

TATA TECHNOLOGIES

Make it real. Make it better.

PLM Training

(by PLM Team,
Tata Technologies Ltd.,
TML, Pimpri)

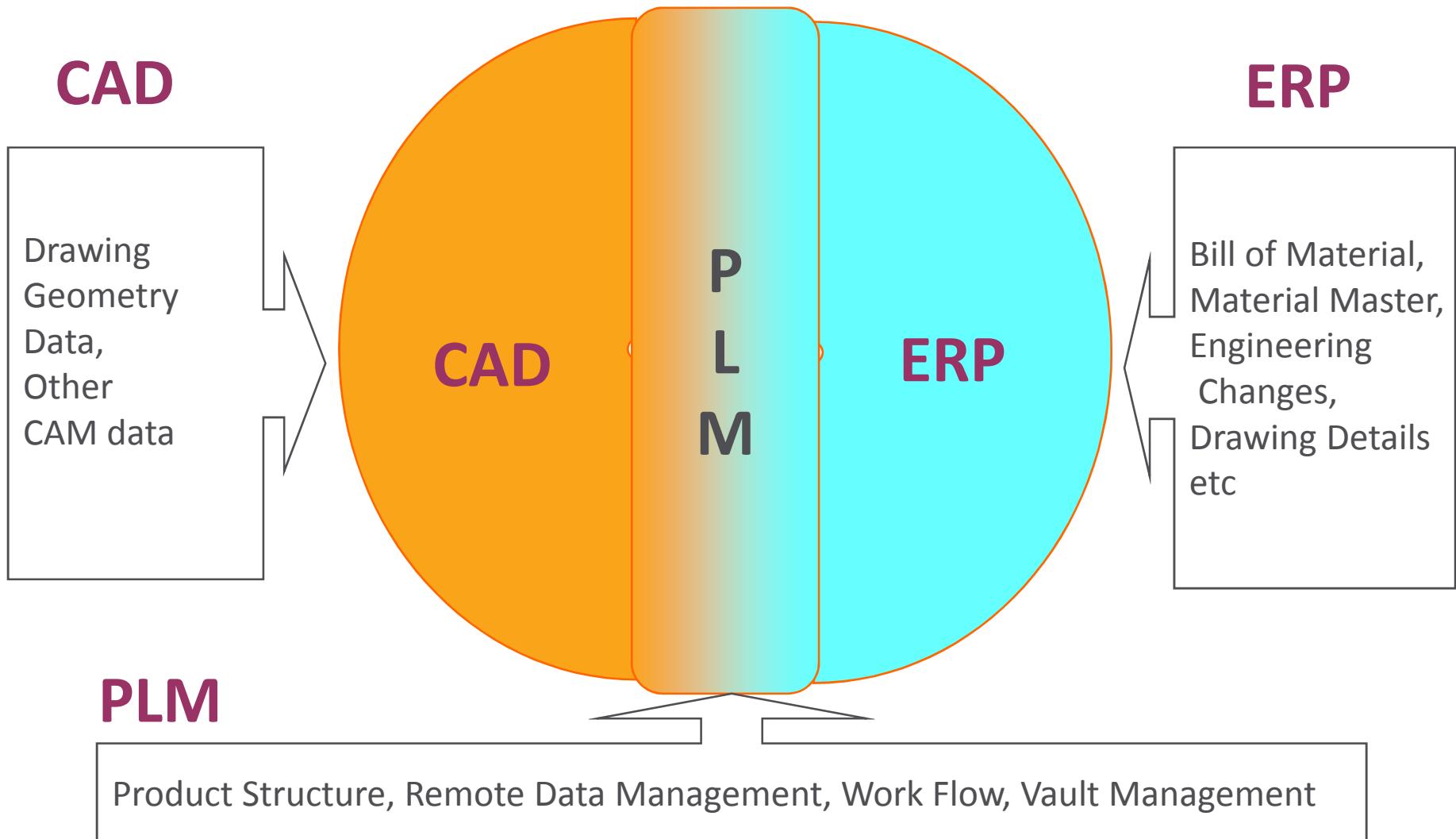
Introduction to PLM

PLM stands for Product Lifecycle Management. It means managing a product right from its initial phase (Idea Generation) to the end of its lifecycle (Disposal).

Lifecycle of a product



PLM interfacing CAD & ERP



Value of PLM

- Product Life Management is an integrated solution to manage Product Data and Processes in an integrated and consistent manner through all stages of Product Life Cycle.
- Product Data involves,
 - I. CAD / CAM geometry Data,
 - II. Documents : Drawing Documents, Design Documents etc.
 - III. Part details, product structures, and other non-geometric information in database.

Value of PLM

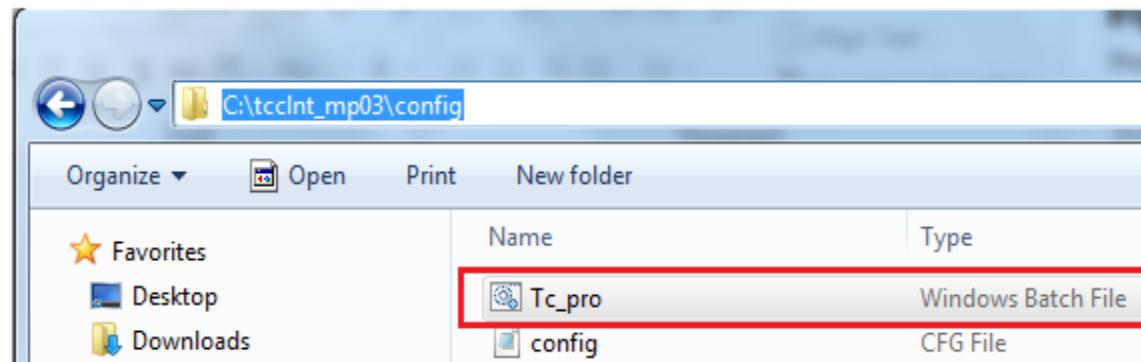
- Relates all data related to a product--not just documents--(for example, changes, drawings, and specifications), and manages the related processes
- Makes information easily available for ALL consumers In the view they want--not just designers

Launching of PLM client

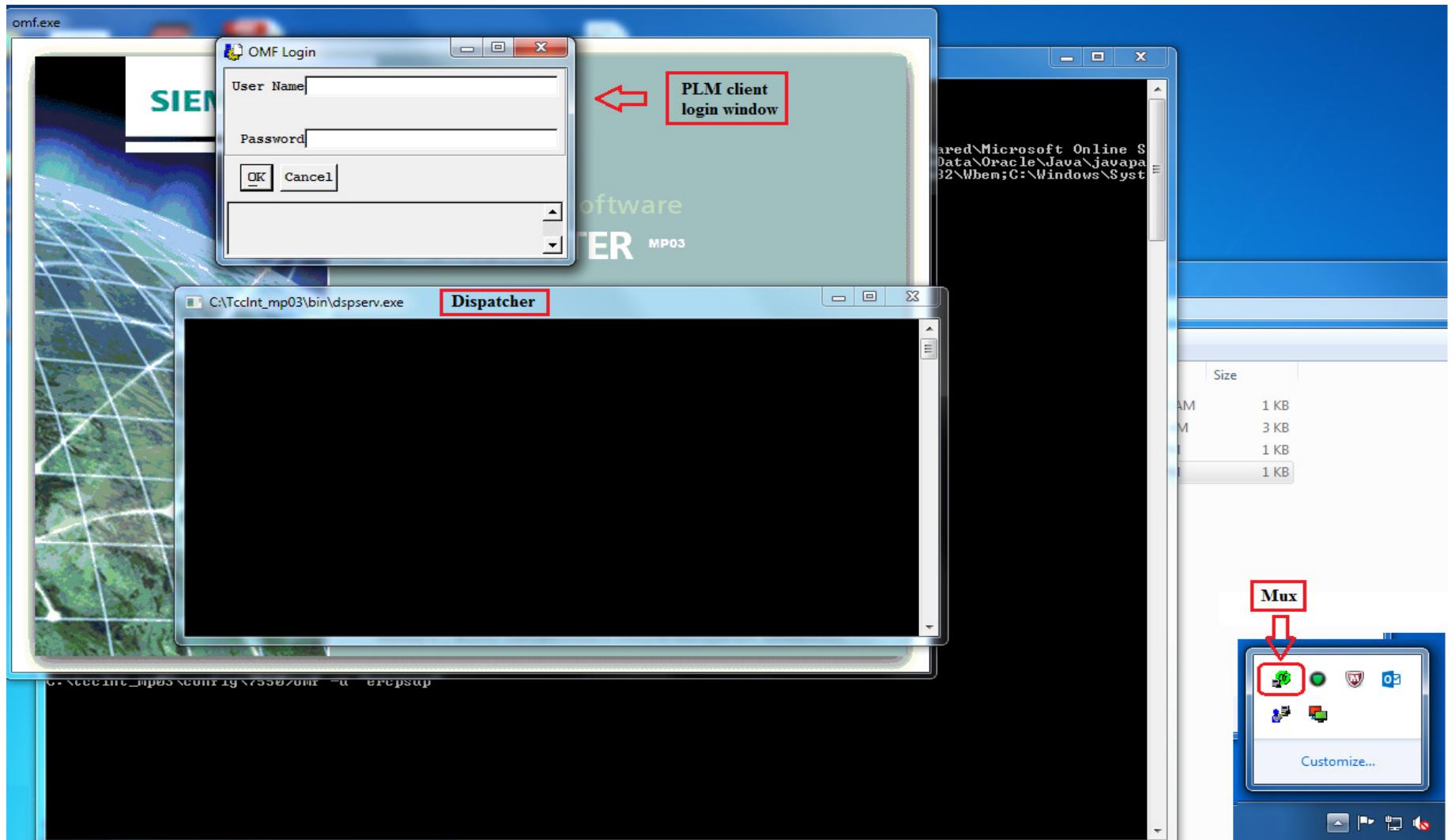
**PLM Client icon
on desktop
(shortcut)**



Full path:

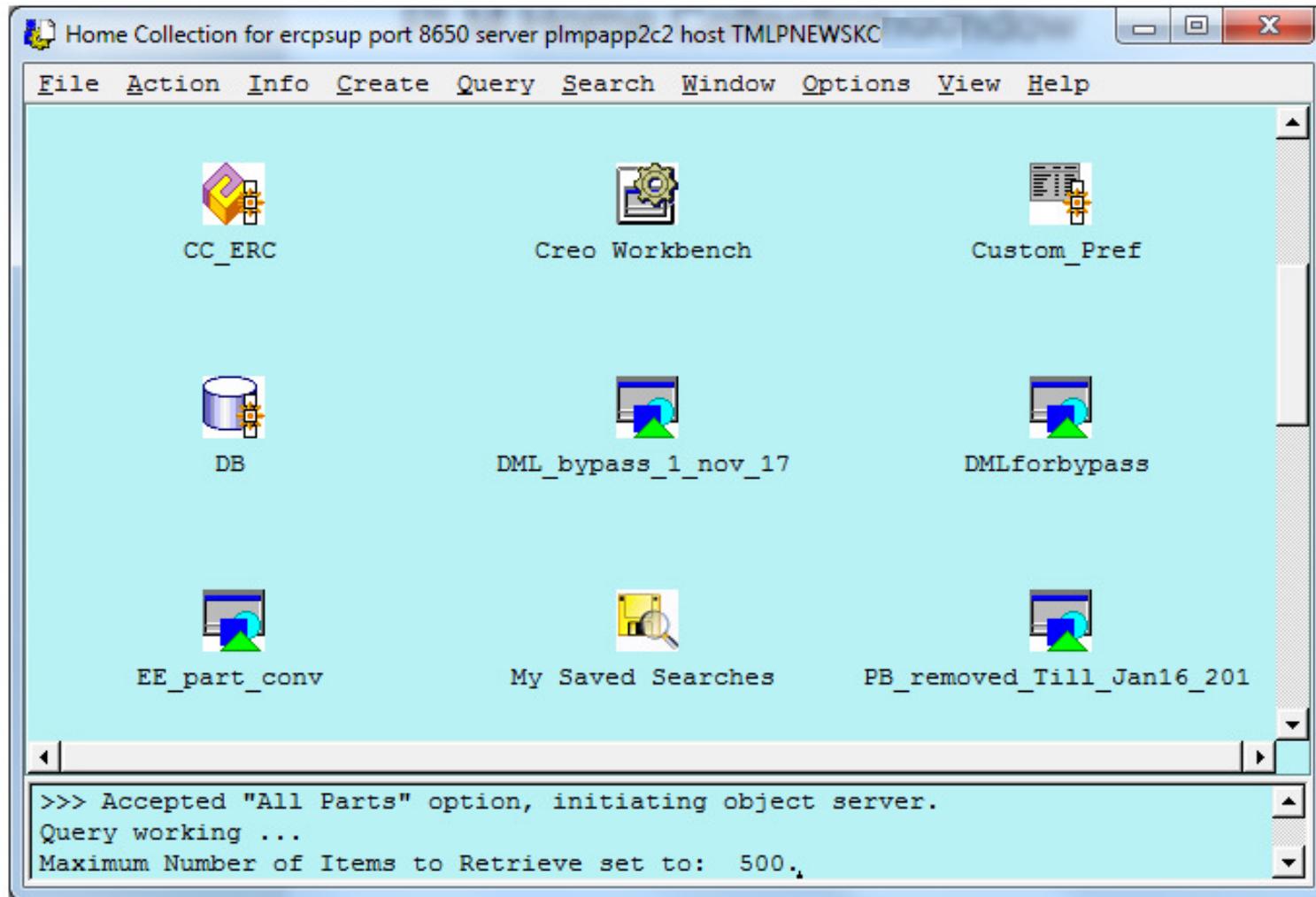


Launching of PLM client



Warning: Dispatcher window should not be closed, even after the launch of PLM client

