

A Comparison of Three Tools Built to Support the Needs of Business Analysts

Detailed Evaluation Criteria

We identified five important categories that a business analysis tool needs to support. We then organized these categories into 11 subcategories. Within these subcategories, we identified 95 specific criteria and ranked each tool against each criterion, assigning scores of 10 for full support, 5 for partial support and 1 for little or no support. The results are represented in a detailed table below.

If nothing else, when you're looking for a tool to support your business analysts, you can use this detailed table to ask questions of the vendors you're considering and to help rank what they will provide.

Categories and sub-categories included:

1. Requirements Definition
 - a. Support for Diagrams
 - b. Support for Requirements Definition
 - c. Support for User Interface Mockups
2. Requirements Management
3. Requirements Collaboration and Review
 - a. Support for Review and Discussions
 - b. Support for Simulation
4. Usability
 - a. General Usability
 - b. Support for Documentation
 - c. User and Tool Administration
 - d. Test Generation
5. Integration with Quality Assurance Tools

Figure#1: Scores by Sub-Category Evaluation Criteria

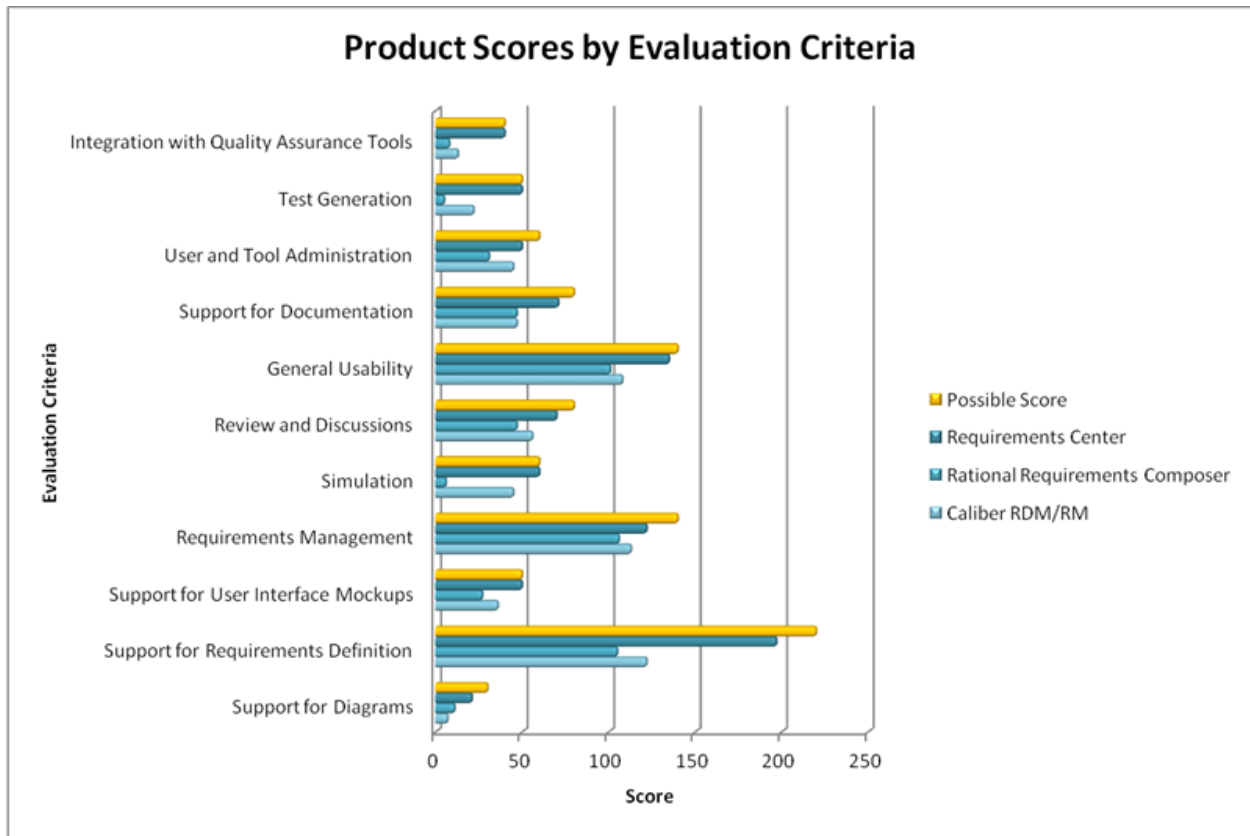



































Figure #2: Support for Sub-Categories by Percentage

Category	Area	Enterprise Requirements Definition and Management Solutions		
		Blueprint Requirements Center	IBM Requirements Composer	Microfocus Caliber RDM/RM
Requirement Definition	*Support for Diagrams			
	*Support for Requirements Definition			
	*Support for User Interface Mockups			
Requirements Management				
Requirements Collaboration and Review	*Simulation			
	*Review and Discussions			
Usability	*General			
	*Support for Documentation			
	*User and Tool Administration			
	*Test Generation			
Integration	*Integration with Quality Assurance Tools			






-  0%-20% Compliant
-  20%-40% Compliant
-  40%-60% Compliant
-  60%-80% Compliant
-  80%-100% Compliant

Table #1: Detailed Criteria for a Business Analysis Tool

Category	Area	Requirement	Blueprint Requirements Center	Numerical Score	IBM Requirements Composer	Numerical Score	Caliber RDM + Caliber RM	Numerical Score
