SIEMENS

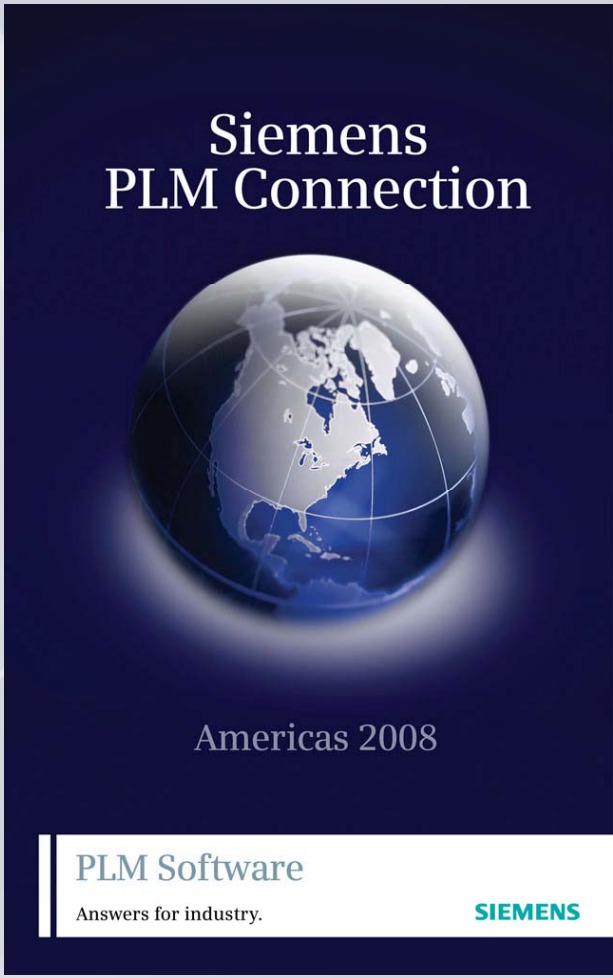
Siemens PLM Connection

Teamcenter Platform Designer Customer Case Study

Jim Albrecht

Siemens PLM Software

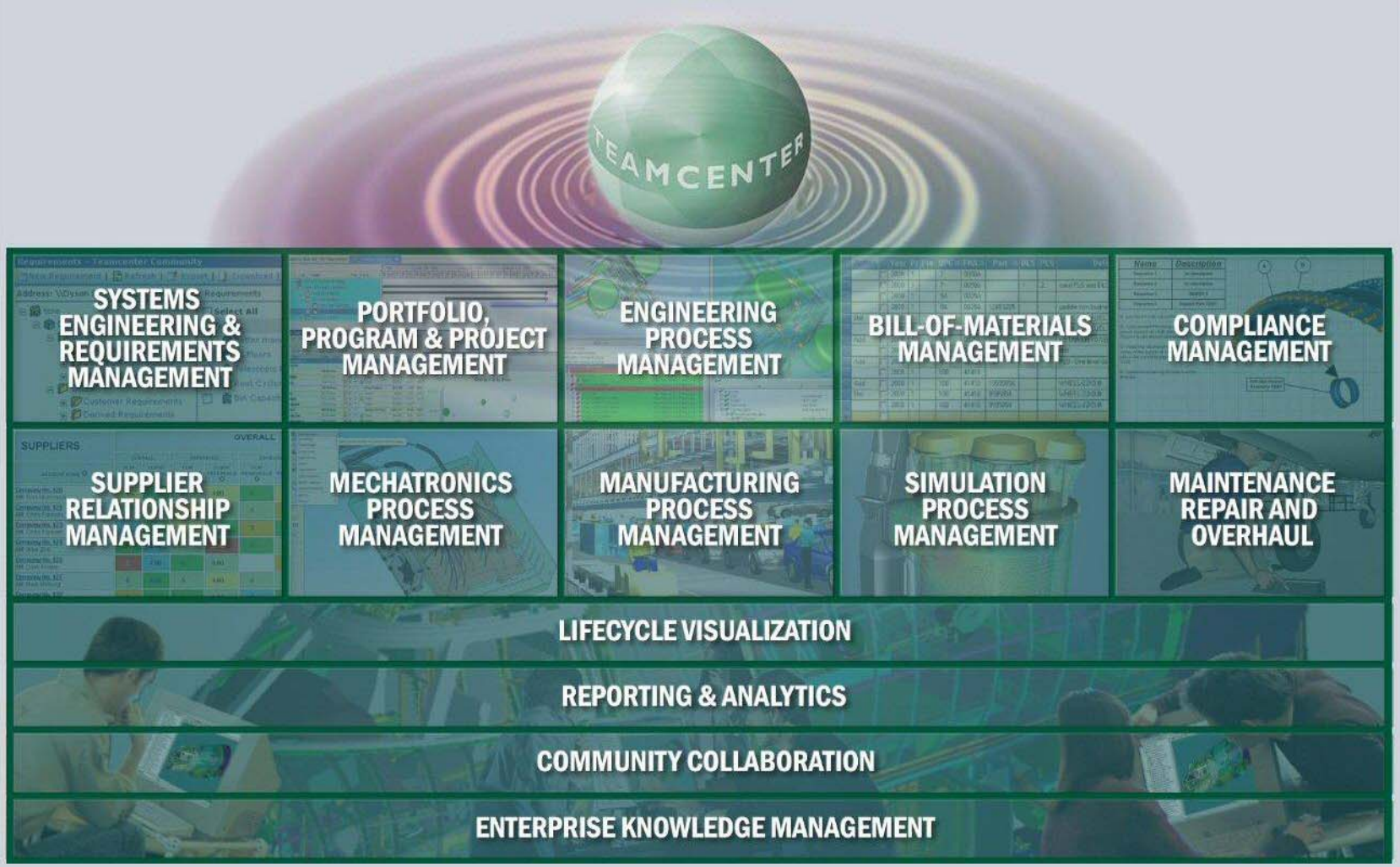
Teamcenter Development Consulting



Copyright © Siemens PLM Software Inc. 2008. All rights reserved.

Teamcenter Digital Lifecycle Management Solutions

SIEMENS



© 2008. Siemens Product Lifecycle Management Software Inc. All rights reserved

SIEMENS

Bill-of-Materials Management

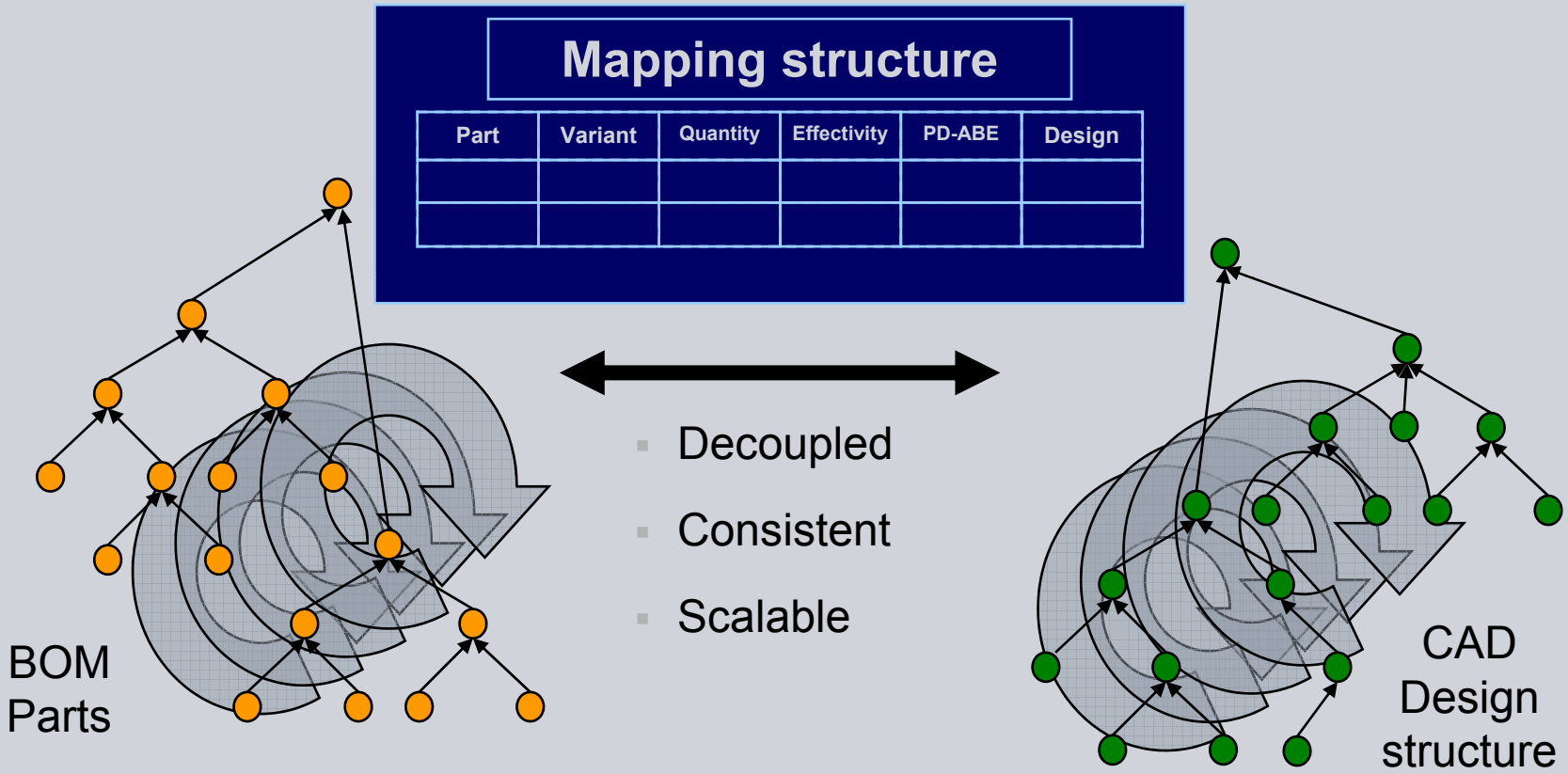
Agenda

- Problem Space
- Conceptual Solution
- Teamcenter Platform Designer
- Customer Case Study
- Q&A

