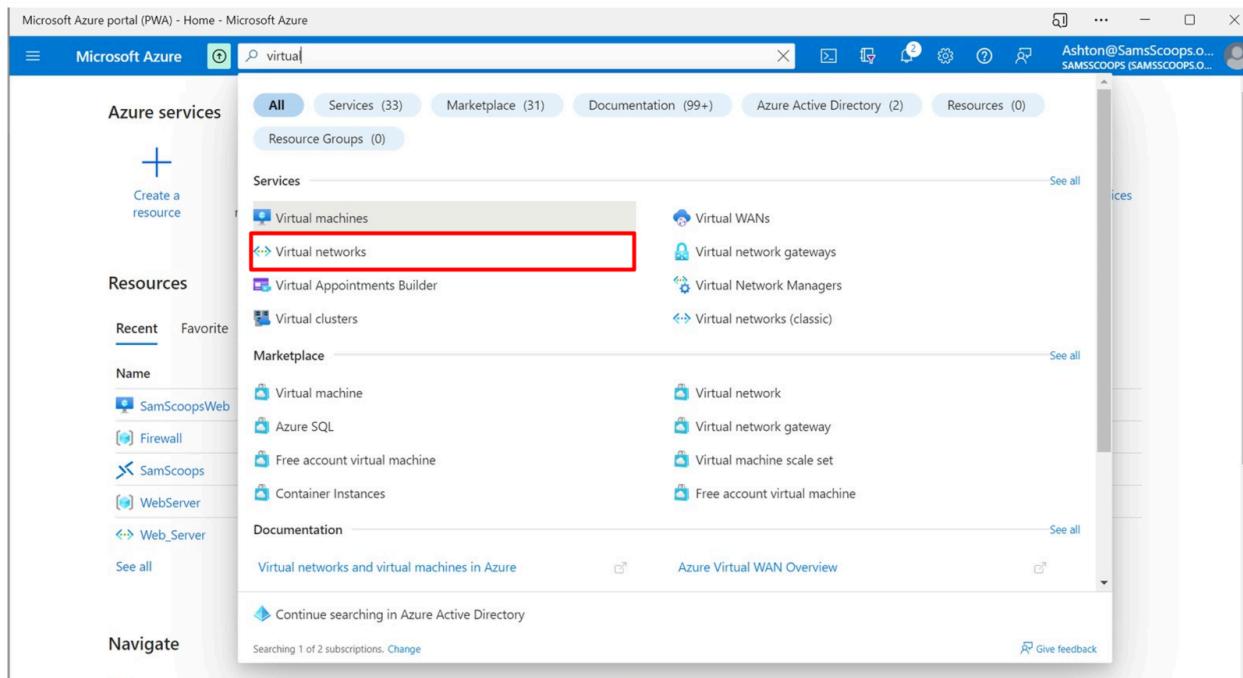


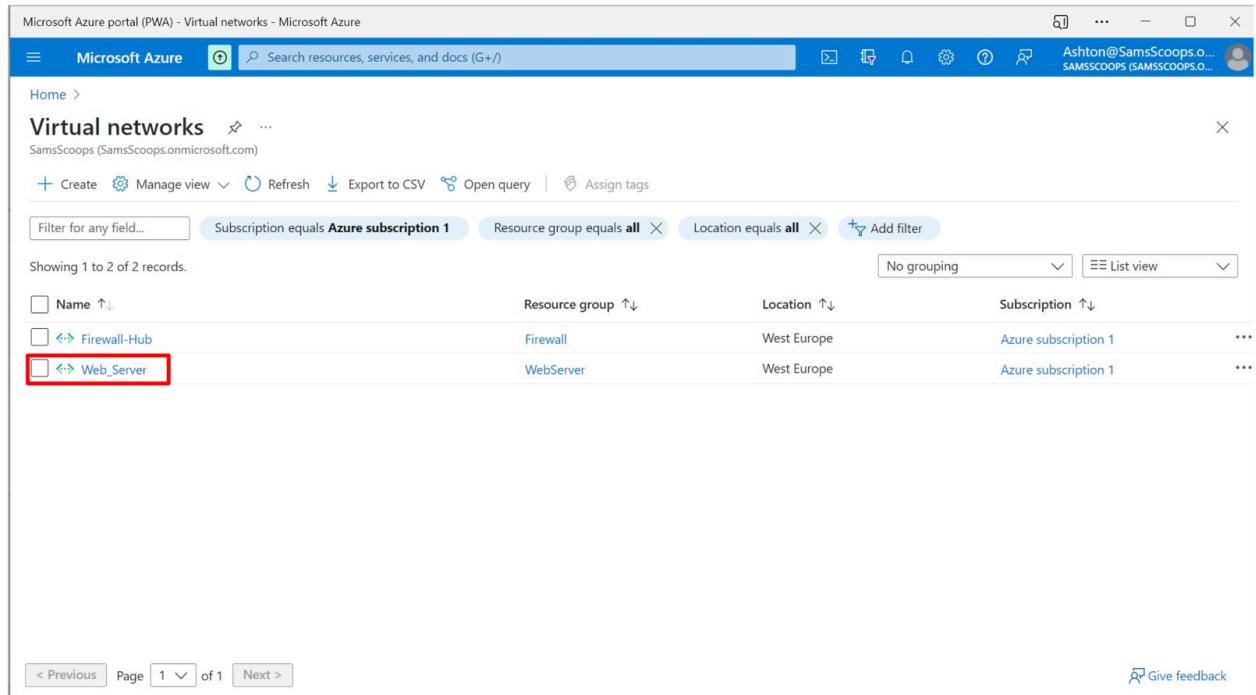
Step 1: Set up and configure Azure Bastion for the SamScoopsWeb VM

- From the Azure portal home page use the search function to find **Virtual networks** and select it.



The screenshot shows the Microsoft Azure portal interface. The search bar at the top contains the text 'virtual'. Below the search bar, the 'Azure services' section is visible, with a 'Virtual machines' item selected. To its right, under 'Services', the 'Virtual networks' item is highlighted with a red box. Other service options listed include Virtual WANs, Virtual network gateways, Virtual Network Managers, and Virtual networks (classic). The left sidebar shows recent resources like 'SamScoopsWeb', 'Firewall', and 'SamScoops'. The bottom of the screen displays navigation links and a feedback button.

- Select the **Web_Server** network.



The screenshot shows the 'Virtual networks' blade in the Microsoft Azure portal. The title bar says 'Microsoft Azure portal (PWA) - Virtual networks - Microsoft Azure'. The main area displays a table of virtual networks. The first two rows are 'Firewall-Hub' and 'Web_Server'. The 'Web_Server' row is highlighted with a red box. The table has columns for Name, Resource group, Location, and Subscription. At the bottom of the table, there are navigation links for 'Previous', 'Page 1 of 1', and 'Next'.

Name	Resource group	Location	Subscription
Firewall-Hub	Firewall	West Europe	Azure subscription 1
Web_Server	WebServer	West Europe	Azure subscription 1

