

Mental Health eScreening (MHE) System Administration training lesson plan (approx. 2 hours)

Materials:

- MHE Triple-i System Administration training slide deck
- MHE System Administration Manual
- MHE application for demonstration of the software, including administrative user and password to log in

Introduction

1. Welcome the class to MHE System Administration training.
2. Show SA PPT slides 1 – 2 and present slide overview for basic understanding of the eScreening application:
 - what it does (automates paper process of screening Veterans for MH issues)
 - what it's made of (web-based assessment runtime, a database for storing assessment data, a web-based WYSIWYG editor for designing assessments and notes templates, and a web administrative dashboard for operating the system)
 - how it interacts with VistA
3. Tell where the training slides and videos are located in the VA system and include materials for the other system roles (Healthcare System Technical Administrator (HSTA), Clinicians, and Assistants. Also make sure students know where to locate the System Administration Manual, the HSTA Manual, and the Clinician and Assistant Manual. Each of these slide decks, videos, and manuals provides custom information and procedures.

Hardware

1. Show SA PPT slides 3 – 10, Hardware:
 - Explain the physical system and connections.
 - Show the physical system diagram and explain the application server, RPC management, and how the client-side devices access the application.
 - Show the Hardware specs table and walk through the specifications.
 - Show schematic of the logical system components and explain the components.
 - Show the logical integration slide; explain relationships between the application, the repository, and VistA.

Software

1. Show SA PPT slides 11 – 22, Software:
 - Describe the software system on the UI side. Note the web application, MySQL database, and VistA.
 - Show the communications diagram and explain the RPC framework.
 - Describe further the VistA dependency, including the background processes.
 - Show the software table showing the categories, products, and licenses, and note where the source code is located on GitHub.

MHE software demo

Note: You will need a user name and password for a system administrator or HSTA role.

1. Show the application log-in for MHE and explain Veteran and Staff accesses.
2. Log in as staff and display the Home page. Note that clinicians and assistants won't see this many tabs. Explain the roles of Clinician, Assistant, HSTA, and System Administrator. (Assistant has the same access as Clinician, but cannot sign a note. HSTA has the same access as System Administrator, but serves in a junior role.)
3. Show the dashboard tab and explain that clinicians and assistants will use this view to monitor assessments in-process. Point out that staff alerts can be triggered when Veterans' answers exceed normal parameters and that this feature enables immediate clinical intervention if warranted.
4. Show the Editors tab; mention that the HSTA training slides show how to use the Editors' page. Additionally, the HSTA manual provides detail.
5. Show the System Configuration page and explain importing.

MHE Deployment

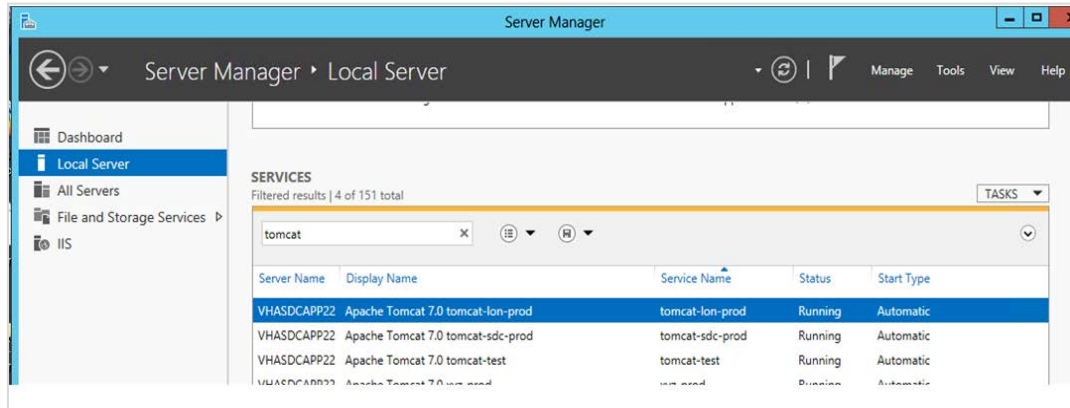
Show SA PPT slides 23 and 24, MHE Deployment.

