ORACLE NETWORK APPLICATIONS PLATFORM

Oracle Network Applications Platform is an integrated hardware and software platform engineered to support the next generation of communications and network applications. It is a new type of platform that enables network equipment providers and communications service providers to minimize costs while accelerating time-to-market for innovative new services.

Pre-Integrated, Next Generation Platform

The challenge of delivering new and innovative communications applications has increased dramatically in recent years. Rapid growth in smart phones and mobile applications, accelerating customer expectations, and heightened competition from new players in the value chain have combined to create a major challenge for network equipment providers (NEPs) and communications service providers (CSPs). Differentiation and growth in the telecom market is now centered on delivering these new and innovative applications quickly to the market.

Oracle Network Applications Platform (ONAP) is focused on this key NEP and CSP challenge. ONAP is an integrated solution that includes all the key foundational hardware and software that NEPs and CSPs need to support the rapid development and role-based deployment of both new and legacy applications and services.

Unified Availability

Among the many requirements for today’s communication applications is the mandate to provide the highest possible degree of availability – up to 7 nines. As important is the demand for a solution that preserves the application state and continuous service required to meet the demands and expectations of consumers of these new services. Oracle Network Applications Platform offers a unified availability capability that is unique in its approach and performance.
ONAP APPLICATIONS

Oracle Network Applications Platform supports a wide range of communications and network applications:

- IMS (network applications):
  - Media gateway controller
  - Multi-media session control
  - Wireless media gateway
  - Call session control functions
  - Home subscriber
- Next Generation Intelligent Network (NGIN) Services:
  - MMS, SMS, messaging
  - AAA, SDP
  - Video transcoding (IPTV)
  - Home and mobile device management
  - Radio Access and Core Network Management
  - Subscriber management
- OSS:
  - Next generation /Unified OSS
- Policy Control & Charging (PCC)
- Real-time Charging/Online Charging Systems (RTC/OCS)
- Machine-to-Machine (M2M)

ONAP’s unified availability is based on two foundational technologies: Oracle Communications Service Availability (OCSA) software and Oracle Clusterware. These technologies are tightly integrated via Cluster Membership (CLM) to deliver a unique solution to the challenge of availability. The ONAP solution for availability maintains session integrity for applications even in the face of system faults. This means that when faults occur, ONAP will recover automatically from these errors, and maintain continuous service with no interruption for the end user of the service or application.

Unified Management

Unified Management is another foundational building block of the ONAP platform. ONAP’s management includes a robust set of application and system management capabilities based on Oracle Enterprise Manager 12c. Key capabilities include:

- Complete Lifecycle Management
- CLI and GUI Console options
- Automated Installation
- Configuration Management
- Telecom Presentation and Interfaces

ONAP is also architected for future evolution of additional functionality via an OEM Plug-In methodology that enables smooth migration as platform requirements evolve.

Extended Framework

In addition to the core system features of the ONAP, the platform is also extensible via Platform Service Modules that can add critical functionality and application support. The core building blocks of ONAP can be supplemented and extended by 3rd party commercial software companies as well as Oracle.

Appliance Assembly Framework

ONAP’s Appliance Assembly Framework provides component and application developers with the ability to package applications and build a deployment plan. ONAP includes an Integration Development Kit (IDK) that provides the APIs for integration of end-user applications with ONAP. This secure and centralized framework is further enhanced with a unique role-based architecture that simplifies the development and deployment process. ONAP’s role-based environment supports each of the key roles usually require when developing network and communications applications. Segmenting the development roles and functionality in this way ensures a smooth process with fewer errors as well as a higher degree of consistency across a wider range of applications. Roles included in ONAP are: component...
developer, development environment administrator, appliance assembler, appliance deployer and appliance administrator.

**Telecommunications - Ready**

ONAP’s core architecture and capabilities are complemented by a set of system features that make it ideal for telecommunications applications and services. This includes special power consumption features as well as the choice of AC or DC as the power source. All the key components are NEBS-certified and include extended product lifecycles that are crucial in telecom.

**Supported Hardware Configurations**

Oracle Network Applications Platform has two configurations that support the varied customer and market requirements for our customers’ network applications.

**Compute and Storage**

This ONAP configuration includes compute and storage capabilities along with the core features that are part of all ONAP software infrastructures. This configuration is ideal for applications with a high volume of small database transactions or heavy content management that requires a high volume of storage.

**Compute**

ONAP is also offered in a Compute-only configuration for those customers who do not want integrated storage in their application platform. This configuration is well-suited for applications with sensitive real-time demands and typically involves an in-memory database. Typical applications include on-line charging and SIP call processing.
## Hardware and Operating System Specifications

### Compute and Storage Configuration

<table>
<thead>
<tr>
<th>Network</th>
<th>Cisco 4948</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rack</td>
<td>Sun Rack II</td>
</tr>
<tr>
<td>Storage</td>
<td>Oracle Sun ZFS Storage 7320 Trays (2 or 4)</td>
</tr>
<tr>
<td></td>
<td>• 2 Controllers (72GB RAM, 2 x 512GB SSD each)</td>
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<tr>
<td></td>
<td>• 20 x 600GB HDD, 2 x 73GB SDD (each tray)</td>
</tr>
<tr>
<td></td>
<td>• 2 trays (24 TB) or 4 trays (48 TB)</td>
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<tr>
<td>Chassis</td>
<td>Sun Netra 6000, 1 per frame</td>
</tr>
<tr>
<td></td>
<td>Ethernet Switched NEM 24p 10 GbE</td>
</tr>
<tr>
<td>Blades</td>
<td>Netra Blade X3-2B Server Modules</td>
</tr>
<tr>
<td></td>
<td>• 256GB RAM, 4 x 600GB HDD</td>
</tr>
<tr>
<td></td>
<td>• Two Intel Xeon processor E5-2600 product family CPUs</td>
</tr>
</tbody>
</table>

### Compute - only Configuration

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<tr>
<td>Storage</td>
<td>N/A</td>
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<tr>
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<td>Sun Netra 6000, 2 per frame</td>
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### Operating System

Oracle Linux 5.8

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**Contact Us**

For more information about Oracle Network Applications Platform, visit oracle.com or call +1.800.ORACLE1 to speak to an Oracle representative.

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**Hardware and Software, Engineered to Work Together**