SIEMENS
Ingenuity for life

Digitalization Platform for Electronic and Industrial Market

Unrestricted © Siemens AG 2017

Agenda

SIEMENS
Ingenuity for life

9.30 Registrazione & Welcome Coffee

10:00 Welcome a cura di Ducati

10:10 Digital Twin di prodotto e processo:

- Dalla progettazione del prodotto e del processo produttivo alla simulazione e validazione
- Additive: un nuovo modo di progettare e realizzare i componenti
- La gestione integrata meccanica/elettronica/software

11.50 Success Story: Gruppo De' Longhi

12.10 Il valore dell'IOT per il settore high tech e dell'elettronica

12:30 Q&A

13:00 Pranzo

14.00 Visita al museo e alla fabbrica Ducati

Twitter: @SiemensPLM_IT

Unrestricted © Siemens AG 2017

Trends in the Electronics Industry

SIEMENS
Ingenuity for life

Disruptive pull of electronics in mature industries.

Customer Diversification is on the rise.

Devices are getting smaller and smarter.

Customer Experience is essential to growth.

Unrestricted © Siemens AG 2017

Impacts for the Electronics Industry

SIEMENS
Ingenuity for life

Shorter technology Innovation Adoption Time Becomes Shorter.

More difficult to enable collaboration across and through the Supply Chain.

Inability to achieve zero defect will cause loss of revenue/market share.

Manufacturing environment needs to be closed loop, intelligent and integrated.

Unrestricted © Siemens AG 2017

Siemens Vision:

Deliver Holistic Software Solutions to Digitalize the Enterprise, enabling NPDI Excellence.

Digital Twin of Product
Ideation

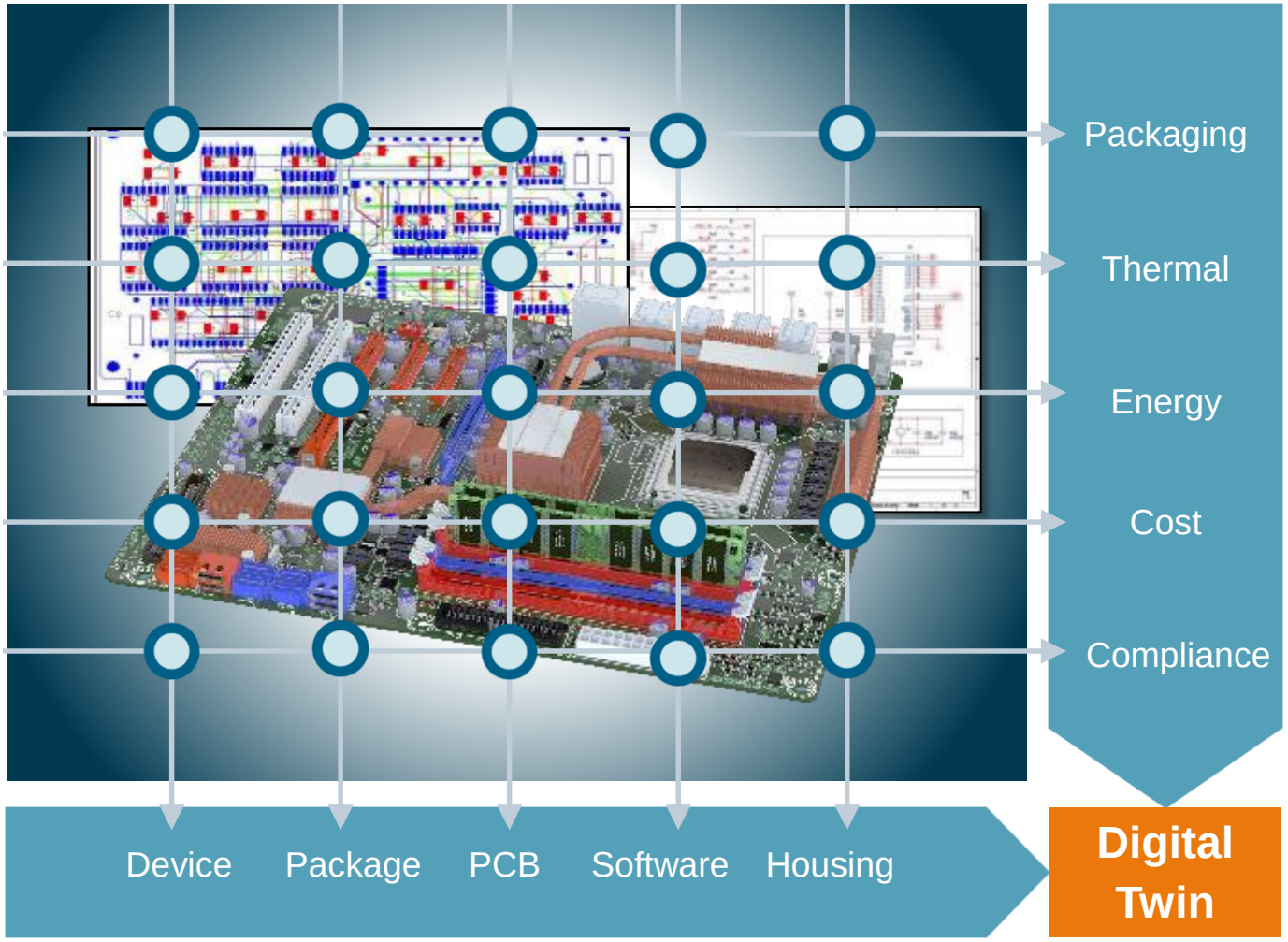
Manage Product Complexity

Optimize competing targets

Enable modularity and reuse

Balance performance, cost, compliance

Integrate disciplines



Unrestricted © Siemens AG 2017

SIEMENS
Ingenuity for life

Accurately represent what is real and simulate what is possible

Digital Twin

Physical production system

Manufacturing Planning + Manufacturing Engineering + Manufacturing Execution

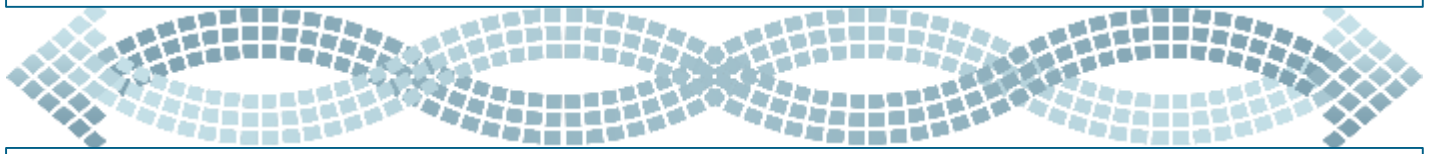
Unrestricted © Siemens AG 2017

Digital Twin of Performance
Utilization

SIEMENS
Ingenuity for life

Plant and Machine Analytics

Optimizing asset performance, energy and resource consumption, maintenance, services...



Improve customer experience and supplier quality
Contextualize data and discover trends

Product Analytics

Unrestricted © Siemens AG 2017

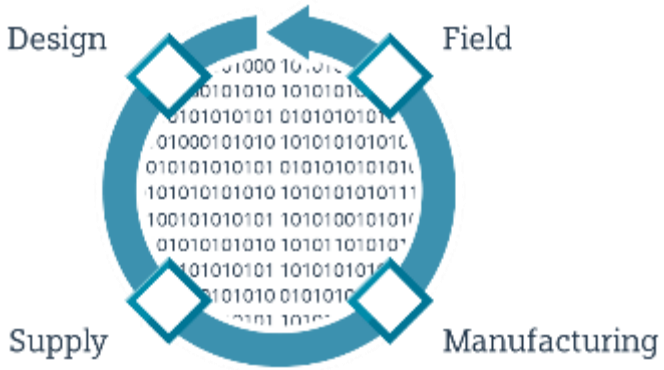
The Siemens Digitalization strategy

SIEMENS
Ingenuity for life

Digital *Product* Twin

Digital *Production* Twin

Digital *Performance* Twin



Unrestricted © Siemens AG 2017

Make Strategic Acquisitions

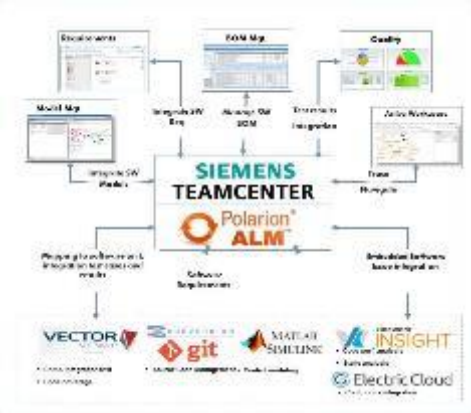
SIEMENS
Ingenuity for life

ALM

Polarion Acquisition

PLM – ALM integration

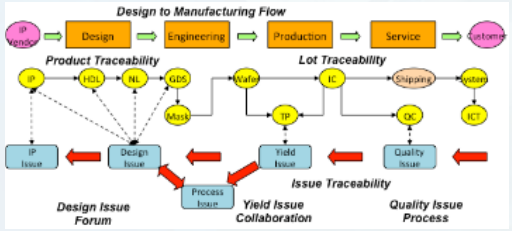
Continuous Delivery



MES

Camstar Acquisition

PLM – MES Integration



Product Analytics

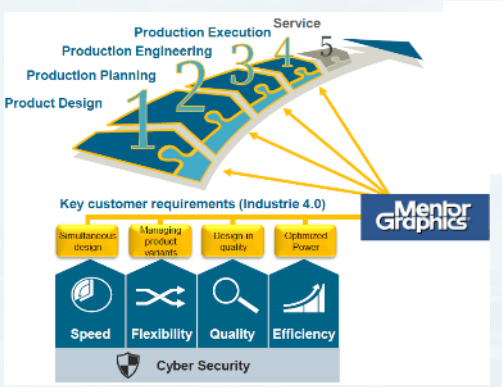
Cloud Based Solutions

Product Performance Intelligence

Electronic Design Automation

Mentor Graphics Acquisition

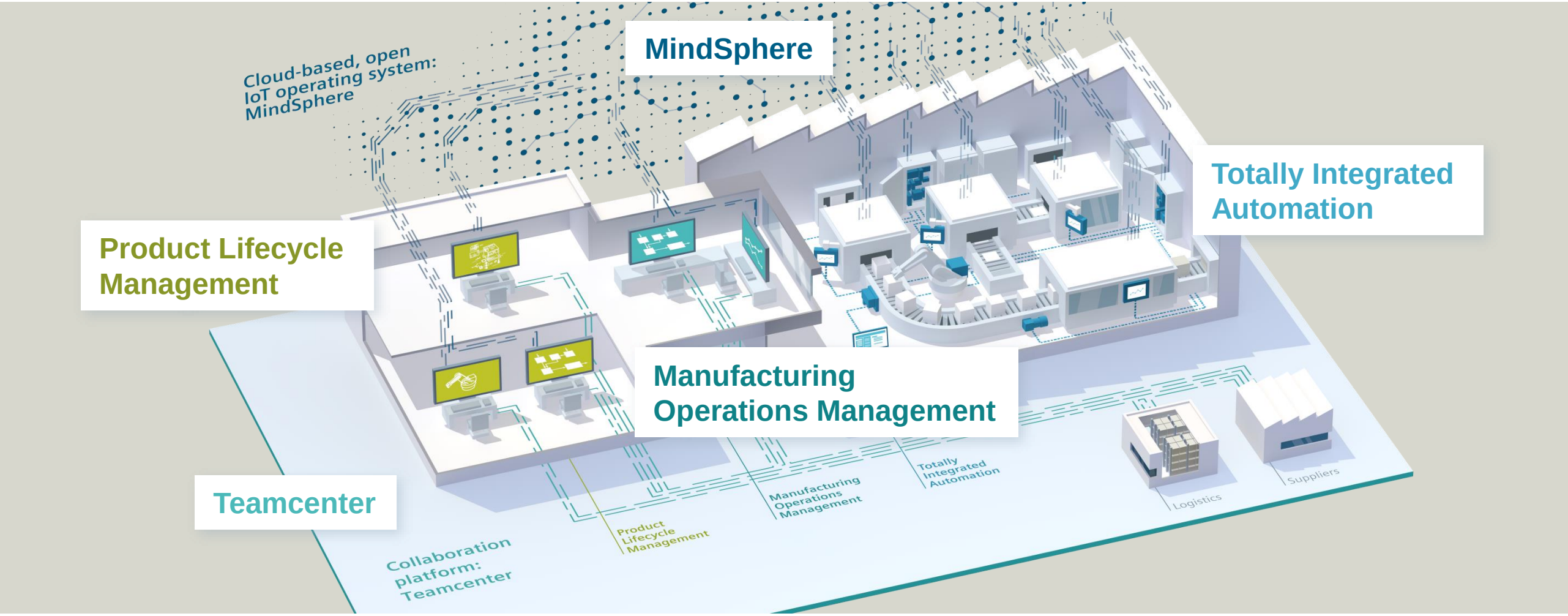
PLM – EDA integration



Unrestricted © Siemens AG 2017

Digital Enterprise Suite
Siemens holistic approach to IoT

SIEMENS
Ingenuity for life



Unrestricted © Siemens AG 2017

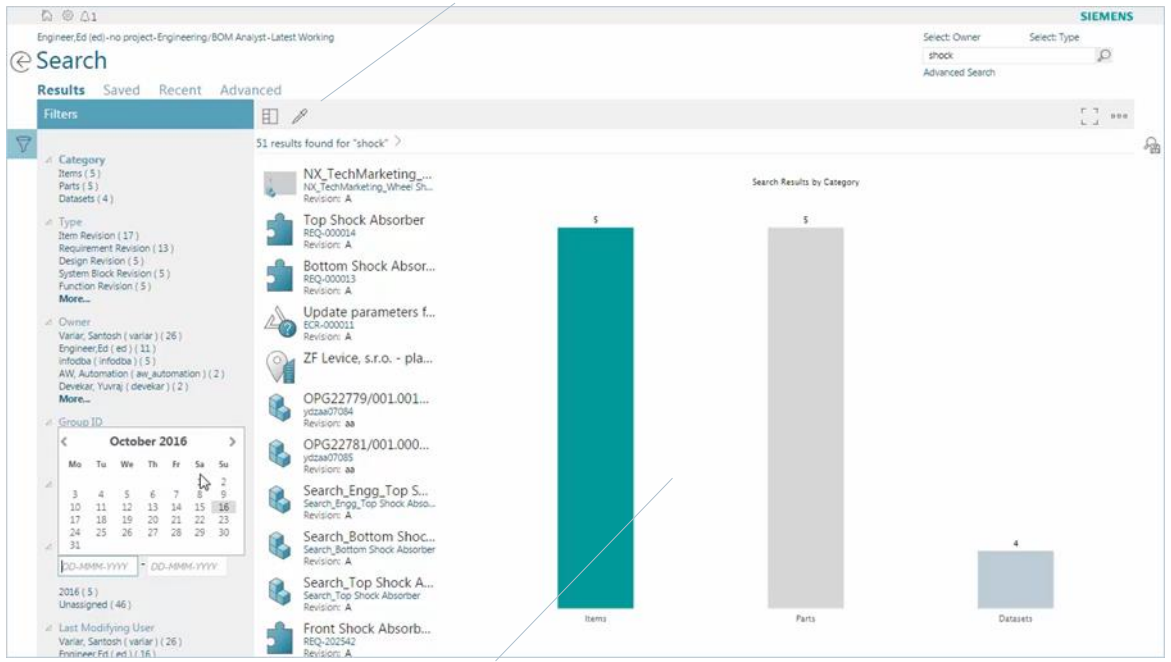
Product Cost Management
Integrated Closed Loop Smart Manufacturing
Additive Manufacturing
Multi-Discipline Data Management
Connect more people in more places
Supplier Collaboration
Compliance Management
Program & Program Management

Product Cost Management
Integrated Closed Loop Smart Manufacturing
Additive Manufacturing
Multi-Discipline Data Management
Connect more people in more places
Supplier Collaboration
Compliance Management
Program & Program Management

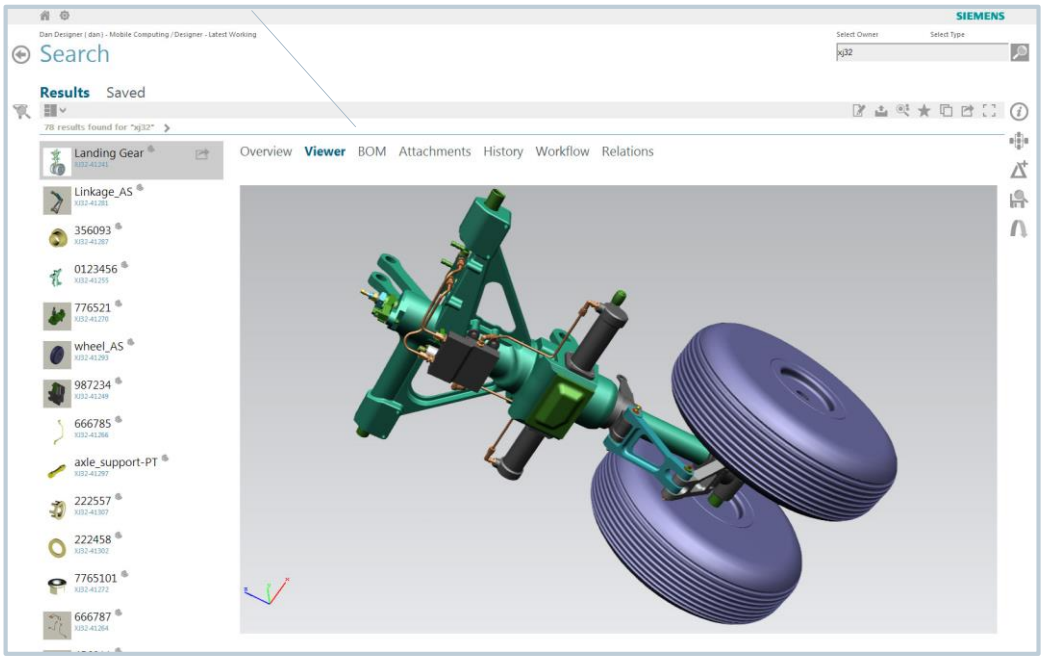
Active Workspace
Find what you need faster

Increase productivity by reducing time wasted searching for information

shopping cart-like filtering



easy access to relevant information



intelligent charts

Unrestricted © Siemens AG 2017

SIEMENS

Search

Select: Owner Select: Type

shock

Advanced Search

Results Saved Recent Advanced

Filters

Category
Items (5)
Parts (5)
Datasets (4)

Type
Item Revision (17)
Requirement Revision (13)
Design Revision (5)
System Block Revision (5)
Function Revision (5)
More...

Owner
Variar, Santosh (variar) (26)
Engineer,Ed (ed) (11)
infodba (infodba) (5)
AW, Automation (aw_automation) (2)
Devekar, Yuvraj (devekar) (2)
More...

Group ID

October 2016

Mo	Tu	We	Th	Fr	Sa	Su
						2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30
31						

DD-MMM-YYYY - DD-MMM-YYYY

2016 (5)
Unassigned (46)

Last Modifying User
Variar, Santosh (variar) (26)
Engineer,Ed (ed) (16)

51 results found for "shock"

NX_TechMarketing_...
NX_TechMarketing_Wheel Sh...
Revision: A

Top Shock Absorber
REQ-000014
Revision: A

Bottom Shock Absor...
REQ-000013
Revision: A

Update parameters f...
ECR-000011
Revision: A

ZF Levice, s.r.o. - pla...