© 2008. Siemens Product Lifecycle Management Software Inc. All rights reserved

Platform Designer Problem Space
Mapping BOM / CAD structure

SIEMENS



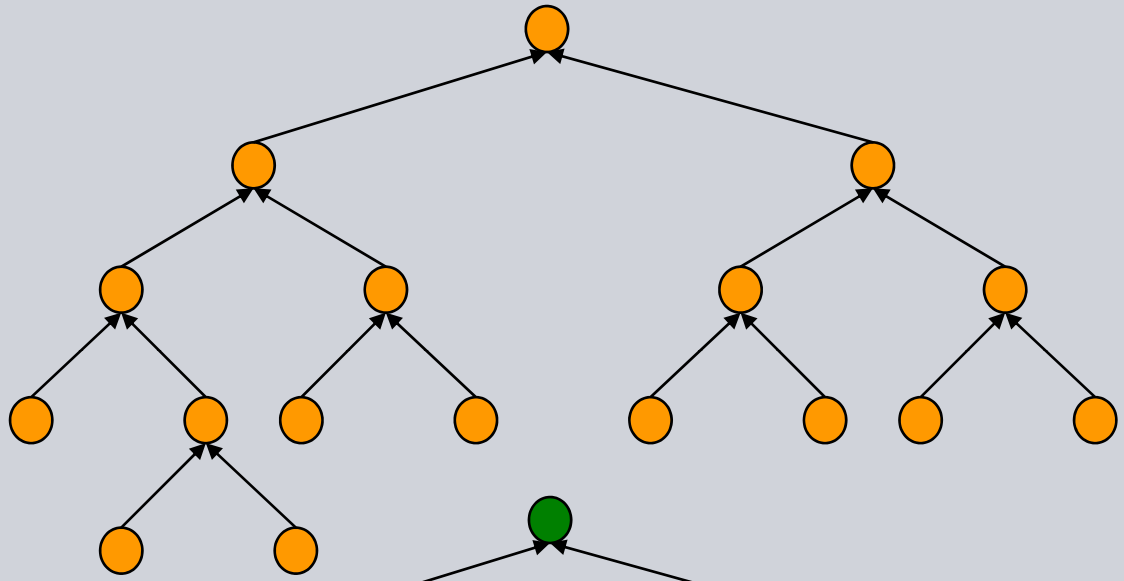
- Decoupled
- Consistent
- Scalable

© 2008. Siemens Product Lifecycle Management Software Inc. All rights reserved

Problem
BOM and CAD structure are not one in the same

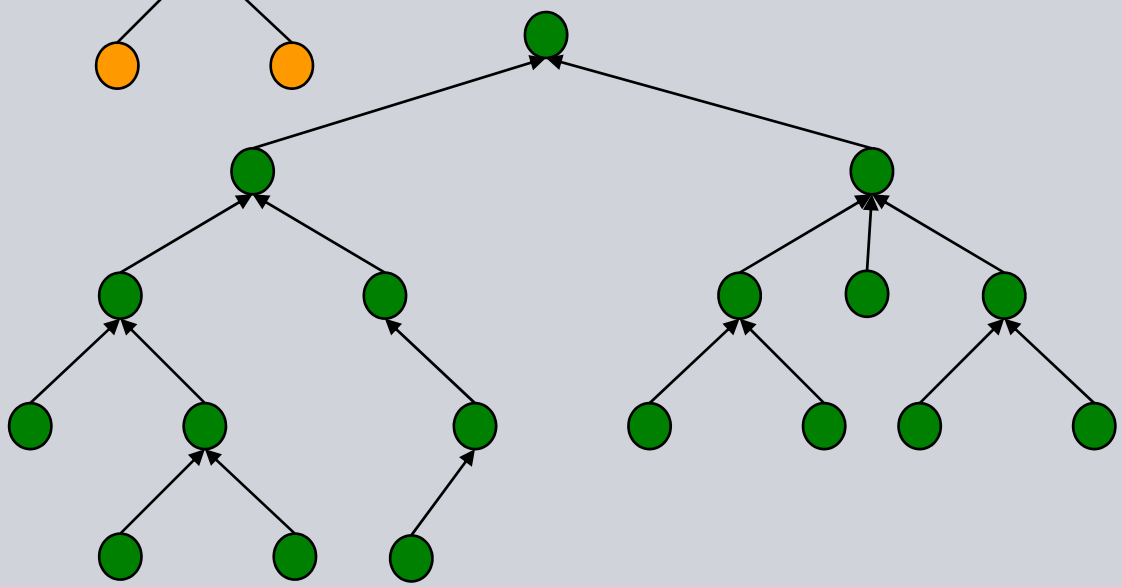
BOM

Parts



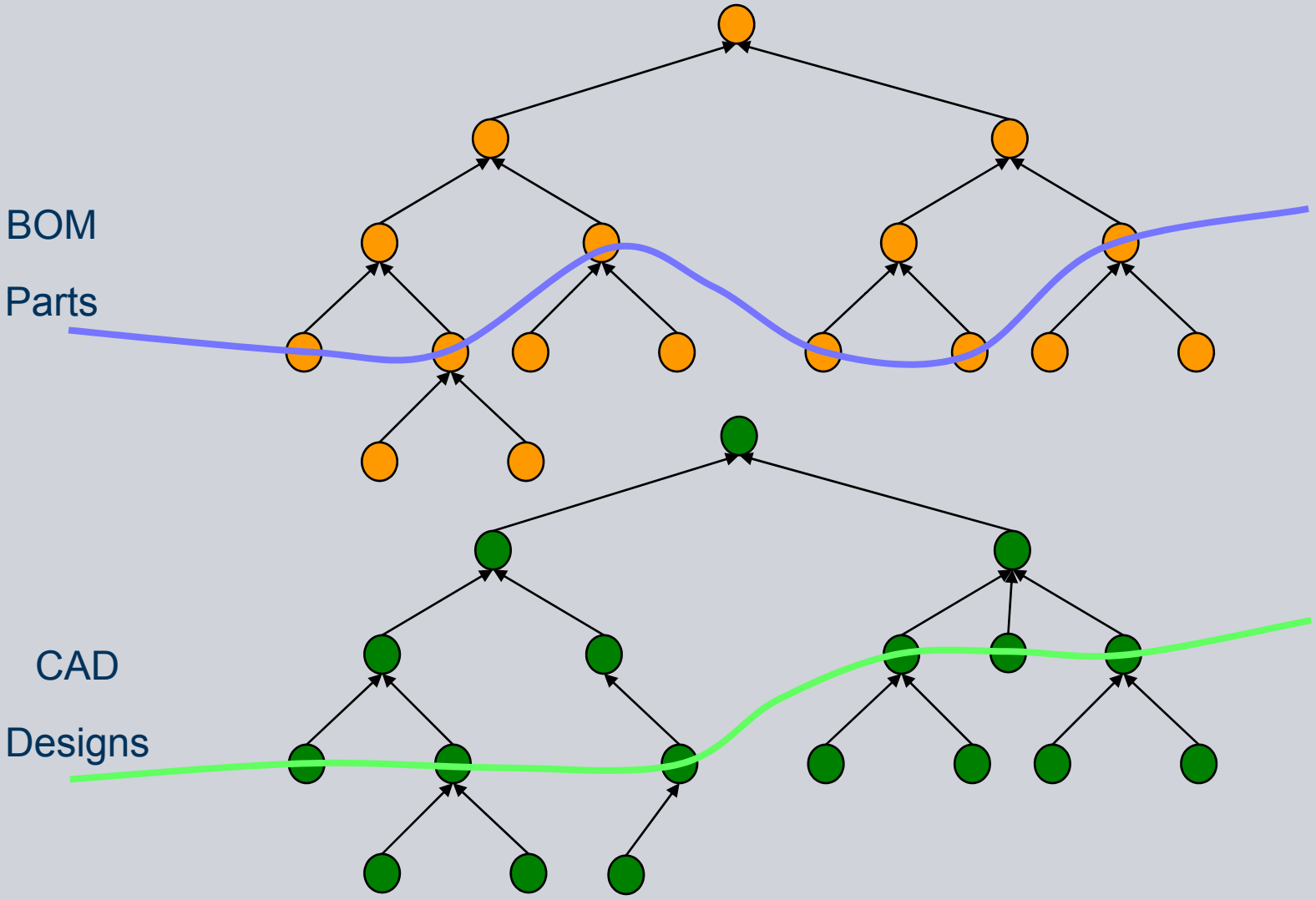
CAD

Designs



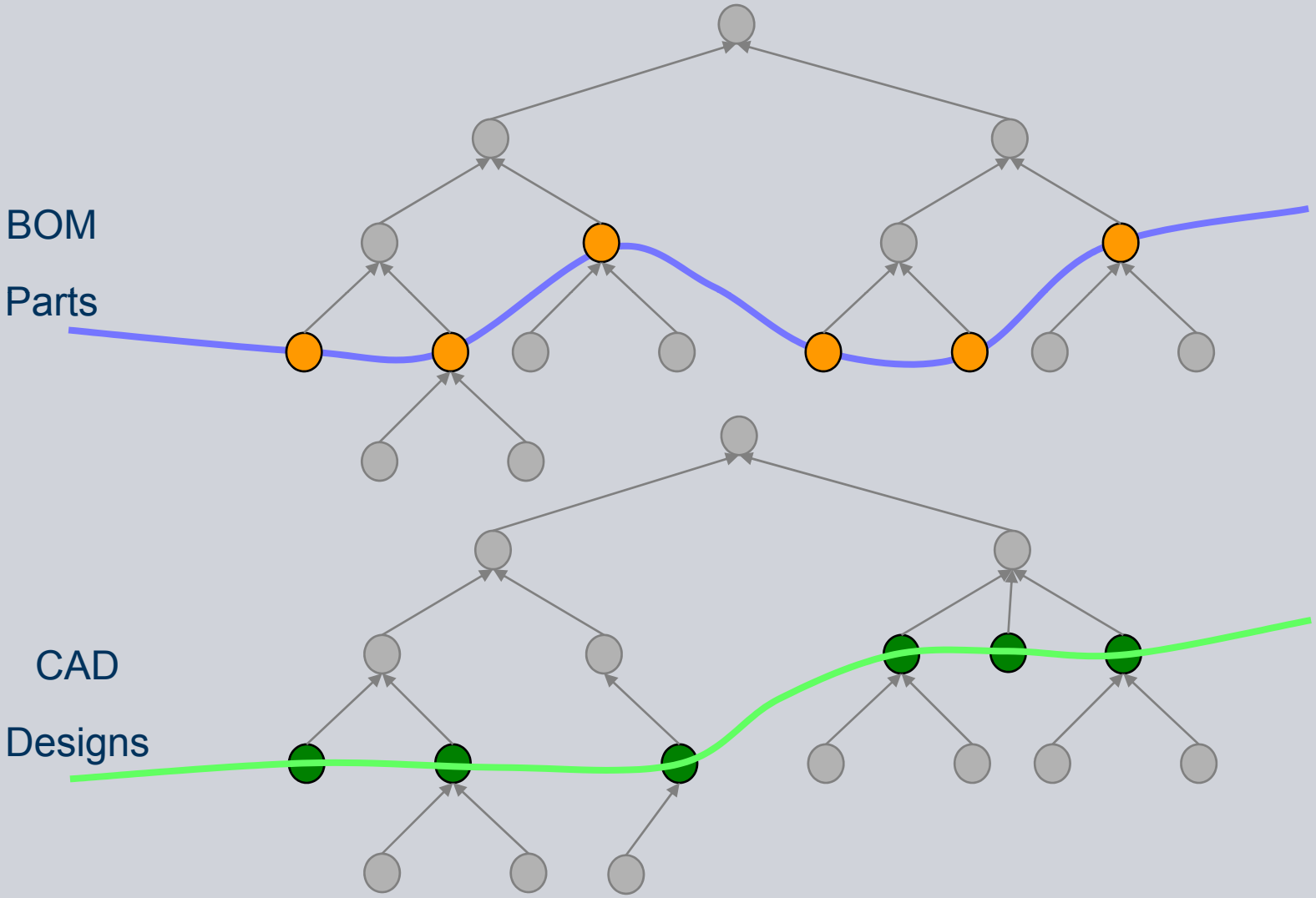
© 2008. Siemens Product Lifecycle Management Software Inc. All rights reserved

Problem
Need to create a part and a design data thread



© 2008. Siemens Product Lifecycle Management Software Inc. All rights reserved

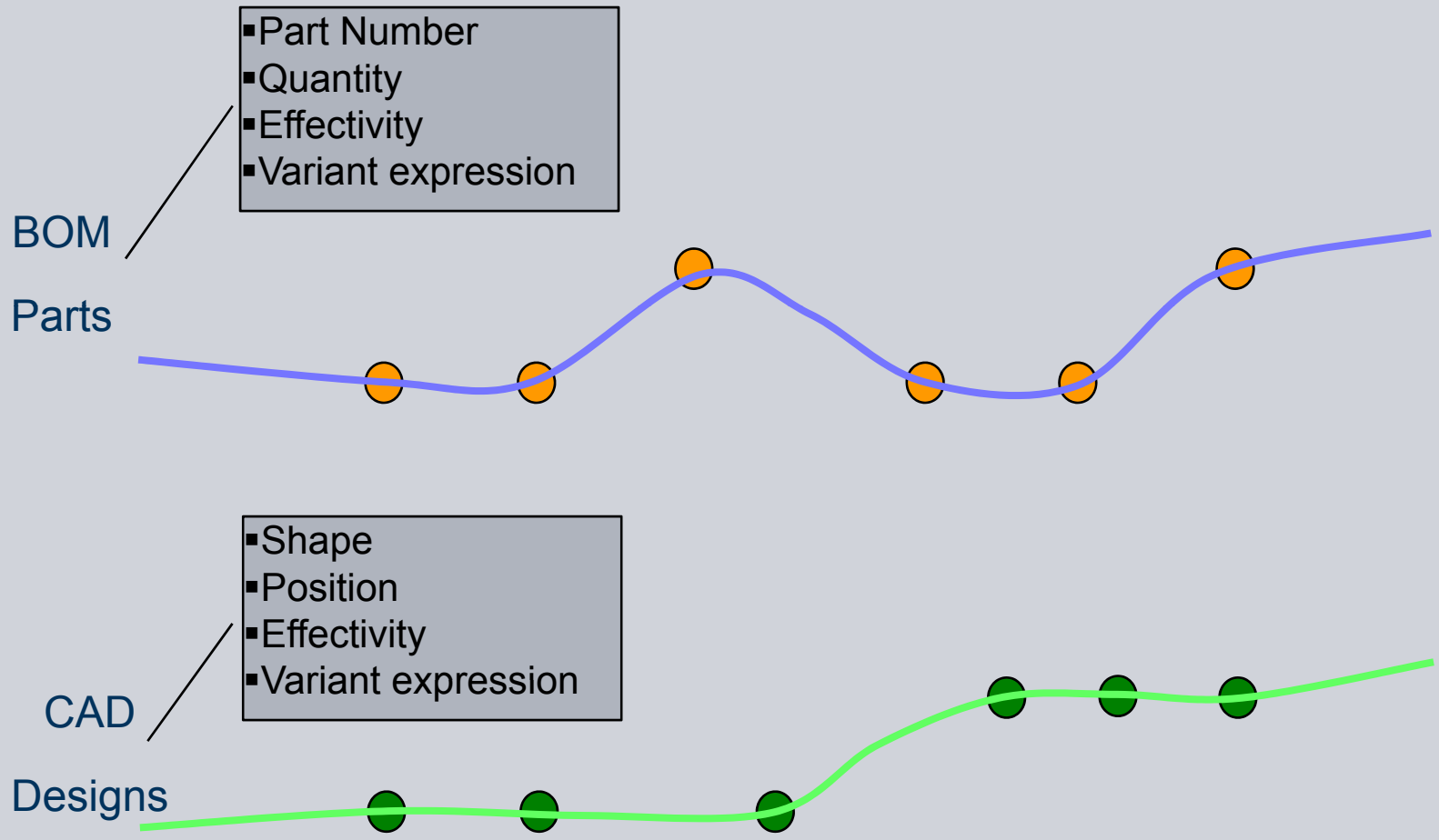
Problem
Need to find correlation, “weave the threads”



© 2008. Siemens Product Lifecycle Management Software Inc. All rights reserved

Not 1:1, Similar but Different
BOM and CAD structure are <u>interdependent</u>

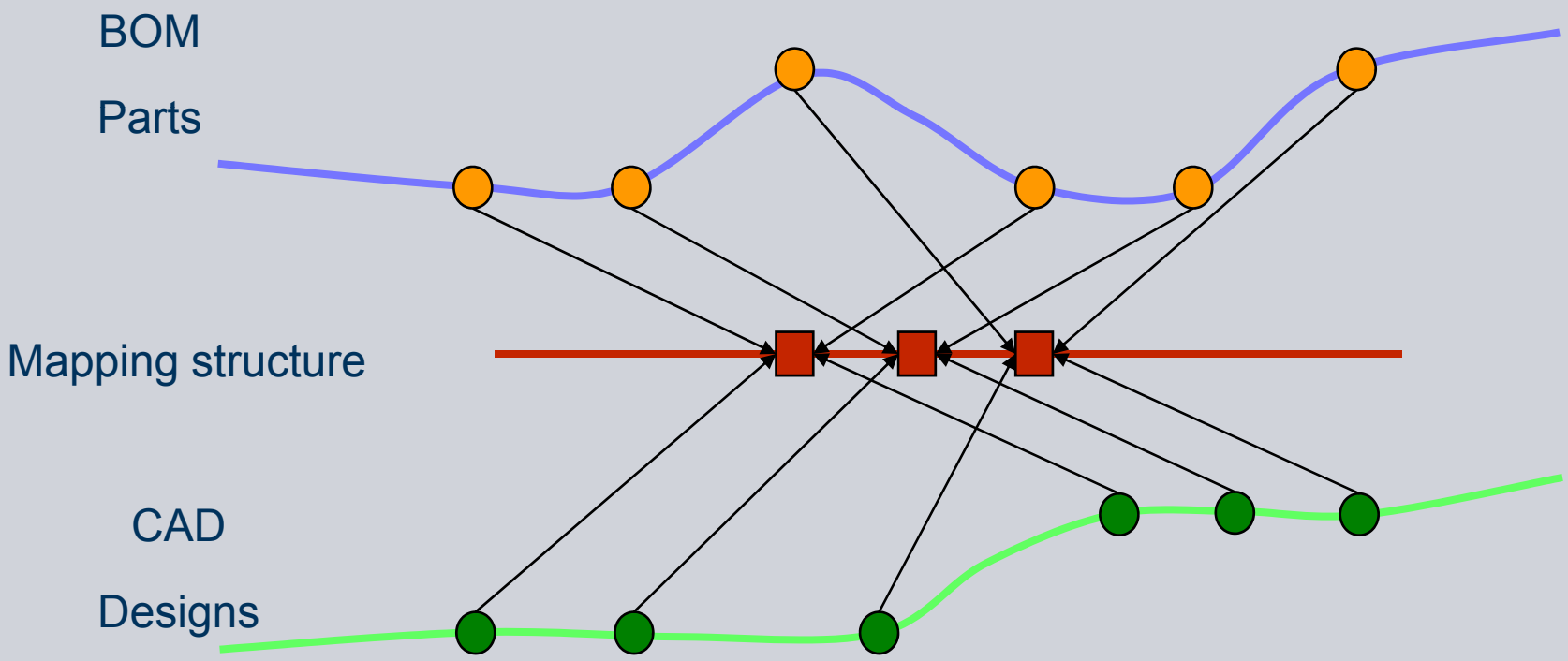
SIEMENS



© 2008. Siemens Product Lifecycle Management Software Inc. All rights reserved

Conceptual Solution: Mapping Structure
BOM and CAD structure

SIEMENS



© 2008. Siemens Product Lifecycle Management Software Inc. All rights reserved

SIEMENS

Introduce and Define Teamcenter Platform Designer

- Allows Configuration Experts, Part Engineers, and CAD Designers to work efficiently, yet maintain interdependence