Requirement Definition	Support for Diagrams	Business process diagrams aligned with BPMN notation, supporting swim lanes, tasks and sub-tasks, decisions, and transitions at a minimum.	Full support, but not fully BPMN compliant	10	Both simple and complex diagram do not support BPMN	5	Only one diagram type – used for any “flow”	5
		Use Case diagrams aligned with UML notation, supporting actors, use cases, associations, includes, and extends relationships.	Full support	10	No includes or extends	5	Not UML compliant	1
		Generic diagram that can be used to illustrate such things as the organization hierarchy or the system context	Not provided	1	Not provided	1	Not provided	1
Total				21		11		7
Possible Score	30			70.00%		36.67%		23.33%
	Support for Requirements Definition	Ability to support a range of requirements artifact types including at least textual statements but also more complex types such as business process elements, use cases,	Yes, full support for textual requirements, use cases, and screen mockups	10	Yes, but complex. RRC does not include the ability to define data.	5	Limited diagram support, full screen mockup support, and full textual requirement support requires 2	5

Business Analysis Tools Detailed Criteria Table

Category	Area	Requirement	Blueprint Requirements Center	Numerical Score	IBM Requirements Composer	Numerical Score	Caliber RDM + Caliber RM	Numerical Score
		actors, data elements, user interface mockups.					separate tools (Caliber RDM+RM)	
		Ability to define different types of textual requirements (e.g. data, functional, business rule, performance, capacity, etc.)	Yes, Full support	10	Yes	10	Yes, but typing can only be done by moving requirements between packages, no separate typing mechanism.	10
		Ability to support textual requirements hierarchies with unlimited parent-child support (e.g. any number of levels; any type can be child of any other type)	Yes, Full support	10	Requirements must be within a folder and cannot be the direct child of another requirement. However, Parent – Child link type does exist	5	Browser hierarchy is based off of requirement type folders	5
		Ability to have user-defined textual requirement types	Yes	10	Yes, but complex	10	Yes	10
		Ability to capture attributes for artifacts	Yes	10	Yes	10	Yes, but they can only be created on custom tabs, not on existing ones.	10
		Ability to define new attributes for an artifact type	Yes	10	Yes	10	Yes	10

