

Get the Dev/Test Software
you need in minutes

Leveraging ISV AWS Marketplace Solutions

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Introduction

The modern enterprise continues to become more software-centric, making developing and testing new applications a core function upon which the rest of the business depends. Because dev/test workloads have highly variable resource requirements and are transient by nature, provisioning on-premises infrastructure to support them is a challenging, expensive, and often, impractical endeavor. Developers should have access to the IT resources required to new create, iterate, and validate application ideas at scale, which tasks IT managers with finding a means to support these initiatives while also reducing costs and minimizing project risk.

Cloud computing has fundamentally changed the way we address these challenges. It enables an organization to provision massive IT resources on-demand, and then shut them down and stop paying at any time, giving developers access to a seemingly infinite pool of resources with minimal long-term risk to the business. This means that developers can focus on activities that add value for customers, like improving existing applications and building new ones, instead of hardware acquisition and capacity planning. It also means that the length of development cycles can be significantly reduced.

To augment the flexibility that AWS provides at the hardware level, AWS Marketplace enables developers to acquire the software needed to power their development initiatives with all of same benefits—rapid deployment, pay-as-you-go pricing with no long-term commitments, and improved scalability. This allows you to circumvent the protracted hardware acquisition process and the large, long-term investments that come with it, and focus instead on building the next great application for your business.

Application Development and Testing Tools

Developers are generally aware of the fact that a lot more goes into building great applications than just writing code. From AWS Marketplace, you can launch Integrated development environments, testing tools, source control systems, security tools, and other software that will allow your team to focus on the code that goes into new applications, instead of the time-consuming, undifferentiated work that facilitates those development efforts.

Mendix is an application-platform-as-a-service (aPaaS) solution that can help you design, build, deploy and manage business applications, at speeds 6 to 10 times faster than traditional approaches. Unlike most development solutions, Mendix is model-driven, meaning that there is no code required. However, Mendix models can be augmented with third-generation code, such as Java. Through Mendix Modeler, power users, citizen developers and professional developers can create sophisticated data-driven and process-oriented applications, quickly and cost-effectively. You can also leverage AWS resources directly from Mendix's visual modeling environment, including Amazon S3, Amazon RDS, and Amazon SNS. Customers frequently

cite ease of use and strong user-experience as key differentiators that cause them to choose Mendix. In addition, the Mendix App store helps vendors and users share their applications and app components, giving you a wide selection of building blocks that can further shorten development cycles. You have several options for deploying Mendix from AWS Marketplace: you can pay for 50, 100, or 250 users on an hourly basis, or you can bring your existing Mendix license and only pay for the AWS compute and storage resources required for your development efforts. There is also a free version available in AWS Marketplace, which gives you a full-production platform for building and deploying unlimited applications, up to 10 users each.

If you are looking to build applications specifically for mobile, you should consider Kony Mobile Fabric, a backend-as-a-service that makes it much simpler to develop, test, and deploy mobile applications. As the largest independent vendor of mobile application development platforms, Kony offers a rich feature set and strong integration with a variety of tools that you may already be using. It gives you data integration and orchestration, authentication, offline sync, security token management, analytics and more. One area where Kony is especially strong relative to comparable offerings is in the context of security, earning several certifications, including Defense Information Systems Agency (DISA) certification, and includes functionality for cryptography, obfuscation and app hardening.

If you leverage Git as part of your development process, Bitnami allows you to deploy GitLab, a fast, secure, and stable solution based on Ruby on Rails as an AMI from AWS Marketplace. With GitLab, you can keep your code secure on your own server and Amazon EC2 Instances and manage repositories, users and access permissions. GitLab is self-contained, so you can duplicate or move the installation to different EC2 Instances easily. It also comes with GitLab CI, which allows you to test, build, and deploy your code using Continuous Integration (CI) practices, while providing the same great user experience as GitLab.

Application Servers

In addition to development tools which increase productivity, AWS Marketplace also makes it easy to access application server software when you need it, without long-term licensing requirements or waiting for hardware to arrive and be deployed. Regardless of programming language, scale, or security requirements, you can find an application server in AWS Marketplace to meet your needs.

Adobe ColdFusion is one of the most popular web server software solutions among developers, primarily known for its associated scripting language, ColdFusion Markup Language (CFML). It dramatically simplifies complex coding tasks, making it easier to rapidly develop web and mobile applications that are secure, scalable, and high-performance. Common use cases include live chat, enterprise dashboards, online collaboration, porting applications to mobile devices, dynamic PDF generation, and more. ColdFusion is a Java-based application, meaning it can be mixed with Java classes to create applications, and also supports .NET within the CFML syntax. With ColdFusion, you can supercharge your mobile application development workflow by using unique on-device debugging and multi-device inspection capabilities.

If you're looking for an application server that runs on PHP, Zend Server is an excellent way to quickly create a sandbox for building applications. It allows you to deploy faster by streamlining key sources of failures and ensuring consistency across your development lifecycle. Zend is also optimized for Continuous Delivery, and can be integrated with Bamboo, Docker, Jenkins, and more with minimal friction. Built to scale, Zend uses de-centralized management of identical components to enable high availability. It also includes functionality for job queuing, cache management, application monitoring, code tracing, and more. In addition, Zend comes with Z-Ray, a powerful debugging tool that lets you look under the hood of PHP environments for rapid troubleshooting. Zend Server works with a wide variety of Linux distributions: you can launch AMIs that support Ubuntu, Red Hat Enterprise Linux, and CentOS from AWS Marketplace.

