APPENDIX B
Reference URLs

This appendix includes a number of reference URLs associated with hybrid cloud and Microsoft Azure Stack. URLS do change—although the authors have made every effort to verify the references here as working links, there is no guarantee they will remain current. It is quite possible some will change or be "dead" by the time you read this book. Sometimes the Wayback Machine (http://www.archive.org/index.php) can rescue you from dead or broken links. This site is an Internet archive, and it will take you back to an archived version of a site—sometimes.

These links are also available "live" at Pearson's InformIT website at http://www.informit.com/title/9780672338502 under the Downloads tab. Look for Appendix B, "Reference URLs."

General Resources

A number of websites provide excellent resources for hybrid cloud and Microsoft Azure Stack. This section lists some of the more general resources available.

▶ GitHub is a web-based Git or version control repository and Internet hosting service, used mostly for code. It offers the distributed version control and source software development platform functionality of Git, while adding its own features. GitHub is accessed at https://github.com.

▶ Read about the growth of cloud computing at https://www.forbes.com/sites/louiscolumbus/2015/01/24/roundup-of-cloud-computing-forecasts-and-market-estimates-2015/#47fe12c0db7a.

▶ See Market Research Media's Global Cloud Computing Market forecast (2015-2020) at https://www.market-researchmedia.com/?p=839.

▶ Tight Scale's 2016 State of the Cloud report is available at https://www.rightscale.com/lp/state-of-the-cloud.

▶ A Gartner blog discusses problems encountered by private clouds, at http://gtnr.it/1LTLIJc.

▶ Understand Microsoft's Azure Stack with Rand Morimoto's 2016 Network World article at https://www.networkworld.com/article/3037483/cloud-computing/truly-understanding-microsoft-s-azure-stack.html.

▶ Access a Gartner Group report stating that hybrid cloud is anticipated to become the most common use of cloud by 2019, at http://www.gartner.com/newsroom/id/3354117.

Microsoft's Hybrid Cloud Resources

The following list includes some general Microsoft resources available for hybrid cloud and Azure Stack:

▶ Microsoft provides a DevOps self-assessment tool, available at https://devopsassessment.azurewebsites.net.

▶ Download the Azure Stack Development Kit (ASDK) from the Microsoft Software Download Center (http://aka.ms/azurestack).

▶ Find a full feature list of the Modern Azure Portal at https://azure.microsoft.com/en-us/features/azure-portal.

▶ The Azure Classic Portal is hosted at https://manage.windowsazure.com.

▶ Microsoft lists key features and concepts in Azure Stack at https://docs.microsoft.com/en-us/azure/azure-stack/azure-stack-key-features.

▶ ASDK architecture is documented at https://docs.microsoft.com/en-us/azure/azure-stack/azure-stack-architecture.

▶ Microsoft provides Azure Stack tutorials and an application programming interface (API) reference at https://docs.microsoft.com/en-us/azure/azure-stack/.

▶ Find Microsoft's Azure DevOps self-assessment tool at https://devopsassessment.azurewebsites.net. The wizard lets you describe your DevOps scenario along with the tooling plan you intend to use.

▶ Use Azure Marketplace to grow your cloud business; see https://azuremarketplace.microsoft.com/en-us/sell.

▶ Download the Azure Stack Tools from GitHub at http://aka.ms/azurestacktools/.

▶ Read about platform as a service (PaaS) services for Azure Stack at https://docs.microsoft.com/en-us/azure/azure-stack/azure-stack-tools-paas-services.

▶ How to perform conditional deployments in Azure Stack is described with the example at https://docs.microsoft.com/en-us/azure/azure-resource-manager/resource-group-authoring-templates#resources.

▶ Find a description for controls for a CreateUIDefinition file at https://docs.microsoft.com/en-us/azure/azure-resource-manager/managed-application-createuidefinition-elements.

▶ Deploy a SQL resource provider using the script at https://docs.microsoft.com/en-us/azure/azure-stack/azure-stack-sql-resource-provider-deploy.

▶ Deploy the MySQL resource provider using the script at https://docs.microsoft.com/en-us/azure/azure-stack/azure-stack-mysql-resource-provider-deploy.