Business Analysis Tools Detailed Criteria Table

Category	Area	Requirement	Blueprint Requirements Center	Numerical Score	IBM Requirements Composer	Numerical Score	Caliber RDM + Caliber RM	Numerical Score
		Ability to support spreadsheet-style editing for large groups of hierarchical requirements and their attributes	Yes, custom attributes can be created for any artifact	10	Limited	5	Limited	5
		Support for filtered and custom views of requirements information	Yes, filters can be created in requirements list view	10	Yes, but requirements list view does not show hierarchy of requirements	10		10
		Ability to create/store a data dictionary	Yes, data elements can be created and used within visualization	5	Not available	1	Data Used in Screens	5
		Ability to define data structures such as single values and more complex structures such as tables with mixed value types.	Yes	10	Not available	1	Yes	10
		Ability to create/store glossary terms	Yes	10	Yes	10	Yes	10
		Ability to quickly and easily create relationships among artifacts	Yes	10	Yes	10	Simple relationships can be created in RDM, but must be managed in RM	5
		Ability to reuse an artifact as a separate object or as a reference to the same underlying definition	Yes	10	Partial support, RRC allows artifacts (text requirements,	5	Yes	10

Business Analysis Tools Detailed Criteria Table

Category	Area	Requirement	Blueprint Requirements Center	Numerical Score	IBM Requirements Composer	Numerical Score	Caliber RDM + Caliber RM	Numerical Score
					diagrams, ...) to be embedded within other text artifacts as a form of reuse.			
		Visual indication of artifact trace relationships while working	Yes	10	Partial, traceability managed in the context of the element	5	Partial, traceability shown in the context of the element on some diagrams	5
		Explicit support for Use Case steps and structure (pre-condition, post-condition, alternate flows, etc.)	Yes, include structured use case editor	10	Use Case Steps not individual artifacts	1	Partial support, steps are not defined individually	1
		Ability to create Use Case flows and steps graphically (e.g. using an editable diagram)	Visualization creates graphical representation of use case, but cannot be edited	10	No, lack of structured steps prevents diagrams from being created from use case steps.	1	No, diagramming tools are separated from use case functionality	1
		Ability to create Use Case flows and steps textually (e.g. in a list, or structured document, etc.)	Yes	10	Partial. No structured scenario	1	Partial, No structured scenario	5
		Support for standard use case 'dialog' of alternating actor-system steps	Yes	10	No, steps cannot be associated to actor	1	No, steps cannot be associated to actor	1
		Ability to generate Activity Diagrams from Use Case scenarios	No	1	No	1	No	1

Business Analysis Tools Detailed Criteria Table

Category	Area	Requirement	Blueprint Requirements Center	Numerical Score	IBM Requirements Composer	Numerical Score	Caliber RDM + Caliber RM	Numerical Score
		Ability to generate composite Activity Diagrams from multiple, related Use Case scenarios	No	1	No	1	No	1
		Ability to link Use Case steps to requirements, screen designs/mockups or other artifacts	Yes	10	No, links cannot be created at the step level	1	No, links cannot be created at the step level	1
		Ability to precisely reference source materials (e.g. reference specific content within documents, spreadsheets, and other files)	Yes	10	Not available; must reference entire document	1	No documents cannot be referenced within tool	1
Total				197		105		122
Possible Score	220		Compliance Ratings	89.55%		47.73%		55.45%
	Support for User Interface Mockups	Ability to create screen mockups/wireframes	Yes	10	Yes	10	Yes	10
		Ability to capture existing screens from an external source directly from the tool and to annotate and illustrate modifications	Yes	10	No built-in screen capture; can import and reference the image	5	No built-in screen capture; can import image and then modify	5

Business Analysis Tools Detailed Criteria Table

Category	Area	Requirement	Blueprint Requirements Center	Numerical Score	IBM Requirements Composer	Numerical Score	Caliber RDM + Caliber RM	Numerical Score
		Ability to link screen mockups/wireframes to steps within a Use Case	Yes	10	Not available.	1	Yes	1
		Ability to add common screen controls and fields from a pre-defined palette (e.g. drop-downs, buttons, menus, etc.)	Yes	10	Yes	10	Yes	10
		Ability to associate screens and their contents to data definitions/requirements	Yes	10	No, RRC does not capture or use any data information	1	Yes	10
Total				50		27		36
Possible Score	50		Compliance Ratings	100.00%		54.00%		72.00%
Total Score				268		143		165
Requirements	30							
Possible Score	300		Compliance Ratings	89.33%		47.67%		55.00%
Requirements Management		Ability to auto-number requirements with unique IDs	Yes	10	Yes	10	Yes	10
		Maintain history of changes for artifacts	Yes	10	Yes	10	Yes	10

