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HEALTH LEVEL SEVEN (HL7) WORKING GROUP MEETING, JANUARY 23-28, 2005, THE HILTON IN WALT DISNEY RESORT, ORLANDO, FLORIDA

VHA representatives presented material to the HL7 Security & Accountability Technical Committee (TC) on role engineering and role implementation. Mike Davis, VHA Security Architect, was named acting TC Co-chair for the meeting.

The material presented to the Security TC included the following:

- Healthcare (HC) Scenario-Permission Roadmap
- Four HC sample scenarios:
 - SSC-001 Physician w Scheduling Privileges v0.1
 - SRD-001 Physician w Review Documentation Privileges v0.1
 - SPD-001 Physician w Perform Documentation Privileges v0.1
 - SOE-001 Physician w Order Entry Privileges v0.1
- Permission Tables - Licensed Providers
- VHA Privilege Management Infrastructure (PMI) Brief
- VHA RBAC Task Force Issues
- Use of XACML to Represent Roles with Permissions

The TC updated its HL7 RBAC Project Approach and Plan. Among the upcoming key activities are to develop scenarios for licensed healthcare providers by the end of August 2005. This date provides the opportunity to prepare for an RBAC demonstration at the HIMSS conference in January 2006.

INCITS LOOKS TO ESTABLISH A NEW CYBER SECURITY TECHNICAL COMMITTEE

On Thursday, January 20, 2005, the InterNational Committee for Information Technology Standards (INCITS) Executive Board Meeting had an action item to recommend the establishment of a new INCITS Technical Committee on Cyber Security. If the INCITS Executive Board approves this new group, a meeting notice and press release will be issued for the first meeting of the new group (possible date and location is March 29-30, 2005 in the Washington, DC area).

The new TC will have the opportunity to form task groups to progress its work via experts. We expect that the new TC will quickly consider the formation of an RBAC standard task group, along the lines of the one that we have discussed in the past. It will be up to the task groups to decide how to progress their standards projects - e.g., via electronic or physical meetings, email. The task groups will also, of course, recommend additional standards projects that they want to undertake related to their charters.

VHA intends to support an RBAC task group to further the RBAC standard and to promote it to international status.

Inside this issue:

- **HL7 January Working Group Meeting Summary**
- **INCITS Cyber Security Technical Committee**
- **Standards updates on OASIS, ASTM and ACM**
- **Amending the Healthcare Scenario Roadmap**
- **Going Beyond Role Definitions**
- **Upcoming Meetings**

STANDARDS CORNER

OASIS

XACML 2.0 and all of the associated profiles were approved as OASIS Standards on February 1, 2005. This includes the Core and Hierarchical Role Based Access Control (RBAC) Profile.

ASTM

Mike Davis of VHA presented material on the Privilege Management Infrastructure (PMI) to members of the Healthcare Informatics Work Group in Washington, DC, in November 2004. Basic and Functional roles along with their implementation were included in the PMI discussion. Representatives from six product manufacturers participated in the discussions.

ACM

A paper entitled "Role Engineering in Healthcare: Process, Results, and Lessons Learned" was submitted to the ACM Symposium on Access Control Models and Technologies (SACMAT). The paper was prepared under VHA auspices and describes the activities and results of the Healthcare Task Force. The symposium will be held June 1-3 in Stockholm, Sweden.

UPCOMING MEETINGS

- **ASTM Committee E31 on Healthcare Informatics**, May 15-18, 2005, Salt Lake City, Utah.
- **HL7 Working Group Meeting**, May 1-6, 2005, Noorwijkerhout, The Netherlands.
- **ACM Symposium on Access Control Models and Technologies (SACMAT)**, June 1-3, 2005, Stockholm, Sweden.

AMENDING THE HEALTHCARE SCENARIO ROADMAP

The Veterans Health Administration (VHA)/Indian Health Service (IHS) Role-Based Access Control (RBAC) Task Force (TF) continues to amend the Healthcare Scenario Roadmap spreadsheet for licensed healthcare roles and responsibilities for increased correctness and completeness. The VHA/IHS RBAC TF has been meeting regularly to resolve issues based on departmental inputs from VA Medical Centers (VAMCs) throughout the U.S. These issues come directly from licensed healthcare personnel in the field. As of January 2005, a total of 25 issues have been received with the current status being 13 Open, 1 Deferred, and 11 Closed.

The Healthcare Scenario Roadmap was developed during weekly discussions with clinicians on the VHA/IHS RBAC TF clinicians initially using the American Society for Testing and Materials (ASTM) E1986 Standard Guide for Information Access Privileges to Health Information list of "Healthcare Personnel that Warrant Differing Levels of Access Control" as the initial basic role names. The roadmap can function as a foundational tool to assist in defining the scope of the RBAC modeling effort, as well as be utilized as a quick reference of healthcare scenarios. The roadmap presents scaleable management of user permissions in the form of a list of tasks as a healthcare standard and is available on the RBAC website.

GOING BEYOND ROLE DEFINITIONS

As discussed at ASTM and HL7 technical committee meetings, the overall concept of user authorization is more than just the roles with their associated permissions (as fundamentally important as these are). To complete our authorization policy we must also address Business Rules and Constraints. This is illustrated below. In defining role names and permissions, the Role Engineering Task Force is addressing the first two items, in the diagram (Roles and Permissions). Input from the Task Force will also assist in the process of defining Business Rules and Constraints.

How They All Fit Together

ROLE = Physician



Dr. Joe Smith is an Oncologist

PERMISSION = Write Medication Order



BUSINESS RULE = Oncologists may Write "Chemotherapy" Medication Orders

CONSTRAINT = 1st year Oncology Residents need Chemotherapy Medication Orders co-signed by an Attending Physician