OPG22779/001.001...
ydzaa07084
Revision: aa

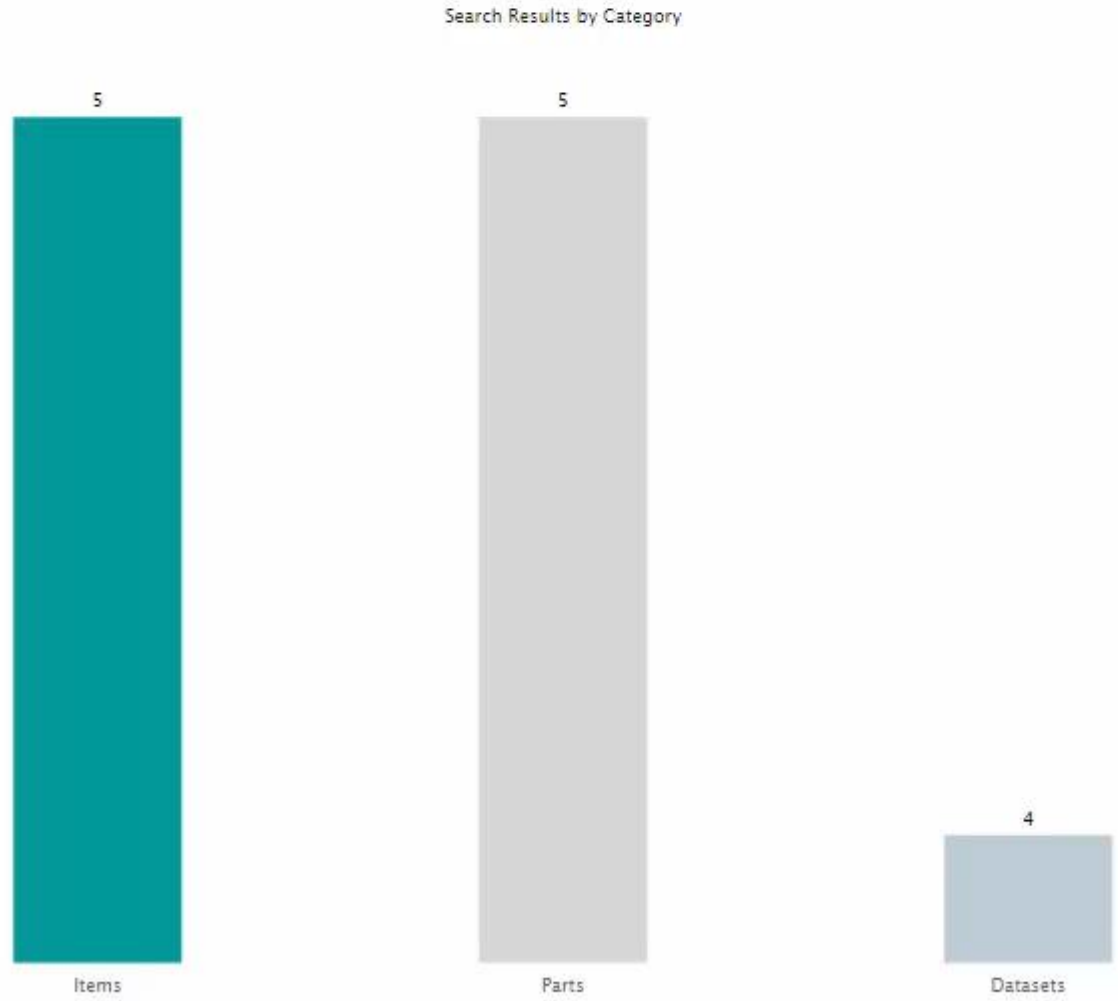
OPG22781/001.000...
ydzaa07085
Revision: aa

Search_Engg_Top S...
Search_Engg_Top Shock Abso...
Revision: A

Search_Bottom Shoc...
Search_Bottom Shock Absorber
Revision: A

Search_Top Shock A...
Search_Top Shock Absorber
Revision: A

Front Shock Absorb...
REQ-202542
Revision: A



Active Workspace
User productivity – universal viewer

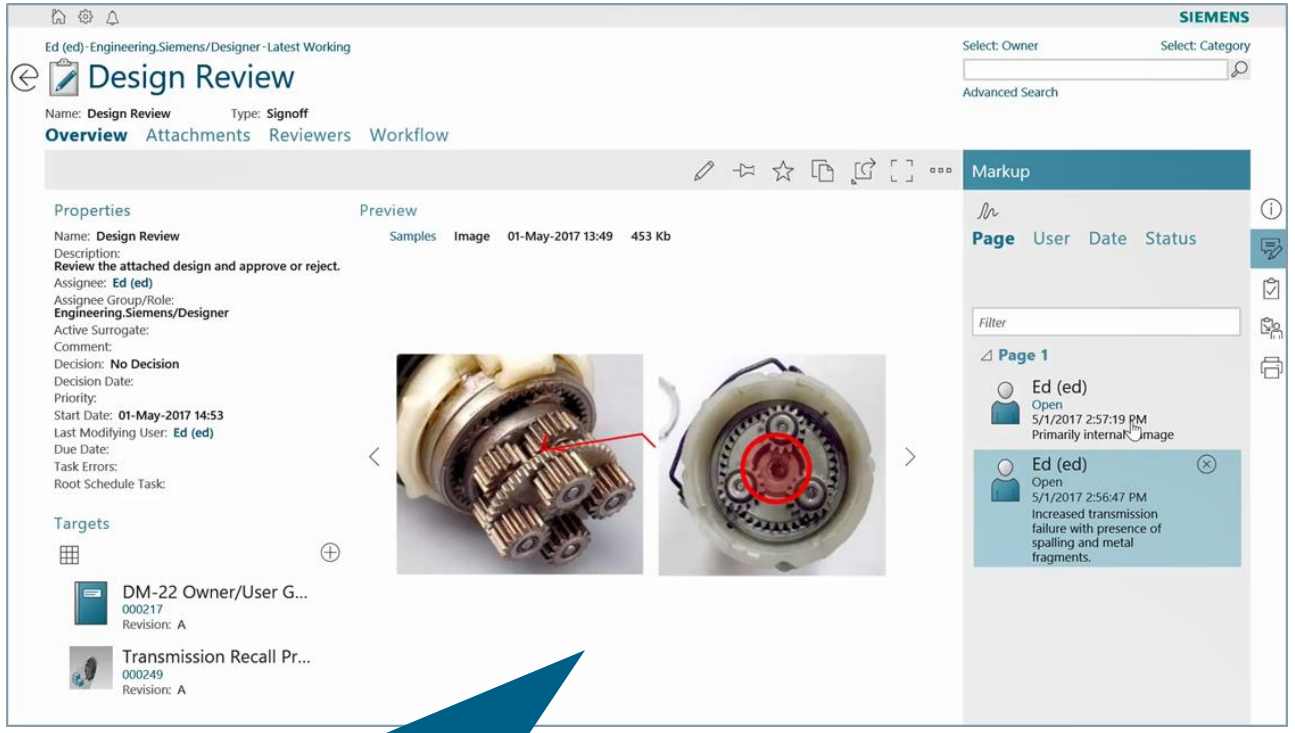
Provide all relevant in context information and data

View the contents of various data types directly from the object's Overview location, without having to drill into objects and data structures

View:

- PDF
- JT
- Text
- HTML
- Images (image files supported natively in browsers)

- Markup PDF and Images



View related files on summary view or any tab

Unrestricted © Siemens AG 2017

Design Review

Name: **Design Review** Type: **Signoff**

Overview Attachments Reviewers Workflow

Properties

Name: **Design Review**
Description:
Review the attached design and approve or reject.
Assignee: **Ed (ed)**
Assignee Group/Role:
Engineering.Siemens/Designer
Active Surrogate:
Comment:
Decision: **No Decision**
Decision Date:
Priority:
Start Date: **01-May-2017 14:53**
Last Modifying User: **Ed (ed)**
Due Date:
Task Errors:
Root Schedule Task:

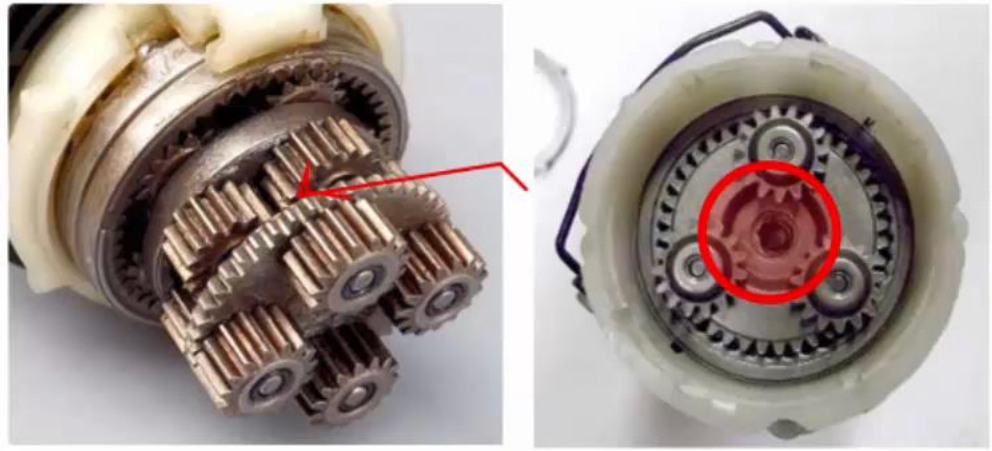
Targets

DM-22 Owner/User G...
000217
Revision: A

Transmission Recall Pr...
000249
Revision: A

Preview

Samples **Image** **01-May-2017 13:49** **453 Kb**



Markup

Page User Date Status

Filter

Page 1

Ed (ed)
Open
5/1/2017 2:57:19 PM
Primarily internal image

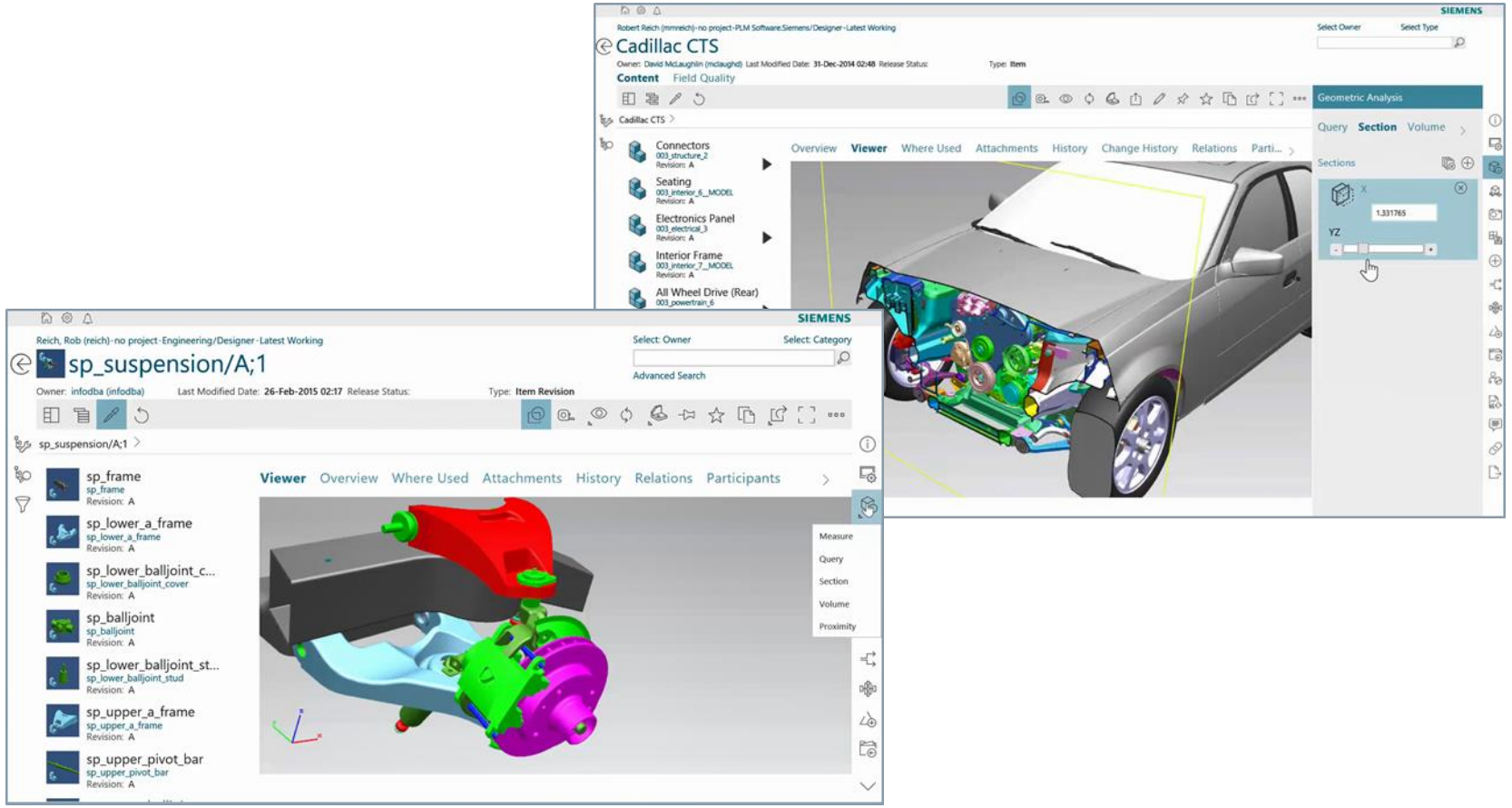
Ed (ed)
Open
5/1/2017 2:56:47 PM
Increased transmission failure with presence of spalling and metal fragments.

Active Workspace

User productivity – universal viewer

Enable knowledge users to visualize standard 2D and 3D format

- View 3D models
- Navigate 3D view
- View massive models
- View PMI
- Capture images
- Markup image captures
- Select multiple objects
- Set viewer display options
- Measure
- Search spatially
- Cross section
- 2D View and Markup



Unrestricted © Siemens AG 2017

SIEMENS

Reich, Rob (reich)-no project-Engineering/Designer-Latest Working

sp_suspension/A;1

Select: Owner Select: Category

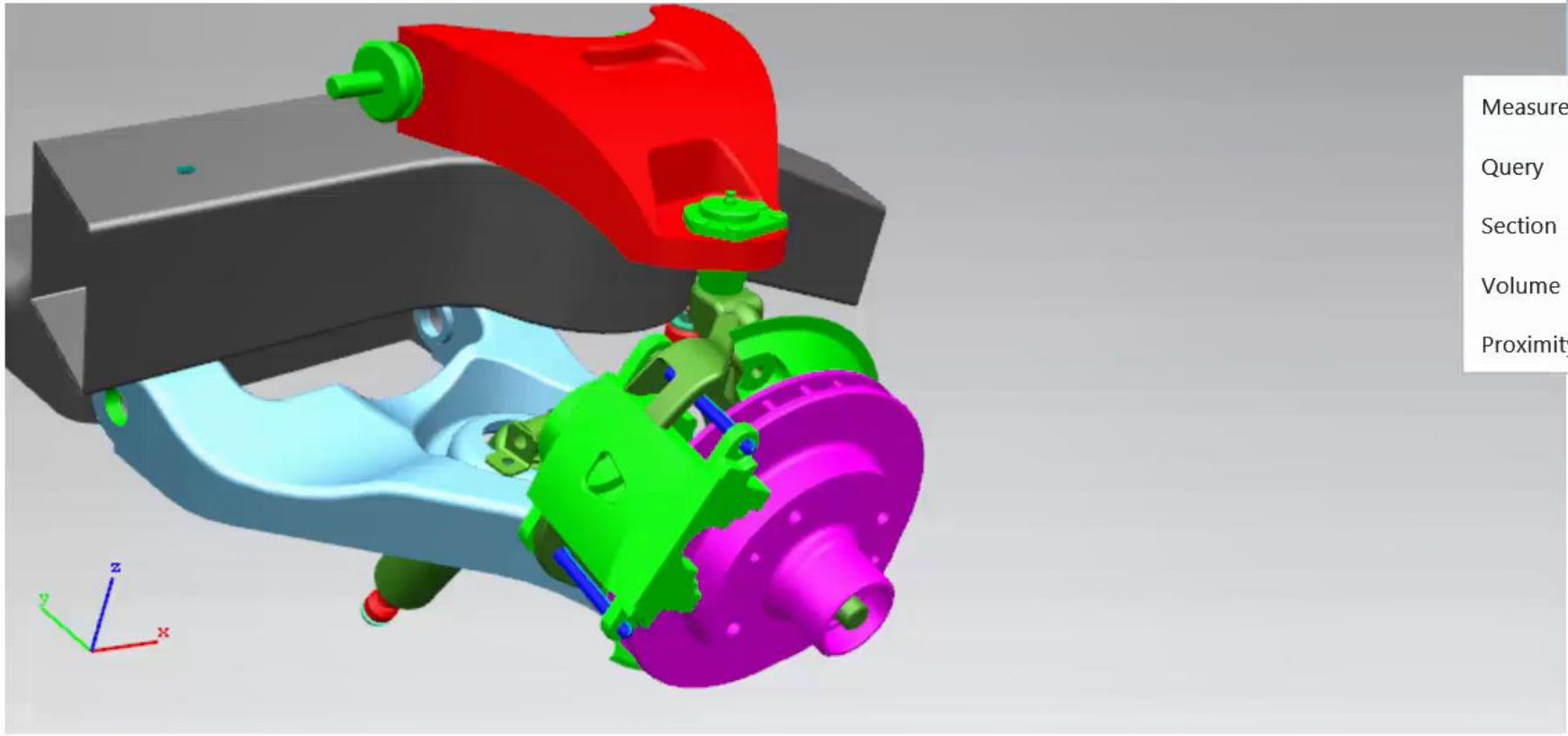
Advanced Search

Owner: infodba (infodba) Last Modified Date: **26-Feb-2015 02:17** Release Status: Type: **Item Revision**

sp_suspension/A;1

- **sp_frame**
  sp_frame
  Revision: A
- **sp_lower_a_frame**
  sp_lower_a_frame
  Revision: A
- **sp_lower_balljoint_c...**
  sp_lower_balljoint_cover
  Revision: A
- **sp_balljoint**
  sp_balljoint
  Revision: A
- **sp_lower_balljoint_st...**
  sp_lower_balljoint_stud
  Revision: A
- **sp_upper_a_frame**
  sp_upper_a_frame
  Revision: A
- **sp_upper_pivot_bar**
  sp_upper_pivot_bar
  Revision: A

Viewer Overview Where Used Attachments History Relations Participants



Measure
Query
Section
Volume
Proximity

Active Workspace

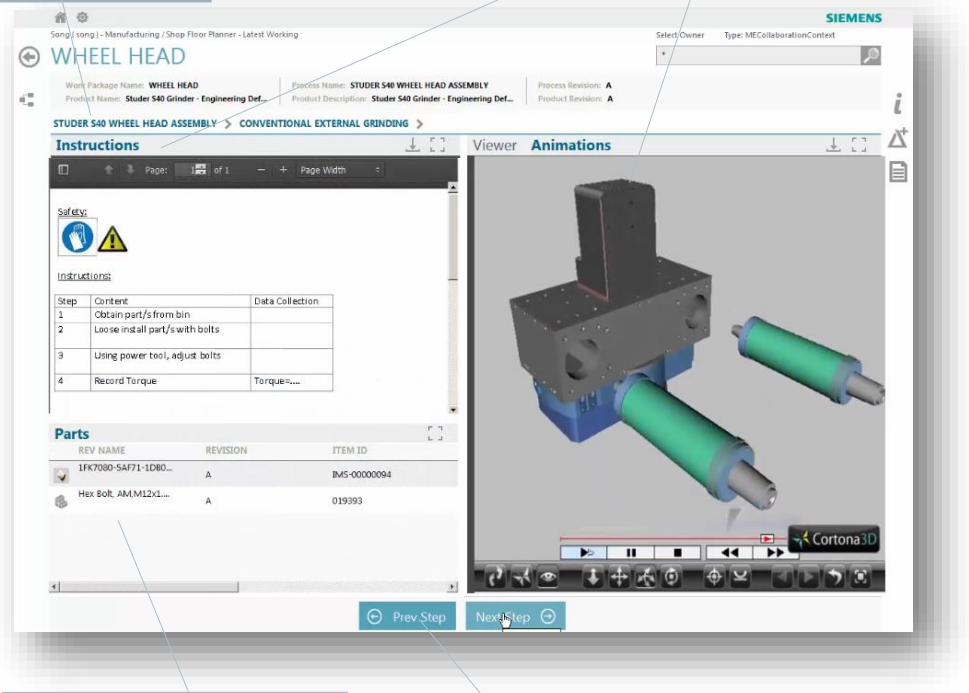
Electronic Work Instructions: On-Line Digital Assembly Sequence

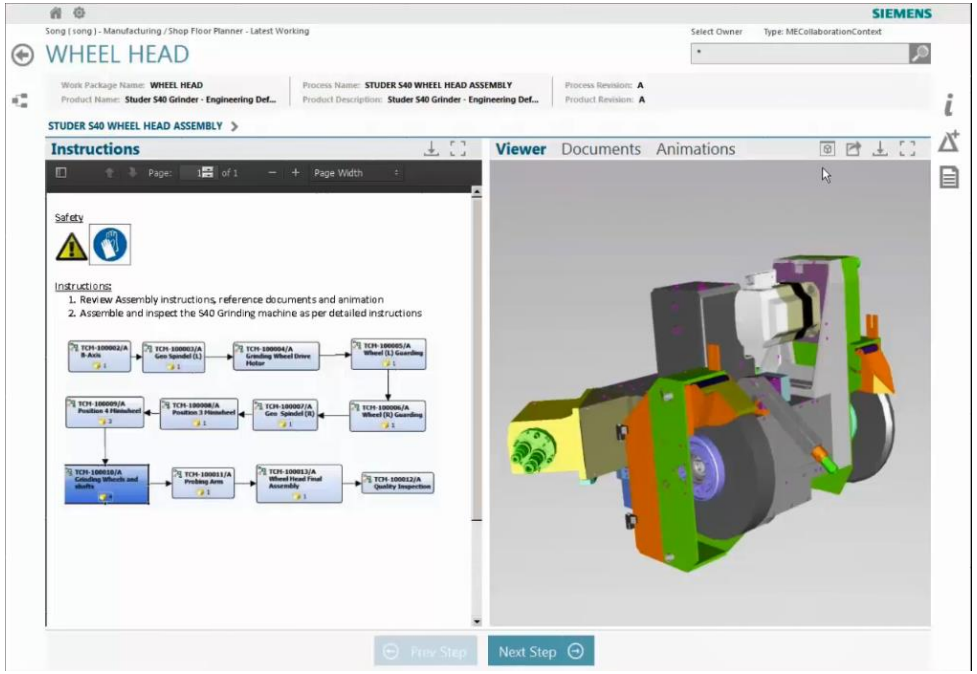
Shop Floor Level - Leveraging Manufacturing Engineering Data

