

Secure Engineering Collaboration with Integrated Rights Management

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GLOBAL PRODUCT DATA INTEROPERABILITY SUMMIT 2014



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Agenda

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- **PLM Data Protection Challenges**
- **Siemens/NextLabs Enterprise Digital Rights Management (EDRM)**
- **EDRM Use Cases**
- **Solution Demonstration**

Protecting the Value of IP

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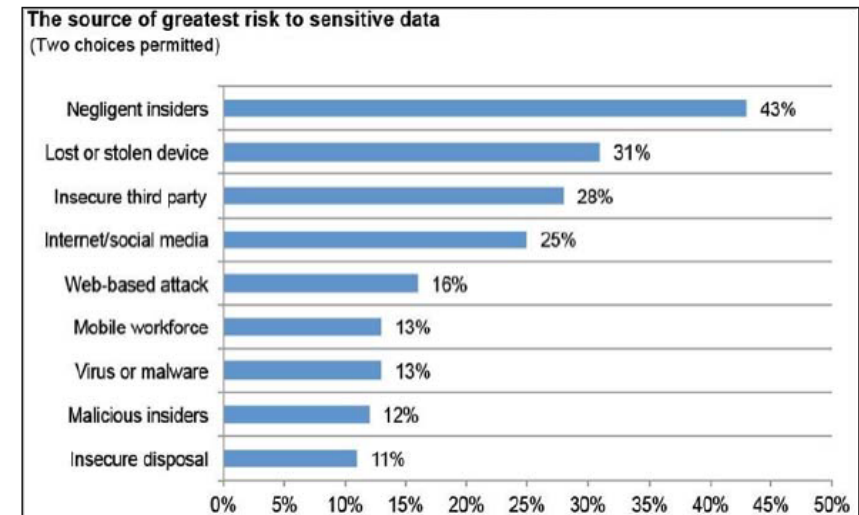
“An estimated 70 per cent of US corporate assets are tied up in "intangible assets" such as intellectual property, and around 6 per cent of this is being lost in IP theft every year”

www.theregister.co.uk

In 2012, a former employee of a North American automotive company and the employee's spouse were found guilty of stealing trade secrets related to hybrid vehicle technology worth **\$40 million**. The couple intended to sell the information to a Chinese competitor.

2012 IBM/Ponemon Institute Survey results

Feb. 27, 2012: IBM and the Ponemon Institute recently conducted a survey of more than 265 C-level executives to determine what organizations believe are the most important factors when considering sensitive data and complying with strict security regulations.



Challenges

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- **Protecting IP while enabling collaboration**
- **Maintaining a centralized security strategy**
- **Understanding and controlling who, what, when, and where your data is being accessed**
- **Making sure people access the right document at the right time**

About NextLabs and Siemens PLM

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NEXTLABS

- Leader in Information Risk Management Software and Solutions
- Customers are Leaders in Aerospace & Defense, High-Tech, Chemical, and Manufacturing
- Award Winning Products in Rights Management, Entitlement Management, and Compliance Automation
- 21 Awarded Patents in Information Control Policy and Data Protection
- Siemens PLM Foundation Partner

