

Technical Guidelines Development Committee
March 22-23, 2007, Plenary Meeting

NIST Voting Program Activities
Update

March 22, 2007

Mark Skall
Chief, Software Diagnostics
and
Conformance Testing Division

Technical Guidelines Development Committee

March 22-23, 2007, Plenary Meeting

Overview

- Activities since 12/4-5 TGDC meeting
 - Continued research and drafting of VVSG
 - Coordination with the TGDC
 - Outreach in support of NIST research
 - Resolution Matrix updates
- Agenda and aims of this meeting
 - Meeting focus
 - Meeting strategy
 - Agenda

Technical Guidelines Development Committee

March 22-23, 2007, Plenary Meeting

Next VVSG R & D

- HFP
 - Usability performance benchmarks and updates to usability requirements
 - Updates to accessibility requirements
 - Software Independence and Accessibility paper
- CRT
 - Continued research in reliability and benchmarks
 - Quality requirements
 - EMC requirements
- STS
 - Software independence auditing research
 - Innovation Class research
 - Coordination with HFP on SI and Accessibility, paper record usability issues
 - Updates to cryptography, setup validation, access control, system event logging

Technical Guidelines Development Committee

March 22-23, 2007, Plenary Meeting

Coordination with TGDC

- NIST-TGDC work coordination
 - 21 telecons since last December 2006
 - Joint telecons between committees
 - Prepared discussion papers, much draft material
 - Numerous individual discussions
- VVSG March draft build
 - Over 500 pages
 - Approximately 80% complete
 - Continue to work with newer, more usable format

Technical Guidelines Development Committee

March 22-23, 2007, Plenary Meeting

Outreach in Support of NIST Research

- Monthly coordination meetings with EAC
- Meetings with vendors via ITAA
- Presentation and discussion at conferences and meetings:
 - The Election Center
 - The Advisory Board
 - The Standards Board
 - Other meetings
- Outreach to election officials on paper auditing issues
- Outreach to NASS, NASED on benchmarks for reliability

Technical Guidelines Development Committee

March 22-23, 2007, Plenary Meeting

Resolution Matrix

- Asked by TGDC to provide mapping from resolutions to draft material
- Developed extensive spreadsheet, regularly updated
- <http://vote.nist.gov/TGDC/TGDCMatrixTasks.xls>

Technical Guidelines Development Committee

March 22-23, 2007, Plenary Meeting

Aims of This Meeting

- One TGDC meeting remaining before VVSG delivery to EAC
- NIST needs final consensus NOW for many issues
- Overall aims of this meeting
 1. to make substantial progress on finalizing existing material
 2. to discuss remaining open issues and get consensus

Technical Guidelines Development Committee

March 22-23, 2007, Plenary Meeting

Strategy for Presentations

- Day 1: Subcommittee presentations
 - Subcommittee consensus issues and material
 - Discussions limited to material at hand
 - Intent is to achieve TGDC consensus
- Day 2: Discussion of cross-cutting issues
 - Discussion can be more open-ended
 - Need consensus to provide direction for future research

Technical Guidelines Development Committee

March 22-23, 2007, Plenary Meeting

Today's Presentations

- **Overview of the Draft VVSG**
- **Security and Transparency Committee:**
 - Audit Architecture and Electronic/Paper Records Requirements
 - Cryptography Requirements
 - Access Control & System Events Logging Requirements
 - Software Distribution & Installation Requirements
 - Setup Validation Requirements

Technical Guidelines Development Committee

March 22-23, 2007, Plenary Meeting

Today's Presentations (cont)

- **Core Requirements and Testing:**
 - Quality Assurance and Configuration Management Requirements
 - Electromagnetic Compatibility Requirements
 - Review of CRT Changes from the Previous VVSG Draft
 - Benchmarks for Reliability
- **Human Factors and Privacy:**
 - Usability Requirements
 - Accessibility Requirements
 - Privacy Requirements
 - Usability Research Update

Technical Guidelines Development Committee

March 22-23, 2007, Plenary Meeting

Tomorrow's Presentations

- NVLAP Voting System Testing Laboratory Accreditation update
- Cross-Cutting Issues Discussion:
 - Paper Rolls
 - VVSG Scope and Ballot Activation
 - Accessibility and Software Independence
 - The Innovation Class
- Introduction of resolutions
- Future TGDC meeting planning