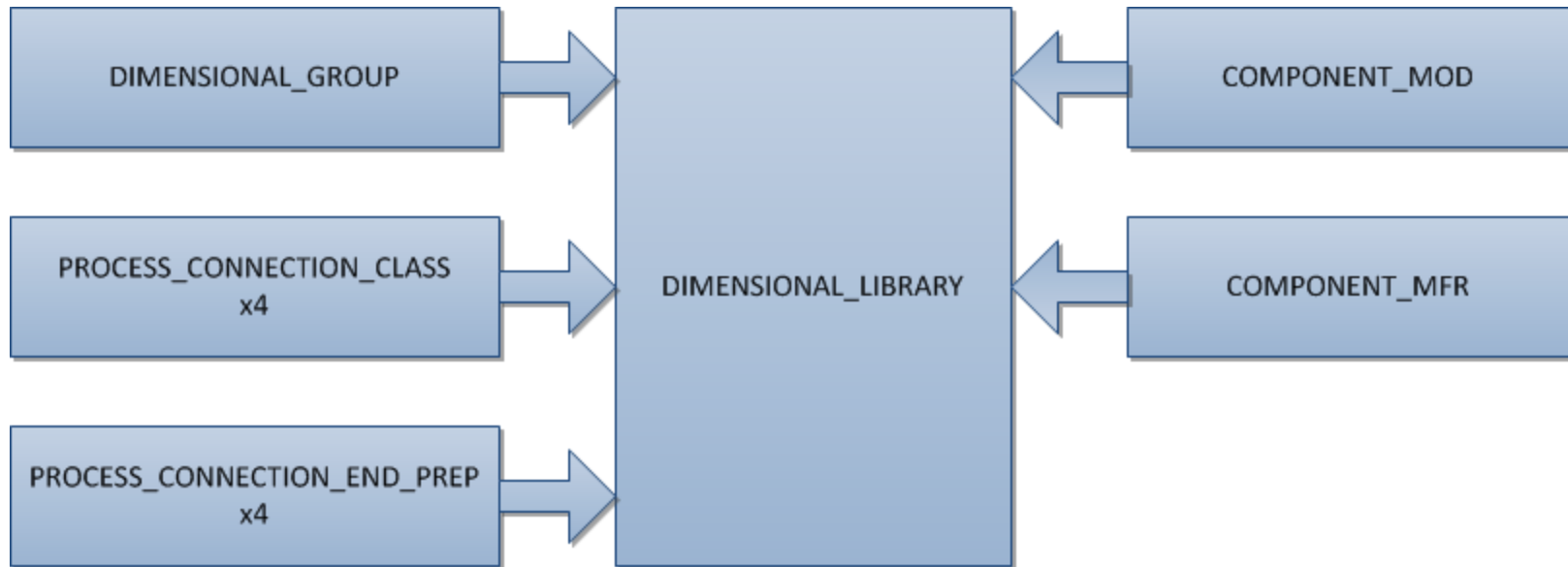
Importing into a Project Default Library

- ◆ Preload Groups and Forms via Domain Admin Module
- ◆ Currently all or nothing from Master Default Library
- ◆ Similar process to importing to Master Default Library
 - ✓ PROCESS_CONNECTION_END_PREP (table)
 - ✓ PROCESS_CONNECTION_CLASS (table)
 - ✓ DDP_TRANSFER (view)(custom added to database)
- ◆ Save import links to reuse on future projects



Importing into a Project Default Library

- ◆ Table relationship in DDP_TRANSFER view



Importing into a Project Default Library

- ◆ Currently all or nothing from Master Default Library

Link Definitions

Link: 3. DIMENSIONAL_LIBRARY

Import method

Single table Module (multiple tables)

Name of module or table: DIMENSIONAL_LIBRARY

Source

Database type: Oracle 11g

Service name: hompg4si

User name: ddp_library

Password: *****

Table: DDP_TRANSFER

Connect View...