SIEMENS

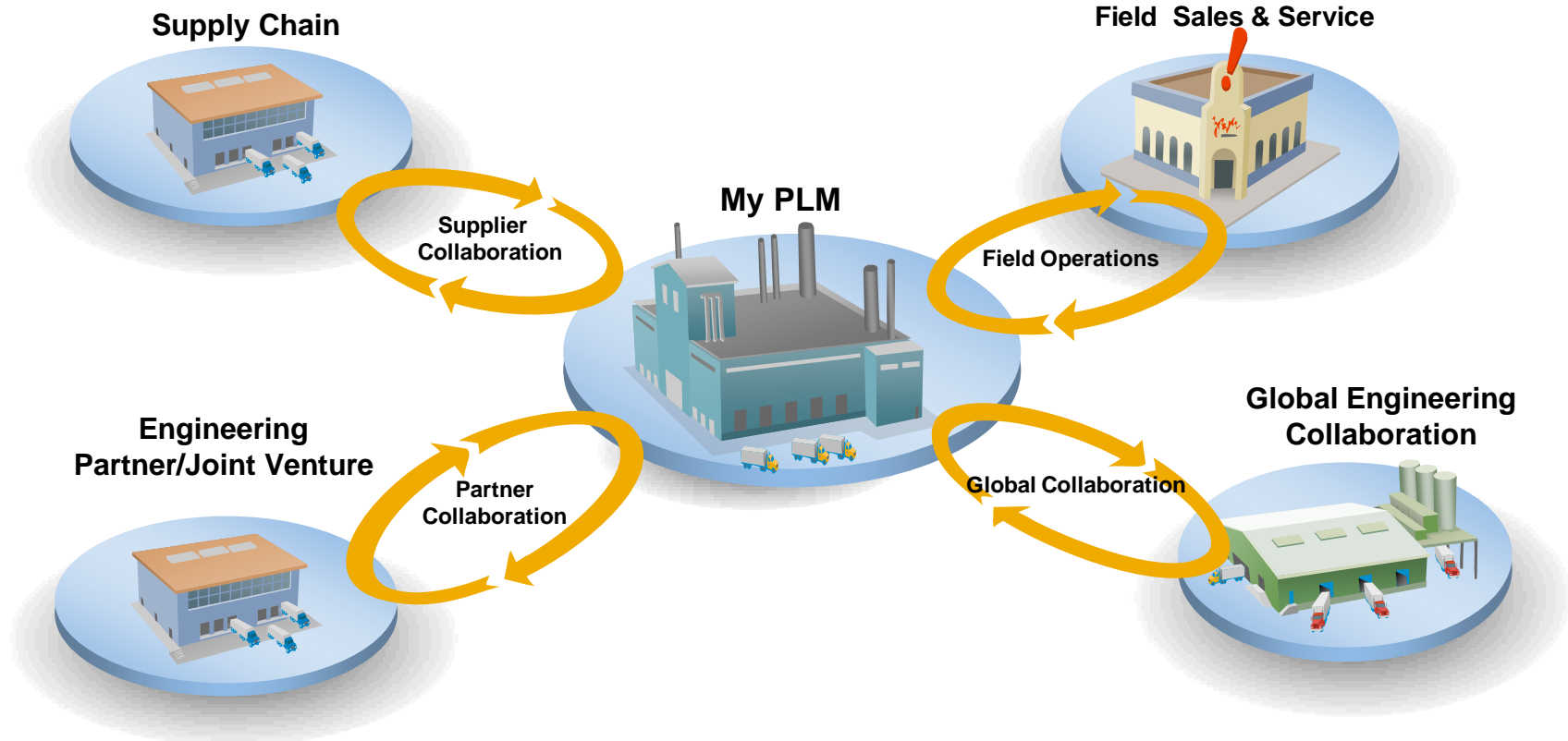
- Siemens PLM Software is a business unit of the Siemens Industry Automation Division.
- World-leading provider of product lifecycle management (PLM) software, systems and services with nine million licensed seats and 77,000 customers worldwide.
- Headquartered in Plano, Texas.
- Siemens PLM Software helps thousands of companies make great products by optimizing their lifecycle processes, from planning and development through manufacturing and support.

Data on the Move Challenges

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Partners

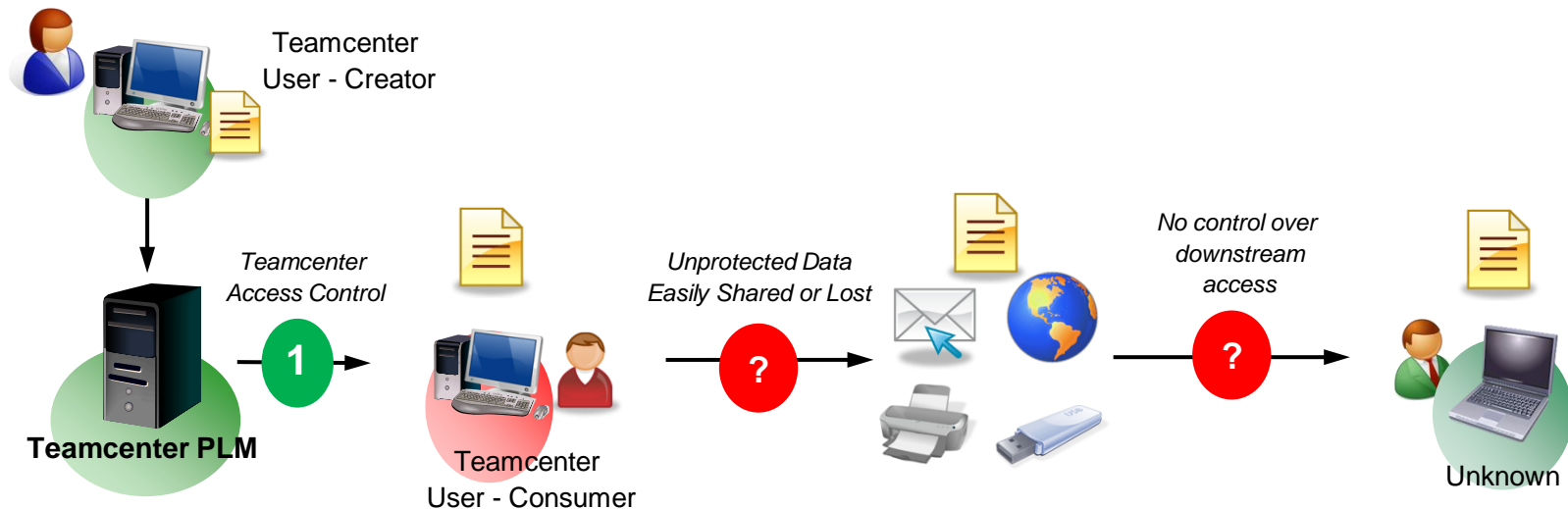
Employees



What is EDRM?