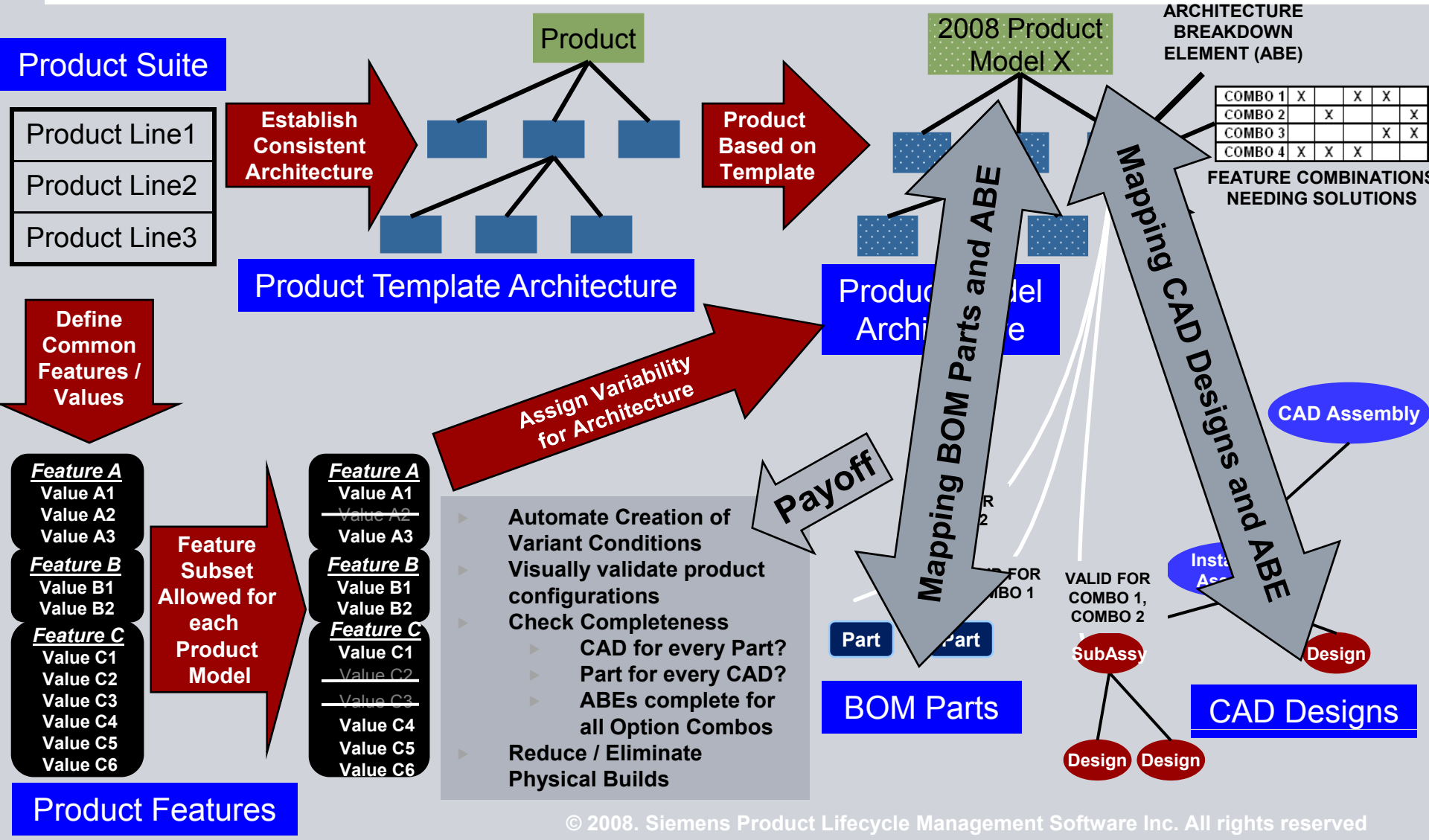
- Application in Teamcenter Product Configuration suite
  - Manages platforms, structural template
  - Manages variability, product options

- Provides framework for Product Planning

  "What product variation are we offering?"
- Architecture Provides link to validate the consistency
- Automates Variant Rule Creation
- Maps consistent variant definitions to Parts and CAD Designs
- Carryover and reuse within and across platforms, product families
- Facilitates visual validation of product variations
- Assures that quantity is correct for each structure variation
- Enables you to reduce / eliminate physical build of product variations

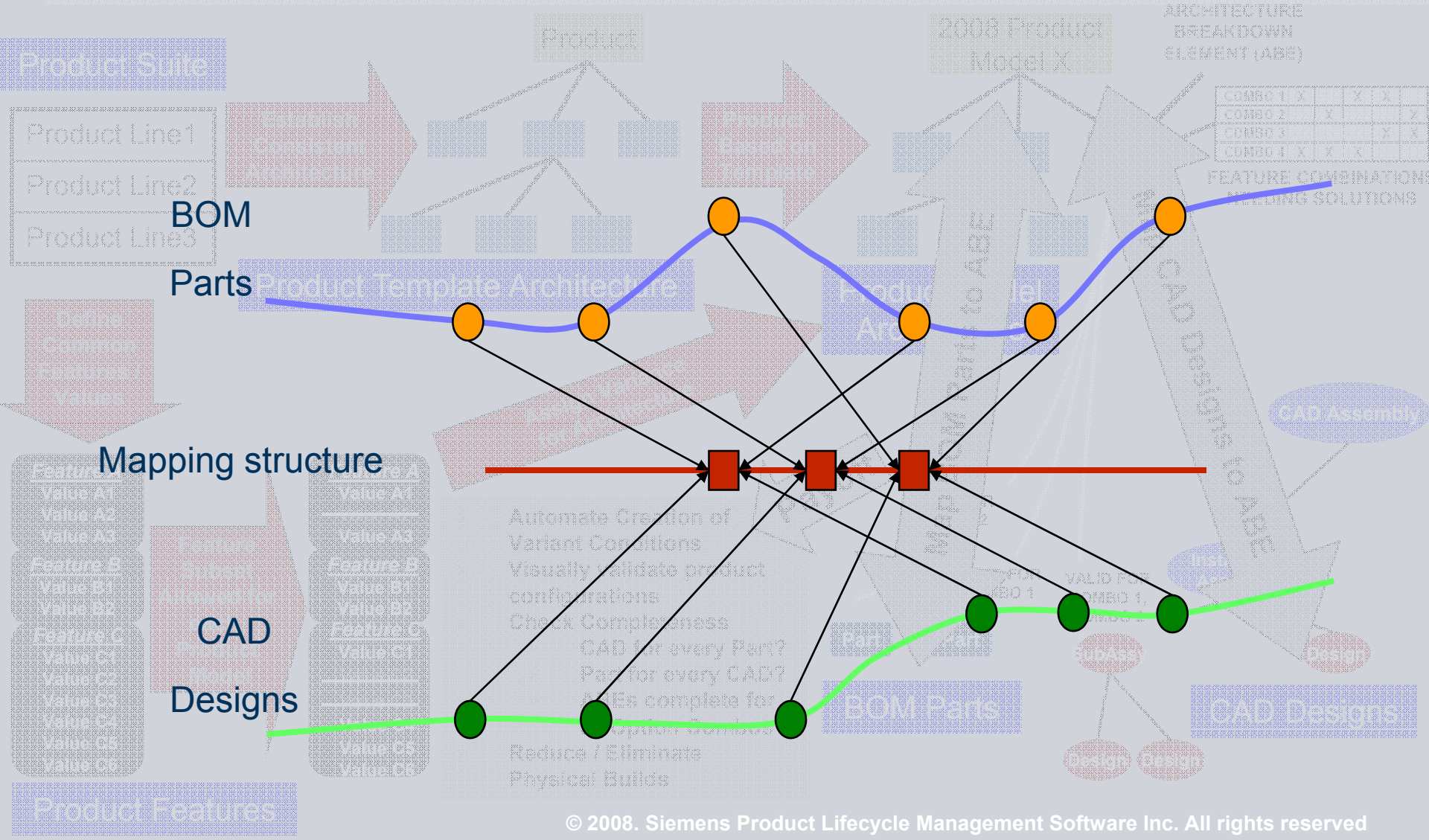
© 2008. Siemens Product Lifecycle Management Software Inc. All rights reserved

Platform Designer: The Basics



© 2008. Siemens Product Lifecycle Management Software Inc. All rights reserved

Platform Designer: Mapping Structure



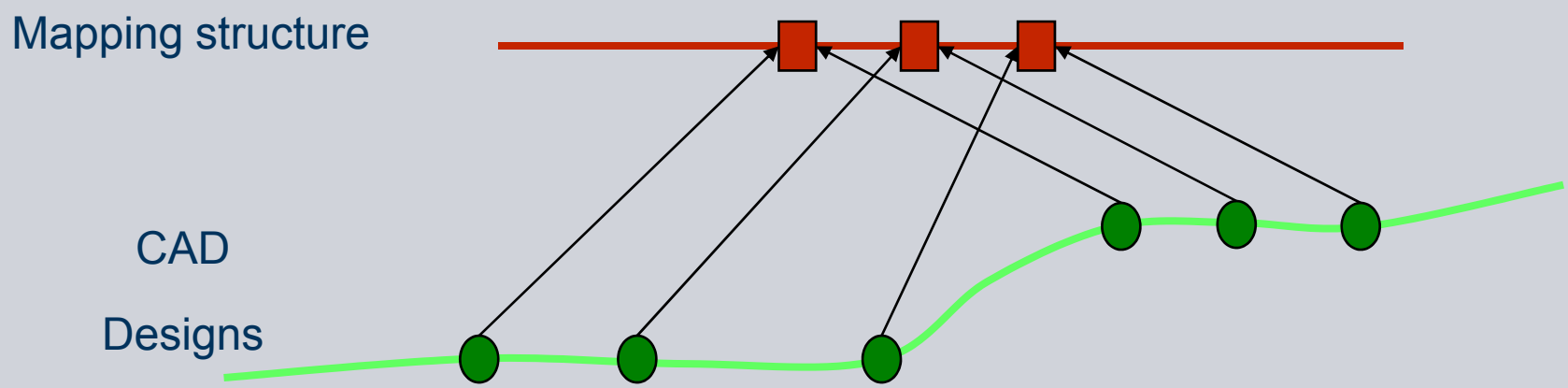
© 2008. Siemens Product Lifecycle Management Software Inc. All rights reserved

SIEMENS

Platform Designer to manage CAD Variability

Transitioning to our customer case study

- Reduce the solution space covered by Platform Designer
  - Generic Product Architecture
  - Variability
  - CAD Design



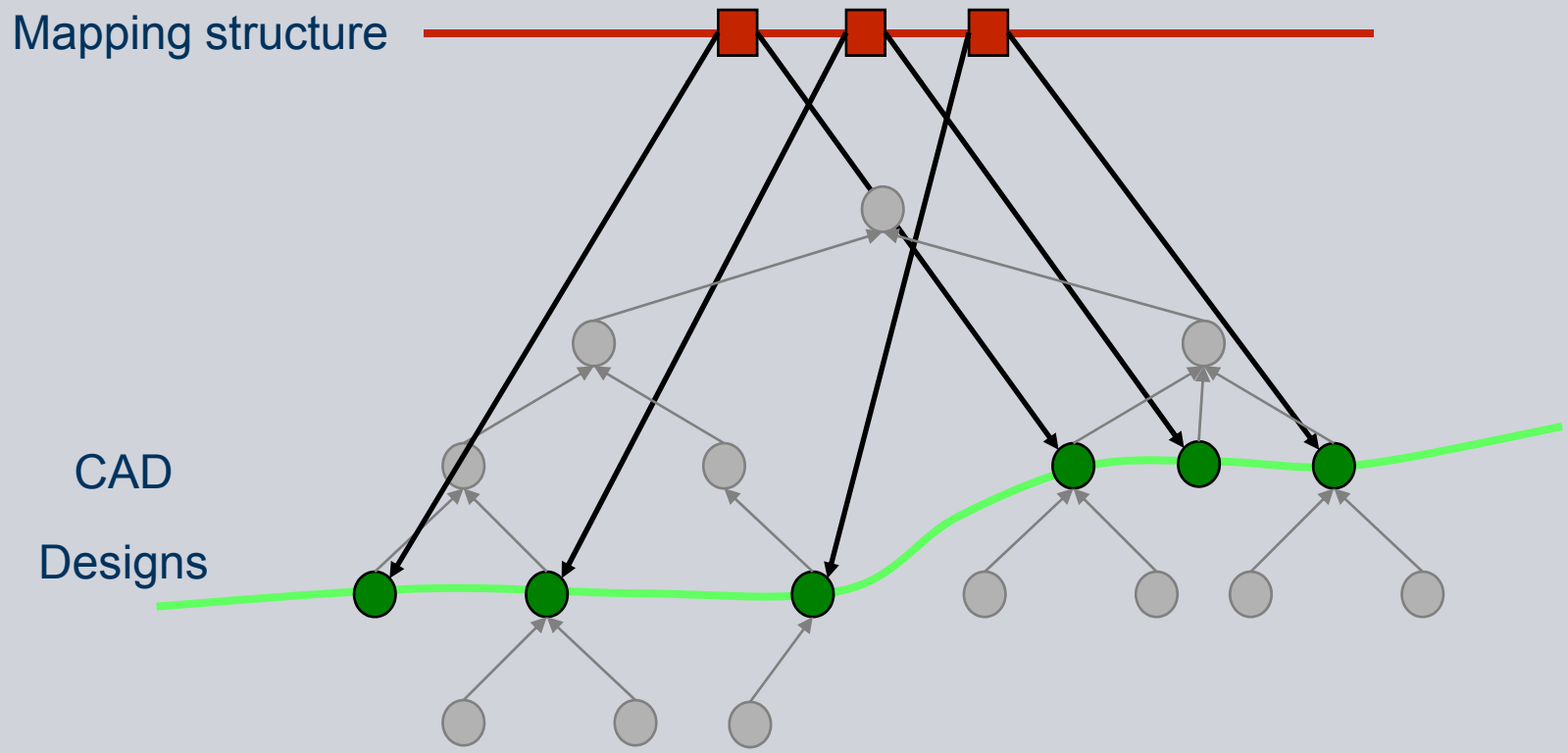
© 2008. Siemens Product Lifecycle Management Software Inc. All rights reserved

Customer Case Study
Managing CAD Design Variability

SIEMENS

Customer Case Study has a tighter focus

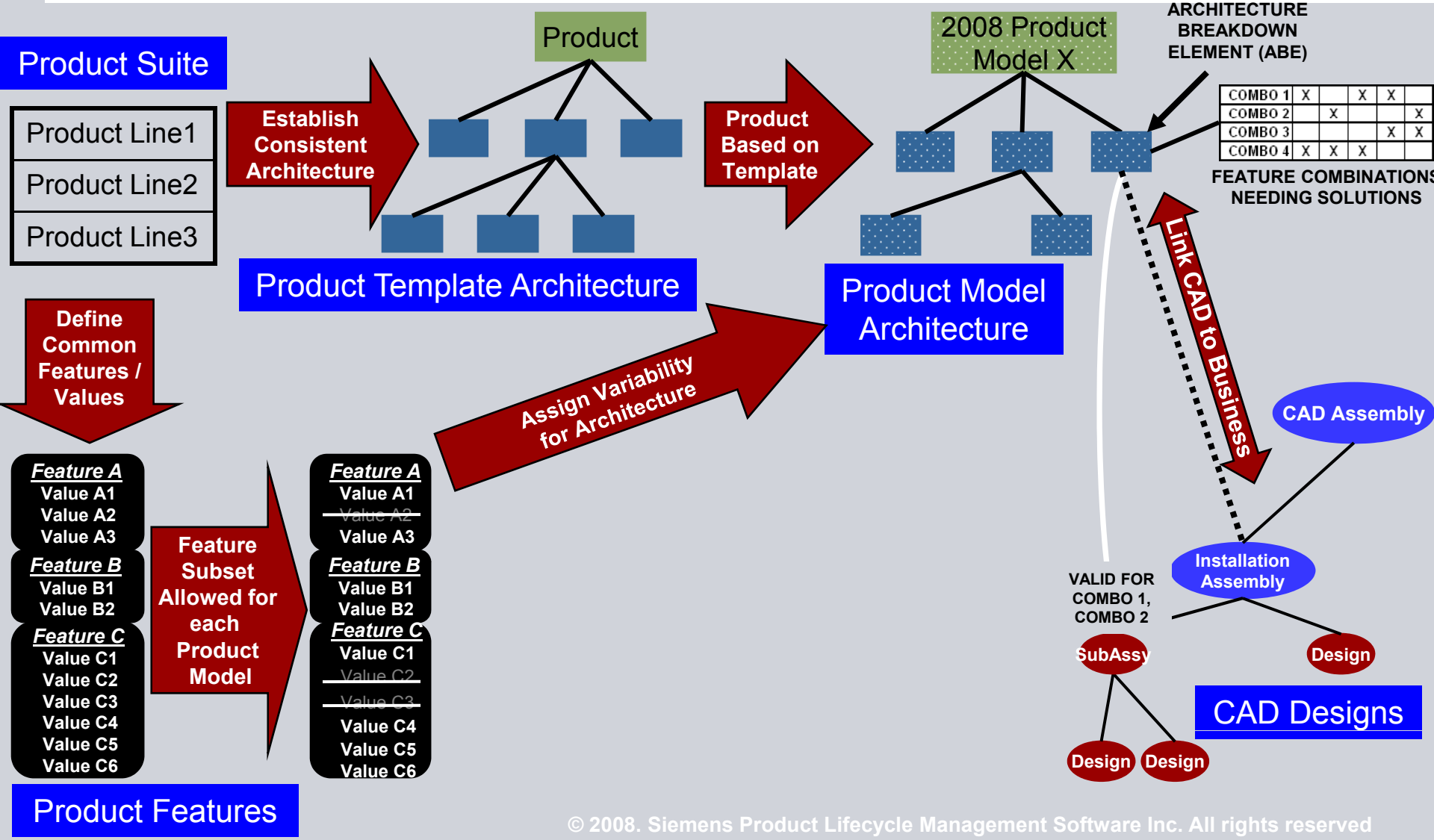
- Teamcenter Platform Designer to manage variability based on a generic product definition



