



Hosting Microsoft Dynamics NAV 2013 on Windows Azure Infrastructure Services

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White Paper

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Introduction

This guide provides everything you need to understand the basics of delivering ERP on Windows Azure Infrastructure Services (WAIS). WAIS provides the infrastructure you need to provide customers with dependable, secure ERP deployments in the cloud, backed by Microsoft for a full-stack offering.

Flexibility and familiarity make WAIS an ideal platform for Dynamics products. Microsoft Dynamics NAV 2013 Feature Pack 1 for deploying in the cloud is exactly the same one that you are used to selling and deploying every day. As WAIS is a Virtual Machine environment, the model should be very familiar to you already. You have flexibility with respect to the license model you choose to package with your Azure offering to customers. And because the product is constant, customers can be reassured that they can move off of (or onto) the cloud seamlessly.

In this document, you will find the 'how-to' content for licensing, privacy, and deployment steps, plus links to useful information on the [Azure Portal](#), [MSDN](#) and Dynamics [PartnerSource](#) sites. For the business value and customer talking points, please go [here](#).

Part 1: Licensing

Licensing the various components of the Dynamics NAV 2013 Feature Pack 1 solution is an important consideration in all deployment types. For deployments on Windows Azure, Partners will want to evaluate the special licensing terms and specific to Windows Azure and the impact that these decisions have on the overall cost of providing the hosted solution.

All Microsoft software installed in the Windows Azure Virtual Machine environment must be properly licensed. Windows Azure Virtual Machines include by default a license for use of Windows Server in the Windows Azure environment. Certain Windows Azure Virtual Machine offerings may also include additional Microsoft software on a per-hour or evaluation basis.

[Click here](#) to view additional common FAQs regarding licensing on Windows Azure Virtual Machines.

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Microsoft License Mobility through Software Assurance

License Mobility through Software Assurance gives Microsoft Volume Licensing customers the flexibility to deploy eligible server applications with active Software Assurance on Windows Azure. With this Software Assurance benefit, there is no need to purchase new licenses and no associated mobility fees so, you can easily deploy existing licenses on the Windows Azure cloud platform.

With License Mobility through Software Assurance, you can:

- Deploy certain server application licenses purchased under your Volume Licensing agreement in Windows Azure data centers.
- Extend the value of your server application licenses by deploying them on-premises or in the cloud.
- Take advantage of the low cost computing infrastructure for changing business priorities.

More program benefit details and information can be found [here](#).

For information about Microsoft's License Mobility program see:

<http://www.microsoft.com/licensing/software-assurance/license-mobility.aspx>

Microsoft Dynamics NAV 2013

Use the [Microsoft Dynamics NAV 2013 and Microsoft Dynamics GP 2013 Pricing and Licensing](#) page on Partner Source to learn more about the Perpetual Licensing and Service Provider License agreement (SPLA) licensing programs – both of which are supported for on-Azure deployments.

Consult the [Microsoft Dynamics NAV 2013 and Microsoft Dynamics GP 2013 Licensing Guide](#) to improve your understanding of how to license Microsoft Dynamics NAV 2013.

Remote Desktop Services (RDS)

Because Windows Azure currently does not have the ability to offer SBH (Session-Based Hosting) through RDS or any other third party offering, Partners will want to configure their solutions to remote into their servers for administrative purposes for up to 2 administrators without additional licensing. To read more about the licensing RDS with Virtual Machines, see: <http://www.windowsazure.com/en-us/pricing/licensing-faq/>

SQL Server

There are three ways to license SQL Server in Windows Azure Virtual Machines:

1. Install or upload your own SQL Server image using the license mobility benefits under Software Assurance.
2. Obtain the SQL Server image from our image gallery and pay the per-hour rate of SQL Server in Windows Azure Virtual Machines.
3. Hosted solution for SQL Server Standard Edition licensed as Subscriber Access Licenses (SAL) through SPLA.

Partners will want to carefully evaluate each of these options for SQL Server as the cost models are very different. The deployment model a Partner chooses to employ and the number of users that will be supported are key factors in this decision.

Other Licensing Considerations – Azure Billing / Cost Allocation

For many Partners determining how to bill Customers for monthly, consumption-based charges from Windows Azure will represent a new challenge.

To learn what billing information is available, Partners should review the [Understand Your Bill for Windows Azure](#) section on the Windows Azure Portal. These pages provide an overview of the Windows Azure billing process, links to sample invoices and a description of the daily usage data file that can be exported and analyzed.

Windows Azure billing is done monthly at the Account level. Charges for various services are grouped and reported at the Subscription level. To simplify the cost allocation exercised, Partners supporting multiple Customer deployments may wish to segregate each Customer's services to individual subscriptions.

Part 2: Legal

Together with Microsoft, Partners must work together to protect Customer data and provide guidance to Customers when it comes to security, privacy, and compliance practices.

Microsoft runs Windows Azure services with common operational practices and features across multiple geographies and jurisdictions. However, it is ultimately up to Partners and Customers to determine if Microsoft services satisfy their regulatory needs.