PLM Home Collection window

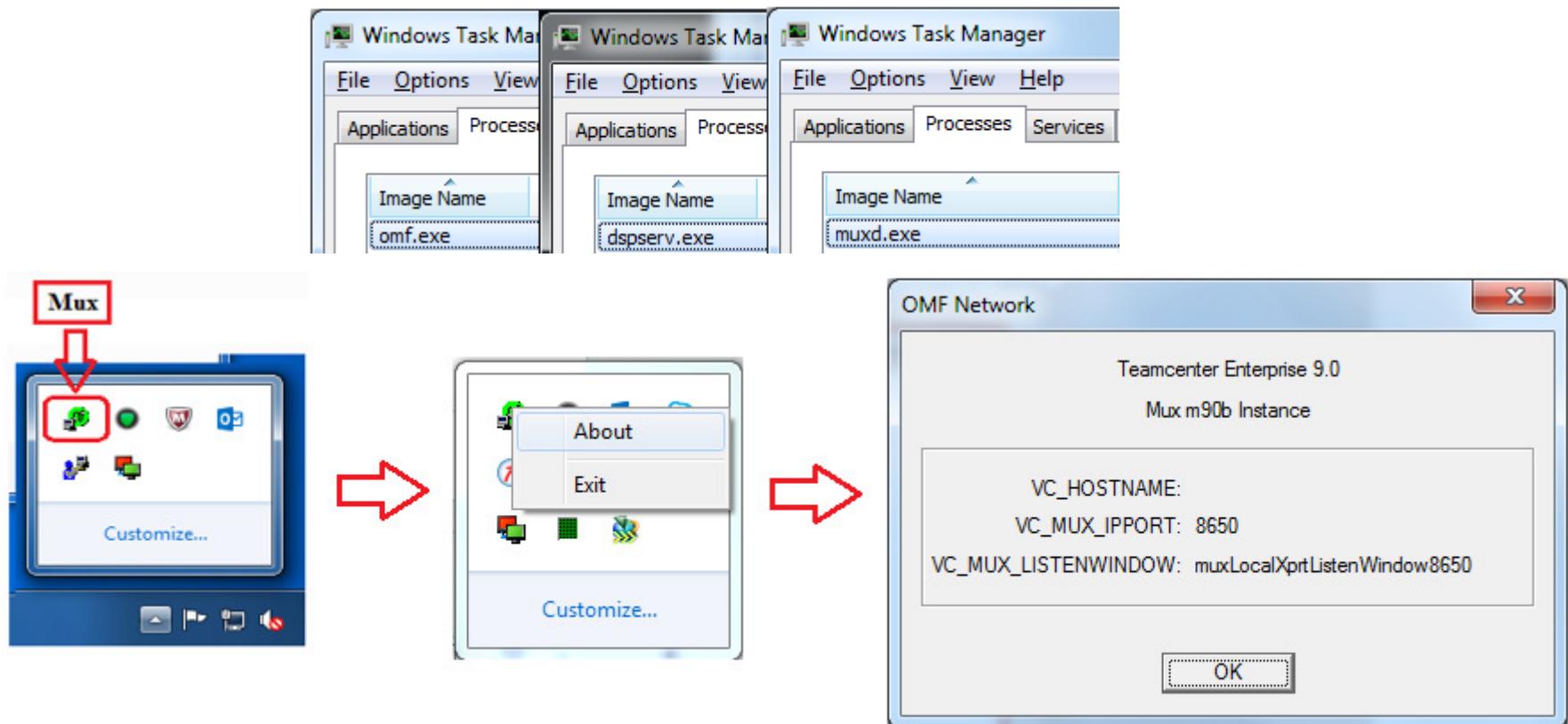


Note: Click on “Help” => “About” to see version of Teamcenter Enterprise currently used

Version of Teamcenter Enterprise (TCE) currently used

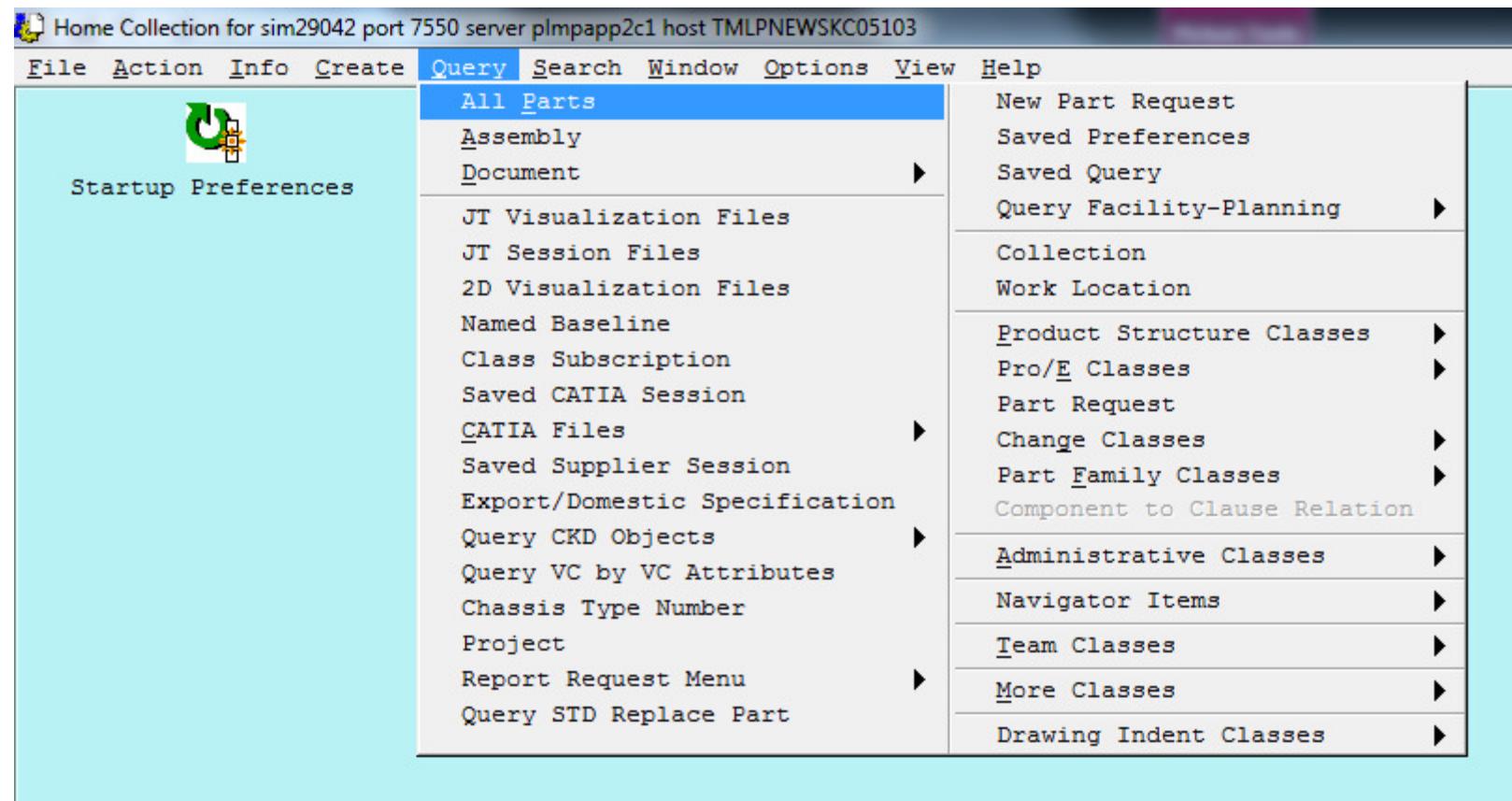
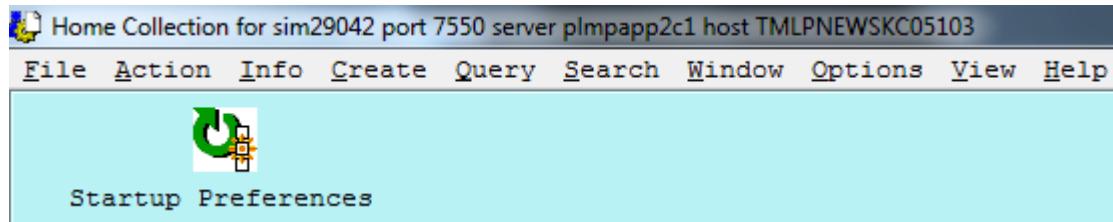


Mux & Dispatcher are services meant for communication between PLM client to server and vice versa. We can see them running on Windows Task Manager once PLM client is launched.



Port: Different ports are assigned for each dept. (e.g. 8650 is for CAB)

Query of parts



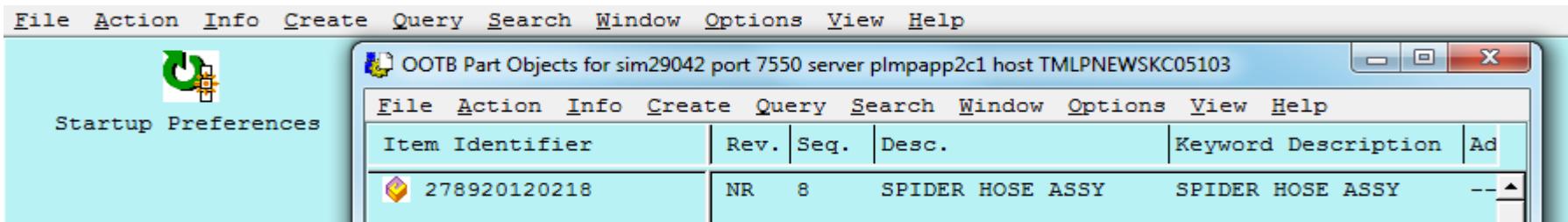
File Action Info Create Query Search Window Options View Help

Query for OOTB Part

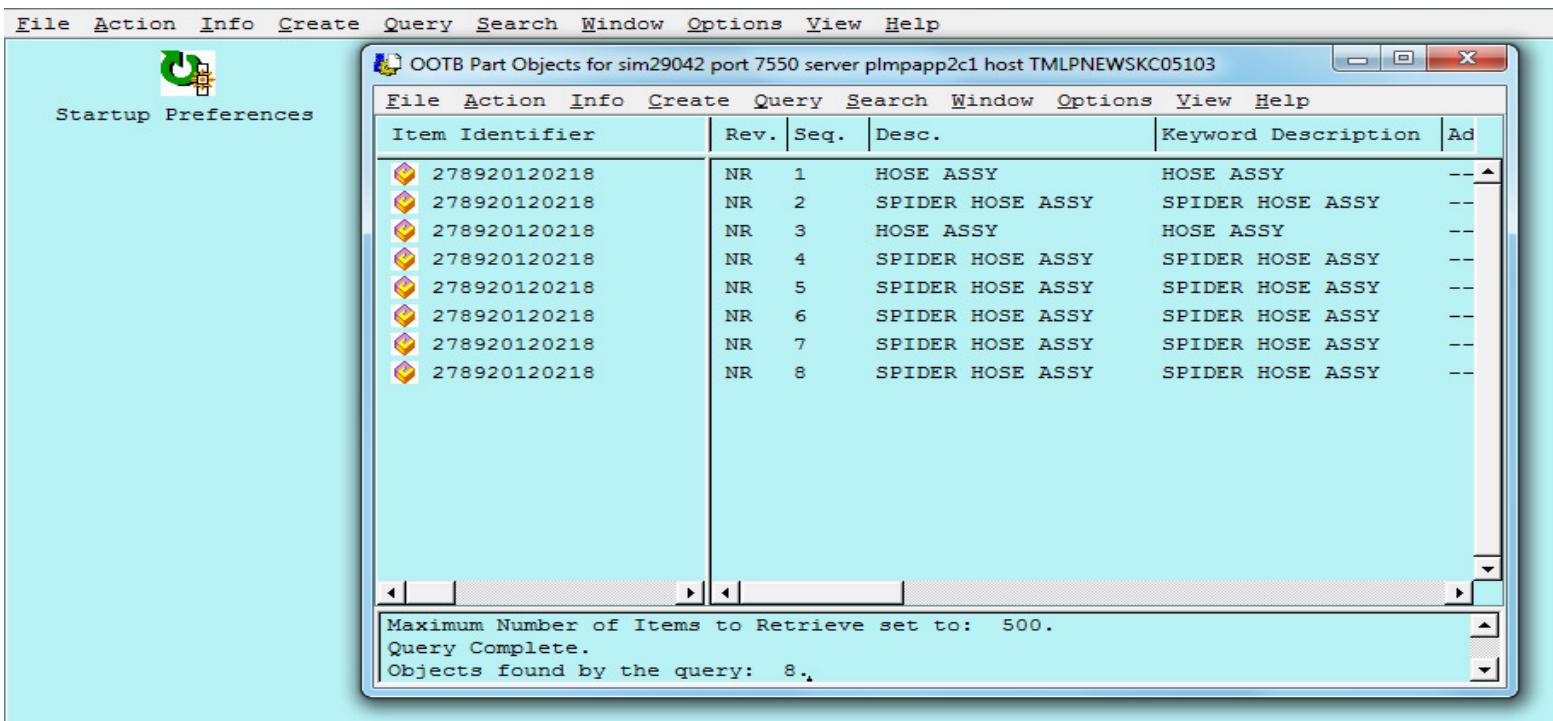
Part Number: 278920120218 Rev. Seq.
Project code Design Group Part Code
Keyword Description

Desc.
AddOn Description
Part Type
Organization Name
Modification Description
Superseded? Frozen?
Recoverable
Dismantable
OK Save... Recall Set Scope... Clear Cancel Help

Selecting "False" in "Superseded?" field will display latest revision of entered part number.



By keeping it blank we can get all revisions of entered part number.



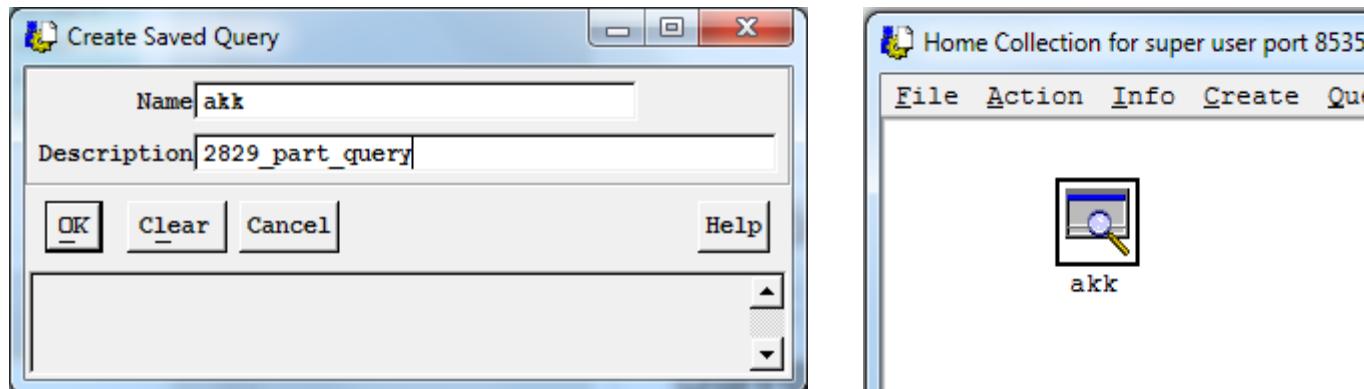
Query of parts



Utilities available:

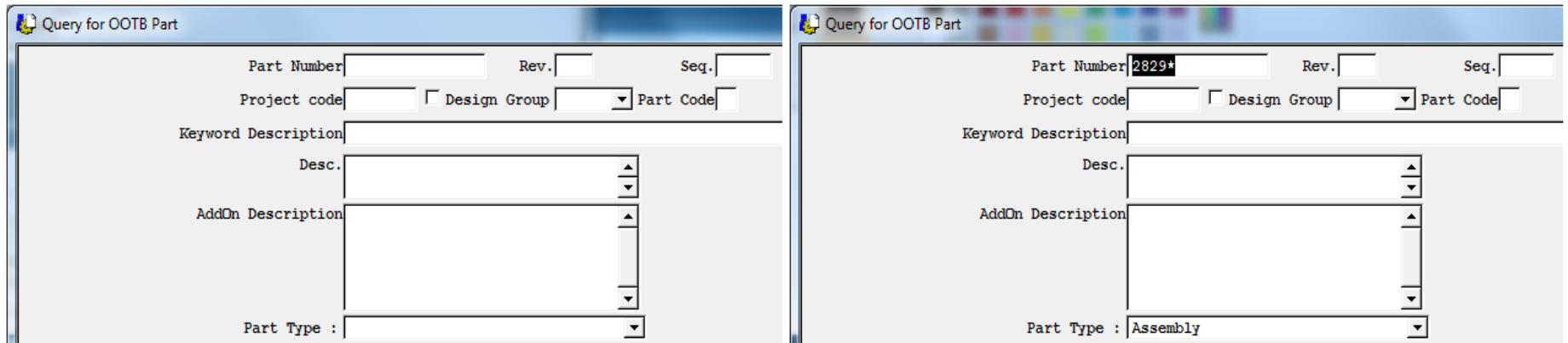
OK : This has to be clicked after filling all desired fields on part query form.

