

# **BEDIFFERENT**

ACE 2012 INTERNATIONAL



# Aras Requirements Management

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# Why Requirements Management?



## ► Requirements are...

- The voice of your customer
- The building blocks of your products
- Verification that you are building what you mean to build
- Defining and validating design and quality goals
- **A CRITICAL IP ASSET**

# Why RM in PLM?



- ▶ **Validation - are we building the correct product?**
  - Have we listened to our customers, and captured their needs?
  - Are we building what's ideal for the market?
- ▶ **Traceability - are we building the product correctly?**
  - Have we forgotten anything?
  - Are my products / parts / documents satisfying my requirements?
- ▶ **Version Control - are we still building the correct product?**
  - Close the loop - validate with our customers that we are meeting their needs
  - See how our requirements have historically evolved

## ▶ Managing Requirements in Aras Innovator

- Allow relating multiple disciplines to the definition and validation functions of requirements management
- Easy to use interface to enter and manage requirements
- Leverage workflow, lifecycle, and configuration management capabilities for enhanced requirements management
- Integrated processes

# Anatomy of a Requirements Document



## ▶ Document Header information

- Product identification

## ▶ Chapters

- Structure for the document
  - Text- items to describe product

## ▶ Documents, Chapters, and text can be linked to:

- From other Aras Innovator items for traceability e.g. Part that satisfies a Requirement
- External URL's
- Files
- Other Requirement objects in other Requirement Documents

# Requirements Documents



http://demo.aras.com/ - Requirement Document - RD-00001 Multi Color Pen - Windows Internet Explorer

File Edit Views Search Actions Reports Tools Help

Requirement Document Number: RD-00001 Rev: A Status: Draft

Title: Multi Color Pen

Managed By: Innovator Admin Owned By: Innovator Admin

Created By: Innovator Admin

Content Extended Content Files

Actions Create Related Hide Search Criteria Page Size

Chapter	Requirement Number	Title	State	Rev	Type	Priority	Risk	Complexity	Manager	Level
1	REQ-000000001	PRODUCT DESCRIPTION	Draft	A	Structure	High	Low	Low		0
1.1	REQ-000000002	Purpose	Draft	A	Text	Critical	High	High		1
1.2	REQ-000000003	System Boundaries	Draft	A	Text	Critical	High	High		1
1.3	REQ-000000004	System Functions	Draft	A	Text	Critical	High	High		1
2	REQ-000000005	References	Draft	A	Structure	Critical	High	High		0
2.1	REQ-000000006	Reference Sheet	Draft	A	Text	Critical	High	High		1

# Enhanced Editing UI



http://demo.aras.com/ - Requirement Document - B3D4DAB40F534556B0371413B535809F - Windows Internet Explorer

File Edit Views Search Actions Reports Tools Help

Requirement Document Number Rev Status  
 Server Assigned [ ] [ ] [ ]  
 Title  
 Multi Color Pen  
 Managed By [Innovator Admin] Owned By [Innovator Admin]

Created By:

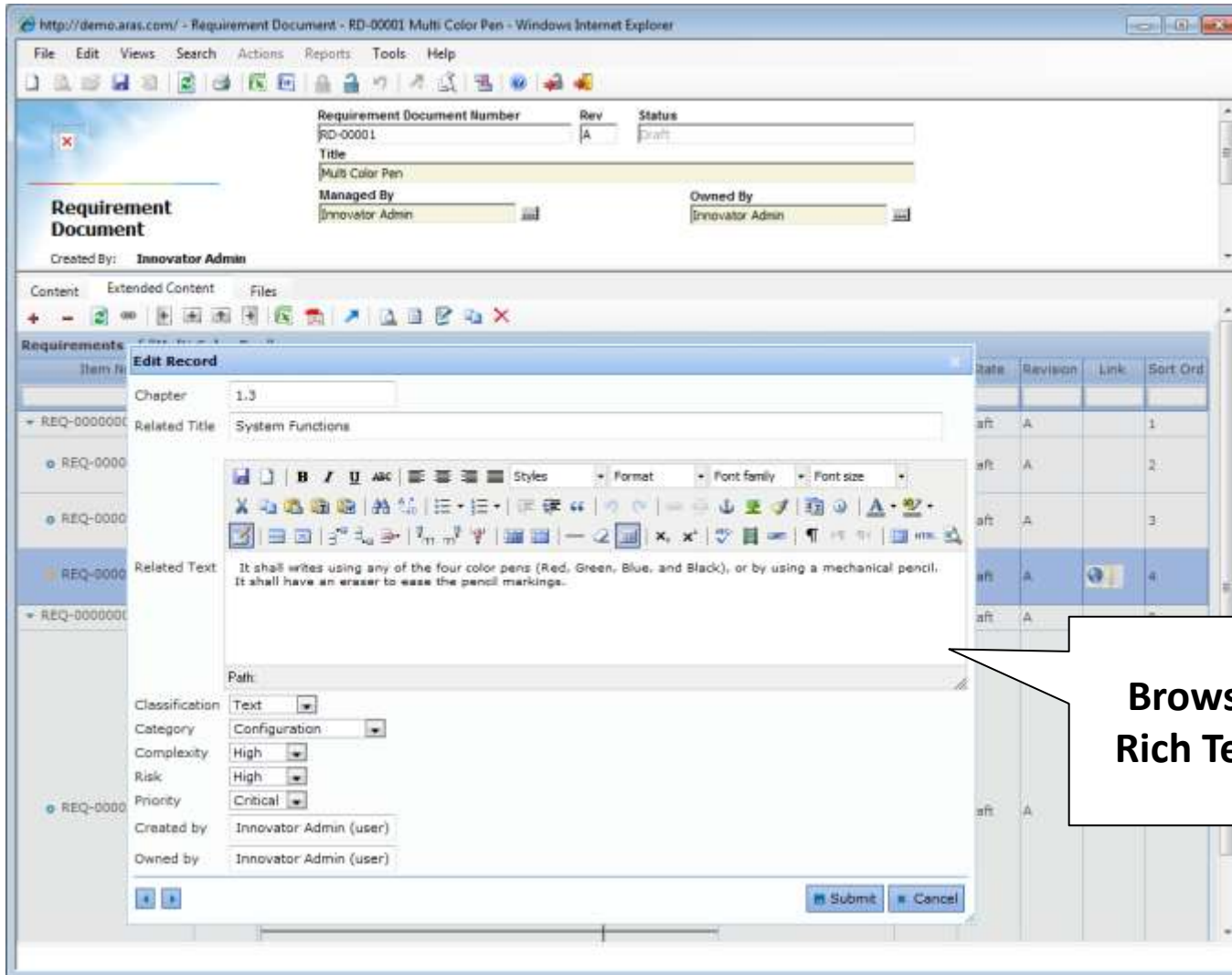
Content Extended Content Files

Requirements of "Multi Color Pen"

Item Nr	Chapter	Title/ Description	Classification	Categor	State	Revision	Link	Sort Ord
REQ-00000001	1	PRODUCT DESCRIPTION	Structure	Configur	Draft	A		1
REQ-00000002	1.1	Purpose The purpose of this document is to provide the system requirements f	Text	Configur	Draft	A		2
REQ-00000003	1.2	System Boundaries The system manufacturing cost should be les than \$4.00 per unit for a	Text	Configur	Draft	A		3
REQ-00000004	1.3	System Functions It shall writes using any of the four color pens (Red, Green, Blue, and	Text	Configur	Draft	A		4
REQ-00000005	2	References	Structure	Configur	Draft	A		5
REQ-00000006	2.1	Reference Sheet						
		Type: Adult Use , Overall Length: 200 mm	Type: Children a					
		Colors:	Colors:					
		Black	Black, Blue, Whit					
		Blue	Yellow					
		White	Purple					



# Enhanced Editing UI



Requirement Document Number: RD-00001  
Rev: A  
Status: Draft  
Title: Multi Color Pen  
Managed By: Innovator Admin  
Owned By: Innovator Admin

Created By: Innovator Admin

Content Extended Content Files

Requirements

Item No

Chapter: 1.3  
Related Title: System Functions

Related Text: It shall writes using any of the four color pens (Red, Green, Blue, and Black), or by using a mechanical pencil. It shall have an eraser to erase the pencil markings.