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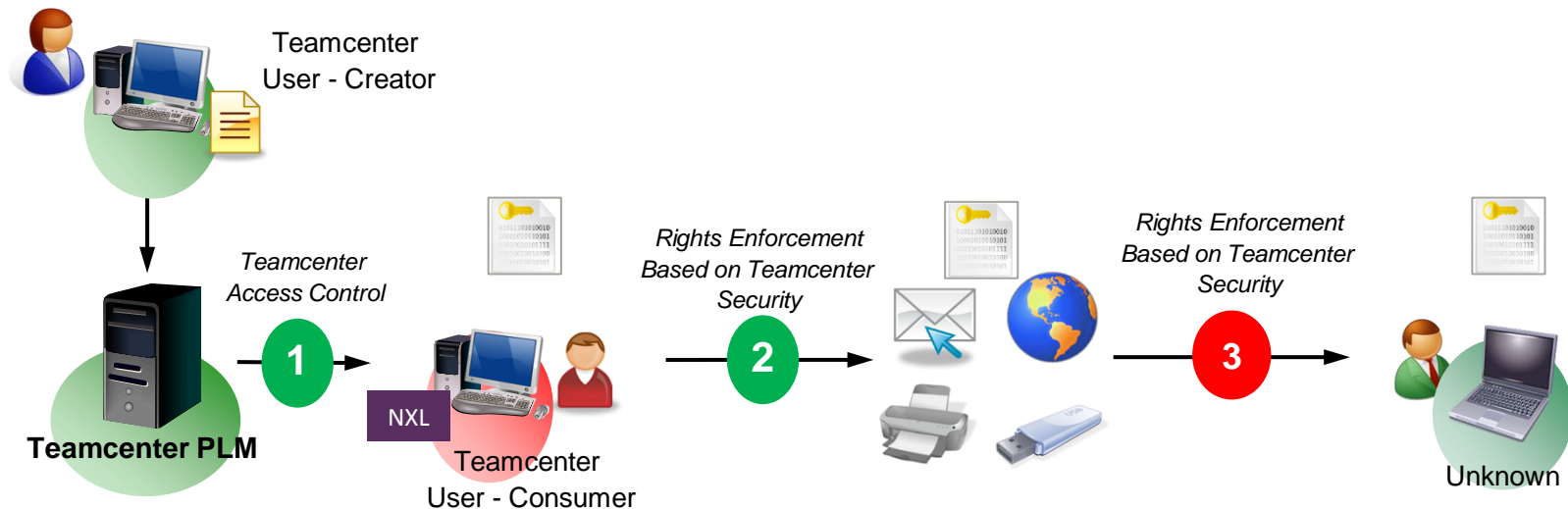
Without EDRM Teamcenter Access Control only controls access to data while managed in Teamcenter



What is EDRM?

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With EDRM Documents are Encrypted and Teamcenter security can be extended to unmanaged data.



Teamcenter Integrated EDRM

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1. Security and Classification Defined in Teamcenter