Save : Search for a particular query can be saved as shown below. It will be added to the Home Collection window of that user. Doing a double click on this will query set of parts that are eligible for that input w.r.to that time period.

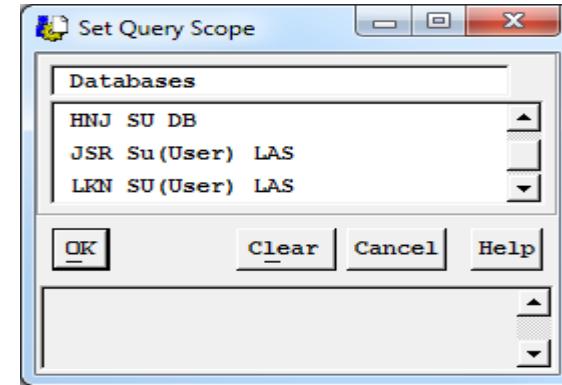
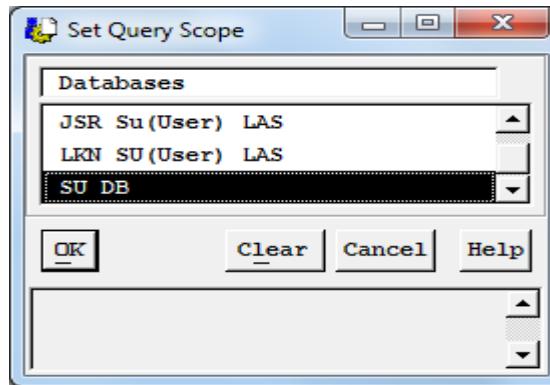


Recall : If same set of inputs need to be called on query form, then this option can be used. It will automatically populate all inputs in a new form that are used in previous query.

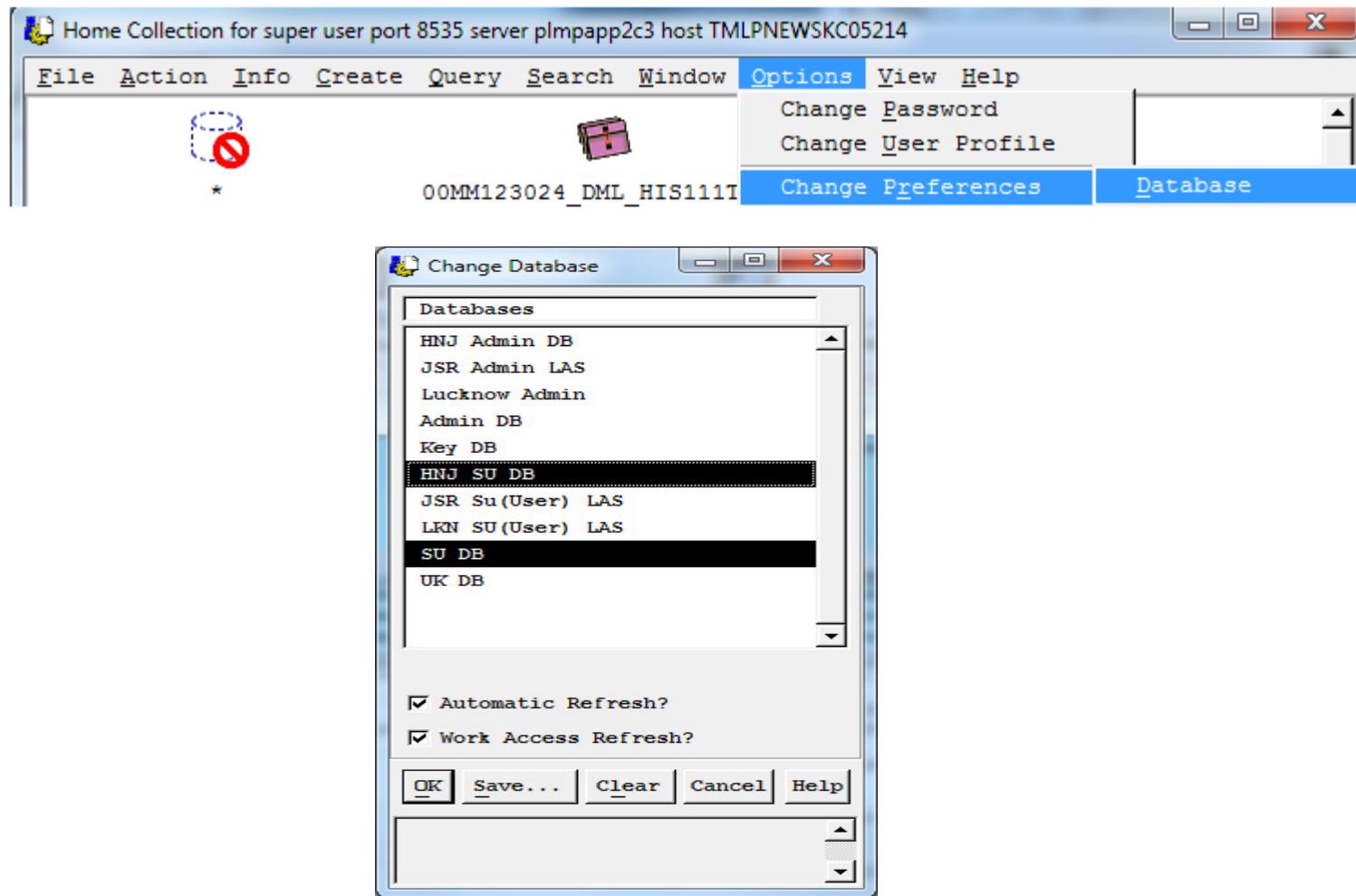
cont'd. **Recall** option, left image shows a new form. After clicking on Recall option we can see the same inputs getting populated in this new form also.



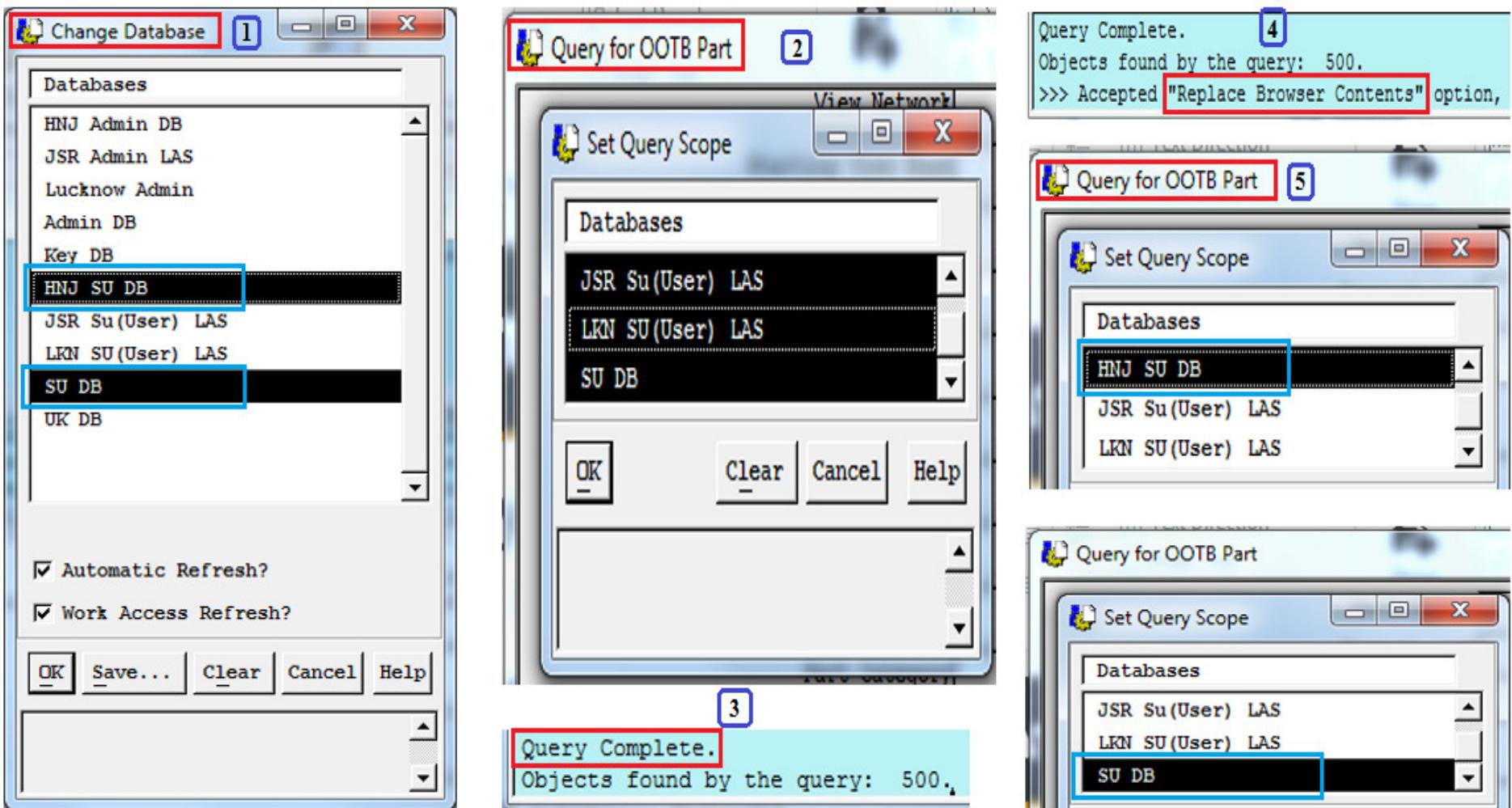
Set Scope : User can set database preferences as per need and can get only those parts which belongs to that particular location in the output query. For instance, “SU DB” is used for Pune location, LKN, JSR, HNJ are for Lucknow, Jamshedpur, Hinjewadi locations resp. DB's other than these are meant for PLM Admin activities.



cont'd. **Set Scope** option. Main option to set Database is: “Options => Change Preferences => Database”. Whatever is set here will be reflecting on “Set Scope” of query from also.



If any DB is included or excluded against this, it will apply for that particular query only. On doing "Query => Replace Browser Contents", we can see this by clicking on **Set Scope** option. Same is illustrated in below images.



Clear : Clicking on this will clear all filled/pre-filled attributes on the part query form.

Cancel : This will close the form without doing any change.

Help : Clicking on this will lead to pop-up of Help window of query form. We can find basic things like Fields/attributes of part etc.

Part:

- It is a main object where documents related to a design are attached.
- If you go by Windows OS, it is as same as a Drive where folders are kept. So all docs related to a particular design will be attached to its concerned part.
- It is also mentioned as “Tc Part” which nothing but short form of “Teamcenter Part”.

Documents:

- As mentioned above documents are like folders where CAD files related to a design are kept.
- These are also mentioned as **Business Items (BI)**.

Data Items:

- These are CAD files belonging to Pro-E / CATIA.
- **Data Items** are also mentioned shortly as **DI**.

Part Creation

Part creation - Understanding field items:

Create Assembly

*Part Number	Version Number 1	Rev. NR
*Description	*Project Code	
Modification Description	*Design Group	
NEW RELEASE	Part Code 8	
*Drawing Indicator D : Drawing Available		
*Part Type		
<input type="checkbox"/> Standard Part?		
Keyword Description		
AddOn Description	Material in Drawing	Material Thickness (mm)
	Material Class	* Yield
*Weight (Kg)	<input type="checkbox"/> CMVR Certification Reqd	
*Unit Of Measure	<input checked="" type="checkbox"/> Spare Indicator	
*Colour Indicator	<input type="checkbox"/> Recmd Spare For Initial Stock	
Colour ID	<input type="checkbox"/> Dismantlable	
Comp Code	<input type="checkbox"/> LH/RH Indicator NA	
Non Colour Part	<input type="checkbox"/> Homologation Reqd N	
Coated	<input type="checkbox"/> COP Reqd	
*Part Category	Packaging Standard	
*Samples To Be Approved	Party Part No	
Recyclable	Product	
Recoverable	Envelope Dimensions	
*Owner Design Unit	Hazardous Indicator False	
Owner Design Dept	Hazardous Description	
Surface Protection Std	Appearence Code NA	
DR/AR Status	Option Value	
Model Indicator	Has ERC Part No	
Is Post Release Required? N	Data Sharing Status	
<input type="button"/> OK <input type="button"/> Apply <input type="button"/> Clear <input type="button"/> Cancel <input type="button"/> Help		

- All * marked fields are **mandatory**
- Part Number:** Refer TS11814 to assign this number. (Query the last sequence number for subject project code, design group & sub group)
- Description:** System provides it with keyword description. User can suffix detail up to 40 character limit (keyword + suffix) = 40
- Modification Description:** This is provided if assembly/component gets revised. This denotes the reason for creation of the new revision.
- Keyword Description:** It is a standard description. System gives list of values based on design group. It is mandatory (refer TS11311).
- Add-on Description:** User can provide additional description as per his/her requirement.
- Weight:** In Kgs.
- Unit of measure:** If part no is for oil and paints then UOM e.g. 3-Ltr. If part no is for sheets/bars e.g. 4-Nos.
- Color Indicator:** If part is colorable (to be painted or pigmented) then it should be 'Y'. Provide Color ID.
- Comp code:** A generic name of any Assy/comp which is must if color ind is 'Y'. LOVs are available.
- Coated:** This denotes the coating requirement on body shell parts [N/Y/C]
- Part Category:** This defines whether part is loose part, bought out part, kits, assemblies based on in house production or supplier's part.
- Samples to be approved; Recyclable; Recoverable; Owner Design Unit; Owner Design Dept;**: as per LOVs
- Surface Protection Std:** Related to surface like POWDER COATING TYPE 20 SS:7651
- DR/AR Status:** User to declare the design stage of a part like DR0, DR1, and so on.
- Model Indicator:** This denotes the CAD availability of the part
- Is post release required?:** System generated non-editable field related to color.

