

ART is an IBM® DOORS® accelerator product from  
River North Solutions

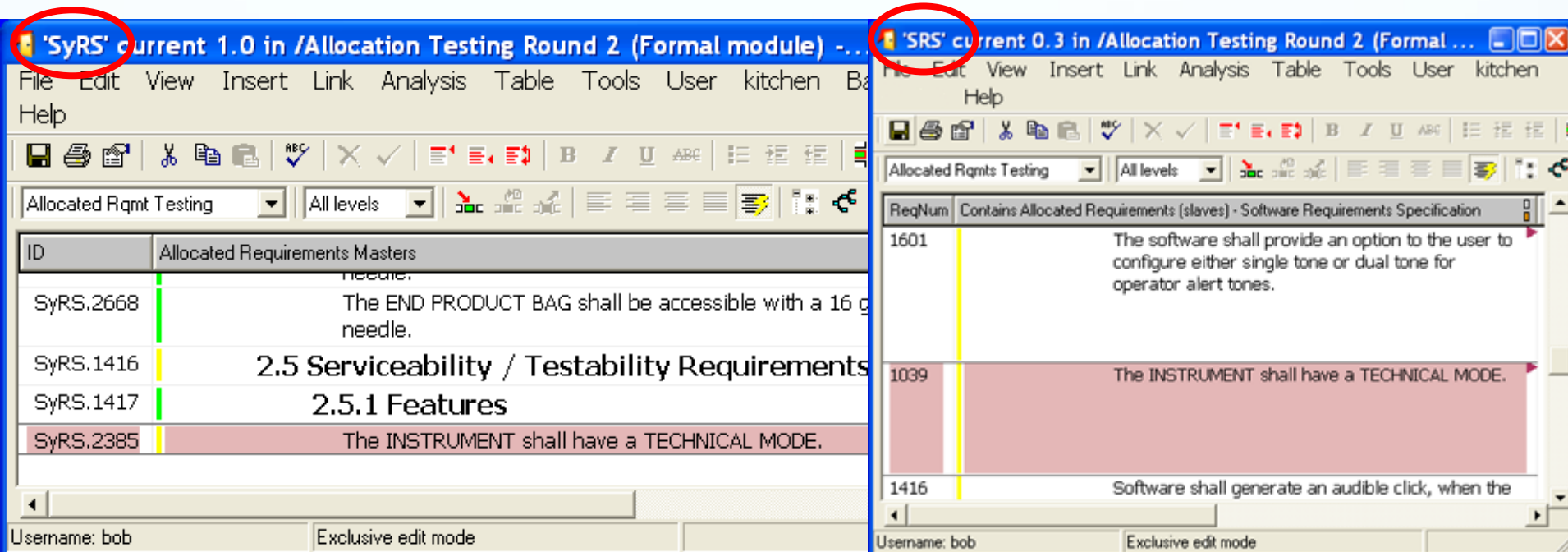


# ***Allocated Requirements Tool™*** **(ART) for DOORS** v2.2

ART automates synchronization of reused requirements

## 'Allocated Requirements' Definition

- Same requirement used in two or more places
  - E.g. Software requirement same as System requirement
- Want one instance of requirement in database (master), displayed in more than one location (slaves)



**'SyRS' current 1.0 in /Allocation Testing Round 2 (Formal module) - ...**

File Edit View Insert Link Analysis Table Tools User kitchen Ba Help

Allocated Rqmt Testing All levels

ID	Allocated Requirements Masters
SyRS.2668	The END PRODUCT BAG shall be accessible with a 16 g needle.
SyRS.1416	2.5 Serviceability / Testability Requirements
SyRS.1417	2.5.1 Features
SyRS.2385	The INSTRUMENT shall have a TECHNICAL MODE.

