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Nota di contenuto	Cover; Copyright; Credits; About the Authors; About the Reviewers; www.PacktPub.com; Table of Contents; Preface; Chapter 1: Virtual Data Center Design; Virtual Data Center design principles; Best practices; Designing Virtual Data Center; VMware vCenter components; Choosing a platform for your vCenter server; Using the vCenter server appliance; Sizing your vCenter server; Choosing your vCenter database; vSphere clustering - HA and DRS; Host considerations; Network considerations; Storage considerations; Cluster considerations; Admission control; Summary; Chapter 2: Hypervisor Design ESXi hardware design CPU considerations; Memory and NUMA considerations; Virtual NUMA (vNUMA) considerations; Considerations for Java virtual machines (JVMs); Network interface card considerations; Hypervisor storage components; Stateless host design; Scale-Up and Scale-Out designs; Summary; Chapter 3: Storage Design; Storage protocols; Fibre Channel (FC); iSCSI; Fibre Channel over Ethernet (FCoE); NFS; Virtual machine filesystems; VMFS; RDM; NFS; Designing storage; Local storage considerations; Datastore and cluster design; VMware

storage features; Configurable storage features; SIOC
Configuring the multipathing path selection policy
Provisioning;
Summary; Chapter 4: Network Design; Introducing vSphere switching;
vNetwork Standard Switches (vSS); vNetwork Distributed Switches (vDS);
Common networking design considerations; Best practices to
implement in your design; Implementing Network I/O Control (NIOC);
Providing network redundancy, resiliency, and throughput; Physical
switches and adapters; ESXi host hardware; Considerations when using
IP storage; Separating your traffic; Validating your storage
configurations; Summary; Chapter 5: Virtual Machine Design
Virtual machine resources and templates
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issues; Memory performance issues; Storage performance issues;
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Resource considerations; Ensuring high availability and application
resiliency; Enabling CPU Hot Add in vSphere client; The vCenter
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strategies; Designing for RPO and RTO requirements; Choosing
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replication; Mixing replication solutions
Planning and testing the DR strategy

Sommario/riassunto

An easy-to-follow guide full of hands-on examples of real-world design best practices. Each topic is explained and placed in context, and for the more inquisitive, there are more details on the concepts used. If you wish to learn about vSphere best practices and how to apply them when designing virtual, high performance, reliable datacenters that support business critical applications to work more efficiently and to prepare for official certifications, this is the book for you. Readers should possess a good working knowledge of vSphere as well as servers, storage, and networking.
