ORACLE®
CLOUD

Oracle Cloud Platform

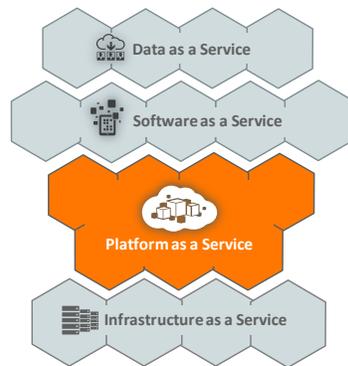For Application Development

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"The software industry has seen a 47 percent growth in cloud processes, forcing companies to rethink their IT strategies."

—GARTNER

Cloud computing is now broadly accepted as an economical way to share a pool of configurable computing resources. 87 percent of the businesses that participated in a recent Computerworld study said they look to cloud initiatives to lower capital expenses. 84 percent of them turn to the cloud to reduce operational expenses, while 89 percent say "greater business agility" is the main benefit of cloud. In the next two years, about 50 percent of companies plan to move key parts of their development workloads to public clouds to take advantage of rapid implementation options, dynamic scalability, and subscription-based pricing models.

In order to help customers reduce the cost of developing, testing, and deploying applications, Oracle introduced a broad portfolio of integrated cloud services. These subscription-based platform as a service (PaaS) offerings allow companies to develop and deploy nearly any type of application, including enterprise apps, lightweight container apps, web apps, mobile apps, and more. Oracle's cloud products are based on prevailing Java standards, so DevOps teams can use familiar architectures, utilities, and products—including IDEs—and then deploy their apps on-premises or to the public cloud. Oracle provides the same platform for public and private clouds, resulting in maximum flexibility as business requirements change and evolve. Even business users can now build simple apps without coding.

Data as a Service

Software as a Service

Platform as a Service

Infrastructure as a Service

Bring Oracle's leading Database and Middleware Technology Software to customers and partners anywhere in the World through the Internet

There are several types of application workloads that are being moved to the cloud:

- Java Enterprise Edition (EE) applications, many of which are key to business success

- Mobile apps, which are becoming increasingly more common as companies enhance their mobile strategies

- JavaScript and REST-based applications that focus on lightweight

development and customer experience

- Standard Java applications that companies wish to offload to the cloud

You can place other types of application workloads in Oracle Cloud as well, using a combination of dedicated or infrastructure services. However, this brief focuses on these four primary use cases.

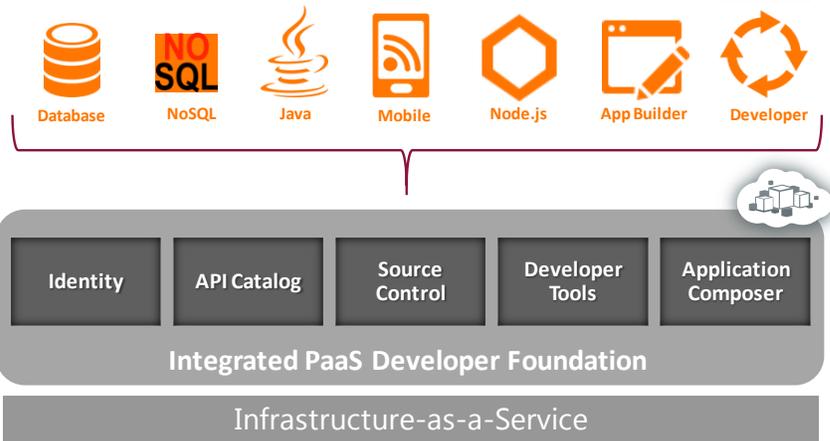## Developing and Deploying Java EE Applications

Java EE applications continue to be extremely important to the enterprise, often requiring complex infrastructure and layers of management complexity. Many companies report that it takes several weeks to spin up a development and testing environment for Java EE applications. To dramatically accelerate this cycle, Oracle introduced Oracle Java Cloud Service (JCS). This cloud offering, available on a subscription basis, boosts innovation and speed without erecting the usual IT roadblocks of standing up and configuring servers and infrastructure.

Each Oracle Java Cloud Service customer receives a fully-managed instance of Oracle WebLogic Server in the cloud, with optional Oracle Coherence in-memory data grid functionality. They can utilize dedicated virtual machines (VMs) running pre-configured WebLogic clusters—all managed by Oracle. Customers can choose the number of cores, amount of memory, scaling options, and backup options with a few clicks in a self-service interface. This versatile cloud service allows them to spin up instances for development, testing, and deployment in minutes rather than days or weeks.