Business Analysis Tools Detailed Criteria Table

Category	Area	Requirement	Blueprint Requirements Center	Numerical Score	IBM Requirements Composer	Numerical Score	Caliber RDM + Caliber RM	Numerical Score
		Ability to compare artifact versions and show differences using familiar 'redline' approach	Yes	10	Comparison can only be done between sequential versions, not user selected versions	5	Yes, baseline compare in Caliber RM	10
		Ability to show differences in diagrams graphically, using a before-after comparison.	Yes	10	No	1	No	1
		Tracking of approval status	Yes	10	Yes	10	Yes	10
		Ability to define baselines and partial baselines	Yes	10	Baselines (snap shots) can only be taken of the entire project	5	Yes, baselines are managed within RM	10
		Ability to compare baselines and report on differences	Yes	10	Cannot compare baselines	10	Yes, baseline compare in Caliber RM	10
		Ability to report on project metrics (e.g., number of requirements of different types/different statuses)	No	1	Yes, project dashing board provides reporting capabilities	10	No	1
		Manage versions and allow versions to be rolled back	Yes	10	Yes, but this is done for single elements. Multiple roll backs cannot be conducted at once	5	Yes	10

Business Analysis Tools Detailed Criteria Table

Category	Area	Requirement	Blueprint Requirements Center	Numerical Score	IBM Requirements Composer	Numerical Score	Caliber RDM + Caliber RM	Numerical Score
		Central repository to store project information	Yes	10	Yes	10	Yes, both Caliber RDM and Caliber RM point to same repository	10
		Ability to support multiple users working concurrently in a single repository.	Yes	10	Yes, but see below	5	Yes	10
		Incorporation of a locking mechanism which allows users to work in a single repository while preventing conflict or overlap, precluding the need to merge work	Yes	10	Multiple people can work on same artifact without realizing it	5		10
		Support for impact analysis leveraging traceability	Yes	10	Yes	10	Yes; very nice visual map of traceability relationships	10
		Display of information using user-definable dashboards	No	1	Yes	10	No	1
Total Score				122		106		113
Requirements	14							
Possible Score	140		Compliance Ratings	87.14%		75.71%		80.71%
Requirements Collaboration and Review	Simulation	Ability to simulate screen flow and step through a Use Case	Yes	10	No simulation capability	1	Partially, Simulation is tied to a separate flow diagram. Not a	5

Business Analysis Tools Detailed Criteria Table

Category	Area	Requirement	Blueprint Requirements Center	Numerical Score	IBM Requirements Composer	Numerical Score	Caliber RDM + Caliber RM	Numerical Score
							process diagram or use case	
		Ability to select multiple related use cases to be simulated as a single session	Yes	10	No	1	Partially, Simulation is tied to a separate flow diagram. Not a process diagram or use case	5
		Ability to interact with screens during a simulation as (e.g. select from drop-down lists, choose from menu options, type into text fields, etc.)	Yes	10	No	1	Yes	10
		Ability to advance simulation and control simulation decisions from screen interactions	Yes	10	No	1	Yes, Make connections between screens based on data behaviors assigned to each screen.	10
		Ability of tool to transform data values and perform calculations during simulation and display results in screen.	Yes	10	No	1	Yes	10

Business Analysis Tools Detailed Criteria Table

Category	Area	Requirement	Blueprint Requirements Center	Numerical Score	IBM Requirements Composer	Numerical Score	Caliber RDM + Caliber RM	Numerical Score
		Ability to retrieve traced/related artifacts during simulation	Yes	10	No	1	Partial, If requirements are not properly maintained in RM (left in folder and copied into other requirement type folders) then traceability is lost.	5
Total				60		6		45
Possible Score	60		Compliance Ratings	100.00%		10.00%		75.00%
	Review and Discussions	Ability to notify project team members about changes	Yes	10	Yes	10	Partial, notifications can be sent to request review but there is No way for reviewer to see what changes were made from comments	5
		Management for the requirements approval process	Yes	10	Yes	10	Yes	10
		Ability for users to comment and conduct discussions on specific requirements or other	Yes	10	Can direct comments to specific individuals	10	Yes	10