© 2008. Siemens Product Lifecycle Management Software Inc. All rights reserved

Teamcenter Platform Designer
Managing CAD Design Variability

SIEMENS



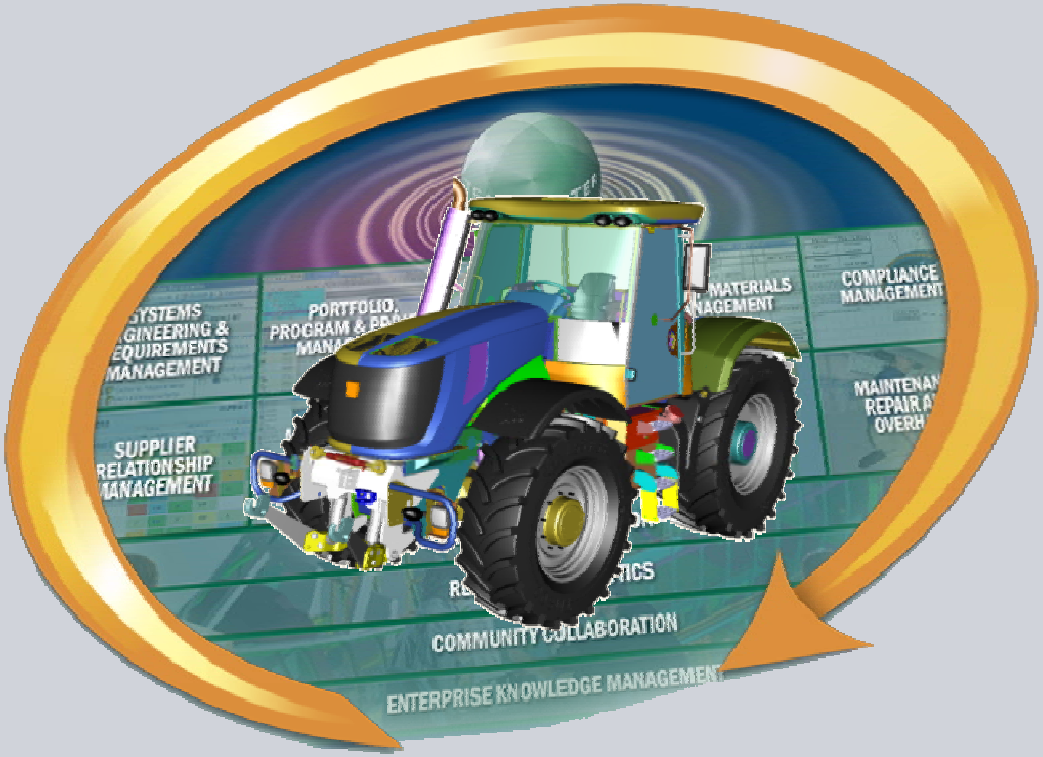
© 2008. Siemens Product Lifecycle Management Software Inc. All rights reserved

Teamcenter Platform Designer
Customer Case Study

SIEMENS

Construction Machinery Manufacturer

- Business Process Architect
  - 20+ years experience
  - Manufacturing → PLM
  - Knows Product Lines
  - Knows Variability
- Siemens PLM Software
  - Product Consultants
  - Product Architects



- Work in Progress
  - This Presentation
  - Best Practice Document
  - Improved Technical Documents
  - Improved Software Product

© 2008. Siemens Product Lifecycle Management Software Inc. All rights reserved

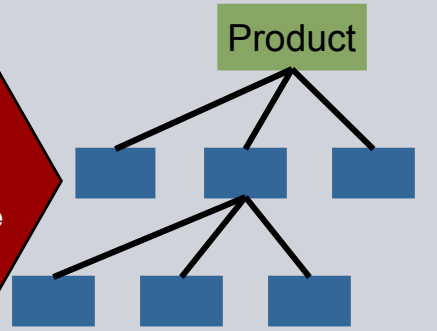
Methodology, Step 1:
Identify Product Data: Structure and Variability

SIEMENS

Product Suite

- Product Line1
- Product Line2
- Product Line3

Establish Consistent Architecture



Product Template Architecture

Define Common Features / Values

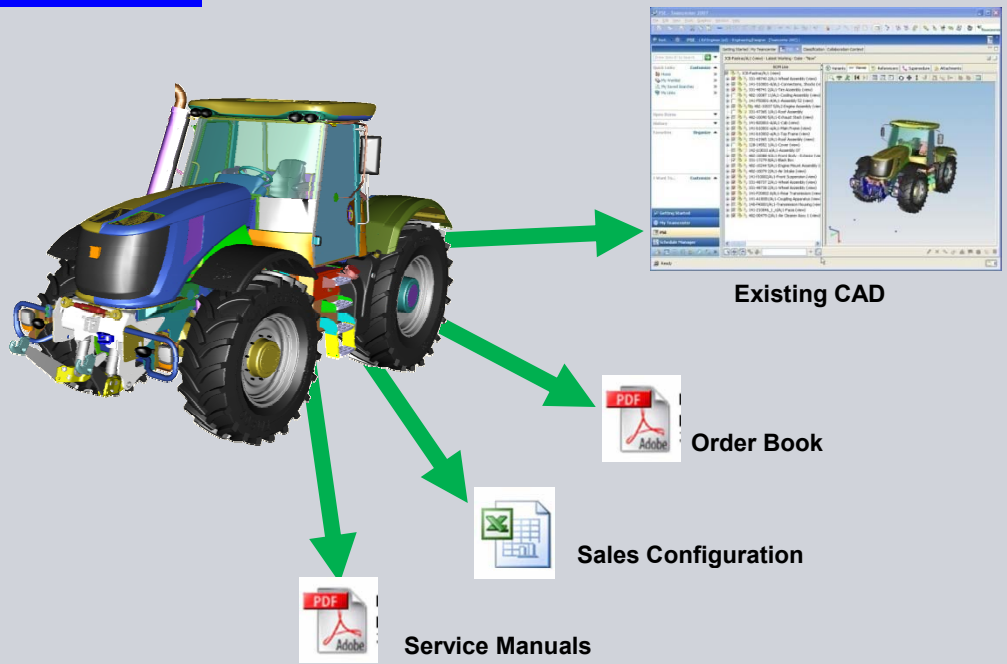
Feature A
Value A1
Value A2
Value A3

Feature B
Value B1
Value B2

Feature C
Value C1
Value C2
Value C3
Value C4
Value C5
Value C6

Product Features

- Customer Data Sources
  - Existing CAD
  - Order Book
  - Sales Configuration
  - Service Manuals



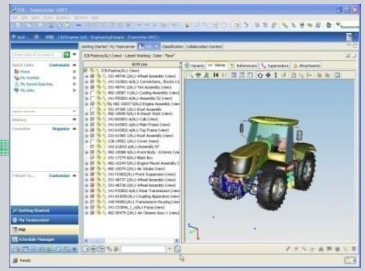
© 2008. Siemens Product Lifecycle Management Software Inc. All rights reserved

Methodology, Step 2: Aggregate and Clean Data

SIEMENS

Identify Product Architecture or Corporate Dictionary

- Used Excel for data analysis
- Data Sources
  - Teamcenter Product Structure Editor
    - Existing CAD Design for Product (> 150% BOM)
  - Company Order System and Sales Configuration
    - Mandatory components (base machine), 1 of n
      - Example: Engine
    - Optional components (additional upgrades), 0-1 of n
      - Example: Heated Seat, Backup Camera, and/or Rotating Beacon
  - Service Manuals
    - Service Manuals were eliminated due to lack of organization or pattern



Existing CAD

Order Book

Sales Configuration

Service Manuals

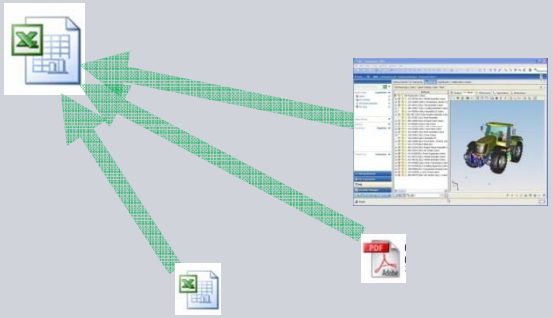
Excel used for data capture and analysis

- Pattern discovery, then Teamcenter can capture that knowledge
- Filtering, Forest → Trees → Wood
- Aggregating via pivot tables, see connections / patterns / combinations

© 2008. Siemens Product Lifecycle Management Software Inc. All rights reserved

Methodology, Step 3: Analyze Data

SIEMENS



Used analysis to get knowledge of Product
- Architecture
- Variability

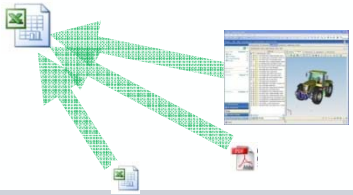
Started with simple comparisons
  - CAD structure & Business (Sales) structure
  - Sales Options & 101% - 600% CAD structure

Examined one option effect on one section of the product
  - Ambient Temperature
  - Cooling System Fan

Introduced Excel pivot tables and added columns (attributes)
  - Categorize sub-assemblies
    - Phantom
    - Weld
    - Manufactured

© 2008. Siemens Product Lifecycle Management Software Inc. All rights reserved

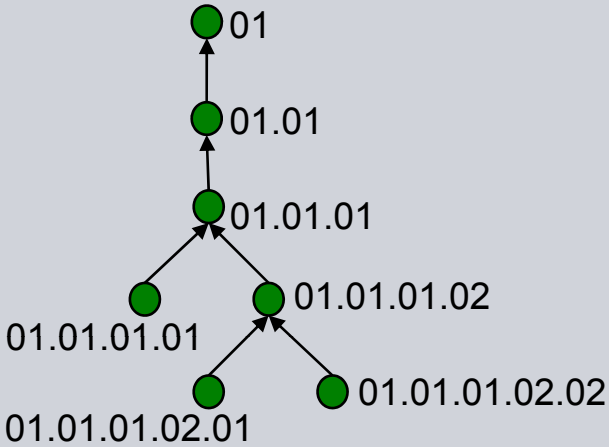
Methodology, Step 4: Analyze Data Further



SIEMENS

Added section coding methodology
- Identify and categorize hierarchy
- Need <u>Architecture Breakdown Element ID</u>

Tested analysis first on focus section and option
- Ambient Temperature
- Cooling System Fan



Began to derive data
- Create prototype architecture breakdown

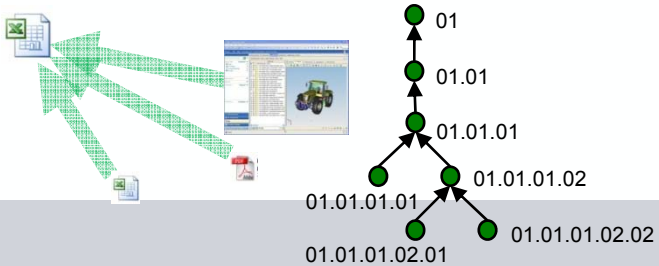
Q1001 =IF(VALUE(A1001)<1,"",IF(VALUE(A1001)=1,G1001,IF(VALUE(A1001)>1,Q1000)))

	A	B	D	G	M	N	O	P	Q
1	Lev	Item Id	Seq	Rev Name	Engineering	Leaf Node Description	Service	Section	Level 1 Where Used
963	1	332/S6595	90	COOLER ASSEMBLY	06.01	COOLING	U.04	06.01	COOLER ASSEMBLY
1982	1	332/S6595A	230	COOLER ASSEMBLY QUIET	06.01	COOLING	U.04	06.01	COOLER ASSEMBLY QUIET
2070	1	332/S6595B	240	COOLER ASSEMBLY HOT CLIMATE	06.01	COOLING	U.04	06.01	COOLER ASSEMBLY HOT CLIMATE
5713									
5714									

ENG - FASTRAC 8250 PSE | PD - ABE ANALYSIS | PD - STRUCTURE ANALYSIS | PD - OPTIONS & VALUES | PD - NVE's | SRV

© 2008. Siemens Product Lifecycle Management Software Inc. All rights reserved

Methodology, Step 5: Synthesize Data



SIEMENS

Refined prototype architecture breakdown

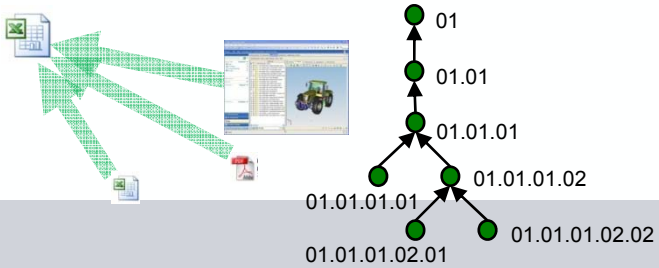
- Pivot tables used for child item usage and counts

	A	B	C	D	E	F	G	H
1	Section	06.01				Section	06.01	
2	Level	(Multiple Items)				Level	1	
3								
4	Count of Item Id					Count of Item Id		
5	Rev Name	Item Id	Level 1 Where Used	Total		Rev Name	Item Id	Total
100	FAN 26"	30/926118	COOLER ASSEMBLY	1				
101			COOLER ASSEMBLY HOT CLIMATE	1				
102			COOLER ASSEMBLY QUIET	1				
103		30/926118 Total		3				
104	FAN 26" QUIET	30/926119	COOLER ASSEMBLY	1				
105		30/926119 Total		1				
106	FAN 27"	30/926120	COOLER ASSEMBLY	1				
107		30/926120 Total		1				
108	FAN ADAPTOR	01/180055	COOLER ASSEMBLY	1				
109			COOLER ASSEMBLY HOT CLIMATE	1				
110			COOLER ASSEMBLY QUIET	1				
111		01/180055 Total		3				
112	FAN COWL	331/53830	COOLER ASSEMBLY	1				
113			COOLER ASSEMBLY HOT CLIMATE	1				
114			COOLER ASSEMBLY QUIET	1				
115		331/53830 Total		3				
116	FAN DRIVE GA	482/10264	COOLER ASSEMBLY	1				
117			COOLER ASSEMBLY HOT CLIMATE	1				
118			COOLER ASSEMBLY QUIET	1				
119		482/10264 Total		3				
120	FIRTREE ADAPTOR 1/4 NPTF	816/60277	COOLER ASSEMBLY HOT CLIMATE	1				
121			#REF!	2				
122		816/60277 Total		3				
123	FORWARD ANTI-RECIRC GA	332/S8137	COOLER ASSEMBLY	1				
124			COOLER ASSEMBLY HOT CLIMATE	1				
125			COOLER ASSEMBLY QUIET	1				
126		332/S8137 Total		3				
127	GA EXPANSION TANK	332/S7814	COOLER ASSEMBLY HOT CLIMATE	1				

