

WhiteStar HyperSpace

Quantum VPN Solution

Configuring Routing on Windows Server

Configuring a Windows Server for HyperSpace

Installing the Routing Software

On your Windows Server machine, launch the Windows Server Manager

Click on **Dashboard** in the left hand column

| 📥 Server Manager | | | | | | - | ð × |
|---------------------------|---------------|--------------------------|----------------|---------|--------|----------|---------|
| Server Ma | anager • Dash | board | | • 🕲 I 🧗 | Manage | Tools Vi | ew Help |
| Dashboard | | R MANAGER | | | | | |
| All Servers | | 1 Configure this local | server | | | | |
| n DNS | QUICK START | | | | | | |
| File and Storage Services | | 2 Add roles and features | | | | | |
| | | 3 Add other servers to n | nanage | | | | |
| | WHAT'S NEW | 4 Create a server group | | | | | |
| | | 5 Connect this server to | cloud services | | | | |
| | LEARN MORE | | | | | | Hide |
| | | | | | | | |

Figure 1

Click on "*Add Roles and Features*" (#2) in Figure 1, the following Wizard is presented to the user

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| efore you begin | DESTINATION SERVER WIN-S2BUMQAAC36 |
|-------------------|---|
| Before You Begin | This wizard helps you install roles, role services, or features. You determine which roles, role services, or features to install based on the computing needs of your organization such as sharing documents, or |
| Installation Type | hosting a website. |
| Server Selection | To comeve cales, cale convices, or features: |
| Server Roles | Start the Remove Roles and Features Wizard |
| Features | Before you continue, verify that the following tasks have been completed: |
| Confirmation | • The Administrator account has a strong parsword |
| Results | Network settings, such as static IP addresses, are configured |
| | The most current security updates from Windows Update are installed |
| | If you must verify that any of the preceding prerequisites have been completed, close the wizard, complete the steps, and then run the wizard again. |
| | To continue, click Next. |
| | |
| | |
| | Skip this page by default |
| | < Previous Next > Install Cancel |
| 2 | |

Figure 2

Click "*Next*" to begin.

Click on "Role-based or feature-based installation" and then click "Next".

Select installation type

DESTINATION SERVER WIN-S2BUMQAAC36

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| Before You Begin | Select the installation type. You can install roles and features on a running physical computer or virtual machine, or on an offline virtual hard disk (VHD). |
|--|--|
| Server Selection | Role-based or feature-based installation Configure a single server by adding roles, role services, and features. |
| Server Roles Features Confirmation | Remote Desktop Services installation Install required role services for Virtual Desktop Infrastructure (VDI) to create a virtual machine-based or session-based desktop deployment. |
| Results | |
| | |
| | |
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| | < Previous Next > Install Cancel |

Figure 3

On "*Select destination server*", click "*Select a server from the server pool*" and select the server you are currently running on in the list presented, then click "*Next*".

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| elect destinati | on server | | | DESTINATION SERV WIN-S2BUMQAAC |
|---------------------------------------|--|--|---|--|
| Before You Begin Installation Type | Select a server or a virtua Select a server from t | l hard disk on which he server pool | to install roles and features. | |
| Server Selection | Select a virtual hard d | lisk | | |
| Server Roles | Server Pool | | | |
| Features | | | | |
| Confirmation | Filter: | | | |
| Results | Name | IP Address | Operating System | |
| | | 10.0.2.4.102.16 | Misses of Mindows Convert | 22 Chandrad |
| | 1 Computer(s) found | | | |
| | This page shows servers t and that have been adde newly-added servers from | that are running Win d by using the Add S n which data collectio | dows Server 2012 or a newer rel ervers command in Server Man on is still incomplete are not sho | ease of Windows Serve ager. Offline servers an wn. |
| | | < Pre | vious Next > | Install Cance |
| | | < FIE | TICKLY | Can |

On "Select server roles" select "Remote Access" from the list of Roles and click "Next".



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Figure 5

On "**Select Features**" for that Role, take the default settings that are selected by Microsoft and click "**Next**".

📥 Add Roles and Features Wizard



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Figure 6

On "Remote Access" click "Next" to get to "Role Services".