- On the page for the virtual network, in the left pane, select **Bastion** to open the Bastion page.

The screenshot shows the Microsoft Azure portal interface. The left sidebar lists 'Virtual networks' under 'Web_Server'. The main area shows the 'Web_Server' virtual network details. The 'Bastion' section is highlighted with a red box.

1. On the Bastion page, select I want to configure Azure Bastion on my own.

The screenshot shows the 'Create Bastion' page for the 'Web_Server' virtual network. It includes fields for Name, Resource group, Virtual network, and Public IP address. A note indicates that a subnet with at least 64 addresses is required. The 'I want to configure Azure Bastion on my own' button is highlighted with a red box.

1. On the **Create a Bastion** page, configure the settings for the Bastion host. To configure the instance details give the instance a Name, "SamScoops". For the **Region**, select the same region you chose for your SamScoopsWeb VM. For the **Tier**, select **Standard**. Leave the instance at the default of **2**.

Project details

- Subscription: Azure subscription 1 (f7b5c2c8-674c-493b-9277-0693ca8d30af)
- Resource group: WebServer

Instance details

- Name: SamScoops
- Region: West Europe
- Tier: Standard
- Instance count: 2

Configure virtual networks

- Virtual network: (dropdown menu)

Review + create | **Previous** | **Next : Tags >** | [Download a template for automation](#)

1. Configure the virtual networks settings by selecting the **Web_server** VNet from the dropdown menu.
2. To configure the **AzureBastionSubnet**, select **Manage subnet configuration**.

