Oracle’s Public Cloud Portfolio Expansion: Nearly Complete

Oracle has shifted most of its product portfolio to the cloud.
Summary

Catalyst

Oracle is turning itself into a cloud-centric business. June 2015 was an important milestone in this process because as well as its latest annual results (see Ovum report: Oracle’s Cloud Transformation: Ongoing, Successful, Challenging report), it announced no fewer than 24 new services as the company continued to round out its public platform-as-a-service (PaaS) portfolio. It also expanded, but to a much lesser extent, its public infrastructure-as-a-service (IaaS) portfolio.

Ovum view

Oracle’s public IaaS, PaaS, and software-as-a-service (SaaS) cloud business will continue to grow on the basis of its expanding and maturing portfolio, which the company needs to keep improving to maintain the momentum of its cloud transformation. The unexpected June 2015 announcement of archiving services is a positive development, but Oracle’s public IaaS services portfolio still needs to further expand and mature. This is much less the case at PaaS level. Oracle’s public PaaS offering has expanded quickly in the past two years. It is now nearly complete as a result of the June 2015 announcement, and is capable of catering to the needs of a variety of audiences, from developers (with Database, Java, developer, and mobile services, for example), to line-of-business users (with analytics and BPM, for example), as well as corporate IT. Its SaaS portfolio is the most mature of all, and its verticalization is well and truly underway. The company has cloud Industry Solutions for the communications, financial services, consumer goods, high tech and manufacturing, and higher education sectors, and Ovum expects to see further development of industry-specific cloud solutions.

Key messages

- Public PaaS remains Oracle’s current focus.
- Oracle continues to develop its public IaaS capabilities.
- Oracle’s SaaS business is healthy and increasingly verticalized.

Recommendations

Recommendations for enterprises

Oracle has grown into a credible provider of cloud computing in all its guises, from private to public clouds, as well as SaaS, PaaS, and IaaS. If you have Oracle technology and skills to leverage, Oracle should be shortlisted. Even if you don’t, consider its now nearly complete cloud service portfolio with care. The list of services unveiled in June 2015 is Oracle’s most comprehensive to date, clearly illustrating the company’s commitment to its ongoing cloud transformation. However, the services are varied. Some are available immediately and others still to be released, and their maturity is uneven. Oracle does not provide enough details about this, so make sure you ask which service will be available when from which data center. Familiarize yourself with the services that are currently available, understand their limitations, the terminology that relates to them, and their evolution. At the time of this publication, for example, the Oracle Java Cloud Service, Integration Cloud Service, Mobile
Cloud Service, Process Cloud Service are generally available while yet-to-be-released services include Oracle Application Builder Cloud Service and Oracle Node.js Cloud Service. Similarly, the simplified and guided user experience delivered by the new Oracle Integration Cloud Service is soon to expand from Oracle’s public cloud to on-premise private clouds, and to support long-running integration orchestrations, as well as pre-integration with the Oracle Developer Cloud Service for full development lifecycle.

Recommendations for vendors

The more it expands, the more Oracle’s portfolio of cloud services provides independent software vendors (ISVs), system integrators (SIs), managed service providers (MSPs), and value-added resellers (VARs) with new business opportunities. The IaaS portfolio maturing well, but the PaaS portfolio is the one to focus on at this time.

Public PaaS remains Oracle’s current focus

Oracle’s public PaaS offering is taking off

At the fiscal 2015 earnings conference call, the company asserted that it had booked over $100m in public PaaS business, which grew 100% sequentially in the last quarter of fiscal 2015, with 1,419 new customers out of a total of 1,800 customers for the Oracle Cloud Platform (this also includes IaaS). This is significant but not surprising. There is a lot of low-hanging public PaaS fruit in the Oracle customer base. The company needs to build on this initial momentum. Also bear in mind that this is the second wave of Oracle’s PaaS roadmap. It launched its first offering in 2013 and in June of that year claimed 3,400 database PaaS and 1,700 Java PaaS customers.

The 2014/2015 expansion of the public PaaS portfolio is much more substantial that the initial 2012/2013 launch, all the more so following the June 2015 announcement. There were no particular surprises among the services announced. Most of them were expected (see Ovum’s Oracle PaaS Cloud: Ambition and Expansion report). The only major piece still missing is Oracle’s identity management platform, which has yet to be fully turned into a public PaaS offering.