2. Documents Rights Protected and Tagged

3. Rights determined by applying policy based on Teamcenter security



Intellectual Property

Export Control

Program

Proprietary

ITAR

Destiny



Intellectual Property

Export Control

Program

Rights
Open
Print
Copy
Convert

EDRM Global Engineering Collaboration

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Use Case

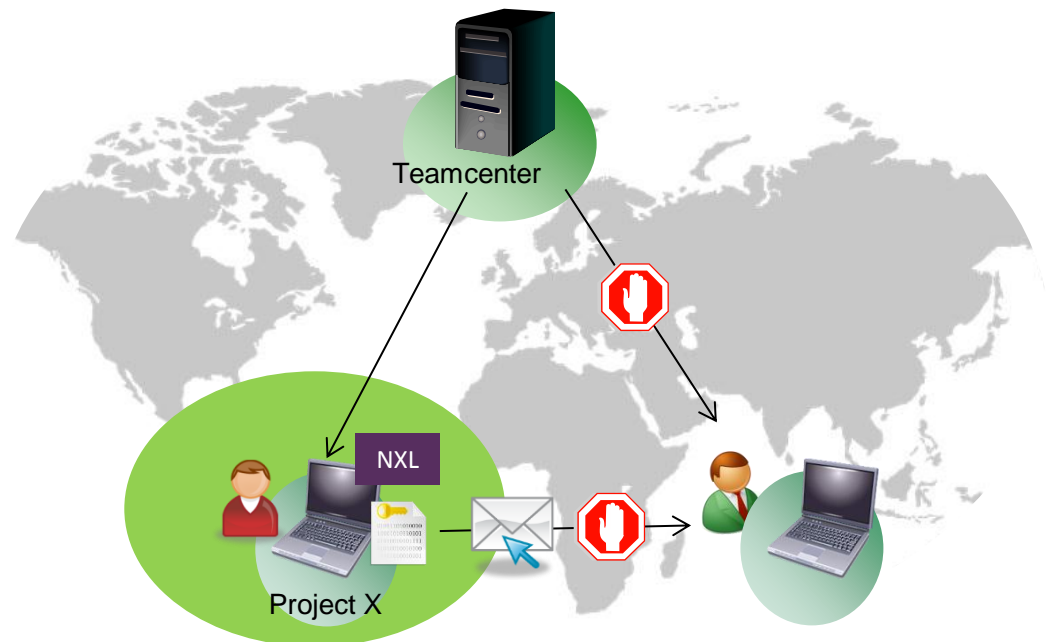
Global PLM systems enable streamlined collaboration and global processes across divisions and geographies but make it challenging to control data for need-to-know projects, new product introduction (NPI), and global regulatory export requirements. Companies must achieve a delicate balance between sharing and securing data.

Information Risks

- NPI engineering data shared outside team members with need to know.
- Violation of global regulatory export requirements for controlled technical data.

Challenges

- Control access to data based on classification, user project assignments and location.
- Access controls easily worked-around by sharing via unauthorized channels (e.g. email, file server)



EDRM for Field Service

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Use Case

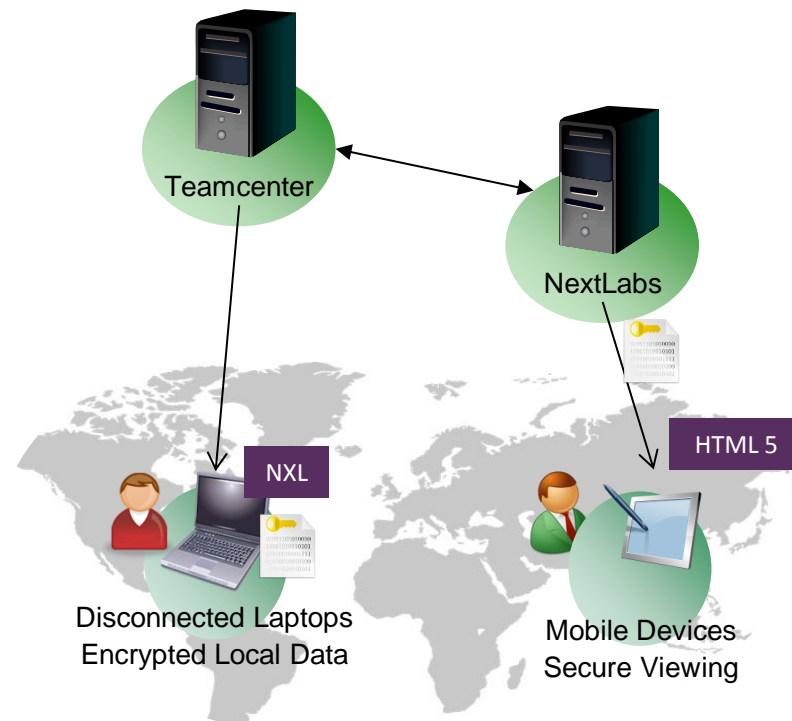
Field Service representatives need access to technical product manuals and service instructions on laptops and mobile devices. After market service business has become a critical business more many manufacturing companies. The risk of IP theft by insiders and competitors is a direct threat to the service revenue.

Information Risks

- Company IP and customer confidential data loss due to lost or stolen devices.
- Insider threat of remote employees stealing know-how and service customers.

Challenges

- Large amounts of technical manuals and service instructions need to be available to a remote/mobile workforce.
- Technical data in multiple formats including drawings, 3D, and service databases



