21st Century Medical Scheduling America COMPETES Contest

Description of Virtual Testing Environment

A virtual testing environment has been configured to provide an on-line environment in which submissions to the scheduling contests can be evaluated in a fair and objective manner.

Background

This virtual testing environment satisfies the following requirements:

- Provides a representative multi-site VistA configuration.
- Provides a largely identical environment for evaluating all contestant submissions.
- Contestants will have sufficient control of the virtual machines (VMs) in which they will prepare their submissions.
- Upon submission, evaluators will have a standardized environment in which they will be able to review each submission.

Specification

The virtual environment is composed of a collection of VMs that will be made available to contestants through remote connections via username/password secure logins.

Each contestant will receive access to three VMs, and will have control over them for the allotted time of submission preparation. At the submission deadline, Veterans Affairs (VA) evaluators will take control of the VMs and will initiate the submission reviews.

Table 1. Overview of Virtual Machines:

	VM-1	**VM-2**	**VM-3**
Server Name	ca-######	al-######	ga-######
Operating System	Windows Server 2008 - R2 - 64 bits	RedHat Enterprise Linux 6.1 or Windows Server 2008 - R2 - 64 bits (See Table 2)	RedHat Enterprise Linux 6.1 or Windows Server 2008 - R2 - 64 bits (See Table 2)
State / Time Zone	California / PDT	Alabama / CDT	Georgia / EDT
Database	Intersystems Cache	Intersystems Cache	Intersystems Cache
VistA Version	VISN0 VA Innovation Sandbox	VistA-FOIA Aug-24-2012	VistA-FOIA Dec-06-2011
RAM Size	4 Gb	4 Gb	4 Gb
Disk Size	160 Gb	160 Gb	160 Gb

The machine's clocks have been set to different time zones in order to exercise some specific scheduling scenarios. During the testing process, contestants may have to change the date and time in the clock, but must not change the time zone.

VM-1 Description

This VM is built on a Windows Server 2008 - 64 bits operating system. It has Intersystems Cache installed, and the VistA VISN0 version used by the VA Innovation Sandbox. Its time zone is set to California, Pacific Daylight Time (PDT).

Contestants can login to this VM using "remote desktop" clients and the username and password provided in their registration package.

This VM will also have an installation of CPRS (Computerized Patient Record System) that is compatible with the VistA installations.

VM-2 Description

This VM is built on either a RedHat Enterprise Linux 6.1 or a Windows Server 2008 operating system, depending on contestant preference (see Table 2). It has Intersystems Cache installed, and the version of VistA-FOIA dated August 24, 2012. Its time zone is set to Alabama, Central Daylight Time (CDT).

If using Linux, contestants can login to this VM using "ssh" clients and the username and password provided in their registration package. If using Windows, contestants can login to this VM using "remote desktop" clients and the username and password provided in their registration package.

VM-3 Description

This VM is built on a RedHat Enterprise Linux 6.1 or a Windows Server 2008 operating system, depending on contestant preference (see Table 2). It has Intersystems Cache installed, and the version of VistA-FOIA dated December 6, 2011. Its time zone is set to Georgia, Eastern Daylight Time (EDT).

If using Linux, contestants can login to this VM using "ssh" clients and the username and password provided in their registration package. If using Windows, contestants can login to this VM using "remote desktop" clients and the username and password provided in their registration package.

For details on the specific software infrastructure of the Testing Environment please see document "TCMS – Instructions on Use of Testing Environment"

Table 2. Operating System Options

The Virtual Machines VM2 and VM3 can have the following combinations of Operating Systems, at the request of the contestant. You must indicate your choice as part of the information that you provide during the registration to the contest.

Choice	VM2	VM3
Option A	Red Hat Linux 6.1	Red Hat Linux 6.1
Option B	Windows Server 2008	Red Hat Linux 6.1
Option C	Windows Server 2008	Windows Server 2008