Nevertheless, Oracle now has a portfolio capable of catering to the needs of a variety of audiences, from developers (with Database, Java, developer, and mobile services, for example), to line-of-business users (with analytics and BPM, for example), as well as corporate IT. Oracle’s integration cloud services (iPaaS), composed of Integration Cloud Service and SOA Cloud Service, for instance, cater to both lines of business and corporate IT.

The company has had some success when using public PaaS services to ease the migration of its customer base to its SaaS business applications, because PaaS provides these customers with the platform and tools they need to replicate custom extensions to their on-premise business applications. However, until now, resources, design, and functionality constraints have limited public PaaS services to smaller greenfield applications rather than the lifting and shifting of large (Java) applications. As these services mature and evolve, however, and not just expand in number, we will see more lifting and shifting of these large applications. Next, Oracle needs to attract its ISV partner ecosystem to its PaaS platform. ISVs have yet to move beyond small extensions to Oracle’s own SaaS modules.
In the meantime, the company is right to focus on ease of use, support, and speed of implementation rather than just security and reliability. Platinum Support customers get 15-minute response times, for example. But you might want to put pressure on Oracle to improve its cloud hosting and delivery policies. Availability SLA, for example, is currently an average 99.5% for all of Oracle’s cloud services, and downtime includes not only planned downtime for maintenance and upgrades, but also outages due to denial of service, hacker, or malware attacks. You also need to keep an eye on how the new services evolve at this level. During initial releases, the newly announced Oracle Integration Cloud Service, for example, will require a planned downtime once every month for a short duration, but Oracle is looking to alleviate this in a future release.

Pick the right Oracle Database Cloud Service

![Figure 1: Oracle Database Cloud service portfolio from June 2015](source)

Until June 2015, the Oracle Database Cloud Service portfolio consisted of two offerings: the Database Schema Service (also known as the “multitenant” service) and the Database as a Service offering available in “standard” and “enterprise” editions. In June 2015, Oracle added two new Database as a Service editions (high-end extreme performance) and a third service called Oracle Database Cloud – Exadata Service. The resulting portfolio makes it easier for enterprises to find and combine the right option(s) (see Figure 1).

Database Schema Service is a dedicated schema managed by Oracle that targets Oracle Application Express developers who wish to develop or deploy Application Express applications in one schema or access data in their schema using RESTful Web Services. Database as a Service is a dedicated database instance with direct network connections and full administrative control. It targets more generic Oracle database-centric applications.

The June 2015 announcement mostly focused on the Oracle Database Cloud – Exadata Service that provides full access to the features and operations available with Oracle Database, with Oracle providing and Exadata Database Machine environment and (optionally) performing certain database maintenance and management operations. It makes the hardware and software-engineered system combination previously only available as an on-premise option available as a public cloud service on a monthly subscription basis. This is a high-end offering that starts with a Quarter Rack, which features two database servers and three storage servers, 28 microprocessor cores, and 42 terabytes of storage, and is capable of 1 million input/output operations per second (IOPs). Pricing is based on the number of enabled compute cores. It does scale up, but not down, and the only parameter that users
can tweak is the number of cores, not memory, storage, or network resources (to change these they need to upgrade to the Half and Full Rack options). Backups leverage the Oracle Database Backup Service, which has been available for a while and which Oracle categorizes as PaaS. It is a RMAN-integrated solution that sends Oracle Database backups directly to Oracle’s public IaaS Storage Cloud.

Make sure you take advantage of the breadth of Oracle’s developer-centric public PaaS services

Oracle provides a full Java infrastructure for running Java applications in the Oracle Cloud. The first Oracle Java Cloud Service to ship was the Java Cloud Service - SaaS Extension, an Oracle-managed dedicated environment with no access to underlying infrastructure focused on building extensions and personalizing Oracle Cloud SaaS applications.

At OpenWorld 2014 Oracle released two other Java Cloud Service types: Java Cloud Service and Java Cloud Service Virtual Image. Each of these enables customers to choose deployments in the cloud of WebLogic Server Standard Edition (non-clustered Java servers), WebLogic Server Enterprise Edition (clustered Java servers), and WebLogic Suite (clustered Java servers with an in-memory data grid, Coherence).

