

Appendix A: Tool Evaluation Criteria

The following outlines the evaluation criteria we used for the business case in selecting a requirements tool. Each feature was given a level of importance, with 3 being the most important. Some tools were eliminated without going through the detail evaluation due to limitations such as, no support for use cases, only one use can be in the tool at a time, no central repository. In addition to the criteria below, tools were also evaluation based on price.

Functionality	Specific Feature (Level of Importance 1-3)
Use case creation and maintenance	<p>Unique numbers are assigned to each use case and use case step for traceability (3)</p> <p>Use case steps can be linked to other use cases (3)</p> <p>Use cases can have exclude and use relationships (2)</p> <p>Use Case steps can reference and link to requirements, (e.g. a use case step referencing a business rule) (3)</p> <p>A use case can be used in multiple projects (3)</p> <p>Tool automatically versions and creates history of use case changes, including use case steps (3)</p> <p>User can add and edit history comments (2)</p> <p>Description field supports cut/paste (2)</p> <p>External documents can be attached to a project (3)</p>
Customizable Attributes/Fields	<p>Can create new fields, modify existing fields, and choose not to use existing fields (3)</p> <p>Attributes can be set for individual use case steps (e.g. risk level)(2)</p>
Requirements	<p>Supports customizable requirement types (e.g. business rules, business requirements, non-functional requirements) (3)</p> <p>Enforces consistent requirements entry (e.g. standard fields). (3)</p> <p>Existing requirements, located in Borland CaliberRM™, can be converted/moved/copied into the tool. (2)</p> <p>Can trace to CRs located in Borland® StarTeam® (2)</p>
UC Modeling	<p>Supports creation and storage of use case diagrams with actors (3)</p>
Other Modeling	<p>Supports creation and storage of other models such as state diagrams and business process flows (1)</p>
Document Output	<p>Generates output documents (3)</p> <p>Document templates are customizable and support filtering (3)</p> <p>All fields available in the tool are available to display on template (3)</p>
Document Version Control	<p>Has document management functionality, or, integration with Borland® StarTeam® (3)</p>
Glossary	<p>Has a glossary (3)</p> <p>Glossary terms can be output to the document (3)</p> <p>Glossary can be shared by multiple projects (3)</p>
Keyword Search	<p>Ability to search use cases and other requirement types by keyword (3)</p>

Functionality	Specific Feature (Level of Importance 1-3)
User log-in	Supports multiple users logged in at same time (3) Provides multiple permissions (e.g. read only users, ability to print) (2)
Export into text delimited format	Data from tool can be exported in a text format allowing import into another database or application. (2)
Import from text delimited format	Accepts data imports (e.g. delimited text format, MS Office documents) (2)
Communication with Mercury Quality Center™	Notification when a requirement has changed. (3)