Username: bob Exclusive edit mode

**'SRS' current 0.3 in /Allocation Testing Round 2 (Formal ...**

File Edit View Insert Link Analysis Table Tools User kitchen Help

Allocated Rqmts Testing All levels

ReqNum	Contains Allocated Requirements (slaves) - Software Requirements Specification
1601	The software shall provide an option to the user to configure either single tone or dual tone for operator alert tones.
1039	The INSTRUMENT shall have a TECHNICAL MODE.
1416	Software shall generate an audible click, when the

Username: bob Exclusive edit mode

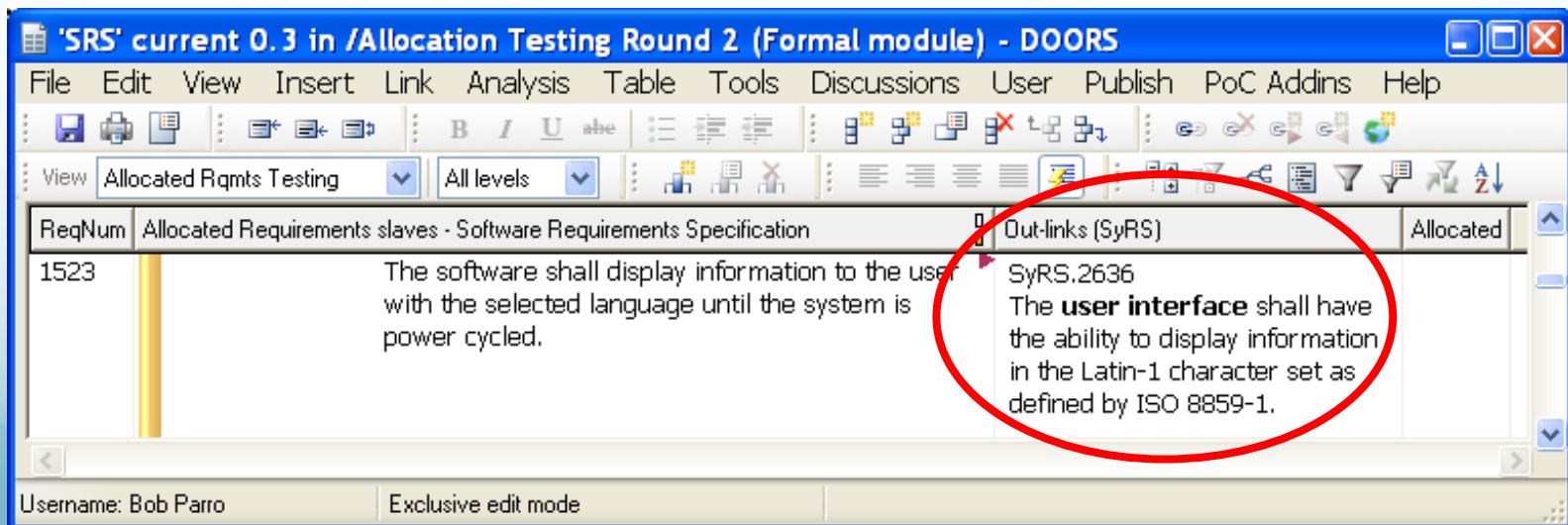
## *Allocated Requirements Tool™ (ART) Features*

- Allocates one ‘master’ requirement to one or more ‘slave’ locations – respects rich text & OLE objects
- Updates slave requirement(s) automatically
  - When module opens
  - When ‘Allocated’ attribute transitions to TRUE
- Prompts user to confirm overwriting of existing requirement text when creating Allocated Requirement, if applicable
- Prohibits modifying Allocated Requirements (slaves)
- Allows manual updating of all Allocated Requirements within a module with a ‘single’ click

