



IBM Rational Software Conference 2009  
As Real as It Gets!



## Introducing IBM® Rational® Publishing Engine™ for Document Generation

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**Rational.** software

# Agenda

- The Documentation Need
- The Documentation Problem
- Rational Publish Engine
- Demos

# Why do we still need documents?



Ad-hoc Needs



Internal Project Deliverables



Customer Deliverables



Remote Use



Contractual Agreements

# What documentation challenges are you facing?

- Wasted engineering effort
  - ▶ Creating documents in the correct format at the correct time
  - ▶ Creating documents from disparate applications
- Contamination of engineering data with formatting information
- Up-to-date Documents
  - ▶ Document contents are out of date before the document is completed



*“Studies by AIIM and Ford Motor Company estimate that knowledge workers spend 15-25% of their time on non-productive information-related activities.”*

*–IDC whitepaper: High Cost of Not Finding Information*

## Luca – 3 23,38

Gesù era figlio di Giuseppe, figlio di Eli, figlio di Mattàt, figlio di Levi, figlio di Melchi, figlio di Innài, figlio di Giuseppe, figlio di Mattatìa, figlio di Amos, figlio di Naum, figlio di Èsli, figlio di Naggài, figlio di Maat, figlio di Mattatìa, figlio di Semèin, figlio di Iosek, figlio di Ioda, figlio di Ioanan, figlio di Resa, figlio di Zorobabèle, figlio di Salatìel, figlio di Neri, figlio di Melchi, figlio di Addi, figlio di Cosam, figlio di Elmadàm, figlio di Simeone, figlio di Aram, figlio di Giuda, figlio di Giuseppe, figlio di Ionam, figlio di Eliacim, figlio di Melèa, figlio di Menna, figlio di Mattatà, figlio di Natàm, figlio di Davide, figlio di Iesse, figlio di Obed, figlio di Booz, figlio di Sala, figlio di Naàsson, figlio di Aminadàb, figlio di Fares

figlio di Giuda, figlio di Giacobbe, figlio di Isacco, figlio di Abramo, figlio di Tare, figlio di Nacor, figlio di Seruk, figlio di Ragau, figlio di Falek, figlio di Eber, figlio di Sala, figlio di Cainam, figlio di Arfàcsad, figlio di Sem, figlio di Noè, figlio di Lamech, figlio di Matusalemme, figlio di Enoch, figlio di Iaret, figlio di Malleèl, figlio di Cainam, figlio di Enos, figlio di Set, figlio di Adamo, figlio di Dio



# Luca – 3 23,38 – Codice 109 (XIV secolo)

Mattàt, Levi

Gesù era figlio di Giuseppe, figlio di Eli,  
figlio di Giuda, figlio di Giacobbe, figlio  
di Mattàt, figlio di Levi, figlio di Isacco,  
figlio di Abramo, figlio di Melchi, figlio  
di Innài, figlio di Giuseppe, figlio di  
Ragau, figlio di Falek, figlio di di  
Mattatìa, figlio di Amos, figlio di  
Lamech, figlio di Naum, figlio di Esli,  
figlio Eber, figlio di Sala, figlio di  
Cainam, figlio di Naggài, figlio di  
Maat, figlio di Mattatìa, figlio di  
Semèin, figlio di Iosek, figlio di Ioda,  
figlio di Arfàcsad, figlio di Sem, figlio di  
figlio di Ioanan, figlio di Matusalemme,  
figlio di Enoch, figlio di di Resa, figlio  
di Zorobabèle, figlio di Salatìel, figlio di  
Neri, figlio di Melchi, figlio di Addi,  
figlio di Iaret, figlio di Malleèl, figlio di  
Cainam, Cosam, figlio di Elmadàm,  
figlio di Simeone, figlio di Adamo, figlio  
di Dio figlio di Aram,

figlio di Giuda, figlio di Giuseppe, figlio di  
Ionam, figlio di Eliacim, figlio di  
Melèa, figlio di Menna, figlio di  
Mattatà, figlio di Natàm, figlio di  
Davide, figlio di Iesse, figlio di Obed,  
figlio di Booz, figlio di Sala, figlio di  
Maàsson, figlio di Aminadàb, figlio di  
Fares



