

Release Process AB Volvo

PTC tools

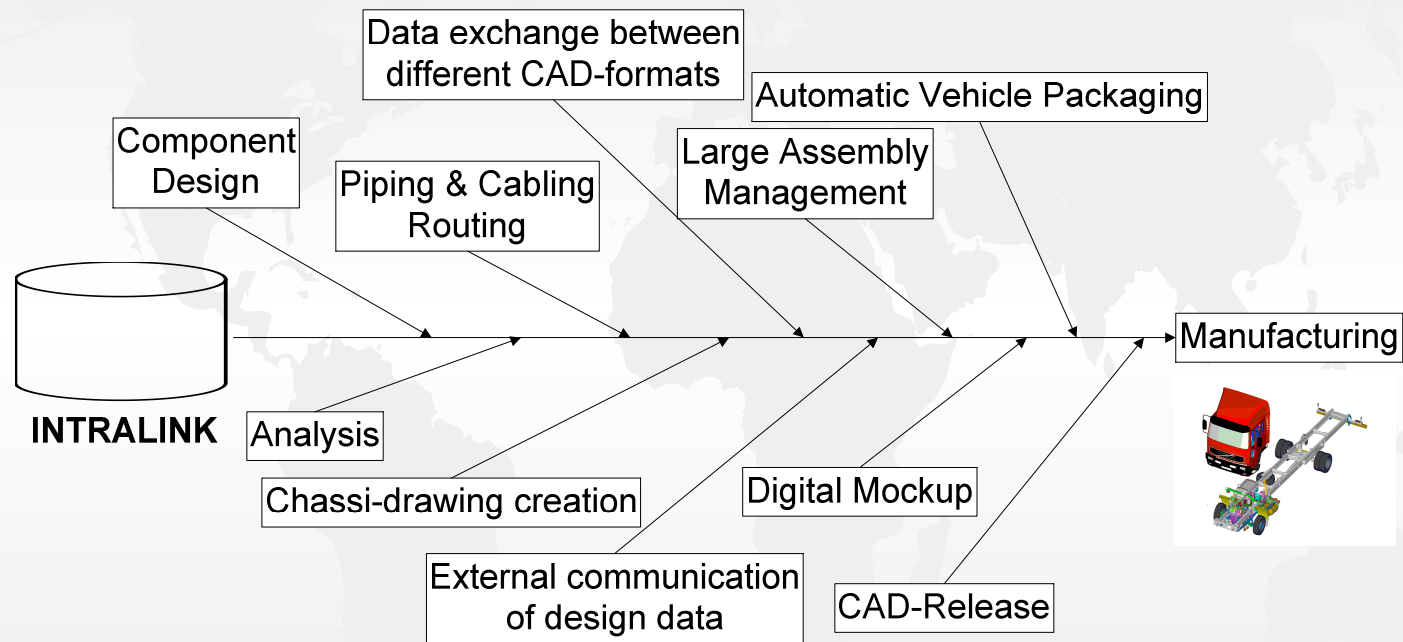
15 February 2011



Lars Körner Volvo IT

Ronney Tollbom Volvo IT

Pro/INTRALINK



den 12 September 2004

Pro/INTRALINK in Volvo environment

Contents

1. Introduction

2. RPU – Release process in PDM-Link

3. Pro/CCP – Cad Check Program

Volvo PowerTrain



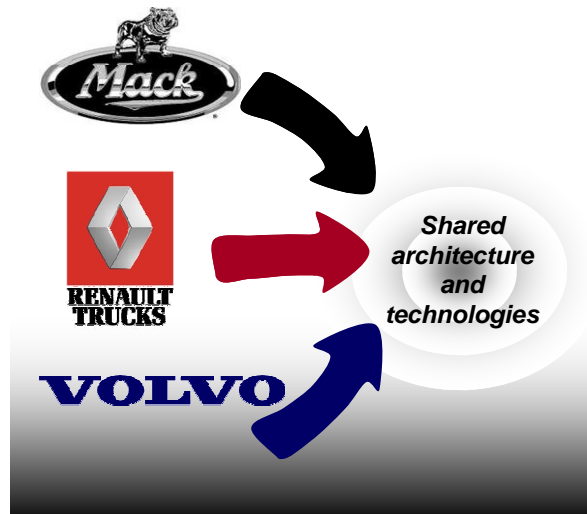
VPT - Volvo PowerTrain

Standalone mode



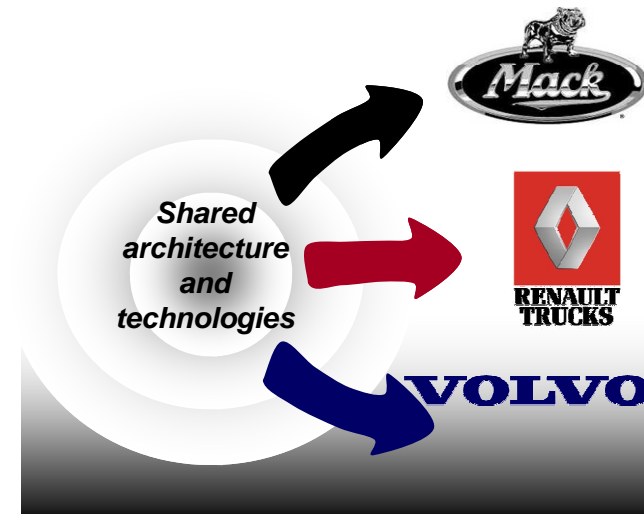
Merger mode

"Create synergies"