PD - STRUCTURE ANALYSIS | PD - OPTIONS & VALUES | PD - NVE's | SRV - ICB CATALOGUE ST

© 2008. Siemens Product Lifecycle Management Software Inc. All rights reserved

Platform Designer
Data created



SIEMENS

Product Suite

Product Line1

Product Line2

Product Line3

Establi
Consist
Architec
t
re

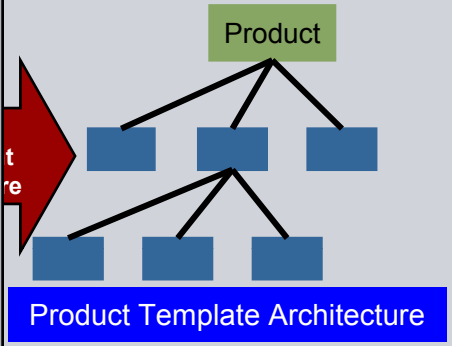
Define Common Features / Values

Feature A
Value A1
Value A2
Value A3

Feature B
Value B1
Value B2

Feature C
Value C1
Value C2
Value C3
Value C4
Value C5
Value C6

Product Features



- Candidate Architecture Breakdown
- Product Template Architecture

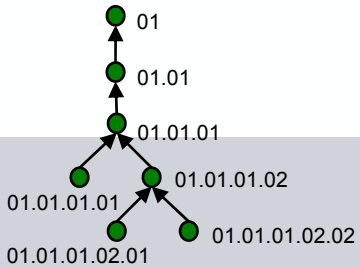
25.01.01	CAB - UNIT	
25.01.01.01	CAB - UNIT - FRAME	136
25.01.01.02	CAB - UNIT - LH DOOR	59
25.01.01.03	CAB - UNIT - REAR WINDOW	42
25.01.01.03.01	CAB - UNIT - REAR WINDOW SCREEN	2
25.01.01.03.02	CAB - UNIT - REAR WINDOW HINGE FASTENER	2
25.01.01.04	CAB - UNIT - TRIM	7
25.01.01.05	CAB - UNIT - GLAZING	14
25.01.01.06	CAB - UNIT - RIVET NUTS	10
25.01.01.07	CAB - UNIT - WHEELHOUSE	38
25.01.01.08	CAB - UNIT - ROOF	20
25.01.01.09	CAB - UNIT - B POST	6
25.01.01.10	CAB - UNIT - FRONT BULKHEAD	8

Next Steps
- Analyze Options
- Synthesize NVE
  - Name Variant Expression

© 2008. Siemens Product Lifecycle Management Software Inc. All rights reserved

Methodology, Step 6: Analyze Options

SIEMENS



Order Book

Sales Configuration

A3 | AMBIENT_TEMP

	A	B	C	J	K	L	M	N	O	P	Q
1				COOLING	COOLING - FRONT ANTI-RECIRC	COOLING - REAR ANTI-RECIRC	COOLING - FAN DRIVE	COOLING - FAN DRIVE - FAN	COOLING - FAN DRIVE - COUPLING	COOLING - COOLERS	COOLING - COOLER - ASSY
2	Option	Value	Service	06.01	06.01.01	06.01.02	06.01.03	06.01.03.01	06.01.03.02	06.01.04	06.01.04.01
3	AMBIENT_TEMP	NOT_ABOVE_46C		×			×	×		×	×
4	AMBIENT_TEMP	ABOVE_46C		×			×	×		×	×
5	NOISE_LEVEL	NOT_ABOVE_100DB		×			×	×	×		
6	NOISE_LEVEL	ABOVE_100DB		×			×	×	×		
122											
123											

PD - OPTIONS & VALUES | PD - NVE's | SRV - JCB CATALOGUE STRUCTURES | SRV - FASTRAC 8250 PS | SRV - SECTION

Analyze Option and Value

- Impact on Section
- Impact on Component within Section

© 2008. Siemens Product Lifecycle Management Software Inc. All rights reserved

Methodology, Step 7: Option Combinations

SIEMENS

	A	B	C	D	E	F	G	H	I
1			130F801	130F802	130F803	130F804	130F805	130F806	130F807
2				482/10291	482/10292	481/11053	481/11054	481/11055	332/T2895
3	E130E801	482/10188							
4	E130E802	482/10190							
5	E130E803	482/10189							
6	E130E804	482/10195							
7	E130E805	482/10190							
8	E130E806	482/10192							
9	E130E807	482/10191							
10	E130E808	482/10193							
11	E130E809	482/10190							
12	E130E810	482/10187							
13		482/10194							

SALES COMPATIBILITY | ENG - COMIBNATION MASTER

Analyze Combination of Options

- Focus on the permitted combinations
- Teamcenter will manage combinations of option values
  - NVE, Named Variant Expression
  - SVR, Saved Variant Rule

© 2008. Siemens Product Lifecycle Management Software Inc. All rights reserved

Methodology, Step 8: Analyze NVE

SIEMENS

Apply Combination of Option Values

- Use Section Code (ABE ID)
- Create unique NVE count

	A	B	C	DG	DJ	DK	DL
1				STABILISERS	CAB	CAB	
2	ABE	SALES CODE / NVE DESCRIPTION	GA's / NVE's			YELLOW_NO_HATCH	NO_HATCH_WINTER_PACK
127		PD - NVE's OUTLINE (PD PSE)			×	×	×
128	25.01.01.05	CAB - UNIT - GLAZING	NVE 1		×	×	
129	25.01.01.05	CAB - UNIT - GLAZING	NVE 2		×		×
130	25.01.03.01	CAB - CONTROLS - HEATED FRONT SCREEN	NVE 1		×	×	
131	25.01.03.01	CAB - CONTROLS - HEATED FRONT SCREEN	NVE 2		×		×
132	25.01.03.02	CAB - CONTROLS - HEATED REAR SCREEN	NVE 1		×	×	
133	25.01.03.02	CAB - CONTROLS - HEATED REAR SCREEN	NVE 2		×		×
134	25.01.03.03	CAB - CONTROLS - HEATED MIRRORS	NVE 1		×	×	
135	25.01.03.03	CAB - CONTROLS - HEATED MIRRORS	NVE 2		×		×
136	25.01.03.04	CAB - CONTROLS - WINTER PACK	NVE 1		×	×	
137	25.01.03.04	CAB - CONTROLS - WINTER PACK	NVE 2		×		×
138	25.01.04	CAB - ELECTRICS	NVE 1		×	×	
139	25.01.04	CAB - ELECTRICS	NVE 2		×		×
140	25.01.01.03.01	CAB - UNIT - REAR WINDOW SCREEN	NVE 1		×	×	
141	25.01.01.03.01	CAB - UNIT - REAR WINDOW SCREEN	NVE 2		×		×
142	25.01.01.03.02	CAB - UNIT - REAR WINDOW HINGE FASTENER	NVE 1		×	×	
143	25.01.01.03.02	CAB - UNIT - REAR WINDOW HINGE FASTENER	NVE 2		×		×
144							

PD - STRUCTURE ANALYSIS 2 | PD - OPTIONS & VALUES | PD - NVE's | SRV - ICB CATALOGUE ST

© 2008. Siemens Product Lifecycle Management Software Inc. All rights reserved

Methodology, Step 9: Reduce Clutter

SIEMENS

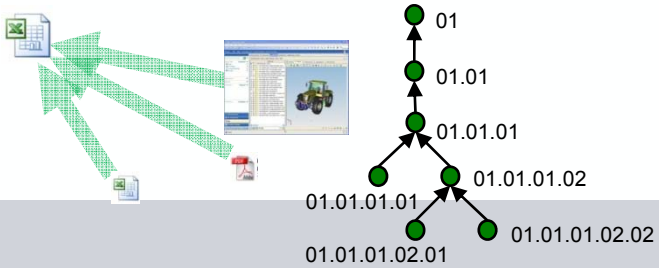
Added Column Designation for type of item
- A = Assembly
- C = Component
- D = Detail

Removing the “D” items reduced the noise in the structure
- D items include
  - Parts purchased as part of a whole assembly (for example, parts in a purchased engine)
  - Parts in a welded assembly
  - Bulk parts, like a roll of hose

Items were categorized
- Mandatory, which means one must be selected (1 of n)
- Optional, which means many can be chosen (0-1 of n)
  - Subject to combination restrictions

© 2008. Siemens Product Lifecycle Management Software Inc. All rights reserved

Platform Designer Data created



SIEMENS

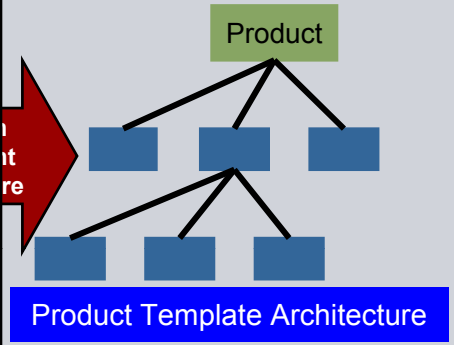
Product Suite

Product Line1

Product Line2

Product Line3

Establi
Consist t
Architec re



- Candidate Architecture Breakdown
- Product Template Architecture

25.01.01	CAB - UNIT	
25.01.01.01	CAB - UNIT - FRAME	136
25.01.01.02	CAB - UNIT - LH DOOR	59
25.01.01.03	CAB - UNIT - REAR WINDOW	42
25.01.01.03.01	CAB - UNIT - REAR WINDOW SCREEN	2
25.01.01.03.02	CAB - UNIT - REAR WINDOW HINGE FASTENER	2
25.01.01.04	CAB - UNIT - TRIM	7
25.01.01.05	CAB - UNIT - GLAZING	14
25.01.01.06	CAB - UNIT - RIVET NUTS	10
25.01.01.07	CAB - UNIT - WHEELHOUSE	38
25.01.01.08	CAB - UNIT - ROOF	20
25.01.01.09	CAB - UNIT - B POST	6
25.01.01.10	CAB - UNIT - FRONT BULKHEAD	8

Define Common Features / Values

Feature A
Value A1
Value A2
Value A3

Feature B
Value B1
Value B2

Feature C
Value C1
Value C2
Value C3
Value C4
Value C5
Value C6

Product Features

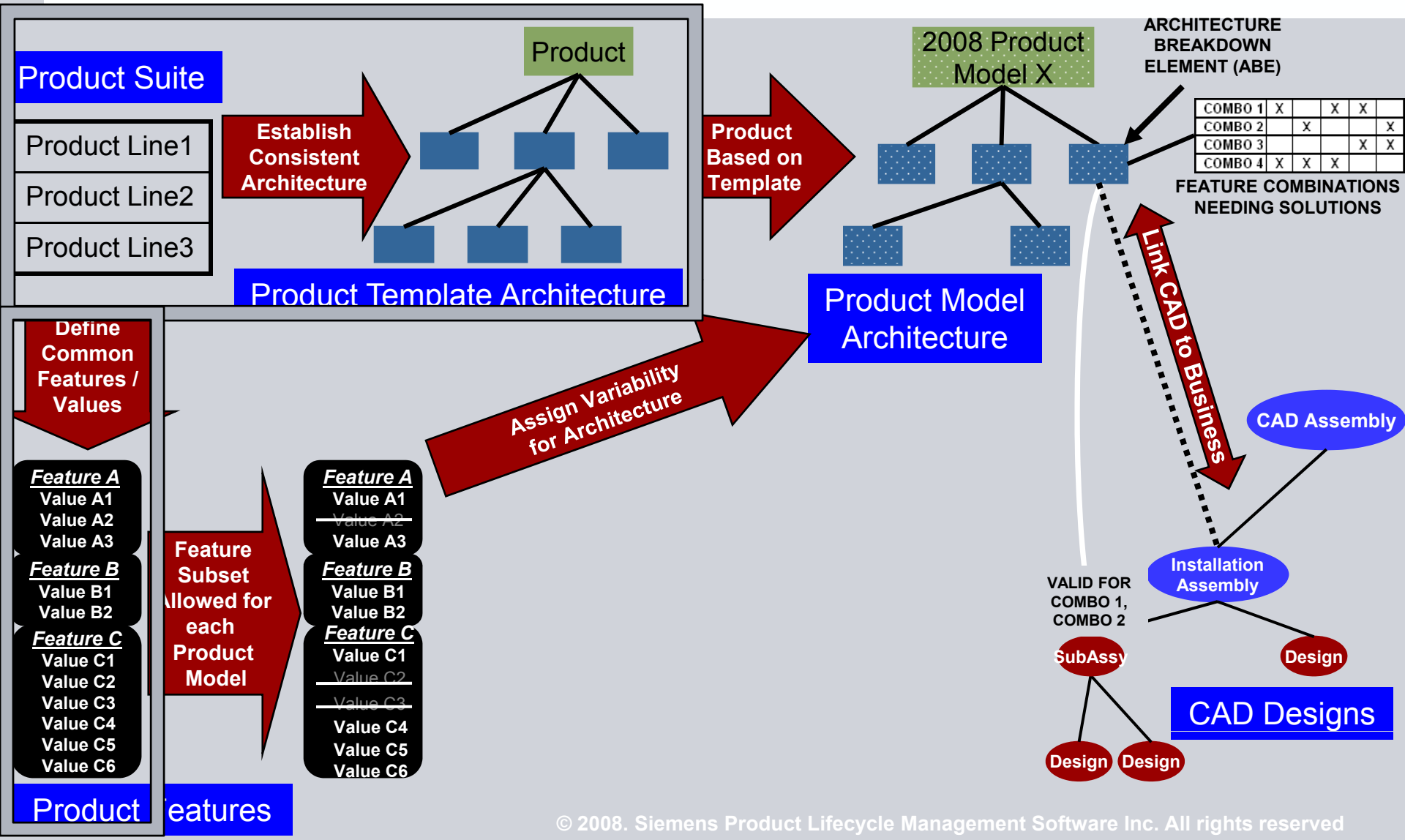
- Option and Values entered
- Candidate NVE assignments

1 2	A	B	C	EB	EC	ED	EE	EF	EG
1				HYDRAULIC_OPTION	HYDRAULIC_OPTION				
2	ABE	SALES CODE / NVE DESCRIPTION	GA's / NVE's		PWR_BEYOND_CONN	REAR_F_FLOW_RETURN	FRONT_F_FLOW_RETURN	FRONT_AUX_3SPOOL	FRONT_AUX_4SPOOL
145	32.01.01	HYDRAULICS OPTION - REAR FREE FLOW RETURN	NVE 1	1		X			
146	32.01.01	HYDRAULICS OPTION - REAR FREE FLOW RETURN	NVE 2	2	X	X			
147	32.01.01	HYDRAULICS OPTION - REAR FREE FLOW RETURN	NVE 3	2		X	X		
148	32.01.01	HYDRAULICS OPTION - REAR FREE FLOW RETURN	NVE 4	2		X		X	
149	32.01.01	HYDRAULICS OPTION - REAR FREE FLOW RETURN	NVE 5	2		X			X
150	32.01.01	HYDRAULICS OPTION - REAR FREE FLOW RETURN	NVE 6	3	X	X	X		
151	32.01.01	HYDRAULICS OPTION - REAR FREE FLOW RETURN	NVE 7	3		X	X	X	
152	32.01.01	HYDRAULICS OPTION - REAR FREE FLOW RETURN	NVE 8	3		X	X		X
153	32.01.01	HYDRAULICS OPTION - REAR FREE FLOW RETURN	NVE 9	4	X	X	X	X	
154	32.01.01	HYDRAULICS OPTION - REAR FREE FLOW RETURN	NVE 10	4	X	X	X		X

© 2008. Siemens Product Lifecycle Management Software Inc. All rights reserved

Customer Case Study
CAD Design (lower right corner)