Desktop demo:

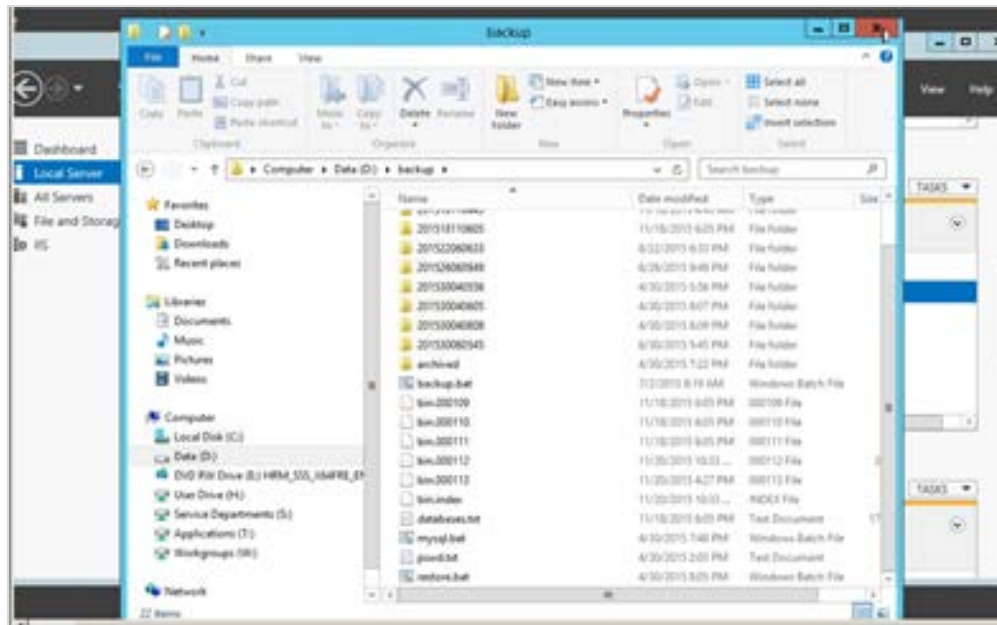
- a. If possible, show the source code.
- b. Explain what the code will look like when it's downloaded and show the workspace displaying the Maven process. Explain modules and web application, and back end code. Note that the libraries are downloaded through Maven except for one, VistA Link Library, which has to be downloaded before the project can be built.
- c. Explain the VistA Proxy account, which is not a real user account. Explain the procedure for deploying a new account when the current one expires.
- d. Explain configuring a new adapter.
- e. Explain the prerequisites to MHE Deployment.
- f. Explain the database setup for deployment.
- g. Explain Tomcat Service Configuration.
- h. Show the root directory and the source directory.
- i. Explain the deploy directory including the use of shell scripts and the text directory:

Routine Operations

1. Resume with SA PPT slide 33 - Routine Operations with bullet list. (This section covers slides 34 – 48.)
2. For system startup and shutdown, show the SD server and explain how we normally do these tasks:

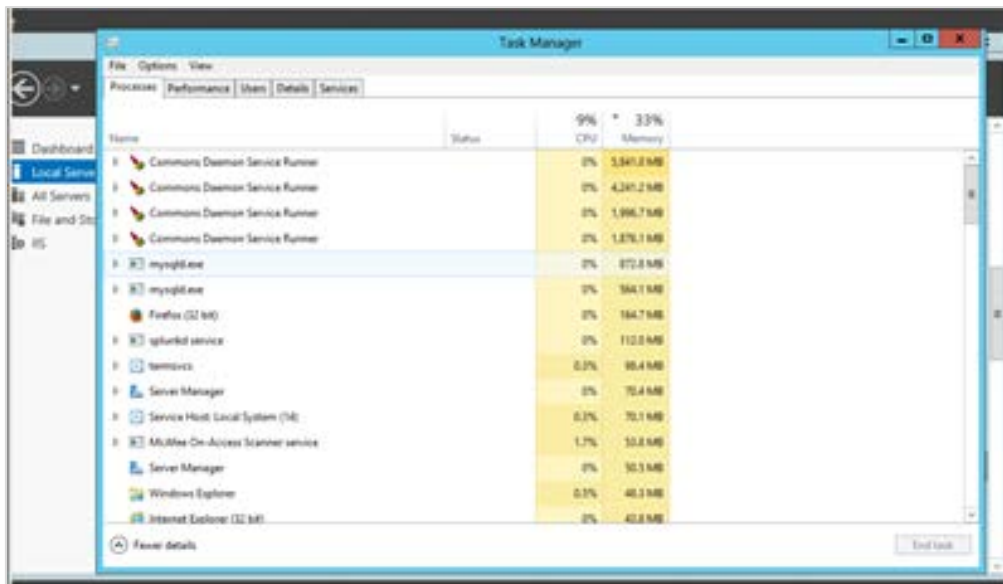


3. Explain restarting the service using a remote desktop connection to VA.
4. Explain data backup and restoration using the scripts in the source code:



5. Explain the basic steps for setting up an SSL certificate – request a new one before expiration of the old.

6. Explain system monitoring, reporting, and tools (logging)

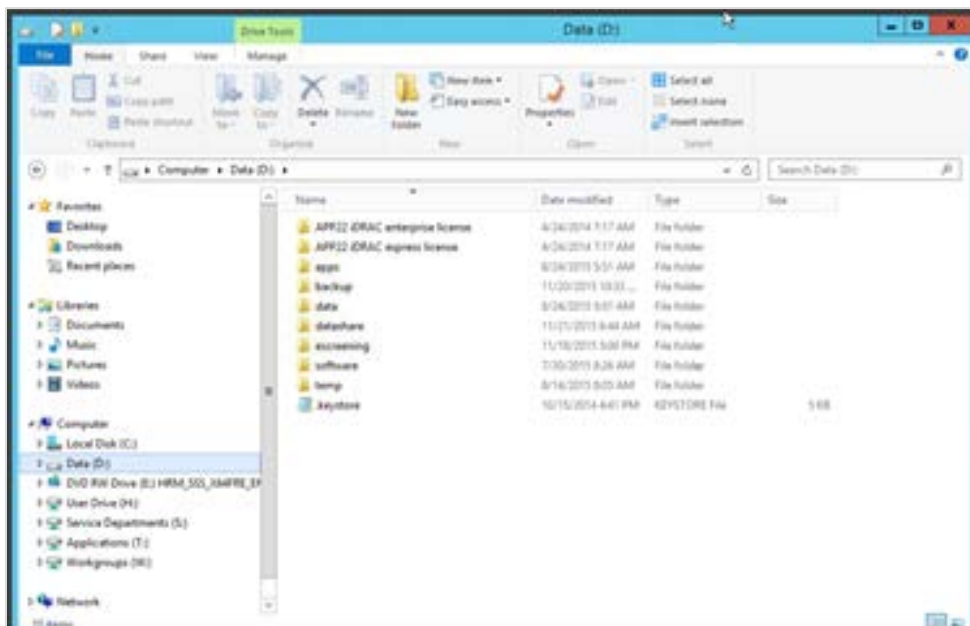


7. Show the table for application status checks and discuss availability monitoring.
8. Discuss performance and capacity monitoring, how it's done and the KPIs.
9. Show the KPI chart slide.
10. Discuss the potential need to restart the server.