Textual information

Assembly process navigation

Assembly animation or lightweight visualization

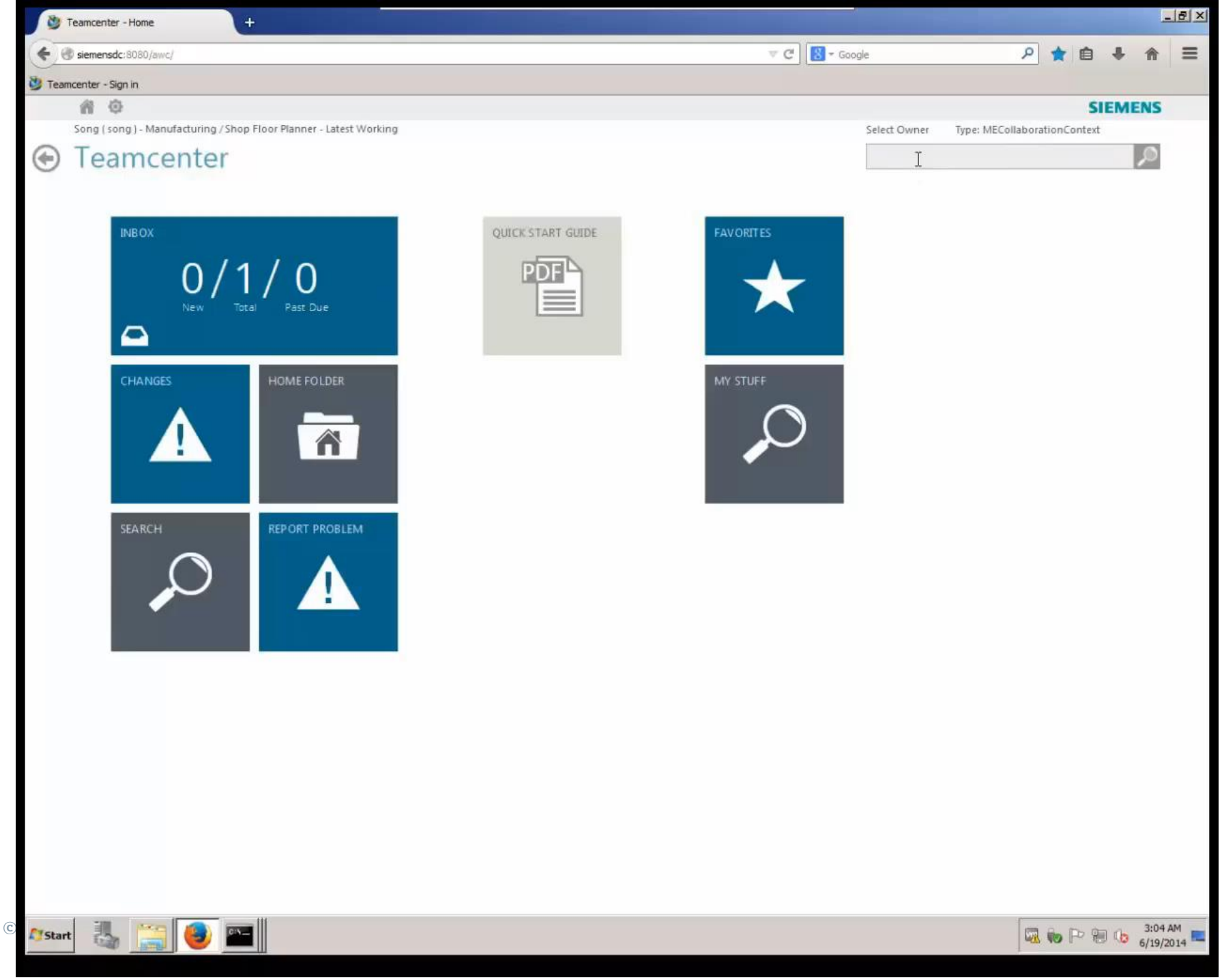




Parts list

Assembly sequence navigation

Unrestricted © Siemens AG 2017

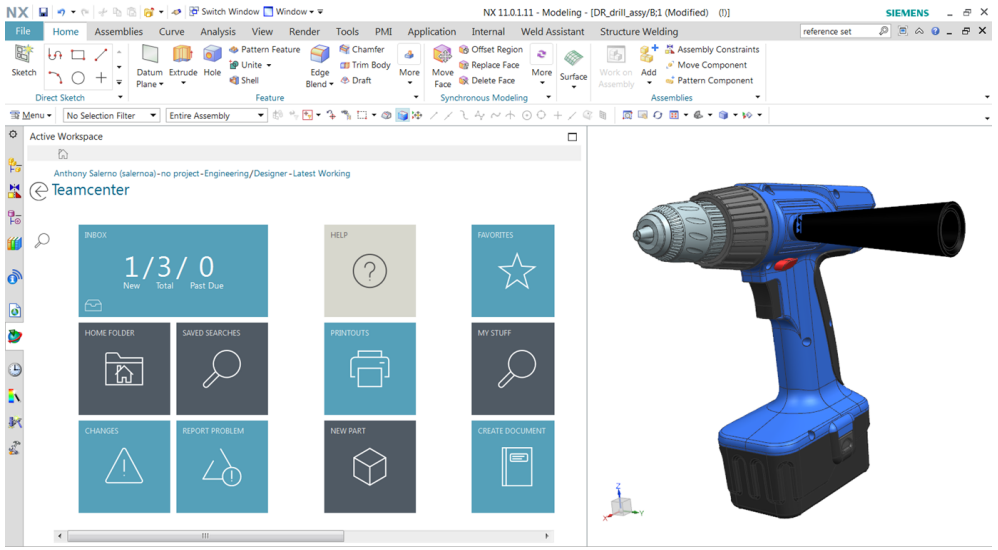

Teamcenter - Home
siemensdc:8080/awc/
Google
Teamcenter - Sign in
SIEMENS
Song (song) - Manufacturing / Shop Floor Planner - Latest Working
Select Owner
Type: MECollaborationContext
Teamcenter
INBOX
0 / 1 / 0
New
Total
Past Due
QUICK START GUIDE
PDF
FAVORITES
CHANGES
HOME FOLDER
MY STUFF
SEARCH
REPORT PROBLEM
Start
3:04 AM
6/19/2014

Product Cost Management
Integrated Closed Loop Smart Manufacturing
Additive Manufacturing
Multi-Discipline Data Management
Connect more people in more places
Supplier Collaboration
Compliance Management
Program & Program Management

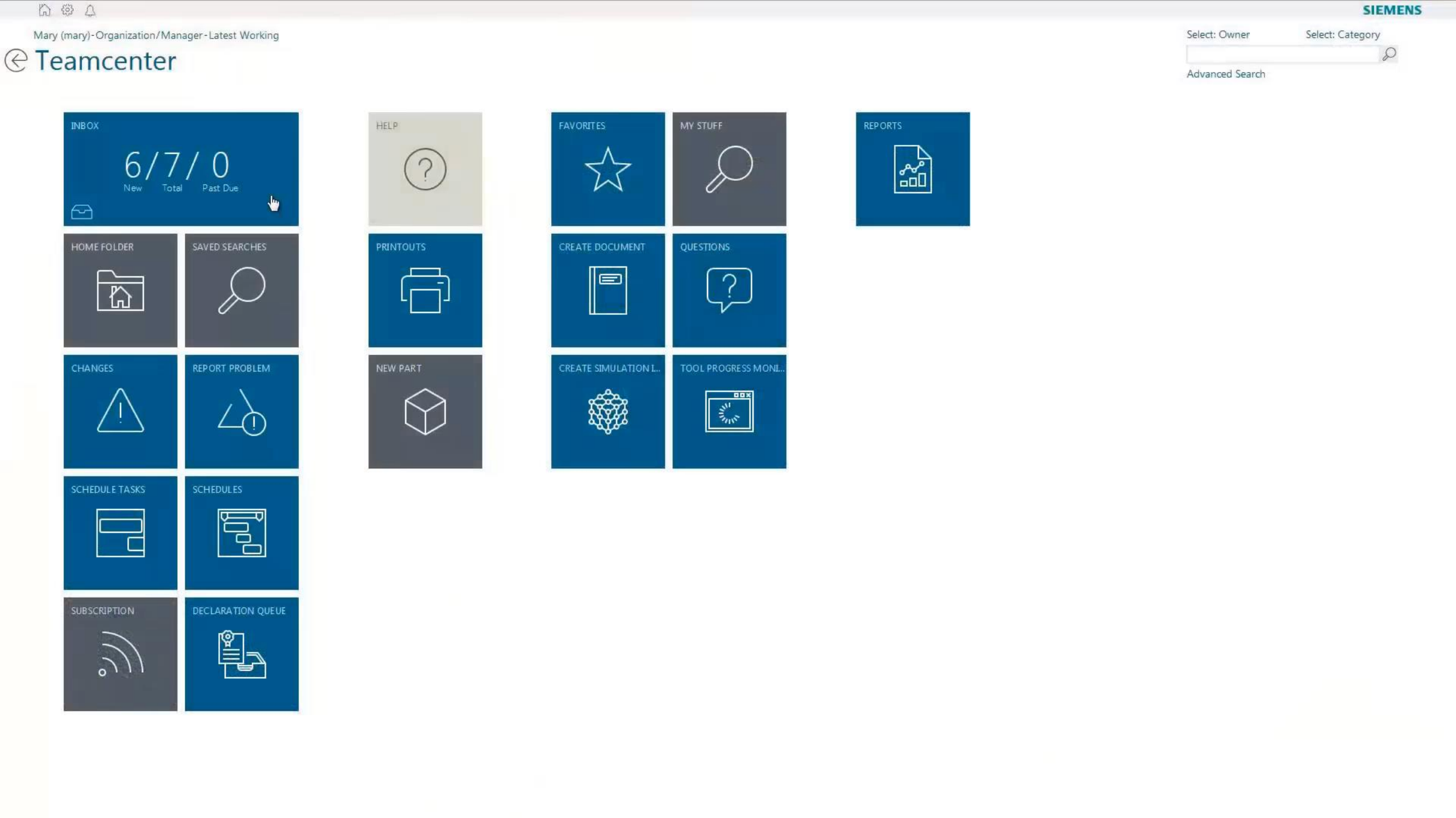
MCAD product development
NX data management

Capture, manage and share NX data

- On-demand access to Teamcenter from inside NX: navigate, search, view data, check-in/check-out
- Vault, manage and control multiple revisions of component and product designs
- Support for all advanced Teamcenter security designations and data access controls
- Ability to create new product revisions or version updates for work in progress
- Ability to create, configure and edit a product structure in either Teamcenter or NX
- Consistent visualization of assemblies and their constructs in NX and Teamcenter
- Ability to load product structure by applying configuration rules, i.e. revision rules, precise, baseline, effectivity
- Selective/partial load of product structure for efficient management of assembly design
- Where-used/referenced queries on interpart relations in either NX or Teamcenter



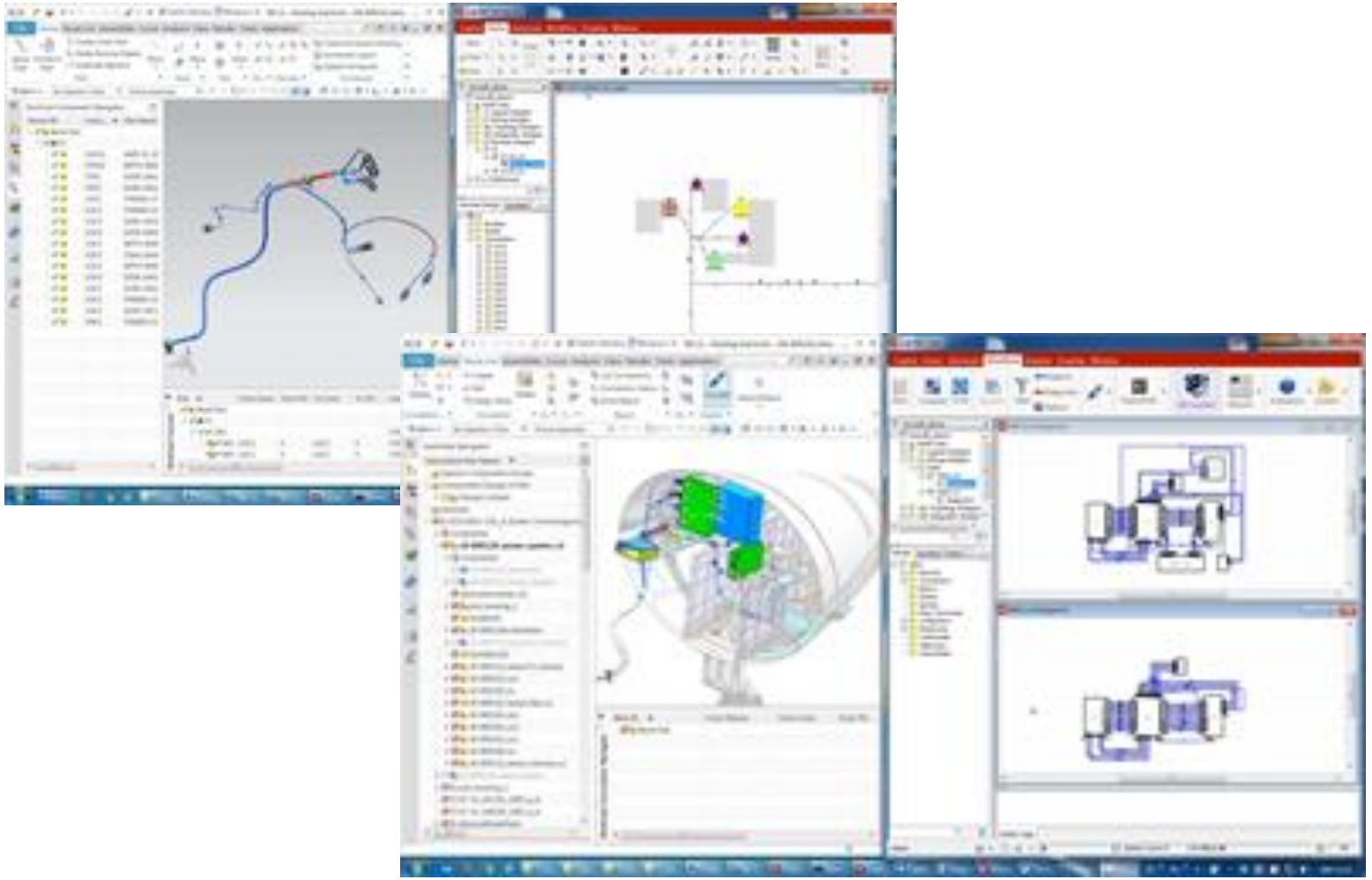
Unrestricted © Siemens AG 2017


SIEMENS
Mary (mary)-Organization/Manager-Latest Working
Teamcenter
Select: Owner
Select: Category
Advanced Search
INBOX
6/7/0
New
Total
Past Due
HELP
FAVORITES
MY STUFF
REPORTS
HOME FOLDER
SAVED SEARCHES
PRINTOUTS
CREATE DOCUMENT
QUESTIONS
CHANGES
REPORT PROBLEM
NEW PART
CREATE SIMULATION I...
TOOL PROGRESS MONI...
SCHEDULE TASKS
SCHEDULES
SUBSCRIPTION
DECLARATION QUEUE

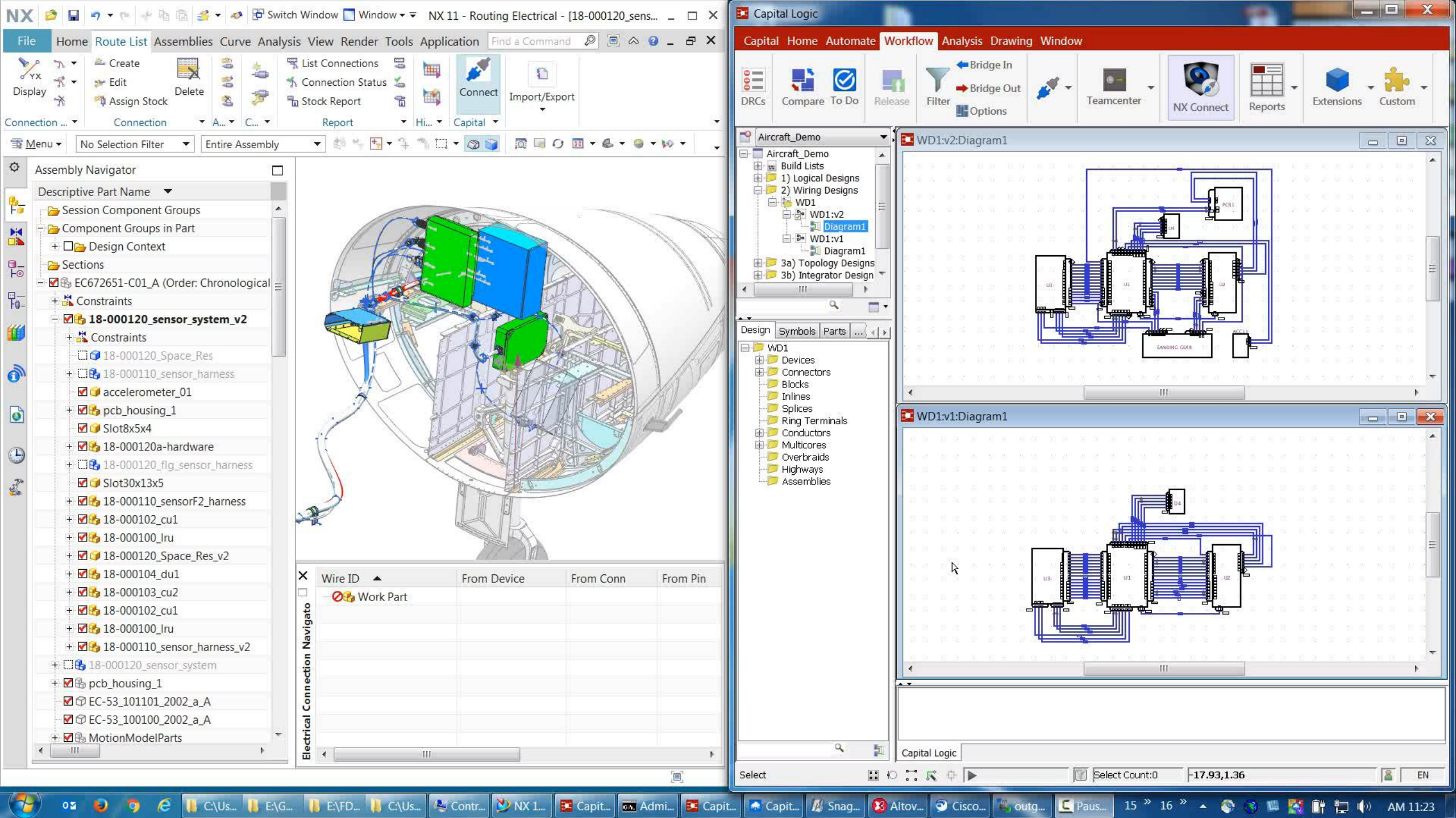
eCAD and mCAD collaboration

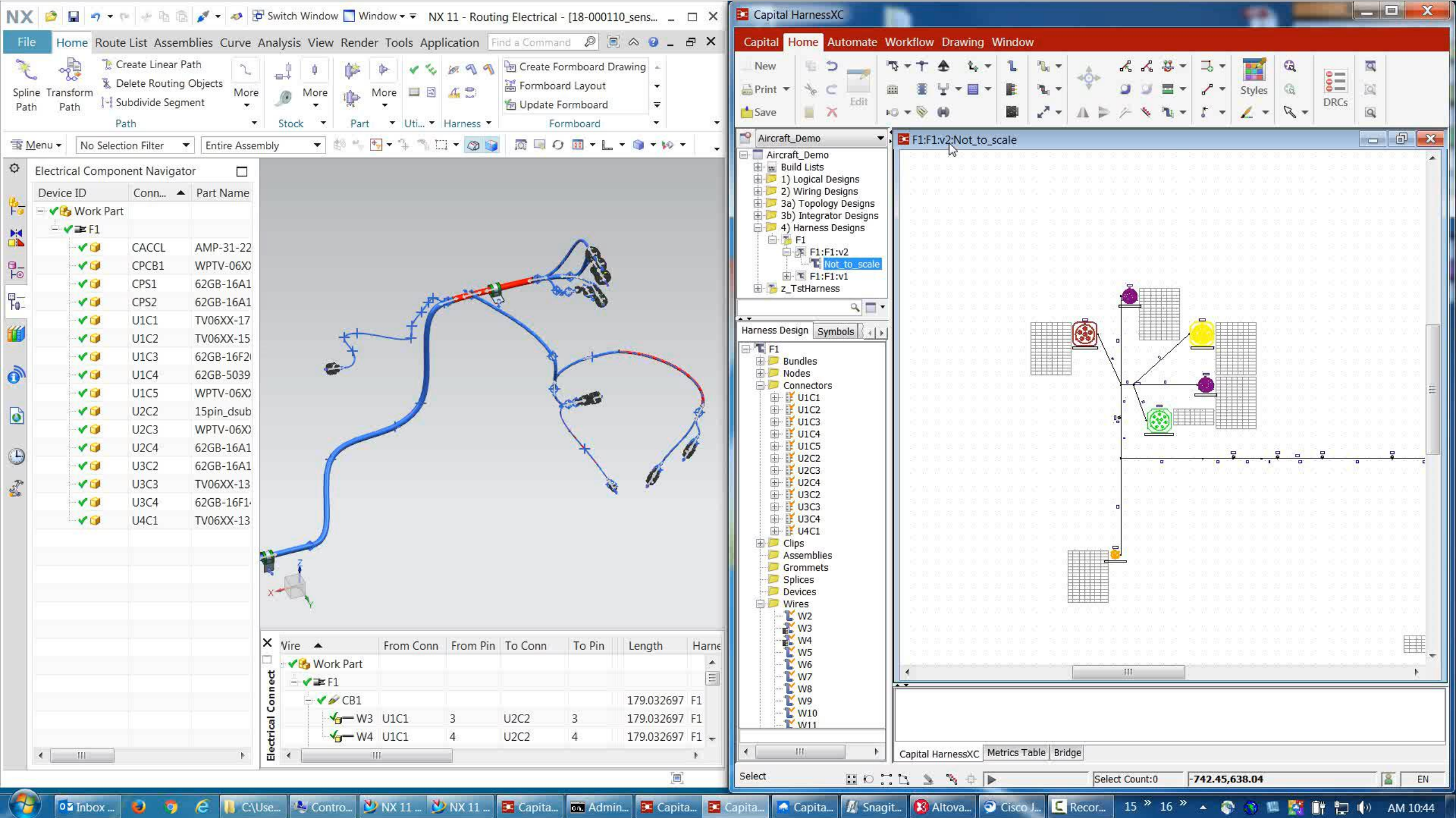
Facilitate multidisciplinary collaboration

