Oracle Enterprise Manager 12c Cloud Control: Install & Upgrade Workshop

Course Summary

Description

This course is the first in a series for the Oracle Enterprise Manager 12c Cloud Control product. This course is intended to provide one with an in-depth understanding of the architecture of the Oracle Enterprise Manager 12c Cloud Control platform. It guides one through a step-by-step installation and preliminary configuration of a Cloud Control instance. Operating system specific considerations that apply to installing the Cloud Control on a Linux, Unix, or MS Windows host are provided, along with numerous examples. Potential problems and pitfalls are discussed and possible troubleshooting remedies are offered.

One will learn how to discover within the systems infrastructure a host system and a software installation running on that host, such as a database or middleware application server instance. Incorporating the host system and the software installation into the Enterprise Manager 12c framework then allows the Cloud Control to be used to manage those targets.

The course then concludes with Oracle Enterprise Manager 12c Cloud Control upgrade procedures, including actual examples from real-world upgrade scenarios. Throughout the procedures explained in this course are recommendations for building a high-availability, high-performance and secure Enterprise Manager installation.

Topics

- EM Cloud Control Architecture
- Configuring A Host For EM Cloud Control
- Installation
- Target Discovery
- Upgrade

Audience

The target audience for this course is all Oracle professionals. Among the specific groups for whom this course will be helpful are database administrators, web server administrators, system administrators, implementation specialists, and data center support engineers.

Prerequisites

Before taking this course, students should have taken the Oracle Database 12c: Install & Upgrade Workshop (PT9684). Students should be familiar with basic host system configuration and Oracle software installation techniques that are helpful to complete an Oracle Enterprise Manager 12c Cloud Control installation.

Duration

One day
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Course Outline

I. EM Cloud Control Architecture
   A. About Enterprise Management
   B. EM Framework
   C. EM Framework Extensibility
   D. EM Architecture
   E. EM High-Availability Architecture

II. Configuring A Host For EM Cloud Control
   A. Configuration Overview
   B. EM CC Repository Database Recommendations
   C. EM CC Repository Database Templates
   D. Host Configuration Steps
   E. Host System Requirements
   F. Categorizing The Size Of Your Systems Infrastructure
   G. Database System Requirements
   H. Making The OS Selection
   I. Linux Host Configuration
   J. Step 1 – Check Linux Package Requirements
   K. Step 2 – Check Environment Variables
   L. Step 3 – Check Network Configuration
   M. Step 4 – Create System Groups & Users
   N. Step 5 – Shell Configuration
   O. Step 6 – Create The Oracle Inventory Directory
   P. Step 7 – Create Or Identify The Home Directories
   Q. Home Directory Restrictions
   R. Troubleshooting Problems
   S. MS Windows Host Configuration
   T. Check Virtual Memory Configuration
   U. Check Environment Variables Settings
   V. What Is Cygwin & Why Do I Need It?
   W. Download Cygwin
   X. Cygwin Installation Dialog
   Y. Configure Cygwin
   Z. Configure OpenSSH
   AA. Verify The Installation

III. Installation
   A. Perform A Linux Installation
   B. Download
   C. Unpack The Installation Package
   D. Launch The Installation Session
   E. About The Installation Dialog
   F. Advanced Installation Dialog
   G. Troubleshooting Repository Problems
   H. Specify Authentication Passwords
   I. Specify Repository Tablespaces
   J. Configure Oracle Software Library
   K. Troubleshooting Problems
   L. Updating Oracle Inventory Before Retrying The Installation
   M. Handling Partial Installation Situations
   N. Simple Installation Dialog
   O. Perform A Windows Installation
   P. Post-Installation
   Q. Post-Installation Tasks
   R. EM Host Firewall Configuration
   S. Defining The Environment Variables
   T. OMS High-Availability
   U. Encryption Key Availability
   V. Oracle Software Library Availability
   W. Repository Database High-Availability
   X. VERIFY THE INSTALLATION
   Y. Access The WLS Administration Console
   Z. Access The Cloud Control
   AA. Peruse The Installation Directories

IV. Target Discovery
   A. About Target Discovery
   B. The Target Discovery Process
   C. Obtain Management Agent
   D. Prerequisite Checks For This Step
   E. Download Management Agent Software
   F. Apply To The Software Library
   G. Add HOST Target
   H. Deploy Management Agent
   I. Guided Process
   J. Named Credentials
   K. Deployment Operation
   L. How Will You Do?
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Course Outline (cont’d)

M. ADD NON-HOST TARGET
N. Add Targets Using Guided Process
O. Specify Common Monitoring Credentials
P. Troubleshooting Problems

V. Upgrade
A. Upgrade Considerations
B. About Versions, Releases & Patches
C. Direct Upgrade Path
D. Indirect Upgrade
E. Scope Of An Upgrade
F. Developing An Upgrade Strategy
G. Upgrade Strategies
H. Launch The Upgrade Session
I. About Downtime
J. One System Upgrade Approach
K. Two System Upgrade Approach
L. Blended Approach
M. One-System Upgrade Dialog
N. The Upgrade Scenario
O. The Installation Dialog
P. Handling The EM Encryption Key
Q. Troubleshooting Problems
R. Post-Upgrade Configuration Tasks