▶ Download the System Center Management Pack for Microsoft Azure from https://www.microsoft.com/en-us/download/details.aspx?id=50013.

▶ Information about connecting to Azure Stack using Remote Desktop is available at https://docs.microsoft.com/en-us/azure/azure-stack/azure-stack-connect-azure-stack.

▶ API version profiles are discussed at https://docs.microsoft.com/en-us/azure/azure-stack/azure-stack-version-profiles.

▶ Read about installing Azure Stack PowerShell at https://docs.microsoft.com/en-us/azure/azure-stack/azure-stack-powershell-install.

▶ Information about downloading the Azure Stack PowerShell modules from GitHub is at https://docs.microsoft.com/en-us/azure/azure-stack/azure-stack-powershell-download.

▶ See https://technet.microsoft.com/en-us/library/bb978526.aspx to get started with PowerShell.

▶ Considerations about authoring ARM templates are documented at https://docs.microsoft.com/en-us/azure/azure-stack/azure-stack-develop-templates. Find additional information at https://docs.microsoft.com/en-us/azure/azure-resource-manager/resource-group-authoring-templates.

▶ Available ARM template schemas can be downloaded from the Azure GitHub repository at https://github.com/Azure/azure-resource-manager-schemas/tree/master/schemas.

▶ Read about best practices for ARM templates at https://docs.microsoft.com/en-us/azure/azure-resource-manager/resource-manager-template-best-practices.

▶ Read about defining resources in ARM templates at https://docs.microsoft.com/en-us/azure/templates/.

▶ Resource functions for ARM templates are listed at https://docs.microsoft.com/en-us/azure/azure-resource-manager/resource-group-template-functions-resource. ARM template functions are discussed at https://docs.microsoft.com/en-us/azure/azure-resource-manager/resource-group-template-functions.

▶ Information about nested templates is at https://docs.microsoft.com/en-us/azure/azure-resource-manager/resource-group-linked-templates.

▶ For a guide to install and connect Microsoft Visual Studio to Azure Stack, see https://docs.microsoft.com/en-us/azure/azure-stack/azure-stack-install-visual-studio.

▶ Get started authoring templates with Visual Studio Code with the documentation at https://docs.microsoft.com/en-us/azure/azure-resource-manager/resource-manager-vs-code.

▶ Read how to provision a virtual machine (VM) in Azure and join it to an exisiting Active Directory domain at https://blogs.msdn.microsoft.com/igorpag/2016/01/25/azure-arm-vm-domain-join-to-active-directory-domain-with-joindomain-extension/.

▶ Find a VM extension to enable Remote Desktop and password reset at https://github.com/Azure/AzureStack-QuickStart-Templates/tree/master/vmaccess-ext-win.

▶ For information about executing a custom script on a Linux VM (Bash), see https://github.com/Azure/AzureStack-QuickStart-Templates/tree/master/101-vm-linux-apply-extension-customscript.

▶ Read about enabling Remote Desktop and password reset on Linux at https://azure.microsoft.com/en-us/blog/using-vmaccess-extension-to-reset-login-credentials-for-linux-vm/.

▶ Configure a Docker environment on a Windows or Linux VM with the information at https://docs.microsoft.com/en-us/azure/virtual-machines/virtual-machines-linux-dockerextension.

▶ Install and configure the Microsoft Monitoring Agent for OMS on VM at https://github.com/Azure/AzureStack-QuickStart-Templates/tree/master/MicrosoftMonitoringAgent-ext-win.

▶ Examples of using Azure Resource Manager (ARM) template extensions are available at https://docs.microsoft.com/en-us/azure/virtual-machines/virtual-machines-windows-extensions-configuration-samples.

▶ Read about PowerShell Desired State Configuration (DSC) at https://docs.microsoft.com/en-us/powershell/dsc/overview.

▶ Continuous delivery (CD) is usually described as part of DevOps. For an example of CD using Azure Automation, see https://docs.microsoft.com/en-us/azure/automation/automation-dsc-cd-chocolatey.