Java Cloud Service Virtual image delivers simplified self-service provisioning of WebLogic Server and Coherence, but requires the customer to manually deal with administration and other lifecycle activities. It targets development and testing activities. The Java Cloud Service adds tooling for automated administrative and lifecycle operations and focuses not only on development and testing but also production workloads, be they moved from on-premise to the cloud or developed natively in the cloud. The Oracle Database Cloud Service options underpin (but are priced separately) its Oracle Java Cloud Service options (see Table 1).

Table 1: How Oracle Database Service relates to Oracle Java Cloud service

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<th>Java Cloud Service</th>
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Source: Oracle. * Indirectly needed if DBCS backup to storage-enabled

All Java Cloud Service offerings include (free) access to the Oracle Developer Cloud Service that became generally available at OpenWorld 2014. The Oracle Developer Cloud Service is not yet available on its own. Instead, it is embedded in other Oracle PaaS offerings. Use it to underpin agile development and continuous builds/deployment processes based on support for the likes of Git (source code management), Hudson (continuous integration), Maven (build automation), and Mylyn (task management). It enables you to deploy build results to your on-premise production environments, not just public PaaS environments.

In June 2015, Oracle built on its Java and Developer Cloud credentials to deliver a variety of additional services, some yet-to-be-released (Oracle Application Builder Cloud Service, Oracle Node.js Cloud Service, for example) and others available (Oracle Mobile Cloud Service, Oracle Integration Cloud Service, for example) although mostly as pilots so far.
The Oracle Application Builder Cloud Service focuses on making it easier to create SaaS extensions. It did not attract much attention but could prove significant. It is part of Oracle’s ongoing efforts to evolve its public cloud offering to ease SaaS customization as well as upgrade processes. This is particularly important to users of Oracle’s earlier generation applications and will help Oracle convince more customers to host these applications on Oracle’s own Public Cloud as opposed to third-party clouds. Its declarative (graphical, drag and drop) approach to programming also expands Oracle’s market reach beyond developers to other IT people with development skills and “power users”, but make sure you control who does what with it. It creates applications that can span desktop and mobile devices. Last but not least, it makes it easier to mash-up Oracle and non-Oracle services.

While a new Oracle Java SE (Standard Edition) Cloud Service expands Oracle cloud’s traditional Java support, the new Node.js offering, alongside a forthcoming JRuby-centric one, once available, will expand Oracle’s market reach beyond Java to a new generation of developers. The Node.js/JRuby offerings combine Oracle cloud resources with Node.js/JRuby-related tools (in addition to the Oracle Developer Cloud Service) and runtime components. The Oracle Mobile Cloud Service already leverages Node.js under the hood.

The Oracle Mobile Cloud Service, which Ovum expected to become available at OpenWorld 2014 and is now finally available, builds on Oracle’s strong presence as a Mobile App Development Platform (MADP) provider (see Figure 2). It is application client tool-agnostic with SDKs for Native platforms (iOS, Android, and Windows (future)) as well as JavaScript client frameworks, and frameworks such as Xamarin. It complements the Oracle Mobile Application Framework (Oracle MAF) that combines Java, HTML5, and JavaScript to develop applications once and deploy them to both Apple iOS and Google Android platforms. It makes it easier, with an API-centric approach, for mobile developers to create mobile interfaces, integrate to enterprise data and third-party mobile services, and add mobile centric services such as push, offline sync, and storage. It also complies with enterprise’s single sign...

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**Figure 2: Ovum Decision Matrix: Mobile App Development Platform (MADP) 2015–16**

[Image of Ovum Decision Matrix]

Source: Ovum

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on access and governance for both B2C and B2E applications federating with existing enterprise IDM stores. It needs to mature further, however, in areas such as connectors to third-party services and IoT/wearable support, for example. It is also the service that would be the most positively affected by the release of a cloud-based identity management service. It does have OAuth 2.0 and SAML for REST Connector APIs, but does not currently support Role Based Access Control (RBAC) and Active Directory.