- Enable eCAD and mCAD data exchange from logical to schematic to PCB board layout and mechanical representation
- Provide a common BOM structure to manage and visualize eCAD and mCAD data
- SDPD approach to design and verification, eliminates rework across disciplines
- Improves part/component re-use
- Reduces cycle time for change



Unrestricted © Siemens AG 2017


NX 11 - Routing Electrical - [18-000120_sens...
File Home Route List Assemblies Curve Analysis View Render Tools Application
Display Create Edit Assign Stock Delete List Connections Connection Status Stock Report Connect Import/Export
Connection Report Capital
Menu No Selection Filter Entire Assembly
Assembly Navigator
Descriptive Part Name
Session Component Groups
Component Groups in Part
Design Context
Sections
EC672651-C01_A (Order: Chronological
Constraints
18-000120_sensor_system_v2
Constraints
18-000120_Space_Res
18-000110_sensor_harness
accelerometer_01
pcb_housing_1
Slot8x5x4
18-000120a-hardware
18-000120_flg_sensor_harness
Slot30x13x5
18-000110_sensorF2_harness
18-000102_cu1
18-000100_lru
18-000120_Space_Res_v2
18-000104_du1
18-000103_cu2
18-000102_cu1
18-000100_lru
18-000110_sensor_harness_v2
18-000120_sensor_system
pcb_housing_1
EC-53_101101_2002_a_A
EC-53_100100_2002_a_A
MotionModelParts
Wire ID
From Device
From Conn
From Pin
Work Part
Electrical Connection Navigato
Capital Logic
Capital Home Automate Workflow Analysis Drawing Window
DRCs Compare To Do Release Filter Bridge In Bridge Out Options Teamcenter NX Connect Reports Extensions Custom
Aircraft_Demo
Aircraft_Demo
Build Lists
1) Logical Designs
2) Wiring Designs
WD1
WD1:v2
Diagram1
WD1:v1
Diagram1
3a) Topology Designs
3b) Integrator Design
Design Symbols Parts
WD1
Devices
Connectors
Blocks
Inlines
Splices
Ring Terminals
Conductors
Multicores
Overbraids
Highways
Assemblies
WD1:v2:Diagram1
WD1:v1:Diagram1
Capital Logic
Select
Select Count:0
-17.93,1.36
EN
AM 11:23


NX 11 - Routing Electrical - [18-000110_sens...
File Home Route List Assemblies Curve Analysis View Render Tools Application
Create Linear Path
Delete Routing Objects
Subdivide Segment
Spline Path
Transform Path
Path
Stock
Part
Harness
Create Formboard Drawing
Formboard Layout
Update Formboard
Formboard
No Selection Filter
Entire Assembly
Electrical Component Navigator
Device ID
Conn...
Part Name
Work Part
F1
CACCL AMP-31-22
CPCB1 WPTV-06X
CPS1 62GB-16A1
CPS2 62GB-16A1
U1C1 TV06XX-17
U1C2 TV06XX-15
U1C3 62GB-16F2
U1C4 62GB-5039
U1C5 WPTV-06X
U2C2 15pin_dsub
U2C3 WPTV-06X
U2C4 62GB-16A1
U3C2 62GB-16A1
U3C3 TV06XX-13
U3C4 62GB-16F1
U4C1 TV06XX-13
Wire
From Conn
From Pin
To Conn
To Pin
Length
Harne
Work Part
F1
CB1 179.032697 F1
W3 U1C1 3 U2C2 3 179.032697 F1
W4 U1C1 4 U2C2 4 179.032697 F1
Electrical Connect
Capital HarnessXC
Capital Home Automate Workflow Drawing Window
New
Print
Save
Edit
Styles
DRCs
Aircraft_Demo
Aircraft_Demo
Build Lists
1) Logical Designs
2) Wiring Designs
3a) Topology Designs
3b) Integrator Designs
4) Harness Designs
F1
F1:F1:v2
Not_to_scale
F1:F1:v1
z_TstHarness
F1:F1:v2:Not_to_scale
Harness Design
Symbols
F1
Bundles
Nodes
Connectors
U1C1
U1C2
U1C3
U1C4
U1C5
U2C2
U2C3
U2C4
U3C2
U3C3
U3C4
U4C1
Clips
Assemblies
Grommets
Splices
Devices
Wires
W2
W3
W4
W5
W6
W7
W8
W9
W10
W11
Capital HarnessXC
Metrics Table
Bridge
Select
Select Count:0
-742.45,638.04
EN
AM 10:44

NX 11 - Modeling - [pcb_orig.prt]

SIEMENS

File | Home | Curve | Surface | Assemblies | Tools | Analysis | View | Application

Find a Command

Modeling | Drafting | Sheet Metal | Shape Studio | Assemblies | PMI

Design

Pre/Post | Flexible Pipe | Design | Motion

Simulation

Electrical | Mechanical | Logical | More

Routing

Flexible Printed Circuit Design | PCB Exchange

Process Specific

More

Menu | No Selection Filter | Entire Assembly

Assembly Navigator

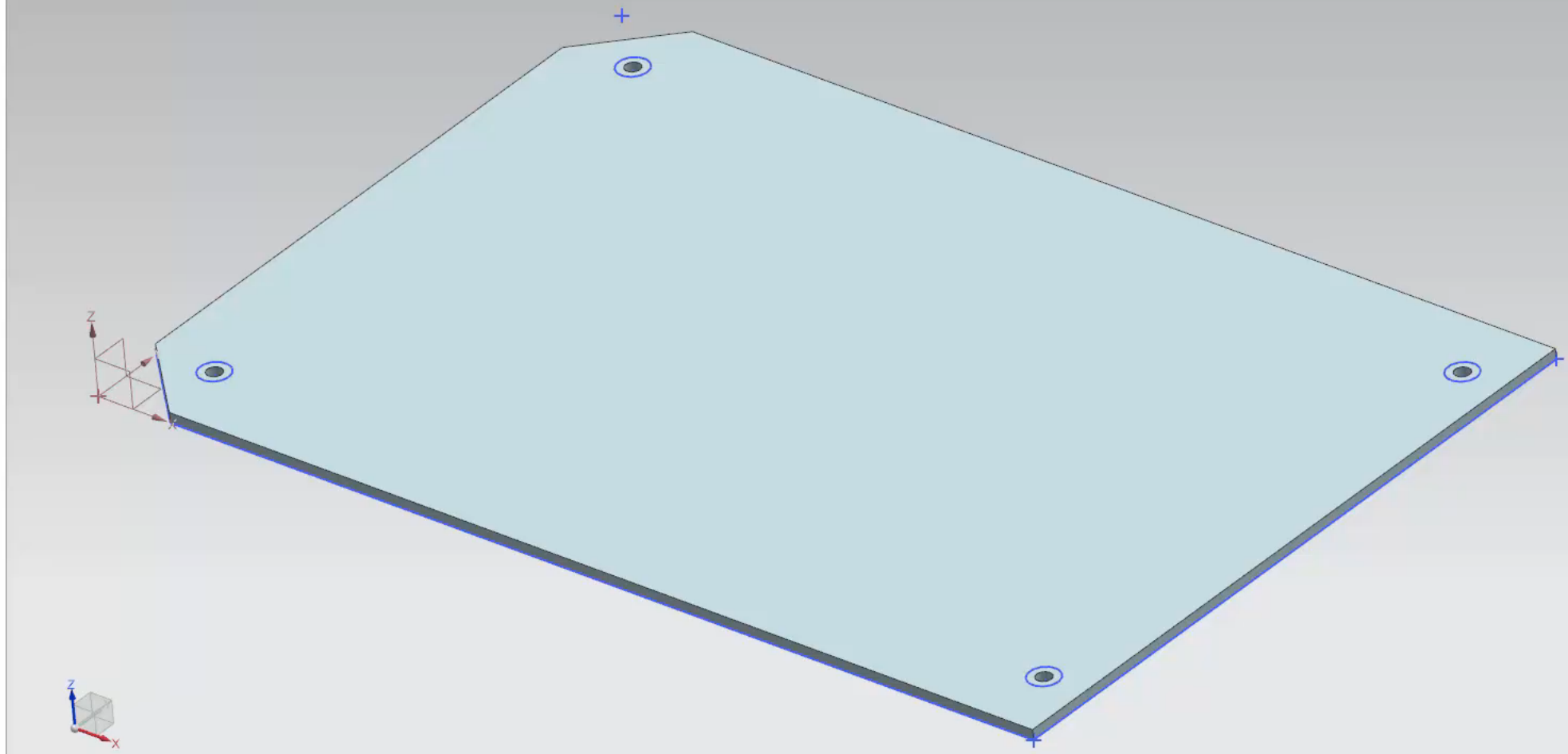
Descriptive Part Name

Sections

pcb_orig

Preview

Dependencies



EDA 2 New -...

Recording...

NX 11 - Mod...

1:57 PM
4/25/2017

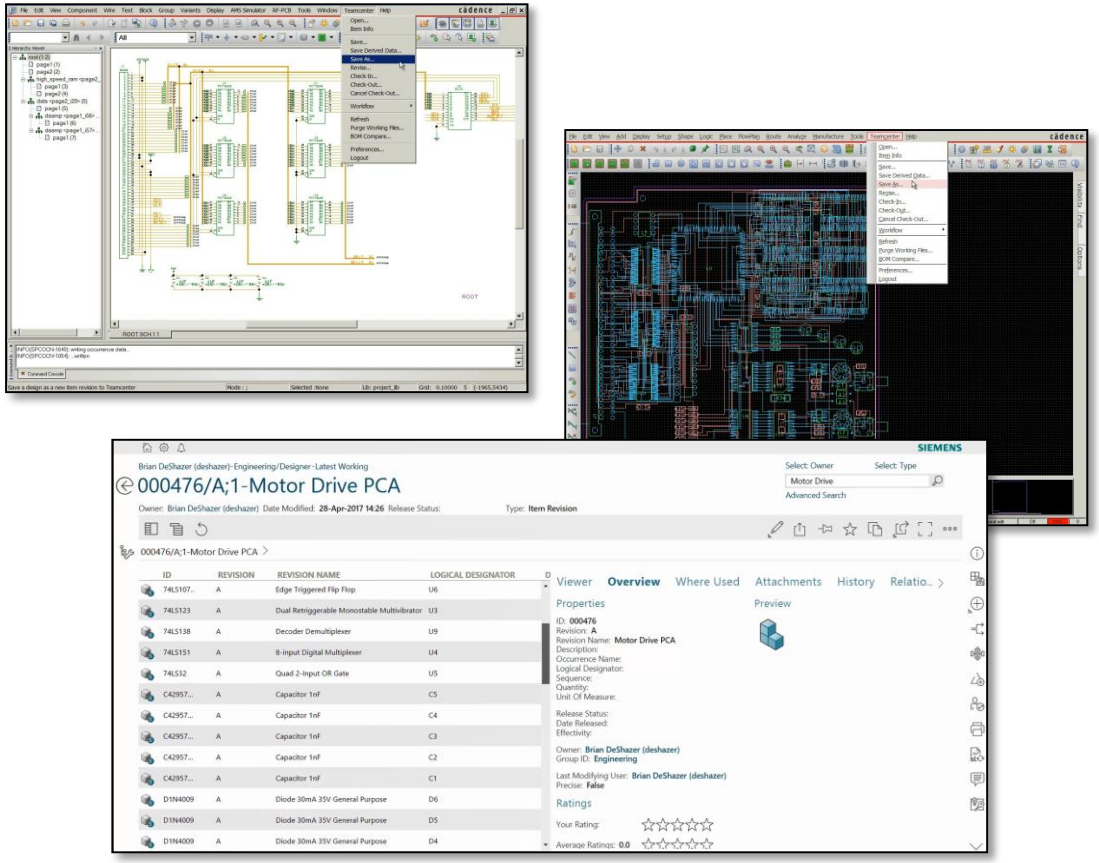
ECAD Data Management

ECAD tool integrations and data management

Uniform ECAD data management across tools and locations

Vendor/Tool	Design	Library	Visualization
Cadence Allegro	Yes	Yes	SCH/PCB
Cadence OrCAD	Yes	Yes*	SCH
Mentor Board Station	Yes	Yes	SCH/PCB
Mentor PADS	Yes	Yes	PCB
Mentor xPedition	Yes	Yes	SCH/PCB
Altium Designer	Yes	Yes*	PCB

- Manage versions/revisions; schematic, layout, variants, IDF/IDX, BOM, visualization, fabrication, assembly, etc.
- Open/Close, Save/Check-in design & derived data
- Control access/authorizations
- Execute workflows & manage/track release status
- Define/trace relationships between design objects
- Search and find the right design data



Unrestricted © Siemens AG 2017

Teamcenter - 000476/A;

tc112server:7001/awc/#/com.siemens.splm.clientfx.tcui.xrt.showObject?uid=QaOAAEigomrL2B&pci_uid=SR::N::Awb0ProductContextInfo..P:QaOAAEigomrL2B,RR:QEMAAAAYomrL2B,,,AWBCB

Apps Teamcenter Active W

SIEMENS

Brian DeShazer (deshazer) - Engineering/Designer - Latest Working

000476/A;1-Motor Drive PCA

Select: Owner Select: Type

Motor Drive

Advanced Search

Owner: Brian DeShazer (deshazer) Date Modified: **28-Apr-2017 14:26** Release Status: Type: **Item Revision**

000476/A;1-Motor Drive PCA

ID	REVISION	REVISION NAME	LOGICAL DESIGNATOR	D
000478	A	Motor Drive PWB		
74LS00	A	Quad 2-Input NAND Gate	U10	
74LS04	A	Hex Inverter	U2	
74LS05	A	Hex Inverter	U12	
74LS08	A	Quad 2-Input AND Gate	U7	
74LS10	A	Triple 3-input NAND Gate	U11	
74LS107..	A	Edge Triggered Flip Flop	U8	
74LS107..	A	Edge Triggered Flip Flop	U6	
74LS123	A	Dual Retriggerable Monostable Multivibrator	U3	
74LS138	A	Decoder Demultiplexer	U9	
74LS151	A	8-input Digital Multiplexer	U4	
74LS32	A	Quad 2-Input OR Gate	U5	
C42957...	A	Cap		

Viewer **Overview** Where Used Attachments History Relat...

Properties

ID: **000476**
Revision: **A**
Revision Name: **Motor Drive PCA**
Description:
Occurrence Name:
Logical Designator:
Sequence:
Quantity:
Unit Of Measure:

Release Status:
Date Released:
Effectivity:

Owner: **Brian DeShazer (deshazer)**
Group ID: **Engineering**

Last Modifying User: **Brian DeShazer (deshazer)**
Precise: **False**

Preview

Ratings

Your Rating:

"000476/A;1-Motor Drive PCA" was restored from Fri Apr 28, 2017 15:19:27. Select Reset to apply the default view and configuration.

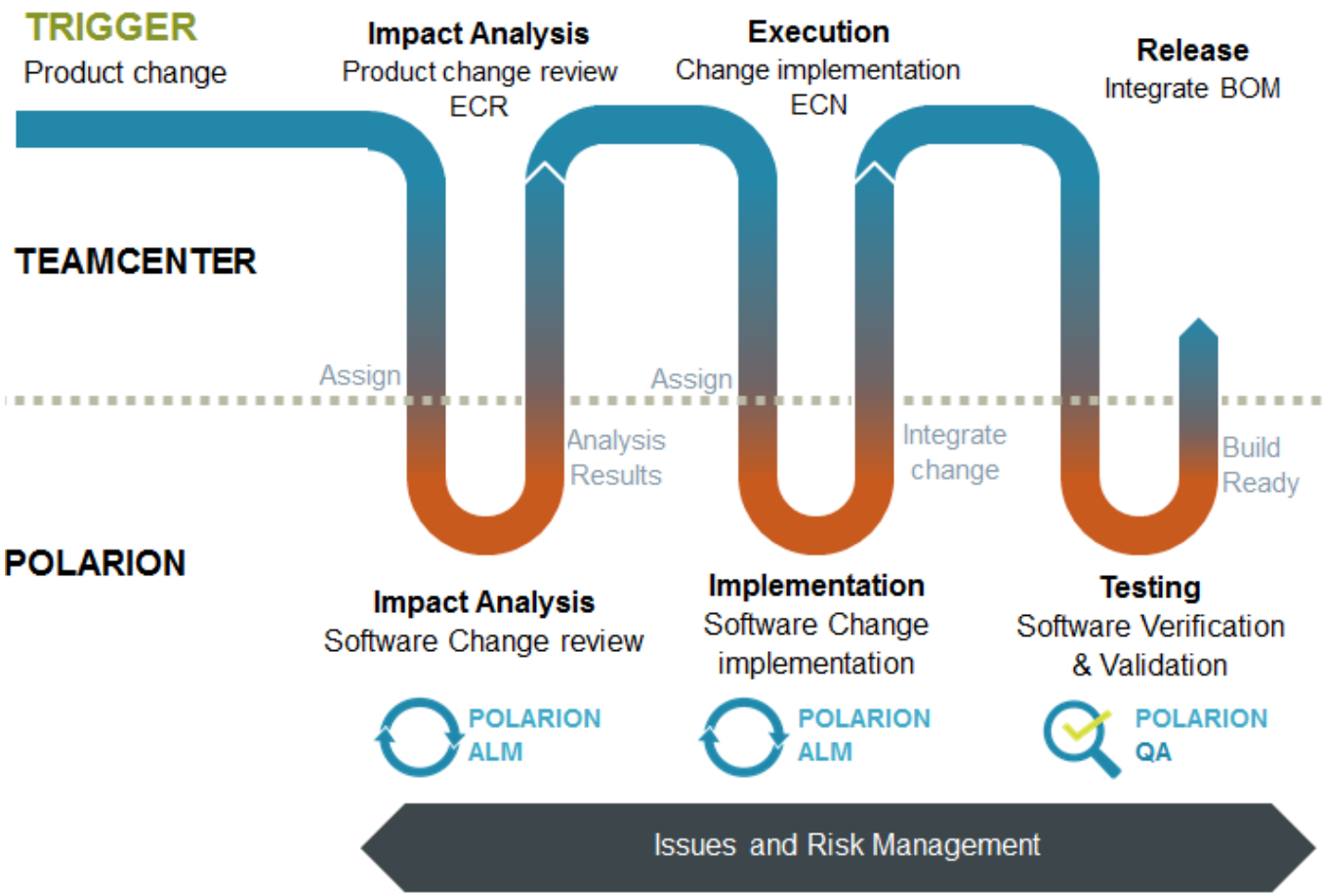
javascript:;

4:39 PM
4/28/2017

Integrated PLM-ALM Solution
Comprehensive ALM and PLM solution

Manage software requirements

- Increased visibility and confidence of test results, test coverage and schedule
- Reduced number of design iterations and verification process
- Trace Requirements to Software for Create/Update and to Test Cases for Traceability
- Identify and Execute the Test cases for Quality
- Track Test Results for Compliance/Regulations
- Record Build Information and Software Artifacts as Part of the Integrated BOM



