Accelerate your hybrid journey
HPE Technology Consulting Services for software-defined infrastructure (SDI)
In the Idea Economy—many of your best ideas will come to life as services or applications. You need to be able to bridge the applications and workloads of today, with the services, applications and workloads of tomorrow. Doing this effectively, means first you have to accelerate your move towards a high velocity IT environment and manage your journey successfully so that you can achieve the benefits you expect—agility, flexibility and cost effectiveness.

Enterprises currently support two very different models for delivering applications. The traditional model operates in conventional, steady-state environment that focuses on minimizing risk through standard methodologies, conventional vendors, and strong governance.

The New Style of Business model, on the other hand, operates mobile, Big Data, and cloud applications and services in a nonlinear, high-speed model that requires agile application development, DevOps, low latency and can continuously adapt to high levels of uncertainty and change.

Transform to a hybrid infrastructure

At HPE, we envision a landscape that can accommodate both speeds of IT with enhanced control options for your business users, application developers, and IT administrators—through a software-defined, composable hybrid infrastructure. The software-defined infrastructure (SDI) will help you obtain service delivery that’s faster, simpler, and more agile and efficient.

Software defined means abstracting the conventional and proprietary vendor hardware and software-specific tasks from the IT assets where they have normally been performed, to a central control layer, making it much easier to manage and control those assets (server, storage, network, and facilities) without having to make changes to them individually.

Software-defined infrastructure encompasses not only software-defined data center (SDDC), which includes compute (SDC), network (SDN), storage (SDS), and facilities (SDF), but also extends to non-data center infrastructure with the use of monitors or machines that are increasingly software defined.

HPE for software-defined infrastructure

Helping organizations remove the complexity from their IT infrastructures and enable service improvement through the dynamic control of the infrastructure, satisfying the needs of applications, IT, and business users.

- Implement programmable control of infrastructure
- Accelerate both cloud and convergence work
- Manage a unified view of physical and virtual infrastructure
- Provide open control choices for improving technology, processes, and workforce

Figure 1. SDI and new control options

Figure 1 shows you the new open control choices with SDI that allow you to react quickly to changing business dynamics while providing you with a secure, stable environment. Software-defined control creates functional abstractions that support both operator and application requests. These programmatic controls are applied in three distinct layers: IT administrative control layer facilitated by the composable infrastructure, line-of-business control through the cloud, and application-level control through the software-defined architecture.

With HPE’s flexible approach to SDI and software-defined technologies you have the advantage of evolving your infrastructure at your pace or accelerate it through well-defined technical pilots—solution accelerators for select domains such as software-defined compute, facilities, network or storage.
With HPE Services, we provide:

- A clear description of the architectural approach, opportunities, strategy, and technology, as well as the benefits based on your specific business situation and needs
- A vision and strategy to start your data center and IT infrastructure journey
- An analysis of your current readiness and a roadmap to help you reach your vision
- A process that accelerates the adaption of software-defined architectures through reference architecture, predefined hardware, software, and services solution accelerators

**Figure 2. The journey to the New Style of IT**

**HPE Transformation Workshop for SDI (1–2 days)**

The HPE Transformation Workshop for SDI helps your business and IT organizations work interactively to define the topline strategy for a future SDI. This workshop clarifies your business requirements and the issues that IT must resolve in order to meet these requirements. A detailed executive briefing or high-level report summarizes the strategies and functional requirements.

**HPE Readiness and Roadmap Service for SDI (5–7 weeks)**

HPE Readiness and Roadmap Service for SDI provides gap analysis and recommendations using HPE’s holistic SDI Capability Model and the SDI Reference Architecture. This engagement service identifies the people, process, products, policies, and proof elements that you need to institute in order to transition to a software-defined future state. The deliverables from this service are the requirements, recommendations, and roadmap for the targeted SDI aligned to your business goals.

**HPE Discovery Service for SDI (6–8 weeks)**

This service provides insights into data center assets and total cost of ownership by discovering, mapping, and assessing the data center environment for project dependencies and prioritization. HPE experts use both manual and automatic data gathering techniques leveraging HPE and third-party tools. The scope of the discovery includes facilities, servers, storage, network, IT management processes, and application dependencies, as well as provides an understanding of infrastructure and application performance profiles.

**HPE Architecture and Design Service for SDI (6–8 weeks)**

With your readiness and roadmap fully understood, you then move forward to architect your SDI environment. The HPE team will leverage its HPE Technology Services structured IT Solution Architecture (ITSA) methodology to build out a holistic SDI reference architecture customized to your specific goals and requirements. You receive a high-level design and bill of materials that provides the foundation for the next phase of your SDI implementation.
HPE Software-defined Accelerator Solutions (4-6 weeks)
These solutions, which are predefined, yet customizable, can be implemented within weeks based on the HPE Software-defined Infrastructure Reference Architecture. Each accelerator contains the necessary hardware, software, and services to enable the piloting of the most common software-defined use cases in the enterprise. The accelerator solutions span compute, networking, storage, facilities, cloud, and IT operations:

- HPE Software-defined Compute Accelerator Solution—significantly reduce the response time to the business by providing integrated provisioning and intelligent policy-based workload management throughout its entire lifecycle
- HPE Software-defined Compute for Cloud Accelerator Solution—increase business agility by providing a public cloud experience within a private cloud environment—underpinned by a robust SDI
- HPE Software-defined Network Accelerator Solution—improve the customer experience when using Microsoft Lync by dynamically optimizing the network using the HPE Network Optimizer SDN Application; increase network security by providing real-time threat protection across the enterprise campus network by using HPE Network Protector SDN Application
- HPE Software-defined Storage Accelerator Solution—reduce the response time to the business by improving the speed and quality of storage infrastructure provisioning
- HPE Software-defined Facilities Accelerator Solution—reduce energy costs and improve capacity planning by integrating facilities and IT Infrastructure management to enable optimized power and cooling
- HPE Software-defined Accelerator Solution for IT Operations—significantly reduce downtime for business applications by identifying application and infrastructure issues and dynamically remediate the root causes

HPE Implementation Service for SDI (custom)
This service includes the actual deployment and implementation of SDI projects such as software-defined compute implementation with VMware, Microsoft, and Red Hat, and a transition to operations for hybrid delivery models, including in house, outsourcing, and cloud computing.

HPE Technology Services for SDI: a comprehensive approach to SDI
HPE helps you remove complexity from your IT infrastructures and enable service improvement through the dynamic control of the infrastructure, satisfying the needs of IT, applications, and business users. The HPE SDI approach takes control layers that are hypervisor independent and built on open standards (such as OpenStack and OpenFlow), and allows you to manage your infrastructure through a fully automated, single control layer.

Learn more at hp.com/services/sdi

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