Oracle’s Process Cloud Service’s modeling and execution environment makes it an attractive entry point for organizations in the early stages of BPM adoption, and a lighter-weight complement to the on-premise Oracle Business Process Management Suite for organizations that are already delivering BPM. Its positioning is similar to that of most of Oracle’s public cloud services. Oracle is clear that for very complex processes or systems that have to support high transaction volumes, its on-premise product is likely to be more suitable. However, the majority of process use cases do not demand the level of sophistication that Oracle’s heavy-duty BPMS platform delivers. If you are already using Oracle’s BPMS, consider it as a complementary technology. If you are new to BPM, Process Cloud offers an attractive entry point. The new service makes Oracle’s BPM technology accessible to a much wider audience. Combined with the Oracle Document Cloud Service it provides a strong digital workplace business automation and collaborative solution.

Oracle added the Oracle Documents Cloud Service and the Oracle Business Intelligence Cloud Service to its PaaS portfolio in October 2014, expanding the reach of its PaaS from developers to line-of-business users. The Oracle Documents Cloud Service provides content collaboration for file sharing, and a content platform for content-enabling business applications. Oracle plans to extend its Documents Cloud Service with the Social capabilities of its Social Network (already tightly integrated into its SaaS applications) to provide an integrated suite for business context aware digital collaboration. The Oracle Business Intelligence Cloud Service provides business users with powerful data analytics and visualization capabilities. Accessible from mobile devices, it supports a broad array of cloud and on-premise data sources combined with powerful tooling for data sync and data modeling.

Consider Oracle’s expanding big data portfolio

Oracle’s database, and therefore private DBaaS cloud, strategy has become increasingly big data-centric in the past two years, all the more so since the open source-centric big data movement is a growing disruptor for Oracle’s database business. In this context, the company relies not only on Oracle Database 12c’s multi-tenant option (mid-2013), but also on its in-memory (mid-2014) option. The latter positions it as a direct competitor to SAP HANA. Oracle thinks of big data as an underlying set of technologies, not only the Oracle Database in memory option for real-time big data, but also the Oracle NoSQL Key-Value Database, and Hadoop for big data batch processes (the company has strong ties with Hadoop distribution provider Cloudera, which it might end up acquiring). It positions big data both on its own and as an enabler for its (SaaS) application business, and Internet of Things (IoT) business where embedded Java will join the database-centric fray.

In addition to Exadata and SuperCluster (coupled with the in-memory option), Oracle has two big data-related engineered systems: the Oracle Exalytics In-Memory Machine, and the Oracle Big Data Appliance. The first includes, among other products, the Oracle Business Intelligence Foundation Suite (reporting, dashboards, scorecards, and predictive analytics with Oracle Essbase multi-dimensional OLAP Server), and Oracle TimesTen In-Memory Database (can serve as a cache to
accelerate Oracle Database, and can work as a standalone database at the application tier, and Oracle Endeca Information Discovery. The second is the only platform that features Oracle Big Data SQL to integrate data in Hadoop and NoSQL with data in Oracle Database. Oracle also markets its Oracle Data Integration and Oracle Big Data Connectors technologies as well as Oracle Business Analytics products. The latter include data discovery, enterprise performance management and analytics, business intelligence, predictive analytics, and self-learning decision-optimization software.

In June 2015 Oracle announced the public cloud version of its on-premise private Big Data Cloud portfolio for release in the third quarter of calendar 2015. Availability as a managed public cloud service is a key requirement for broadening the adoption of hard to implement platforms such as Hadoop. The new Oracle Big Data (Hadoop) Cloud features Big Data Connectors that deliver load rates of up to 15TB per hour to Oracle Exadata Cloud Service - Dedicated instances, and Database Cloud Service - Exadata Edition. The new Oracle NoSQL Database service adds a scale-out, low-latency key-value database option. It will be offered with two choices: on general-purpose compute or on the Big Data Appliance (also includes Hadoop) service. The two options handle elasticity differently. In the general-purpose compute option, storage is virtualized from compute, which is the most common cloud architecture. In the appliance, compute, memory, and storage are combined as a single unit or container. It has a coarser form of elasticity (compute cannot be ramped up or down with demand), but Oracle plans to eventually virtualize storage with the appliance option. However, the appliance, when packaged as a service, still simplifies configuration and operation issues for the customer because it carries its own built-in optimizations.

