

VMware vSphere APIs

Course Duration: 5 Days

Course Overview:

This training provides hands-on knowledge about VMware vSphere APIs from former VMware engineer who authored the book VMware VI and vSphere SDK with Prentice Hall, and created the de facto open source vSphere Java API. It covers the concepts and various aspects of vSphere APIs, from virtual machine, networking, clustering, event management, to performance monitoring, etc. with full week hands-on labs. For private training classes, we can heavily customize the training contents for your project needs.

Course Objectives:

1. Master the fundamentals of vSphere APIs 5.1
2. Deep dive into specific vSphere APIs with 15 or so hands on labs
3. Get hands on needed tools including open source vijava API (<http://vijava.sf.net>)
4. vSphere API best practices and troubleshooting techniques

Prerequisites:

VMware vSphere Basics; Programming languages like Java

Delivery Format:

Onsite, Live Online, Classroom

COURSE OUTLINE (can be adjusted to specific needs)

Day 1

- Introduction and Course Logistics
- VMware vSphere API Overview
- vSphere API Reference
- Lab 1: Using vSphere API Reference
- Open source VIJava API Architecture Overview
- vSphere Managed Object Browser (MOB)
- Lab 2: Using MOB
- Doublecloud Proxy
- Development Environment Setup
- Lab 3: Hello vSphere – Your First Program
- Task Management

Day 2

- Virtual Machine Management Overview

- Virtual Machine Configurations
- Lab 4: Resizing VM
- Virtual Machine Stats
- Lab 5: Retrieving Stats
- Virtual Machine Power Management
- Lab 6: Power on/off/suspend VMs
- Device Management
- Lab 7: Attach a New CD to VM
- Virtual Machine Snapshot Management
- Lab 8: Create/Revert Snapshots

Day 3

- Virtual Networking Overview
- Lab 9: Portgroup Creation
- Lab 10: Static Route Assignment for ESXi
- Host Management
- vSphere Clustering Management
- Resource Management

Day 4

- User Management and Security Model
- Lab 11: Create User and Assign Role
- Session Management
- Lab 12: Monitor Live Sessions
- License Management
- Lab 13: Assign Licenses
- Event Management
- Performance Monitoring

Day 5

- Alarm Management
- Lab 14: Create Alarm to SNMP
- vSphere Plugin Development
- Lab 15: Hello World Plugin to vCenter
- Other Language Bindings
- vSphere API Best Practices
- Q&As