Melchi, Innài, Giuseppe

## Luca – 3 23,38 – Codice 109

Gesù era figlio di Giuseppe, figlio di Eli,  
 figlio di Mattàt, figlio di Levi, figlio di  
 Melchi, figlio di Irmà, figlio di  
 Giuseppe, figlio di Mattatìa, figlio di  
 Amos, figlio di Naum, figlio di Esli,  
 figlio di Naggai, figlio di Maat, figlio di  
 Mattatìa, figlio di Semèin, figlio di  
 Iosek, figlio di Ioda, figlio di Ioanàn,  
 figlio di Rësa, figlio di Zorobabèle,  
 figlio di Salatiel, figlio di Neri, figlio di  
 Melchi, figlio di Eddi, figlio di Cosam,  
 figlio di Elmadàm, figlio di Simeone,  
 figlio di Aram, figlio di Giuda, figlio di  
 Giuseppe, figlio di Ionam, figlio di  
 Eliacim, figlio di Melèa, figlio di  
 Menna, figlio di Mattatà, figlio di  
 Natàm, figlio di Davide, figlio di Iesse,  
 figlio di Obed, figlio di Booz, figlio di  
 Sala, figlio di Naàsson, figlio di  
 Aminadàb, figlio di Fares

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 di Isacco, figlio di Abramo, figlio di  
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 figlio di Ragau, figlio di Falek, figlio di  
 Eber, figlio di Sala, figlio di Cainam,  
 figlio di Arracsad, figlio di Sem, figlio di  
 Noè, figlio di Lamech, figlio di  
 Matusalemme, figlio di Enoch, figlio di  
 Iaret, figlio di Malleèl, figlio di Cainam,  
 figlio di Enos, figlio di Set, figlio di  
 Adamo, figlio di Dio