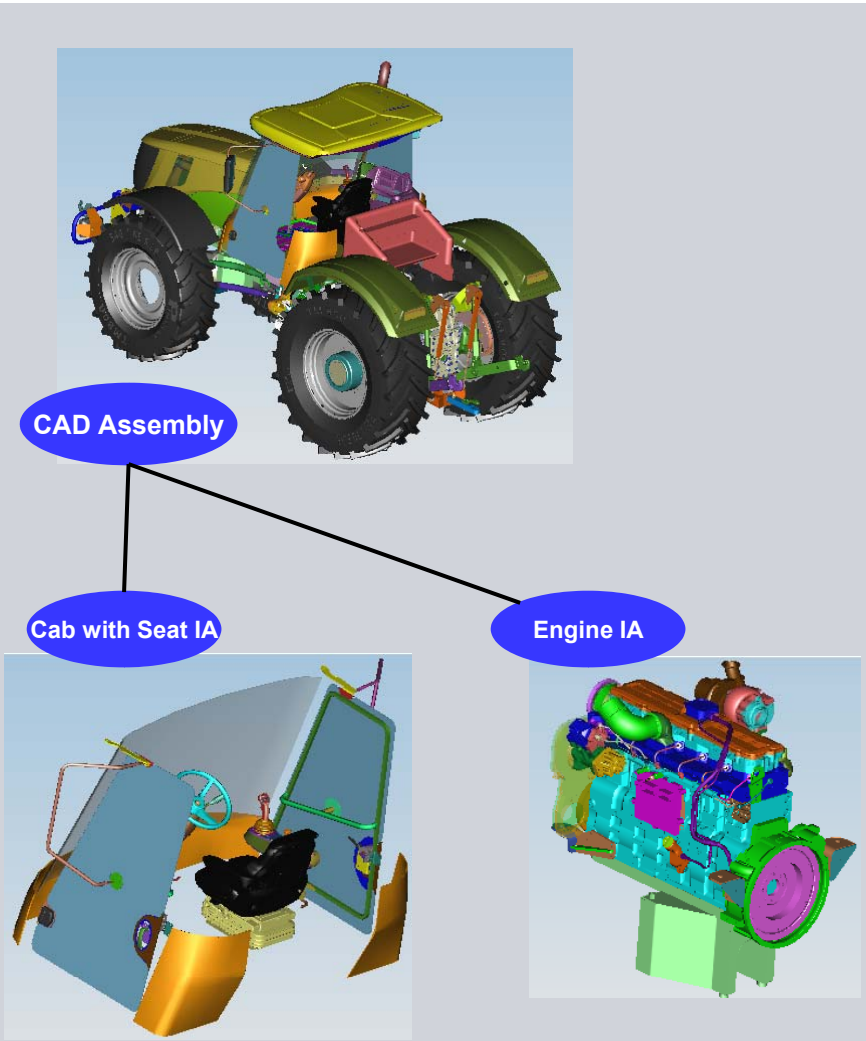
SIEMENS

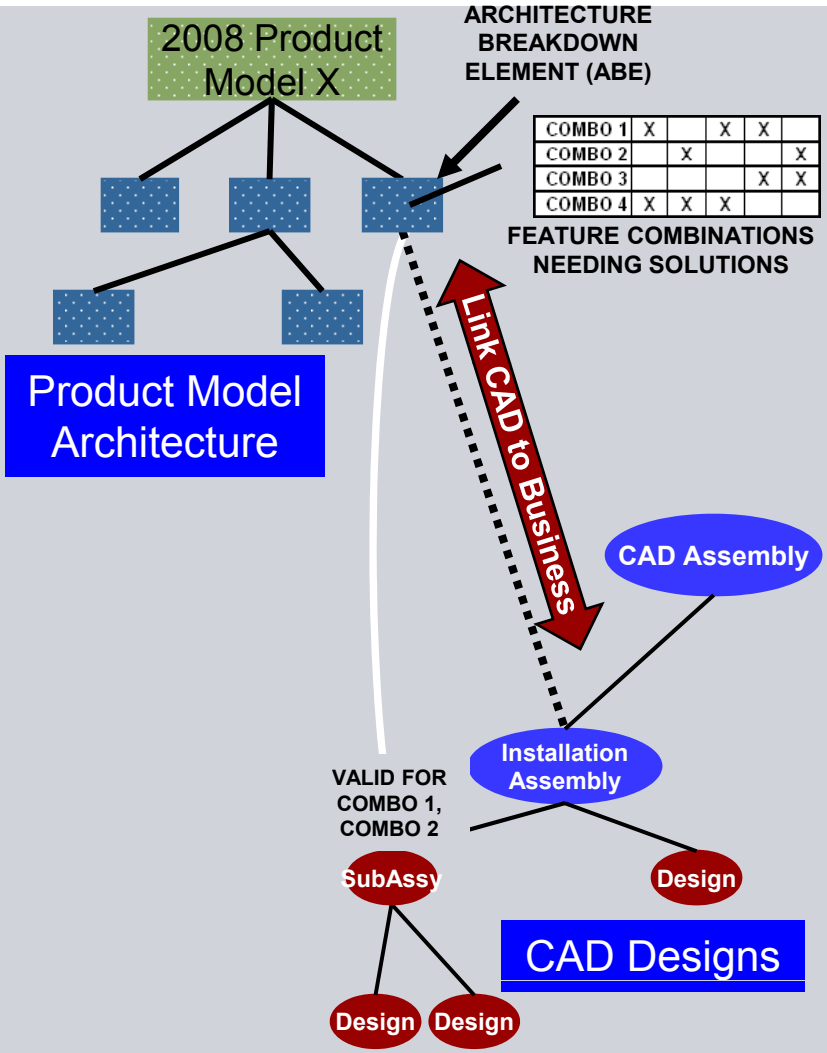


© 2008. Siemens Product Lifecycle Management Software Inc. All rights reserved

CAD Design
Installation Assembly (IA) Selection

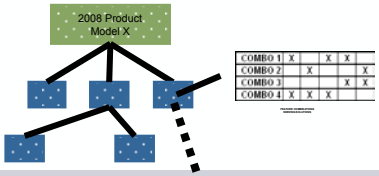
SIEMENS





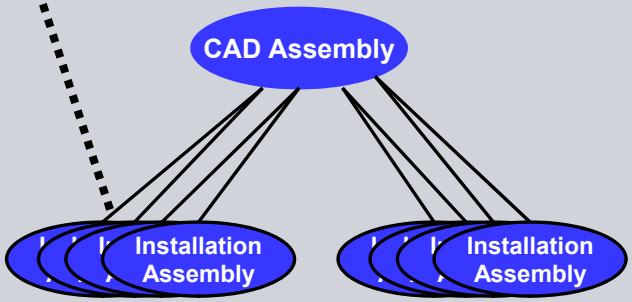
© 2008. Siemens Product Lifecycle Management Software Inc. All rights reserved

Installation Assembly (IA)

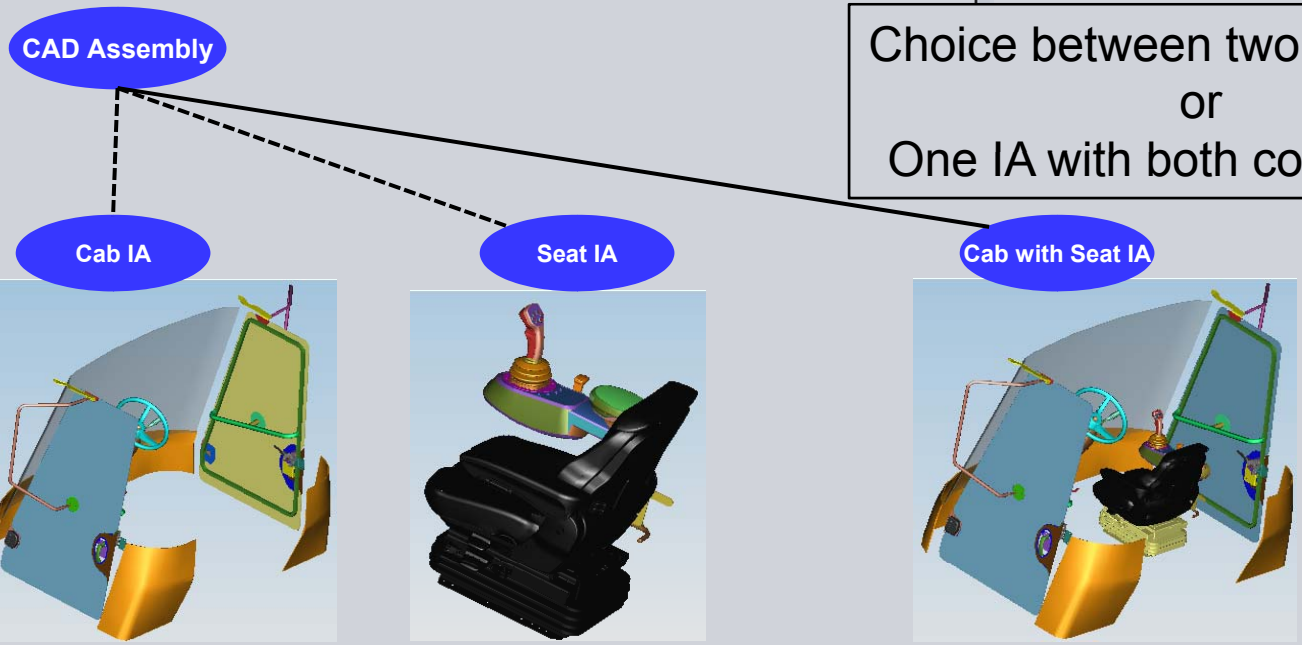


SIEMENS

- Maps to an Architecture Breakdown Element
- Collective set form generic structure of the product
- Design building block for engineering
- Design owned by a single Designer or group
- Component only appears in a single IA
- Does not contain background parts



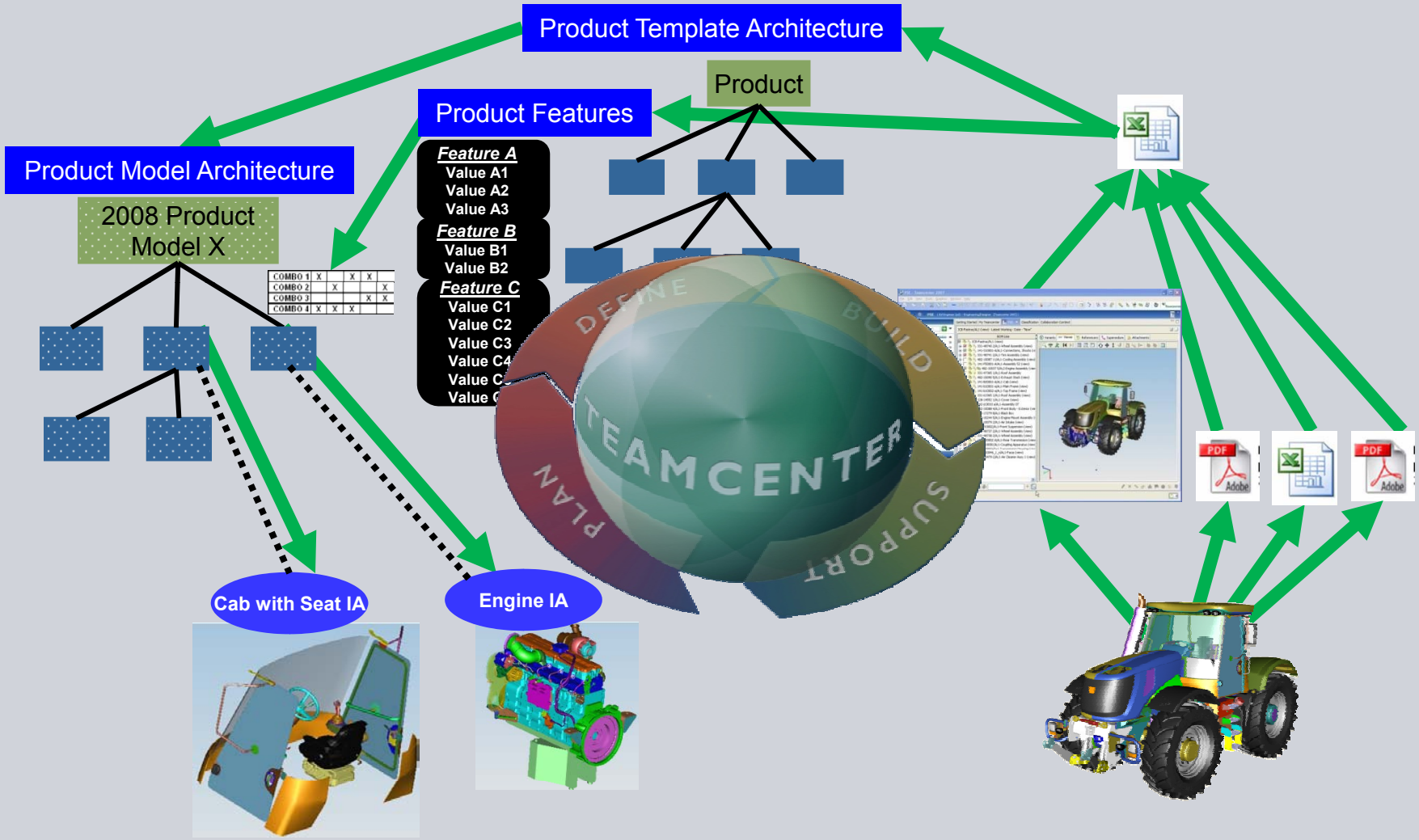
Choice between two IA's on left
or
One IA with both components



© 2008. Siemens Product Lifecycle Management Software Inc. All rights reserved

Teamcenter Platform Designer Customer Case Study (summary)

SIEMENS



© 2008. Siemens Product Lifecycle Management Software Inc. All rights reserved

Teamcenter Platform Designer
Active Customer List

SIEMENS

GM (production)

Volkswagen (production)

B/S/H (evaluation)

Ford (evaluation)

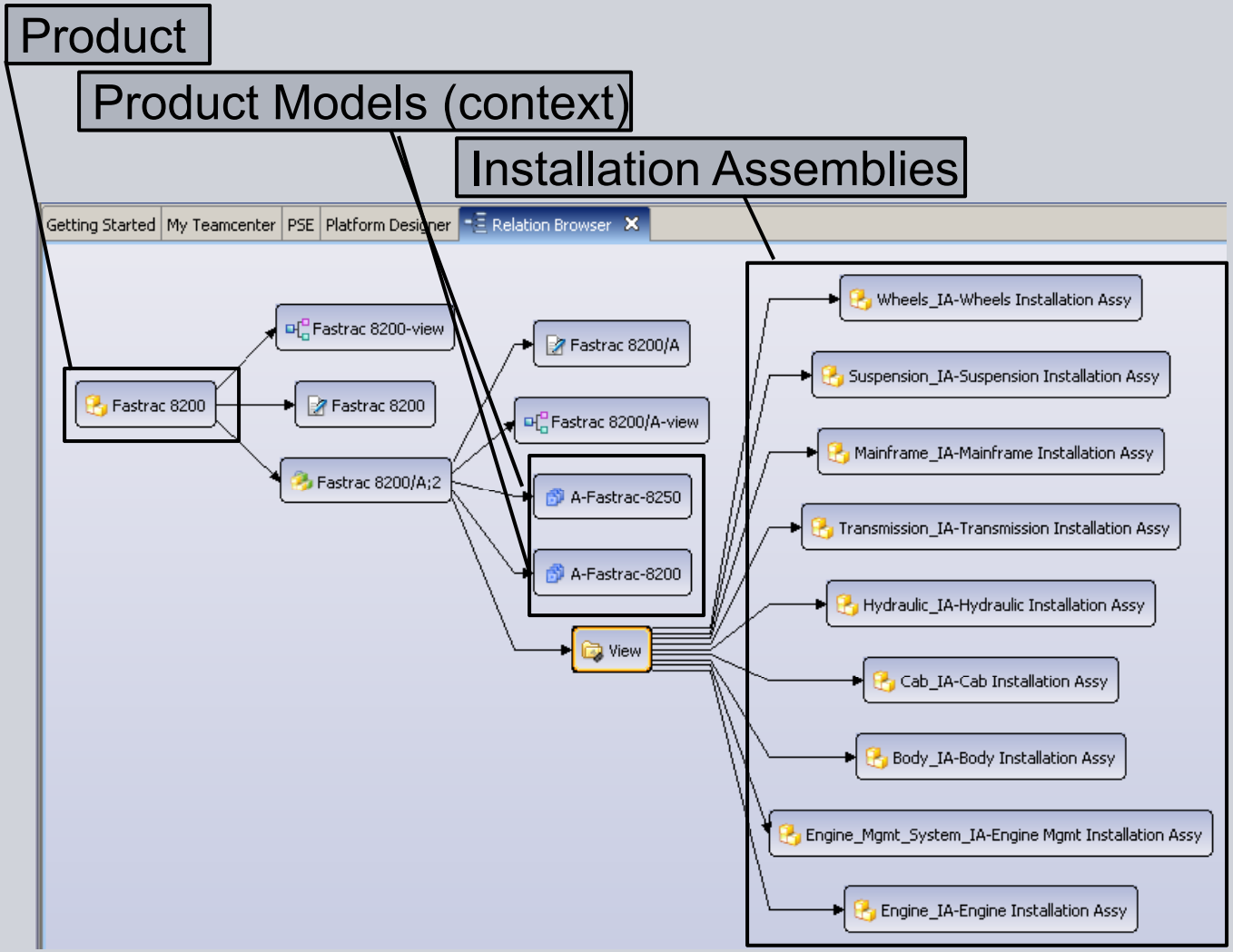
Chrysler (evaluation)

