VMware Advanced Configuration and Management

VMware Advanced Configuration and Management is a 4 or 5 day class that covers topics that are beyond the Installation and Configuration. This class will provide the students with CLI experience and tools that will help them "get under the hood" of ESX and troubleshoot more effectively. The class uses both CLI and GUI tools to troubleshoot and learn about the ESX environment. This class is approximately 50% lab and 50% lecture. The class ends on the 4th day, but can continue into the 5th day as a full lab. This lab will include an advanced Scripted Installation that takes advantage of the commands used in class, additional advanced CLI troubleshooting exercises, as well as a "hands on lab test". Students who successfully pass the lab test will be awarded a certificate for completion of the lab.

I. ESX Server Provisioning
   1. Attended installations
   2. Scripted/Unattended installation
   3. CLI commands useful in scripted installs and post installation configuration

II. Security
   1. VMware Virtualized Environment
   2. Physical Infrastructure
   3. How Virtual Infrastructure mitigates common security vulnerabilities
   4. Secure access to storage networks
   5. Security for network infrastructure
   6. Secure access to service console

III. Resource Allocation
   1. Core Resources
   2. Limits
   3. Shares
   4. Reservations
   5. Resource Management
   6. Resource Pools

IV. Clusters and Data Protection
   1. Clusters Overview
   2. VMware DRS
   3. VMware HA
   4. VMware VCB

V. Performance Monitoring and Tuning
   1. CLI
   2. GUI/VIC
   3. Interpreting Performance Graphs
   4. Microsoft PerfMon

VI. Fault Analysis
   1. Tools
   2. Methodology
   3. Analyze and solve problems in VI3

Optional Lab and Exam Day 5

I. Install ESX unattended
    a. vSwitch for Production VM
    b. VMKernal for NFS and iSCSI
    c. 2nd Service Console for management
    d. NFS storage
    e. iSCSI storage
    f. Add user and grant shell access
    g. Allow root to use SSH

II. Using VIC
    a. Configure vMotion on SC port
    b. Verify correct appliction of script

III. Virtual Center installation and configuration
    a. Create VM
    b. Install Virtual Center on the VM
    c. Create VM
    d. Clone VM to template
    e. Deploy VM from template
    f. Configure HA and DRS
    g. Test Vmotion
    h. Test DRS
    i. Test HA

IV. Written test

V. Final lab for exam