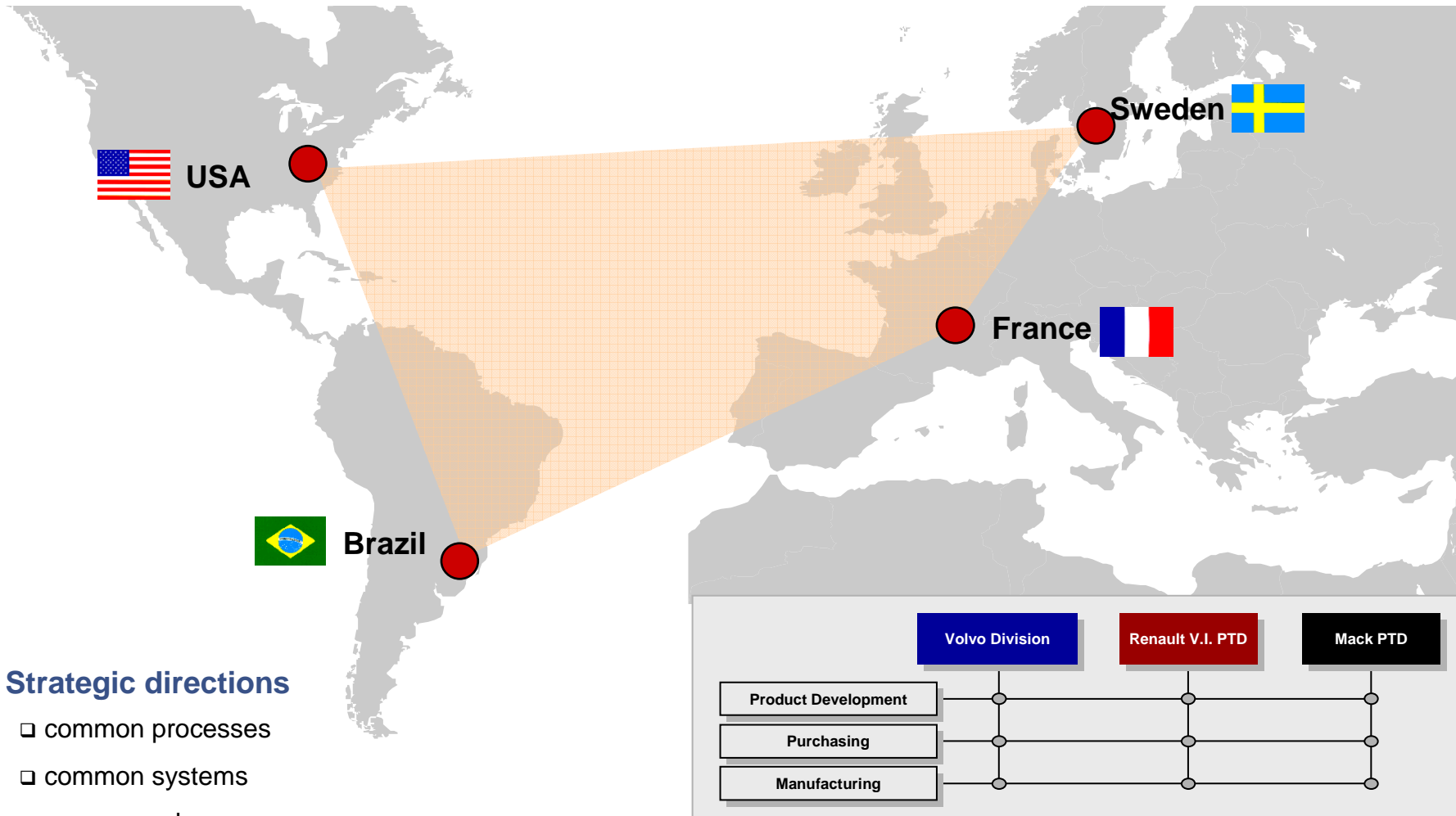


Vision mode

"New architecture and shared technologies. Develop unique brand versions"



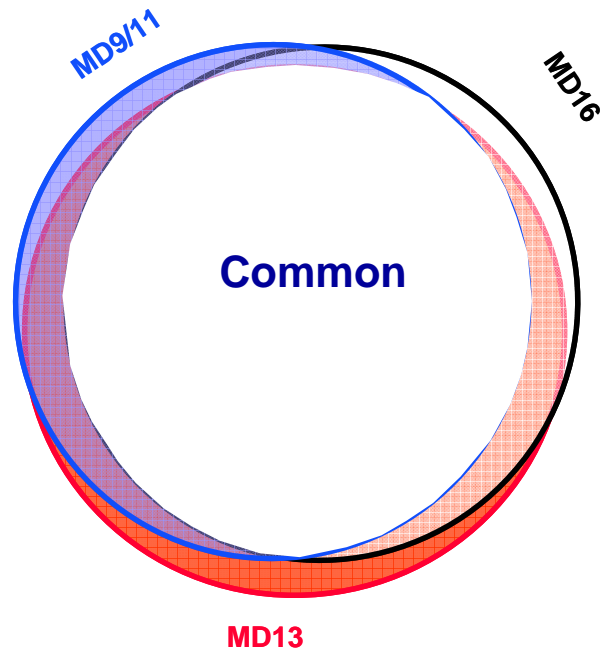
One Team – 4 Sites



Strategic directions

- common processes
- common systems
- common roles
- global ownership

Commonality goals



Definition of commonality

- Shared Technology
- Common Architecture
- Same manufacturing technology
- Same supplier