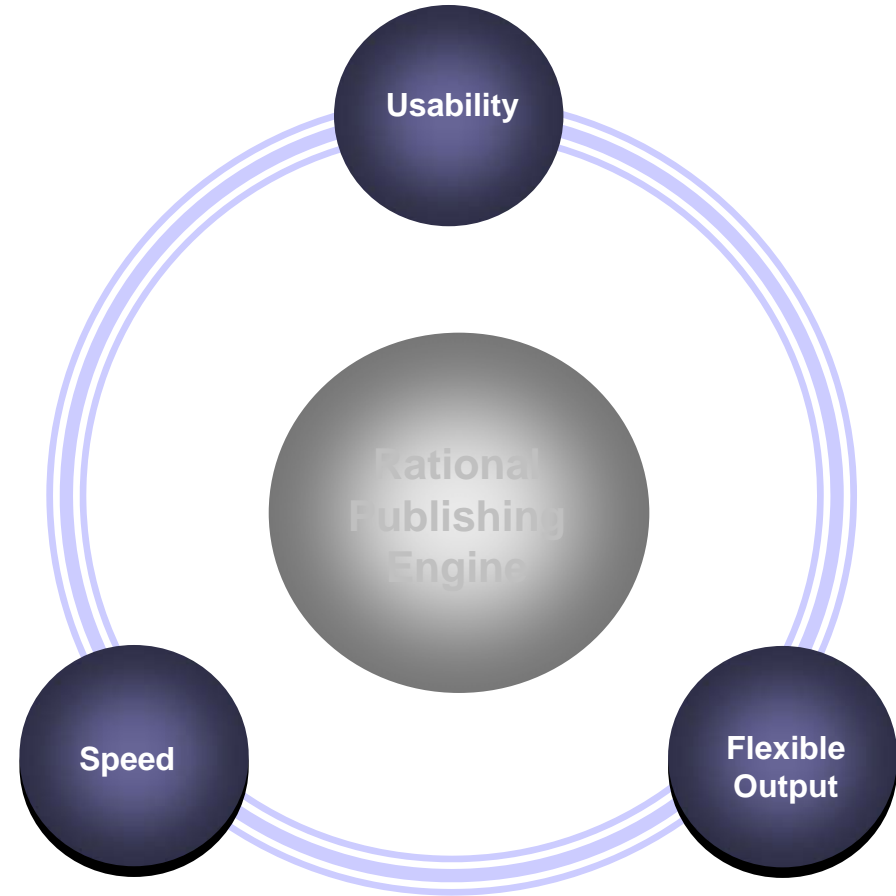
**Secondo il codice 109:**

**Fares è il padre della razza Umana**

**Dio è figlio di Aram!**

# Rational Publishing Engine Automates Your Document Creation Process

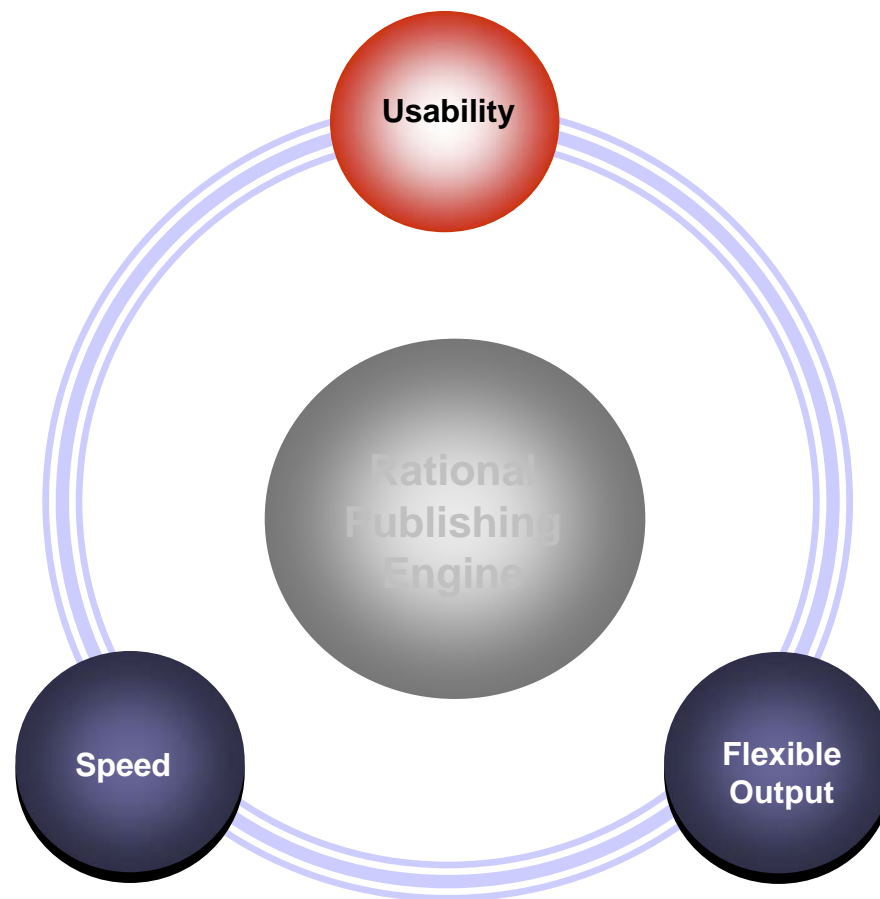
- Document Creation Made Simple
- High Quality, Elegant Documents
- High Performance Document Generation





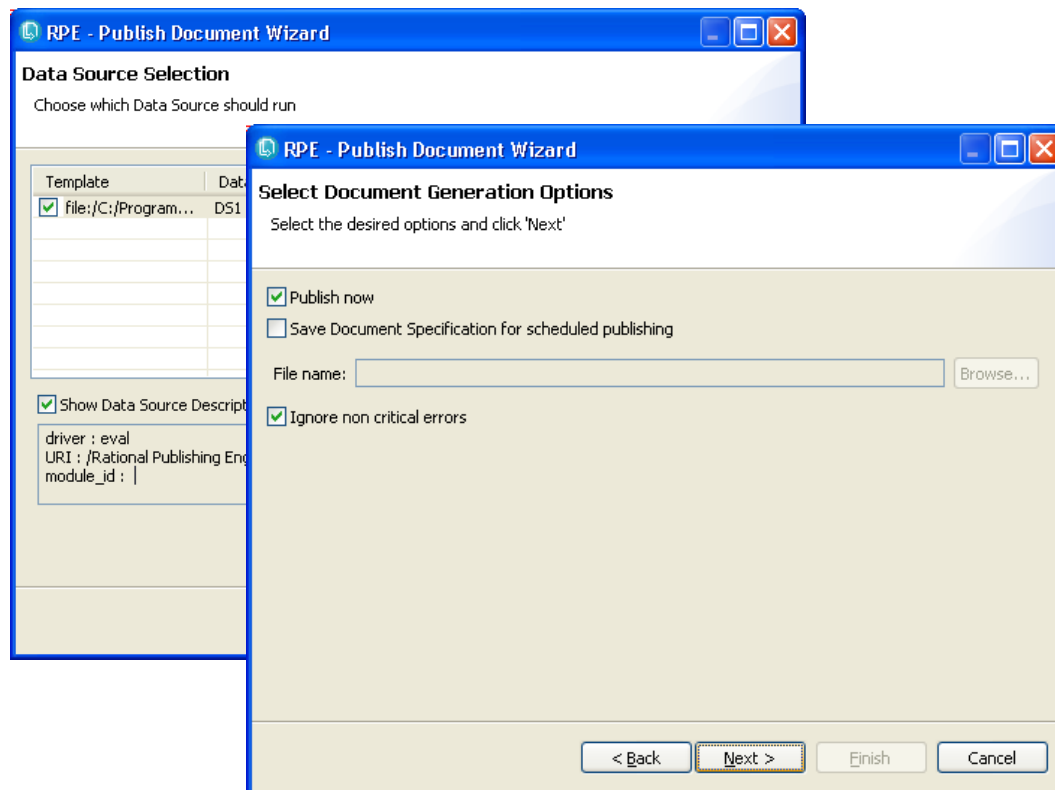
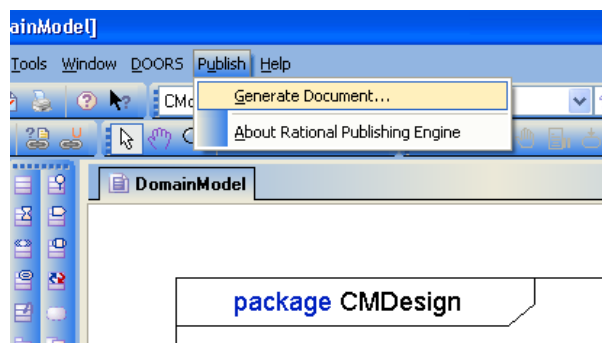
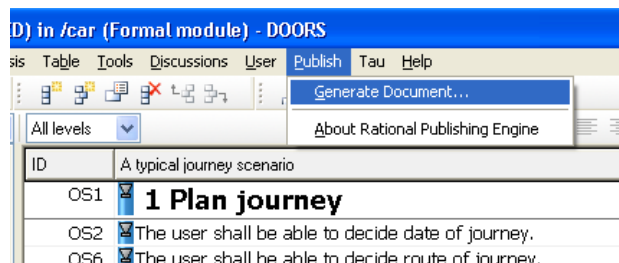
# Rational Publishing Engine Automates Your Document Creation Process

