Live presentation PDM-Broker Competence Unit EDM/G

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Scenario - **Overview** - Sample engineering process using PDM-Broker

This scenario describes a collaborative product development process:

- The product 'truck' is available in the global Metaphase PDM system.
- The assembly 'loading space' should be designed within a local design team, using CATIA V5 and the new structure should be assembled in the 'body' assembly
- The ownership of the 'body' assembly is transferred from Metaphase to CATIA Team PDM.
- The 'loading space' is designed within CATIA V5 and the results are saved to CATIA Team PDM.
- After the engineering process is finished, the ownership will be transferred back to Metaphase.
- => The new designed Product structure is available in global PDM

Prerequisites:

Metaphase is the company wide PDM system and CATIA Team PDM is used as local team data manager for the engineering process.

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Scenario Global PDM - delegate design job in Metaphase

- Search the truck assembly in Metaphase and expand the used parts
- If the 'truck' assembly is not available in the local Team PDM, the assembly and the parts must be transferred first
- Transfer ownership of assembly 'body' to Team PDM to give the write access to the Team PDM

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- 🤣 Pro3457-002	×	1	front axis assm	False	
- Uses Parts (uses)					
- 💛 Par3457-007	1	1	front axis	False	
Par3457-009	1	1	front wheel	False	
Pro3457-003	1	1	rear axis assm	False	
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Scenario Local Team PDM - design preparation in SmarTeam

- Search the truck assembly and expand all parts
- Check out 'body' inclusive all children
- View the checked out version of the 'body' assembly in an own tree view
- Launch CATIA V5 from SmarTeam with the 'Body'->File Operation -> Edit command





Scenario Part design with CATIA V5

- Connect CATIA to SmarTeam
- Create a new product as child of 'body' with name 'loading space assm'
- Create new part as child of 'loading space assm' with name 'cargo box'
- Switch to the Part Design module and build up the geometry for the 'cargo box' part
- Position the new created part in relation to the drivers cab
- Save the changed 'body' assembly to SmarTeam, this action will add the new components to SmarTeam

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Scenario Finish the design process in SmarTeam

- Copy the Files from the last public 'truck' revision to the working directory
- Open and view the 'truck' assembly in CATIA V5
- Check in the 'body' assembly in SmarTeam
- Transfer the ownership for the 'body' assembly to Metaphase

SmarTeam - [Documents - Demo Project:]					
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CATPRT-1013 rear wheel a.0	Description truck				
CATPRT-1012 rear axis a.0	Feature Id Pro3457				
CATPRD-101D body a 2	Engineering Information				
CATPRT-1017 cargo box a.0	Part Number Pro3457				
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Scenario overview cont. Sample Engineering process using PDM-Broker

- A change request for the 'cargo box' is initiated
- The ownership for the 'cargo box' Part is transferred to SmarTeam
- The design team modifies and optimizes the part design in several stages
- The results will be checked in by each designer
- Each check in will automatically start the transfer of this status to Metaphase
- After the design process is finished the ownership is transferred back to Metaphase



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Scenario Global PDM - delegate design job in Metaphase

- Search for the truck assembly in Metaphase and expand the used parts
- If the 'truck' assembly is not available in the local Team PDM, the assembly and the parts must be transferred first
- Transfer ownership of Component 'cargo box' to Team PDM to give the write access to the Team PDM

Part Objects						
File Action Info Create Query	7 <u>W</u> i	ndow	Options View Help			
PDM-Broker						
ToSmarteam	Rev	Seq	Nomenclature	Stands		
OwnershipToSmarteam						
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- Uses Parts (uses)						
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Par3457-009	A	1	front wheel	False		
Pro3457-003	1	1	rear axis assm	False		
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Scenario PDM-Broker configuration (automatic transfer settings)

Change the PDM-Broker configuration for a check in command in SmarTeam to the resulting action "new sequence in MP"

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File Options						
Catia Team PDM Metaphase General About						
	Checkin Catia Part	No action in MP				
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	New Release Catia Part	New sequence in MP				
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	CheckOut Catia Part	No action in MP				
	CheckOut Catia Product	No action in MP				
	Release Catia Part	No action in MP				
	Release Catla Product	No action in MP				



- The new settings for the PDM-Broker:
 - A "check in" action in SmarTeam will trigger an automatic transfer of the meta data and the CAD-File to global PDM
 - A new sequence for the part in Metaphase is created

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Scenario

Design process in the design team

- Check out the 'cargo box' part in SmarTeam
- Load the checked out part in CATIA V5
- Change part in CATIA V5 and save the changes to SmarTeam
- Check in the changed part in SmarTeam (and automatic transfer of the meta data and the CAD-File to Metaphase)
- Repeat these steps until the change process has finished
- Transfer the ownership of the 'cargo box' part to Metaphase

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File Action Info Greate Query	r <u>¥</u> 1:	ndow	Options View
PDH-Broker			
Item Identifier	Rev	Seq	Nomenclature
Pro3457	Å	1	truck
- Uses Parts (uses)			
- 🤤 Pro3457-001	A	3	body
- Uses Parts (uses)			
- 🤣 Par3457-102	A	з	drivers cab
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- Uses Parts (uses)			
- 💛 Par 3457-007	A	1	front axis
L 📴 Par 1457-009	1	1	front sheel



global PDM

local PDM

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Questions?