Part creation - Understanding field items (contd.):

Create Assembly

*Part Number	Version Number 1	Rev. NR
*Description	*Project Code	<input type="checkbox"/>
Modification Description	*Design Group	Part Code 8
NEW RELEASE	<input type="checkbox"/>	
	*Drawing Indicator	D : Drawing Available
	*Part Type	<input type="checkbox"/>
	Standard Part?	
Keyword Description	<input type="checkbox"/>	
AddOn Description	Material in Drawing	<input type="checkbox"/>
	Material Thickness (mm)	<input type="checkbox"/>
	Material Class	<input type="checkbox"/>
	* Yield	<input type="checkbox"/>
*Weight (Kg)	<input type="checkbox"/>	
*Unit Of Measure	<input type="checkbox"/>	
*Colour Indicator	<input type="checkbox"/>	
N	<input checked="" type="checkbox"/> CMVR Certification Reqd	
Colour ID	<input checked="" type="checkbox"/> Spare Indicator	
Comp. Code	<input type="checkbox"/> Recmd Spare For Initial Stock	
Non Colour Part	<input type="checkbox"/> Dismantable	
Coated	<input type="checkbox"/>	
*Part Category	*LH/RH Indicator	NA
	*Homologation Reqd	N
	COP_Reqd	<input type="checkbox"/>
	Packaging Standard	<input type="checkbox"/>
*Samples To Be Approved	Party Part No	<input type="checkbox"/>
N	Product	<input type="checkbox"/>
Recyclable	Envelope Dimensions	<input type="checkbox"/>
False	Hazardous Indicator	False
Recoverable	Hazardous Description	<input type="checkbox"/>
False	Appearance Code	NA
*Owner Design Unit	Option Value	<input type="checkbox"/>
	Has ERC Part No	<input type="checkbox"/>
Owner Design Dept	Data Sharing Status	<input type="checkbox"/>
Pune-Design		
Surface Protection Std		
DR/AR Status		
NA		
Model Indicator		
N		
Is Post Release Required?	N	
<input type="button"/> OK <input type="button"/> Apply <input type="button"/> Clear <input type="button"/> Cancel <input type="button"/> Help		

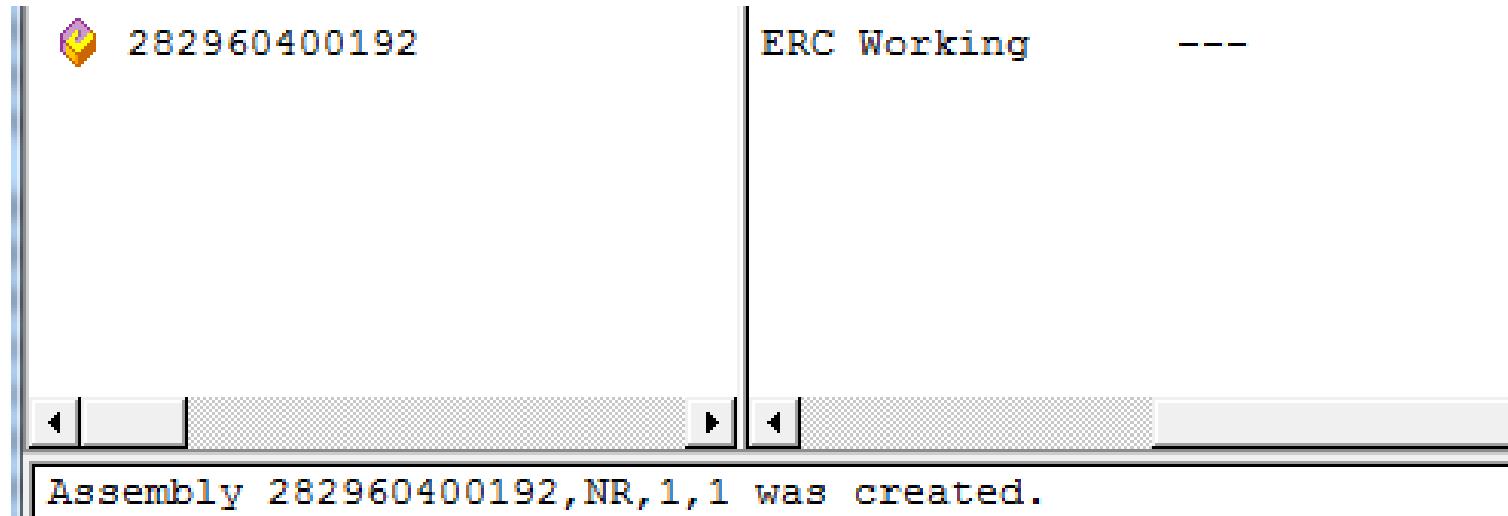
- Version Number '1'; Rev 'NR'
- Project Code; Design Group and Drawing Indicator from LOVs.
- Part Code: 8 (default)
- Part Type: To be selected from list of values (LOVs) e.g. Vehicle, Assembly, TPL, Component, VC etc.
- Material in Drawing: Material Specification as mentioned on drawing;
- Material thickness: In mm.
- Material Class: Material used for the part; % Yield: As relevant.
- CMVR Certification Required: Central Motor Vehicles Rules (CMVR) is for domestic business. The indicator to be selected in case of safety items like Lamps, Seat belts, windshields etc. Refer TS11412, TS11411
- Spare Indicator: To select if part is serviceable (TS11416);
- Recmd Spare for Initial Stock; Dismantable: As Required.
- LH/RH Indicator: To select from LOVs e.g. NA / LH CATIA / RH CATIA / LH PROE / RH PROE.
- Homologation required: Homologation is for Exports. It is mandatory to get this approval to export automobile products or components.
- COP Required: Conformity of Production - This relates to certification and possible values are Y and N.
- Party Part No.: It is supplier part which is mandatory if Part Category is 'BTS'. But it is advisable to give party part no. for supplier parts even if user has selected different part category (like BTP etc.)
- Packing Standard; Product; Envelope Dimensions; Hazardous Indicator; Hazardous Description; Appearance Code (NA/PAINTED/PIGMENTED); Option Value; Has ERC Part No → populate them as may be required.
- Data Sharing Status: As per LOVs (Vendor Development / Tooling Development / Release for FIAL)

Part creation: (Create => Product Stricture Classes => "Assembly" option)

Create Assembly

*Part Number: 282960400192	Version Number 1 Rev. NR
*Description: BIW	*Project Code: 2829
Modification Description: NEW RELEASE	*Design Group: 60 Part Code: 8
	*Drawing Indicator: D : Drawing Available
	*Part Type: Assembly
	<input type="checkbox"/> Standard Part?
Keyword Description: BIW	Material in Drawing: Fe410 WA SS:4017
AddOn Description:	Material Thickness (mm): 10
	Material Class: Ferrous metal & alloys
	* Yield:
*Weight (Kg): 1	<input type="checkbox"/> CMVR Certification Reqd
*Unit Of Measure: 2-Kg	<input type="checkbox"/> Spare Indicator
*Colour Indicator: N	<input type="checkbox"/> Recmd Spare For Initial Stock
Colour ID:	<input type="checkbox"/> Dismantable
Comp Code:	*LH/RH Indicator: NA
Non Colour Part:	*Homologation Reqd: N
Coated: N	COP_Reqd:
*Part Category: Box-like Alternator mounting bracket, Knuckle etc	Packaging Standard:
*Samples To Be Approved: N	Party Part No:
Recyclable: False	Product:
Recoverable: False	Envelope Dimensions:
*Owner Design Unit: PROPUN	Hazardous Indicator: False
Owner Design Dept: Pune-Design	Hazardous Description:
Surface Protection Std:	Appearance Code: NA
DR/AR Status: DR0	Option Value:
Model Indicator: Y	Has ERC Part No:
Is Post Release Required? N	Data Sharing Status:

Buttons: OK, Apply, Clear, Cancel, Help



We can see part 282960400192 is created, after clicking OK button on part creation form

Creation and attachment of various documents to TC parts
(Drawing document, Design document etc.)

Documents creation depends on design requirements.

- Drawing document will be created when requirement is for attaching only 2D.
- Design document will be created if 3D has to be attached to part.
- CAD parts can have either Drawing or Design document or both as per the design requirements.
- CATIA parts may additionally contain CATIA Product Document in place of design doc where a CATIA 3D file will be attached.

Drawing document: It is used for attaching 2D file. Marked fields are mandatory.
(Create => Document => "Drawing Document" option)

The image shows two windows side-by-side. The left window is titled 'Create Drawing Document' and contains various input fields for defining a drawing document. The right window is a properties dialog for a 'Converted DesDoc' and contains fields for surface area, coil size, nesting type, and standard details. Both windows have red boxes highlighting specific fields: 'Drawing Document Number', 'Project Code', 'Design Group', 'Sheet Size', 'BOM Indicator', 'L-R Indicator', 'Manual Drg Indicator', 'Offer Drawing Number', 'Opp Hand Drawing', 'Party Drawing Number', 'Reference Drawing', 'Created By', 'Assignee: Designer', 'Application Name', 'Drawing Description', 'Sheet Revision Details' table, and the 'Referred Standard' list in the properties dialog.

Create Drawing Document

- *Drawing Document Number
- *Project Code
- *Design Group
- *Sheet Size
- Rev. NR
- *BOM Indicator Y
- L-R Indicator N
- Manual Drg Indicator N
- Drawing Type
- Offer Drawing Number
- Opp Hand Drawing
- Party Drawing Number
- Reference Drawing
- Created By super user
- Assignee: Designer super user
- Application Name Proe Drw.Doc
- Drawing Description
- Sheet Revision Details

Sheet No	Sheet Revision	Sheet Size	Delete Indicator	Modific
	N			
	N			
	N			

Converted DesDoc

- Blank Surface Area(sq.mtr)
- Coil Size(mm)
- Nesting Type
- Standard Details

 - Referred Standard

- Date Received
- Pitch(mm)
- Process Type
- Author
- Authored Date 09/12/2017
- Addressee(s)
- Other Addressee(s)
- Date Received 09/12/2017
- Component Surface Area(sq.mtr)

OK Apply Clear Cancel Help

Design document: It is used for attaching 3D file. Marked fields are mandatory.
(Create => Document => "Design Document" option)

The screenshot shows two side-by-side windows for creating a design document. The left window is titled 'Create Design Document' and contains several input fields:

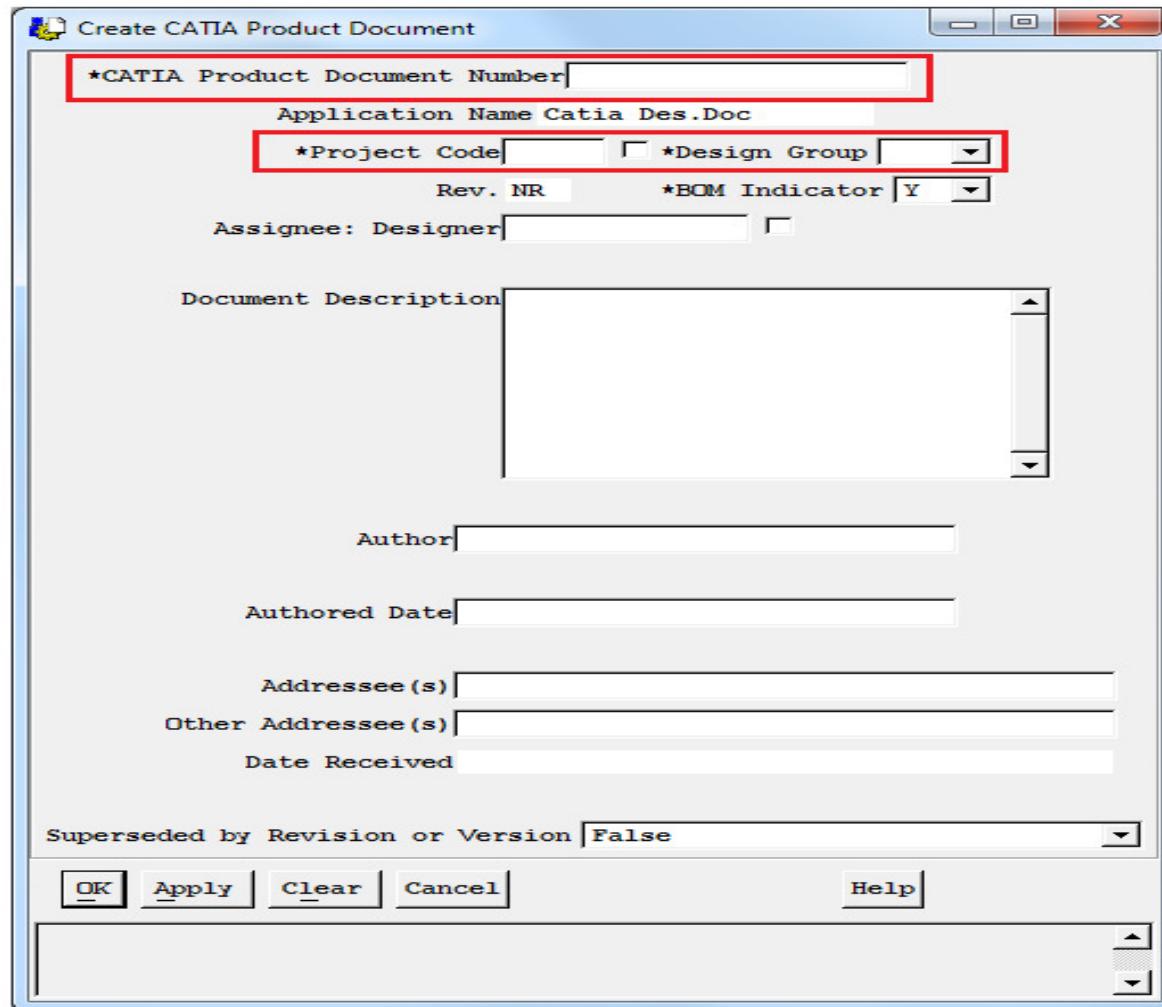
- *Design Document Number (highlighted with a red box)
- Rev. NR
- *Project Code (highlighted with a red box)
- *BOM Indicator Y
- *Design Group (highlighted with a red box)
- Assignee: Designer super user
- Application Name Proe Des.Doc
- Document Description (text area)
- Author

The right window displays optional or informational fields:

- Authored Date 09/12/2017
- Addressee(s)
- Other Addressee(s)
- Date Received 09/12/2017
- Converted DesDoc
- Blank Surface Area(sq.mtr)
- Coil Size(mm)
- Nesting Type
- Pitch(mm)
- Process Type
- Component Surface Area(sq.mtr)
- Date Received

At the bottom of the right window are buttons: OK, Apply, Clear, Cancel, and Help.

CATIA Product document: It is used for attaching 3D CATIA file. Marked fields are mandatory.
(Create => Document => "Catia Product Document" option)



All these documents are created by filling mandatory fields.



282960400192



282960400192



282960400192



282960400192

Attachment of documents to TC parts in standalone PLM can be made by drag & drop of document on part. Right click on part & select "Single Click Navigation to JT" to view the same.



