Oracle Communications Converged Application Server 5 Essentials Certified Implementation Specialist Exam Study Guide
Getting Started
The Oracle Communications Converged Application Server 5 Essentials Certified Implementation Specialist Exam Study Guide is designed to help you prepare for the Oracle Communications Converged Application Server 5 Implementation Essentials Exam (1Z1-571).

Earning this certification helps OPN members differentiate in the marketplace through proven in-depth expertise, and helps their partner company qualify for the Oracle Communications Service Delivery Platform 5.

Target Audience
The Oracle Communications Converged Application Server 5 Essentials Certified Implementation Specialist exam audience defines the type of participants who are likely to pass the exam and targets individuals with a specific level of education and expertise:

Job Role:
- Application Developers
- Network operators
- Service providers

Level of Competency:
Required
- Basic understanding of Linux/Unix system administration
- Basic awareness of SIP and IMS
- Java EE programming, preferably using Eclipse

Suggested
- Basic awareness of WebLogic Server architecture
- Basic awareness of application servers
Exam Topics

The Oracle Communications Converged Application Server 5 Certified Implementation Specialist exam covers **sixteen** topics:

- Oracle Service Delivery Platform Overview
- Architecture, Installation & Domain Creation
- Introduction to Session Initiation Protocol (SIP)
- Deployment Architectures and Sizing
- Networking
- Engine Tier Configuration
- Data Tier Configuration
- Deploying and Upgrading Applications
- Introduction to Eclipse and Oracle Enterprise Pack for Eclipse (OEPE)
- Introduction to SIP Servlets
- Developing SIP Servlets
- Configuring and Packaging SIP Servlets
- Security
- Application Routers
- Troubleshooting
- Logging and Packet Analysis
Levels of Knowledge

Each exam topic contains objectives and each objective is categorized by learner or practitioner level of knowledge.

Learner items test foundational grasp and require product comprehension (not recognition or memorization).

Example:
“When setting up price list modifiers in Advanced Pricing, which three steps must be completed in order to successfully activate surcharge and price break features?”

Practitioner items present on-the-job scenarios and require the ability to: integrate and apply knowledge in new contexts, analyze and troubleshoot complex issues, and solve problems.

Example:
1) “You are creating price list modifiers in Advanced Pricing. Your customer has three requirements: X, Y, Z. Identify the two steps that must be completed in order to meet those requirements.

2) “You are running a two-instance database with six redo logs defined. You decide to add a third thread to support a third database instance, on the third node of the cluster. Using command line administration, which two commands will you execute to achieve this?”

Training Options

Throughout the study guide each exam topic recommends one or several training formats:

- OPN Boot Camps
- Online Training
- Oracle University Training

While the Oracle Partner Network facilitates free access to online training, in class trainings often require a fee.
Exam Details per Topic

This section covers details associated to all exam topics such as: exam topics overview, objectives, levels of knowledge, recommended trainings and sample questions. Specialization exams include all application functionalities not only the most frequently used ones.

Topic 1: Oracle Service Delivery Platform Overview

Objective

- Identify the major products in the Oracle Service Delivery Platform portfolio
- Describe what differentiates each product from the other
- Describe the major features of Oracle Communications Converged Application Server
- Describe common use cases for Converged Application Server

Recommended Training

Online Training

- [Oracle Communications Converged Application Server Implementation Specialist Guided Learning Path](#)

Oracle University Training

- [Oracle Communications Converged Application Server Administrator](#)

OPN Boot Camps

- [Oracle Communications Converged Application Server Implementation Boot Camp](#)

Sample Questions

Which Oracle product best fits this description?

"This product includes open standards-based, highly scalable and available carrier-grade service interaction and mediation capabilities that enable service interaction across diverse network types, for example, SS7, and orchestrates multiple services in real time, enabling the creation of innovative blended services. Key customer use cases include NGIN and Service Capability Interaction Manager (SCIM)."