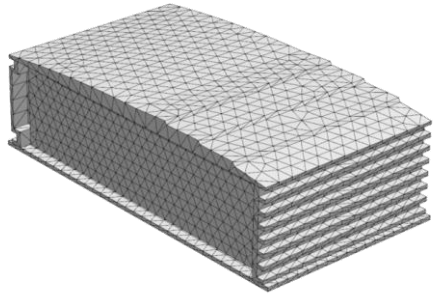
Unrestricted © Siemens AG 2017

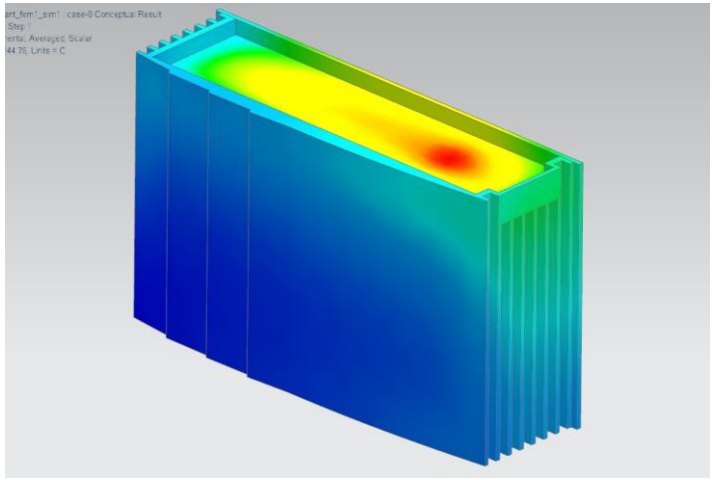
Siemens Teamcenter-Polarion

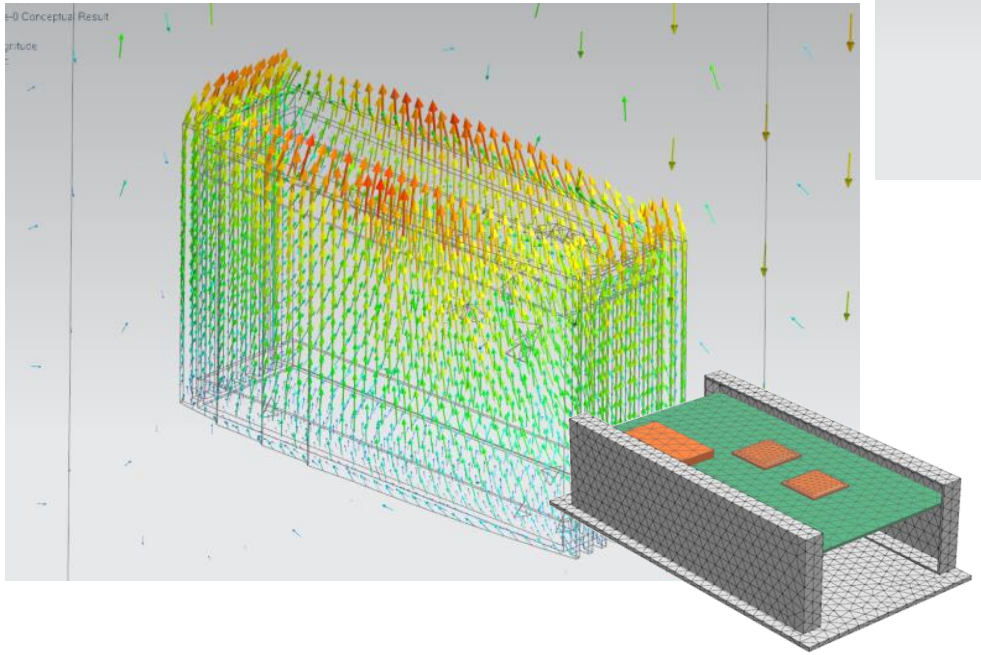
Simulation Data Management

Multidisciplinary Simulation

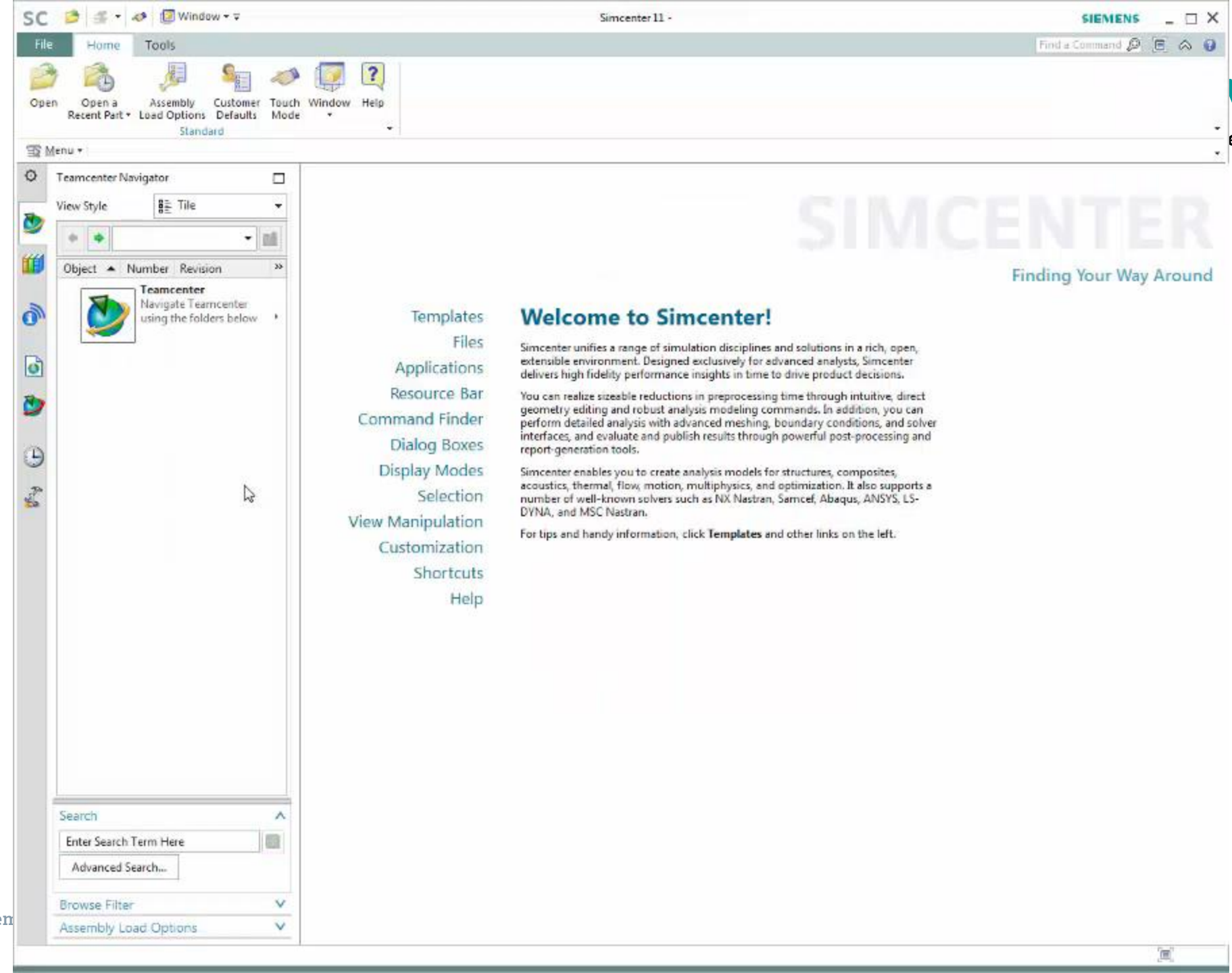
- Predict/simulate issues based on varying data conditions
- Store and manage 1D behavioral models and CAE models, simulation data and processes
- Store and trace analyzed parts
- Improve quality with simulation tools early in design cycle
- Reduce physical prototypes by leveraging the digital twin
- Accelerate early discovery of design issues







Unrestricted © Siemens AG 2017



MENS
enuity for life

Product Cost Management

Integrated Closed Loop Smart Manufacturing

Additive Manufacturing

Multi-Discipline Data Management

Connect more people in more places

Supplier Collaboration

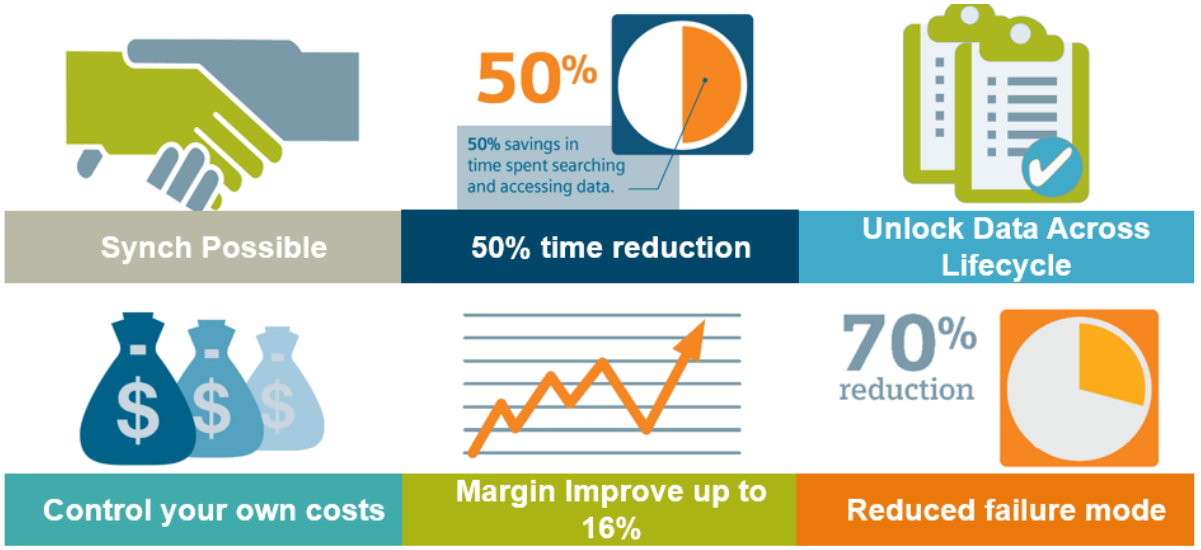
Compliance Management

Program & Program Management

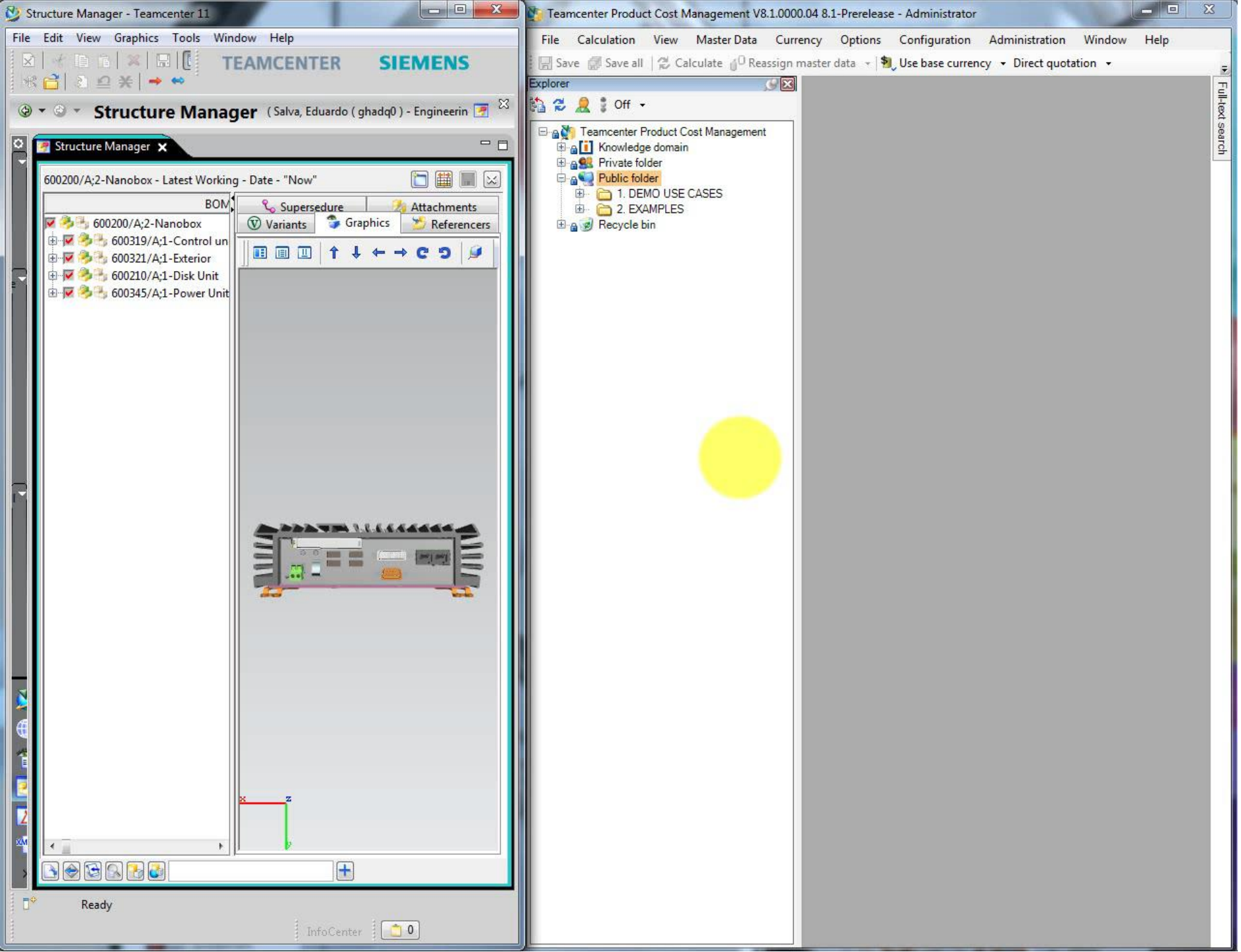
Cost & Compliance Risk Management
Cost Management

Deliver profitable price

- Process-based bottom-up calculation and cost models
- Integrated cycle time calculators for selected technologies
- Flexible simulations of what-if scenarios
- Cost-relevant knowledge database
- Delivers standardized costing methodology and a consistent database
- Enables the company-wide exchange of cost information for all involved business functions
- Ensures cost-effective return on capital over the product lifecycle
- Delivers optimized purchase prices through knowledgebased cost analysis

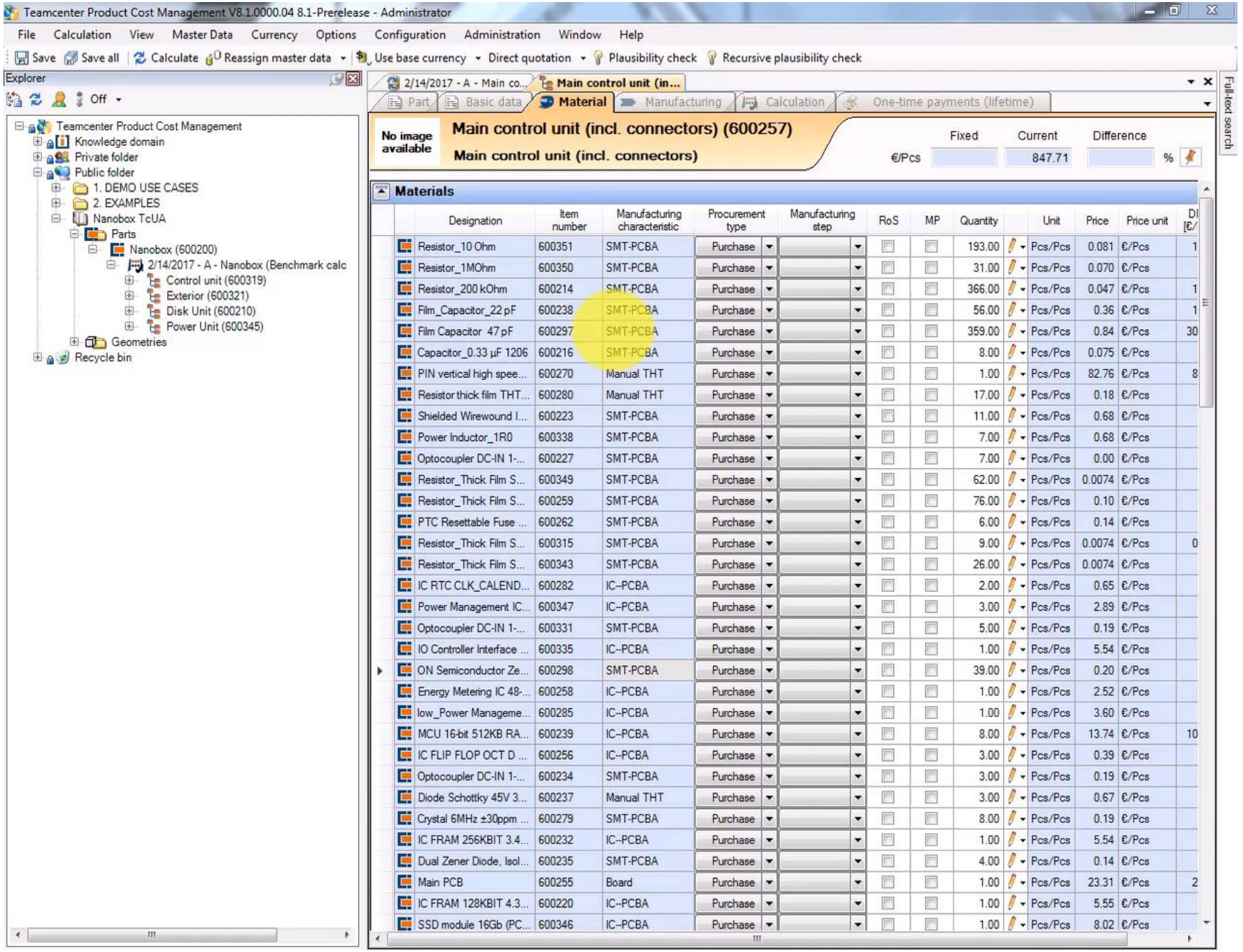


Unrestricted © Siemens AG 2017

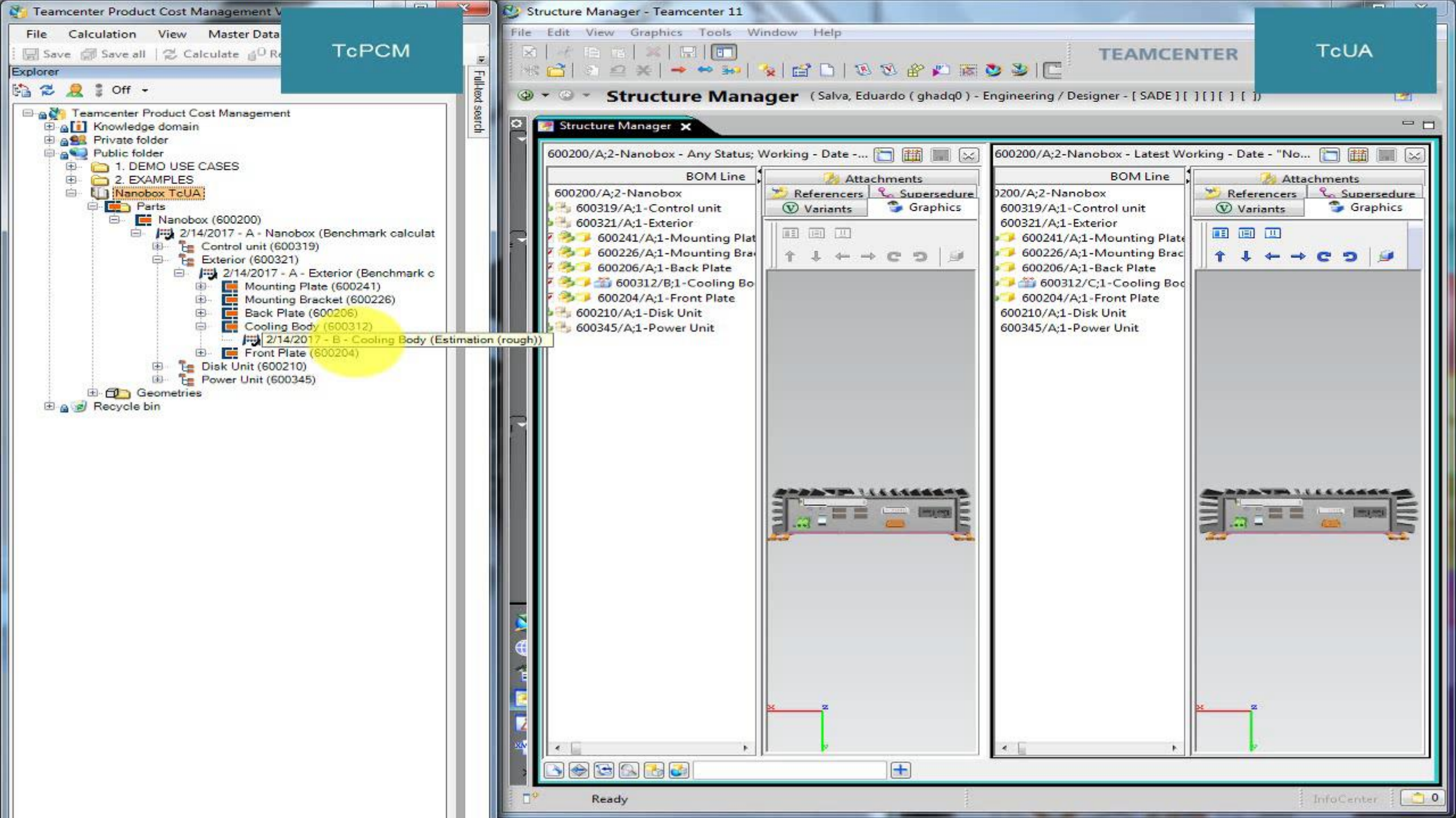


SIEMENS

Ingenuity for life



SIEMENS
Ingenuity for life


Teamcenter Product Cost Management V
File
Calculation
View
Master Data
Save
Save all
Calculate
TcPCM
Explorer
Off
Fulltext search
Teamcenter Product Cost Management
Knowledge domain
Private folder
Public folder
1. DEMO USE CASES
2. EXAMPLES
Nanobox TcUA
Parts
Nanobox (600200)
2/14/2017 - A - Nanobox (Benchmark calculat
Control unit (600319)
Exterior (600321)
2/14/2017 - A - Exterior (Benchmark c
Mounting Plate (600241)
Mounting Bracket (600226)
Back Plate (600206)
Cooling Body (600312)
2/14/2017 - B - Cooling Body (Estimation (rough))
Front Plate (600204)
Disk Unit (600210)
Power Unit (600345)
Geometries
Recycle bin
Structure Manager - Teamcenter 11
File
Edit
View
Graphics
Tools
Window
Help
TEAMCENTER
TcUA
Structure Manager
(Salva, Eduardo (ghadq0) - Engineering / Designer - [SADE] [ ] [ ] [ ] [ ])
Structure Manager
600200/A;2-Nanobox - Any Status; Working - Date -...
BOM Line
600200/A;2-Nanobox
600319/A;1-Control unit
600321/A;1-Exterior
600241/A;1-Mounting Plat
600226/A;1-Mounting Bra
600206/A;1-Back Plate
600312/B;1-Cooling Bo
600204/A;1-Front Plate
600210/A;1-Disk Unit
600345/A;1-Power Unit
Attachments
Referencers
Supersedure
Variants
Graphics
600200/A;2-Nanobox - Latest Working - Date - "No...
BOM Line
0200/A;2-Nanobox
600319/A;1-Control unit
600321/A;1-Exterior
600241/A;1-Mounting Plate
600226/A;1-Mounting Brac
600206/A;1-Back Plate
600312/C;1-Cooling Boc
600204/A;1-Front Plate
600210/A;1-Disk Unit
600345/A;1-Power Unit
Attachments
Referencers
Supersedure
Variants
Graphics
Ready
InfoCenter
0