JCB (evaluation)

© 2008. Siemens Product Lifecycle Management Software Inc. All rights reserved

Teamcenter Platform Designer overview
Product Data

SIEMENS



© 2008. Siemens Product Lifecycle Management Software Inc. All rights reserved

Tour of Platform Designer

Enforce Hierarchical Variability (optional)

- Lower level elements cannot extend variability of parents

Define Variance for whole product or per element

- **Shared NVE**
  Define variance at product level and assign to one or more element
- **Unshared NVE**
  Define variance at element level

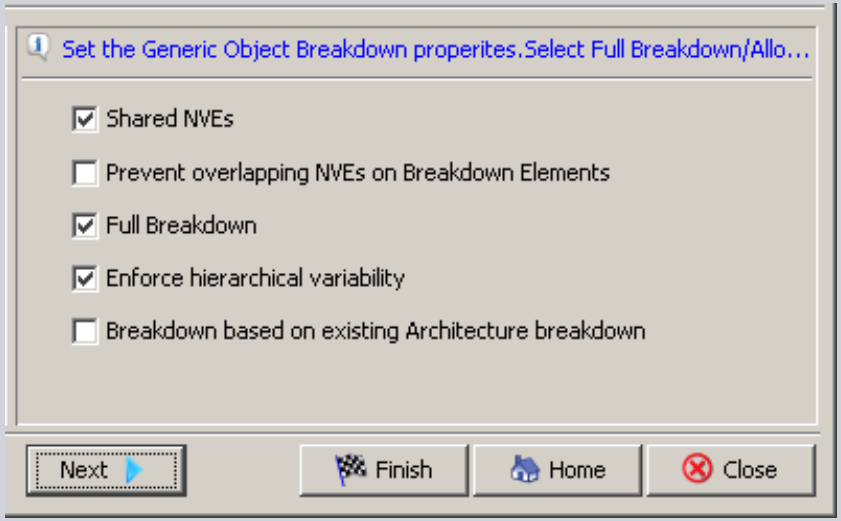
Variance overlap checks (optional)

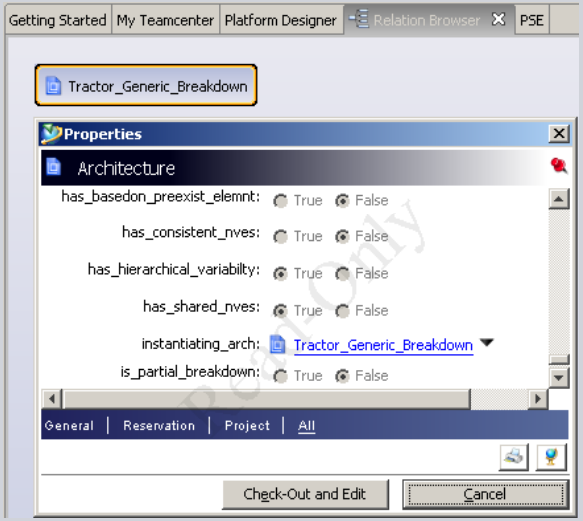
- As variant rules evolve, validates that unintentional overlaps are not being created
- Ensure you never get multiple things configured where only one is expected

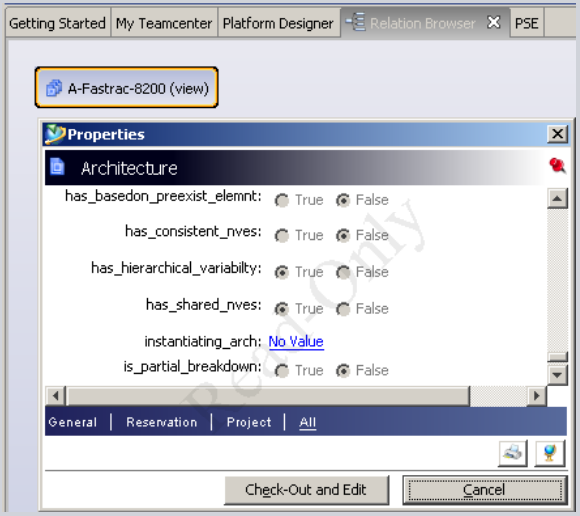
© 2008. Siemens Product Lifecycle Management Software Inc. All rights reserved

Architecture Configurations

- Configuration must be selected carefully
- Use **Properties** dialog to determine breakdown type
  - **Generic** will show the a value for **Instanciating Architecture**
  - **Architecture breakdown** will show **No Value**







© 2008. Siemens Product Lifecycle Management Software Inc. All rights reserved

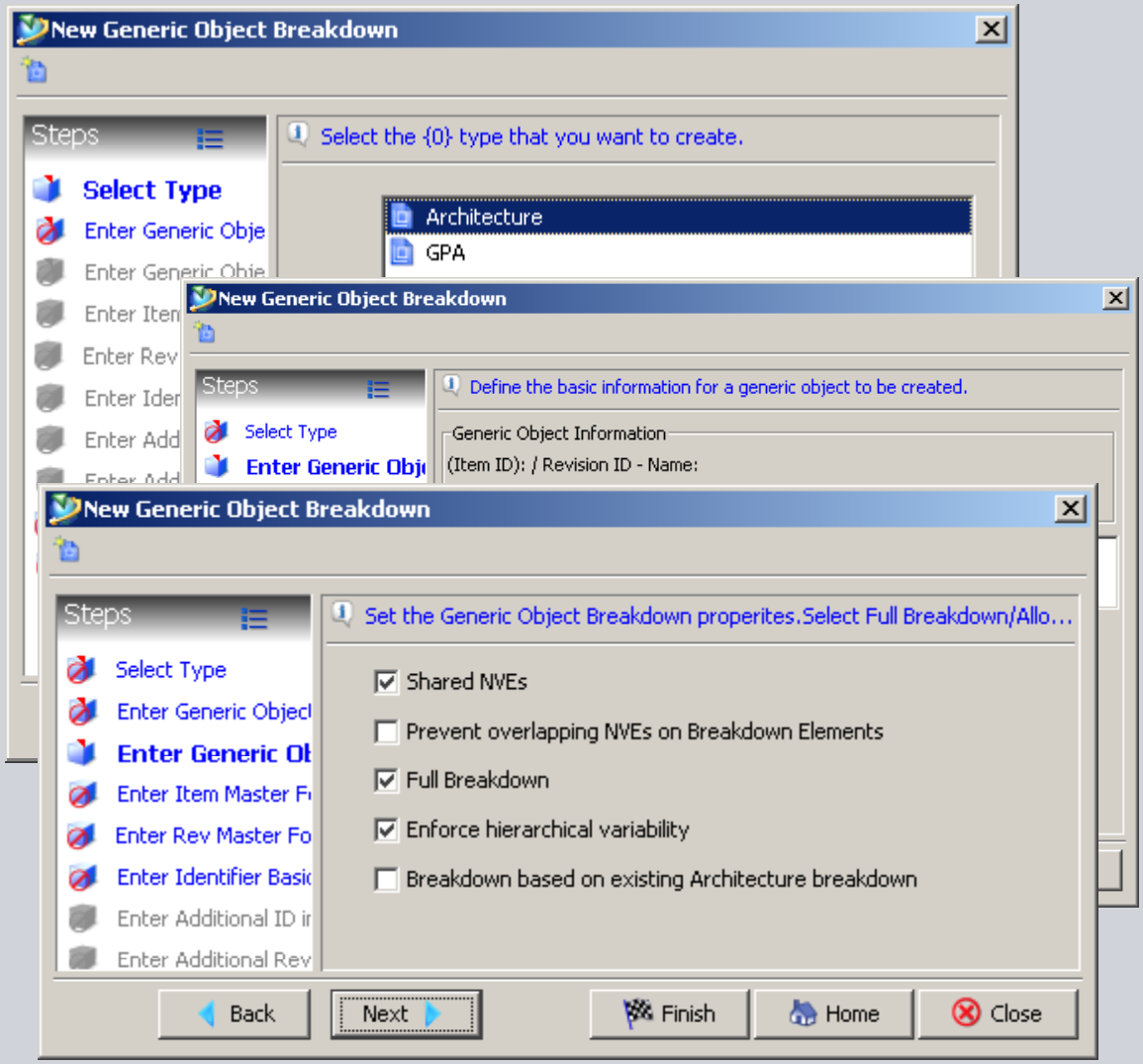
Create the Product Template Architecture

Future Product Model Architectures will copy appropriate nodes from this Product Template Architecture.

The selection of Architectural Breakdown type must be carefully considered.

The architecture breakdown can be either:

- Generic Object
- Architecture Breakdown

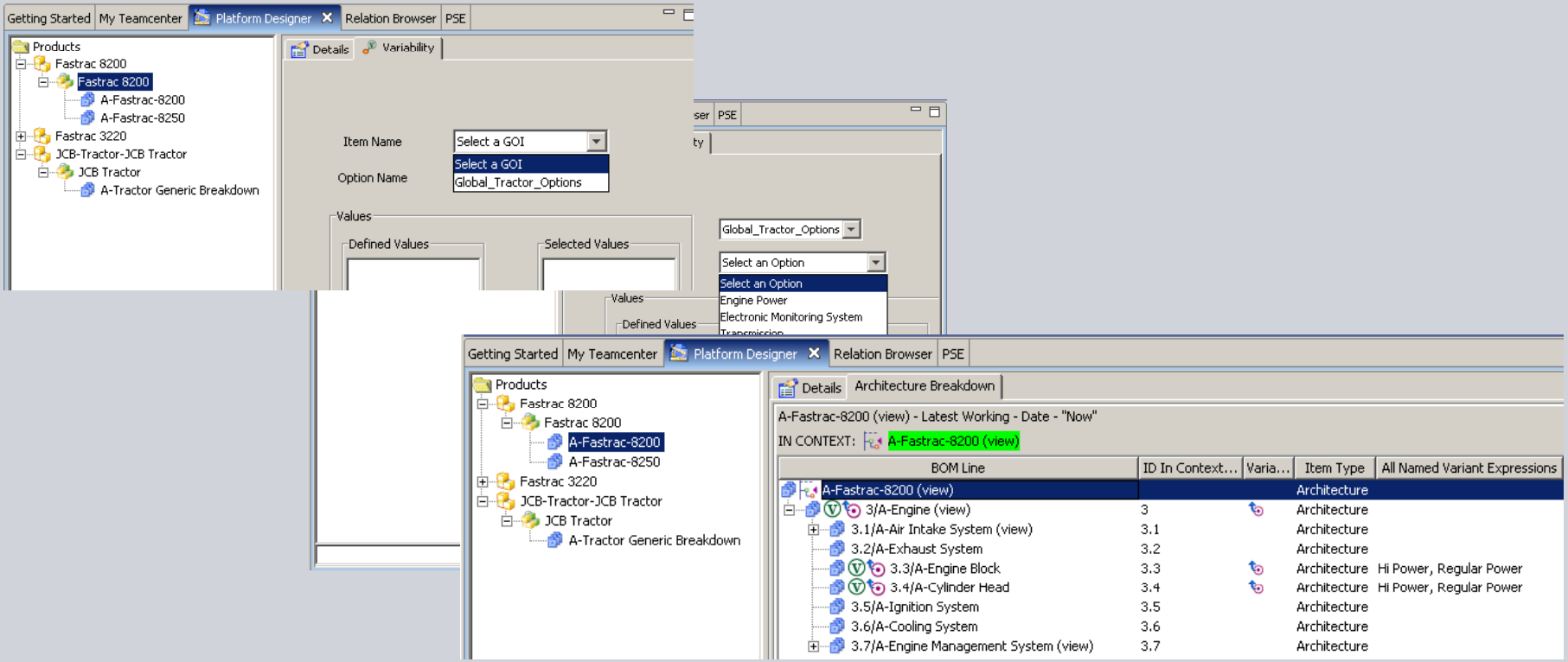


© 2008. Siemens Product Lifecycle Management Software Inc. All rights reserved

SIEMENS

Cascade Variability

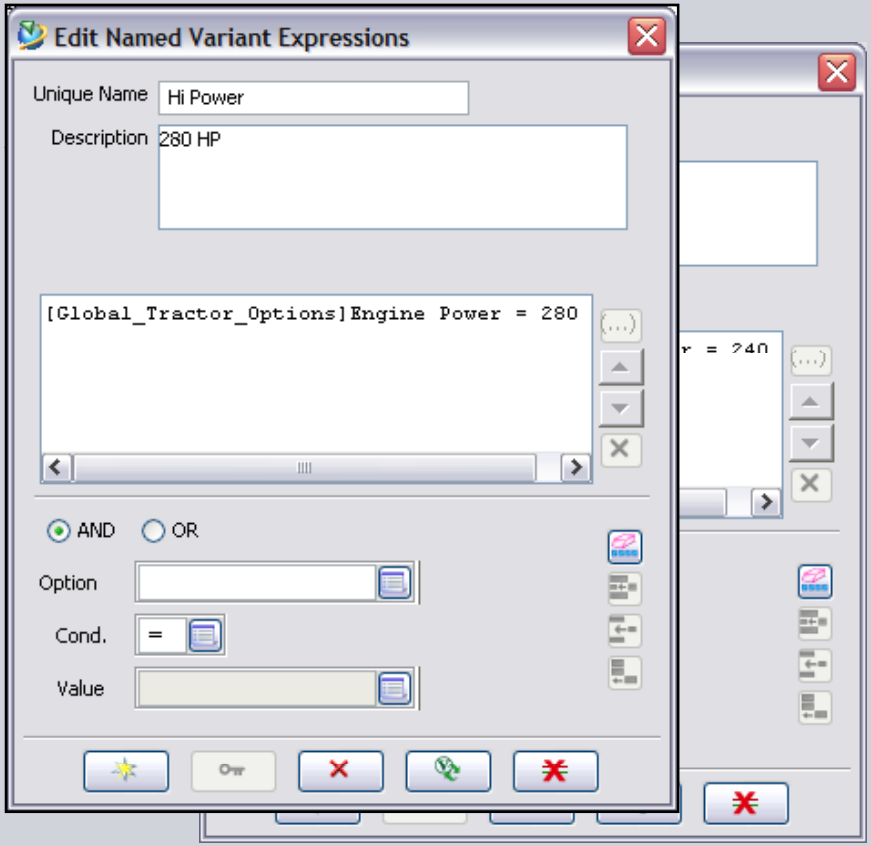
- Cascade from Product Context to Architecture (as may be several)
- Then cascade down the Architecture to the appropriate node, Architecture Breakdown Element (ABE)
- Enforce Hierarchical Variability is on in this example
- Note: once variability cascaded, a (V) & target icon appear

