AppZero – Virtualization of Windows and Unix Server-side Applications

If you’re reading this, there’s a good chance you’re already taking advantage of the economics of cloud computing, or are setting out on that path. You’ve now come face to face with the question of how to best move server-side applications to clouds offered by the likes of Amazon and GoGrid.

Statistics tell us that there is a good likelihood that you are concerned about cloud lock-in. Problem solved. AppZero software virtualizes server-side applications in a way that gives them 100% mobility for instant deployment from data center to EC2, from EC2 to GoGrid, and to clouds from other providers and back to the datacenter – on physical or virtual servers.

AppZero software encapsulates an application with all of its dependencies, but with zero operating system (OS) component. Our software decouples an application from the OS and its underlying infrastructure and packages it as a Virtual Application Appliance (VAA).

AppZero Virtual Application Appliance Basics

Containing executables, libraries, files/registries, configuration settings, machine/network identity and services, the VAA has everything an application needs to run – except any piece of the OS. VAAs assume the presence of a compatible OS on target servers and, when they run, they make zero changes to the OS.

Instead of performing complex installation and configuration operations on each server in a deployment, our customers install just once into a VAA. That VAA can then be distributed across all servers to all locations – on-premise, hosted, or in the cloud – and rolled into production in real-time or over time.

Movement is a simple file copy. The VAA arrives at a server and the application is instantly up and running. Running in complete isolation from each other and from other applications, they can safely co-exist on one server.

We’ve run independent benchmarks that show performance overhead is negligible; VAAs run at 97% of an application in its native environment. And because they don’t alter the underlying OS on which they run, moving a VAA to and from clouds will leave behind no data artifacts.

Poof. Cloud lock-in is history. So you can move your server application to any cloud with confidence and without any modification to your application. In fact, you can see us demo moving a live application from the datacenter to a cloud and then to another cloud in under six minutes on our homepage (www.appzero.com). Just click on the talent in suits.

Top AppZero Use Cases

If you’re wondering, “Why, for example in the case of Amazon’s EC2, wouldn’t I just use an AMI?” one answer is, “Of course you can.” But if you do, you’re signing up for owning the lifecycle of the OS in addition to your server application. In that case, the server-side application and the OS become entwined in the classic interdependencies that create complexity and unpredictability.

Not a great concern for developers testing in the cloud, this complexity is a bigger consideration when it comes to maintaining production applications. And if there is any planned movement between datacenter (and in this case EC2) and client site or enterprise location, the cloud-bound AMI is not the most versatile option.

Because AppZero VAAs have no OS component, they move freely across environments without melding application and OS. This decoupling makes it possible to move server-based applications across VMs – VMware, Xen, and Hyper-V – without any modification. The result is the ability to use a single gold server-application image for cross-domain provisioning of the data center, to multiple clouds and back. ISVs and enterprise practitioners can concentrate on the lifecycle of their applications independent of the eccentric and labor-intensive OS cycle of patches and upgrades.

Like proud parents everywhere, we could fill pages with a long list of AppZero accomplishments and advantages. And there are many. But we’ll limit the list to the top use case ISVs and for the enterprise. Then use your imagination or visit our website for more.
ISVs – this is your lucky day because you have discovered instant proof of concepts (POC)

Proof of concept (POC) work is a high-stakes, high-touch roll of the dice for ISVs – with no guarantee of a win. POCs consume so much time and resources from the most valuable ISV talent – the technical employee who is also good with customers. For many ISVs, limited resources for POCs act as a hard-limit constraint on revenue.

AppZero makes it easy for ISVs to smash that resource barrier and slash the costs of POCs. By packaging their solution in a VAA, ISVs can do all of the sometimes ugly installation, configuration and set-up work behind the scenes, sending a simple, elegant file that arrives ready to run on any cloud or on the customer premise. VAAs let ISVs put proof-of-concept in a bottle for instant deployment and use with no compromise to value.

Question: If an ISV can bring install time close to zero, their proof of concept (POC) efforts will:

1. Take less time
2. Become predictable and repeatable
3. Go more smoothly in the eyes of the potential customer
4. Provide more time for actually working with the customer and proving the concept
5. Look impressive compared to competitors who need to send SEs on site for hours and days of sweating through glitch filled installation and configurations
6. Increase the likelihood of a win
7. Use less of the most skilled and valuable ISV asset - the knowledgeable SE who is also good in front of living, breathing, revenue generating potential customers
8. Lower the cost of sales
9. Generate incremental revenue
10. All of the above

No surprise for the enterprise – almost-no-cost disaster recovery (DR)

AppZero VAAs and the cloud are a marriage made in enterprise heaven. The “argument” is a statement and the math is simple:

In case of emergency, encapsulate your server applications and data as VAAs to run on a cloud at a cost that approaches zero.

What numbers of really important server-based applications hang out in datacenters unprotected by DR techniques? The fact is that the cost associated with high availability and disaster recovery solutions leave many critical applications unprotected by clustering, failover, or any other recovery automation. Hoping for the best, IT throws expensive talent at restoring an application when the worst happens.

With AppZero, an application can be restored in minutes or seconds rather than days or hours, at almost no incremental cost. VAAs stored off-line can be retrieved and restored in minutes, while applications stored in ready-to-run VAAs are deployed at the click of a mouse. They can be spun out in a cloud with no time lost and at a very low cost. Unexpected downtime is cut close to zero.

(And, oh by the way, statistically, the main cause of application down time is configuration error, not disasters. Because VAAs are pre-configured, applications are deployed with zero configuration mistakes.)