Oracle should work with BDA (Big Data Appliance) customers (in cloud and on-premise) to benchmark real-world experience with mixed workloads to devise blueprints or recommendations for scenarios such as maximum capacity utilization, greatest cost-efficiency, and prioritization of critical workloads. It could publish patterns denoting where existing virtualization is more (or less) optimal compared to traditional cloud schemes that decouple storage from compute.

The latest addition to Oracle’s big data portfolio is the Oracle Internet of Things (IoT) Cloud Service that provides the capability to analyze massive amounts of IoT-related information at scale from connected devices in real time. In keeping with Oracle’s focus on industries, it is well suited for use cases such as remote equipment monitoring and maintenance for the industrial manufacturing industry and asset tracking in the logistics/transportation industry. It offers flexible topologies for device connections by using client libraries, gateway software or REST APIs, and integrating with other Oracle PaaS platform components and SaaS services with out-of-the-box connectors. For example, it integrates with Oracle Business Intelligence Cloud Service to allow business users to perform BI analytics on IoT data.

Other soon to be released additional options to the Oracle Cloud Platform for Business Analytics include new Data Visualization as well as Big Data Preparation and Big Data Discovery services. Big Data Preparation, built natively in Hadoop and Spark, enables analysts to import, cleanse, and prepare structured, semi-structured, and unstructured data for downstream processing. Big Data Discovery enables them to analyze and collaborate on Hadoop raw data and turn it into actionable insight. Ovum expects Oracle to next focus some of its big data capabilities to IT monitoring, with a new service that could deliver insight from log data, for example.
The new iPaaS offering facilitates overall PaaS adoption

The last big piece of the Oracle on-premise middleware to move to the cloud is its integration technology. Oracle’s integration platform in the cloud (iPaaS) consists of Oracle Integration Cloud Service and the forthcoming Oracle SOA Cloud Service. It provides a comprehensive platform in the cloud for delivering integration as well as easy federation with Oracle’s on-premise SOA Suite to cater to hybrid integration requirements. This aligns well with the requirements of existing Oracle middleware customers, as well as enterprises interested in augmenting existing integration infrastructure to achieve faster time to value for cloud service integrations. As a result, Oracle is now well placed to secure a significant market share in the global iPaaS market, which Ovum forecasts will grow at a compound annual growth rate (CAGR) of 40% over the next four years, reaching $940m by the end of 2019.

The Oracle Integration Cloud Service delivers point-and-click SaaS-to-SaaS, and SaaS-to-on-premise integration, and comes with pre-built adapters for connectivity to various SaaS and on-premise applications from Oracle and third-party applications. Its set of adapters will gradually expand to cover a wider range of Oracle and third-party SaaS applications, including NetSuite, SuccessFactors, Taleo, Workday, ADP, Concur, and ServiceNow. Oracle also offers a software development kit (SDK) for partners to build and deliver their own adapters and publish them into the Cloud Marketplace. This is the same SDK that Oracle uses internally to develop adapters. These adapters can be leveraged in both the Oracle Integration Cloud Service and the Oracle SOA Cloud Service.

The Oracle Integration Cloud Service supports a variety of integration scenarios, from simple data synchronization to more advanced integration flows, as well as integration patterns, from real-time synchronous message exchanges between two applications, to publish/subscribe message exchanges between multiple applications. It is a premium product compared to the technically focused JMS/REST/HTTP-based Oracle Messaging Cloud Service, which has been available for a while, because of the much richer experience the Oracle Integration Cloud Service delivers. Its simplified approach to integration combines pre-built integrations, a streamlined designer interface, and embedded best practice recommendations.

The Oracle Integration Cloud Service is available in two editions: standard and enterprise, with the latter featuring a larger number of connections. This means that a larger number of messages can be processed, and a larger number of applications can be integrated. Both editions are currently available as public cloud offerings, but Oracle is working on a plan to deliver the same capability on-premise in a private cloud. This private cloud capability is not yet commercially available, but public trials are coming soon. In the meantime, you can enroll in a private trial.