EDRM for Supply Chain Collaboration

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Use Case

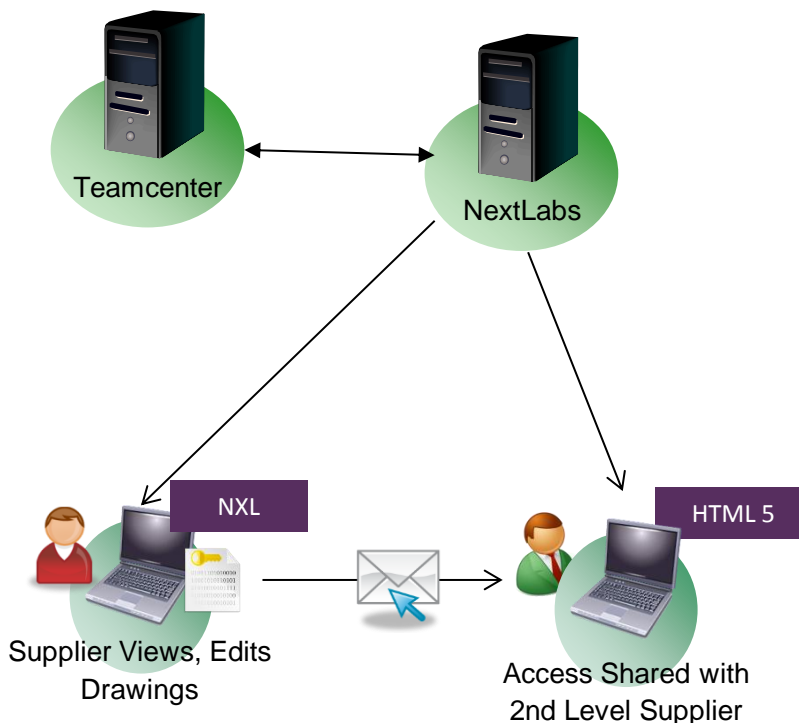
Product data needs to be shared with suppliers so that they may design, manufacture and test components. Suppliers may additionally need to modify your information to fit into their processes and share your information with their partners/suppliers. Loss or theft of IP is common, while timely and accurate access to the correct product data is critical to control cost and project timelines.

Information Risks

- Intellectual Property loss through suppliers and their partners
- Disruption caused by Suppliers using old or outdated specifications

Challenges

- Visibility and control over product data after it is shared with suppliers.
- Ensuring that suppliers can no longer access outdated product data.
- Suppliers will need to share your information with their partners/suppliers



EDRM for Partner Product Collaboration

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Use Case

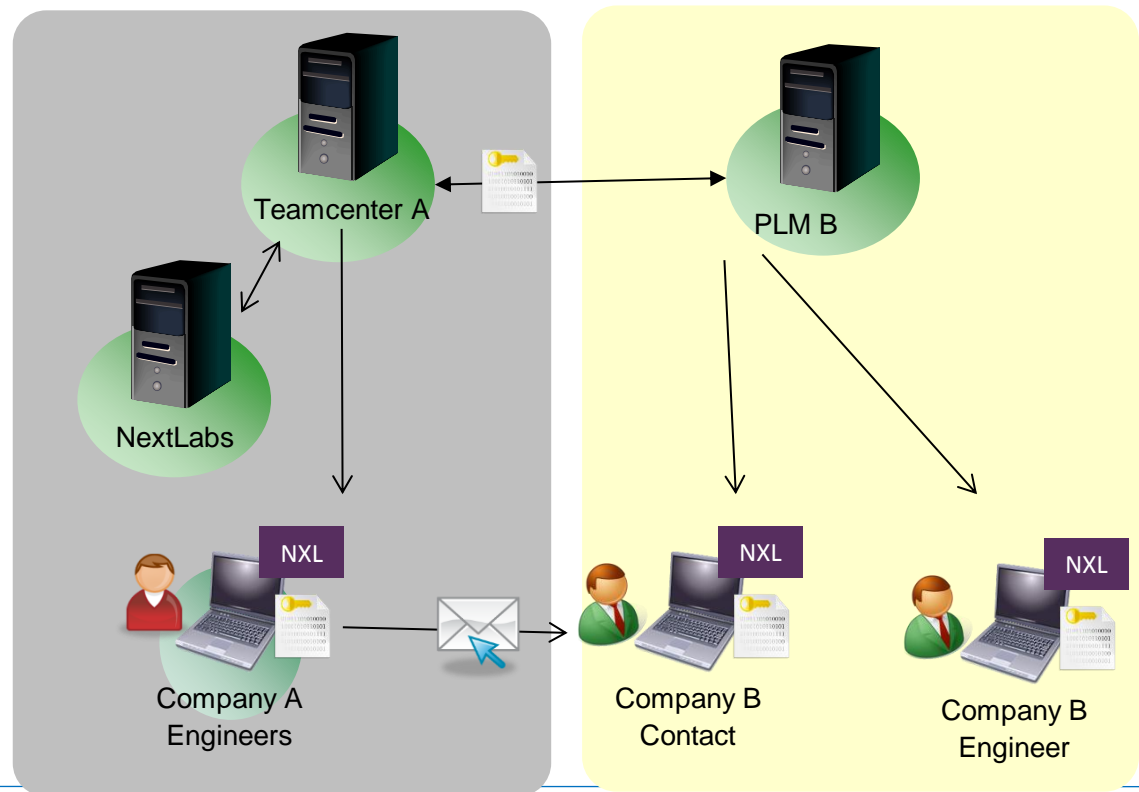
Multiple companies collaborating on product development within partnerships or joint ventures. Both companies must share and jointly develop intellectual property (IP) while protecting the IP of their engineering partners. Protection of IP is a contractual obligation for all parties, but companies lack adequate controls to enforce these.