282960400192

Is Described By (desBy)



282960400192

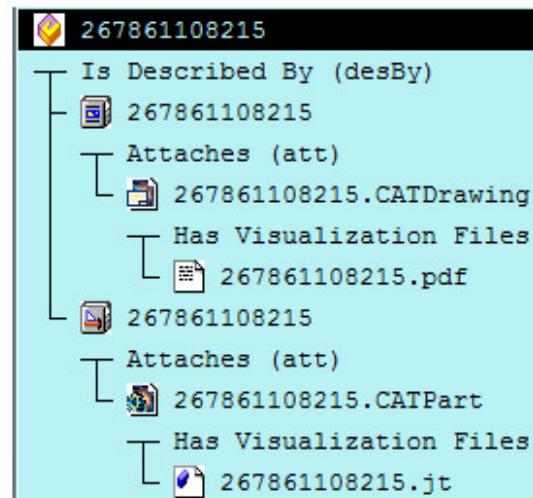
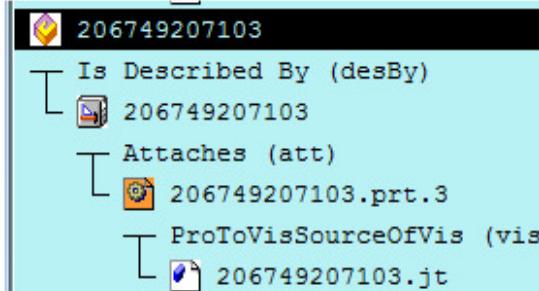
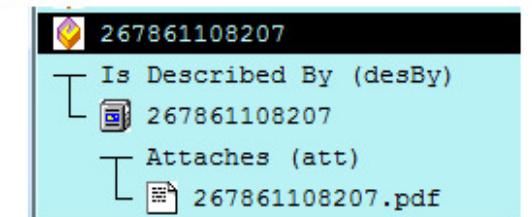
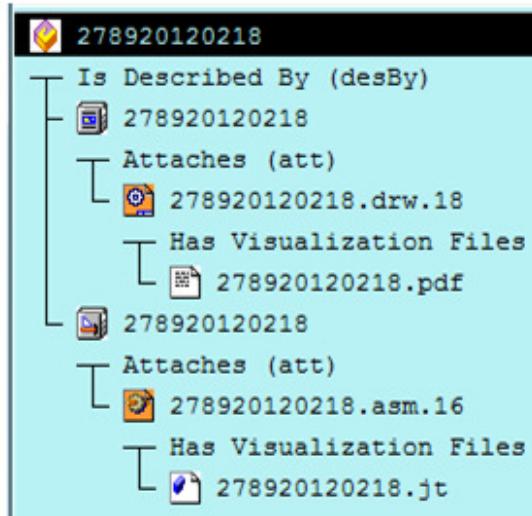


282960400192

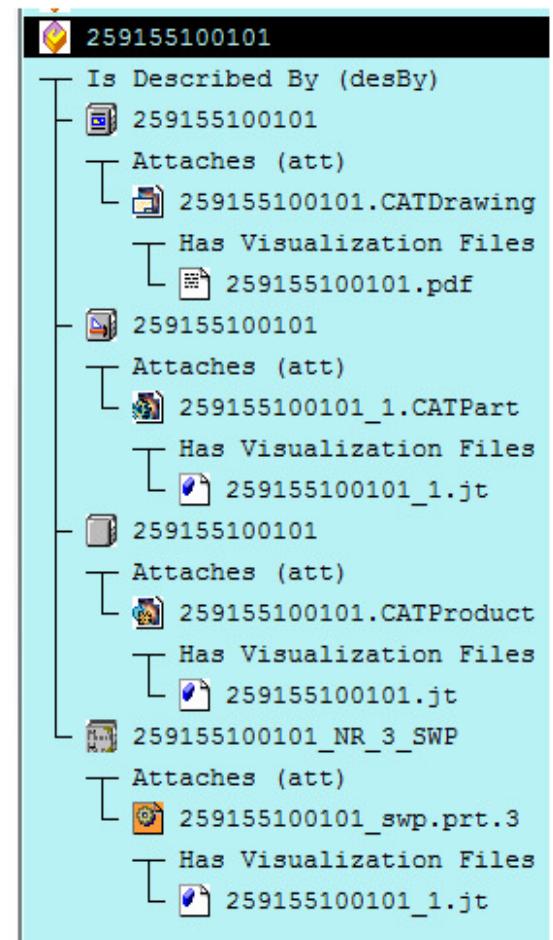


282960400192

Different use cases of Part, docs & DI's



- Drawing Document**
- Design Document**
- CATIA Product Document**
- Converted Document**



New part creation & approval process

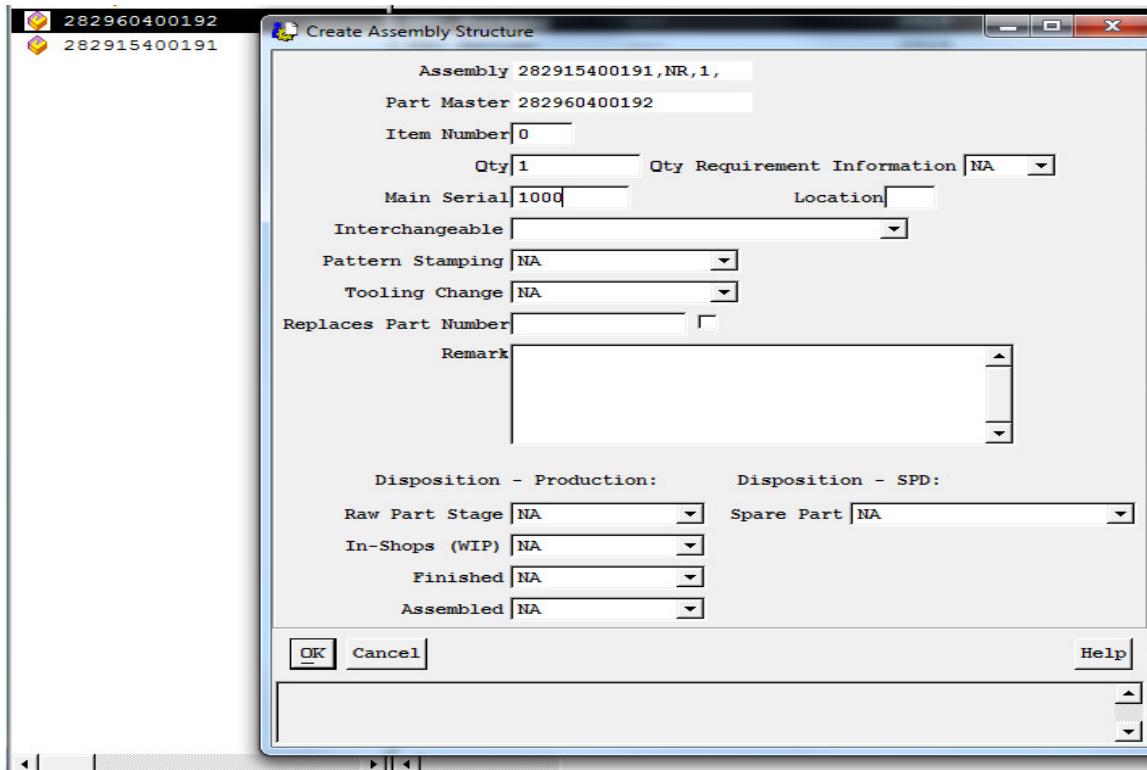
Creating new parts belonging to particular design groups of **CVBU** project requires designer to follow "New Part Request" process. In this process designer has to create the request for the same in PLM and follow the concerned workflow steps meant for it. Below document need to be referred to know the process involved in "New Part Request" process.

Part numbering & part types

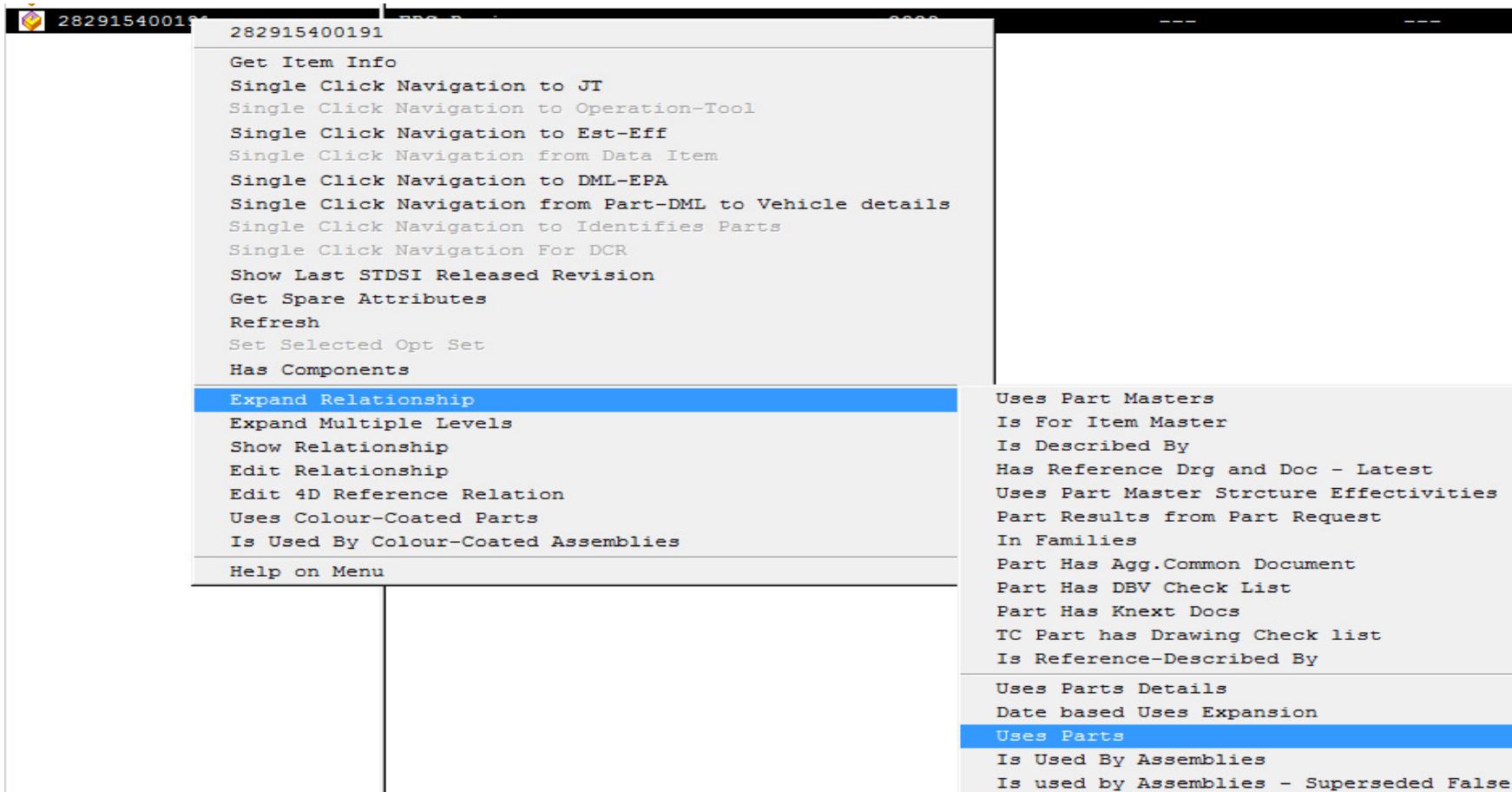
- Part type of a 12-digit part (all numbers) is based on its 3rd barrel i.e. 9th and 10th digits. It is defined on Telco Standards (TS) for part numbering.
- If it is 01 / 02 / 03 / 16 then part type will be Assembly.
- If the same is 00 or 04, then part type will be Dummy.
- For remaining cases it will be Component usually.
- It is configured in PLM system so part type gets selected automatically based on 3rd barrel value given by user during creation of a part.
- This applies for both: if a part is created from CAD -> PLM or in standalone PLM itself. Coding is done accordingly in PLM. So even if designer selects part type against this & clicks OK button on create window of TC part, we can see its part type getting selected based on these parameters once a part is created.
- It is strictly advisable that part type shouldn't be changed because of above mentioned restrictions. Designer need to take new part number instead w.r.to TS for part numbering & requirement of new design.

Part Type	3rd barrel value
Assembly	01 / 02 / 03 / 16
Dummy	00 or 04
Component	remaining cases

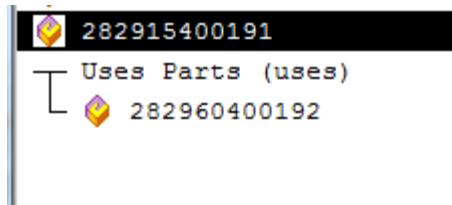
EBOM: It is the abbreviation of **Engineering Bill Of Materials**. It indicates the relation through which child parts are attached to parent parts. It can be made in standalone PLM by drag & drop of a part on parent part. It used to get created automatically through CAD during save through CAD BOM relation.

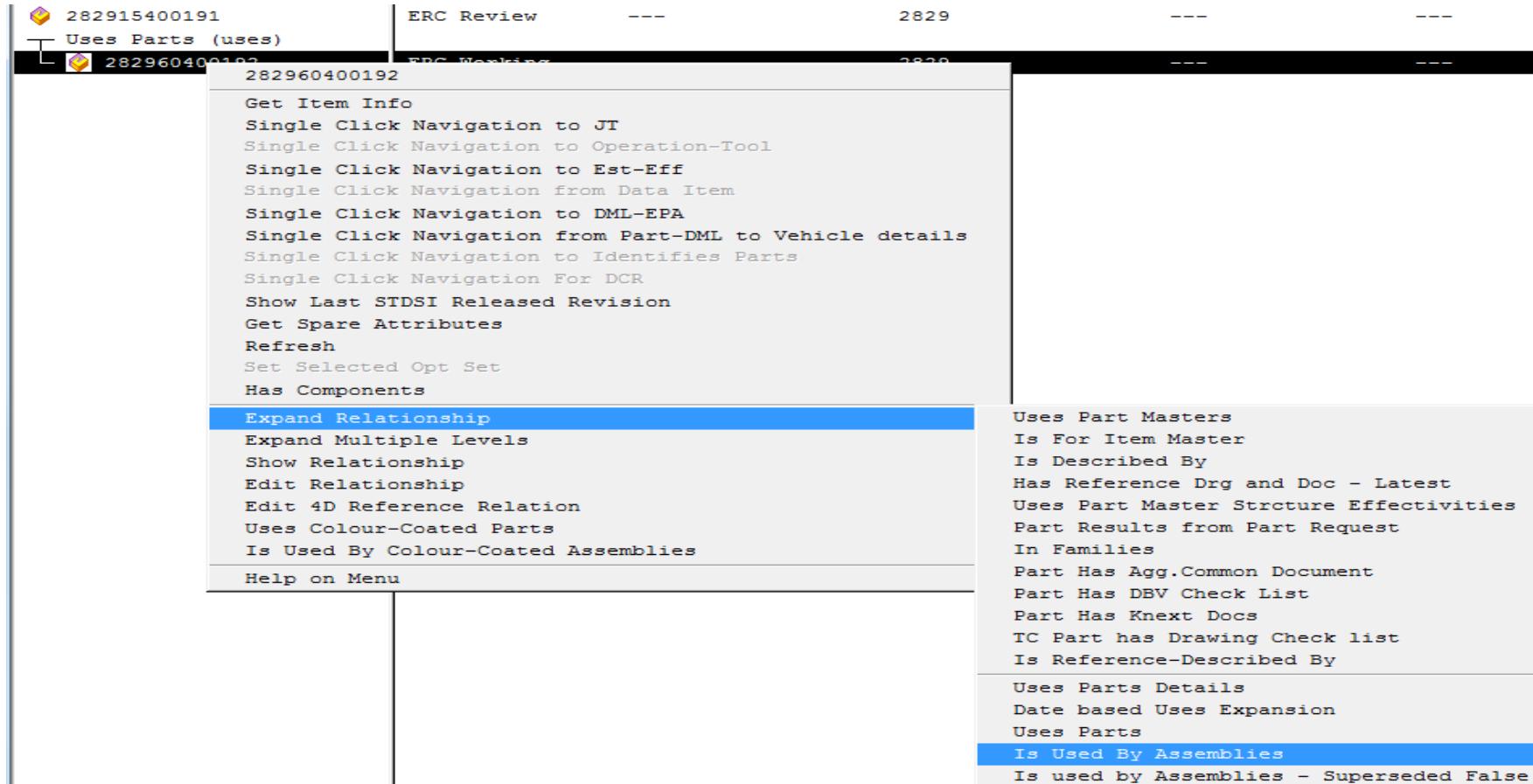


The Assembly Structure was created.
The Uses Part Masters relationship was created between
282915400191,NR,1,1 and 282960400192.

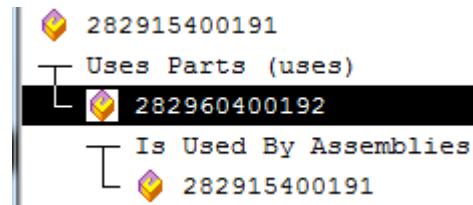


By using “Uses Parts“ option we can expand parent to child relation.