Future Oracle Integration Cloud Service releases will support bulk load integration with large data sets between SaaS and on-premise applications, and will support long-running integration orchestrations, and deliver a simplified user experience for partner community integration, as well as pre-integration with the Oracle Developer Cloud Service for full development lifecycle. Oracle also has other PaaS offerings coming soon for data integration that can help with large-scale change data capture use cases.

Oracle has revealed few details of the SOA Cloud Service announced in June 2015. It does not even yet feature on the Oracle Cloud website. More details are expected at Oracle’s annual event OpenWorld in October. While Oracle Integration Cloud Service mostly focuses on SaaS integration (with on-premise as well as other SaaS offerings), the SOA Cloud Service will be a more rounded
service targeted at existing customers using Oracle on-premise SOA technology, and will span a variety of domains from B2B API management to process integration.

Oracle iPaaS offerings are important to support hybrid cloud but so is Oracle Enterprise Manager (OEM). Ovum expects OEM to expand in three different directions in this domain.

- From an on-premise-only offering to a SaaS offering. This expansion has yet to be announced, but Ovum expects Oracle to do so within the next two years.
- From managing private clouds to managing private and public clouds. This expansion has already started, but it is very early days. This is one of the reasons for Oracle's acquisition of Nimbla in March 2013, because the start-up had an existing focus on managing both private and public cloud services. Oracle has recently released an OEM version that can handle Oracle private and public PaaS services through a single pane of glass.
- From managing the Oracle public cloud to managing third-party public clouds. Nimbla will also help here because this was one of its main ambitions. However, Oracle does not seem particularly keen to leverage its capabilities in this domain at the moment. It should do so, however, and sooner rather than later. Ovum expects that mounting competitive pressure will drive the company in this direction both on its own and via third-party plugins to OEM in the next 12 months. Already the OEM Extensibility Exchange features one third-party public cloud plugin. It monitors Amazon Elastic Block Store (EBS), Elastic Compute Cloud (EC2), and Amazon Relational Database Service (RDS).

As OEM matures in the area of hybrid cloud management, Ovum expects it not only to enable enterprises to move VMs and applications between private and public clouds (including non-Oracle clouds), but also to make smart arbitrages regarding why, when, and where these migrations need to take place. We also expect Oracle to be more proactive in supporting native cloud applications. While the use of the same Oracle “red stack” across private and public clouds enables enterprises to migrate to public clouds and create hybrid ones at their own pace and to the extent that is relevant to their needs, it does not encourage them to move beyond traditional SOA-centric designs to adopt new cloud-centric designs, but the expectation is that the solution will quickly expand to encompass and deliver on these capabilities.

Oracle’s private PaaS credentials are stronger than its public PaaS ones

While Oracle is strengthening its private IaaS cloud capabilities, its main focus is on private PaaS clouds, which it positions as delivering better productivity, convenience, and application-centricity. Its database-as-a-service (DBaaS) and Platform as a Service (PaaS) private clouds combine database (especially its multi-tenant option) and WebLogic and other middleware components and public PaaS components with the Exadata and Exalogic engineered systems and the cloud management capabilities of OEM for customers looking for an engineered solution. Oracle plans to provide all its public cloud PaaS services as a private cloud on Exalogic so that enterprises can get the same productivity and user experience in both the public and the private cloud.

Upgrade to OEM 12c because it delivers “true” red stack-centric private clouds, with shared, standardized, and metered IT resources on demand on a self-service basis via GUIs as well as APIs. However, because Oracle private PaaS clouds combine a large number of moving parts, most of them are priced and licensed separately, and you need to develop strong TCO/ROI modeling as well as
license management skills. Also keep in mind that while the new Oracle Database 12c turns applications into multi-tenant as well as in-memory applications without code changes, it does involve some lock-in to take advantage of the multi-tenancy and in-memory capabilities.

Oracle continues to develop its Public IaaS capabilities

Oracle’s IaaS portfolio has been long in the making

Oracle tackles private IaaS clouds with a combination of engineered systems and Oracle Enterprise Manager (OEM) to deliver elastic pools of compute, storage, and network resources available on demand on a self-service basis. Take your pick from the broad range of hardware systems that Oracle offers, because there is more to Oracle’s private IaaS clouds than engineered systems. These systems are more than simple hardware bundles in that they also include strong support. OEM is on a convergence course with the acquired Nimbula and open source OpenStack IaaS technology (now with the support of the 40-strong engineering team of the shutdown OpenStack startup Nebula) team that Oracle brought on board in May 2015. The OEM/Nimbula/OpenStack convergence is the right direction to follow. However, the process will take time, and as always, the devil is in the detail, so ask Oracle for details and roadmaps. Oracle should deliver greater clarity at this level, despite the fact that the convergence is complex and difficult to clearly plan ahead.

