CRT Documents: Analysis, Revision of VSS

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Disposition of VSS Requirements Volume I (as of 2/22/05)

- Complete first draft of table extracting requirements from the 2002 VSS

- Proposes disposition of each requirement
  - E  Requirement can be extracted as is, no need to rewrite
  - R  Requirement not precise, clear or testable. Needs to be rewritten
  - M  Testing requirement. Move to Volume II
  - D  Delete, remove the requirement

- Comments column
  - Currently, initial observations and questions
  - Will incorporate comments received and answers to questions
Disposition of VSS Requirements Volume II (as of 3/3/05)

• On web site, not on distribution CD

• First draft of Volume II requirements table, contains sections 2-6
Process Model 20050223
Process Model Text 20050223

- Election process modeled with activities, objects and flows
- Reference for organizing and cross-referencing compliance points
CRT Rationale Pieces 20050301

• Discussion and explanation of issues impacting CRT subgroup
  - Architecture of a revised VSS
  - Testing issues
  - Coding conventions and code reviews
  - Quality assurance and configuration management
  - Procedural requirements -- scoping and necessity
• Compliance points related to "Accumulate, Count, and Report"

• Ongoing work to extract and identify precise, testable compliance points, clarify, remove redundancy, organize coherently

• Accuracy of terms in vote data reports defined by reference to logic model
CRT Testing Pieces 20050301

- Formal logic model of voting systems
  - Terms and definitions
  - Logic verification applied to source code
- Examples of abstract test cases (functional, capacity, ...)

• Proposed rewrite of 2002 VSS sections on software standards
  - Recommends changes to coding conventions for voting system source code
  - Retains and expands conventions addressing software integrity
  - Retains size limit on modules (needed for logic verification)
  - Purges outdated, optional stylistic conventions
  - Defines criteria for "published, credible coding conventions" to encourage adoption of current best practices
  - Requires structured exception handling