Teamcenter Product Cost Management V8.1.0000.133 8.1-Release - Administrator

File Calculation View Master Data Currency Options Configuration Administration Window Help

Save Save all Calculate Reassign master data Use base currency Direct quotation Plausibility check Recursive plausibility check

Volume simulation

Explorer

Off

amcenter Product Cost Management
Knowledge domain
Private folder
Public folder
1. DEMO USE CASES
2. EXAMPLES
Aerospace
Braket
Casting
Customers
Fan shroud
Insignia Project
Intrument Panel TcUA
Joint Ball
Laser cutting
Motorbike TcUA
Nanobox TcUA
PCBA
Plastic
Project
Shaft Large
Vehicle BOM
Whats New 8.0
Nanobox TcUA
Parts
Nanobox (600200)
15/02/2017 - A - Nanobox 1 unit (Benchmark calculation)
15/02/2017 - A - Nanobox 1M units (Benchmark calculation)
Geometries
Recycle bin

Nanobox (Nanobox... | Main control unit (incl. c...

Part | Basic data | Material | Manufacturing | Overheads | (lifetime)

Nanobox (600200)

Nanobox 1 unit

	Fixed	Current	Difference
€/Pcs	2.168,67	2.168,67	0,0 %

Calculation variant

Designation	Nanobox 1 unit	
Last change	06/03/2017	
User	Administrator	
Assigned to		
Left / right calculation		
Procurement type	Purchase	
Currency	€	
Region		
Plant		
Segment		
Customer		
Supplier		
Date of calculation	15/02/2017	
Shift model	3,0 S.. 5.760	h/year
Calculation quality	Benchmark calcul	
Status	Identified	
Calculation methodology	PCM 8.0 r71 (Revision	
Cost source	Calculation	
One-time payments (lifetime)	1.000,00	€
Net sales price	2.168,67	€/Pcs

Customer-specific fields for calculations

Innovation level <empty>

Prices

Quantity

Annual requirement usable parts in this ass...	1,0	Pcs
Additional annual requirement		Pcs
Average annual requirement usable part	1,0	Pcs
Peak annual requirement usable parts	1,0	Pcs
Manufacturing quantity per year	1,0	Pcs
Number of manufacturing lots	1,0	1/year

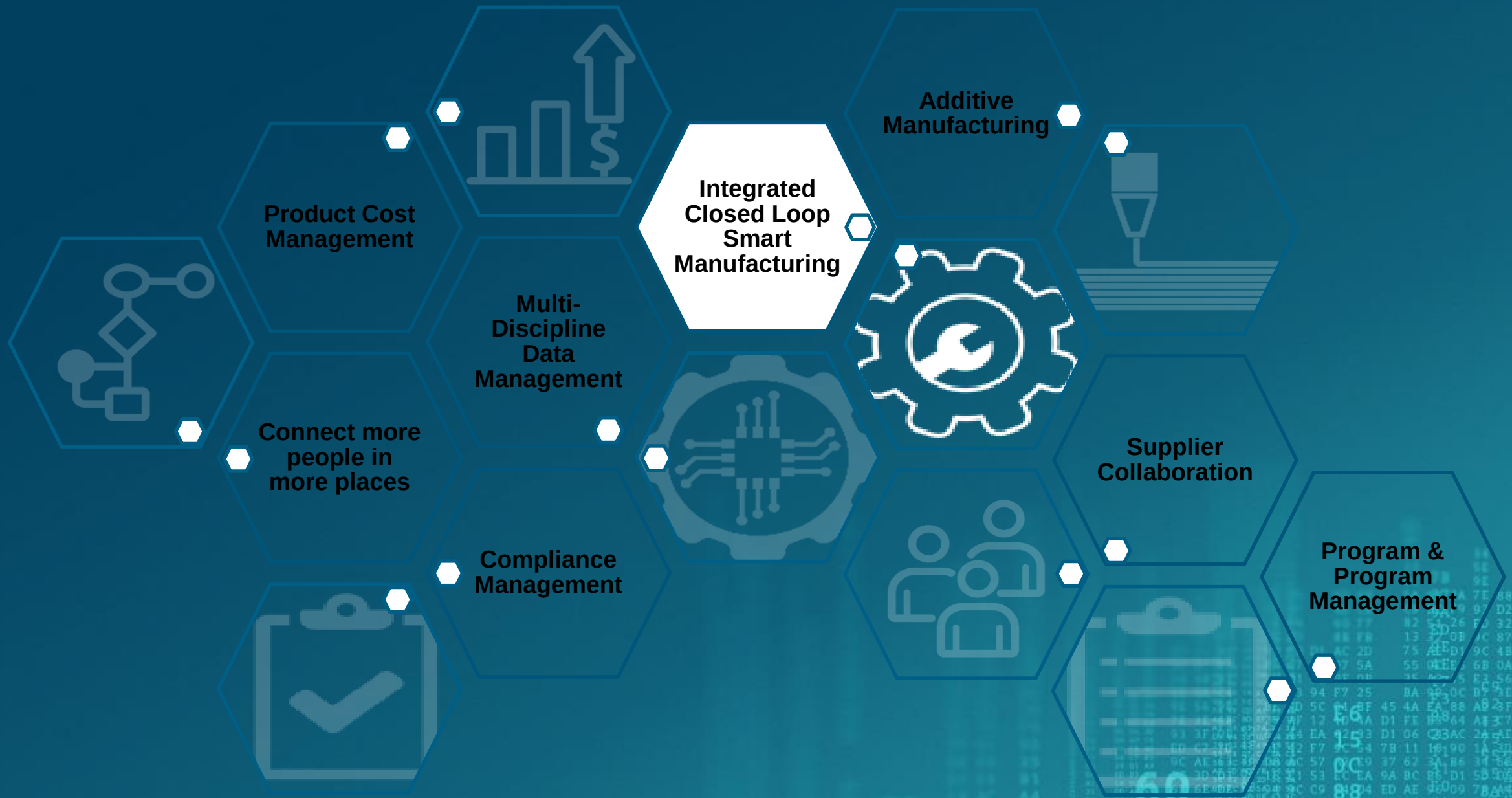
Views

1 of 1 Paste image Import Export Delete image

File attachments

Name	Extension	Size in bytes	Date

Import file Export Delete Open Edit link

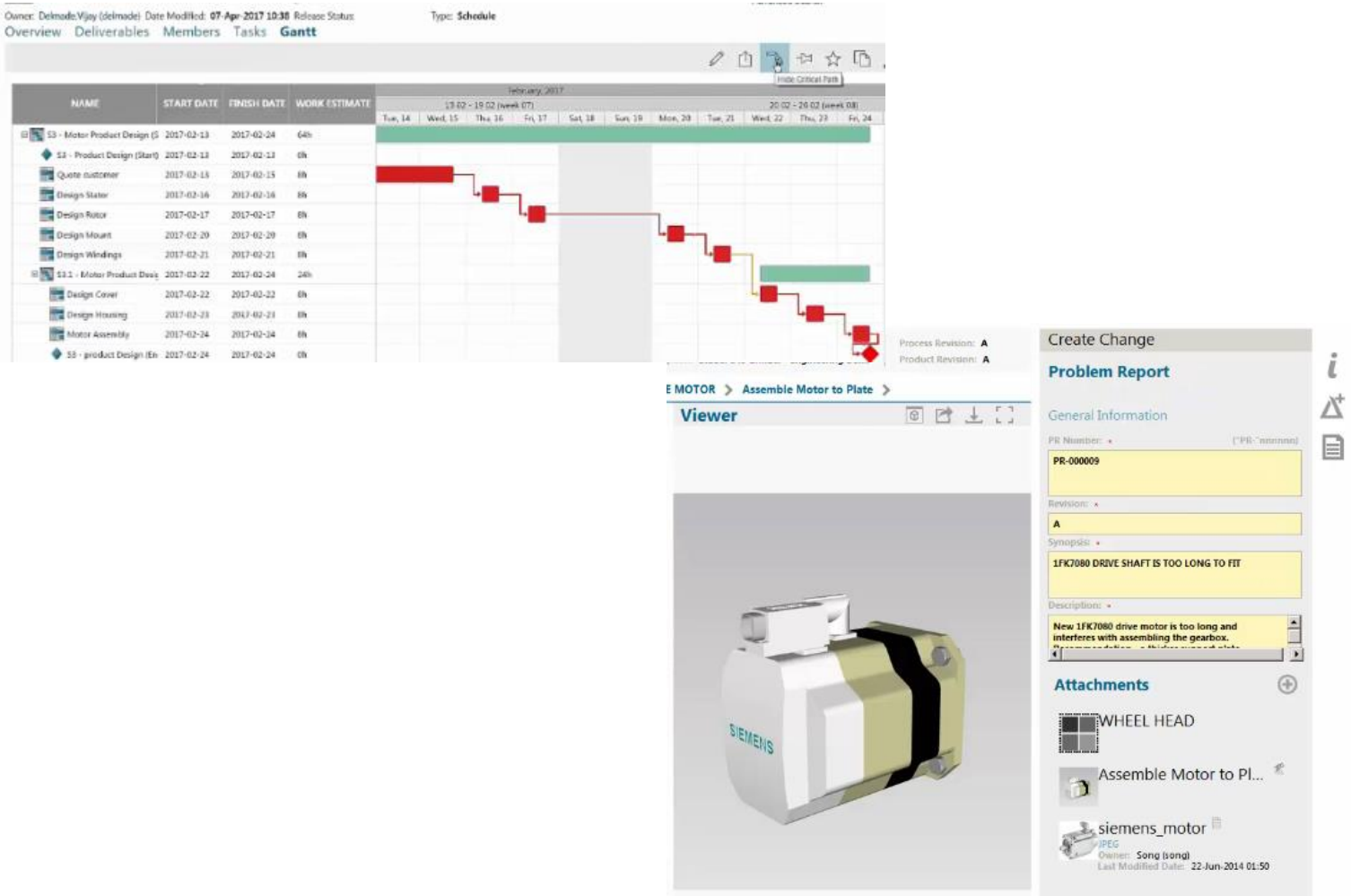

Product Cost Management
Integrated Closed Loop Smart Manufacturing
Additive Manufacturing
Multi-Discipline Data Management
Connect more people in more places
Supplier Collaboration
Compliance Management
Program & Program Management

Manufacturing Engineering

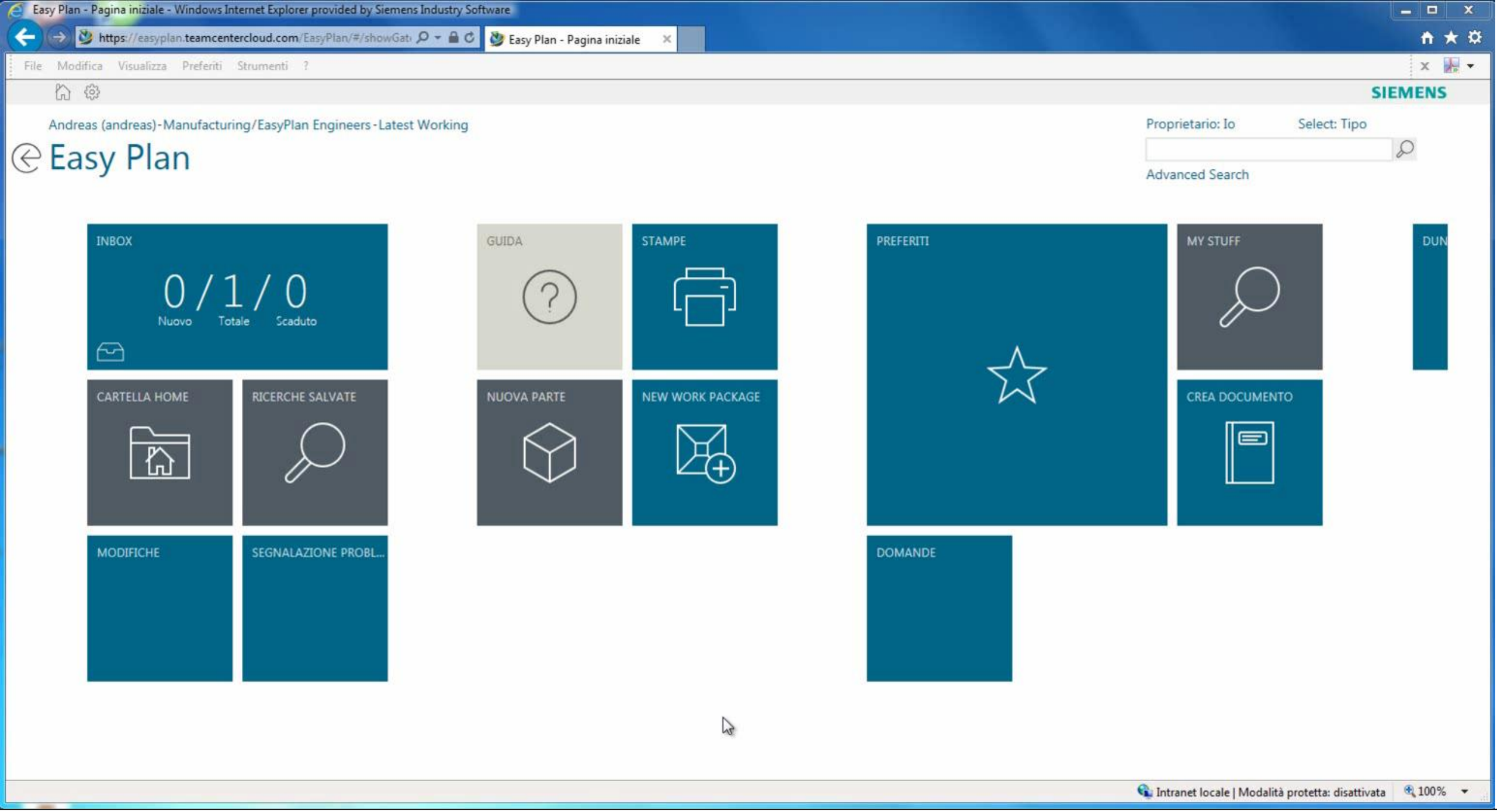
Capturing the process knowledge and global standardization

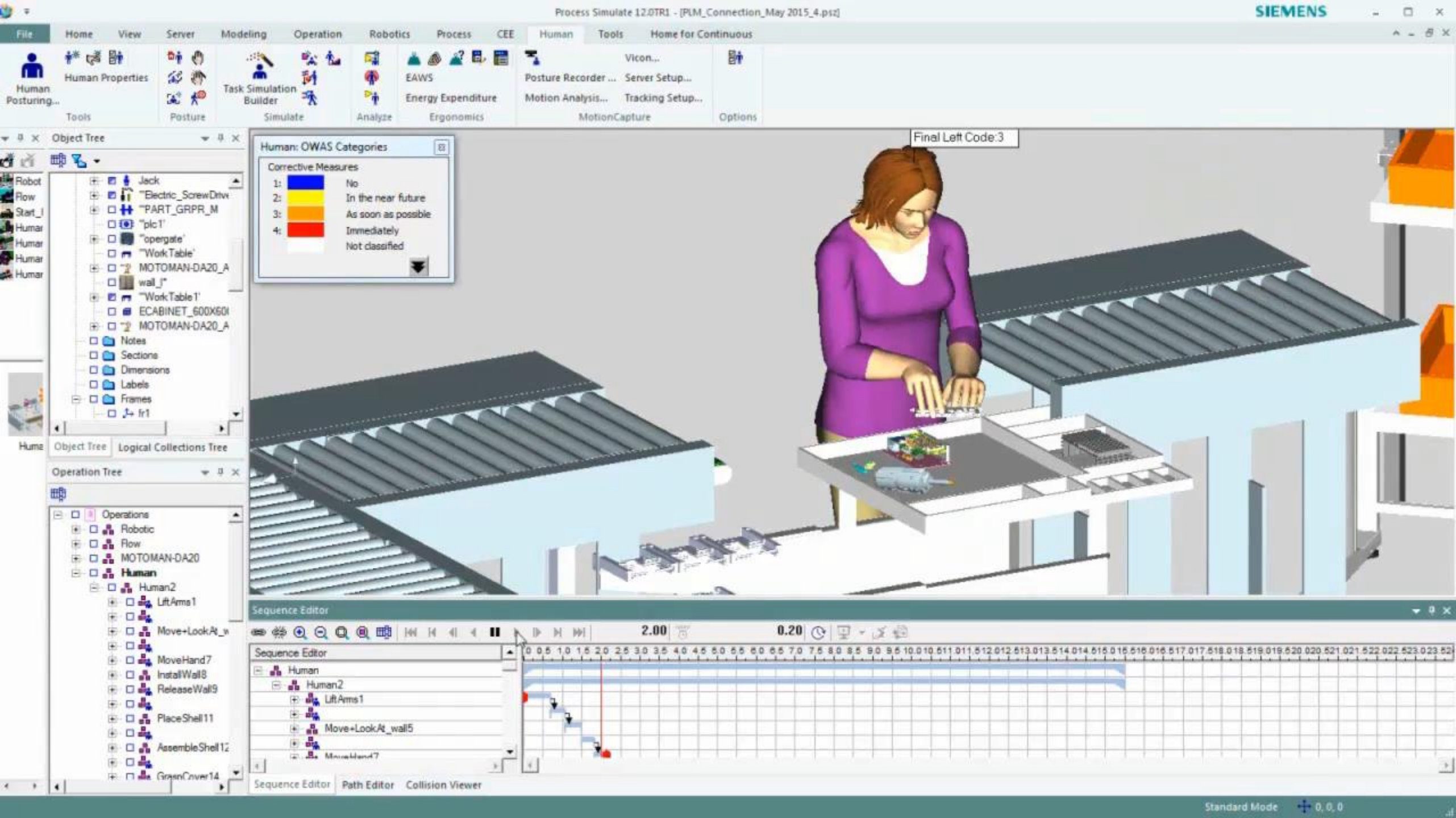
Integrated environment for Mfg BOM and Bill of Process Definition

- ***Templates*** based structures
- Graphical Mfg BOM definition and update guidance
- Bill of (Assembly) Process based on Mfg BOM and ***best practices*** for operations and sequences
- Complete description of the process phases with duration, workareas, tooling and required ***process documentation***
- Integrated ***change management***