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| Remote Access | DESTINATION SERVER WIN-S2BUMQAAC36 |
|---|--|
| Before You Begin Installation Type Server Selection Server Roles Features | Remote Access integrates DirectAccess, VPN, and Web Application Proxy in a single management console. Deploy DirectAccess to allow managed domain-joined computers to connect to the internal corporate network as DirectAccess clients. Connectivity is seamless and transparent, and is available any time client computers are located on the Internet. DirectAccess administrators can remotely manage clients, ensuring that mobile computers are kept up-to-date with security updates and corporate compliance |
| Role Services Confirmation Results | Deploy VPN to allow client computers running operating systems not supported by DirectAccess, or configured in a workgroup, to remotely access corporate networks over a VPN connection. Deploy Web Application Proxy to publish selected HTTP- and HTTPS-based applications from your corporate network to client devices outside of the corporate network. It can use AD FS to ensure that users are authenticated before they gain access to published applications. Web Application Proxy also provides proxy functionality for your AD FS servers. Configure RRAS routing features using the Routing and Remote Access console. |
| | < Previous Next > Install Cancel |

Figure 7

Click "*Routing*". "Direct Access VPN (RAS)" will also get selected by the wizard and can't be de-selected. Click on "*Next*".

| 📥 Add Roles and Features Wizard | | | | _ | | × |
|----------------------------------|---|-----------------|------------------------------------|------------------------|----------------------|-----------|
| Select role service | S | | | DESTINAT WIN-S28 | TION SERV BUMQAAC | 'ER 36 |
| Before You Begin | Select the role services to install for Ren | mote Access | | | | |
| Installation Type | Role services | - | Description | | | |
| Server Selection Server Roles | DirectAccess and VPN (RAS) Routing | | Routing provide Routers, LAN Ro | s support uters run | for NAT | D, |
| Features | Web Application Proxy | | (IGMP Proxy). | st capable | e routers | |
| Remote Access | | - | | | | |
| Role Services | | | | | | |
| Web Server Role (IIS) | | | | | | |
| Role Services | | | | | | |
| Confirmation | | | | | | |
| Results | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | - | | | | | |
| | [| < Previous Next | > Inst | all | Cancel | |
| Figure 8 | | | | | | |

A Wizard will pop up. Click on "*Include Management Tools*" and then click "*Add Features*"



On "Web Server Role" click "Next".

| ∋ - Server N | Manager • Dashboar | d | • © r | Manage |
|---|--|--|-------------------|--------|
| hboard al Server | WELCOME TO SERVER MA | NAGER | | |
| All Servers File and Storage Services | Add Roles and Features Wizard | Configure this local server | x | |
| | Web Server Role (| IIS) DESTINATION SEE WIN-OWGAHE | MR ISA | |
| | Before You Begin Installation Type Server Selection Server Roles | Web serves are comparter that it you share information over the internet, or through internets are extranset. The Web Server (to includes thread information (and information (and administration, a unlifed Web platform that integrates IIS 100, ASPART, and Windo Communication Foundation. | sd nog, nos | |
| | Features Remote Access Role Services Web Server Role (IIS) Role Services | The default initialization for the Web Server (IIS) role includes the installation of role services that enable you to serve static content, make minor customizations (such as default documents and h error), monitor and log server activity, and configure static content compression. | TP | |
| | Results | | | |
| | | More information about Web Server IIS | | |
| | | < Previous Next > Install Canc | s | |
| | Figure 10 | | | |

Keep the default Role Services and click "Next".

| Server N | Manager • Dashboard | | • 🛞 🏲 Manage |
|---------------------------|--|---|----------------|
| Dashboard Local Server | WELCOME TO SERVER MANAGER | | |
| En All Servers ► | Configure this I Add Roles and Features Wizard | local server | |
| | Select role services | DETTINATION SERVER WHO ON QUARTICSA | |
| | evolve huo expri Installation Type Servar Selection Servar Selection Remote Access Remote A | Testures Testures unant unant oursing est est est est est est est est | |
| | | < Previous Next > Install Cancel | |

Click "*Install*". A "*Starting installation*" progress bar will appear at the top. Wait for it to complete.

| 🚘 Add Roles and Features Wizard | | - | | \times |
|---------------------------------|--|----------------------|----------------------|------------|
| Installation progre | SS | DESTINA WIN-S2 | TION SERV BUMQAAG | /ER 136 |
| Before You Begin | View installation progress | | | |
| Installation Type | Starting installation | | | |
| Server Selection | | | | |
| Server Roles | | | | |
| Features | Group Policy Management | | | ^ |
| Remote Access | RAS Connection Manager Administration Kit (CMAK) | | | |
| Role Services | Remote Access | | | |
| Web Server Role (IIS) | DirectAccess and VPN (RAS) | | | |
| Role Services | Routing | | | |
| Confirmation | Renote Server Administration Tools | | | |
| Results | Remote Access Management Tools | | | |
| | Remote Access GUI and Command-Line Tools | | | |
| | Remote Access module for Windows PowerShell | | | |
| | You can close this wizard without interrupting running tasks. View task prop page again by clicking Notifications in the command bar, and then Task De Export configuration settings | gress or c tails. | open this | ~ |
| | < Previous Next > Inst | all | Cance | I |
| Figure 12 | | | | |

After the progress bar completes, click "*Close*".