- Document Creation Made Simple
- High Quality, Elegant Documents
- High Performance Document Generation



# Rational Publishing Engine Document Creation Made Simple

- Create documents from within and/or extract data from Rational DOORS and Rational Tau, ClearCase, ClearQuest, Quality Manager, Test Manager, Requisite Pro, XML data sources...)



# Rational Publishing Engine Document Creation Made Simple

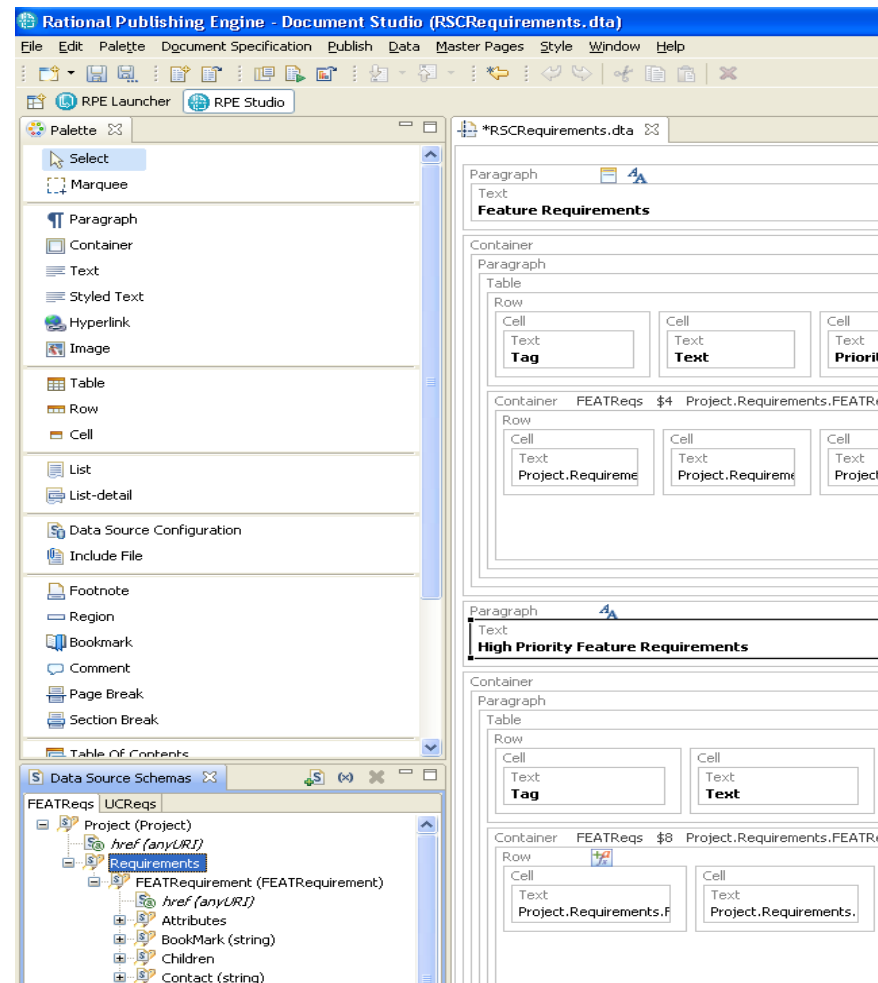
- Create documents using the easy and intuitive Rational Publishing Engine Launcher