IBM WebSphere Application Server is another Java-based application server that is built to handle everything from lightweight production projects to large enterprise deployments. WebSphere can run across on-premises, public, and private clouds, but really shines in the context of hybrid deployments. It is strongly integrated with container services like Docker and hypervisors like VMware, allowing you to move application projects across environments with ease. WebSphere also provides a single management console for Java apps, Node.js apps and APIs. Using IBM API Connect, you can create, discover, publish, and manage APIs to improve productivity and accelerate time to market.

Third-party Services

In addition to reducing the friction required to set up a properly configured development environment and app server, many developers look for ways to reduce the amount of code that they have to write, particularly for components of the application that are necessary for it to function, but not within the developers' area of expertise, such as language processing or multi-factor authentication.

One common initiative for development teams is finding a way to simplify access to AWS development and testing environments. Elastic SSO provides a fast, lightweight, federated single sign-on access software solution that supports Shibboleth/SAML2 identity federations such as InCommon, UK federation, Edugate, CAF, KID, AAF and others. This gives ISVs and SaaS developers a centralized, unified system for registering, authenticating, and managing users for federated access to development tools and applications in dev/test on AWS. By implementing Elastic SSO, customers can reduce deployment of their SSO and identity management system by as much as 75%. If you'd like to try 9STAR's Elastic SSO before deploying it across your organization, or have a small development team, you can provision a free 5 User License from AWS Marketplace.

If you're looking to add language processing to your application with minimal friction, Cortical.io Retina API provides easy-to-use code components for text filtering, classification, clustering, searching, and much more. It works with virtually any kind of text, including messages, user profiles, documents, webpages, web apps, and more. In addition, it can be accessed via a simple, intuitive REST API, and requires no specific, expert knowledge of language processing. Organizations

³Netflix: Netflix at AWS re:Invent 2015 <http://techblog.netflix.com/2015/10/netflix-at-aws-reinvent-2015.html>

across a variety of vertical industries have used Retina API to provide complex language processing capabilities to their applications, providing solutions for social media analytics, compliance monitoring, enterprise search, information discovery and more. Retina API is available as a free trial in AWS Marketplace, and when you are ready to scale up, it's easy to go from free trial to a full production system.

Elastrix Media Server's solution for WebRTC provides code components for web applications that rely on real-time communication (RTC) functionality. By giving you the fundamental building blocks for high-quality communications from the web, such as network, audio, and video components, it allows you to focus on other parts of your application that are more differentiated. As an open-source solution, it is compatible with almost all communication protocols, giving web developers the freedom to choose the protocol of choice for their usage scenario (for example, but not limited to, SIP, XMPP/Jingle, et al.). To further expedite development, it includes pre-configurations and custom scripts.

Application Integration and Infrastructure

One of the biggest needs many developers have is creating integration between all of their applications across on-premises and cloud environments. For instance, since workloads are often moved to the cloud in piecemeal fashion, there is a need for solutions that allow an organization's legacy applications to stay running and communicating with cloud-based apps and dev environments before they are migrated. Or, developers need a way to integrate their e-commerce, content management, and web management tools and deliver them in one application to provide customers with a seamless online shopping experience and line of business managers data about that activity. Application integration and infrastructure solutions in AWS Marketplace can help you tackle these challenges.

Chef is perhaps the most popular such tool in the world, designed to help developers solve complex challenges throughout the entire development cycle. With Chef, you can define, create, and manage your entire application stack on AWS. Using a single recipe, you can manage and orchestrate a multi-tier application that relies on a variety of AWS services such as Amazon Virtual Private Cloud (Amazon VPC), Amazon Elastic Compute Cloud (Amazon EC2), Elastic Load Balancing (ELB), Amazon Simple Storage Service (Amazon S3), and Amazon Relational Database Service (Amazon RDS). If your organization is actively building software using AWS today or running production workloads there, Chef can help you standardize your cloud and data center environments to create a smooth workflow where your teams can build, deploy and manage workloads quickly, reducing time to market. To help you optimally configure your AWS environments, Chef provides AWS cookbooks, which make it simple to leverage AWS APIs as part of your application. When you deploy Chef from AWS Marketplace, the first five nodes are free.

Another solution for website integration and backend configuration that is extremely popular among AWS customers is WordPress. Whether you're looking to develop and host a blog, website, or both, WordPress can help you from start to finish. It gives you all of the functionality that WordPress is known for, including rich text and HTML editing, user roles and permissions, plugin architecture

and template engine, thousands of add-ons for ecommerce, SEO, email, spam filtering, analytics, and more. Bitnami's stack for WordPress is available in AWS Marketplace, and is up-to-date, secure, and consistent, offering a true turnkey solution for deploying a WordPress site in the cloud.

If you're looking for an open, integrated solution for adding shopping cart functionality to your application, OpenCart may be a good choice. It allows developers to build "modules", which are comparable to add-ons, plugins, or extensions in other content management systems. This allows developers to edit the application's functionality (or the functionality of custom applications built on top of OpenCart) without having to edit the application's files. OpenCart offers a huge selection of features out-of-the-box, and you can download over 14,000 additional extensions from OpenCart's website, making it an ideal solution for ecommerce applications of any size, any industry, any budget.

Conclusion

The cost-effectiveness, quick provisioning times, security, and large ecosystem make AWS an ideal platform for developing and testing new applications. AWS Marketplace offers easy, cost-effective, and low-risk access to the partner solutions that can further accelerate development initiatives. Whether you're looking for an integrated development environment, code components that help you focus on differentiated aspects of your application or integration tools that help you manage your applications across complex hybrid environments, you can find the solution you're looking for in AWS Marketplace.

View Application Development Solution in AWS Marketplace at <https://aws.amazon.com/mp/appdev/>