# Agencies find virtualization smooths cloud migrations

The first step is to choose which assets to transition.

**Interview with Troy Massey**
*Director, Enterprise Engagements, Iron Bow Technologies*

*Most federal agencies, by now, have some cloud presence. Still, questions persist. When should an organization shift to cloud? What's the best way to make the transition? How do you minimize missteps?*

*We recently put those questions to Troy Massey, director of enterprise engagements for IronBow Technologies, a leading IT solutions provider serving federal agencies. Massey and his team help organizations get to the cloud. The key is to develop and implement a solution that works for each organization's unique needs.*

**Q: Moving into the Cloud Smart era, how does a government agency know when the time is right to undertake a cloud migration?**

**A:** It's definitely different with every customer, but traditionally the ones who are leaning towards cloud are the ones who are looking at a major hardware or software upgrade. They're looking to take that leap into the cloud instead of investing in a systems upgrade. By rule, DoD and federal have to look to cloud first with any initiative they do.

**Q: Multi-cloud or hybrid cloud? How do you sort it all out?**

**A:** There's on-premise cloud, hybrid cloud, off-premise cloud, public cloud, private cloud. Multi-cloud really is a siloing or segmentation. You can have an on-prem cloud that runs certain applications, and then you can have a completely segregated off-prem public cloud that runs different applications. That would be the multi-cloud situation. You can also have some apps running on AWS and some running on Azure. That's also multi-cloud.

Hybrid cloud is a link between clouds, traditionally a hybrid cloud would be on-prem and a public cloud with something linking them together. Iron Bow's approach is based on VMWare Cloud Foundation's SDDC Manager, which links the on-prem cloud to the public cloud. It allows you to do things like workload migration. Management between the two becomes like a stretch network in the old days.

**Q: What are the main benefits of a multi-cloud solution?**

**A:** First, it's the ease of management. You can do everything as a service, so you don't have to manage the application layer. You pay monthly and avoid major hardware investments every few years. If you're on a public cloud, the provider foots the bill for upgrades. You pay by the drink, so to speak.

There's also more flexibility in the mobile environment. Remote access is a lot more user-friendly and a lot more secure through a public cloud provider.

**Q: What can agencies do to enhance the ease, speed and efficiency of going to cloud, including stand-up time, application provisioning, and total cost of ownership? In other words, can they expect a soft landing?**

**A:** The most critical piece is the assessment. A lot of applications

can go to the cloud, but you need to ask if they should. With an assessment, our team of experts will analyze the environment and identify good candidates for public cloud, which ones are suitable for on-prem, and which applications probably should be left alone. A lot depends on your data. If you have sensitive data that must be siloed, for example, such as medical information subject to HIPPA policies, you're probably looking at a multi-cloud solution. For most users in federal government, hybrid cloud is the most attractive option for the data and applications that agencies are using.

The VMware Cloud Foundation is our platform of choice. It allows our clients to have an on-prem cloud and rapid deployment. Basically, it's a big red "EASY" button that gets you on a hyper-converged platform. You get a modern data center. You get virtual storage through VSANS (virtual storage area network) so you can present to all of your applications a large storage pool. You get virtual software and virtual networking through VMware NSX, which is the network virtualization platform. It all gets deployed very easily through SDDC Manager.

We can deliver IT as a service with less risk and time to deploy. Our team has the experience with pre-designed solutions from VMware on Dell EMC infrastructure, powered by Intel's Xeon processor and Optane SSD drivers, which allows us to easily architect your solution with high scalability and performance.

We can take that a step further and, through SDDC Manager, deploy to a public cloud. The vRealize Suite's Cloud Manager within Cloud Foundations can link the two on-prem and public clouds together to do workload transformation. It gives you a stepping stone to full public cloud or a hybrid solution.

### Q: How easy is it to change cloud vendors?

**A:** At Iron Bow, we make it very easy. Our design is a hybrid, so you can pull everything from a pubic cloud back to on-prem or go to a different public cloud provider. With some providers, that's not always the case. If you go solely into one public cloud provider, later moving directly from that cloud to another cloud provider is not easy, cheap or seamless. You're kind of at their mercy.

### Q: Tell me how Iron Bow helps agencies get to cloud most efficiently to better pursue their missions.

**A:** Again, we're firm believers in assessment first. We like to go in and analyze an environment to make sure everything's a good fit for what we want to propose. We have a VMware Validated Design that is a hyper-converged platform that runs cloud foundations and a lot of other tool sets to include off-prem or cloud backup. It includes software that helps with the virtual desktops. So we have a lot of tools to help get customers from a traditional data center to an on-prem cloud. Our solution gets you one click away from hybrid cloud.

### Q: Can you share a cloud migration case study?

A: We've had customers go to a hybrid cloud and do virtual desktops. The desktop refresh rate went from every three years to a 10-year tech refresh rate. You have the security of your virtual desktop being a software instance that runs on the data center. You patch that and all of your users are patched. So you're secure much more rapidly.

Clients are realizing benefits from virtualizing homegrown applications of the type that are ubiquitous in the DoD and throughout the federal government. A lot of times they're unique to a hardware platform. Over time, the hardware gets outdated, and these homegrown apps can't go onto the new platform or the new hardware; they can't go on the new operating systems. So they basically get left behind, which becomes an unsecure and unsupportable situation. Virtualizing those applications can take a lot of that stress away.