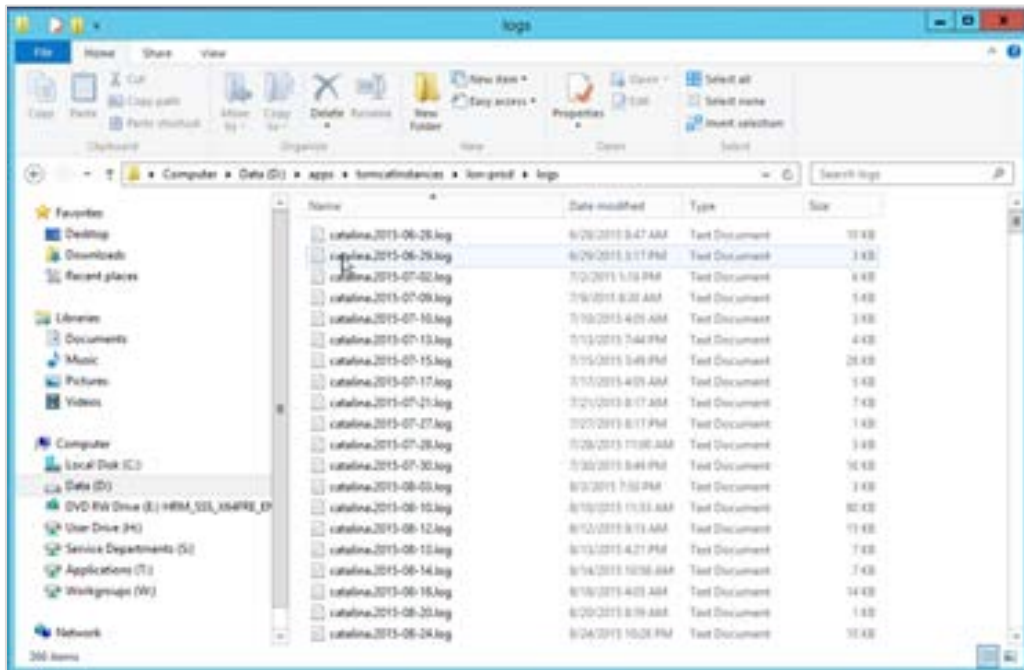
Exception Handling

1. Show SA PPT slide 49, presenting Exception Handling and Troubleshooting.

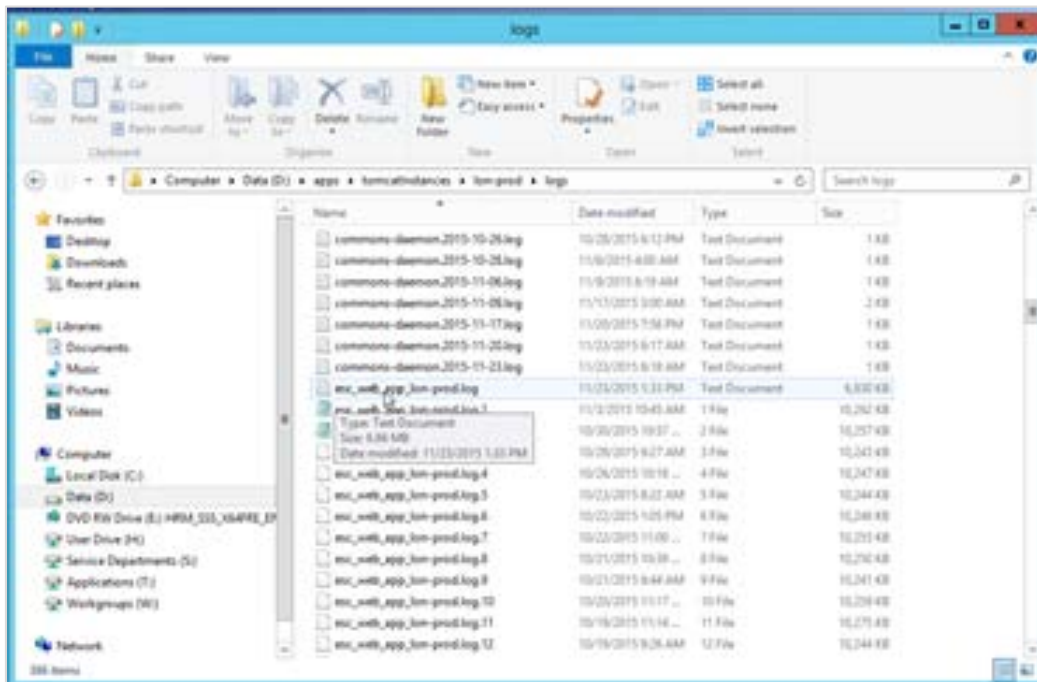
Interface demo:



2. Show the D drive.
3. Show Tomcat instances and logs:



4. Explain file naming conventions, and note that they can be turned off:



System Administration Manual

The purpose of this exercise is to provide familiarity with these areas of the manual.

1. Show SysAdmin manual, section 4. Exception Handling.
2. Discuss types of exception (chart) and workarounds for bugs.
3. Show 4.1 Routine: security errors – show security error resolution table and discuss some common problems, such as a misconfigured VistA code which causes authentication to fail.
4. Explain WYSIWYG errors and show the Activity/Incidence/Response table.
5. Show 4.2: Significant Errors, discuss the logging table and 4.1.2 - application error logs.
6. Show 4.2.2: Application Errors
7. Show 4.4 table 24: Errors and Descriptions
8. Show 4.5.2, where the service restart procedure is located.

Call for Questions.

END