

MOVE PAST THE HYPE WHEN MOVING E-BUSINESS SUITE TO THE CLOUD

There's a lot of hype in the marketplace about "cloud", and when you consider Oracle's barrage of marketing around both their Cloud Applications, and more recently their Public Cloud, customers are confused about what is what. Until recently, E-Business Suite ("EBS") customers in particular have been left in a difficult situation in regard to support timelines and how those timelines influence their decisions around their EBS investments. Most organizations have realized that there is no compelling reason to move away from E-Business Suite at present, and that many options exist for getting the benefits of cloud. They are intrigued by new ways to lower infrastructure costs, improve agility and availability, increase flexibility, and enhance performance, all of which can be delivered to varying degrees by public cloud providers such as Oracle Public Cloud ("OPC") and Amazon Web Services ("AWS"), or by private cloud providers like Data Intensity.

Public cloud has been a good platform for use cases such as project environments or as a disaster recovery solution, but relatively few organizations have been comfortable in moving their production E-Business Suite environments to the cloud. In some cases, some of the objections to EBS on public cloud are justified, such as the variability of the public cloud cost model, the lack of transparency of public cloud platforms, or the guaranteed level of performance that can be expected. Oracle's recent announcement concerning license on authorized private cloud environments presents some challenges from a sizing perspective, and does foreshadow potential issues going forward.

Private clouds alleviate many of these concerns, but there is a general perception in the marketplace that public cloud is inherently cheaper. Many of the organizations we work with have learned the hard way that this is often not the case. There is also a perception that the resiliency of public cloud architectures automatically works with E-Business Suite, when in reality there are many configuration and licensing costs that need to be considered when deploying

legacy software like EBS on a public cloud platform. Data Intensity uses Oracle-certified Oracle VM as the hypervisor in our private cloud, which ensures both supportability and license compliance using hard partitioning. Using a hybrid model that consists of both private cloud and public cloud resources is a great way to balance cost, flexibility and performance. However, the real value of any solution is the provider's ability to integrate the underlying infrastructure with the applications and databases that are running on them to provide a fully managed solution with superior manageability, availability, and performance. And even beyond this, to provide a layer of functional services on top of the infrastructure and technical management of the applications that creates a true end-to-end E-Business Suite support solution.

The capabilities of public cloud vendors are continuing to evolve, with improvements in the level of performance that is achievable (e.g., AWS), better automation tooling (e.g., OPC), and connectivity across platforms. As this maturity continues, Data Intensity is investing in connectivity to public cloud platforms to both facilitate and control the costs of cross-cloud integration, making it easier for customers to choose the use case that makes sense for their overall environment management strategy and each of their application environments. So what makes sense for your particular organization? It all depends on where you're at with your IT strategy, your hardware refresh lifecycle, your application lifecycle, your support personnel, and many other factors. Taking the time to assess E-Business Suite roadmap and addressing some of the issues your users may have with availability, scalability, flexibility and performance can be a challenge, but is a worthwhile exercise. Make sure you consider all angles when picking a solution that's right for you, and that will be flexible enough to change over time as your organization's needs change.

Why Move E-Business Suite to Cloud?

One or more of the following challenges may push you to consider moving EBS to the cloud:

- Your hardware is aging and your organization is shifting from a CAPEX to an OPEX model
- Your IT organization has employed a cloud-first strategy and you need to find the most appropriate cloud solution for your use case
- Your infrastructure teams have a hard time responding to your application teams' needs
- Your application is plagued by availability and performance issues
- Application maintenance activities are slow and sometimes error-prone
- Users are calling for more agile ways to spin up application environments
- It's hard to keep up with security and compliance certifications.

While every organization's priorities are different, the benefits they expect from adopting a cloud model for E-Business Suite applications are the same. Cloud makes EBS more scalable, so you benefit from enhanced burst capacity and can adjust your business focus rapidly, but you have to do this within the boundaries Oracle has imposed with their software licensing guidelines. Cloud can accelerate development activities (faster infrastructure, faster turnaround for cloning and patching), and allows you to build a more responsive solution for the business. Finally, it positions you to meet integration challenges like acquisitions or divestitures faster and with fewer headaches.

