



Improve quality and harmonize your CAD data automatically



- Introduction
- Use cases
- How can SmartUpdate help?
- Benefits
- SmartUpdate workflow and capabilities

Introduction

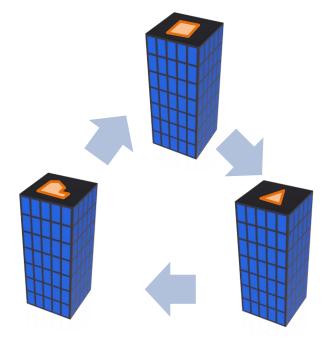


- What is SmartUpdate all about?
- Where does it come from and why was it initially developed?

Use case: Internal Data reuse and Data sharing



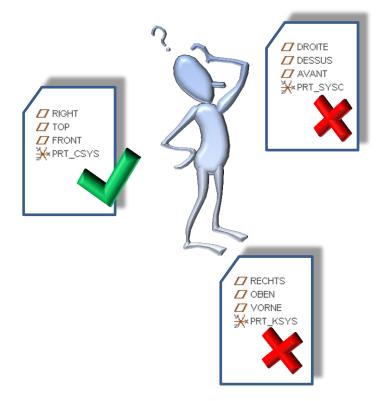
- You want to use parts from existing projects
- You want to incorporate data from other company sites in your design
 - Start features don't match
 - Parameters are missing
 - Layer system conflicts
 - Views are oriented incorrectly
 - Relations need to be cleaned up





You want to harmonize your existing CAD data

- Each company site used/uses own startparts
- There were historical changes to the startparts
- There are no or unclear design rules
- Design rules are not verified

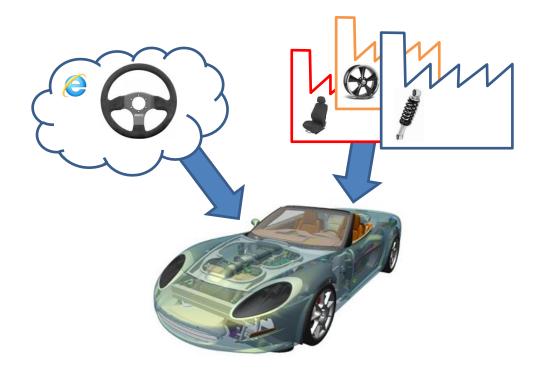


Use case: Data import from external sources



You are using imported objects in your design

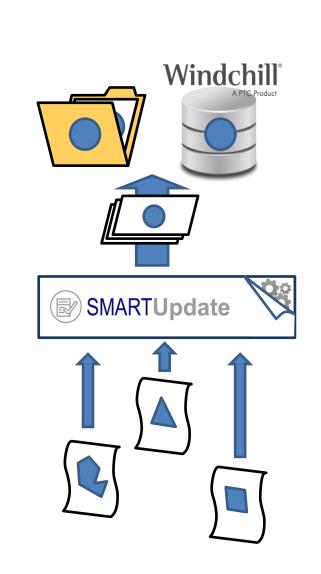
- Parts contain only the geometry as import feature; datum features (planes, axes, csys) are missing or do not mach with your company standard
- Parameters, Layers, Orientations, etc. are missing



Use case: PDM Link introduction

- Your want to implement PDM-Link at your site
- You want to keep your
 Commonspace clean and tidy
 - Parameters are not designated or not existing
 - The design rules have not been followed

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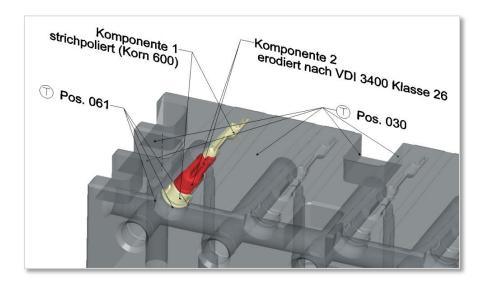




You want to start with MBD

- Existing parts do not have combined states
- The Layer system is not supporting MBD
- Required Orientations are missing
- Part setup files are not correctly set

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- You want to provide multiple tailored and sophisticated startparts to your user base
 - This takes a lot of time to create and maintain
 - Updating startparts becomes a nightmare



- It will save you a lot of time by automating many of these use cases
- It'll help you to apply design rules and verify them
- It helps the user to check and update his design before checking data into Windchill
- You may update recursively through the whole assembly structure
- It helps you and users to avoid errors during updating and harmonization
- Use batch mode for large data sets harmonization
- ... and many more



Manual update

- Create/Edit a single
 - Parameter ~ 25 sec
 - Layer ~ 14 sec
 - Relation ~ 17 sec

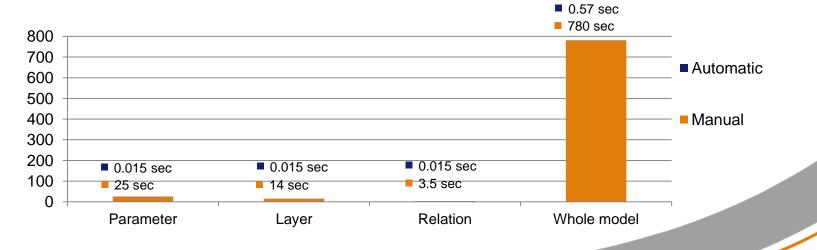
Create/Edit 20 parameters, 15 layers and 3 relations