▶ Azure Automation runbook types are described at https://docs.microsoft.com/en-us/azure/automation/automation-runbook-types.

▶ For information about runbook execution, see https://docs.microsoft.com/en-us/azure/automation/automation-runbook-execution.

▶ Read about variable assets in Azure Automation at https://docs.microsoft.com/en-us/azure/automation/automation-variables.

▶ Integration modules are described at https://docs.microsoft.com/en-us/azure/automation/automation-integration-modules.

▶ For examples of automation packs, see the Azure Automation GitHub repository at https://github.com/azureautomation/automation-packs.

▶ The PowerShell ISE add-on for Azure Automation Authoring is at https://github.com/azureautomation/azure-automation-ise-addon.

▶ Authoring graphical runbooks is discussed at https://docs.microsoft.com/en-us/azure/automation/automation-graphical-authoring-intro.

▶ For information about creating schedules, see https://docs.microsoft.com/en-us/azure/automation/automation-schedules. This documentation also describes how to create and use schedules with PowerShell. To see how to create and link a schedule using an ARM template, check the template sample at https://github.com/azureautomation/automation-packs/blob/master/101-sample-automation-resource-templates/sample-deploy-schedule/.

▶ Read how to automate resources using Azure Automation's hybrid runbook worker feature at https://docs.microsoft.com/en-us/azure/automation/automation-hybrid-runbook-worker.

▶ Create an OMS workspace at http://oms.microsoft.com.

▶ For information about OMS alerts, see https://docs.microsoft.com/en-us/azure/log-analytics/log-analytics-alerts.

▶ Read about hybrid workers, including use cases and examples, at https://docs.microsoft.com/en-us/azure/automation/automation-hybrid-runbook-worker.

▶ Microsoft documents webhooks at https://docs.microsoft.com/en-us/azure/automation/automation-webhooks.

▶ For information using Service Map in OMS, see https://docs.microsoft.com/en-us/azure/operations-management-suite/operations-management-suite-service-map.

▶ Creating and publishing a marketplace item is documented at https://docs.microsoft.com/en-us/azure/azure-stack/azure-stack-create-and-publish-marketplace-item.

▶ Download the Azure Gallery Packager from http://www.aka.ms/azurestackmarketplaceitem.

▶ Read about how to author the user interface (UI) for a marketplace item at https://docs.microsoft.com/en-us/azure/azure-resource-manager/managed-application-createuidefinition-functions and https://docs.microsoft.com/en-us/azure/azure-resource-manager/managed-application-createuidefinition-elements.

▶ Use the PowerShell Azure Stack Infrastructure Administration module, available at https://github.com/Azure/AzureStack-Tools/tree/master/Infrastructure, to perform Azure Stack management-related tasks with PowerShell.

Other Hybrid Cloud Resources

Microsoft of course is not the only organization to discuss hybrid cloud. A number of websites provide excellent resources for hybrid cloud. Following are several you may want to investigate:

▶ Find ARM schemas at https://github.com/Azure/azure-resource-manager-schemas/tree/master/schemas/0.1.2-preview. This version is current at the time of writing this book; be sure to check for new schemas periodically.

▶ Read how to create a SQL Server marketplace item at https://azurestack.blog/2017/01/creating-an-application-deployment-gallery-item-sql-gallery-item/.

▶ GitHub's portaldocs repository is at https://github.com/Azure/portaldocs.

▶ Check out the Elastic search offering, available on GitHub at https://github.com/elastic/azure-marketplace.

▶ Justin Beckwith takes you under the hood of the Modern Azure Portal at http://jbeckwith.com/2014/09/20/how-the-azure-portal-works/.

▶ Deploy the BGInfo VM extension to an existing VM using the ARM template at https://github.com/Azure/AzureStack-QuickStart-Templates/tree/master/101-vm-windows-apply-extension-bginfo.

▶ There are a number of custom script extension Windows examples in the Quick Start templates. For more information, see https://github.com/Azure/AzureStack-QuickStart-Templates/tree/master/101-vm-windows-apply-extension-custom-script-cmd and https://github.com/Azure/AzureStack-QuickStart-Templates/tree/master/101-vm-windows-apply-extension-customscript-pscmd.