Configure virtual networks

- Virtual network: Web_Server
- Subnet: Manage subnet configuration

Public IP address

- Public IP address: Create new
- Public IP address name: Web_Serverip572
- Public IP address SKU: Standard
- Assignment: Static

Review + create | **Previous** | **Next : Tags >** | [Download a template for automation](#)

1. On the subnets page select **+Subnet**. Create the **AzureBastionSubnet** subnet using the following values. The subnet name must be "AzureBastionSubnet". The subnet address range for SamScoops is **172.16.2.0/24**. Leave the other values as default. Select **Save** at the bottom of the page to save your values.

The screenshot shows the Microsoft Azure portal interface. On the left, there's a sidebar with various navigation options like Overview, Activity log, Access control (IAM), Tags, Diagnose and solve problems, Settings, Address space, Connected devices, Subnets, Bastion, DDoS protection, Firewall, Microsoft Defender for Cloud, Network manager, DNS servers, and Peerings. The 'Subnets' option is currently selected. In the main content area, the user is on the 'Create a Bastion' page under 'Virtual networks > Web_Server | Bastion'. A red box highlights the '+ Subnet' button. To the right, a modal window titled 'Add subnet' is open. It has fields for 'Name' (set to 'AzureBastionSubnet') and 'Subnet address range' (set to '172.16.2.0/24'). The 'Save' button at the bottom of the modal is also highlighted with a red box.

1. At the top of the Subnets page, select **Create a Bastion** to return to the Bastion configuration page.

This screenshot is identical to the one above it, showing the 'Add subnet' dialog box with the same settings: Name 'AzureBastionSubnet' and Subnet address range '172.16.2.0/24'. The 'Save' button is again highlighted with a red box.

1. Select **Create new** under **Public IP address**. You can leave the default naming suggestion.
2. When you finish specifying the settings, select **Review + Create**. This validates the values.

Microsoft Azure portal (PWA) - Create a Bastion - Microsoft Azure

Microsoft Azure Search resources, services, and docs (G+)

Home > Virtual networks > Web_Server | Bastion >

Create a Bastion

Region *: West Europe

Tier *: Standard

Instance count *: 2

Configure virtual networks

Virtual network *: Web_Server

Subnet *: AzureBastionSubnet (172.16.2.0/24)

Public IP address

Public IP address *: Create new

Public IP address name *: Web_Serverip572

Public IP address SKU: Standard

Assignment: Static

Review + create

1. Once validation passes, you can deploy Bastion. Select **Create**.

Microsoft Azure portal (PWA) - Create a Bastion - Microsoft Azure

Microsoft Azure Search resources, services, and docs (G+)

Home > Virtual networks > Web_Server | Bastion >

Create a Bastion

Validation passed

Basics Tags Advanced **Review + create**

Summary

Basics	Value
Name	SamScoops
Subscription	Azure subscription 1
Resource group	WebServer
Region	West Europe
Virtual network	Web_Server
Tier	Standard
Subnets	AzureBastionSubnet
Public IP address	Firewallpub
Instance count	2
Copy and paste	Enabled
IP-based connection	Disabled
Kerberos authentication	Disabled
Shareable Link	Disabled
Native client support	Disabled

Create

There will be a message letting you know that your deployment is in process. The status will display on this page as the resources are created. It takes about 10 minutes for the Bastion resource to be created and deployed.

The screenshot shows the Microsoft Azure portal interface. At the top, the title bar reads "Microsoft Azure portal (PWA) - Microsoft.BastionHost-20230517102949 - Microsoft Azure". The main content area displays the "Overview" tab for a deployment named "Microsoft.BastionHost-20230517102949". A prominent message box in the top right corner states "Deployment in progress..." with the subtext "Deployment to resource group 'WebServer' is in progress." Below this, the deployment details are listed: Deployment name: Microsoft.BastionHost-20230517102..., Start time: 5/17/2023, 10:29:51 AM, Subscription: Azure subscription 1 (f7b5c2c8-674c-493b...), Correlation ID: 260996e7-025f-4a56-a35e-7fd; Resource group: WebServer. Under "Deployment details", there is a table with columns "Resource", "Type", "Status", and "Operation details", which shows "No results." On the right side of the page, there are promotional banners for Microsoft Defender for Cloud, free Microsoft tutorials, and working with experts.