Path:

Classification: Text  
Category: Configuration  
Complexity: High  
Risk: High  
Priority: Critical

Created by: Innovator Admin (user)  
Owned by: Innovator Admin (user)

Submit Cancel

**Browser-based  
Rich Text Editing**

# Enhanced Viewing UI



http://demo.aras.com/- Requirement Document - RD-00001 Multi Color Pen - Windows Internet Explorer

File Edit Views Search Actions Reports Tools Help

Requirement Document Number: RD-00001 Rev: A Status: Draft

Title: Multi Color Pen

Managed By: Innovator Admin Owned By: Innovator Admin

Created By: Innovator Admin

Content Extended Content Files

Requirements of "Multi Color Pen"

Item Nr	Chapter	Titel/ Description	Classification	Category	State	Revision	Link
REQ-000000001	1	PRODUCT DESCRIPTION	Structure	Configur	Draft	A	
REQ-000000002	1.1	Purpose The purpose of		Configur	Draft	A	
REQ-000000003	1.2	System Bounda The system ma		Configur	Draft	A	
REQ-000000004	1.3	System Functio It shall writes v		Configur	Draft	A	
REQ-000000005	2	References Reference Shee Type: Adult Us Colors:					
REQ-000000006	2.1	Black Blue White	Text	Configuration	Draft	A	
							revore Purple

**View Record**

Item Nr: REQ-000000004

Chapter: 1.3

Titel/ Description: System Functions

aras combo fix

Classification: Text

Category: Configuration

State: Draft

Revision: A

Link:

Sort Order: 4

Close

# External Links- Requirements



http://demo.aras.com/- Requirement Document - RD-00001 Multi Color Pen - Windows Internet Explorer

File Edit Views Search Actions Reports Tools Help

Requirement Document Number: RD-00001 Rev: A Status: Draft

Title: Multi Color Pen

Managed By: Innovator Admin Owned By: Innovator Admin

Created By: Innovator Admin

Content Extended Content Files

Requirements of "Multi Color Pen"

Item Nr	Chapter	Title/ Description	Classification	Category	State	Revision	Li										
REQ-000000001	1	PRODUCT DESCRIPTION	Structure	Configur	Draft	A											
REQ-000000002	1.1	Purpose		Configur	Draft	A											
REQ-000000003	1.2			Configur	Draft	A											
REQ-000000004	1.3			Configur	Draft	A											
REQ-000000005	2	Reference Sheet		Configur	Draft	A											
REQ-000000006	2.1	<table border="1"> <tr> <td>Type: Adult Use , Overall Length: 200 mm</td> <td>Type: Children a</td> </tr> <tr> <td>Colors:</td> <td>Colors:</td> </tr> <tr> <td>Black</td> <td>Black, Blue, Whit</td> </tr> <tr> <td>Blue</td> <td>Yellow</td> </tr> <tr> <td>White</td> <td>Purple</td> </tr> </table>	Type: Adult Use , Overall Length: 200 mm	Type: Children a	Colors:	Colors:	Black	Black, Blue, Whit	Blue	Yellow	White	Purple	Text	Configur	Draft	A	
Type: Adult Use , Overall Length: 200 mm	Type: Children a																
Colors:	Colors:																
Black	Black, Blue, Whit																
Blue	Yellow																
White	Purple																

Links - REQ-000000004

Requirements URLs Files Where use

Requirement Document: Multi Color Pen

Item Nr Chapter Title Action

# External Links- URLs



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Title: Multi Color Pen

Managed By: Innovator Admin Owned By: Innovator Admin

Created By: Innovator Admin

Content Extended Content Files

Requirements of "Multi Color Pen"

Item Nr	Chapter	Titel/ Description	Classification	Category	State	Revision	Li
REQ-000000001	1	PRODUCT DESCRIPTION	Structure	Configur	Draft	A	
REQ-000000002	1.1	Purpose		Configur	Draft	A	
REQ-000000003	1.2			Configur	Draft	A	
REQ-000000004	1.3			Configur	Draft	A	
REQ-000000005	2			Configur	Draft	A	
REQ-000000006	2.1	Type: Adult Use , Overall Length: 200 mm Colors: Black Blue White	Type: Children a Colors: Black, Blue, White Yellow Purple		Configur Draft	A	

Links - REQ-000000004

Requirements URLs Files Where use

Name	URL	Action
Aras	http://www.aras.com	✖
Aras	http://www.aras.com	✔

# External Link- Files



http://demo.aras.com/- Requirement Document - RD-00001 Multi Color Pen - Windows Internet Explorer

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Requirements of "Multi Color Pen"