A. Oracle Communications Converged Application Server
B. Oracle Communications Network Charging and Control
C. [Oracle Communications Converged Application Server Service Controller](#)
D. Oracle Communications Services Gatekeeper
Topic 2: Architecture, Installation & Domain Creation

Objective

- Describe the components of an Oracle Communications Converged Application Server domain
- Install Converged Application Server
- Create a basic domain
- Leverage the configuration tools provided with Converged Application Server

Level

Learner

Practitioner

Recommended Training

Online Training

- Oracle Communications Converged Application Server Implementation Specialist Guided Learning Path

Oracle University Training

- Oracle Communications Converged Application Server Administrator

OPN Boot Camps

- Oracle Communications Converged Application Server Implementation Boot Camp

Sample Questions

You are tasked to design a call conferencing application for a small telecom company, where the power and telecom grid is weak. Which two things would you consider most important for meeting the requirement of reliability?

A. Asynchronous session management
B. Geographical redundancy
C. Real-Time Java Runtime
D. Compliance with JSR 309
E. Engine and data tiers
F. Application routers
G. A load balancer
Topic 3: Introduction to Session Initiation Protocol (SIP)

Objective

- Manipulate a SIP message
- Describe the SIP stack
- Describe the general components of a SIP application

Level

Practitioner
Learner
Learner

Recommended Training

Online Training
- Oracle Communications Converged Application Server Implementation Specialist Guided Learning Path

Oracle University Training
- Oracle Communications Converged Application Server Administrator

OPN Boot Camps
- Oracle Communications Converged Application Server Implementation Boot Camp

Sample Questions

SIP provides a method to query the capabilities of a Converged Application Server instance involved in a session. The capabilities include determining which SIP request methods are supported and the type of session data the method can handle.

Which SIP request method queries capabilities?

A. SUBSCRIBE
B. QUERY
C. OPTIONS
D. CAPAB
E. PRACK
F. NOTIFY
Topic 4: Deployment Architectures and Sizing

Objective

- Describe the architecture of a Converged Application Server deployment
- Calculate the number of servers required in the engine and data tiers

Level

Learner
Practitioner

Recommended Training

Online Training

- Oracle Communications Converged Application Server Implementation Specialist Guided Learning Path

Oracle University Training

- Oracle Communications Converged Application Server Administrator

OPN Boot Camps

- Oracle Communications Converged Application Server Implementation Boot Camp

Sample Questions

Which two statements are true about determining how many partitions, replicas, and hosts you need?

A. Each partition should be assigned more than one replica.
B. Each partition can be assigned only one replica.
C. There is no maximum number of replicas per partition.
D. All replicas in a partition should be hosted on the same physical machine.
E. Each replica in a partition should be hosted on a different physical machine.
Topic 5: Networking

Objective

- Configure SIP network channels
- Configure a Converged Application Server in a Network Address Translation environment
- Configure a multihomed Converged Application Server

Level

- Practitioner

Recommended Training

Online Training

- Oracle Communications Converged Application Server Implementation Specialist Guided Learning Path

Oracle University Training

- Oracle Communications Converged Application Server Administrator

OPN Boot Camps

- Oracle Communications Converged Application Server Implementation Boot Camp

Sample Questions

By what means do the domain templates provided with Converged Application Server define network access for SIP messaging?

A. IP aliasing  
B. source NAT  
C. destination NAT  
D. network channels  
E. Control SIP Channel Function (CSCF)
Topic 6: Engine Tier Configuration

Objective

- Configure a cluster
- Create an engine tier server
- Add SIP functionalities to servers and clusters

Recommended Training

Online Training

- Oracle Communications Converged Application Server Implementation Specialist Guided Learning Path

Oracle University Training

- Oracle Communications Converged Application Server Administrator

OPN Boot Camps

- Oracle Communications Converged Application Server Implementation Boot Camp

Sample Questions

Which item is not hosted in an engine-tier server instance when the cache function is not used?

A. servlet container  
B. SIP applications  
C. session information  
D. protocol stack  
E. protocol channels
Topic 7: Data Tier Configuration

Objective

- Configure a data tier
- Launch a Converged Application Server deployment gracefully

Recommended Training

Online Training

- Oracle Communications Converged Application Server Implementation Specialist Guided Learning Path

Oracle University Training

- Oracle Communications Converged Application Server Administrator

OPN Boot Camps

- Oracle Communications Converged Application Server Implementation Boot Camp

Sample Questions

Which three steps are required to configure a data tier?