To help provide Partners and Customers with up to date information the Windows Azure [Trust Center](#) provides detailed information on security, privacy, and compliance topics for Windows Azure customers.

Security

This section provides an overview of the provisions Microsoft is taking to provide a secure environment within geographically dispersed datacenters. Among the extensive list of Security-related resources, the [Standard Response to Request for Information: Security and Privacy](#) outlines how Windows Azure meets the suggested principals and mapped them to the International Standards Organization (ISO) 27001:2005 and ISO 27002. This standardized response empowers Partners and Customers with in-depth information to evaluate different offerings in the market place today.

Privacy

Includes links to multiple resources that describe Privacy practices of the Windows Azure environment. It includes a link to the [Windows Azure Privacy Statement](#) an overview of privacy terms and a discussion of the location of Customer data, E.U. Data Protection Directive.

Compliance

This section provides resources to help Partners and Customers comply with the specific laws and regulations applicable to their unique industry and use scenario.

Part 3: Windows Azure Account

This section contains information about signing up for a Microsoft account and creating a Windows Azure subscription.

Sign up for a Microsoft account

You use a Microsoft account to sign in to the Windows Azure Management Portal. For more information, see [How do I sign up for a Microsoft account?](#).

Sign up for a Windows Azure subscription

The Windows Azure subscription gives you access to the Azure Management Portal for creating and managing virtual machines.

1. Visit <http://windows.azure.com> and log on with your Microsoft account.
2. Choose Sign-up for Windows Azure and follow the instructions to create a new account. You can choose either the free trial or purchase option.

Create a Subscription

You will create one or more subscriptions for the Windows Azure account. A subscription is a grouping of Windows Azure services and applications, including the virtual machines discussed earlier. The subscription provides a way to control the access to and the use of the Windows Azure subscribed service. On the account billing, the resource usage of Windows Azure services for each subscription is reported separately. In a situation where you will have multiple Microsoft Dynamics NAV deployments, you may decide to use a separate subscription for each deployment in order to track expenses related to each deployment. All of the Microsoft Dynamics NAV components for a single deployment need to be deployed to the same subscription however. You can set up different administrators for each subscription as required. See [Overview of Subscription Management](#) for additional information.

Use the following steps to create a subscription.

1. Sign in to the [Azure account management portal](#).
2. Choose Account Center to manage the account.
3. Choose to add a subscription.
4. Choose a subscription offer from the available list to create the subscription.

Note: You can rename the subscription after it has been created.

Sign up for a Windows Azure Support Plan

Windows Azure support plans provide technical and billing support for Windows Azure. The Windows Azure support plans offer flexible support options that will allow you to select the right level of support for your Windows Azure

deployment. Information on the available support plans and purchasing a plan can be found on the [Windows Azure Support](#) page.

Part 4: Planning and Deploying Microsoft Dynamics NAV on Windows Azure

Microsoft Dynamics NAV 2013 Feature Pack 1 includes the Microsoft Dynamics NAV Provisioning Tools for Windows Azure that enable you to deploy a Microsoft Dynamics NAV environment on Windows Azure virtual machines. The provisioning tools automate the deployment of Microsoft Dynamics NAV on virtual machines. The provisioning tools include a set of Windows PowerShell cmdlets and scripts that create new virtual machines on Windows Azure, install and configure Microsoft Dynamics NAV components, including Microsoft Dynamics NAV Web Server components, Microsoft Dynamics NAV Server, and SQL database components. This section outlines the tasks for planning and deploying Microsoft Dynamics NAV on Windows Azure.

For more information, see [Deploying and Managing Microsoft Dynamics NAV on Windows Azure](#).

Determine the Network Topology and Configuration

You can deploy Microsoft Dynamics NAV in different network topologies. You can deploy to a single virtual machine, where all Microsoft Dynamics NAV components are installed. Or, you can deploy on two virtual machines, where Microsoft Dynamics NAV Web Server components and Microsoft Dynamics NAV Server are on one machine and SQL Server and the Microsoft Dynamics NAV database components are on the other.

For more information, see [Network Topologies for Microsoft Dynamics NAV on Windows Azure](#).

Prepare the Provisioning Environment

Before you deploy Microsoft Dynamics NAV 2013 on Windows Azure, you must prepare the computer that you will use to provision Microsoft Dynamics NAV on Windows Azure.

For more information, see [Preparing for Deploying Microsoft Dynamics NAV on Windows Azure](#).

Deploying Microsoft Dynamics NAV on Windows Azure Using the Example Scripts

After you prepare the provisioning environment, you can run the example scripts that are available with the provisioning tools to deploy Microsoft Dynamics NAV 2013 on Windows Azure.

For more information, see [Deploying Microsoft Dynamics NAV on Windows Azure Using the Example Scripts](#).

