

Contents

1 Introduction

Course Goals 1-2

Lesson Objectives 1-3

What Is Enterprise Manager Cloud Control 13c? 1-4

Why Do I Need Enterprise Manager Cloud Control 13c? 1-5

Cloud Control 13c: A Single Pane of Glass 1-6

Cloud Control 13c Major Themes 1-8

Finding Your Way Around Cloud Control 13c 1-9

This Course in Context 1-10

Oracle VM VirtualBox in the Classroom 1-11

Summary 1-13

Practice 1-1 Overview: Using Oracle VM VirtualBox 1-14

Practice 1-2 Overview: Getting to Know the Cloud Control 13c Interface 1-15

2 Architecture and Implementation Options

Objectives 2-2

Cloud Control Components 2-3

Oracle Management Service 2-5

Oracle Management Repository 2-6

Oracle Management Repository Best Practices 2-7

Oracle Management Agent 2-8

Communication Flow Between Components 2-10

Oracle Management Agent Deployments 2-11

Agent Installation Best Practice: Gold Agent Images 2-13

Host and Target Discovery Mechanism 2-14

Target Discovery 2-15

Key Differences Between 13c and Earlier Versions 2-16

Implementation Options 2-17

Single-Server Installation Process 2-19

Installation Directories 2-22

Initial Setup Console 2-23

Starting and Stopping Cloud Control 13c 2-24

Quiz 2-25

Practice 2-1 Overview: Installing Cloud Control in a Single-Server Topology 2-26

Practice 2-2 Overview: Using the Initial Setup Console 2-27

Practice 2-3 Overview: Adding Managed Hosts 2-28
BI Publisher 2-29
The BI Publisher Security Model 2-30
Practice 2-4 Overview: Setting Up BI Publisher Security 2-31
Summary 2-32

3 Oracle Cloud in Your IT Ecosystem

Objectives 3-2
Oracle Cloud as Part of Your IT Ecosystem 3-3
Tools for Monitoring and Managing Oracle Cloud Services 3-4
Why Use Cloud Control to Manage Oracle Cloud Services? 3-5
How Cloud Control Monitors and Manages Oracle Cloud Services 3-6
How to Get Past the Firewalls That Protect You? 3-7
The Hybrid Cloud Agent: An Elegant Solution 3-8
Under the Covers of the Hybrid Cloud Agent 3-9
What the Hybrid Cloud Agent Enables 3-10
Summary 3-11

4 Upgrade Paths

Objectives 4-2
Upgrade Paths 4-3
12c to 13c Upgrade Utilities 4-4
The 1-System Upgrade Process 4-5
Cloud Control 12c Software-Only with Plug-ins Upgrade Procedure 4-6
Cloud Control 12c 1-System Upgrade Procedure: Steps 1 and 2 4-7
Cloud Control 12c 1-System Upgrade Procedure: Step 3 4-8
Cloud Control 12c 1-System Upgrade Procedure: Steps 4 and 5 4-9
Cloud Control 12c 1-System Upgrade Procedure: Step 6 4-10
Cloud Control 12c 1-System Upgrade Procedure: Step 7 4-11
Agent Upgrade Best Practice: Gold Agent Images 4-12
Cloud Control 12c 1-System Upgrade Procedure: Step 8 4-13
12c Upgrade Requirements and Best Practices 4-14
Start Using SHA Certificates Today 4-15
Quiz 4-16
Practice 3-1 Overview: 1-System Upgrade (12.1.0.5 to 13.2.0.0) 4-19
Summary 4-20

5 Implementation Planning

Objectives 5-2
Enterprise Manager Implementation Lifecycle 5-3
The Implementation Plan 5-5

Cloud Control Infrastructure Growth	5-7
An Enterprise Manager Site	5-9
One Site Managing the Entire IT Enterprise	5-11
Multiple Sites Managing the IT Enterprise	5-12
Sizing the Repository	5-13
OMR Life Cycle and Security	5-15
OMS Life Cycle and Security	5-16
Elements of High Availability	5-17
Four Levels of High Availability	5-19
High Availability Level 1 Best Practice Installation	5-21
High Availability Level 2 Sample Design	5-22
High Availability Level 3 Sample Design	5-23
High Availability Level 4 Sample Design	5-24
The Availability Continuum	5-25
Keeping Up with Current High Availability Trends	5-26
Summary	5-27

A Cloud Computing Fundamentals

We Are Already Consumers of the Cloud	A-2
Cloud Computing	A-4
Cloud Computing: Essential Characteristics	A-6
Cloud Computing Service Models	A-8
Cloud Computing Deployment Models	A-10
Sharing the Benefits of Cloud Computing	A-11
Why Implement a Cloud?	A-13
Cloud Service Models: IaaS	A-15
Cloud Service Models: PaaS	A-16
Cloud Service Models: SaaS	A-17
Deployment Models: Private Cloud	A-18
Deployment Models: Community Cloud	A-19
Deployment Models: Public Cloud	A-20
Deployment Models: Hybrid Cloud	A-21
Cloud Type Formula	A-23
From Zero to Cloud	A-25
Managing Internal Stakeholders	A-27
To the Cloud or Not? Scenario 1	A-28
To the Cloud or Not? Scenario 2	A-29
To the Cloud or Not? Scenario 3	A-30