A. **Create the data-tier cluster if one does not exist.**
B. Configure the data-tier cluster for multicast.
C. Add the data tier to the engine-tier cluster.
D. Configure the data-tier servers with SIP network channels.
E. Configure the data-tier servers by setting their “type” to “replica”
F. **Create partitions.**
G. Target the sipserver and datatier custom-resource to the cluster.
Topic 8: Deploying and Upgrading Applications

Objective

- Deploy a SIP application to a Converged Application Server
- Update a production environment with a new version of a Converged Application Server application

Level

Practitioner

Recommended Training

Online Training

- Oracle Communications Converged Application Server Implementation Specialist Guided Learning Path

Oracle University Training

- Oracle Communications Converged Application Server Administrator

OPN Boot Camps

- Oracle Communications Converged Application Server Implementation Boot Camp

Sample Questions

Which Converged Application Server application deployment format is recommended for development environments?

A. archived file: .sar (SIP application)
B. archived file: .war (Web application)
C. archived file: .jar (Java application)
D. archived file: .ear (Enterprise application)
E. exploded directories
Topic 9: Introduction to Eclipse and Oracle Enterprise Pack for Eclipse (OEPE)

Objective

- Describe the Eclipse project
- Describe the features of the Oracle Enterprise Pack for Eclipse
- Use Eclipse as the development environment for Converged Application Server applications

Level

Learner

Exam Registration Details

Recommended Training

Online Training

- Oracle Communications Converged Application Server Implementation Specialist Guided Learning Path

Oracle University Training

- Oracle Communications Converged Application Server Developer

OPN Boot Camps

- Oracle Communications Converged Application Server Implementation Boot Camp

Sample Questions

Which extra feature for Eclipse will make it easier for you to develop applications for Converged Application Server?

A. Oracle WebLogic Server for Eclipse
B. Oracle Coherence for Eclipse
C. Oracle Application Development Framework for Eclipse
D. Oracle Enterprise Pack for Eclipse
E. Oracle Spring for Eclipse
Topic 10: Introduction to SIP Servlets

Objective

- Describe the components of a converged application
- Describe the functions of the SIP Servlet container
- Apply the SIP Servlet API

Level

- Learner
- Learner
- Practitioner

Recommended Training

Online Training

- Oracle Communications Converged Application Server Implementation Specialist Guided Learning Path

Oracle University Training

- Oracle Communications Converged Application Server Developer

OPN Boot Camps

- Oracle Communications Converged Application Server Implementation Boot Camp

Sample Questions

Which three tasks are managed by a SIP servlet?

A. Managing automatic call ID
B. Registration of vias
C. Record-routing
D. **Sending SIP requests**
E. Handling SIP message retransmissions
F. **Sending provisional responses**
G. **Sending final responses**
Topic 11: Developing SIP Servlets

Objective

- Implement a SIP Servlet
- Perform basic operations such as proxying

Level

Practitioner

Recommended Training

Online Training

- Oracle Communications Converged Application Server Implementation Specialist Guided Learning Path

Oracle University Training

- Oracle Communications Converged Application Server Developer

OPN Boot Camps

- Oracle Communications Converged Application Server Implementation Boot Camp

Sample Questions

Which class should a developer access to store the data attributes for a SIP application?

A. SIPServlet  
B. DataTier  
C. SipSession  
D. SipServletContainer
Topic 12: Configuring and Packaging SIP Servlets

Objective

- Configure a SIP Servlet for deployment
- Package a SIP application for staging or production deployment

Recommended Training

Online Training
- Oracle Communications Converged Application Server Implementation Specialist Guided Learning Path

Oracle University Training
- Oracle Communications Converged Application Server Developer

OPN Boot Camps
- Oracle Communications Converged Application Server Implementation Boot Camp

Sample Questions

Which two statements are true about the `<servlet-mapping>` tag in sip.xml?

A. It specifies which servlet to associate with the file name portion of the URL.
B. It specifies which servlet to associate with a request method, unless that request is already associated with an established dialog.
C. It specifies which servlet to associate with which application's remote method invocations.
D. It specifies which servlet to associate with a request method, optionally with an extra conditional parameter.
E. It specifies which servlet to associate with the mapping function.
**Topic 13: Security**

**Objective**

- Describe the four supported types of SIP security
- Configure security with deployment descriptors
- Use security audit providers

**Level**

- Learner
- Practitioner
- Practitioner

**Recommended Training**

**Online Training**

- Oracle Communications Converged Application Server Implementation Specialist Guided Learning Path

**Oracle University Training**

- Oracle Communications Converged Application Server Administrator
- Oracle Communications Converged Application Server Developer

**OPN Boot Camps**

- Oracle Communications Converged Application Server Implementation Boot Camp

**Sample Questions**

All requests to protected resources, such as a protected method within a SIP servlet, must be authenticated by Converged Application Server.