Cloud also simplifies and lowers the cost of setting up a substantial disaster recovery infrastructure, with inexpensive options that use automation to build out a DR environment in a very short amount of time. Some public cloud solutions (AWS, OPC) also allow you to include technology licensing in your monthly costs. Using deployment templates for network, server, and storage, resources provide a great level of agility, and many of the compliance challenges organizations faced are addressed in part by pass-through certifications from cloud providers.

Which Cloud Option Should I Choose?

Customers who ask about options for leveraging benefits of cloud are usually familiar with AWS as a public cloud option, and may already use it for some of their less critical applications. Most of these customers are unaware of some of the limitations of deploying a legacy software packages like E-Business Suite in a cloud model. Fewer are aware of details about Oracle Public Cloud, and have many questions about how it compares to AWS' offerings. They also want to understand the differences between a public cloud model and a private cloud model, and how they can deploy a combination of the two in a hybrid model. Regardless of the option(s) you are considering, the questions you need to answer are the same:

- Does my IT department have a preferred provider of cloud services? What restrictions or guidelines are imposed by my IT, security, and or compliance teams?
- How complex is my E-Business Suite system in terms of server topology (multi-node, RAC, DMZ, etc.), database size, I/O requirements, concurrent processing requirements, and integrations? What limitations does the cloud provider have in regard to each?
- How is my software licensing impacted by a potential move to cloud? Which cloud provider makes the most sense when considering my current license allocation?
- How important are predictable monthly operating expenses in my decision? And how can I be sure my estimates for public cloud are sufficient if I choose that option?
- What are my biggest pain points, how are they quantified, and how will cloud alleviate them? How can I turn this information into an ROI, or at a minimum, compare the TCO across cloud providers?
- How can I use this opportunity to provide my organization with flexibility and not be trapped?

Here are the three main cloud options, with their relative merits.

1) EBS on Public Cloud (AWS, OPC)

Key advantages:

- Fast deployment
- Inexpensive for part-time use
- Flexible self-service provisioning
- Minimal commitment
- Tech licensing can be included

Great for:

- Burst capacity, particularly for development projects that don't require 24 x 7 uptime
- Disaster recovery
- Offsite backups
- Production use cases for small EBS systems on certain public cloud platforms

Caveats

- Maturity of OPC offering is improving, but not quite there for production deployments
- Licensing concerns for AWS may grow in the future
- Performance profiles must be carefully considered
- Procedures for performing maintenance need to be considered, so use a provider with experience on your platform of choice.

Data Intensity endorses both AWS and OPC for running Oracle E-Business Suite in public cloud:

ORACLE CLOUD

- Offers a single-vendor support solution and a base level of automation tooling
- Enables a highly integrated EBS infrastructure, platforms and applications into a comprehensive suite of on-premises and cloud solutions.
- Offers some customization, but can't be tailored as precisely as a private cloud or on-premises implementation and is limited in the level of performance
- Falls short of the technical capabilities built into Amazon's AWS cloud service for storage, load balancing, and overall ease of use
- Exceeds AWS in terms of the level of integrated tooling and the ability to run Oracle RAC or Exadata on the database tier
- No performance SLA for compute cloud IOPS, which can be a problem for larger EBS deployments
- Bare metal options may provide acceptable performance but at a higher cost than shared compute
- Can include database tier licensing in the cloud service if required.

AMAZON AWS CLOUD SERVICE

- Offers a mature orchestration engine with most features required for a complex E-Business Suite deployment.
- Provides wide variety of options for compute shapes and storage offerings, especially in regard to guaranteed IOPS capabilities.
- Offers limited integration of Oracle software into its infrastructure, and is not certified to run E-Business Suite.

2) EBS on Data Intensity Private Cloud

Key advantages:

- Oracle Red Stack design (server, virtualization, operating system) improves the overall support experience and allows customers to comply with licensing restrictions
- Customizable, flexible, and transparent infrastructure to support most complex EBS implementations
- Significant levels of hardware isolation ensure no "noisy neighbor" issues
- Integrated automation for typical maintenance tasks like cloning, patching, and health checks allow for rapid turn around and zero defects
- Highly personalized, concierge levels of service
- Expertise throughout the entire technology stack
- Direct connectivity to AWS and OPC for true transportability of systems, matching the service to the use case
- Predictable monthly operating expense with no hidden costs as compared to public cloud.

