1. Record Nr. UNINA9910790931003321

Autore Savill John

Titolo Mastering hyper-V 2012 R2 with system center and windows azure / /

John Savill; acquisitions editor, Mariann Barsolo; development editor, Kim Beaudet; technical editor, Sean Deuby; book designers, Maureen

Forys, Judy Fung

Pubbl/distr/stampa Indianapolis, Indiana:,: Wiley,, 2014

©2014

ISBN 1-118-82833-X

1-118-82815-1

Descrizione fisica 1 online resource (578 p.)

Disciplina 005.4476

Soggetti Application software - Design

Cloud computing Web services

Workflow management systems - Computer programs

Lingua di pubblicazione Inglese

Formato Materiale a stampa

Livello bibliografico Monografia

Note generali Includes index.

Nota di contenuto Cover; Title Page; Copyright; Contents; Chapter 1 Introduction to

Virtualization and Microsoft Solutions; The Evolution of the Datacenter; One Box, One Operating System; How Virtualization Has Changed the Way Companies Work and Its Key Values; History of Hyper-V; Windows Server 2008 Hyper-V Features; Windows Server 2008 R2 Changes;

Windows Server 2008 R2 Service Pack 1; Windows Server 2012 Hyper-V Changes; Windows Server 2012 R2; Licensing of Hyper-V; One

Operating System (Well, Two, but Really One); Choosing the Version of

Hyper-V; The Role of System Center with Hyper-V

System Center Configuration ManagerSystem Center Virtual Machine Manager and App Controller; System Center Operations Manager; System Center Data Protection Manager; System Center Service

Manager; System Center Orchestrator; Clouds and Services; The Bottom Line; Chapter 2 Virtual Machine Resource Fundamentals; Understanding

VMBus; The Anatomy of a Virtual Machine; Generation 1 Virtual

Machine; Generation 2 Virtual Machine; Processor Resources; Virtual

Processor to Logical Processor Scheduling; Processor Assignment; NUMA Support; Memory Resources; Virtual Storage; VHD; VHDX Creating a Virtual Hard DiskPass-Through Storage; The Bottom Line; Chapter 3 Virtual Networking; Virtual Switch Fundamentals; Three Types of Virtual Switch; Creating a Virtual Switch; Extensible Switch; VLANs and PVLANS; Understanding VLANs; VLANs and Hyper-V; PVLANs; How SCVMM Simplifies Networking with Hyper-V; SCVMM Networking Architecture; Deploying Networking with SCVMM 2012 R2; Network Virtualization; Network Virtualization Overview; Implementing Network Virtualization; Useful Network Virtualization Commands; Network Virtualization Gateway; Summary; VMQ, RSS, and SR-IOV; SR-IOV; DVMQ

RSS and vRSSNIC Teaming; Host Virtual Adapters and Types of Networks Needed in a Hyper-V Host; Types of Guest Network Adapters; Monitoring Virtual Traffic: The Bottom Line: Chapter 4 Storage Configurations; Storage Fundamentals and VHDX; Types of Controllers; Common VHDX Maintenance Actions; Performing Dynamic VHDX Resize; Storage Spaces and Windows as a Storage Solution; Server Message Block (SMB) Usage; SMB Technologies; Using SMB for Hyper-V Storage; iSCSI with Hyper-V; Using the Windows iSCSI Target; Using the Windows iSCSI Initiator; Considerations for Using iSCSI Understanding Virtual Fibre ChannelLeveraging Shared VHDX; Data Deduplication and Hyper-V; Storage Quality of Service; SAN Storage and SCVMM; The Bottom Line; Chapter 5 Managing Hyper-V; Installing Hyper-V: Using Configuration Levels: Enabling the Hyper-V Role: Actions after Installation of Hyper-V; Deploying Hyper-V Servers with SCVMM; Hyper-V Management Tools; Using Hyper-V Manager; Core Actions Using PowerShell; Securing the Hyper-V Server; Creating and Managing a Virtual Machine; Creating and Using Hyper-V Templates; Hyper-V Integration Services and Supported Operating Systems Migrating Physical Servers and Virtual Machines to Hyper-V Virtual Machines

Sommario/riassunto

This book will help you understand the capabilities of Microsoft Hyper-V, architect a Hyper-V solution for your datacenter, plan a deployment/migration, and then manage it all using native tools and System Center. Coverage also includes hybrid cloud scenarios specifically with Windows Azure to complete the full virtualization piece of providing data both on premise and off premise. In addition, you will explore the Windows Azure capabilities for virtual machines and managing a hybrid cloud, including Windows Azure's Internet as a Service (IaaS) and storage capabilities, how seamless m