- **Platforms ENGINES from 18 to 2 shared on 4 development sites.**

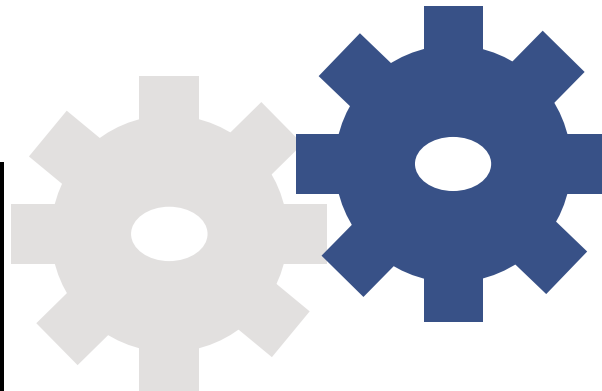
Contents

1. Introduction
- 2. RPU – Release process in PDM-Link**
3. Pro/CCP – Cad Check Program

Release Process analysis

Business Needs

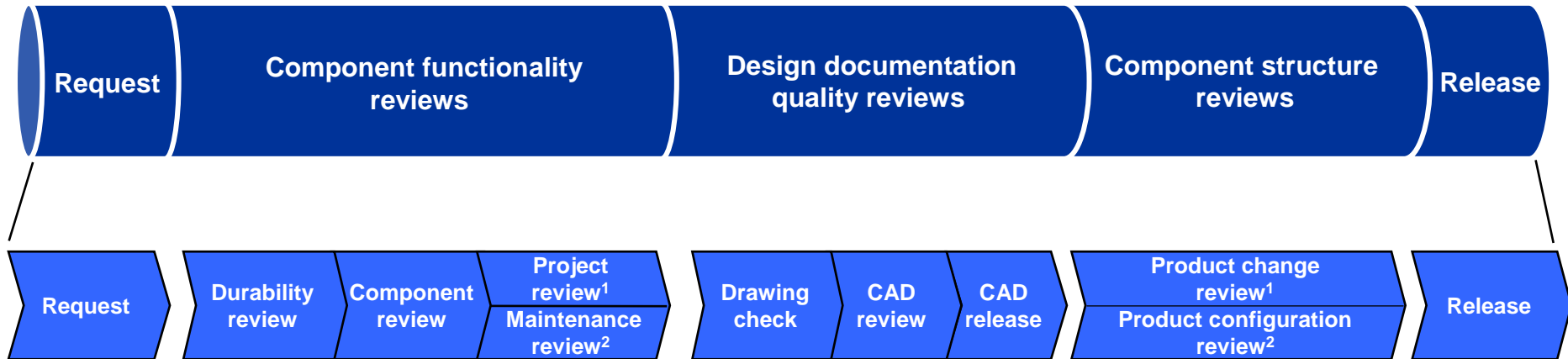
1. **System simplicity**
2. **Process overview**
3. **Global platform**
4. **Electronic information**
5. **Automation**
6. **Data consistency**



System characteristics

1. ***Single user interface*** to access release information
2. ***Workflow management*** ability
3. ***Access from all sites*** to release information
4. ***Electronic documentation*** collaboration and ***signing***
5. ***Integration of automation*** applications
6. ***Real-time information sharing*** between sites

RPU – Release Process Upgrade in PDM-Link

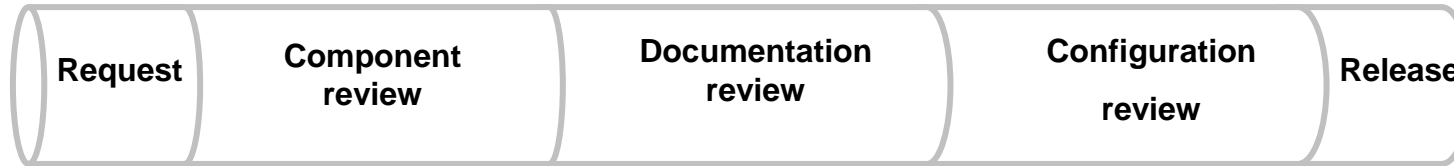


Deliverables:

- Review material
- Confirmed durability
- Confirmed drawing quality
- Confirmed product change
- Released design
- Confirmed component functionality
- Confirmed CAD-object
- Confirmed product configuration & diversity
- Stored design
- Confirmed component compatibility with entire product
- Released CAD-object