Business Analysis Tools Detailed Criteria Table

Category	Area	Requirement	Blueprint Requirements Center	Numerical Score	IBM Requirements Composer	Numerical Score	Caliber RDM + Caliber RM	Numerical Score
		artifacts						
		Ability to list and filter discussions from across the project.			Partial, can view across projects but there is not filtering	5	Comments for artifacts can be viewed across the repository	5
		Support for review and commenting	Yes	10	Yes, but see comment below	5	Yes	5
		Ability to identify a subset of the requirements for review, and for reviewer to only see that subset.	Yes	10	Must use main product interface	5	Yes	10
		Ability to review while offline and later submit feedback/comments.	Yes	10	No	1	No	1
		Provision of a simplified experience for reviewer as compared to the more fully-featured experience used by requirements authors.	Yes	10	Not supported	1	Yes	10
Total				70		47		56
Possible Score	80		Compliance Ratings	87.50%		58.75%		70.00%
Total Score				130		53		101
Requirements	14							

Business Analysis Tools Detailed Criteria Table

Category	Area	Requirement	Blueprint Requirements Center	Numerical Score	IBM Requirements Composer	Numerical Score	Caliber RDM + Caliber RM	Numerical Score
Possible Score	140		Compliance Ratings	92.86%		37.86%		72.14%
Usability	General	Ability to work both online and offline	Yes	10	No support for offline	1	No	1
		Requirements artifacts organized by folder structure	Yes	10	Yes, but parent-child relationships of requirements does not appear in grid view	5	Partial, use of folders to type requirements limits usefulness of user defined folder structure	5
		Ability to import artifacts and definitions from Excel and Word; ability to export to Excel and Word	Yes	10	Can import files as a whole from Word and CSV	10	Yes	10
		Ability to import diagram artifacts from Visio; ability to export diagram artifacts to Visio.	Partial, Diagrams can be brought in as images	5	Partial, Diagrams can be brought in as images	5	No	1
		Ability to associate external files to artifacts	Yes	10	Yes	10	Yes	10
		Ability to copy/paste artifacts and diagrams, as well as attribute content within artifacts	Yes	10	Partial support	5	Yes, requirements in Caliber RM, Visualization in Caliber RDM	10
		Ability to search within projects	Yes	10	Yes – can also	10	Yes	10

Business Analysis Tools Detailed Criteria Table

Category	Area	Requirement	Blueprint Requirements Center	Numerical Score	IBM Requirements Composer	Numerical Score	Caliber RDM + Caliber RM	Numerical Score
					search cross-projects			
		Online help	Yes	10	Available, but mixed with help from other IBM products	5	Yes	10
		Availability of knowledge base	Yes, can access directly from tool	10	Online resource is available for all jazz products	5	Yes, online resource available for all Micro Focus products	10
		Availability of samples and templates	Yes	10	Yes	10	Yes	10
		Established user group(s) and community(is)	Yes	10	Yes	10	Yes	10
		Availability of Tutorials	Yes	10	Yes	10	Yes	10
		Easy to learn user interface	Yes	10	Yes	5	Yes	10
		Spell checking	Yes	10	Yes	10	No	1
Total				135		101		108
Possible Score	140		Compliance Ratings	96.43%		72.14%		77.14%
	Support for Documentation	Ability to publish html versions of all requirements with diagrams	No	1	Yes, web-based tool	10	Yes, review can be conducted via web	10
		Ability to publish XML of all requirements information	Yes	10	No	1	No	1