# Accelerate Requirements Management

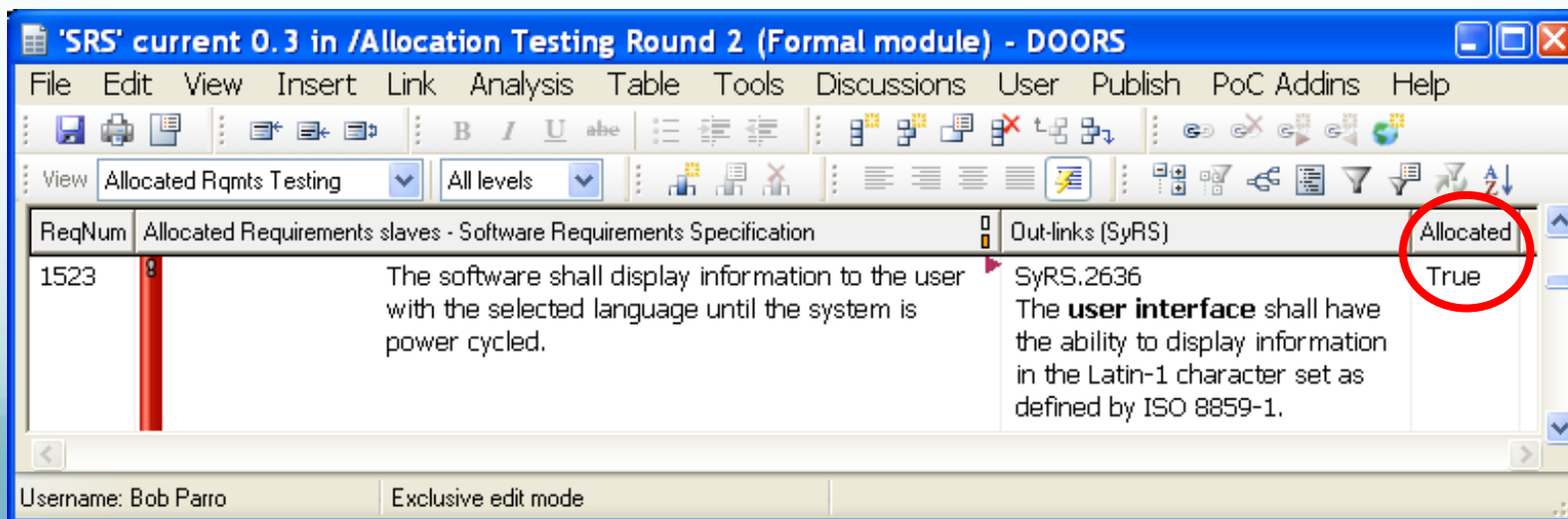
## ART Operation

- Example starting state
  - Existing requirement with outgoing link
  - Want to reuse different requirement here
  - Link points to requirement user desires to reuse



# ART Operation

- When 'Allocated' is set to True on object with outgoing link
- Designates current object as a duplicate or slave object to master object pointed to by outgoing link



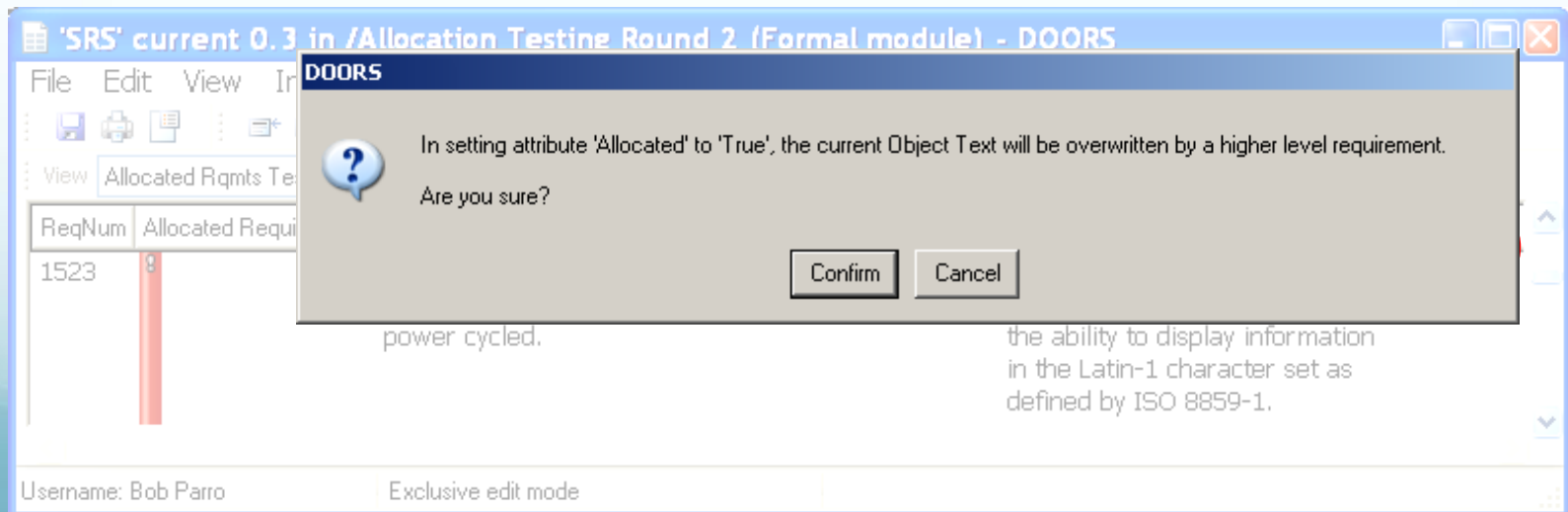
The screenshot shows the DOORS software interface with the title bar "'SRS' current 0.3 in /Allocation Testing Round 2 (Formal module) - DOORS". The menu bar includes File, Edit, View, Insert, Link, Analysis, Table, Tools, Discussions, User, Publish, PoC Addins, and Help. The toolbar contains various icons for file operations, editing, and linking. The main window displays a table with the following data:

ReqNum	Allocated Requirements slaves - Software Requirements Specification	Out-links (SyRS)	Allocated
1523	The software shall display information to the user with the selected language until the system is power cycled.	SyRS.2636 The <b>user interface</b> shall have the ability to display information in the Latin-1 character set as defined by ISO 8859-1.	True

The 'Allocated' column for the requirement 1523 is circled in red, highlighting the value 'True'. The status bar at the bottom shows 'Username: Bob Parro' and 'Exclusive edit mode'.

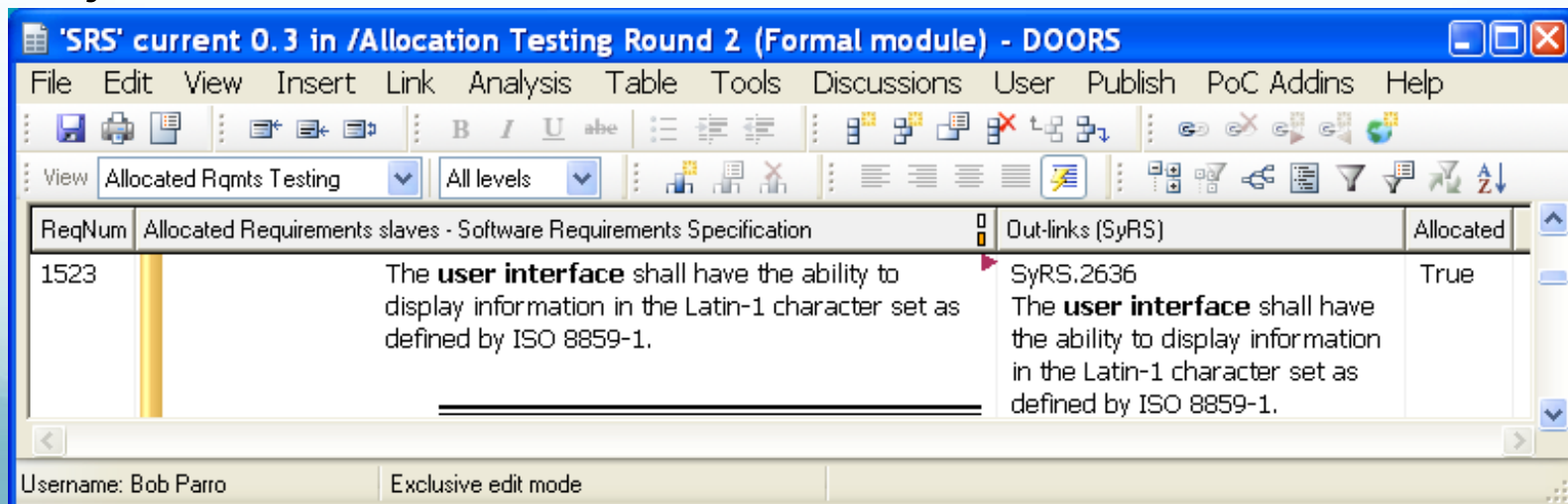
# ART Operation

- When 'Allocated' is set to True on object with outgoing link
- Designates current object as a duplicate or slave object to master object pointed to by outgoing link
- ART requests confirmation since current object text is about to be replaced