Unrestricted © Siemens AG 2017

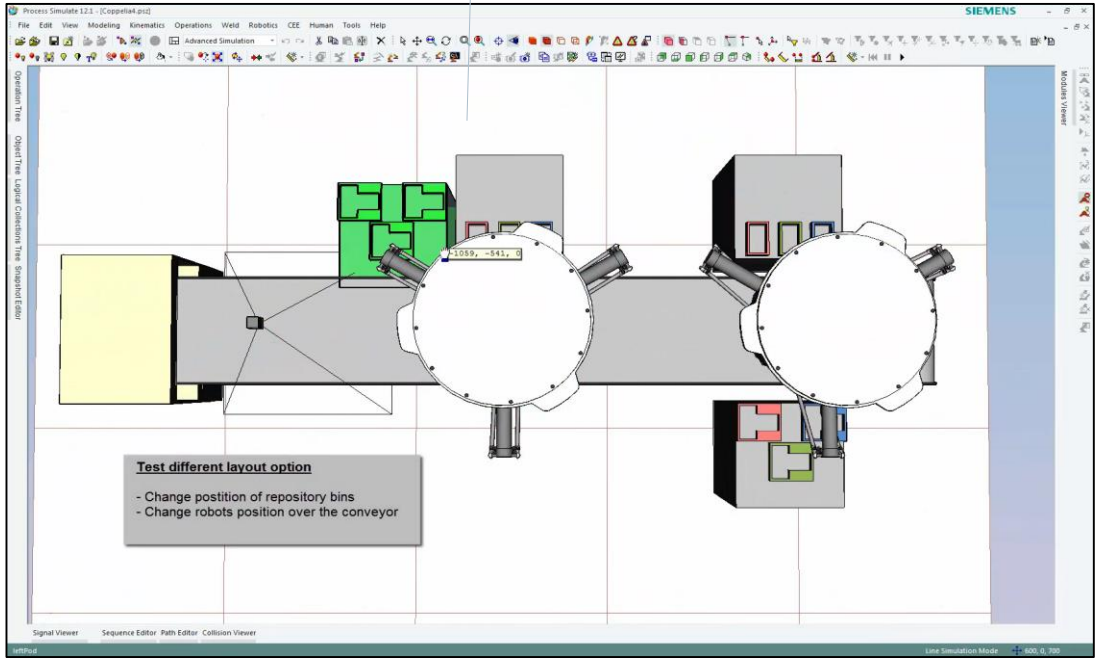

Easy Plan - Pagina iniziale - Windows Internet Explorer provided by Siemens Industry Software
https://easyplan.teamcentercloud.com/EasyPlan/#/showGat
Easy Plan - Pagina iniziale
File Modifica Visualizza Preferiti Strumenti ?
SIEMENS
Andreas (andreas)-Manufacturing/EasyPlan Engineers-Latest Working
Easy Plan
Proprietario: Io
Select: Tipo
Advanced Search
INBOX
0/1/0
Nuovo Totale Scaduto
GUIDA
STAMPE
PREFERITI
MY STUFF
DUN
CARTELLA HOME
RICERCHE SALVATE
NUOVA PARTE
NEW WORK PACKAGE
CREA DOCUMENTO
MODIFICHE
SEGNALAZIONE PROBL...
DOMANDE
Intranet locale | Modalità protetta: disattivata
100%


Process Simulate 12.0TR1 - [PLM_Connection_May 2015_4.psz]
SIEMENS
File
Home
View
Server
Modeling
Operation
Robotics
Process
CEE
Human
Tools
Home for Continuous
Human Posturing...
Human Properties
Tools
Posture
Task Simulation Builder
Simulate
Analyze
EAWS
Energy Expenditure
Ergonomics
Posture Recorder ...
Motion Analysis...
Vicon...
Server Setup...
Tracking Setup...
MotionCapture
Options
Object Tree
Human: OWAS Categories
Corrective Measures
1: No
2: In the near future
3: As soon as possible
4: Immediately
Not classified
Final Left Code:3
Jack
"Electric_ScrewDrive
"PART_GRPR_M
"plc1"
"opergate"
"WorkTable"
MOTOMAN-DA20_A
wall_J"
"WorkTable1"
ECABINET_600X60
MOTOMAN-DA20_A
Notes
Sections
Dimensions
Labels
Frames
fr1
Object Tree
Logical Collections Tree
Operation Tree
Operations
Robotic
Flow
MOTOMAN-DA20
Human
Human2
LiftArms1
Move+LookAt_w
MoveHand7
InstallWall8
ReleaseWall9
PlaceShell11
AssembleShell12
GrasnCover14
Sequence Editor
2.00
0.20
Human
Human2
LiftArms1
Move+LookAt_wall5
Sequence Editor
Path Editor
Collision Viewer
Standard Mode
0, 0, 0

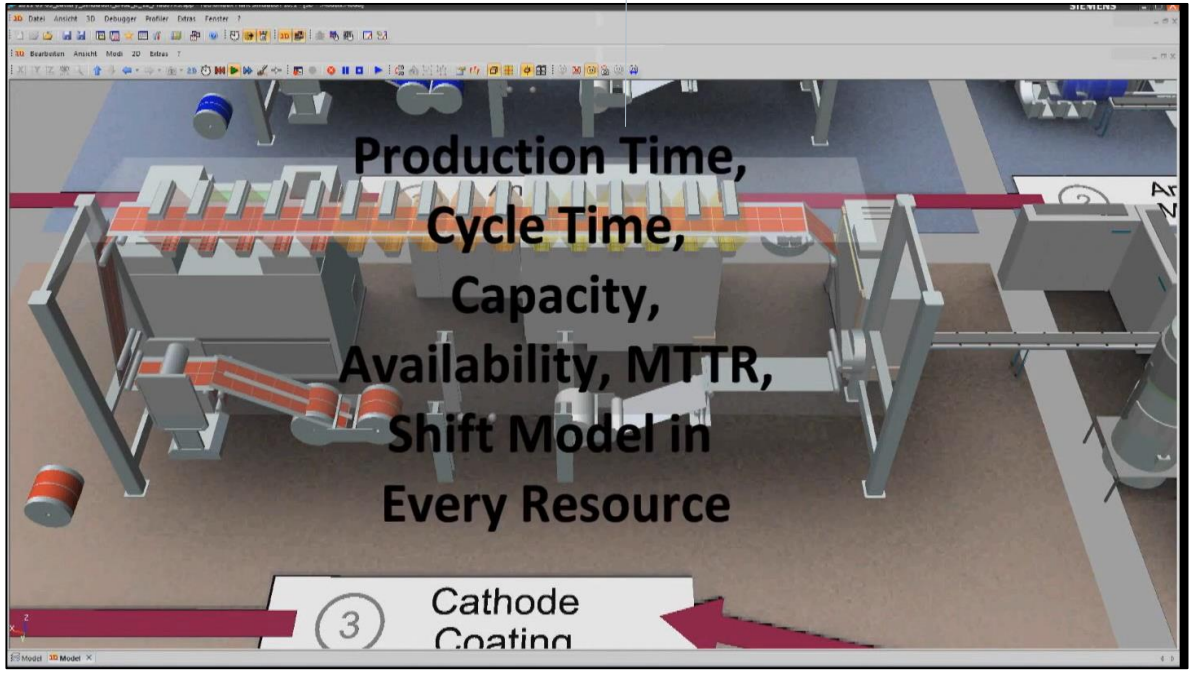
Manufacturing Engineering
Digital Twin for Product & Process

Complete Digital Manufacturing Simulation Suite

Robotics for Packaging Automation



Throughput and Efficiency Line Simulation



Unrestricted © Siemens AG 2017

Product Cost Management
Integrated Closed Loop Smart Manufacturing
Additive Manufacturing
Multi-Discipline Data Management
Connect more people in more places
Supplier Collaboration
Compliance Management
Program & Program Management

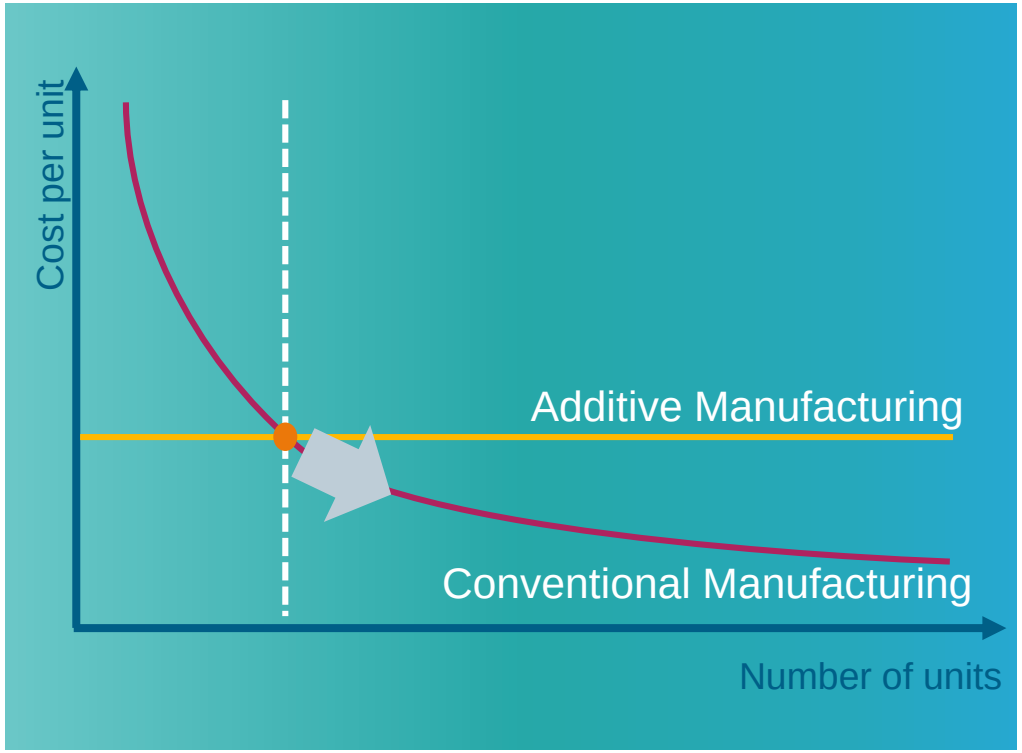
Additive manufacturing

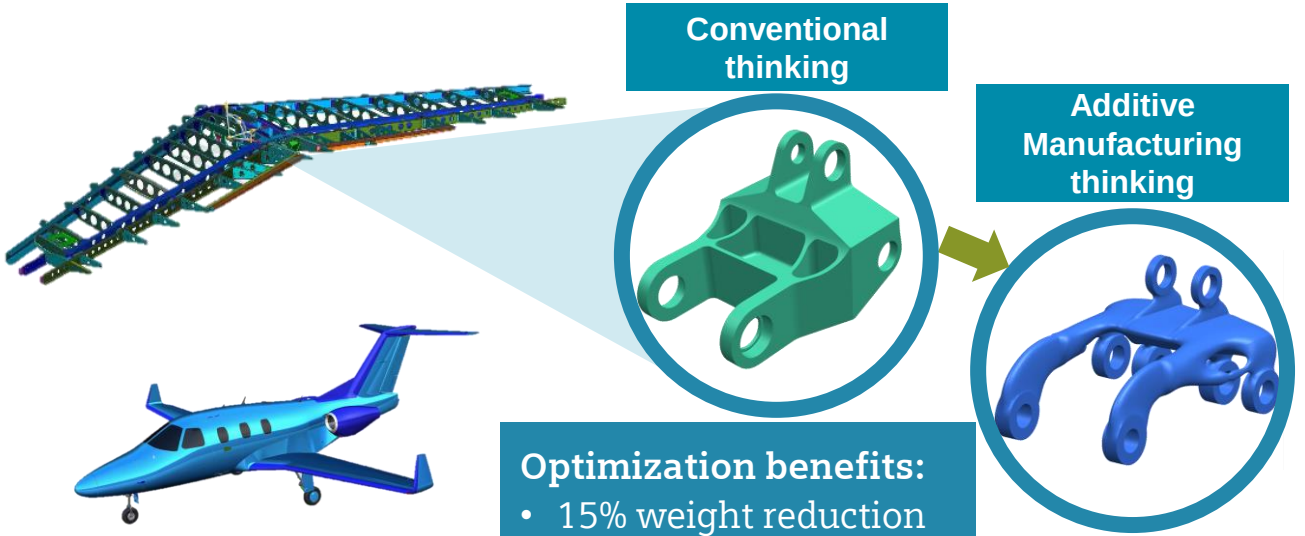
conventional machining vs additive manufacturing

Unrestricted © Siemens AG 2017

Additive manufacturing

Breakeven: Conventional versus additive manufacturing





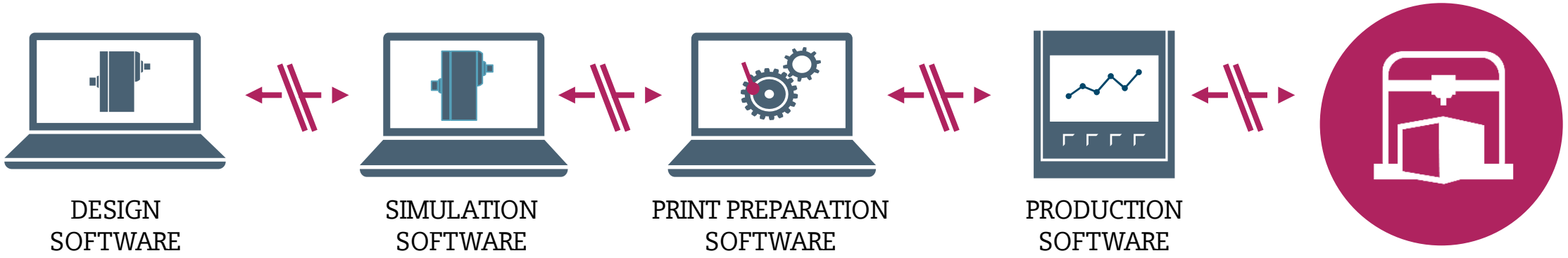
Optimization benefits:

- 15% weight reduction
- Equal strength / reduced stress
- Fewer manufacturing steps

Unrestricted © Siemens AG 2017

Additive manufacturing

Today's Challenge: Industrialize the process



Disconnected applications

Multiple data conversions

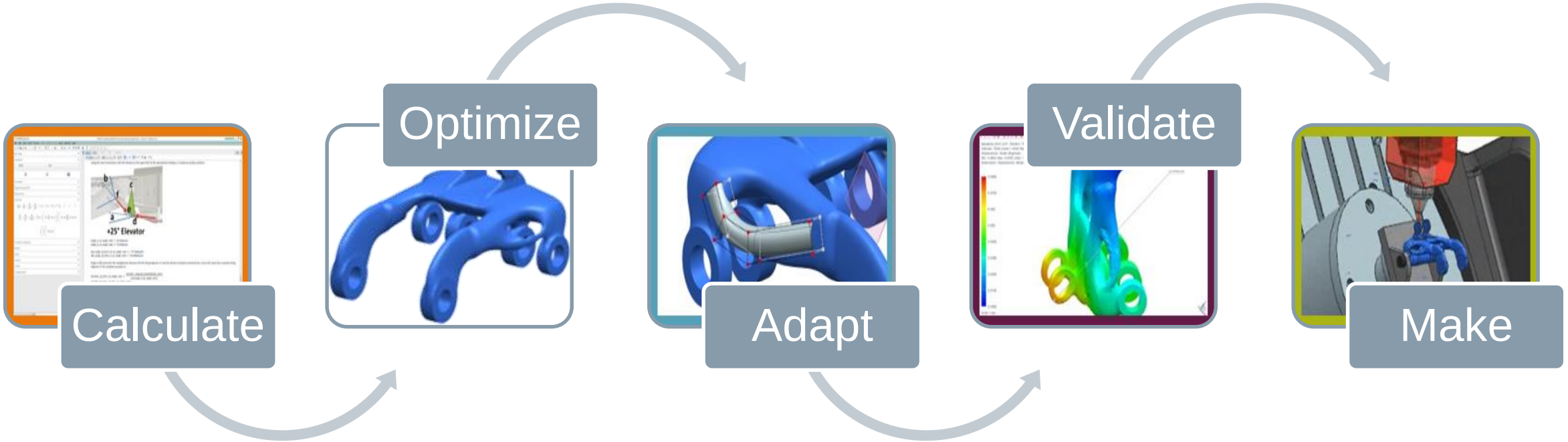
Uncontrolled workflow

Conventional thinking

Unrestricted © Siemens AG 2017

Additive manufacturing

Reshape the process to unleash your creative potential



Unrestricted © Siemens AG 2017

NX | Switch Window | Window | Siemens NX - | SIEMENS

File | Home | Tools | 3Dconnexion | Find a Command

Open | Open a Recent Part | Assembly Load Options | Customer Defaults | Touch Mode | Window | Help

Standard

Menu

Active Workspace

Ed (ed) - Engineering/Designer - Latest Working

Changes

Select Owner | Select Type

All | Submitted | Saved | Approved | Disapproved

1 results found for "All"

Investigate Making S...
ECR-000003
Revision: A

Overview | Affected Items | Reference Items | Participants

Properties

ECR Number: **ECR-000003**
Revision: **A**
Synopsis: **Investigate Making Stabilizer Lighter**
Description: **Investigate Making Stabilizer Lighter**
Type: **Change Request Revision**
Release Status:
Date Released:
Effectivity:

Reason:
Proposed Solution:
Technical Review Priority:
Is Fast Track?:

Maturity: **Elaborating**
Disposition: **None**
Closure: **Open**

Implements:
Implemented By:

Projects

Owning Project:
Projects:

ECR-000003/A;1-Investigate Maki...

Loading Summary...

Start Edit

Create a new file or open an existing

Product Cost Management
Integrated Closed Loop Smart Manufacturing
Additive Manufacturing
Multi-Discipline Data Management
Connect more people in more places
Compliance Management
Supplier Collaboration
Program & Program Management

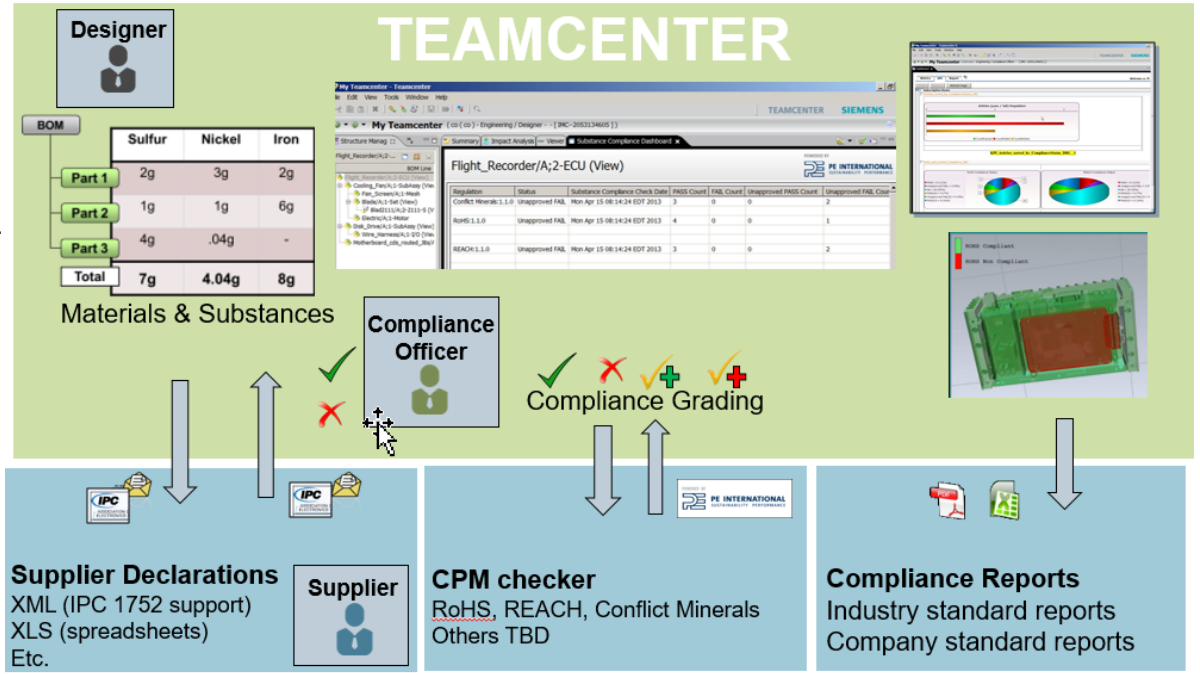
Environmental Compliance and Product Sustainability
Keeping Up With Environmental Regulations

Substance Compliance Key Pillars

Material and Substance Management
- Manage materials and substances along with the product structure lifecycle
- Integrate with third party material sources

Supplier Declaration Automation
- Automated process to gather supplier material and substance declarations
- Supplier data managed along with product structure
- Industry standard support (IPC-175x, CMRT) BOMcheck and IMDS integration

Compliance Grading and Reporting
- Compliance grading
- Pre-configured rule sets
- Rules editor for custom regulations
- Dashboard views



Unrestricted © Siemens AG 2017

Teamcenter - Home

192.168.1.198:7001/awc/#/showGateway

Search

12

SIEMENS

Tcadmin, testuser (tcadmin)-no project-Engineering/Designer-Latest Working

Teamcenter

Select: Owner Type: Legacy Part...

Advanced Search

INBOX
0/0/0
New Total Past Due

HELP

FAVORITES

MY STUFF

REPORTS

HOME FOLDER

SAVED SEARCHES

PRINTOUTS

CREATE DOCUMENT

QUESTIONS

CHANGES

REPORT PROBLEM

CREATE SIMULATION

TOOL PROGRESS MONI...