- 1 model ~ 13 min
- 100 models ~ 21 hours
- 1000 models ~ 26 days

B&W SmartUpdate

Create/Edit a single

- Parameter ~ 0.015 sec
- Layer ~ 0.015 sec
- Relation ~ 0.015 sec
- Create/Edit 20 parameters, 15 layers and 3 relations
 - 1 model ~ 0.57 sec
 - 100 models ~ 57 sec
 - 1000 models ~ 9.5 min



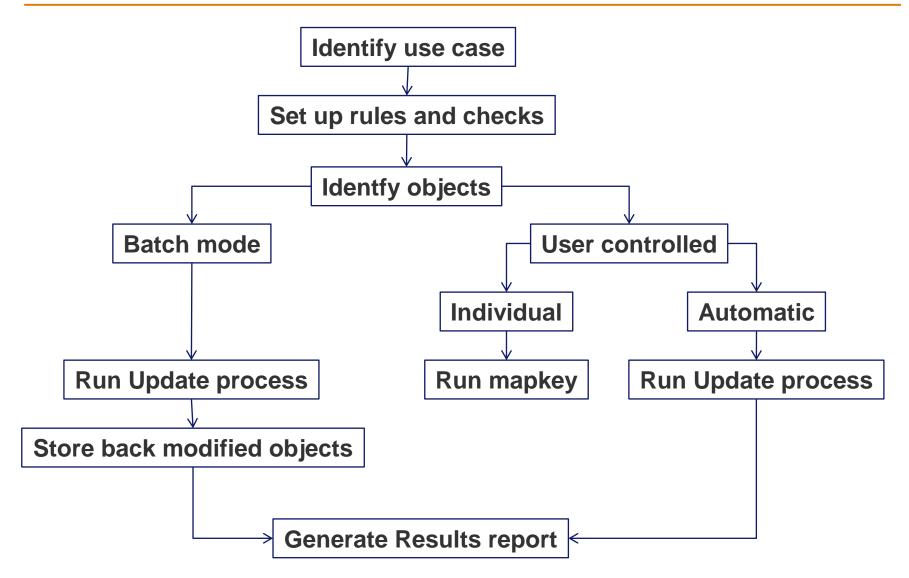
SMARTUpdate capabilities - examples



- Check for required model properties (Parameters, Layers, Views, Relations, etc.) and if necessary create/correct them
- Translate parameters, relations or drawing notes from dictionary
- Use it recursivelly for the whole assembly structure
- Use batch mode for a local folder or workspace
- Use it on drawings to update the .dtl file
- Run a ModelCHECK analysis on your model
- Run a mapkey during a specific check
- Condition the check or update for specific objects
-many, many more

SmartUpdate Workflow





Configurator UI



SMARTUpdate	Confi	gurator: C:\proe\creo_appl\Sl	J60_M050\configuration_customer1\doma
Check Domain/Category			
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Plastic Part		Domain Initial	RD
Basisteil		Current Mode	Part Mode
Mormteil Mosembly Mode		Current Section	Conformity Section
Drawing Mode	~	Expand Model tree	✓
	-	Propagate Status to next level	
Check Details			
Information Section	^	Edit BUW Parameter Organisation 	
		Check ID	RD_PRT_C_EDIT_BUW_PARAM
Info Check 2		Condition Check	
Conformity Section		Conditions	-
Relations Create BUW Relation		Condition the update	
Edit BUW Relation		Condition the check	
Delete BUW Relation		Categories	ALL
Parameters		✓ Туре	
Create BUW Parameter		Check Type	Parameter
Edit BUW Parameter		Description	Edit BUW Parameter
Remove BUW_STAR*		 Definition 	
Startpart Features		Parameter	BUW_EDIT_PARAMETER
Rename old Right Feature to Right		Action	EDIT
Create STD-KOORD		New Name	BUW_EDITED_PARAMETER
Create FT_MASS_PROPS		Value	2

User UI



Overview 🔱 Information	😳 Conformity 🖉 Qual	ity 🔱 Issues	Check Mod
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	D_PARAMETER: N/A (EDIT)		
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🖃 🌝 Quality Section			
🚊 🐶 General Quality Sta	tus		
🖻 📀 Model Setup	: (MLT) Convert to r		
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Part and Assembly

- Parameterquery
- Parameter
- Layer
- Orientation
- Feature
- Relation
- Units
- Model setup
- Combinations states
- Layer states
- Annotations
- Dimensions
- Simp Reps
- Material
- Run mapkey
- Run ModelCHECK

Drawing

- Parameterquery
- Parameter
- Layer
- Drawing setup
- Drawing Program
- Drawing note
- Run mapkey
- Run ModelCHECK



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