# ART Operation

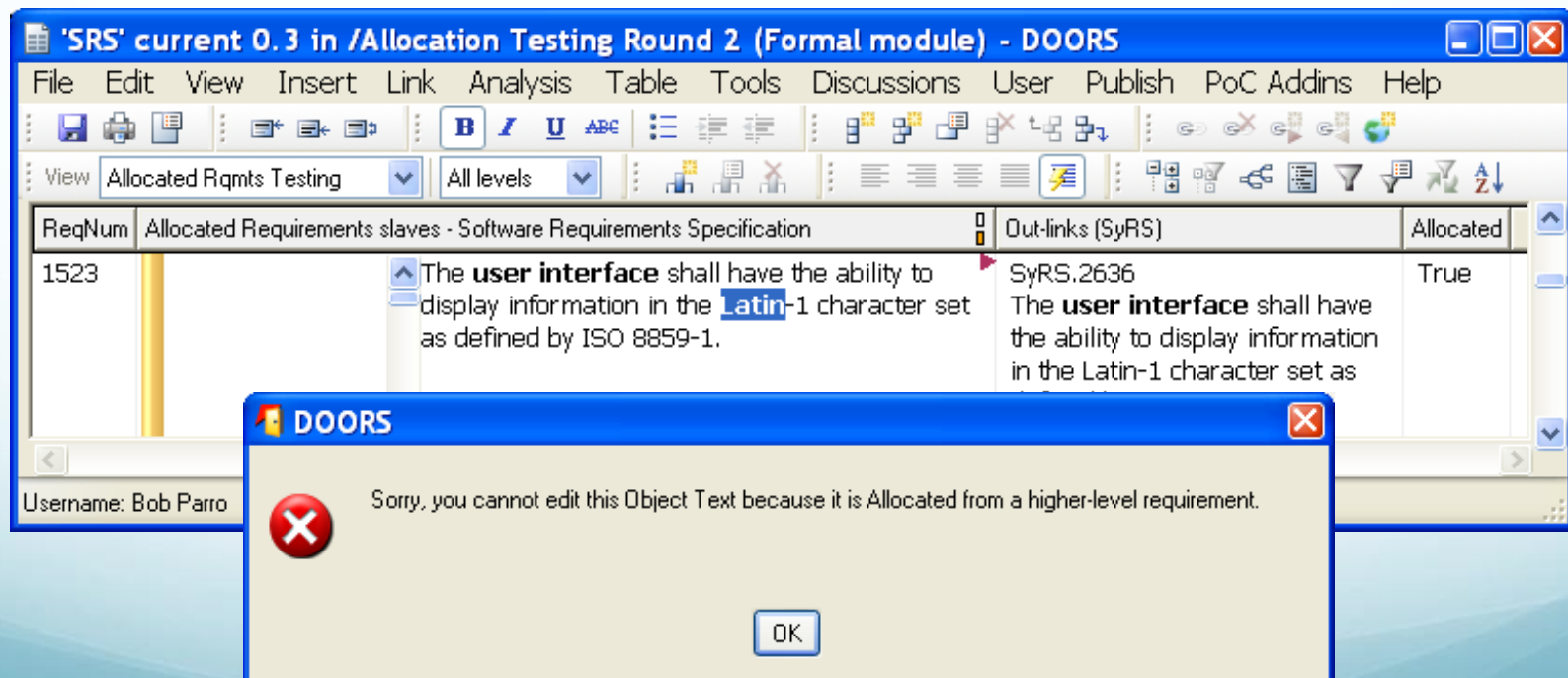
- When 'Allocated' is set to True on object with outgoing link
- Designates current object as a duplicate or slave object to master object pointed to by outgoing link
- ART requests confirmation since current object text is about to be replaced
- Object text replaced with object text of outgoing-linked object





## ART Operation

- If try to modify slave Allocated Requirement (in this case, turn selection bold)
  - Dialog displays message explaining edit was denied
  - To modify requirement must transition Allocated attribute away from 'True'