Item Nr	Chapter	Titel/ Description	Classification	Category	State	Revision	Li
REQ-000000001	1	PRODUCT DESCRIPTION	Structure	Configur	Draft	A	
REQ-000000002	1.1	Purpose		Configur	Draft	A	
REQ-000000003	1.2			Configur	Draft	A	
REQ-000000004	1.3			Configur	Draft	A	
REQ-000000005	2			Configur	Draft	A	
REQ-000000006	2.1	Type: Adult Use , Overall Length: 200 mm Colors: Black Blue White	Type: Children a Colors: Black, Blue, Whit Yellow Purple		Configur Draft	A	

Links - REQ-000000004

Requirements URLs Files Where use

Filename: issues.xlsx Action: Choose file...

# External Links- Items



http://demo.aras.com/- Requirement Document - RD-00001 Multi Color Pen - Windows Internet Explorer

File Edit Views Search Actions Reports Tools Help

Requirement Document Number: RD-00001 Rev: A Status: Draft

Title: Multi Color Pen

Managed By: Innovator Admin Owned By: Innovator Admin

Created By: Innovator Admin

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Requirements of "Multi Color Pen"

Item Nr	Chapter	Title/ Description	Classification	Category	State	Revision	Li
REQ-000000001	1	PRODUCT DESCRIPTION	Structure	Configuri	Draft	A	
REQ-000000002	1.1	Purpose		Configuri	Draft	A	
REQ-000000003	1.2			Configuri	Draft	A	
REQ-000000004	1.3			Configuri	Draft	A	
REQ-000000005	2	References	Structure	Configuri	Draft	A	
REQ-000000006	2.1	Reference Sheet					
		Type: Adult Use , Overall Length: 200 mm	Type: Children a				
		Colors:	Colors:				
		Black	Black, Blue, Whit				
		Blue	Yellow				
		White	Purple				

Links - REQ-000000004

Requirements URLs Files Where use

Item Nr Chapter Title Release Date

# Requirements Search



http://demo.aras.com/ - Aras Innovator - Windows Internet Explorer

**aras INNOVATOR** Wednesday, April 25, 2012 9:18 AM

File Edit View Search Actions Reports Tools Help

Simple Search Page Size: 50 Max Results: Current As Of:

Requirement Number	Title	State	Rev	Type	Requirement Document [...]	Chapter	Priority	Risk	Complexity
REQ-000000001	PRODUCT DESCRIPTION	Draft	A	Structure	<a href="#">RD-00001 Multi Color Pen</a>	1	High	Low	Low
REQ-000000002	Purpose	Draft	A	Text	<a href="#">RD-00001 Multi Color Pen</a>	1.1	Critical	High	High
REQ-000000003	System Boundaries	Draft	A	Text	<a href="#">RD-00001 Multi Color Pen</a>	1.2	Critical	High	High
REQ-000000004	System Functions	Draft	A	Text	<a href="#">RD-00001 Multi Color Pen</a>	1.3	Critical	High	High
REQ-000000005	References	Draft	A	Structure	<a href="#">RD-00001 Multi Color Pen</a>	2	Critical	High	High
REQ-000000006	Reference Sheet	Draft	A	Text	<a href="#">RD-00001 Multi Color Pen</a>	2.1	Critical	High	High

Ready Innovator Admin demo.aras.c RM Items 1-6 of 6. Page 1 of 1 **aras INNOVATOR** Messages: 0

# Aras Requirements Management



- ▶ **Unified PLM data model**
- ▶ **Versionable Requirements Documents**
- ▶ **Capture requirements as formatted text, tables**
- ▶ **Link Requirements to other Requirement Documents**
- ▶ **Link Requirements to Files, URL's, Parts**
- ▶ **Extended content UI for ease of entering and editing requirements**
- ▶ **Export Requirements Documents to PDF**



# Aras Requirements Management



- ▶ Updated enhanced authoring UI/Dojo
- ▶ Text with inline vault-based images
- ▶ Text with inline item property links
- ▶ Trace Matrix Capabilities
- ▶ Import/Export from Word
- ▶ Requirement Document Change Order/Process
- ▶ Requirements as affected items
- ▶ Requirement link to any Itemtype

# Aras Requirements Management



- ▶ **Drag-and-Drop trace linking**
- ▶ **License Manager update enabling trial version**
- ▶ **Requirement Re-use/Derivation**
- ▶ **Customer/Supplier portal**