RPU – Release Process Upgrade in PDM-Link

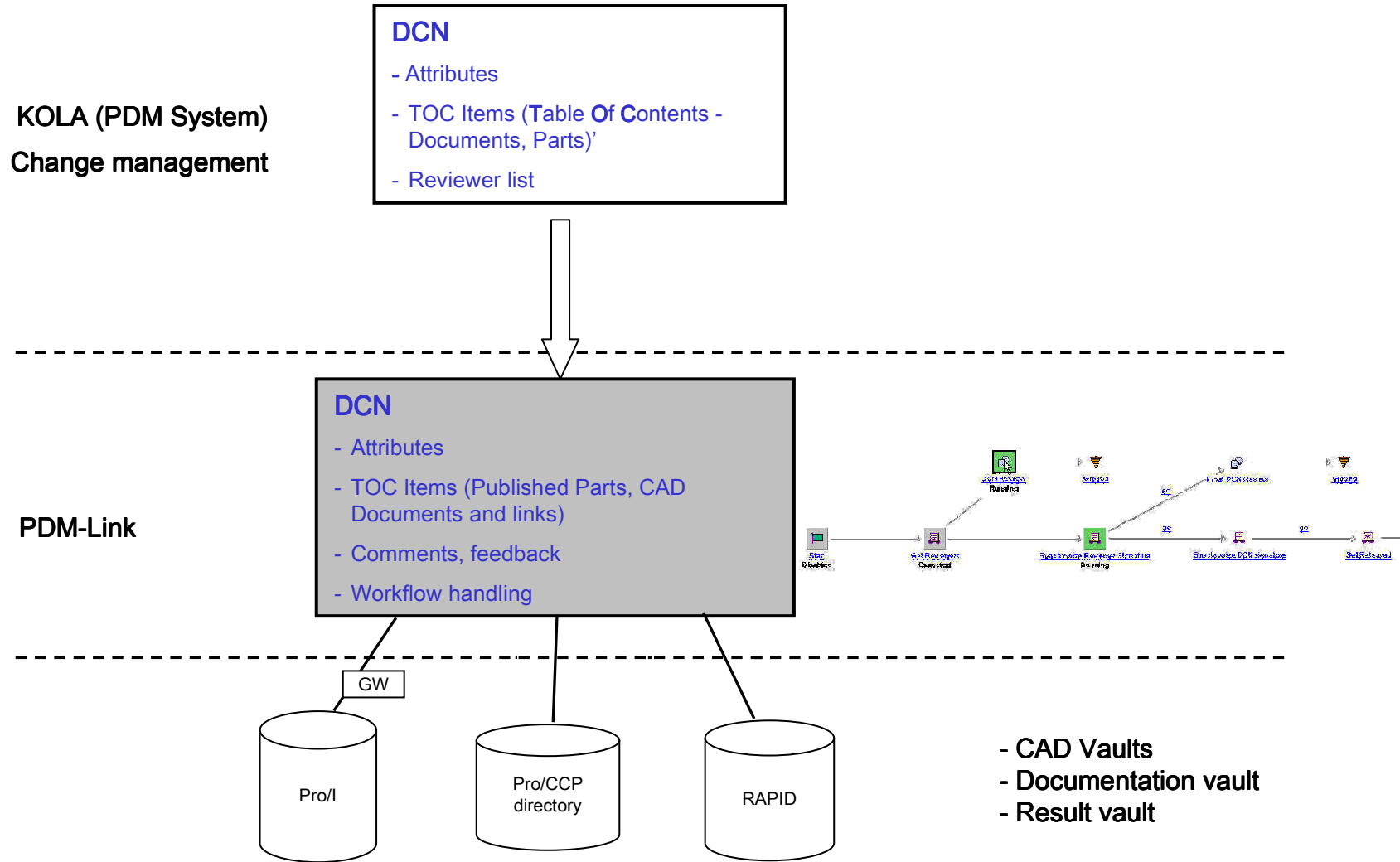
As-Is:



To-Be:



Process scope : DCN Representation (Design Change Notice)



RPU – Release Process Upgrade in PDM-Link



KOLA-148 Change Manager - DEN First Page - Administrative changes

File Update View Window Help

DCN: Display Type: Corrects DCN: ToC

Heading: DCN Status:

General Additional

Priority: Handlers:

	UserID	Name	Tel.No.
Issuer	RE40856	JEROME POIRSON	+33 472 962856
Structure Specialist	R078586	FABRICE RANC	+33 472 968482
Industrial Engineer			

Object No.:
 Resp. Dept.:
 Reg. Date:
 Reference:

Approval Date:

Year	Week
Planned 2003	39
Real 2003	39

Introduction Date:

Year	Week
Planned 2004	35
Real 2003	47

Body

Main (ECU) object number:

Reason:

Nature:

Added functions:
 Solved problems:
 Production Tools Affected:

Cancelled By: Reason:

Last Maintenance: UserID:

KOLA TEST VERSION: DCN D-11000-10 ready

- All involved stakeholders are aware that a change is on its way.
- All can see what change is going on and what effects are.