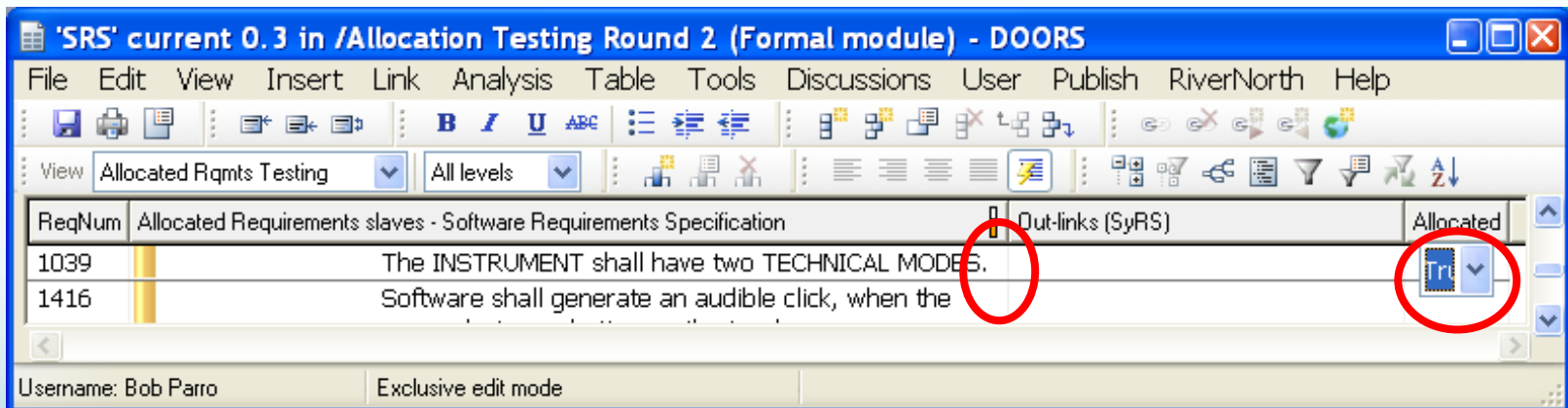




# Accelerate Requirements Management

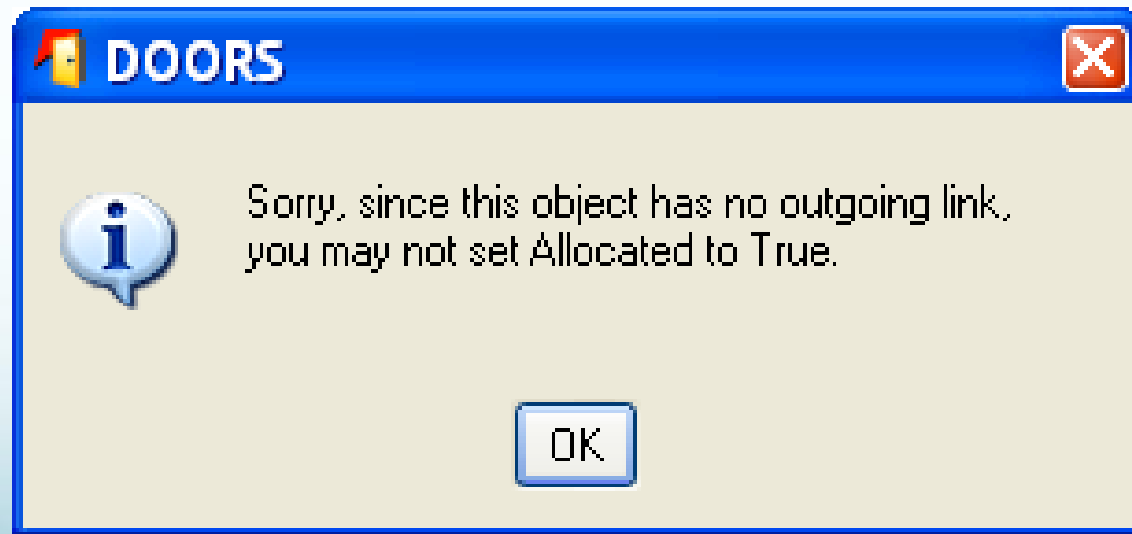
## ART Operation

- If have object with object text, but no out-link, and try to turn into Allocated Requirement (i.e. set “Allocated” = True)