Save as new link

Apply Close Help

Link Properties

Link: 3. DIMENSIONAL_LIBRARY

Import Level Custom Fields Specs Multi-Form Style

General Import Mode Tag/Loop Source Comparison

General parameters

Generate rejected data report

Insert data into reference tables

Messages off

Ignore duplicate source rows

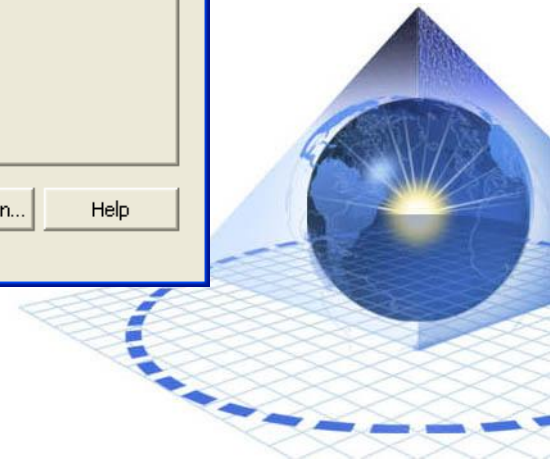
Use reserved symbols with import

Match case

Undefined NOT NULL fields

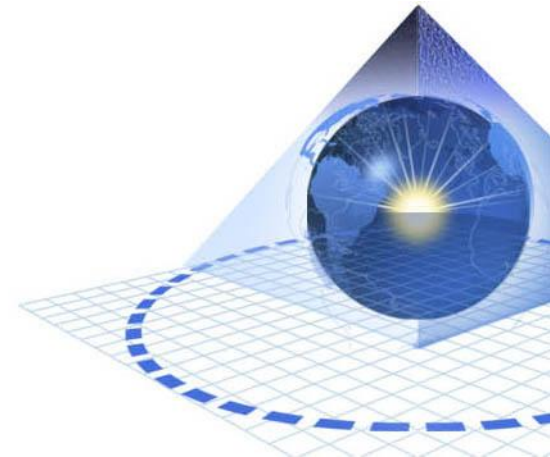
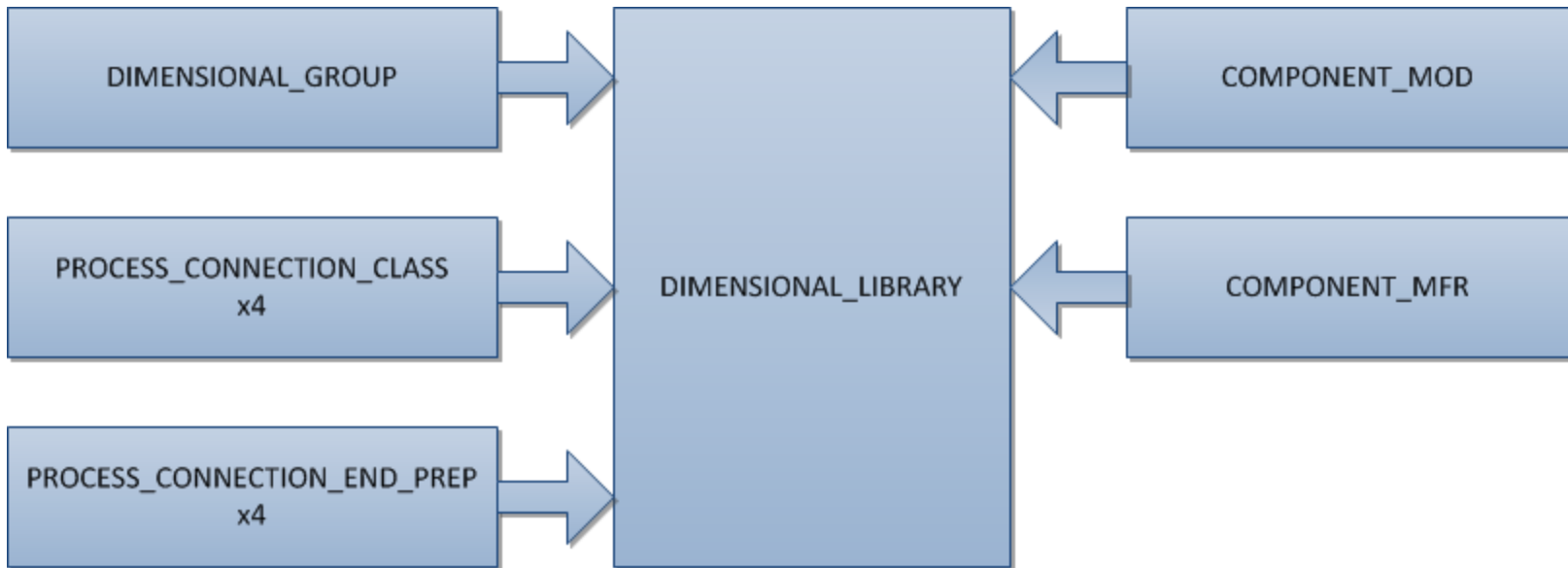
Use default value Reject rows