The screenshot displays the Rational Publishing Engine interface with three overlapping windows:

- Document Specification:** Shows a tree view of the document structure. The 'Output' folder contains targets for PDF, HTML, Word, and XsFo. The 'Variables' folder lists variables like Author, Status, Distribution, and Date. The 'Properties' window at the bottom shows details for the 'CQDefects' data source.
- Publishing Document:** A progress dialog box with the text "Please wait while your document is being generated" and a progress bar. It reports "Processed 400 input elements." and includes a "Pause" button and checkboxes for "Show/Hide" and "Open results page". The elapsed time is 00:00:23.
- Rational Publishing Engine - Results:** A window titled "IBM Rational Publishing Engine" that lists the generated output files:
  - C:\DOCUME~1\Spurlos\LOCALS~1\... \PDF\_1241681397613.pdf
  - C:\DOCUME~1\Spurlos\LOCALS~1\... \Html\_1241681397723.htm
  - C:\DOCUME~1\Spurlos\LOCALS~1\... \Word\_1241681397832.doc
  - C:\DOCUME~1\Spurlos\LOCALS~1\... \XsFo\_1241681397941.fo

# Rational Publishing Engine Document Creation Made Simple

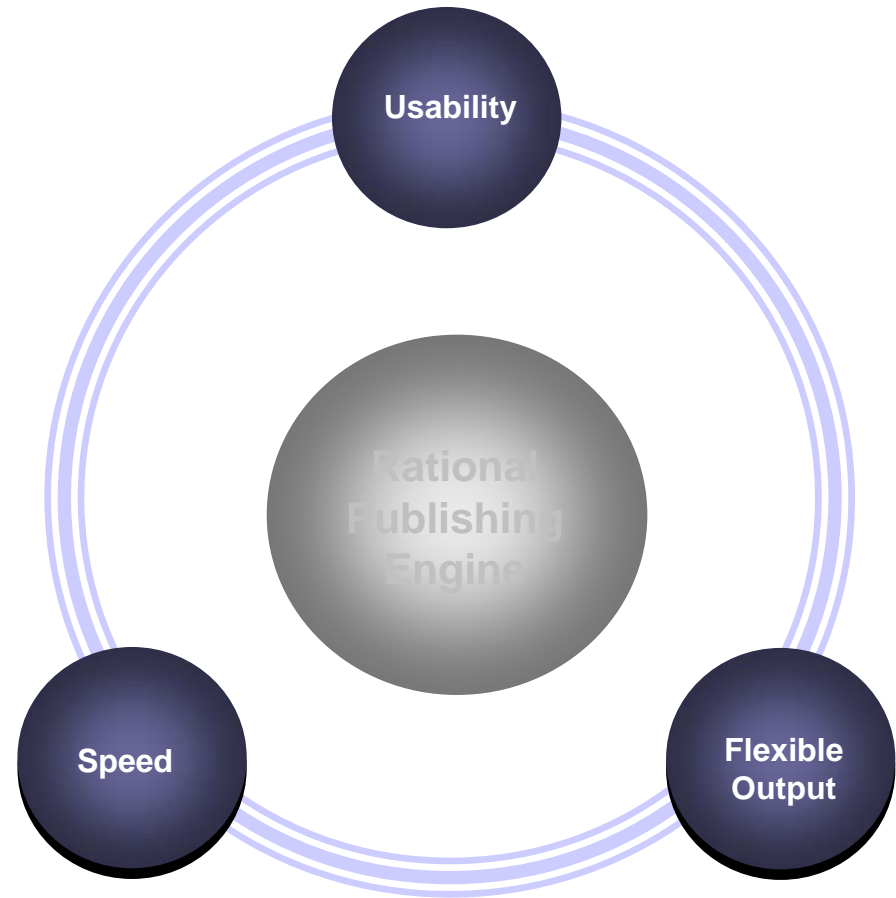
- Build, share and reuse templates
- Use out-of-the-box templates and integrated preview capability for quick ROI
- Leverage templates for industry standards
- Create and modify templates using intuitive editing environment
  - Drag and drop capability
  - Powerful scripting language support (Javascript) with expression editor for ease of use