Of course, Java EE apps must have a configured data source. To store application data, Oracle JCS customers can use Oracle Database Cloud Service, a cloud-based instance of the industry's #1 database. They can choose the version, access methods, and management options that meet their needs. Oracle Cloud also includes infrastructure services for application storage and computing.

Oracle Developer Cloud Service (DCS) is included with each Oracle JCS subscription. Customers enjoy a fully integrated, continuous delivery platform for cloud applications. They can automatically provision a development platform, manage tasks, track builds, and collaborate with other developers. Oracle Cloud streamlines the entire application development lifecycle.

ORACLE CLOUD SERVICES

- » Dedicated virtual machines (VMs) running WebLogic Server Cluster with pre-configured WebLogic Server 11*g* or 12*c*
- » Oracle Database as a Service (DBaaS) and Infrastructure Services
- » Automated patching, scaling, and backup
- » Customizable infrastructure to maximize flexibility
- » Mobile Backend as a Service (mBaaS)
- » In-browser, zero-coding mobile app development

Oracle Cloud Services are based on standards to minimize learning curves and maximize current investments.

Oracle Cloud Platform for Application Development

Database   NoSQL   Java   Mobile   Node.js   App Builder   Developer

| Identity | API Catalog | Source Control | Developer Tools | Application Composer |

Integrated PaaS Developer Foundation

Infrastructure-as-a-Service

Developing and Deploying Mobile Applications

Mobile is the new "first screen." In fact, mobile has surpassed TV as the primary screen we use today, increasing demand for mobile apps. Sophisticated mobile apps, especially corporate apps, often need to communicate with enterprise systems. Integrating mobile apps with these systems represents the majority of the work for developers—often as much as 80 percent of that work. Regardless of which client is used (iOS, Android, HTML5, etc.), the primary communication between the mobile client and the server is asynchronous HTTP with REST/JSON protocol and the leading technology that serves mobile apps is Node.js.

To help customers leverage these popular technologies and trends, Oracle introduced Oracle Mobile Cloud Service, a Node.js-based environment that accelerates the development of rich mobile applications. Oracle Mobile Cloud Service also includes mobile analytics that allow business users to measure app usage and adoption. Mobile app developers can utilize common mobile services such as data storage, data sync, push notifications, and user management while also gaining access to a customizable mobile API catalog.

Oracle Mobile Cloud Service also includes services for backend developers. They can easily access enterprise applications such as ERP, CRM, and HCM. Oracle provides the tools and frameworks to expose backend services as mobile-friendly REST/JSON APIs, including a common API catalog that can be shared with mobile app developers.

Throughout this cloud-based mobile development environment, performance and analytical metrics are available to fine-tune applications for optimal delivery and performance.

Developing and Deploying Java SE Apps

Many companies have Java Standard Edition (SE) applications with desktop, web, and mobile interfaces. Oracle Java SE Cloud Service is often considered a "JDK-as-a-Service" since it delivers lightweight, scalable runtime tools for Java workloads. For continuous delivery and deployment of Java SE workloads, developers can use Oracle Developer Cloud Service, which is included with the Oracle Java SE Service subscription.

Developing and Deploying JavaScript, HTML5 & REST Apps

Today's development shops are overrun with requests for enhancements and updates. To address these needs, Oracle has introduced Oracle Application Builder Cloud Service, a set of lightweight services that empower line-of-business users to create their own apps without coding. They can build extensions to existing applications or focus on creating compelling user interfaces. Oracle Application Builder Cloud Service simplifies connectivity to any REST-enabled data source. Business users can build solutions quickly without relying on developers for assistance.

Conclusion: Cloud Develop and Deployment Made Easy

Oracle has a rich set of PaaS offerings that accommodate many different development scenarios. Whether you are developing and deploying Java EE applications or mobile workloads, Oracle Java Cloud Service, Oracle Developer Cloud Service, and Oracle Mobile Cloud Service include the tools and utilities that you need. These PaaS offerings are based on Oracle's field-tested, industry-leading middleware and database solutions.

Oracle provides an integrated set of cloud solutions for developing and deploying Java SE, JavaScript, HTML5, and REST apps. This comprehensive offering gives customers lots of deployment choices. Oracle utilizes the same platform, products, and technologies for cloud-based and on-premises workloads.

Try Java Cloud Service, Developer Cloud Service and other services now at: *https://cloud.oracle.com/tryit*

"Today's development shops are overrun with requests for enhancements and updates."

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Hardware and Software, Engineered to Work Together

Oracle is committed to developing practices and products that help protect the environment

ORACLE PLATFORM AS A SERVICE: CLOUD APPLICATION DEVELOPMENT AND DEPLOYMENT