Security and Protection for Microsoft Dynamics NAV 2013 on Windows Azure

To help secure and protect Microsoft Dynamics NAV on Windows Azure, you should refer to the Microsoft Dynamics NAV 2013 documentation on the following topics:

- User accounts created by the Microsoft Dynamics NAV 2013 Provisioning Tools
- Clients and services
- Remote Desktop (RDP)
- Windows PowerShell Remoting
- Custom images for Windows Azure Virtual Machines
- Antivirus Software

For more information on these topics, see [Security and Protection for Microsoft Dynamics NAV 2013 on Windows Azure](#).

Part 5: Maintenance and Administration

The maintenance and administration of Microsoft Dynamics NAV on Windows Azure is similar to an on-premise deployment. Some of the major topics include:

- User Authentication

- Backing Up and Restoring the Database
- Fault Tolerance
- Changing the Windows Azure Virtual Machine Size
- Managing Microsoft Dynamics NAV 2013 Hotfixes

For more information on these topics, see [Administration of Microsoft Dynamics NAV 2013 on Windows Azure](#).

Part 6: Troubleshooting and Technical Support

Troubleshooting Microsoft Dynamics NAV on Windows Azure typically involves the same techniques that you would use for any Microsoft Dynamics NAV deployment. The [Microsoft Dynamics NAV product documentation](#) will serve as a good reference for identifying and resolving application issues. When troubleshooting on Windows Azure, you will need to account for unique communication errors that you may not have to consider in an on-premise deployment.

Troubleshooting connection issues

Depending on the virtual network configuration and where users will be accessing Microsoft Dynamics NAV from, you may see issues related to communications not reaching the intended destination. When you suspect that the error could be a communications issue, you will want to start by verifying that the virtual machine is running and accessible using the Windows Azure Management Portal. If the virtual machine is running and accessible, verify the following configuration settings are set correctly.

1. If you are using a custom domain, verify that the DNS server is set up correctly.
2. Verify that an endpoint has been created for the virtual machine if communication is originating from an external network.
3. If using SSL, verify that the custom domain name being used is covered by the security certificate.
4. Verify that there are appropriate inbound and outbound rules configured on the virtual machine's Windows firewall for the TCP port that is being used.
5. Verify the TCP port being used is not blocked by a client-side firewall or proxy.

Contacting Billing and Technical Support

If you need to contact Microsoft Support with technical or licensing (operations) questions, you should be aware that there is different contact information for Microsoft Dynamics NAV and Windows Azure. In order to expedite resolution of the issue you need to identify the type of question or issue you have in order to use the appropriate contact information. Use the information below to best identify which support organization to contact.

Windows Azure

The following are examples of Windows Azure questions or issues. If you are experiencing any of the following types of issues you will want to contact Windows Azure support.

1. Billing questions for Windows Azure services.
2. Errors in the Windows Azure Management Portal.
3. Errors running Windows Azure PowerShell cmdlets.
4. Unable to open a remote desktop connection to a Windows Azure Virtual Machine.

If you have a billing-related question, open the [Windows Azure support option page](#) and select the **technical and billing support** option. You will need to log in using your Microsoft Account. Windows Azure billing support is provided at no cost.

If your question is about using Windows Azure, you have the following options for obtaining technical support. Refer to the [Windows Azure Support Plan](#) page for available plans and pricing information.

1. Online Forums – Open the Online Forums – Open the [Forums page](#) option to obtain assistance with your questions from the Windows Azure community.
2. Service Dashboard - Open the [Windows Azure support option page](#) and select the **Service dashboard** option to get the current health status of the Windows Azure platform and services.

3. Assisted Technical Support - Open the [Windows Azure support option page](#) , If you are an existing Account holder - sign in using your Microsoft Account ID and create a support ticket.
4. If you have subscriptions that are not active, please [contact Microsoft Support](#).

Microsoft Dynamics NAV 2013

The following are examples of Microsoft Dynamics NAV questions or issues. If you are experiencing any of the following types of issues you will want to contact Microsoft Dynamics NAV support.

1. Microsoft Dynamics NAV licensing questions.
2. Errors running Microsoft Dynamics NAV Windows PowerShell scripts and cmdlets.
3. Errors while using Microsoft Dynamics NAV clients.
4. Errors accessing Microsoft Dynamics NAV on a server that is running and accessible using a remote desktop connection.

If your question is a licensing related question, contact the Dynamics Regional Operations Centers (ROCs). The Regional Operations Centers can be contacted on-line using the PartnerSource [Ordering¹](#) or [Operations²](#) pages.

If your question or issue is about using Microsoft Dynamics NAV, you have the following options for obtaining technical support.

1. Self-help Technical Support – Log onto [PartnerSource](#), click Support and then Knowledge Base to search for articles on your question or issue.
2. Assisted Technical Support - Log onto [PartnerSource](#), click Support and then New Technical Support Request to create a request to speak with a support engineer.
3. Partner Network – Access the [Get Support](#) page on the [Microsoft Partner Network \(MPN\)](#).

¹ <https://mbs.microsoft.com/partnersource/ordering/>

² <https://mbs.microsoft.com/partnersource/GlobalOperationsSupportPage.htm>

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