OK Cancel Table Definition... Help



Importing into a Project Default Library

◆ DDP_VIEW mapping



Populated Default Library

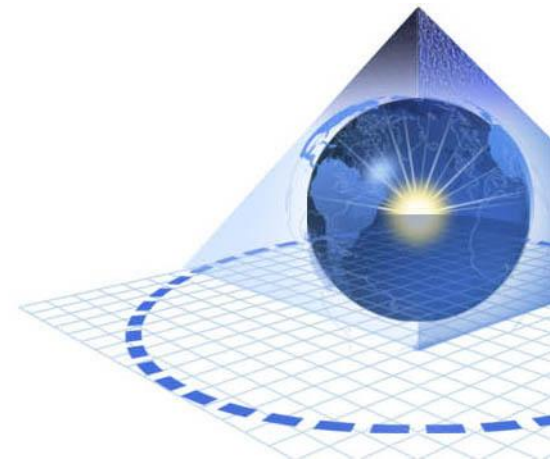
- ◆ Some “tweaking” may be necessary
- ◆ Clearing of Default library recommended at EOP

Dimensional Data for Piping Module		Default Data- All Groups													
Manufacturer	Model	Group	Inlet Size	Unit of Inlet Size	Inlet Class	Inlet End Prep	Inlet End Prep Design Code	Outlet Size	Unit of Outlet Size	Outlet Class	Outlet End Prep	Outlet End Prep Design Code	Dry Weight	Full Weight	Unit of Measure
Fisher		SDG1	1	in	300	RF	ASME-B16.5	1	in	300	RF	ASME-B16.5	117		lb
Fisher		SDG1	1.5	in	300	RF	ASME-B16.5	1.5	in	300	RF	ASME-B16.5	138		lb
Fisher		SDG1	2	in	300	RF	ASME-B16.5	2	in	300	RF	ASME-B16.5	344		lb
Fisher		SDG1	3	in	300	RF	ASME-B16.5	3	in	300	RF	ASME-B16.5	344		lb
Fisher		SDG1	4	in	300	RF	ASME-B16.5	4	in	300	RF	ASME-B16.5	370		lb
Fisher		SDG1	6	in	300	RF	ASME-B16.5	6	in	300	RF	ASME-B16.5	672		lb
Fisher		SDG1	8	in	300	RF	ASME-B16.5	8	in	300	RF	ASME-B16.5	916		lb
Fisher		SDG1	1	in	600	RF	ASME-B16.5	1	in	600	RF	ASME-B16.5	122		lb
Fisher		SDG1	1.5	in	600	RF	ASME-B16.5	1.5	in	600	RF	ASME-B16.5	146		lb
Fisher		SDG1	2	in	600	RF	ASME-B16.5	2	in	600	RF	ASME-B16.5	262		lb
Fisher		SDG1	3	in	600	RF	ASME-B16.5	3	in	600	RF	ASME-B16.5	344		lb
Fisher		SDG1	4	in	600	RF	ASME-B16.5	4	in	600	RF	ASME-B16.5	408		lb
Fisher		SDG1	6	in	600	RF	ASME-B16.5	6	in	600	RF	ASME-B16.5	872		lb
Fisher		SDG1	8	in	600	RF	ASME-B16.5	8	in	600	RF	ASME-B16.5	1086		lb
Fisher	8580D/2052	SDG1	1	in	150	RF	ASME-B16.5	1	in	150	RF	ASME-B16.5	117		lb
Fisher	8580D/2052	SDG1	1.5	in	150	RF	ASME-B16.5	1.5	in	150	RF	ASME-B16.5	131		lb
Fisher	8580D/2052	SDG1	2	in	150	RF	ASME-B16.5	2	in	150	RF	ASME-B16.5	247		lb
Fisher	8580D/2052	SDG1	3	in	150	RF	ASME-B16.5	3	in	150	RF	ASME-B16.5	318		lb
Fisher	8580D/2052	SDG1	4	in	150	RF	ASME-B16.5	4	in	150	RF	ASME-B16.5	345		lb
Fisher	8580D/2052	SDG1	6	in	150	RF	ASME-B16.5	6	in	150	RF	ASME-B16.5	602		lb
Fisher	8580D/2052	SDG1	8	in	150	RF	ASME-B16.5	8	in	150	RF	ASME-B16.5	916		lb



What's The Next Step?

- ◆ Develop “user friendly” interface
- ◆ Automate import for supporting tables
- ◆ Enable filters to support project Approved Vendors List



Questions



FLUOR[®]

