Thinking about moving to an open hyperconverged infrastructure? Excellent choice.

A hyperconverged infrastructure provides a number of key benefits. It combines virtualization with software-defined compute and storage into one small, easy-to-manage footprint, which saves space, money, and time. You can manage your resources from a single interface and consolidate infrastructure. You can deploy at the network edge, at a remote office, or even within the datacenter. And, if you go the open source route, you can tap into the endless innovation supplied by the massive open source development community.

But wait.

Before you make the move, there are some things you need to know. Steps you need to take. Boxes you need to check off. Eight boxes, to be precise.

Here is a checklist to help ensure that you have everything you need to implement an open hyperconverged infrastructure.

**Understand your business drivers.**

Identify the goals that are driving your initiative and think about your use cases. Are you primarily concerned with reducing infrastructure costs, improving workload performance, or consolidating the number of platforms you are using? Something else? All of the above? Being as specific as possible will help you build the right hyperconverged infrastructure for you. Remember, there is no reason to pay hundreds of thousands of dollars for something you use only a small portion of.

**Discover and profile your workloads.**

Closely assess all of the different workloads that are running in your environment. You might think you know everything you’ve got, but you might be surprised. Are you running performance-demanding high IOPS workloads? Throughput-oriented workloads? Something in the middle? Understanding what you’ve got is critical to the next step.

**Choose the right platform.**

When analyzing your workloads, do not just look to “lift and shift” to yet another platform. Consider all of the ways those workloads can be optimized or transformed. Use this opportunity to standardize your operating system, switch application servers, or containerize your application development processes.

**Bet big on communities.**

Use the open source community’s knowledge and drive for innovation to create an open hyperconverged infrastructure that is imminently scalable and flexible. Take advantage of the community’s expertise to stay at the forefront of development.
Go all in on open source.

Do not get locked into closed-source solutions. Avoid using a proprietary platform with some open source components built around it. Instead, make sure your platform is completely open source. Look for vendors that provide enterprise quality and mature infrastructure stacks that include the operating system, virtualization, and software-defined storage. Pair the platform with other open source technologies that support authentication, security packages, and more. And be careful about the hidden costs associated with the public cloud, including ingress, egress, and transactional costs.

Consider downtime requirements.

Make plans for downtime as you migrate your data. Communicate with key stakeholders, including various line-of-business leaders, so that they are aware that some applications might be unavailable during the migration. Look for ways to expedite the process to minimize that downtime and avoid disruptions, possibly supplementing your team's skills with an external professional services team that has done migrations before.

Sharpen your skills.

Look for employees with expertise in Linux®, containers, and associated open source technologies. Continually train your staff so that they are up to date on the latest open source software and the work being done by the upstream open source community. Encourage them to provide their own ideas, and lay the educational groundwork that will help them build and maintain your open hyperconverged infrastructure.

Define a pilot program.

Test your infrastructure before moving forward. Consider applying it to a smaller use case or nonbusiness-critical workload that you feel will be successful. For example, you could pilot your program in a remote office or back office as part of an overall office refresh—an ideal scenario for an open hyperconverged infrastructure. Reduce your risk while proving the value of the efforts to your stakeholders.

Conclusion

An open hyperconverged infrastructure is a great way to reduce deployment complexity, operational overhead, and expenses. Let Red Hat help you complete your checklist and build an open source-based infrastructure that will work for you now and in the future. Learn more at https://red.ht/2qF8NLH.

About Red Hat

Red Hat is the world’s leading provider of enterprise open source software solutions, using a community-powered approach to deliver reliable and high-performing Linux, hybrid cloud, container, and Kubernetes technologies. Red Hat helps customers integrate new and existing IT applications, develop cloud-native applications, standardize on our industry-leading operating system, and automate, secure, and manage complex environments. Award-winning support, training, and consulting services make Red Hat a trusted adviser to the Fortune 500. As a strategic partner to cloud providers, system integrators, application vendors, customers, and open source communities, Red Hat can help organizations prepare for the digital future.