# DEMO

# Rational Publishing Engine Automates Your Document Creation Process

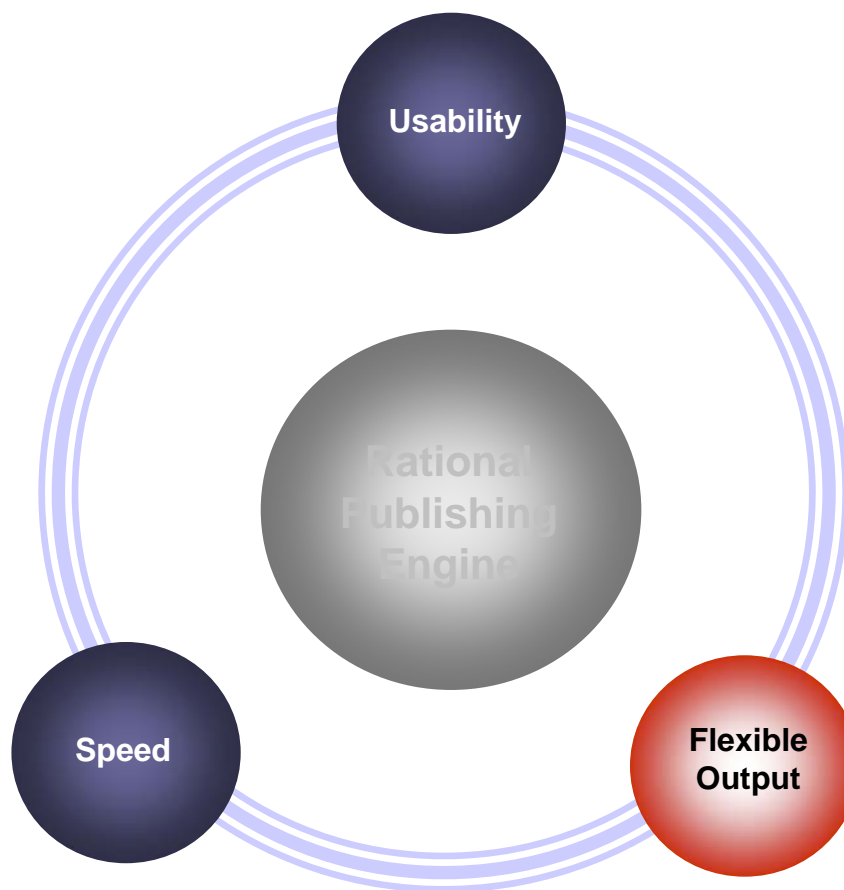
- Document Creation Made Simple
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# Rational Publishing Engine Automates Your Document Creation Process

- Documentation Creation Made Simple
- High Quality, Elegant Documents
- High Performance Documentation Generation



# Rational Publishing Engine

## High Quality, Elegant Documents

- Create documents in various formats (MS Word, HTML, PDF, XSL-FO...)
- Extract data from a single source or multiple sources

The image shows two windows side-by-side. The left window is Adobe Reader displaying a PDF document titled 'test.pdf'. The right window is Microsoft Internet Explorer displaying an HTML document titled 'test.html'.

**Adobe Reader (test.pdf):** The document contains a table of requirements. The table has columns for ID, Description, and a link. The requirements listed are:

172	ITF products shall be valid in OpenOffice	<a href="#">link</a>
189	Pages to cross platform formats should appear identically on all platforms	<a href="#">link</a>
202	Upon opening the Document specification (Design class), the user will be presented with a welcome screen. The welcome screen will be replaced by the first opening of a template.	<a href="#">link</a>
204	The welcome screen will be consistent with corporate guidelines on welcome screens.	<a href="#">link</a>
205	The welcome screen shall accommodate the display of graphics for each change as a company logo.	<a href="#">link</a>
206	The welcome screen shall accommodate the display of multiple images of text which may accommodate hyperlinks to other sites or locations.	<a href="#">link</a>
250	Upon first display, the Report Designer Client layout shall configure itself as it was when the user last closed it.	<a href="#">link</a>

Below the table is a section titled 'DOCB3 Data Summary' with a table of requirements:

121	A single template shall be valid for document specification generation on any output format.	<a href="#">link</a>
51	The user shall be able to create templates via a graphical point and click environment.	<a href="#">link</a>
50	The user shall NOT be required to write any kind of code to create templates.	<a href="#">link</a>
52	The user shall NOT be required to use any kind of field codes used in template class language descriptions shall be used by the user.	<a href="#">link</a>
53	Templates shall be reusable.	<a href="#">link</a>
54	Templates shall be inheritable.	<a href="#">link</a>
186	Templates shall be copyable.	<a href="#">link</a>
16	Admin shall provide a Template Overview screen that takes the user through a step by step process of creating a new template.	<a href="#">link</a>
475	The wizard shall allow a new template to be created from an existing template.	<a href="#">link</a>
476	The wizard shall allow a new template to be created from scratch.	<a href="#">link</a>
477	The wizard shall allow the same to select.	<a href="#">link</a>

**Microsoft Internet Explorer (test.html):** The document displays a list of requirements with corresponding formatting applied to the text:

- 253 The user shall be able to specify the mode of formatting for the generated document specification. The formatting options are detailed below: [link](#)
- 254 Discard all formatting information from the source and apply formatting information from the template/stylesheet [link](#)
- 255 Apply all formatting information from the source and discard all formatting information from the template/stylesheet [link](#)

Below the list, the text reads: "Apply all formatting information from the template/stylesheet, but override formatting with predefined subset of style information from the source"

Eg for DOORS:

- **Bold**
- *Italic*
- Underline
- ~~Strikethrough~~
- Text <sup>Superscript</sup>
- Text
- Bullets
- List Item

256 [link](#)

- Indentation with ~~some other~~ formatting

# Rational Publishing Engine

## High Quality, Elegant Documents

- Define your own document styles
  - ▶ Richly formatted text
  - ▶ OLEs
  - ▶ Tables of Contents
  - ▶ Figures
  - ▶ Captions
  - ▶ User defined styles
  - ▶ Hyperlinks – Internal or external
  - ▶ Conditional formatting
  - ▶ ...

### PR9

*GUID* {C136435B-28AA-4D3B-A0F4-2B1343D15D6A}

*HREF* [link](#)

*Loc.*

<i>Unique ID</i>	7
<i>Bookmark</i>	REQUJIPGS
<i>Doc pos</i>	4194

#### Location table 9

*Desc*  
*Info*

The QBS system shall provide the following reports:

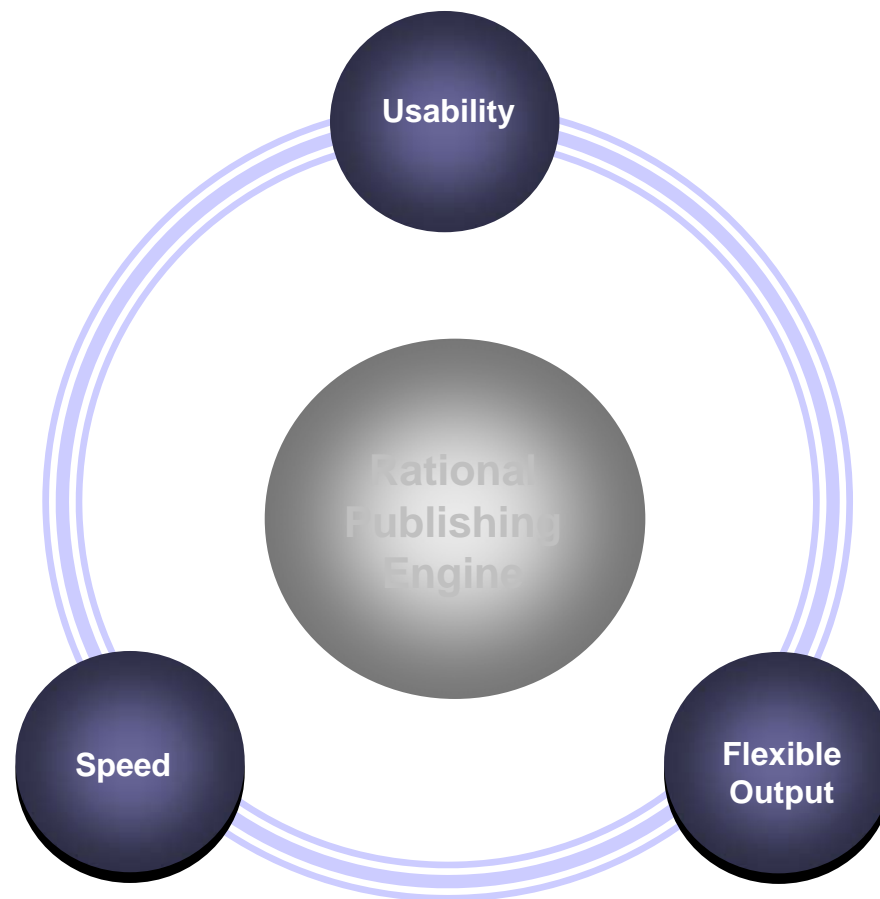
<i>Priority</i>	<i>Difficulty</i>	<i>Stability</i>	<i>Status</i>
High	High	Medium	Proposed



