Dear [insert your boss’ or /coworker’s name]:

We should fully embrace the VMware ESXi architecture and migrate existing ESX hosts to it. I know that ESXi has a much different footprint and requires a different management style from the one we are used to and that it has had its limitations. But ESXi’s limitations have mostly disappeared. While the management is different, ESXi can be managed just as effectively, once we adjust to the differences.

Prior to the release of vSphere 4.1, ESXi supported the major features of ESX, but not lesser ones. But with vSphere 4.1, VMware spent time closing the feature gap. It now supports booting from a storage area network, scriptable installations and Active Directory integration. So the lack-of-features argument is no longer a valid reason to avoid ESXi.

VMware also improved ESXi management by adding the full Tech Support Mode and improving the Direct Console User Interface. We all love the ESX service console. It provides hands-on method for administration and troubleshooting. But ESXi has a management console. While it may not be as powerful as the ESX service console, for most purposes, it does the job. The vSphere Command-Line Interface and the vSphere Management Assistant are decent alternatives to the ESX service console. They were improved in vSphere 4.1, so they can better manage ESXi hosts. PowerCLI can also automate administration tasks, such as configuration and deployment.

ESXi also has several advantages over ESX. New versions, for example, are delivered as a single image file that completely replaces the previous version, much like a server BIOS upgrade. As a result, we no longer have to worry about patch dependencies or installing patches in a specific order. Patching is much simpler, fewer patches are required, and ESXi should reduce the time and effort required to keep our hosts patched.

Another advantage is that the ESXi management console code is much smaller than ESX’s full Red Hat service console. Additionally, rolling back to previous ESXi versions is a breeze. The old version is automatically saved in a backup partition, so you can easily revert to it if needed.

Because of ESXi’s small disk footprint, we can also install ESXi to flash drives and then boot and run ESXi hosts. This capability allows us to get ESXi up and running quickly and eliminates the need for local hard disks in our hosts, which can reduce purchasing costs. Even with a local disk, the ESXi installation process is quicker and simpler than ESX’s installation, which can reduce deployment times for new hosts. Now that ESXi supports scriptable installations, we can streamline ESXi host deployments. In addition, ESXi boots much more quickly than ESX, which helps our hosts get back in action faster if a host fails or needs restarting.

Perhaps the most important reason to move to ESXi is that VMware will stop upgrading ESX as of the next major vSphere release. The company has said so publicly. This decision will force us to use ESXi at some point if we want to take advantage of newer vSphere releases. But why wait until we are forced? Let’s make the transition in an orderly and well-planned-out manner. That way, when the next version of vSphere is released, we are prepared, and we won’t have to deal with an architecture and version change simultaneously.

Converting ESX hosts to ESXi is not difficult, but the mental challenges can be. Change is difficult for some people, but once we get past it, we will realize that it’s for the best. I propose that we start at a slow pace so everyone can get used to the new architecture and learn the management differences. Once we grow comfortable with ESXi and have the migration process down, we can proceed at a faster pace and convert our entire infrastructure to ESXi. VMware has set the stage for ESXi to be the star, and it’s time we accept it and move in the same direction.

Best regards,

[Insert your name]