RPU – Release Process Upgrade in PDM-Link



VOLVO POWERTRAIN Visualization Collection | Learn | Help | Publications | E-mail Page | Hot Links | Copy Page

Home | Product | Project | DCN | Library | Organization

DCN Overview | **DCN Details**

DCN Properties DCN Actions:

Heading: FAN/DC9 FG2631/PC04
Number: A7529310 **DCN Type:** 3 / Late Stages Adm+Part Structure
Priority: 2 / 2 Priority **Responsible Department:** 24483
Reference: K8 **Object Number:** W60-2285
Planned Approval Date: **Real Approval Date:** 19991102
Team: [A7529310 - a752931087099](#)
State: In Work | Pre-Release | **Frozen** | Released | Cancelled
Related Process: [DCN Freeze_A7529310 - a7529310](#)

KOLA Approval Signatures

Document Approve **DCN Approve**

DCN Part table of contents

Category	Number	Name	Pro/l Version	State	Last Modified	Actions
Part	8149866.ASM	8149866.asm	A.1	Released	2004-12-08 18:54:18	
Part	8149867.ASM	8149867.asm	A.1	Released	2004-12-08 22:21:36	

DCN Document table of contents

Category	Number	Name	Version	State	Last Modified	Actions
Drawing	3077716.dwg	3077716.dwg	A.1	Released	2004-12-08 18:26:52	

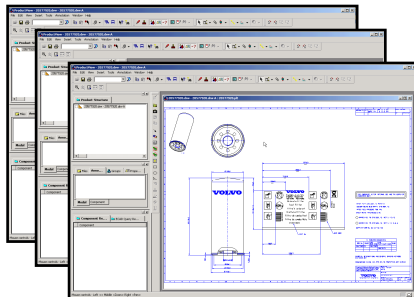
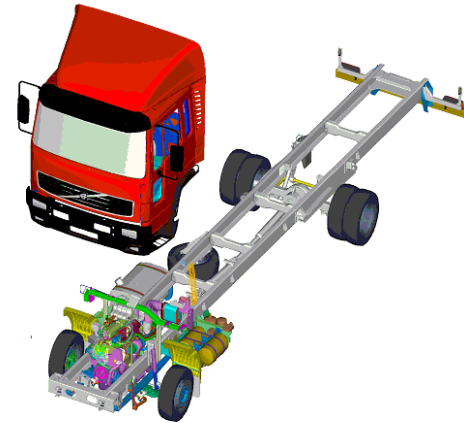
DCN Reference Documents

Name	Format	File Size (kB)	Last Modified	Created By
No files attached				

Trusted sites

• A mirrored DCN are created in PDM-Link

RPU – Release Process Upgrade in PDM-Link

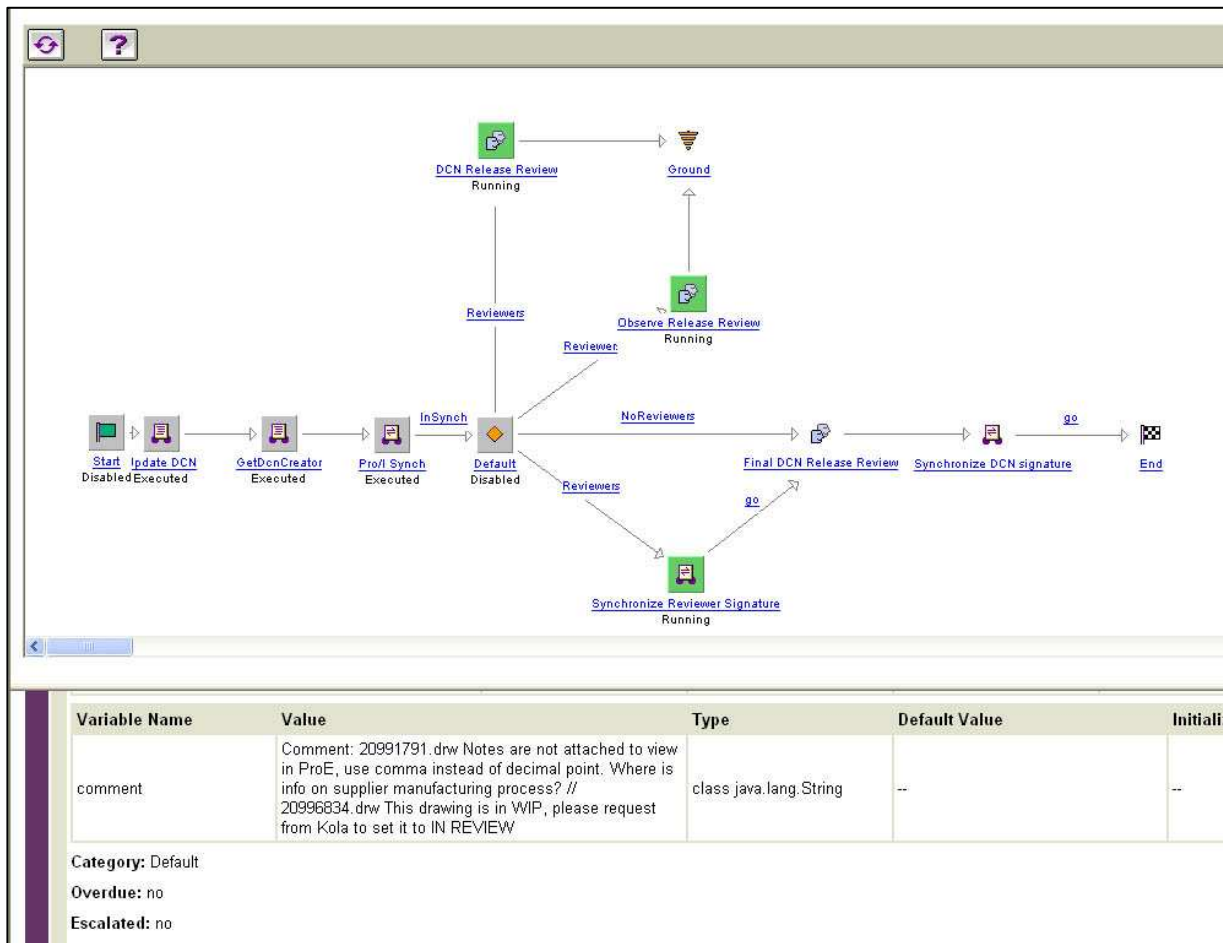
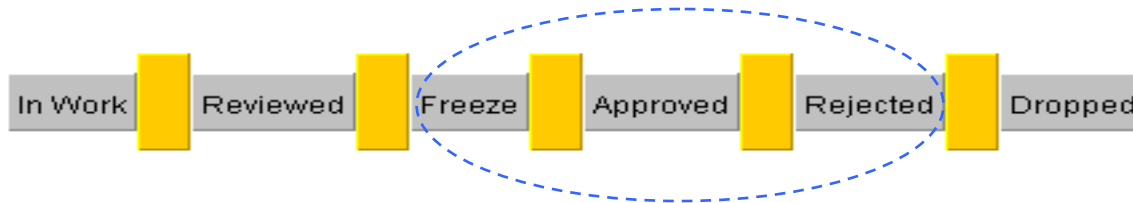