# DEMO

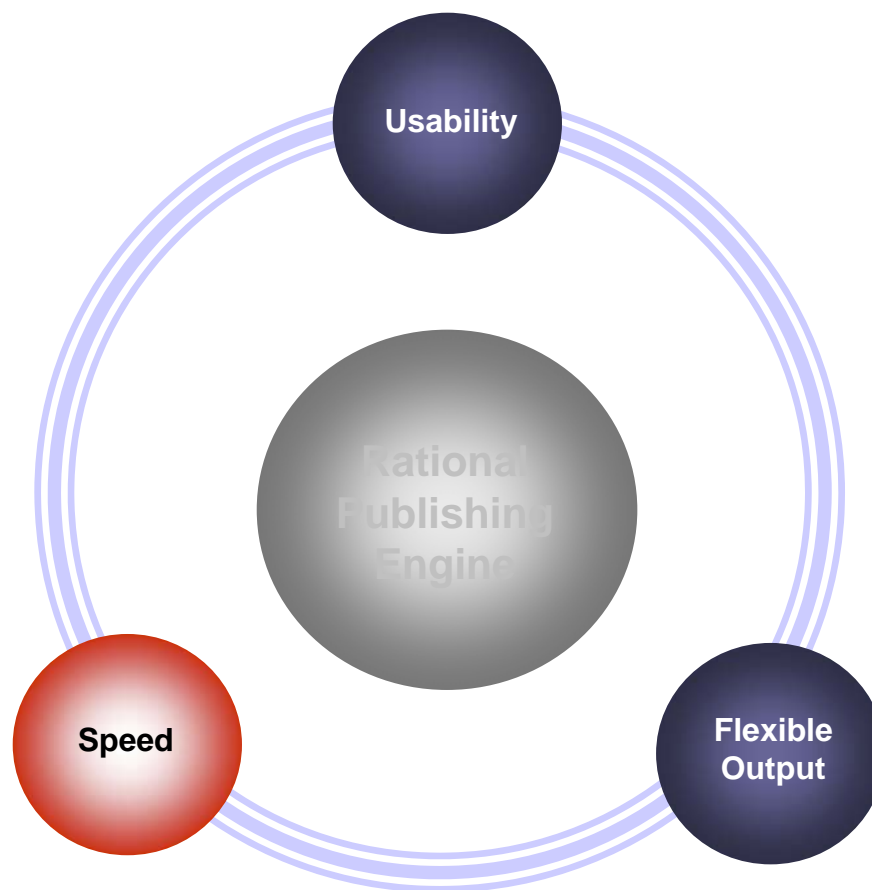
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# Rational Publishing Engine

## High Performance Document Generation

- Optimized for
  - ▶ High Performance
  - ▶ Low Resource Use
  - ▶ Minimal System Invasiveness
- Quick one-click document generation to capture last minute changes to data held in source applications



# DEMO

# Rational Publishing Engine Benefits

- **Increase productivity** by allowing engineers to focus on engineering, NOT formatting concerns
- **Enhance documentation quality and consistency** by sharing and reusing templates
- **Gain quick ROI** with out of the box templates and a user community to share templates
- **Easily implement your own document standards** with intuitive Template Editing environment with drag and drop capability
- **Avoid wasted engineering time** waiting for documents to be generated with an easy to use, high performance and low resource use solution

# Whether You Are Building:

*Business-Critical Applications*



*Mission-Critical Systems*



*New Products*



– Rational Publishing Engine –  
The Right Document at the Right Time

Thank You

## How to learn more

### Where to get more info:

- Rational Publishing Engine Website
  - ▶ <http://www.telelogic.com/products/publishingengine/index.cfm>
  - ▶ <http://www-01.ibm.com/software/rational/solutions/systems/>
- Rational Publishing Engine Forum
  - ▶ <http://www.ibm.com/developerworks/forums/forum.jspa?forumID=1512>
- Contact Local Sales Representative
  - ▶ [www.ibm.com](http://www.ibm.com)

# Questions



# Thank You

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