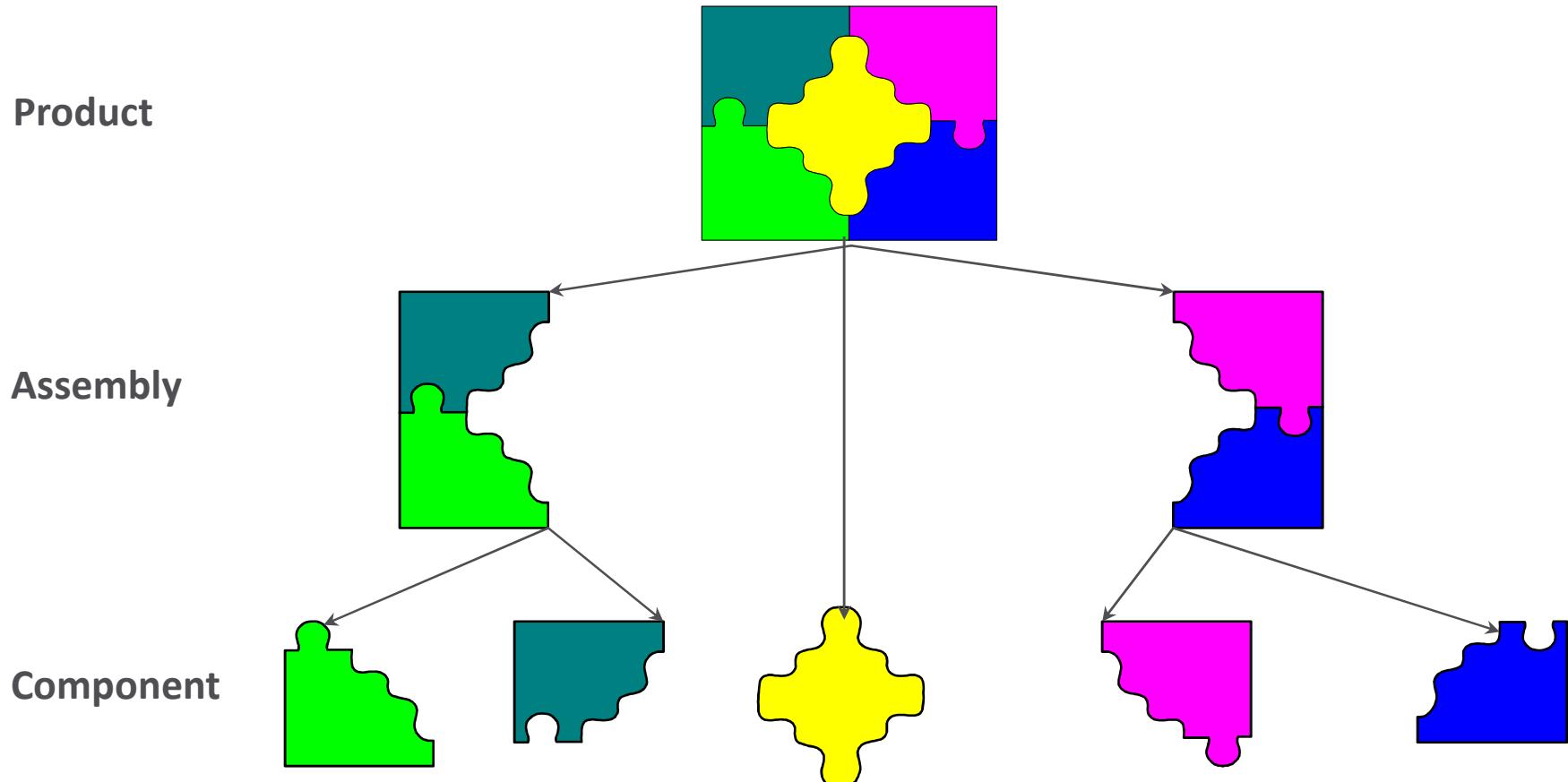




By using “Is Used By Assemblies“ option we can expand child to parent relation.



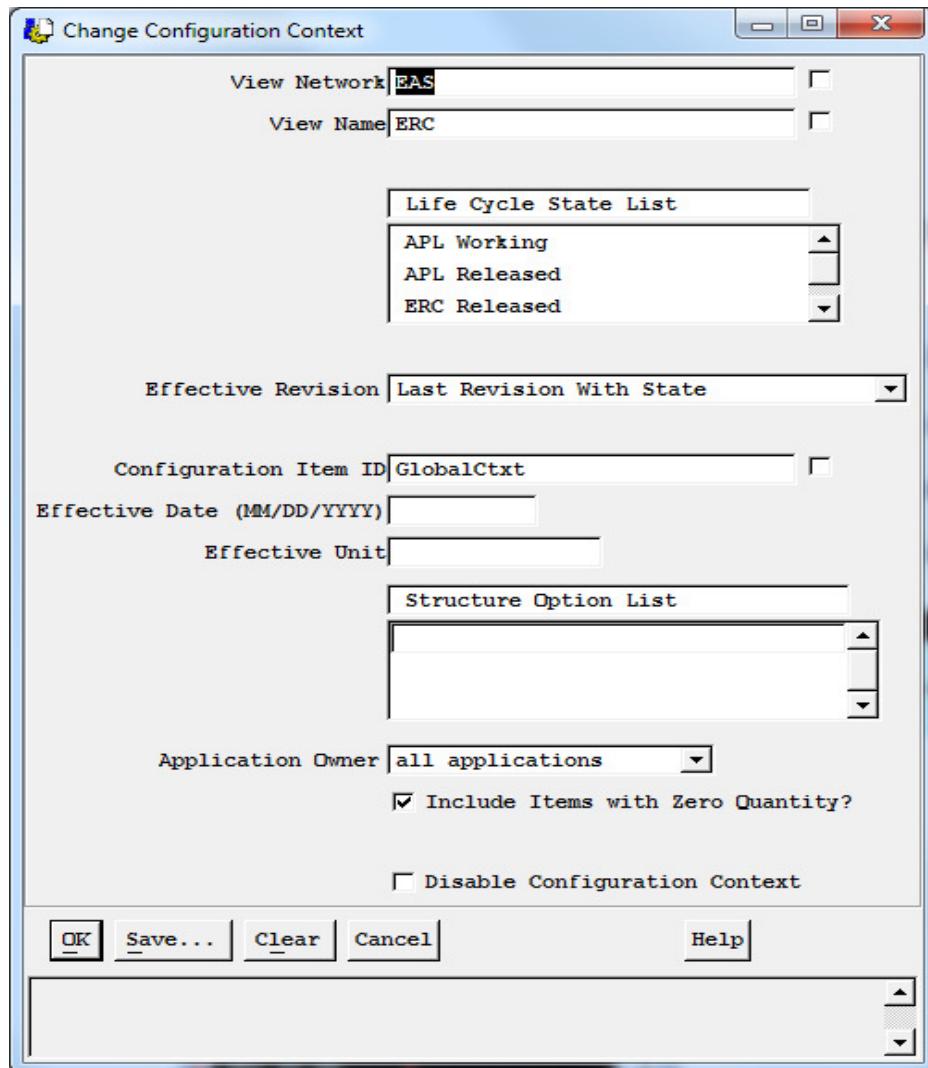
Product Structure: Pictorial representation of basic product structure



Basic Product Structure in PLM:

 27072438000R	Vehicle Combination
└─ Uses Parts (uses)	
 27072438R	Vehicle
└─ Uses Parts (uses)	
 2505068926R	Technical Part List
└─ Uses Parts (uses)	
 11323996221	Component
 12520696022	Component
 250526050109	Assembly
└─ Uses Parts (uses)	
 11063896103	Component
 11063896111	Component
 250526200113	Assembly
 250526200131	Assembly
 250526250110	Assembly
 250526250111	Assembly
 250526255301	Component
 250526510101	Assembly
 250526510102	Assembly
 250526515901	Component

"Configuration Context"



- Options => Change Preferences => "Configuration Context"
- These settings are applied as per requirement through which the child part relation has to be expanded for a parent part.
- This image shows default settings which we use.
- It can be altered based on changes in requirements.
- Desired setting can be saved with a name & can be added to "Startup Preferences". PLM need to be restarted to apply the same.
- Then uses parts relation will be expanding by this saved context, until any manual changes are done on these settings.

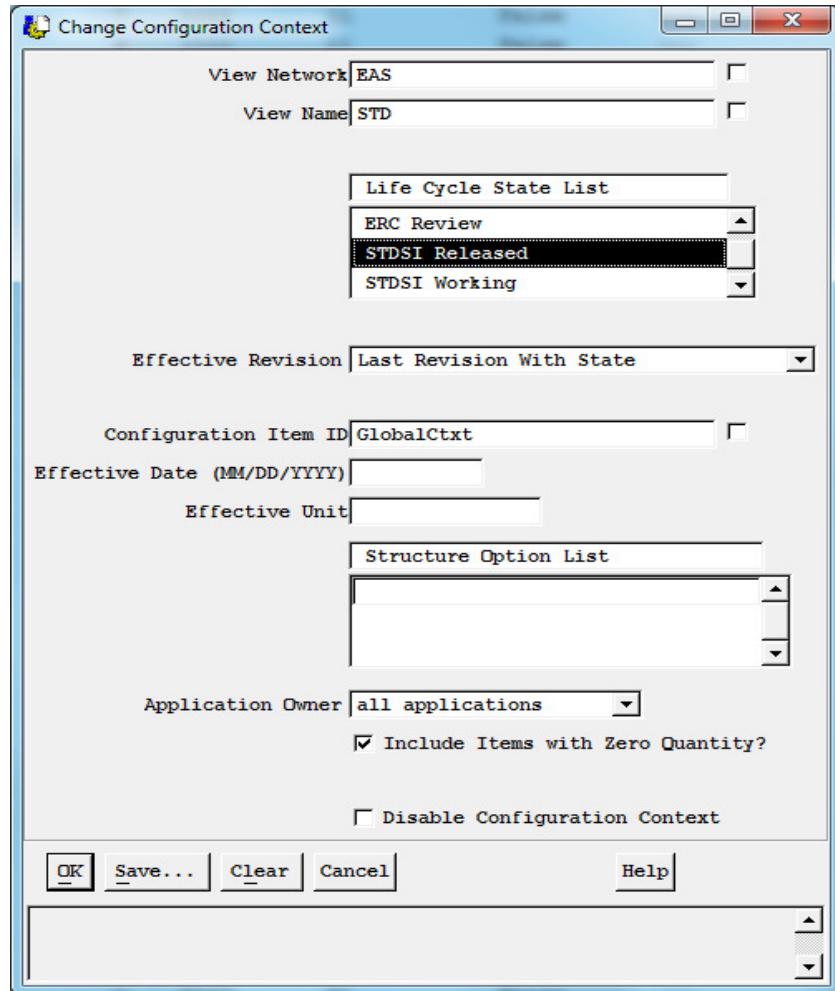
Effect of "Configuration Context" on BOM expansion

With default settings:

Identifier	Life Cycle State	Owner	Qty	Project co	Design Group	Superseded?
2829012081R	ERC Review	CE Vault	1	2829	81	False
Uses Parts (uses)						
11347596088	STDSS1 Released	Release Vault	1	1111	11	False
11387196082	STDSS1 Released	Release Vault	2	1111	11	False
11407396016	STDSS1 Released	Release Vault	1	1111	11	False
11407396032	STDSS1 Released	Release Vault	7	1111	11	False
11407396288	STDSS1 Released	Release Vault	2	1111	11	False
11496496045	STDSS1 Released	Release Vault	3	1111	11	False
11498596047	STDSS1 Released	Release Vault	8	1111	11	False
11498596063	STDSS1 Released	Release Vault	1	1111	11	False
12466096138	STDSS1 Released	Release Vault	6	1111	11	False
12655196071	STDSS1 Released	Release Vault	2	1111	11	False
264181110125	STDSS1 Released	Release Vault	1	2641	81	False
267899706341	STDSS1 Released	Release Vault	1	2678	99	False
269981906301	STDSS1 Released	Release Vault	1	2699	81	False
269981906302	ERC Review	CE Vault	25	2699	81	False
269981906308	ERC Review	CE Vault	4	2699	81	False
269981906310	STDSS1 Released	Release Vault	5	2699	81	False
269981906311	STDSS1 Released	Release Vault	4	2699	81	False
269981906312	STDSS1 Released	Release Vault	2	2699	81	False
269981906315	STDSS1 Released	Release Vault	5	2699	81	False
269981906316	STDSS1 Released	Release Vault	2	2699	81	False
282960606301	STDSS1 Working	Release Vault	1	2829	60	False
282969106302	STDSS1 Released	Release Vault	1	2829	69	False
282969106317	ERC Review	CE Vault	1	2829	69	False
282969506301	ERC Review	CE Vault	1	2829	69	False
282981000002	ERC Review	CE Vault	0	2829	81	False
282981100103	STDSS1 Released	Release Vault	1	2829	81	False
282981100108	STDSS1 Released	Release Vault	1	2829	81	False
282981106308	STDSS1 Released	Release Vault	1	2829	81	False
282981106309	STDSS1 Released	Release Vault	1	2829	81	False
282981106312	STDSS1 Released	Release Vault	1	2829	81	False
282983106301	STDSS1 Released	Release Vault	1	2829	83	False
282983106302	STDSS1 Released	Release Vault	1	2829	83	False
282999506301	ERC Review	CE Vault	13	2829	99	False
283481106341	ERC Review	CE Vault	4	2834	81	False
287168206323	STDSS1 Released	Release Vault	6	2871	68	False
552369206301	STDSS1 Released	Release Vault	2	5523	69	False
552381000012	ERC Review	CE Vault	0	5523	81	False

Effect of "Configuration Context" on BOM expansion

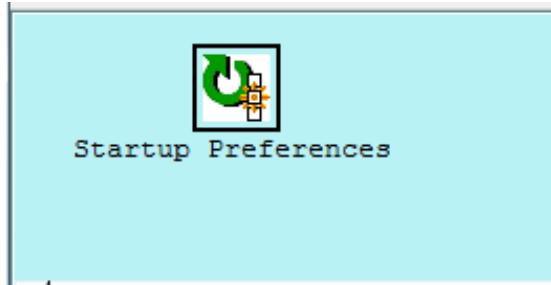
With modified settings:



2829012081R	Uses Parts (uses)	ERC Review	CE Vault	1	2829	81	
	11347596088	STDSI Released	Release Vault	1	1111	11	False
	11387196082	STDSI Released	Release Vault	2	1111	11	False
	11407396016	STDSI Released	Release Vault	1	1111	11	False
	11407396032	STDSI Released	Release Vault	7	1111	11	False
	11407396288	STDSI Released	Release Vault	2	1111	11	False
	11496496045	STDSI Released	Release Vault	3	1111	11	False
	11498596047	STDSI Released	Release Vault	8	1111	11	False
	11498596063	STDSI Released	Release Vault	1	1111	11	False
	12466096138	STDSI Released	Release Vault	6	1111	11	False
	12655196071	STDSI Released	Release Vault	2	1111	11	False
	264181110125	STDSI Released	Release Vault	1	2641	81	False
	267899706341	STDSI Released	Release Vault	1	2678	99	False
	269981906301	STDSI Released	Release Vault	1	2699	81	False
	269981906302	STDSI Released	Release Vault	25	2699	81	True
	269981906308	STDSI Released	Release Vault	4	2699	81	True
	269981906310	STDSI Released	Release Vault	5	2699	81	False
	269981906311	STDSI Released	Release Vault	4	2699	81	False
	269981906312	STDSI Released	Release Vault	2	2699	81	False
	269981906315	STDSI Released	Release Vault	5	2699	81	False
	269981906316	STDSI Released	Release Vault	2	2699	81	False
	282969106302	STDSI Released	Release Vault	1	2829	69	False
	282969106317	STDSI Released	Release Vault	1	2829	69	True
	282969506301	STDSI Released	Release Vault	1	2829	69	True
	282981000002	STDSI Released	Release Vault	0	2829	81	True
	282981100103	STDSI Released	Release Vault	1	2829	81	False
	282981100108	STDSI Released	Release Vault	1	2829	81	False
	282981106308	STDSI Released	Release Vault	1	2829	81	False
	282981106309	STDSI Released	Release Vault	1	2829	81	False
	282981106312	STDSI Released	Release Vault	1	2829	81	False
	282983106301	STDSI Released	Release Vault	1	2829	83	False
	282983106302	STDSI Released	Release Vault	1	2829	83	False
	282999506301	STDSI Released	Release Vault	13	2829	81	True
	283481106341	STDSI Released	Release Vault	4	2834	81	True