Business Analysis Tools Detailed Criteria Table

Category	Area	Requirement	Blueprint Requirements Center	Numerical Score	IBM Requirements Composer	Numerical Score	Caliber RDM + Caliber RM	Numerical Score
		Ability to publish Excel of all requirements information	Yes	10	Yes	10	Partial, test case can be exported into Excel	5
		Built-in document generation with standard templates in (at least) Word format	Yes, word reports are build using XML	10	Four pre-defined templates; can generate documents using information from multiple projects	10	Yes, word reports built using mail-merge functionality	10
		Ability to completely customize document templates and create new/additional templates	Yes	10	Customization of templates complex and requires additional tools	5	Yes	5
		Ability to render trace relationships as navigable links in generated document	Yes	10	No	1	No	1
		Ability to automatically generate redlines (track changes) in documents based on requirements version differences (e.g. what changed since last version of the generated document)	Yes	10	Partial, difference can only compare to last version.	5	Yes, in RM	10
		Ability to easily print diagrams to multiple formats, including Word, pdf, and images (jpg, etc.)	Yes	10	Diagrams are included within reports	5	Diagrams are included in word reports	5
Total				71		47		47

Business Analysis Tools Detailed Criteria Table

Category	Area	Requirement	Blueprint Requirements Center	Numerical Score	IBM Requirements Composer	Numerical Score	Caliber RDM + Caliber RM	Numerical Score
Possible Score	80		Compliance Ratings	88.75%		58.75%		58.75%
	User and Tool Administration	Management of users and user groups, including ability to assign group access	Yes	10	Can manage individuals, not groups	5	Yes	10
		Support for LDAP and Active Directory	Yes	10	Available, but limited	1	Yes	10
		Instance-based permissions	Yes	10	Partial, permission are set by the Jazz Server at the project level	5	Partial, security profiles are set for user groups and applied to projects	5
		Ability to assign privilege levels	Yes	10	Yes	10	Yes	10
		Ability to easily install updates and patches	Yes	10	Yes	10	Yes	10
Total				50		31		45
Possible Score	60		Compliance Ratings	83.33%		51.67%		75.00%
	Test Generation	Ability to generate user acceptance test scripts from Use Case scenarios/steps	Yes	10	No test generation	1	Partial, test cases can be generated for each diagram. Not from use cases.	5
		Ability to generate end-to-end tests for multiple, related use cases	Yes	10	No	1	Partial, test cases can be generated for each diagram.	5

Business Analysis Tools Detailed Criteria Table

Category	Area	Requirement	Blueprint Requirements Center	Numerical Score	IBM Requirements Composer	Numerical Score	Caliber RDM + Caliber RM	Numerical Score
							Not from use cases.	
		Ability to filter tests generated based on criteria (assigned to scenarios) such as business criticality, risk, etc.	Yes	10	No	1	Yes, magnitude can be used to incorporate business criteria into test scenarios	10
		Well-formed tests having expected outcomes for every test step	Yes	10	No	1	No, expected results given at test scenario level	1
		Automatically created traceability between tests and requirements		10	No	1	No	1
Total				50		5		22
Possible Score	50		Compliance Ratings	100.00%		10.00%		44.00%
Total Score				306		184		222
Requirements	33							
Possible Score	330		Compliance Ratings	92.73%		55.76%		67.27%

Business Analysis Tools Detailed Criteria Table

Category	Area	Requirement	Blueprint Requirements Center	Numerical Score	IBM Requirements Composer	Numerical Score	Caliber RDM + Caliber RM	Numerical Score
Integration	Integration with Quality Assurance tools	Integration of basic requirements information (textual requirements, traceability)	Yes	10	Need additional tool.	5	Yes	10
		Integration of rich requirements information (artifacts beyond text such as business process, use cases, user interface mockups, etc.)	Yes	10	No	1	No	1
		Ability to maintain alignment of information in both tools (i.e. when information in one tool changes, related information in the other tool can be made consistent)	Yes	10	No	1	No	1
		User configurable mapping of fields between tools	Yes	10	No	1	No	1
Total Score				40		8		13
Requirements	4							
Possible Score	40		Compliance Ratings	100.00%		20.00%		32.50%