The first incarnation of this integration is the upcoming Exalogic Elastic Cloud 12c software release, which delivers the same IaaS (compute/storage) that is available in the Oracle Cloud, as well as Oracle’s PaaS services (starting with Java Cloud Service, Messaging Cloud Service and Integration Cloud Service). This offering provides an easy on-ramp to Oracle customers, such as, for example, Oracle Applications customers looking to move to the Cloud and leverage native cloud-based IaaS and PaaS capabilities, or customers just looking to run their production workloads on-premise but leverage public cloud for testing and development.

Oracle belatedly joined the public IaaS cloud fray in response to pressure from customers and competitors. Its portfolio has been some time in the making. Oracle announced its compute and storage services (without actual release date) at OpenWorld 2012, started some storage preview in early 2013, and then announced its plans again at OpenWorld 2013. In addition to its object storage service, it released its first compute services in 2014. It is working hard not only on delivering new services but also on upgrading existing ones, and it needs to because many competitors entered IaaS earlier than Oracle, and are forging ahead at a sustained pace. Oracle positions its public IaaS cloud as the foundation for the rest of its public PaaS and SaaS cloud services and its Oracle Managed Cloud Services (OMCS) business. However, because this public IaaS cloud is still very much in the making, it will take some time for it to become the foundation it is positioned to be.

The Oracle Archive Storage Cloud Service is an unexpected, but positive, development

The biggest surprise of the June 2015 announcement came in the form of the new, immediately available, Oracle Archive Storage Cloud service, which nobody saw coming. It complements the Oracle (object) Storage Cloud Service and the Oracle Compute Cloud Block Storage service. Test it
for speed (cloud archiving services are notoriously slow) to store infrequently accessed large-scale data sets, such as corporate financial records, medical archives, and digital film masters, and to add an additional tier to your on-premise Oracle storage systems, if any. You can do so relatively easily because it integrates with Oracle and third-party backup, archival, and preservation software. Encryption and compression are woven into the service for free.

Oracle made a big deal of the fact that, at $0.001/GB/month, it is much cheaper than AWS Glacier, but carefully do your calculations. Keep in mind that you also need to pay a $0.005/GB archive data retrieval fee; a $0.003/GB early deletion fee; $0.005/1,000 requests/month for PUT, COPY, POST or LIST requests; $0.004/10,000 requests/month for GET and all other requests; and an $0.12/GB/month outbound data transfer fee for the first 10TB. The first GB is free and it gets cheaper for higher data transfer volumes. This complexity is not limited to Oracle, though, hence the need, for example, for a Glacier "Pricing Considerations" in Amazon S3 documentation to deal with issues such as the cost of transitioning data from S3 to Glacier, Glacier data restore charges, storage overhead charges, and early deletion fee.

The Oracle Compute Cloud Service, which is available only from a graphical web interface, also expanded in a less prominent but not less important way. At compute level, a forthcoming Dedicated Compute option will deliver additional isolation and more predictable performance. At storage level, it will soon feature a shareable NFS-based file storage option exposed through a Cloud NAS virtual appliance, and new data transfer service for large bulk import capabilities. At network level, it will soon support Site-to-Site VPN and dedicated Direct Connect connections between customers’ data centers and Oracle’s public cloud. It needs to mature further to catch up with AWS in key functionality areas such as auto scaling, elastic load balancing, virtual private cloud (VPC), VM export/import, and VM snapshots.

**Oracle SaaS business is healthy and increasingly verticalized**

**Oracle SaaS business is healthier than ever**

Oracle has not quite grown fiscal 2015 SaaS bookings by more than 50% as was its goal in June 2014. Nevertheless, fiscal 2015 SaaS and PaaS revenue was up 32% (35% in constant currency) to $1.5bn, a significant increase from its 23% (24% in constant currency) growth rate in fiscal 2014. Considering that public PaaS revenue is currently very small, most of this revenue relates to SaaS.