Configure the Routing Software

From the Server Manager Dashboard, Go to the top menu bar and click "*Tools*" in the upper right-hand corner to configure the router.

| L Server Manager | | | | - 0 × |
|-----------------------------|------------------------|---|---------|------------------------|
| Server Mana | ager • Dashboard | | • @ 🏲 | Manage Tools View Help |
| Dashboard | WELCOME TO SERVER MANA | IGER | | |
| All Servers | 0 | Configure this local server | | |
| A DNS | QUICK START | | | |
| ■ File and Storage Services | | 2 Add roles and features | | |
| | | 3 Add other servers to manage | | |
| | WHAT'S NEW | 4 Create a server group | | |
| | | 5 Connect this server to cloud services | | |
| | LEARN MORE | | | Hide |
| | | | | |

Figure 13

Click "Routing and Remote Access"

| Routing and Remote Access | _ | × |
|---|---|---|
| File Action View Help | | |
| | | |
| Routing and Remote Access Routing and Remote Access WIN-S2BUMQAAC36 (local) Welcome to Routing and Remote Access | | _ |
| Net Scondocted (octa) Welcome to Routing and Remote Access Routing and Remote Access provides secure remote access to private networks. Use Routing and remote access to configure the following: • A secure connection between two private networks. • A Virtual Private Network (VPN) gateway. • A Dial-up remote access server. • Network address translation (NAT). • LAN routing. • A basic firewall. To add a Routing and Remote Access server, on the Action menu, click Add Server. | | |
| < >> | | ~ |



In the left hand column, select the current server and then *Right click* on the Server Name and select "*Configure and Enable routing and Remote Access*" from the drop down menu.

| Routing and Rem | ote Access | | - | ٥ | \times |
|-----------------|--|---|---|---|----------|
| File Action Vie | w Help | | | | |
| 🗢 🔿 💼 | 🗙 🗊 🤉 📓 🖬 | | | | |
| Routing and Ren | note Access SERVER (local) | | | | |
| Server Status | Configure the Pouting or | nd Remote Access Server | | | ^ |
| | Configure and Enable Routing and Remote Access | , on the Action menu, click Configure and Enable Routing and Remote Access. | | | |
| | Disable Routing and Remote Access | | | | |
| | All Tasks | > | | | |
| | View | > | | | |
| | Delete | | | | |
| | Refresh | | | | |
| | Properties | | | | |
| | Help | | | | |
| | | | | | |
| Figure 15 | | | | | |

Click "*Next*" on the first screen.

Select "Custom Configuration" and then click "Next".

| Routing and Remote Access | | 0 | × |
|--|---|---|---|
| File Action View Help | | | |
| 🗢 🔿 🙍 📷 🗶 🗊 🧟 | | | |
| Routing and Remote Access Server Status SERVER (local) | SERVER (local) Denfigure the Routing and Remote Access Server To set up Routing and Remote Access, on the Action menu, click Configure and Enable Routing and Remote Access. Routing and Remote Access Server Setup Wizard Onfiguration Was an enable any of the following combinations of services, or you can orbination services the server. Image: Remote access (data or vPR) Adve mente denotes to connect to the internet using one public IP address. Image: Remote access (data or vPR) Adve mented enternet using a single public IP address. Image: Variation (VRA) Adve mented enternet using a single public IP address. Image: Variation (VRA) Adve mented enternet using a single public IP address. Image: Secure connection between two private networks Connect this network (VPR) access and NAT Adve mented enternet using a single public IP address. Image: Connect the Internet using a single public IP address. Image: Connect this network (VPR) access and NAT Address translation (NAT) Address translation (NAT) | | |

Figure 16

Select "LAN Routing" and click "Next".

| Routing and Remote Access | | o x |
|--|---|-----|
| | | |
| Routing and Remote Access Server Status SERVER (local) | SERVER (local) Configure the Routing and Remote Access Server To set up Routing and Remote Access, on the Action menu, click Configure and Enable Routing and Remote Access. Routing and Remote Access Server Setup Wizard Castom Configuration When this wizard does, you can configure the selected services in the Routing and Remote Access controls. Select the services that you want to enable on this server. VPN access Delatup access Demand-del connections (used for branch office routing) NAT VPN inouting < Back Next> | |

Figure 17

Finally click "Finish".



Figure 18

If you see a warning message, click "**OK**" as this Server is <u>not</u> being configured to provide VPN service, and this warning is not applicable.



When prompted, Click "*Start service*" to start the service.





Routing is now installed and configured.