Note: Same methodology can be used for expanding relations used by assemblies also

"Startup Preferences"

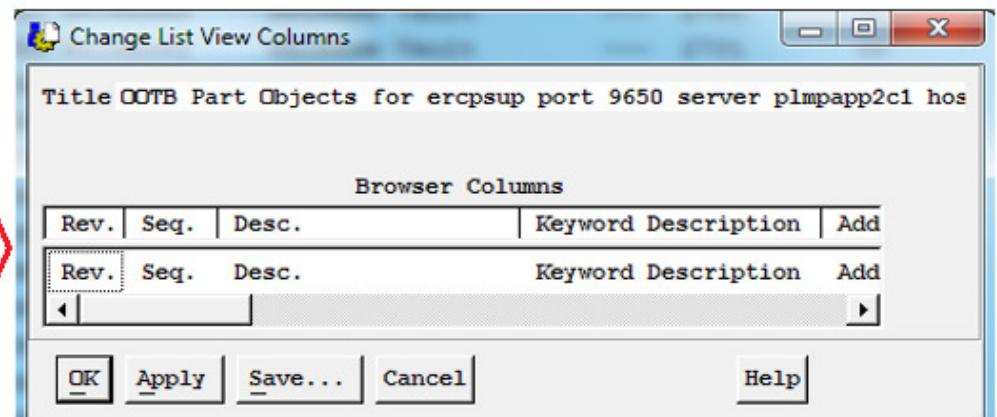
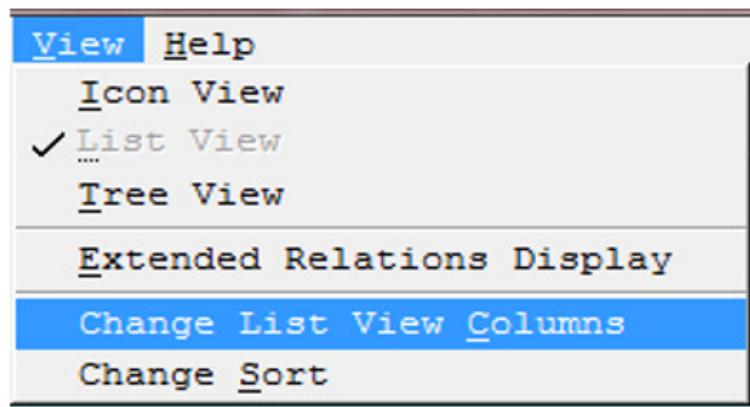


Item Identifier	Class
CC_ERC	Configuration Context Preferences
Custom_Pref	List View Column Preferences
DB	Database Preferences

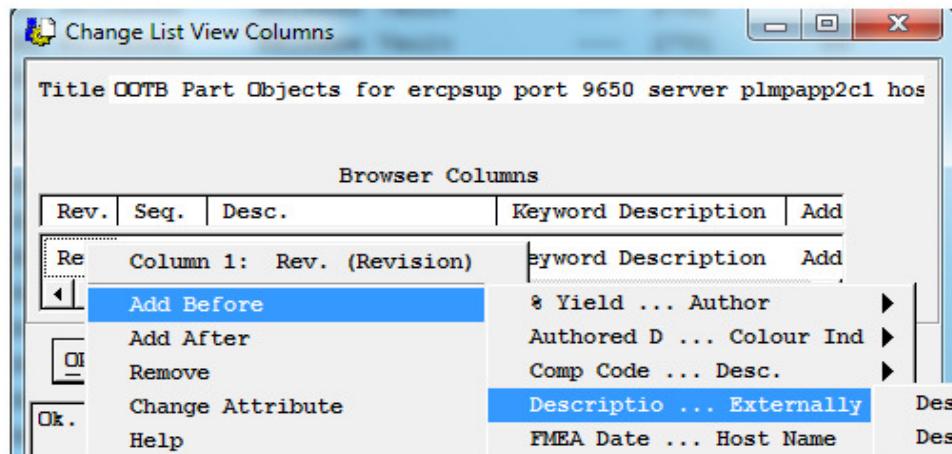
- It will be available in PLM Home collection window
- Double click the same to open.
- We can see preferences like Configuration Context Preferences, List View Column, Database available there.
- These preferences are saved & added to the same. PLM need to be restarted to apply the same.

"Change List View Columns"

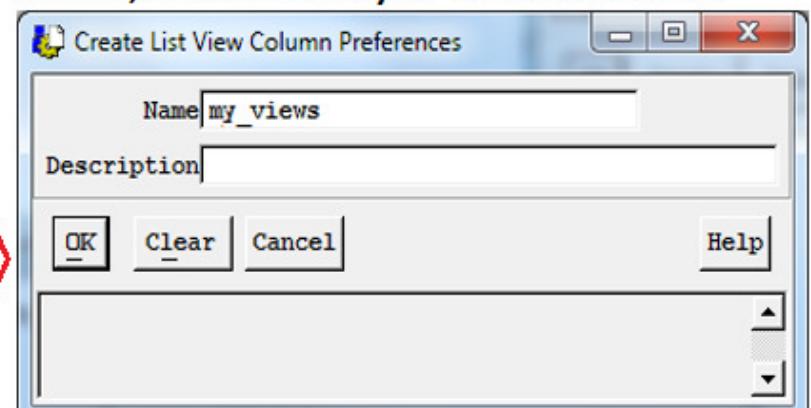
Click "View" => "Change List View Columns" option

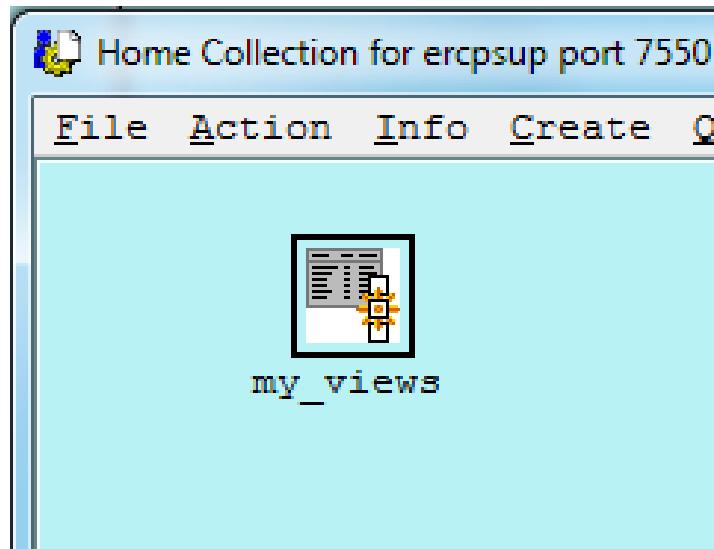


Right click below "Browser Columns", select "Add Before/After" to find the list of attributes available



Once this is done, click on "Save", to get below window, enter Name of your choice & click "OK"





You can find the same created & available in your PLM Home Collection window.
Add it to Startup Preferences using the same method mentioned earlier.

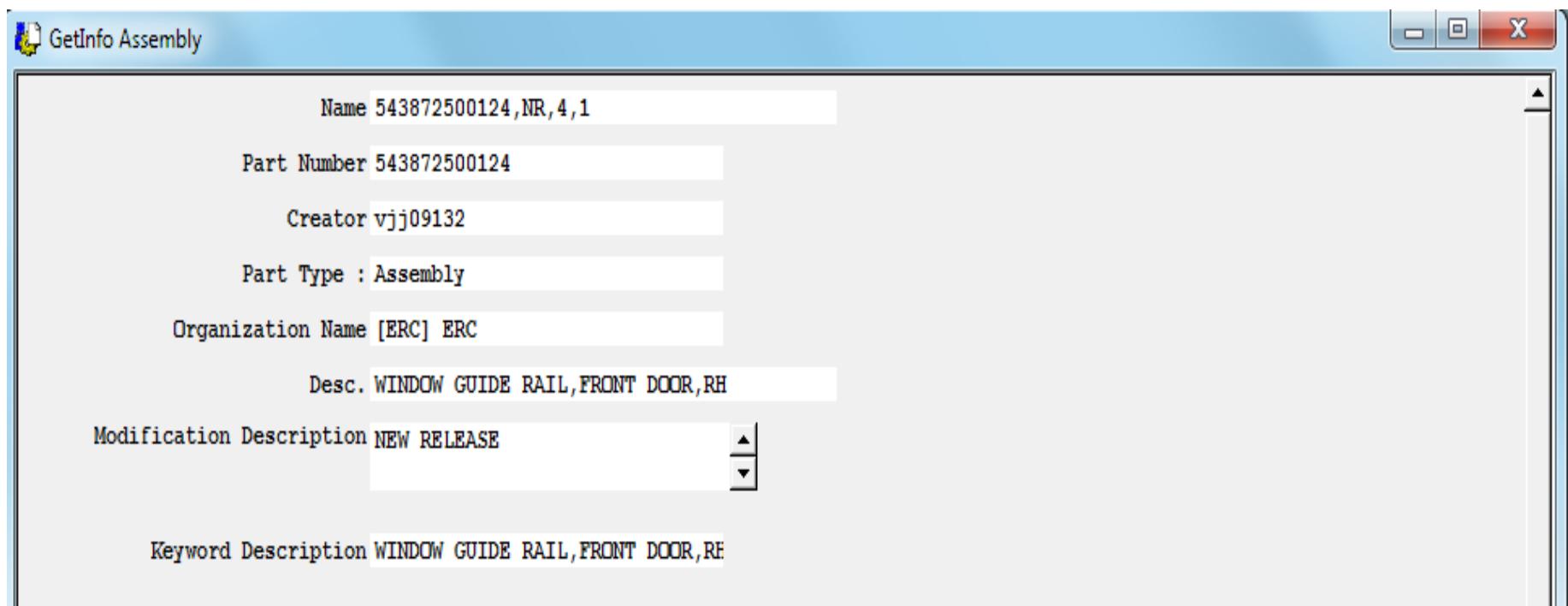
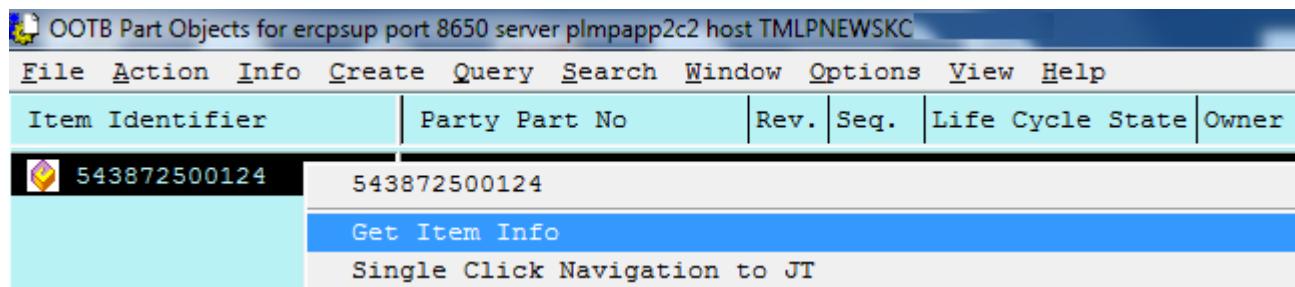
LH/RH relationship

Parts that exists in pairs with left & right combination i.e. mirror image of left part will be actual appearance of the right part and vice versa. Such parts are related using this utility. Below use case is of “front door inner assembly” of LH & RH parts. We can also see how such parts are related in PLM.

Item Identifier	LH/RH Indicator	Desc.
282972200105	---	ASSY FRONT DOOR INNER LH
Is For Item Master (isFor)		
282972200105	LH CATIA	ASSY FRONT DOOR INNER LH
Left Part Has Right (has)		
282972200106	RH CATIA	ASSY FRONT DOOR INNER RH
Has Revisions (has)		
282972200106	---	ASSY FRONT DOOR INNER RH

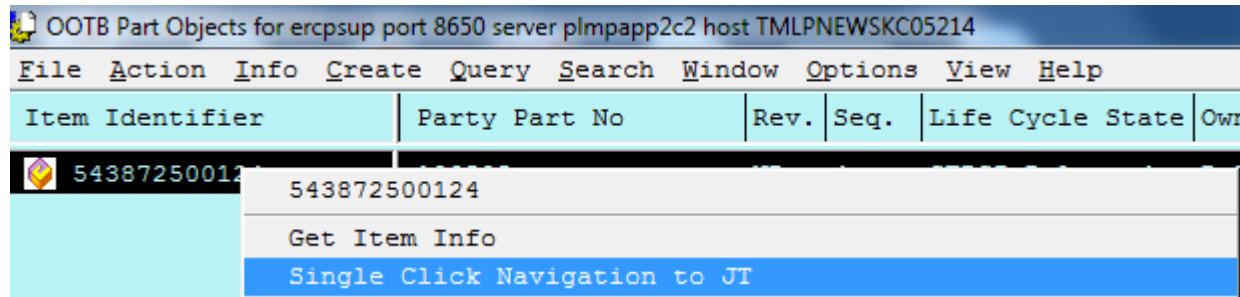
"Get Item Info" option

(Select part and do right click to find list of options)



"Single Click Navigation to JT" option

(Select part and do right click to find list of options)