Information Risks

- Breach of IP licenses or contracts due to mis-handling of partner IP.
- Loss of company IP through partners.

Challenges

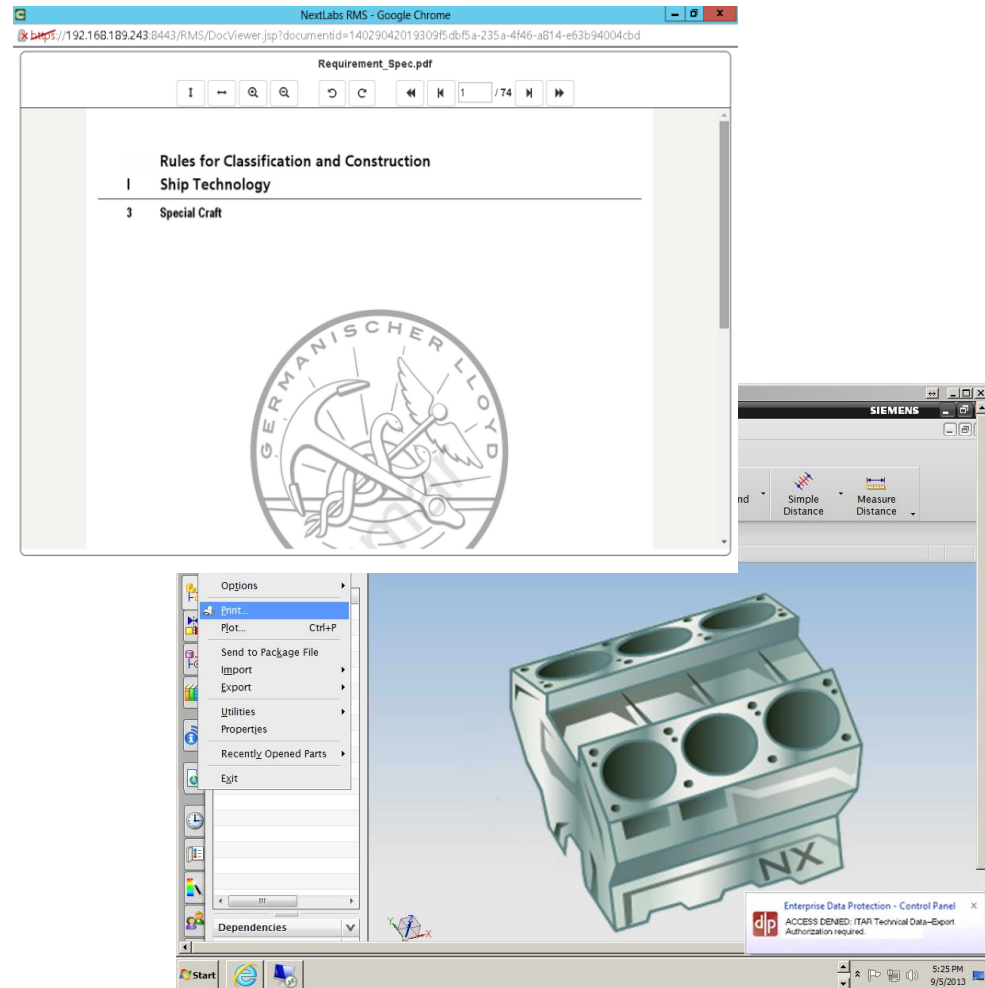
- Unclear designation of IP ownership and controls to enforce IP handing requirements..
- Ability to share and modify engineering drawings securely.
- No knowledge of the specific engineers who will need access to data within the other organization.