SCHEDULE TASKS

SCHEDULES

SUBSCRIPTION

DECLARATION QUEUE

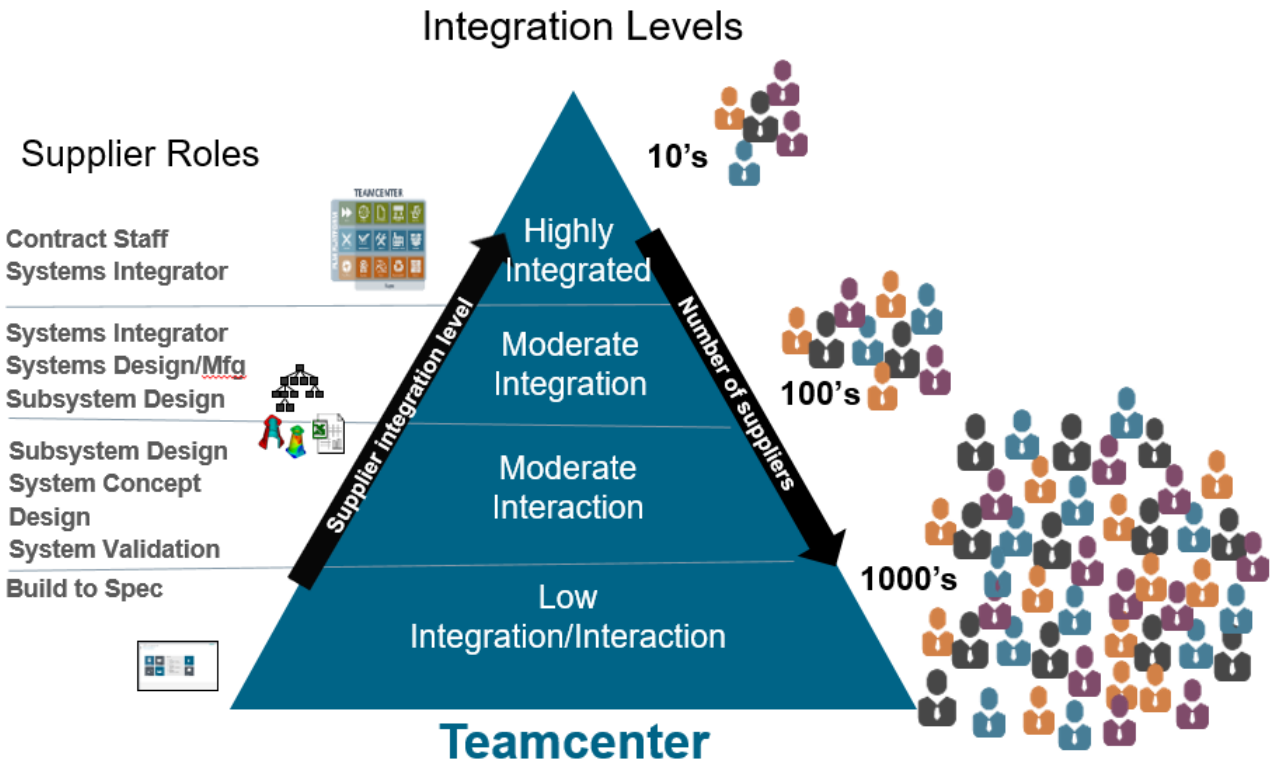
Product Cost Management
Integrated Closed Loop Smart Manufacturing
Additive Manufacturing
Multi-Discipline Data Management
Connect more people in more places
Supplier Collaboration
Compliance Management
Program & Program Management

Supplier collaboration

Support a complex supply chain and multiple use cases

Fully leveraging the supply chain to increase productivity and shorten time-to-market

- Strategically manage suppliers, supplier data and supplied parts
- ***Aggregate supplied parts*** in your company product structure
- Perform configurable search and ***reports on all supplier information*** in Teamcenter
- Automatically ***notify the correct people*** when supplier content information is changed or an issue is raised
- Suppliers can manage their information with a ***standard internet browser***
- Aggregate ***supplier KPI*** information for scorecard reporting



Unrestricted © Siemens AG 2017

Teamcenter - 000322/A;1

win2012:7001/awc/#com.siemens.splm.clientfx.tcui.xrt.showObject;page=Content;uid=w6FAAEI0I2TOOA;pci_uid=SR%253A%253AN%253A%253AAwb0ProductContextInfo..P%253Aw6FAAEI0I2TOOA%252CRR%253AQEKAA

Apps | Favorites | Google Translate | IntoSite | Self Service Softwar... | Teamcenter - Sign in | Teamcenter - Sign in | Goo...-חיפוש טיסות ב | Any.do | salesforce.com | Other bookmarks

SIEMENS

Charile (charlie) - Engineering/Configuration Manager - Latest Working

000322/A;1-NanoBox PC Motherboard-E660-1.3GHz

Select Owner | Select Type

Owner: Don (don) | Last Modified Date: 06-Jan-2015 10:26 | Release Status: | Type: Design Revision

000322/A;1-NanoBox PC Motherboard-E660-1.3GHz >

S-C-0603_100000
S-C-0603_100000
Revision: A

S-C-0603_100000
S-C-0603_100000
Revision: A

S-L-0603_100000
S-L-0603_100000
Revision: A

S-C-0402_55000
S-C-0402_55000
Revision: A

S-C-0402_55000
S-C-0402_55000
Revision: A

CLP-AnalyzePoint_10...
CLP-AnalyzePoint_10000
Revision: A

S-R-0603_55000
S-R-0603_55000
Revision: A

S-C-7343_310000
S-C-7343_310000
Revision: A

S-C-0603_100000
S-C-0603_100000
Revision: A

S-R-0603_55000
S-R-0603_55000
Revision: A

S-XF-4120-0950_113...
S-XF-4120-0950_1130000

Overview | Viewer | Where Used | Attachments | History | Relations | Participants

Properties

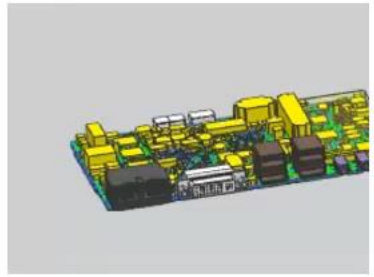
ID: 000322
Revision: A
Revision Name: NanoBox PC Motherboard-E660-1.3GHz
Description: NanoBox PC Motherboard
Occurrence Name:
Logical Designator:
Sequence:
Quantity:
Unit Of Measure:
Release Status:
Date Released:
Effectivity:
Owner: Don (don)
Group ID: Engineering
Last Modifying User: Don (don)
Parent:
Number Of Children: 1485
Precise: False

Ratings

Your Rating: ☆ ☆ ☆ ☆ ☆

Average Ratings: 0.0 ☆ ☆ ☆ ☆ ☆

Preview

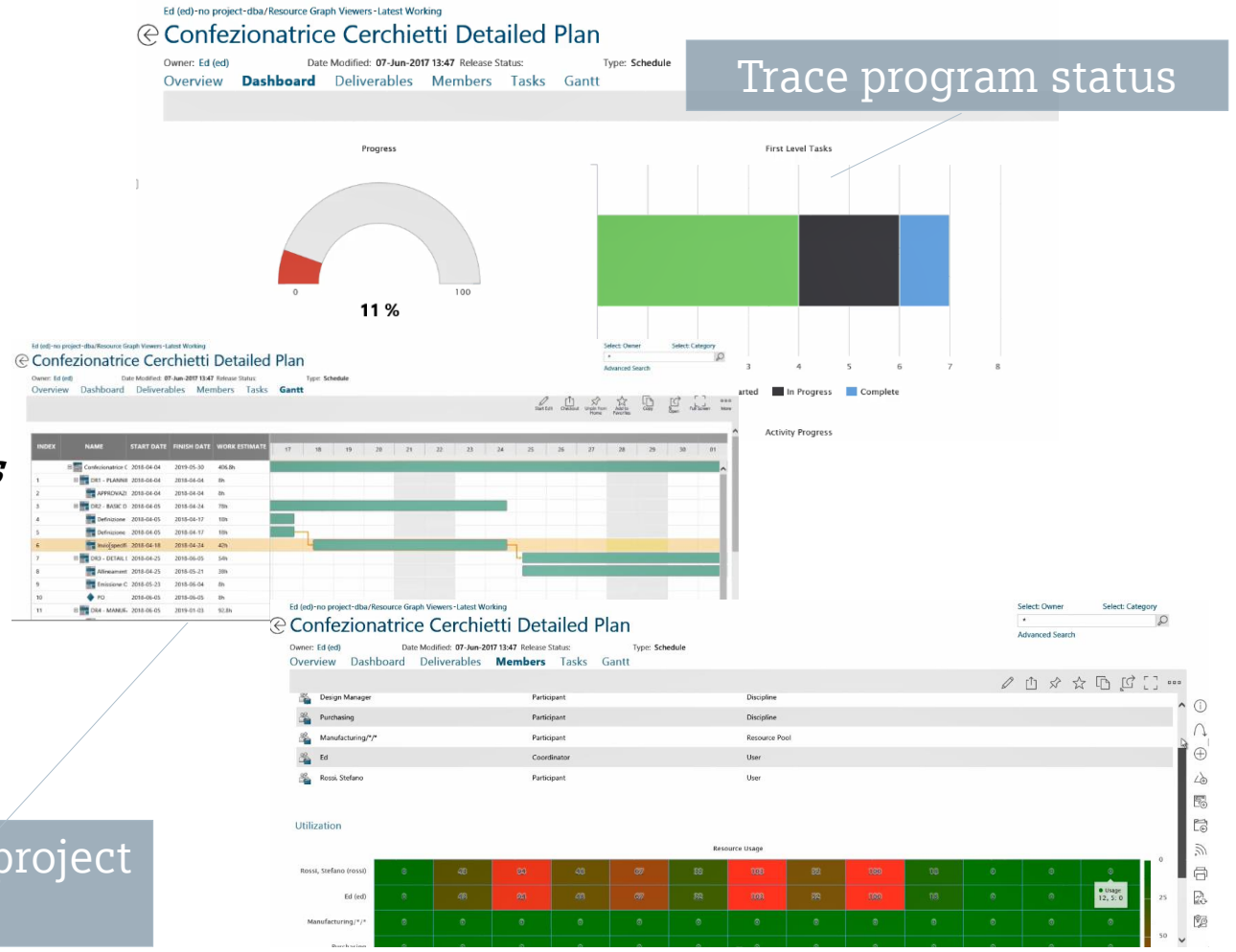


Product Cost Management
Integrated Closed Loop Smart Manufacturing
Additive Manufacturing
Multi-Discipline Data Management
Connect more people in more places
Supplier Collaboration
Compliance Management
Program & Program Management

Program and Project Management
Integrated planning & execution

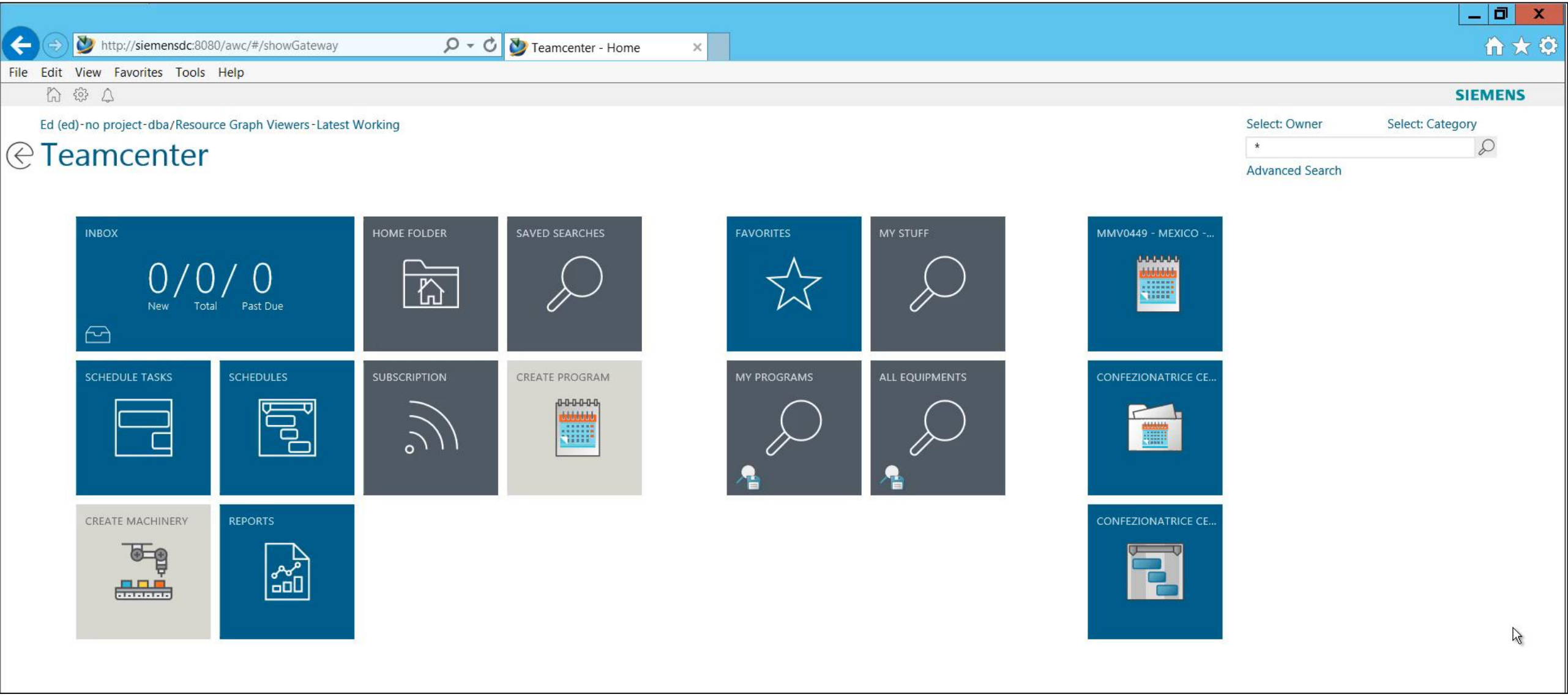
Plan, manage and execute complex processes simply and efficiently

- ***Planning framework*** for long-term programs
- Realize program objectives with a top-down approach to the coordination of product development initiatives across domains
- Create ***high level program plan hierarchy*** (program, project, and subprojects with key events/milestones)
- Define criteria for ***program events/milestones***
- Use in combination with schedule manager to provide a bottoms-up approach to program execution to enable stakeholders to efficiently ***monitor the status of key deliverables***



SIEMENS

Ingenuity for life



Active Workspace
Dashboards and reports

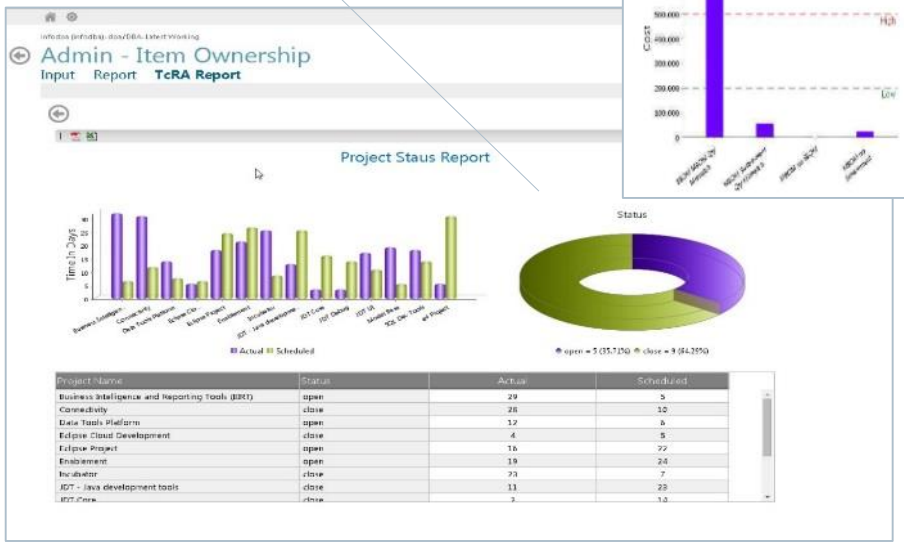
Avoid costly mistakes by seeing the big picture in greater clarity

Self-service reports, dashboards and analytics which leverages your PLM and multi-source information to improve products and processes

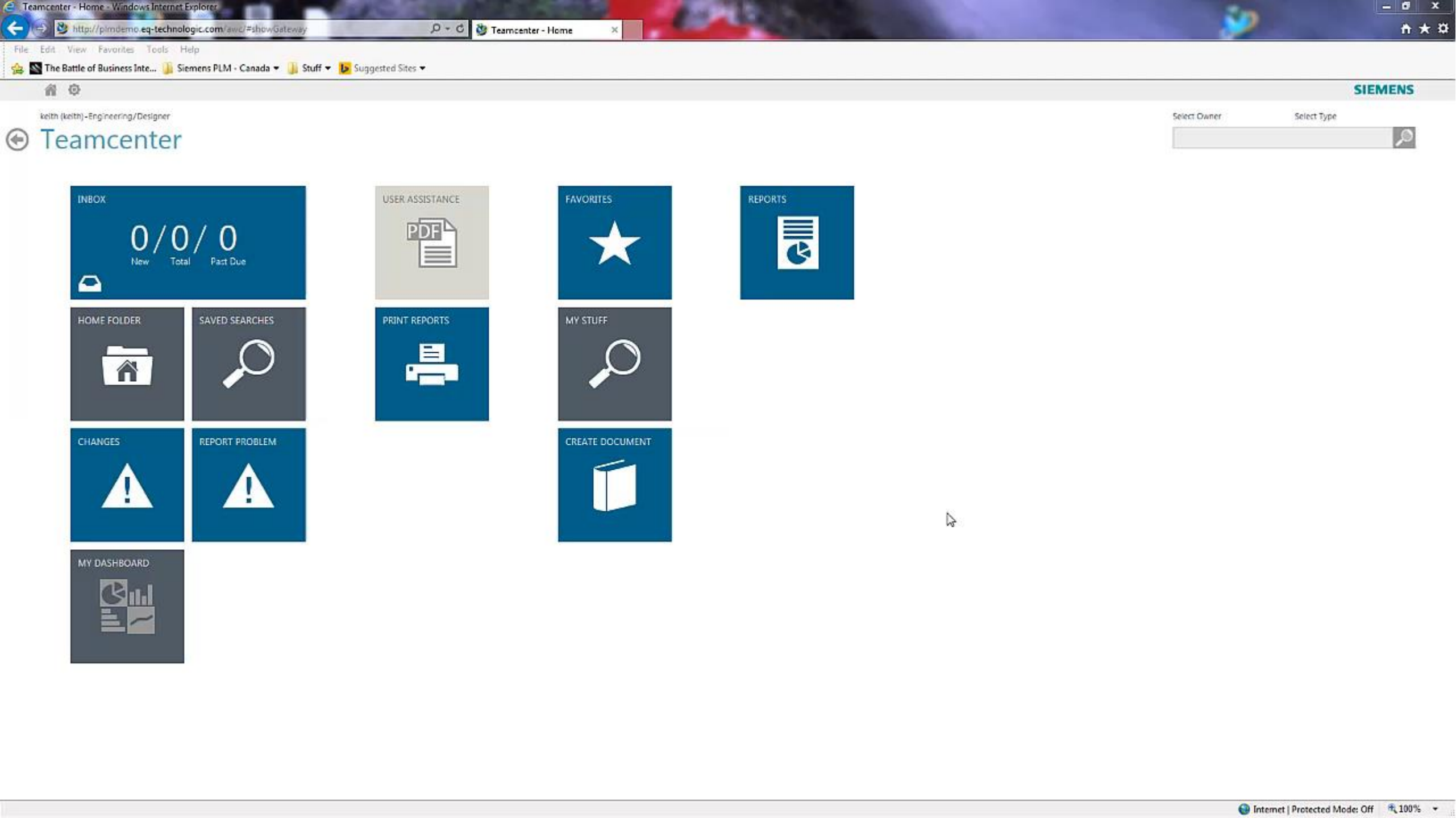
- ***Explore data*** in Teamcenter
- Consolidate data from ***multiple sources*** into a single view
- Visualizing data with industry ***leading graphics***
- ***Analyze data*** for process and product improvements
- ***Track trends*** and changes over time

Configurable dashboards

Drill down to relevant info



Unrestricted © Siemens AG 2017


Teamcenter - Home - Windows Internet Explorer
http://plmdemo.eq-technologic.com/awc/#showGateway
Teamcenter - Home
File Edit View Favorites Tools Help
The Battle of Business Inte... Siemens PLM - Canada Stuff Suggested Sites
SIEMENS
keith (keith) - Engineering/Designer
Teamcenter
Select Owner
Select Type
INBOX
0 / 0 / 0
New Total Past Due
USER ASSISTANCE
PDF
FAVORITES
REPORTS
HOME FOLDER
SAVED SEARCHES
PRINT REPORTS
MY STUFF
CHANGES
REPORT PROBLEM
CREATE DOCUMENT
MY DASHBOARD
Internet | Protected Mode: Off
100%

SIEMENS
Ingenuity for life

Alessio Barone
Fabrizio Bertoletti
Leonardo Cipollini
Katia Gatti
Davide Gualano

SIEMENS
Ingenuity for life

Thank you

Restricted © Siemens AG 2017