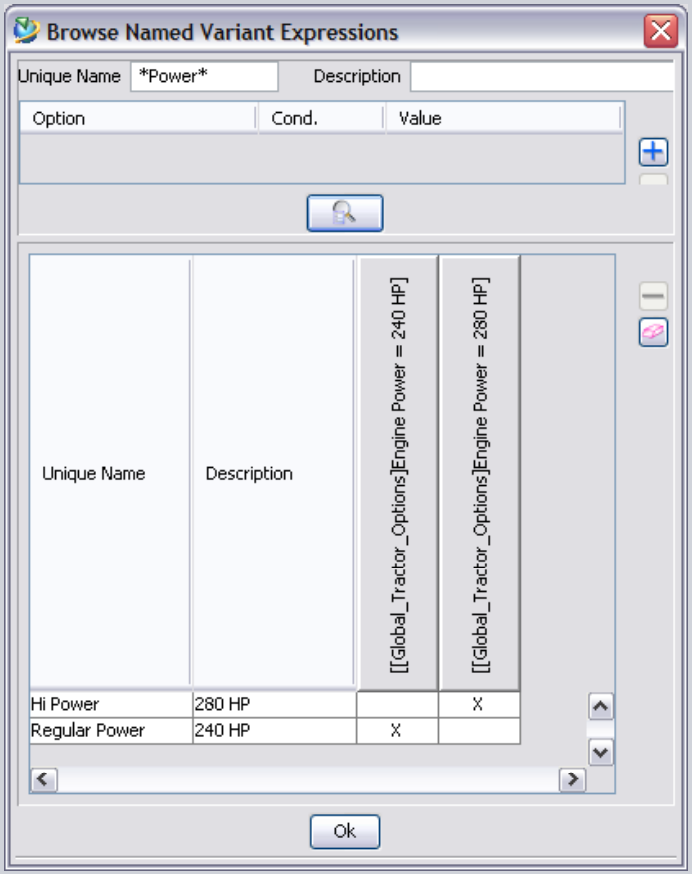


© 2008. Siemens Product Lifecycle Management Software Inc. All rights reserved

Manage Named Variant Expression (NVE)

- Create/Edit the NVE logic blocks
  - Tied to the Architecture
- Browse NVE





© 2008. Siemens Product Lifecycle Management Software Inc. All rights reserved

SIEMENS

Associate NVE's to an Architecture node

- Typically associate the applicable NVE(s) to the lowest level nodes
  - Part Solution items and Design Solution items will be attached

Getting Started | My Teamcenter | PSE | Platform Designer

Details | Architecture Breakdown

A-Fastrac-8250 (view) - Latest Working - Date - "Now"

IN CONTEXT: A-Fastrac-8250 (view)

BOM Line	ID In Context ...	All Named Variant Expressions	Item Type
A-Fastrac-8250 (view)			Architecture
1/A-Main Frame (view)	1		Architecture
2/A-Transmission (view)	2		Architecture
3/A-Engine (view)	3	Hi Power, Regular Power	Architecture
3.1/A-Air Intake System (view)	3.1	Hi Power, Regular Power	Architecture
3.1.1/A-Air Intake Manifold	3.1.1		Architecture
3.1.2/A-Air Cleaner	3.1.2	Hi Power, Regular Power	Architecture
3.1.3/A-Turbocharger	3.1.3	Hi Power, Regular Power	Architecture
3.1.4/A-Air Intake Hoses	3.1.4		Architecture
3.2/A-Exhaust System	3.2		Architecture
3.3/A-Engine Block	3.3		Architecture
3.4/A-Cylinder Head	3.4		Architecture
3.5/A-Ignition System	3.5		Architecture
3.6/A-Cooling System	3.6		Architecture
3.7/A-Engine Management System (view)	3.7		Architecture
4/A-Wheels (view)	4		Architecture
5/A-Suspension System (view)	5		Architecture
6/A-Cab (view)	6		Architecture
7/A-Body (view)	7		Architecture
8/A-Hydraulic System (view)	8		Architecture

Attachment | Variability | Named Variant Expressio

Unique Name * Description

Option

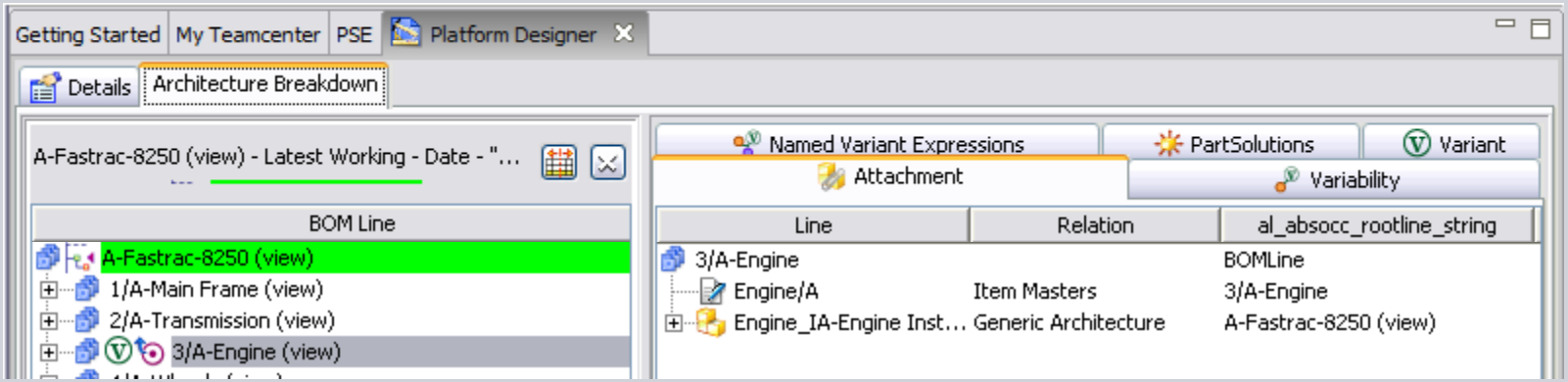
Unique Name	Description	[[Global_Tractor_Options]Engine Power = 240 HP]	[[Global_Tractor_Options]Engine Power = 280 HP]
Hi Power	280 HP		X
Regular Power	240 HP	X	

© 2008. Siemens Product Lifecycle Management Software Inc. All rights reserved

Associate the Installation Assembly with the Architecture node

SIEMENS

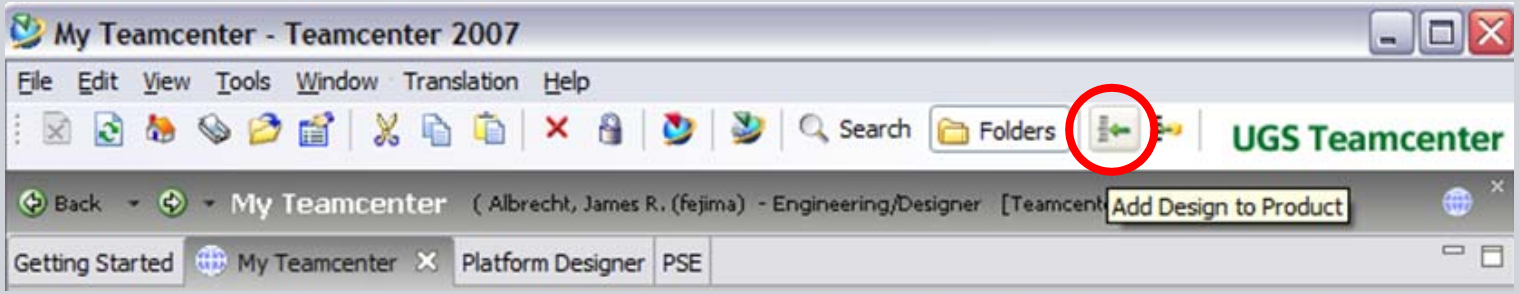
- Copy the ‘Installation Assembly’ to the clipboard
- In Platform Designer, Display the Data Panel, Attachments Tab
  - Select the Node, ABE, for installation assembly attachment
  - Select the Node, ABE, in the attachments tab
  - Paste
- Installation assembly added with the relation, **Generic Architecture**



© 2008. Siemens Product Lifecycle Management Software Inc. All rights reserved

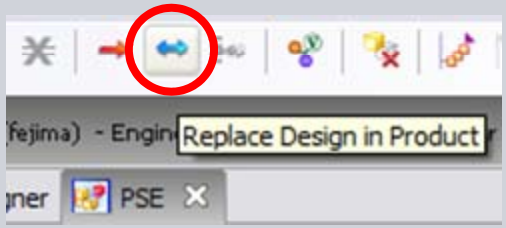
Platform Designer Wizards for CAD Design

Add Design To Product
(My Teamcenter and Platform Designer)

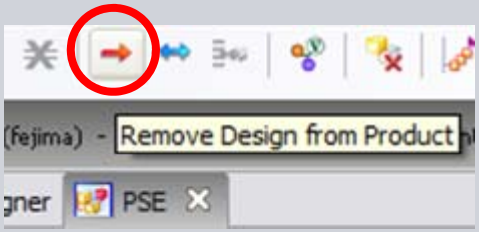


Replace Design In Product
(PSE)

- Same as “Add Design To Product”, except
  - No Installation Assembly selection (driven by PSE tree)
  - Similar to “Edit->Substitute”
  - Occurrence attributes (e.g. 3D position) remain untouched



Remove Design From Product
(PSE)

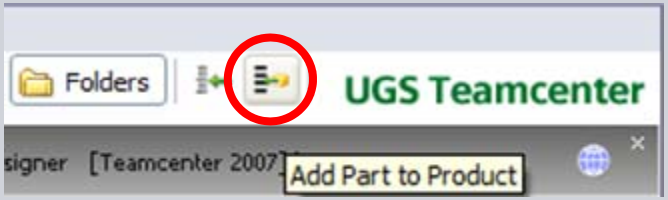


© 2008. Siemens Product Lifecycle Management Software Inc. All rights reserved

SIEMENS

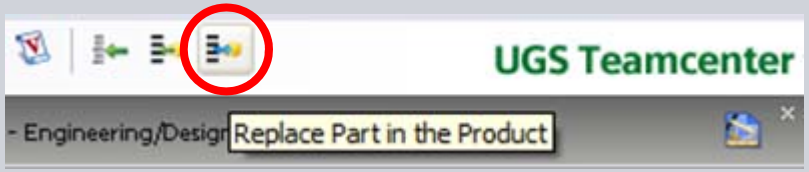
Platform Designer Wizards for BOM Part

Add Part To Product
(My Teamcenter and Platform Designer)



Replace Part In Product
(PSE and Platform Designer)

- Same as “Add Part To Product”
- Similar to “Edit->Substitute”



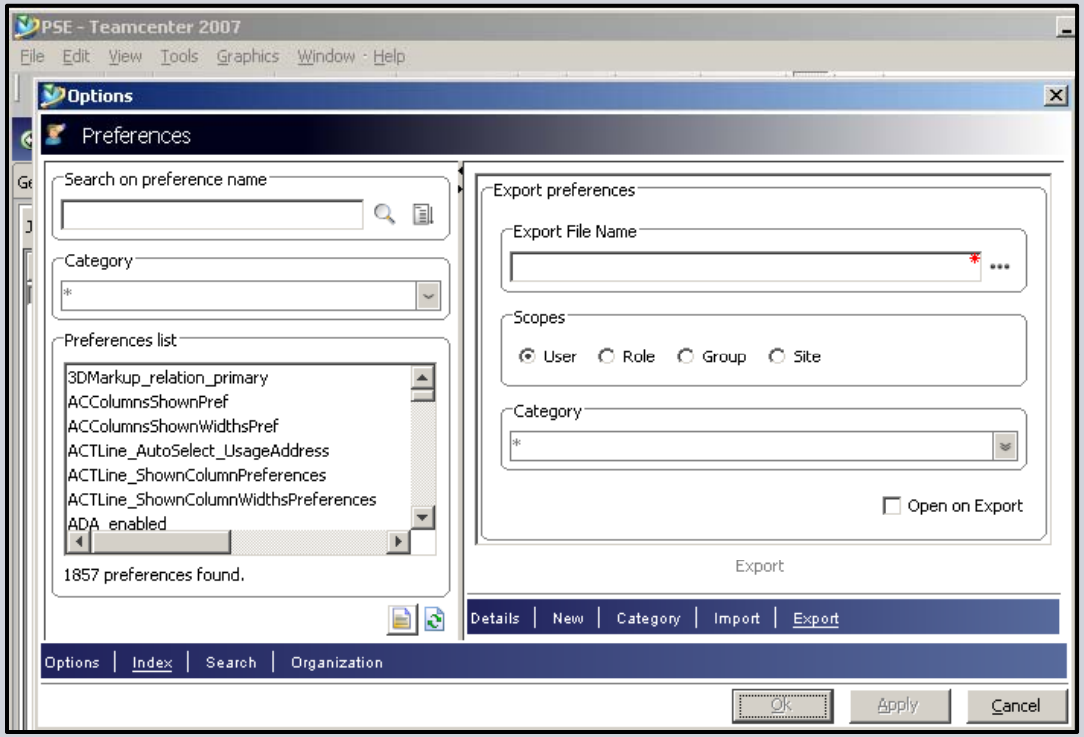
© 2008. Siemens Product Lifecycle Management Software Inc. All rights reserved

(helpful general tip)
Capture Teamcenter Preferences

SIEMENS

Steps to export to MS-Excel

- Edit --> Options…
- On the Dialog, select Index and then Export
- Enter the file name, and repeat this 4 times for each category: User; Role; Group; and Site.
- Then import these XML files into an Excel spreadsheet as 4 tabs.
- Excel has filter and search for Preference settings, important for product functioning.



	C	D	E	F	G	
1	name2	type	array	disabled	preference_description	value
1448	PortalDesignContextProductItemColumnsShownPrefWidth	Integer	TRUE	FALSE	Product Item shown prope	35
1449	PortalDesignContextProductItemColumnsShownPrefWidth	Integer	TRUE	FALSE	Product Item shown prope	25
1450	PortalDesignContextProductItemColumnsShownPrefWidth	Integer	TRUE	FALSE	Product Item shown prope	21
1451	PortalDesignContextProductItemColumnsShownPrefWidth	Integer	TRUE	FALSE	Product Item shown prope	10
1452	PortalDesignContextProductItemColumnsShownPrefWidth	Integer	TRUE	FALSE	Product Item shown prope	13
1453	PortalDesignContextProductItemColumnsShownPrefWidth	Integer	TRUE	FALSE	Product Item shown prope	8
1454	PortalDesignContextProductItemColumnsShownPrefWidth	Integer	TRUE	FALSE	Product Item shown prope	4
1455	PSEShowUnconfigdEffPref	Logical	FALSE	FALSE	Indicates if the unconfigur	0
1456	PSEShowUnconfigdVarPref	Logical	FALSE	FALSE	Indicates if the unconfigur	0

Site User

© 2008. Siemens Product Lifecycle Management Software Inc. All rights reserved

Teamcenter Platform Designer References

SIEMENS

Recommend “reading the manuals”

- Selectively and Collectively
- PDF files can be obtained from GTAC site:
- http://support.ugs.com/docs/teamcenter/

Reading List

- Getting Started with Product Structure
  - Focus on chapter 11, Using Platform Designer
- Getting Started with RDV
  - Focus on chapters 1 & 2, Basic Concepts
- Platform Designer Guide
  - Good Book for reference and (re)reading
- Product Structure Editor Guide
  - Reference for all-things product structure wise
- Preferences and Environment Variables Reference
  - Many preferences for you to tailor

© 2008. Siemens Product Lifecycle Management Software Inc. All rights reserved

SIEMENS

Contact

Jim Albrecht
Teamcenter Development Consulting

Siemens PLM Software
2000 Eastman Drive
Milford, Ohio 45150

E-mail: jim.albrecht@siemens.com

www.siemens.com/plm

© 2008. Siemens Product Lifecycle Management Software Inc. All rights reserved