NextLabs Rights Management

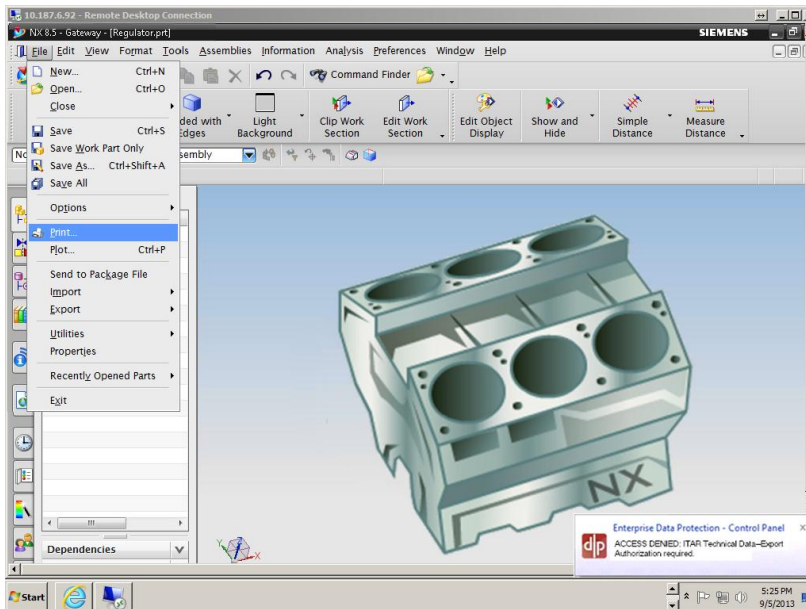
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- **Persistent Protection for Intellectual Property**
 - CAD, Code, Drawings, 3D Models
 - Also supports Office and PDF
- Integrated into PLM, ERP, ECM and Cloud applications
- Securely view documents on any device
- Read and Write protected data with native engineering applications, even offline
- Dynamically apply multiple policies to a single document (e.g. Export & IP)
 - Fewer policies to manage
 - Fewer document copies



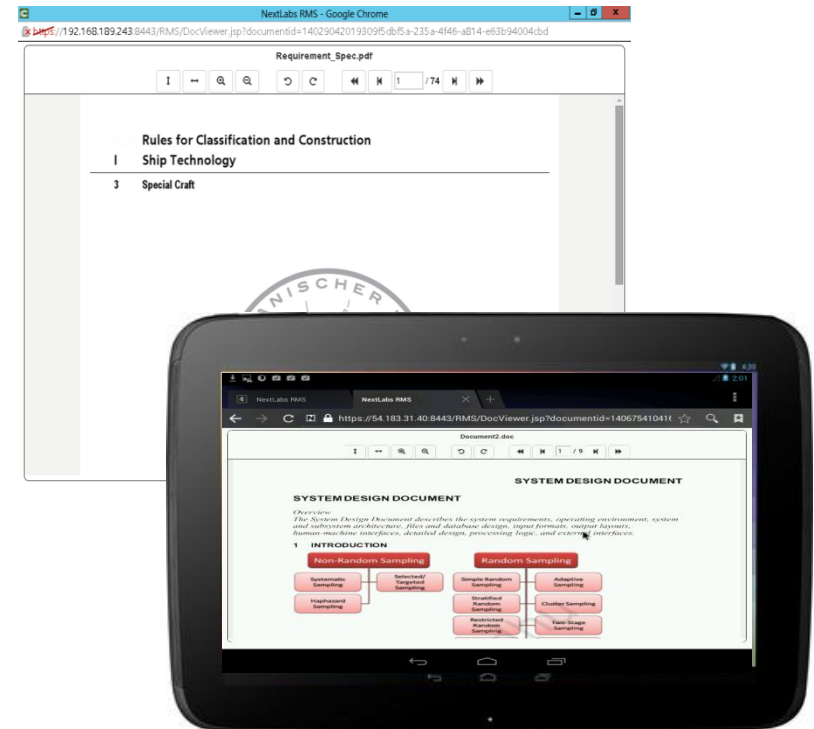
Protect IP Across File Types and Devices

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Rights Management Client

- Read, Edit, Copy/Paste, Print, Watermarks, Screen Capture
- File Type and Application Independent
- Support for engineering file formats including NX and JT formats



Rights Management Server

- Read Only (Trusted Browsing)
- HTML 5 Browser-Based, no install
- Works across device platform
- Supports hundreds of file types (common and engineering)

Rights Management Client Support

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File Type	View	Edit	Print	Copy	Expire	Markings
Business Documents						
• Office (Word, Excel, PPT)	✓	✓	✓	✓	✓	✓
• PDF	✓	✓	✓	✓	✓	✓
• Visio	✓	✓	✓	✓	✓	
• Text, CSV	✓	✓	✓	✓	✓	
• HTML	✓	✓	✓	✓	✓	
Engineering Documents						
• NX	✓	✓			✓	
• JT	✓	✓			✓	
• AutoCAD	✓	✓			✓	
• SolidWorks	✓	✓			✓	
• ProE	✓	✓			✓	
• Catia	✓	✓			✓	
• Creo	✓	✓			✓	
• Source code	✓	✓		✓	✓	
• XML	✓	✓		✓	✓	
• Images (TIF, JPEG,,)	✓	✓		✓	✓	