Item No.	Item Name	Item Code	Item Type	Item Status	Item Date	Item User
1	Engine	10000000	Assembly	Released	2006-09-16	Lars Körner
2	Truck Chassis	20000000	Assembly	Released	2006-09-16	Lars Körner

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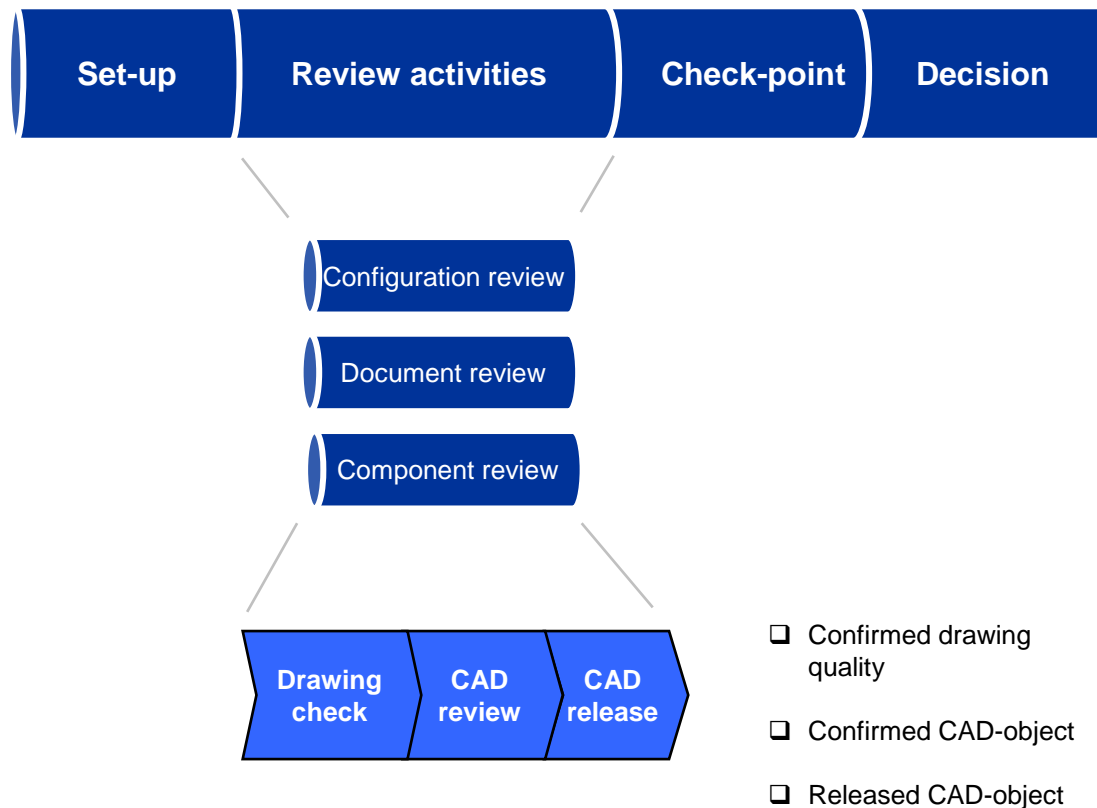
RPU – Release Process Upgrade in PDM-Link



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Pro/CCP – Pro/Engineer CAD Check Program