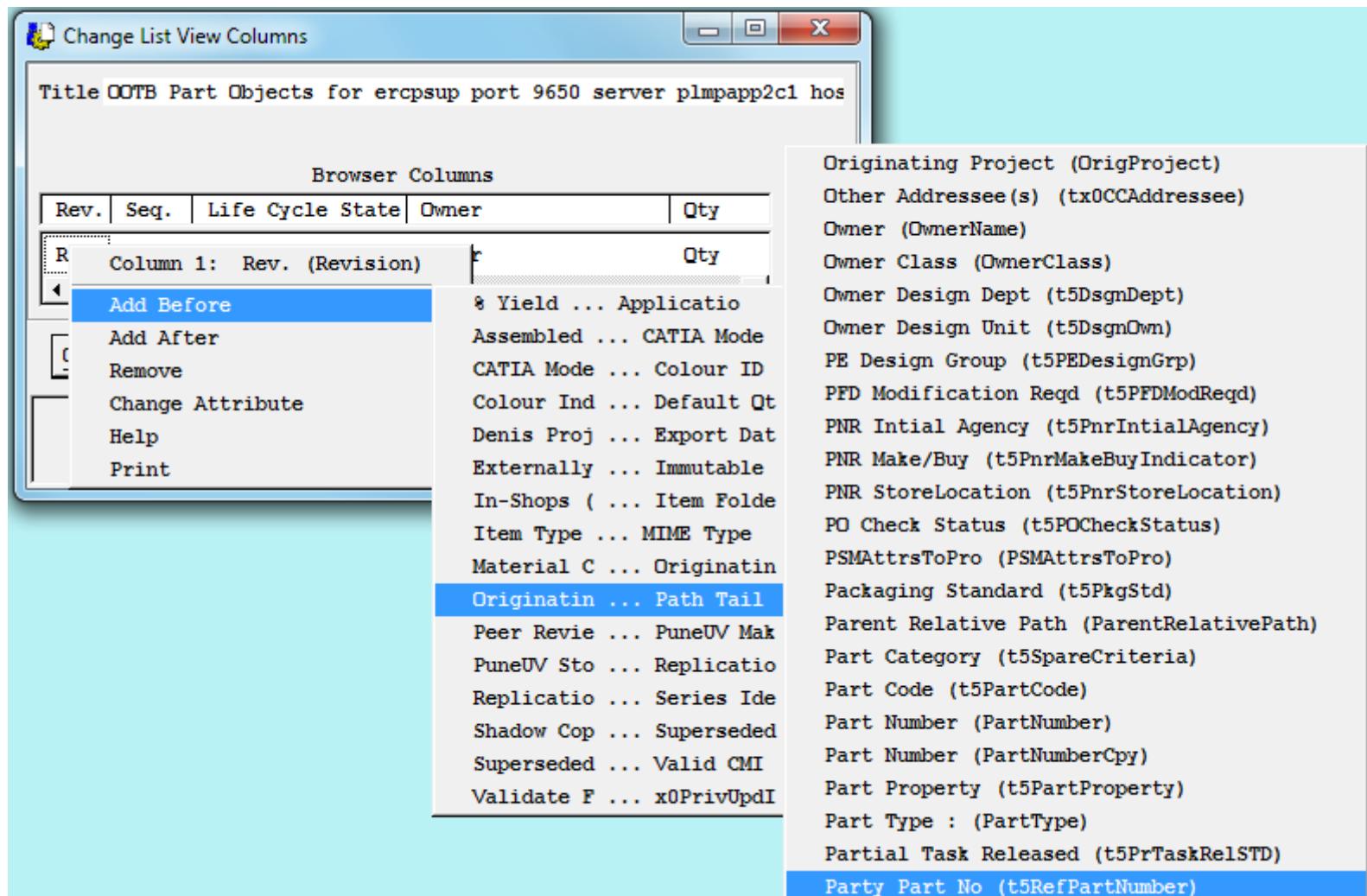


Item Identifier	Rev.	Seq.	Life Cycle State	Owner
543872500124	NR	4	STDSI Released	Release Vault
Is Described By (desBy)				
543872500124	NR	4	APL Working	Release Vault
Attaches (att)				
543872500124.CATPart	---	4	APL Working	Release Vault
Has Visualization Files				
543872500124.jt	---	1	ERC Working	Release Vault

One object found.
One object found.
Expansion is completed

Party part concept

("Party Part No." column can be added as shown below using "Change List View Columns" option)



Party part relation with TC part.

(Part to Task expansion: Select part and do right click => Expand Relationship => "Is Result Of Product Plan" option)

(Task to Part(s) expansion: Select task and do right click => Expand Relationship => "Product Plan Results In" option)

Item Identifier	Party Part No	Rev.	Seq.	Life Cycle State	Owner
543872500124	123525	NR	4	STDSI Released	Release Vault
Is Result Of Product Plan	---	A	1	ERC Released	Release Vault
13PP325682_72,A,1	---	F	3	STDSI Released	Release Vault
Product Plan Results In	---	G	2	STDSI Released	Release Vault
5438012572R	---	F	2	STDSI Released	Release Vault
5438022572R	---	E	2	STDSI Released	Release Vault
5438022573R	---	B	2	STDSI Released	Release Vault
5438032572R	---	E	2	STDSI Released	Release Vault
5438032573R	---	B	2	STDSI Released	Release Vault
5438522572R	---	B	2	STDSI Released	Release Vault
543872500101	---	E	2	STDSI Released	Release Vault
543872500103	123518	E	7	STDSI Released	Release Vault
543872500104	123519	E	5	STDSI Released	Release Vault
543872500123	123524	NR	5	STDSI Released	Release Vault
543872500124	123525	NR	4	STDSI Released	Release Vault
543872500125	403061	NR	1	STDSI Released	Release Vault
543872500126	403060	NR	1	STDSI Released	Release Vault
543873500101	---	E	2	STDSI Released	Release Vault
543873500109	123528	E	6	STDSI Released	Release Vault
543873500110	123529	E	4	STDSI Released	Release Vault
543873500123	123534	NR	2	STDSI Released	Release Vault
543873500124	123535	NR	2	STDSI Released	Release Vault
13PP325682_72_APL,A,1	---	A	1	STDSI Released	Release Vault

Party part query.

(Query => "All Parts" option or Query => Product Structure Classes => "Party Part" option)

Item Identifier	Rev.	Seq.	Life Cycle State	Owner	Project code	Design Group	Superseded?
123525	NR	1	ERC Released	Release Vault	5438	72	False

- File
- Action
- Info
- Create
- Query
- Search
- Window
- Options
- View**
- Help

- Icon View
- List View**
- Tree View
- Extended Relations Display
- Change List View Columns
- Change Sort

The screenshot displays a software interface with two main windows:

- Top Window:** A modal dialog titled "Change List View Columns". It shows a list of columns for "Title OOTB Part Objects" and provides options to "Add Before", "Add After", "Remove", "Change Attribute", "Help", and "Print".
- Main Application Window:** The background window has a title bar "Stub Intent Reason (StubLogReason)" and a toolbar with "File", "Action", "Info", "Create", "Query", "Search", and "Window". It contains a table with the following data:

Item Identifier	Vendor ID	Rev.	Seq.
123525	30	NR	1

The "Change List View Columns" dialog also shows a table of columns:

Rev.	Seq.	Life Cycle State	Owner	Qty
Column 1: Rev. (Revision)			er	Qty

Item Identifier	Party Part No	Rev.	Seq.	Life Cycle State	Owner	Project code	Design Group	Superseded?
282930010412	---	NR	1	ERC Working	super user	2829	30	False

OOTB Part Objects for super user port 8535 server plmpapp2c3 host TMLPNEWSKC

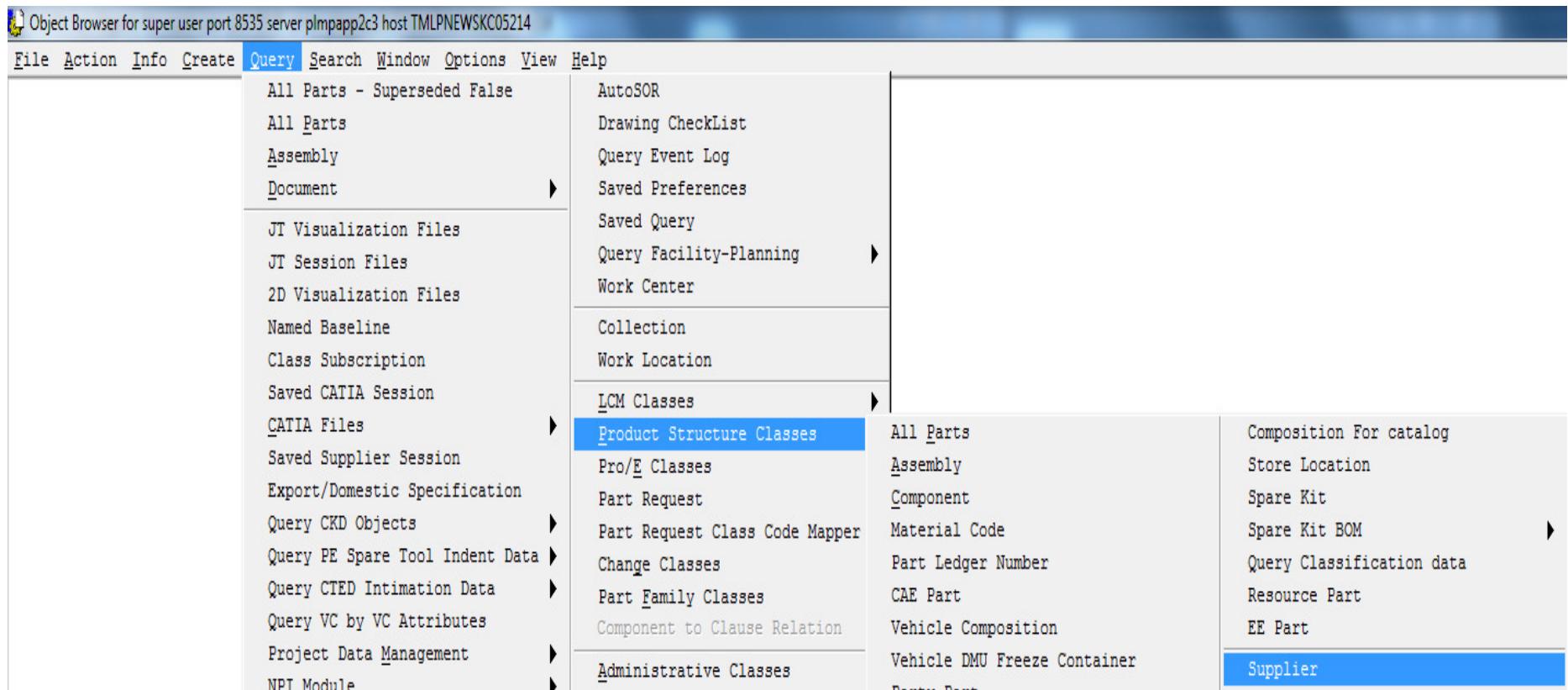
The screenshot shows a software interface with a context menu open over an item identifier. The menu is organized into several categories under the 'Create' tab:

- Document**: Create STD Replace Part
- New Part Request**
- Drawing CheckList**
- Component to Clause Relation**
- Administrative Classes**
- Navigator Items**
- Team Classes**
- Paper**
- Note**
- Editable Text File**

Below these, there are additional options:

- Assembly**
- Component**
- Part Ledger Number**
- Generate Material Code**
- Party Part**

The 'Product Structure Classes' option is highlighted in blue, indicating it is currently selected or being used.



Query for Supplier

Supplier ID	W80210	Rev.	Seq.
Certification Level	<input type="button" value="▼"/>		
Status	<input type="button" value="▼"/>		
Owner	<input type="checkbox"/>		

Supplier Objects for super user port 8535 server plmp

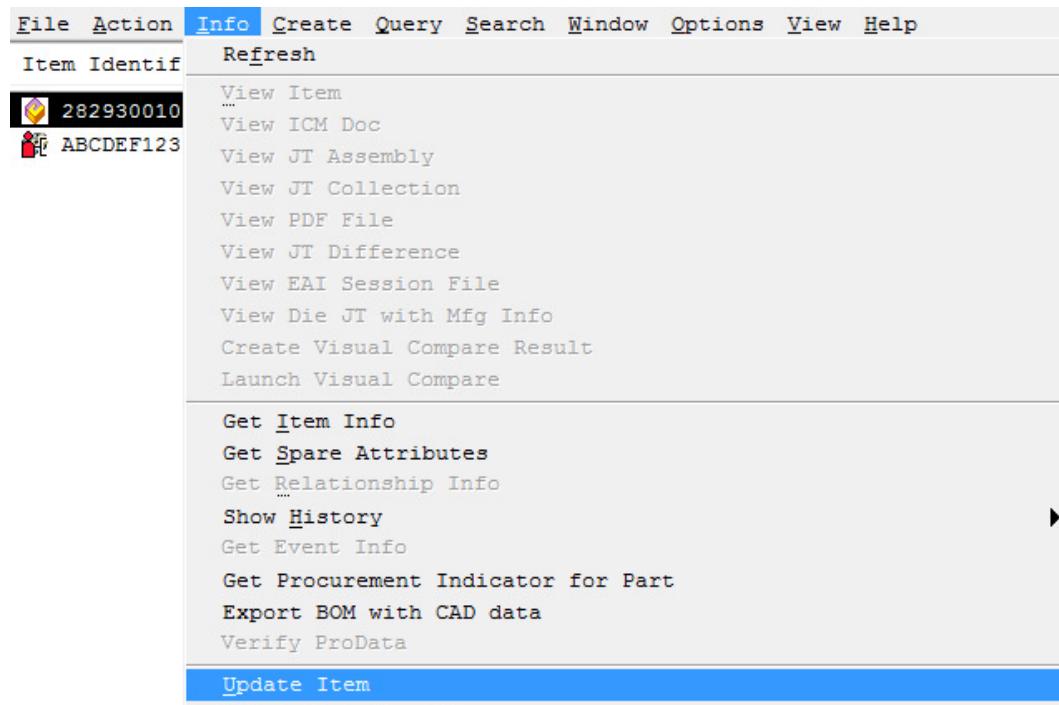
File	Action	Info	Create	Query	Search
Item Identifier					Supplier Name
W80210,A,1					AKK MFG CO

Create Party Part

*Part Number	ABCDEF123	Rev. NR
*Description	BAFFLE	
*Project Code	2829	<input type="checkbox"/>
*Design Group	30	<input type="button" value="▼"/>
Vendor ID	W80210	<input type="checkbox"/>

Item Identifier	Party Part No	Rev.	Seq.	Life Cycle State	Owner	Project code	Design Group
282930010412	---	NR	1	ERC Working	super user	2829	30
ABCDEF123	---	NR	1	ERC Review	WIP Vault	2829	30

Commercial Part ABCDEF123,NR,1,1 was transferred to WIP Vault.
Commercial Part ABCDEF123,NR,1,1 state changed.
Commercial Part ABCDEF123,NR,1,1 was created.



The screenshot shows an 'Update Assembly' dialog box with the following fields:

- DR/AR Status: DR3
- Assembly Type: (dropdown menu)
- Homologation Reqd: N
- Unit Of Measure: (dropdown menu)
- Colour Indicator: N
- Colour ID: (dropdown menu)
- Non Colour Part: (dropdown menu)
- CMVR Certification Reqd: False
- Party Part No: ABCDEF123
-

Item Identifier	Party Part No	Rev.	Seq.	Life Cycle State	Owner
282930010412	ABCDEF123	NR	1	ERC Working	super user
ABCDEF123	---	NR	1	ERC Review	WIP Vault

Objects found by the query: 1.
Objects found by the query: 1.
Assembly 282930010412, NR, 1, 1 was updated.

Item Identifier	Party Part No
282930010412	ABCDEF123
ABCDEF123	---

Get Item Info

GetInfo Party Part

Name ABCDEF123, NR, 1, 1	
Part Number ABCDEF123	
Project code 2829	
Design Group 30	
Desc. BAFFLE	
<input type="checkbox"/> Superseded?	<input type="checkbox"/> Official
<input type="checkbox"/> Frozen?	<input type="checkbox"/> Checked Out
Created By super user	
Owner WIP Vault	
Life Cycle State ERC Review	
TML Part Number 282930010412	

Item Identifier	Party Part No
282930010412	282930010412
ABCDEF123	Get Item Info

GetInfo Assembly
Party Part No ABCDEF123
Vendor Name AKK MFG CO

Supplier Objects for super user port 8535 server plmp					
File	Action	Info	Create	Query	Search
Item Identifier					
Supplier Name					
W80210,A,1		AKK MFG CO			

End

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