

## HEALTHCARE SCENARIO ROADMAP

The Healthcare Scenario Roadmap developed by the Veterans Health Administration (VHA) Role-Based Access Control (RBAC) Task Force (TF) is being finalized for presentation to various Standards Development Organizations (SDOs), including Health Level Seven (HL7) and American Society for Testing and Materials (ASTM). It has been populated during weekly discussions with TF clinicians from the VHA and Indian Health Service (IHS). The VHA RBAC TF began with the list of "Healthcare Personnel That Warrant Differing Levels of Access Control" contained within the ASTM E-1986 Standard Guide for Information Access Privileges to Health Information. The VHA RBAC TF have initially concentrated on the 16 licensed health care providers, identifying and associating 4 high level and 74 detailed clinical activities performed by those providers. The VHA RBAC TF has populated 3682 cells within the spreadsheet.

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 scalable management of user permissions in the form of a list of tasks as a healthcare standard.

## VHA RBAC TF FACE-2-FACE

The VHA RBAC TF met in Chicago on 23-24 April 2004. Agenda items included further progress on the Healthcare Scenario Roadmap, discussion of healthcare scenarios and modeling activities, a presentation of the current VHA software and security architecture, discussion of role engineering guidance to VHA software development teams and a plan for near-future SDO activities.

The VHA RBAC TF plans to develop and model detailed clinical scenarios and use cases during summer of 2004. VHA goals include: Harmonize the mapping of roles and permissions to VHA enterprise menus, options, and security keys; and share the role engineering process to VHA software development teams to further identify and collect roles and permissions. Non-VHA specific goals include: Laying the groundwork for work within SDOs to define standard healthcare permissions; and develop role permission definitions within healthcare enterprises to support interoperability.

## PEER REVIEW OF ROLE ENGINEERING PROCESS

The *Role Based Access Control (RBAC) Role Engineering Process*, Version 2.0 has been peer reviewed by the Healthcare RBAC TF, consisting of members from Department of Defense (DoD), Indian Health Service (IHS), Department of Veterans Affairs (VA) and Kaiser Permanente (KP). The comment period closed on 16 April 2004. Comments are now being addressed and Version 3.0 of the document will be reissued when completed. The document is also being updated to include terminology and harmonization with XACML 1.0 standard and the use of XACML policies to express permissions.

## SDO ACTIVITY:

- ? HL7 - At the May 2004 HL7 Working Group Meeting held in San Antonio, Texas, the Healthcare RBAC TF will present a proposal to the HL7 Board of Directors for consideration of adoption of the RBAC effort. The Healthcare RBAC TF would like HL7 to consider including within its family of standards the specification of permission definitions for use in healthcare. HL7 is the only SDO capable of taking the leadership role for a single international healthcare standard for interoperable RBAC. Recent RBAC activities will also be presented to other HL7 technical committees and special interest groups.

RBAC offers inter-agency architecture, data sharing and scaleable management of user permissions as an international healthcare standard via the HL7 SDO.

- ? ASTM - The Healthcare Scenario Roadmap spreadsheet, as described above, will be presented as an agenda item at the May meeting of the American Society for Testing and Materials (ASTM) in Ft. Lauderdale, Florida. Modifications to licensed health care providers, as proposed by the VHA RBAC TF, will also be presented for addition to the ASTM E-1986 standard.

In addition to enhancing the existing ASTM E-1986 standard, RBAC could obtain broader interest and participation as a result of the VHA RBAC TF Healthcare Scenario Roadmap effort.

- ? NIST - The NIST Draft RBAC Standard is now ANSI approved. The new standard is called *American National Standard for Information Technology - Role-Based Access Control*, ANSI INCITS 359-2004, by the Information Technology Industry Council. The Healthcare RBAC TF adopted use of this standard at the beginning of the RBAC effort and continues to be in harmony with the standard. The next step is to get ISO approval. This standard will be tracked as it progresses through the ISO standardization process. For an article announcing the approval of the RBAC standard, see <http://xml.coverpages.org/RBAC-ANSI.html>.
- ? OASIS – OASIS approved the *eXtensible Access Control Markup Language (XACML) Version 1.0* on 18 February 2003. XACML is a markup language, based on an XML schema, used to express and evaluate access decisions on a system resource. OASIS has also released an initial version of a *XACML Profile for Role Based Access Control (RBAC) Committee Specification 01*, 13 February 2004. This profile is written defines such constructs as role, permission, senior role, and junior role. These two documents are extremely important to the implementation of RBAC permissions and further investigation and prototyping of the use of XACML in RBAC is currently in progress. See the OASIS website (<http://www.oasis-open.org/home/index.php>) for more information.

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