▶ To execute an external file, see the example at https://github.com/Azure/AzureStack-QuickStart-Templates/tree/master/101-vm-windows-apply-extension-customscript-sf.

▶ Use the script at https://github.com/Azure/AzureStack-QuickStart-Templates/tree/master/101-vm-linux-apply-extension-customscript to deploy the Custom Script extension to an existing Linux VM in an Azure Stack environment.

▶ Using out-of-the-box activities, a runbook can be triggered from a SharePoint workflow. http://blog.ctglobalservices.com/automation/jgs/december-1st-azure-automation-triggering-a-webhook-from-a-sharepoint-workflow-using-out-of-the-box-activities/.

▶ Use GridPro's EvOPS software at https://www.gridprosoftware.com/products/evops to turn the Azure Stack portal into a service catalog to submit incidents and check on incidents and service requests.

Blogs

Following are some blogs the authors have used. Some are more active than others, and new blogs seem to spring up overnight!

▶ MVP Ben Gelens publishes at https://azurestack.blog.

▶ Rick Claus, Director of Program Management on the Microsoft Azure Compute team, blogs as "The Regular IT Guy," at https://regularitguy.com/.

▶ Justin Beckwith blogs about Azure and related technologies at http://jbeckwith.com/archive/#azure/.

▶ Microsoft Azure's blog is at https://azure.microsoft.com/en-us/blog/.

Public Forums

If you need an answer to a question, the first place to check is the Microsoft public forums. A list of available TechNet forums is maintained at https://social.technet.micro-soft.com/forums/. It is best to see if the question has already been posted before you ask it yourself!

▶ The Cloud Services (Web and Worker Roles) forum is at https://social.technet.micro-soft.com/Forums/en-US/home?forum=windowsazuredevelopment.

▶ The Azure Storage forum is at https://social.technet.microsoft.com/Forums/en-US/home?forum=windowsazuredata.

▶ Access the Azure SQL Database forum at https://social.technet.microsoft.com/Forums/en-US/home?forum=ssdsgetstarted.

▶ The Azure Management Portal forum is at https://social.technet.microsoft.com/Forums/en-US/home?forum=windowsazuremanagement.

▶ Get your questions answered about Azure pricing and billing at https://social.tech-net.microsoft.com/Forums/en-US/home?forum=windowsazurepurchasing.

▶ The forum for web sites and virtual machines on Windows Server for hosting service providers is at https://social.technet.microsoft.com/Forums/en-US/home?forum=web sitesvirtualmachinesonwinserver.

▶ The Azure Active Directory Technet forum is at https://social.technet.microsoft.com/Forums/en-US/home?forum=windowsazureaditpro.

▶ For questions about the OMS Service Map, see https://social.technet.microsoft.com/Forums/en-US/home?forum=servicemap.

▶ Discussions about private cloud computing are at https://social.technet.microsoft.com/Forums/en-US/home?forum=privatecloud.

▶ Read about software as a service (Saas) at https://social.technet.microsoft.com/Forums/en-US/home?forum=saas.

▶ The infrastructure as a service TechNet (Iaas) forum is at https://social.technet.microsoft.com/Forums/en-US/home?forum=iaas.

▶ Access the PaaS TechNet forum at https://social.technet.microsoft.com/Forums/en-US/home?forum=paas.

Utilities

Following are some utilities, both Microsoft and third party:

▶ Storage Explorer is a free graphical tool used to administer storage account in Azure or Azure Stack. Download it at www.storageexplorer.com. Several steps are necessary to set up a connection to Azure Stack, described at https://docs.microsoft.com/en-us/azure/vs-azure-tools-storage-manage-with-storage-explorer.

▶ Download Azure Developer tools from https://azure.microsoft.com/en-gb/tools/.

▶ Interested in using Visual Studio Code? Download it from https://code.visualstudio.com/.

▶ A template validator script for Azure Stack is available from https://github.com/Azure/AzureStack-Tools/tree/master/TemplateValidator.

▶ Semantic versions are described at http://semver.org/.