Great for:

- Complex, highly integrated EBS implementations with high levels of data transfer
- Ensuring a fully supportable, certified Oracle E-Business Suite experience
- 24 x 7 organizations that require an application management provider with scale and a proven track record of customer success.

Caveats

- Perception of higher costs than public cloud
- Increased level of commitment and less flexibility on contract term
- Can be more expensive than a public cloud solution for environments that don't require 24 x 7 uptime.
- Can be overkill for application requirements that don't require high performance.

3) Hybrid Cloud

Hybrid cloud refers to a blend of on-premises, private cloud, public cloud, and SaaS solutions managed in an integrated manner. Hybrid solutions allow organizations to match the use case to the platform, allowing for the proper balance of cost, performance, and availability. Given that most customers EBS implementations include numerous application integrations beyond just the EBS software, this level of flexibility can be a big advantage to organizations in a rapidly changing IT landscape. However, managing applications in a hybrid model can be a challenge, and it is important that organizations that make use of managed services providers do so with partners who have experience on their chosen cloud platforms.

For many companies, a hybrid cloud is an ideal way to employ a mix of SaaS, PaaS, and IaaS solutions to create an outstanding enterprise architecture. Companies can comfortably mix, manage and match E-business Suite applications across multiple cloud services, including public and private cloud. Data Intensity runs our own business in a hybrid cloud IT platform, with a mix of SaaS (Concur, Paylocity, ServiceNow, Oracle CPQ Cloud), DI Private Cloud (E-Business Suite Prod/Test/Dev, Oracle Access Manager), and Oracle Public Cloud (EBS project environments, EBS disaster recovery) environments.

Four Suggestions for a Successful Cloud Journey

Ideally, you should have a ten-year application roadmap with inflection points at the five-year, three-year, and one-year marks. This will allow you to fully consider support timelines and larger-scale application evaluations, hardware refresh timelines, application and database upgrades, and keeping up to date with CPU and RUP patches. Use that information, along with your knowledge of where your business is going, to plan the phases of your journey to cloud.

Here are four suggestions to be sure that the process doesn't disrupt business operations. After all, you're trying to make it easier for your company to be successful as you move to the cloud. Careful planning and execution helps make that happen uneventfully.

1. Don't let market hype influence your strategy – choose the correct solution for each use case.
2. Understand the fully burdened price of any proposed solution(s). Don't forget to build in automation, orchestration, and management costs – those things that can oftentimes be hidden.

3. Get into the nitty gritty on any outsourced infrastructure solutions you are considering, whether they are public or private. There are a lot of nuances among different providers, and pros and cons to each based on your application complexity, licensing, and sophistication.
4. Engage a knowledgeable partner that is platform agnostic and isn't interested in locking you into a solution. This will allow you to know you have a solution that is crafted to your organization's unique and precise requirements.

Data Intensity can assist you on your cloud journey

Data Intensity is unmatched in our ability to integrate platforms and applications into secure, highly available, highly performing solutions. Since we began hosting Oracle E-Business Suite in 2004, our investment in engineering and automation has enabled us to grow into the largest independent provider of Oracle cloud services. We are one of the largest consumers of Oracle VM in the world, and we utilize the solutions we sell our customers in the running of our own business. Our demonstrated capabilities as an Amazon Web Services Partner, Oracle Platinum Partner, and Microsoft Cloud Platform Partner, give us a wide array of deployment solutions with tested reference architectures for the Oracle enterprise and technology solutions we implement and support. We have performed more data center and cloud migrations than any other provider, and employ dedicated teams that have the experience and know-how to ensure your migration is successful.

This post is part of a larger educational resource on Oracle EBS Cloud Deployment. [Listen to the On-demand webinar](#)

About Data Intensity

Data Intensity is the leading independent provider of managed and cloud consulting services for enterprise databases, applications, business intelligence solutions and analytics. The company combines best-of-category technology, world-class services, a flexible business model, and deep-rooted expertise gained from hundreds of successful deployments. Our mission is to cost-effectively support the full scope of a customer's enterprise data lifecycle. [Contact us](#) for more information. Copyright © 2017 Data Intensity, LLC. All Rights Reserved.