The company asserts that during its last fiscal year, it managed to attract 933 new human capital management (HCM) SaaS customers (312 in the last quarter), almost 1,900 new customer experience (CX) customers (617 in the last quarter), and 888 enterprise resource planning (ERP) customers (312 in the last quarter). As importantly, the company asserts that 82% of deals came from new customers rather than existing Oracle customers in the third quarter of fiscal 2015, and that in the fourth quarter this percentage was slightly less but still more than 60%. This is a very positive development. It also pointed out that during the last quarter about 9% of its customers purchased applications in two or more suites (CX and HCM, for example).
Oracle SaaS implementations are ramping up

We believe that the company had about 600 Oracle Fusion applications customers by the end of 2013, growing to nearly 1,000 by mid-2014, with about one-third of these in production. It now has 1,100 or so customers in ERP Oracle Fusion applications alone, and more than half of all Oracle Fusion application implementations are in production. SaaS continues to be the preferred model of deployment, because Oracle Fusion applications users still face a relatively steep learning curve owing to the novelty and complexity of the technology underpinning these applications. However, many implementations are hybrid in that Oracle customers often mix and match on-premise and SaaS modules. In the same way, Oracle needs to carefully balance its application business between old legacy and new Fusion applications, and it needs to find the right balance between on-premise and (Fusion as well as acquired) SaaS modules as part of its efforts to remain in control of its transformation into a cloud service provider. Enterprises should make the best of the ability to pick and mix Oracle and third-party business application modules, from legacy to Fusion, and from on-premise to SaaS.

Oracle SaaS is increasingly verticalized

Even though the June 2015 announcement focused on IaaS and PaaS, Oracle also promised that a manufacturing-specific version of its Oracle Fusion applications would roll out by the end of 2015 alongside its HCM, CX, and ERP applications. By the end of the calendar year, it will have most of its horizontal applications available as SaaS offerings, but only about a quarter of its vertical applications. The verticalization of its SaaS portfolio has well and truly started, however, and will take a couple of years to be finalized. This is not a new phenomenon for Oracle: it currently has 22,000 employees dedicated specifically to industries, it has invested $650m in application development for industries, and it has made 30 industry-specific acquisitions over the past five years. Expect more vertical-specific SaaS acquisitions in the next few months. It has cloud Industry Solutions for the communications, financial services, consumer goods, high tech and manufacturing, and higher education sectors. Its Oracle Student Cloud, for example, combines traditional student information services (SIS) and core customer relationship management (CRM) capabilities. It also announced a financial sector cloud in early 2015, the second vertical market-specific cloud after its (US) public sector one.

Appendix

Further reading

Oracle’s Cloud Transformation: Ongoing, Successful, Challenging, IT0022-000470, September 2015
“Oracle brings process to the cloud”, IT0022-000408, June 2015
“Oracle filling out its database and application cloud portfolio”, IT0014-003028, June 2015
“Oracle Integration Cloud Service is well placed to exploit hybrid integration market opportunity”, IT0022-000389, June 2015
“Oracle tackles integration and user experience with new design principles and Data as a Service”, IT0020-000115, May 2015

“Oracle finds the right balance between industry expertise and horizontal firepower”, IT0008-000235, April 2015

“Oracle’s Industry Connect highlights the role of revenue management for next-gen telcos”, IT0012-000105, April 2015

SWOT Assessment: Oracle Mobile Application Framework, IT0022-000229, March 2015


“Oracle engineered systems are now going to compete on price”, IT0014-002983, February 2015

Exploring Oracle’s Engineered Systems, IT0022-000248, December 2014

Oracle Cloud: Ambitions and Challenges, IT0022-000163, September 2014

Oracle SaaS Cloud: Acquisitions and Transitions, IT0022-000166 (September 2014)

Oracle PaaS Cloud: Ambition and Expansion, IT0022-000173 (September 2014)

Oracle IaaS Cloud: Evolution and Maturation, IT0022-000162 (September 2014)

Amazon Web Services, Google, and Microsoft IaaS Price Cuts in Perspective, IT0022-000093, June 2014

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