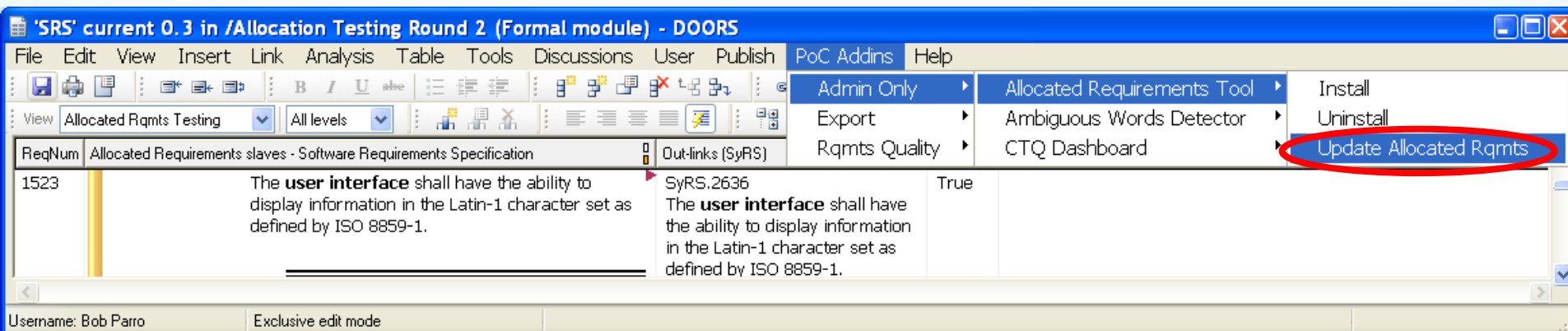
# ART Operation

- If have object with object text, but no out-link, and try to turn into Allocated Requirement (i.e. set “Allocated” = True)
  - Get message indicating cannot set Allocated to True – no out-link

