

Guide to Virtual Infrastructure Implementation

Virtualization Value

Virtualization provides opportunities to improve service levels and lower capital and operating costs to provide and maintain IT infrastructure. Over the past five years many organizations have specifically deployed VMware infrastructure software on industry standard systems to significantly reduce their hardware, data center and operational costs—many report 70-80% costs savings and 3-6 month ROI periods—while achieving unexpected gains in operational flexibility, efficiency, and agility. To date over one million server workloads have been virtualized on this infrastructure. 90% of our customers are now rolling out this infrastructure for production usage.

Key Success Factors

Based on the experiences of our customers, implementing virtual infrastructure is achievable and manageable. However, because virtualization is still a relatively new technology that can touch a broad set of IT stakeholders and processes, cultural resistance can stall or limit many deployments, particularly in larger enterprise organization. To achieve the benefits of virtualization beyond a tactical and isolated project-oriented deployment, we've found that the following considerations and strategies help organizations address cultural and organizational challenges.

- **Top-down sponsorship** ensures the appropriate levels of funding, staffing and cooperation from all groups within the enterprise.
- Treat virtualization as an **architectural decision** that leads to a corporate IT standard and a new model of delivering infrastructure resources.
- Design for the big picture and **deploy incrementally** to lower risk, build confidence and achieve early ROI (target 6 months).
- Achieve and maintain stakeholder buy-in as the cultural changes required to roll out new technology requires cross-department cooperation.
- Form a core virtualization team—a **Center of Excellence**—chartered to design, operate and drive internal changes.
- Create **high quality design** utilizing best practices to minimize issues and establish proficient ways for tracking and remediation.
- Refine virtualization processes with **standardized and measurable practices**.
- Start with an **assessment** of the "as is" organizational and technical readiness and design a vision for your desired end state.

Key Changes within IT infrastructure

Rolling out virtualization can introduce change within the IT infrastructure and the organization requiring, IT management to properly guide and sponsor the activities. A range of IT processes and infrastructure designs are commonly affected by virtualization. Specific knowledge and skill sets around virtualization need to be developed during the design, planning and first phase deployment. IT processes around application, capacity and hardware provisioning is the most fundamental area that requires re-engineering to achieve an implementation that scales across multiple terms. In many cases, a straightforward evolution of current technical standards and operational processes will achieve a smooth integration of virtual infrastructure into existing practices.

Operational Readiness

Operational Readiness is defined as the maturity an enterprise must reach to achieve full benefit from a virtual environment. As the number of virtual machines deployed and the scope of use across the organization increases, the level of capability to manage critical processes determines the maturity level. In order to scale and proliferate virtualization technology, processes and operations must become more mature and robust.

Successful implementations require the expansion of virtual machines and critical processes to be delicately balanced with the capabilities and maturity of the virtual environment. Without measuring balanced progress along the Adoption Curve, an enterprise may either over-commit (too many services on immature virtual infrastructure) or under-commit (not enough services on mature virtual infrastructure). Each of these states can cause lengthy delays, or even failure, in reaching the desired scalability and associated return on investment.