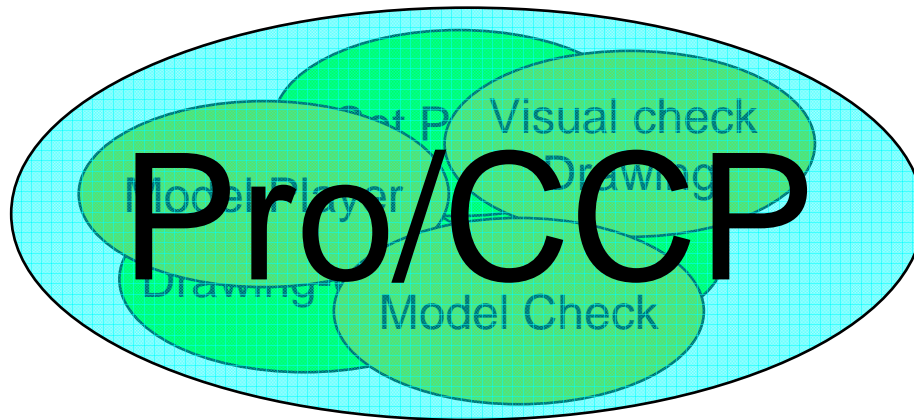


Pro/CCP – CAD Quality

MODEL For more info see Modelling Guideline			
Can not recreate instance [NO].		Redefine and verify the family table in the generic	Pro/E
Failed to regenerate component placement.	The component referring to geometry that is no longer present in the assembly	Redefine the constraints for the component	Pro/E
[NO] incomplete. and [NO] supp. Feature (s) or component (s).		Delete incomplete features or components, Resume suppressed features or components	ProCCP

Overview Pro/CCP Solution

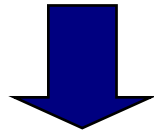
- Today there are several tools/applications for checking cad-objects that helps the designer in his work before Release



- Some actions are done manually
- Pro/CCP will gather these steps to one activity for the designer and release administrator
- Pro/CCP will produce a error log file presented on a web page.

Pro/CCP web interface

On the Pro/CCP web page fill in Id,
object and Site location



- A complete breakdown of the object are performed and choose all non-released objects for testing.

VOLVO

PRO Cad Check Program

Intralink userid:

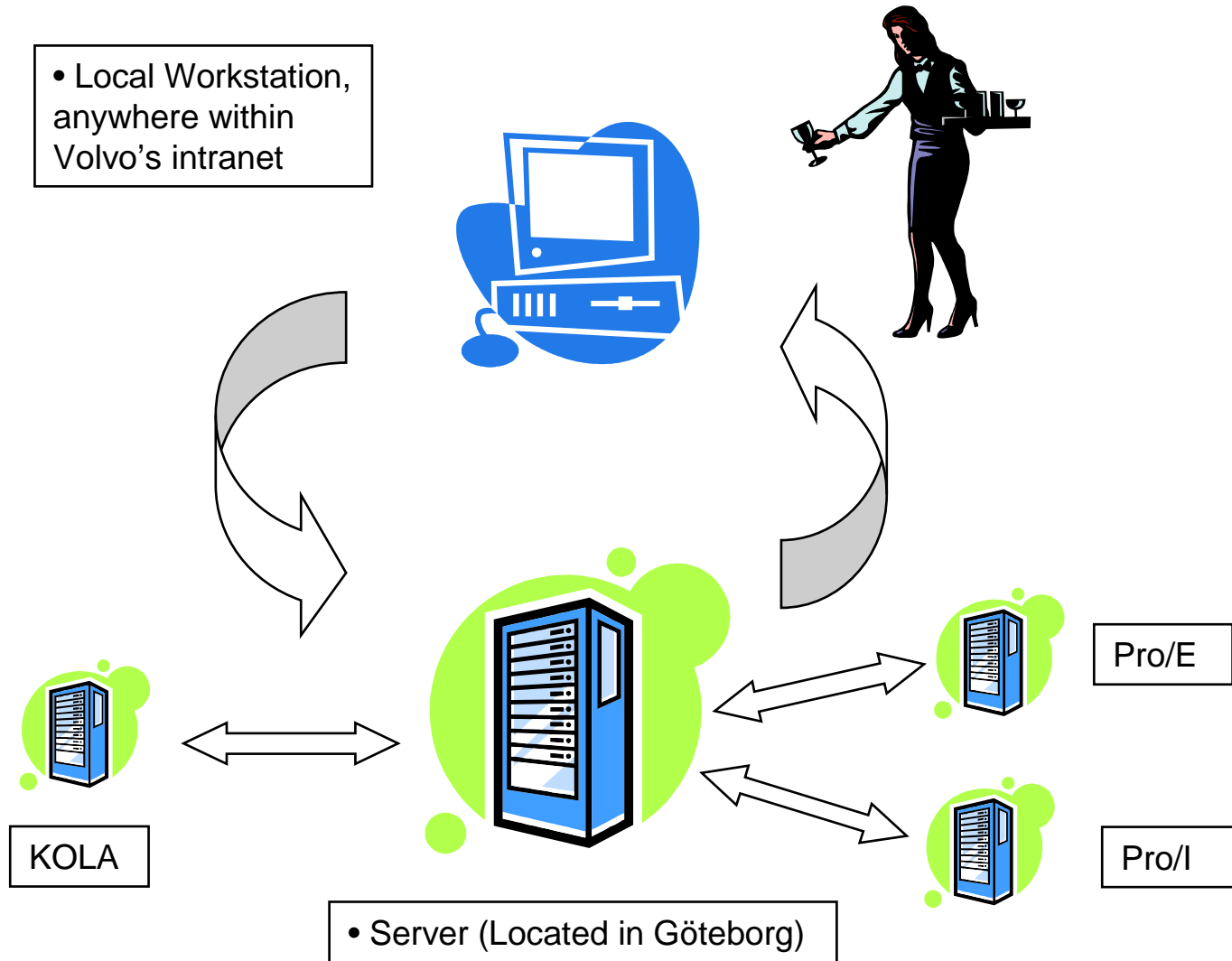
Intralink password:

Objects:
separate objects with a semicolon ;

DCN:
separate dcn's with a semicolon ;

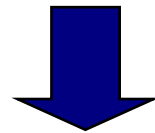
To start search press

Pro/CCP Workflow



Pro/CCP web interface

After the batch process is finished a link to the Result summary will be sent to the users email



VOLVO

20411662.drw 20060518 13:18:11

Summary			
Top Object	Rev.Ver	Result	Breakdown
20411662.drw	0.3	Error	View

Please remember to release all CAD-modules containing these objects!
[Debug info](#)

To delete this reports, press

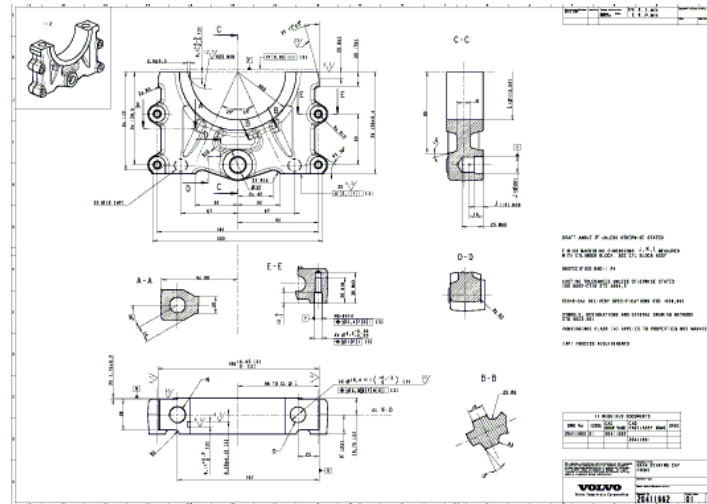
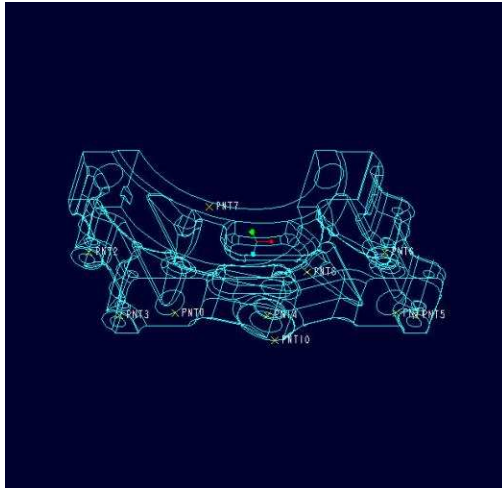
Pro/CCP Result page

On the Result page the user can find information about Warnings and Errors

Check List			
Object	Info	Warning	Error
20411661.prt	The designated parameters corresponds to KOLA	Original reference not found, using alternate. CUT is entirely outside the model, model unchanged.	1 suppressed feature(s) or component(s). (+) marked after model_player "As stored" revision.version (0.3) not the same as "latest" revision.version (1.0) Layer POINTS not blanked out Quilt 24798 is not on layer SURFACES as supposed
20411662.drw	The designated parameters corresponds to KOLA		The geometry which serves as the origin of the partial view "new_view_8", on sheet 1, is missing.

Useful Functions

- Visual check, Pro/CCP generates a link to a .jpeg for parts and a .cals files for drawings.



- Help for Error messages

12	(+) marked after model_player	Model has been modified or contain modified references and has not been completely regenerated.	Execute Utilities > Model Player and solve any regeneration problems that might occur before sending the object into Commonsapce.
13	Parameter ISSUE (01) does not match KOLA data (00)	The issue parameter in the Pro/E object does not correspond to issue in KOLA.	Update issue in KOLA and Pro/E object to correct values.

Effects from Pro/CCP

- **Reduce the amount of rejects and loops.**
 - From ~75% to less than 10% in total & no second time loop. (UVT test)

- **Provide a better tool for designers to check the drawing in a early stage of the design and give them more time for designing.**
 - Time saved approx. 30 min/drawing

- **Less interaction with different system tools.**

- **To have a better quality overall on cad objects.**

- **Same global check within Volvo PowerTrain.**

- **Reduced time for Release administrators.**

Questions



Thank you for your attention!