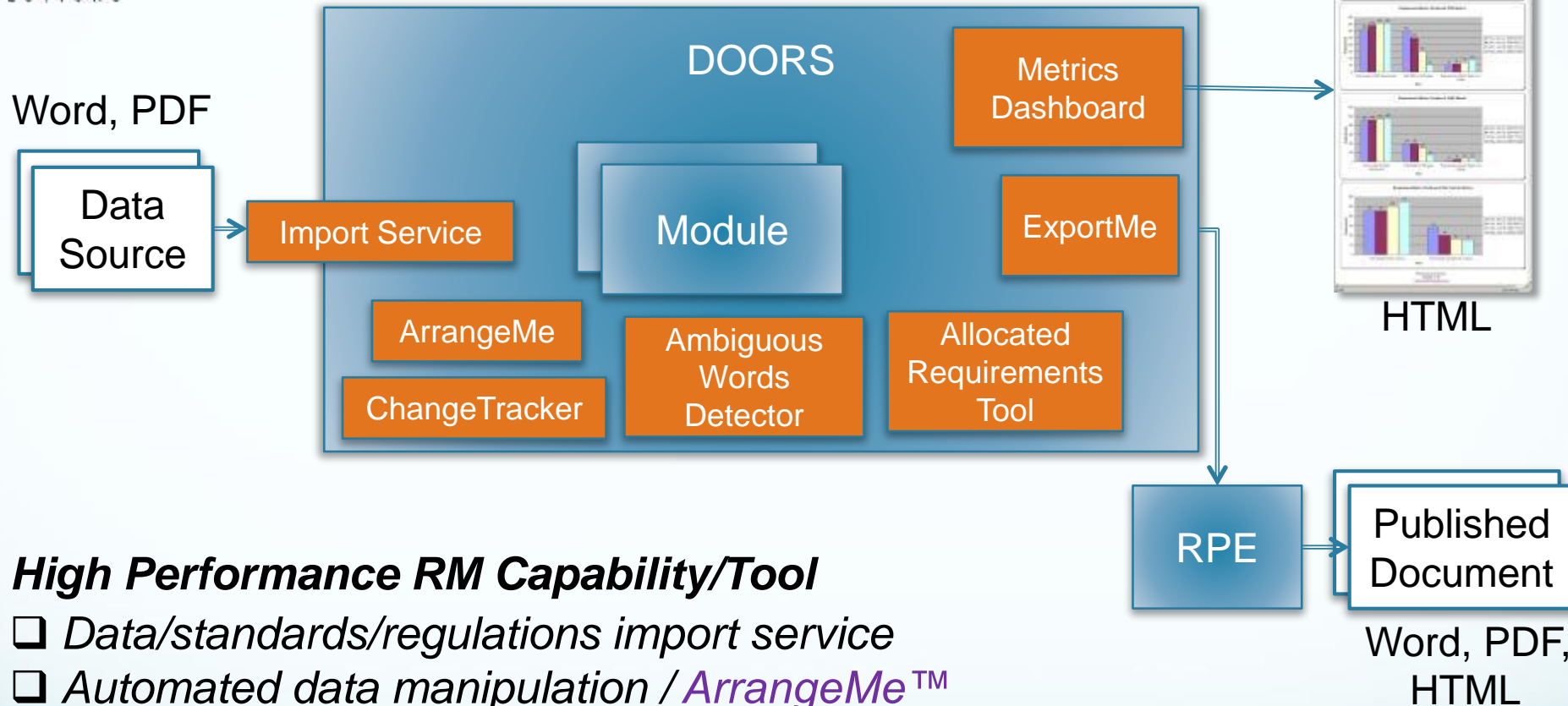


## ART Operation

- “Update Allocated Rqmts” compares object text at both ends of link (for all Allocated Requirements in module)
  - If slave different than master, slave is overwritten, affecting change history
- When are slave Allocated Requirements updated?
  1. Upon slave module open, all Allocated Requirements are updated
  2. Upon “Allocated” attribute transition to “True”
  3. Manual – Update Allocated Rqmts menu selection – all objects with “Allocated” = True



# River North Accelerator Tools for Requirements Management & Document Publishing



## High Performance RM Capability/Tool

- ☐ Data/standards/regulations import service
- ☐ Automated data manipulation / ArrangeMe™
- ☐ Boost requirement quality, reduce churn / Ambiguous Words Detector™
- ☐ Automated, simplified, consistent document publishing / ExportMe™
- ☐ Monitor leading indicator trends / Metrics Dashboard™
- ☐ Display revision markup using rich text / ChangeTracker™
- ☐ Reuse requirements / Allocated Requirements Tool™

# Accelerate Requirements Management

## River North Profile – Industries/Clients\*, Products

- Aerospace & Defense
  - Aerojet Rocketdyne
  - Boeing
  - Collins Aerospace
  - Crane Aerospace
  - LMCO-NASA
  - NASA JPL
  - Northrop Grumman
- Energy
  - NuScale Power
  - Sandia National Labs
  - Westinghouse Nuclear
- Automotive
  - Ford Motor Company
  - Honda Motor Company
  - Johnson Controls
- Medical Device
  - Ameda
  - Ascensia Diabetes Care
  - Baxter Healthcare
  - Bayer Healthcare
  - Eli Lilly
  - Hospira
  - J&J Vision
  - Roche Diagnostics
  - St. Jude Medical (Abbott)
- Semiconductor
  - NXP Semiconductors
- Transportation
  - Ansaldo STS
  - Bombardier Transportation
  - GE Transportation
- Telecommunications
  - Comcast
  - Motorola Solutions
- Industrial
  - Chamberlain
  - HP Enterprise Services

### DOORS Classic Accelerator Products from River North

- *Ambiguous Words Detector™ (AWD)* – boosts requirement quality by automatically detecting ambiguous words in DOORS
- *ArrangeMe™* – automated DOORS data manipulation/movement
- *Requirement Metrics Dashboard™ (RMD)* – automated metrics production for DOORS
- *ChangeTracker™* – revision markup displayed using rich text in DOORS
- *ExportMe™* – document publishing automation taken to a new level in DOORS
- *Allocated Requirements Tool™ (ART)* – facilitates requirement reuse in DOORS

### Contact Information

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\* Partial List



# Accelerate Requirements Management

## For More Information...

- *ART* can be customized to suit your organization's needs
- Contact Bob Parro at [bparro@riversolutions.com](mailto:bparro@riversolutions.com)