Rights Management Server Support

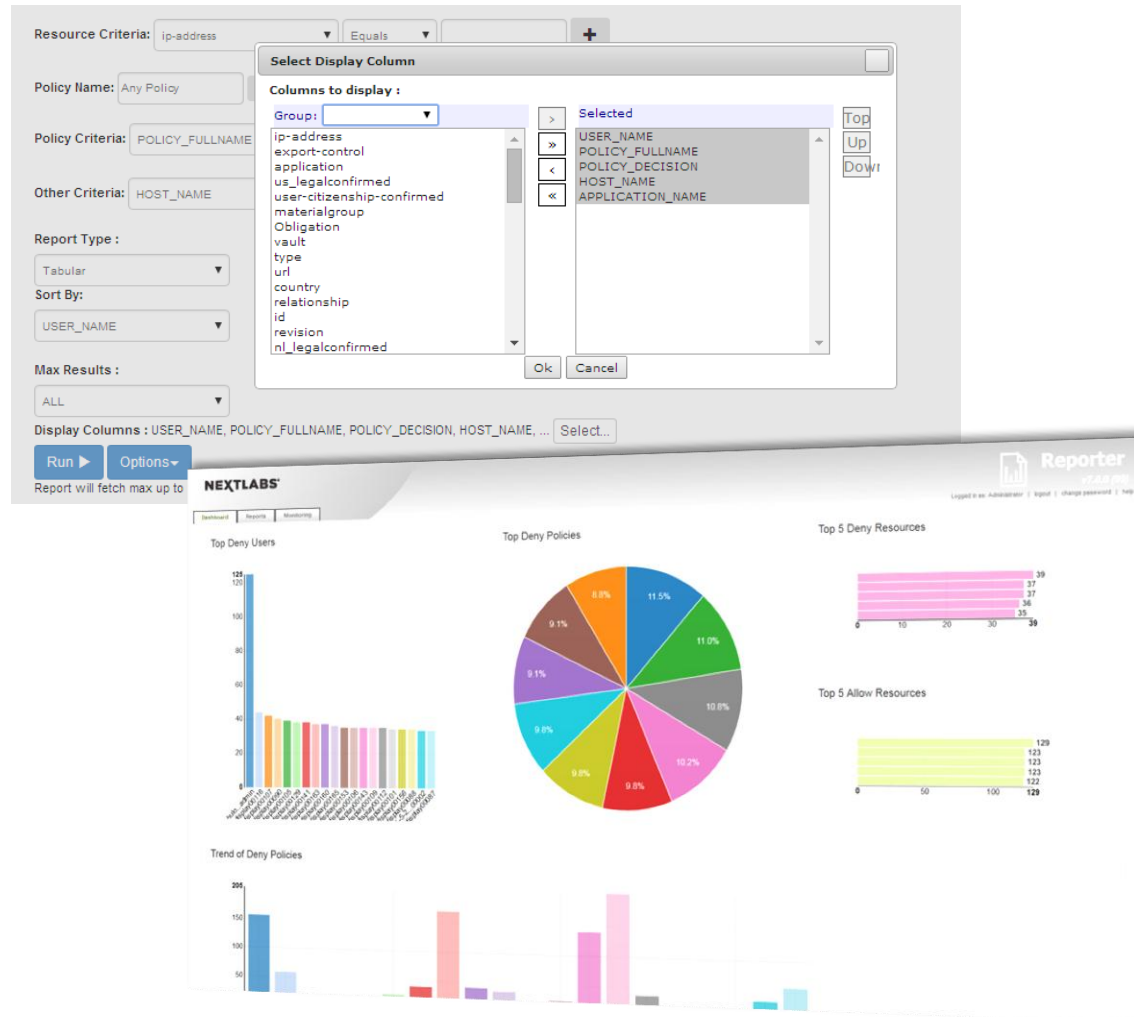
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File Type	View	Edit	Print	Copy	Expire	Markings
Business Documents						
• Office (Word, Excel, PPT)	✓		✓	✓	✓	✓
• PDF	✓		✓	✓	✓	✓
• Visio	✓		✓	✓	✓	✓
• Text, CSV	✓		✓	✓	✓	✓
• HTML	✓		✓	✓	✓	✓
Engineering Documents						
• NX	✓*		✓*	✓*	✓*	✓*
• JT	✓*		✓*	✓*	✓*	✓*
• AutoCAD	✓		✓	✓	✓	✓
• SolidWorks						
• ProE						
• Catia						
• Creo						
• Source code	✓		✓	✓	✓	✓
• XML	✓		✓	✓	✓	✓
• Images (TIF, JPEG,,)	✓		✓	✓	✓	✓

Audit and Reporting

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- End-user customizable reporting
- Custom Dashboards
- Policy Tagging & Tag Analytics
- Monitors and Alerts



EDRM Summary

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- **Extends Teamcenter PLM security model to unmanaged files**
- **Works for engineering data types in engineering applications including NX and JT**
- **Supports offline access for field-service use cases**
- **Supports sharing (read-only) and collaboration (edit) use cases**