Which two authentication methods are documented, and actively supported (not deprecated) by Oracle, for production environments?

A. BASIC Identity
B. DIGEST
C. Kerberos
D. IP SEC
E. CLIENT-CERT
Topic 14: Application Routers

Objective

- Describe the purpose and semantics of Application Routers
- Describe key types of the Application Router API: Routing Regions and Routing Directives
- Configure default and custom Application Routers
- Create a custom Application Router

Level

Learner

Recommended Training

Online Training

- Oracle Communications Converged Application Server Implementation Specialist Guided Learning Path

Oracle University Training

- Oracle Communications Converged Application Server Administrator
- Oracle Communications Converged Application Server Developer

OPN Boot Camps

- Oracle Communications Converged Application Server Implementation Boot Camp

Sample Questions

You are tasked to use application composition to consult data stores when determining which SIP application must handle a request.

Which is the best method to solve your problem?

A. Deploy a Default Application Router (DAR) that is configured using the administration console.

B. Deploy an Application Router that implements the SipApplicationRouter interface.

C. Deploy a DAR that is configured using a Java properties file.

D. Deploy a SIP Servlet that implements the SipServlet.ApplicationComposition class.
Topic 15: Troubleshooting

Objective

- Use the tools available for basic troubleshooting
- Troubleshoot Java Virtual Machine issues
- Troubleshoot WebLogic and Converged Application Server issues

Level

- Practitioner

Recommended Training

Online Training

- Oracle Communications Converged Application Server Implementation Specialist Guided Learning Path

Oracle University Training

- Oracle Communications Converged Application Server Administrator
- Oracle Communications Converged Application Server Developer

OPN Boot Camps

- Oracle Communications Converged Application Server Implementation Boot Camp

Sample Questions

Which monitoring tool can instrument server and application code with SIP request-and-response monitors?

A. JRockit Mission Control
B. sar
C. WebLogic Diagnostics Framework
D. WebLogic Server Debugging
E. The Administration Console
Topic 16: Logging and Packet Analysis

Objective

- Configure SIP message logging
- Create and configure custom SIP message logging servlets
- Leverage WireShark for packet analysis

Level

Practitioner

Recommended Training

Online Training

- Oracle Communications Converged Application Server Implementation Specialist Guided Learning Path

Oracle University Training

- Oracle Communications Converged Application Server Administrator
- Oracle Communications Converged Application Server Developer

OPN Boot Camps

- Oracle Communications Converged Application Server Implementation Boot Camp

Sample Questions

Which two statements correctly describe default (no special configuration) Converged Application Server logging?

A. SIP messages, including To, From, and CallID headers are logged.
B. The only SIP-related information logged describes the listening port used for SIP messages.
C. Every server has a local copy of the domain log file.
D. Every server has a local server log file.
E. A copy of all messages sent to the local server log is also sent to the domain log.
F. The domain log file gets messages of only type DEBUG.
Exam Registration Details

Full exam preparation details are available on the exam page Oracle Communications Converged Application Server 5 Implementation Essentials Exam (1Z1-571), including learning objectives, number of questions, time allowance, pricing and languages available.

The OPN Certified Specialist Exams appointments are available worldwide at Pearson VUE Testing Centers. Reservations can be made via phone or online.

Candidates must have an Oracle Web Account to access CertView and check their exam results. In order to have their certifications reflected on OPN Competency Center, both CertView and Pearson Vue accounts must be updated with the current OPN Company ID. Your Company ID can be obtained by contacting your local Oracle Partner Business Center or by signing in to your OPN account.

Additional Resources

- Oracle Communications Converged Application Server Overview
- Oracle Communications Converged Application Server Partners Information
- Oracle Communications Converged Application Server 5 Implementation Essentials Exam (1Z1-571)
- Oracle Communications Converged Application Server PreSales Specialist Guided Learning Path
- Oracle Communications Converged Application Server Implementation Specialist Guided Learning Path
- Oracle Communications Converged Application Server Implementation Boot Camp
- Oracle Communications Converged Application Server Documentation