Step 2: Testing the Azure Bastion connection

1. In the Azure portal, search and select **Virtual machines**.

The screenshot shows the Microsoft Azure portal search results for "virtual". The search bar at the top contains the text "virtual". The left sidebar shows "Azure services" and "Resources" sections. The "Services" section has a button "Create a resource" and a link "Virtual machines" which is highlighted with a red box. Other service links include Virtual WANs, Virtual network gateways, Virtual Network Managers, and Virtual networks (classic). The "Resources" section shows recent resources: SamScoopsWeb, Firewall, SamScoops, WebServer, and Web_Server. The "Marketplace" section lists Virtual machine, Azure SQL, Free account virtual machine, Container Instances, Virtual network, Virtual network gateway, Virtual machine scale set, and Free account virtual machine. The "Documentation" section includes links to "Virtual networks and virtual machines in Azure" and "Azure Virtual WAN Overview". The bottom of the page shows a navigation bar with "Continue searching in Azure Active Directory" and a "Give feedback" link.

1. Select the **SamScoopsWeb VM**.

Microsoft Azure portal (PWA) - Virtual machines - Microsoft Azure

Microsoft Azure Search resources, services, and docs (G+)

Home > Virtual machines

Virtual machines

SamScoops (SamScoops.onmicrosoft.com)

+ Create Switch to classic Reservations Manage view Refresh Export to CSV Open query Assign tags Start Restart Stop ...

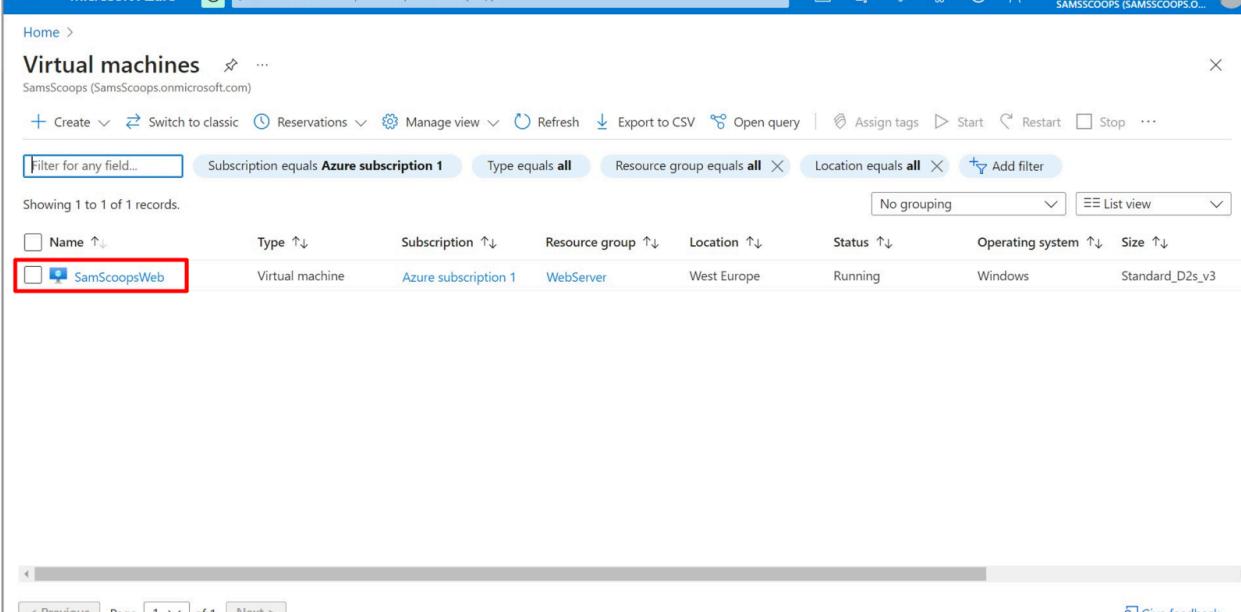
Filter for any field... Subscription equals Azure subscription 1 Type equals all Resource group equals all Location equals all Add filter

Showing 1 to 1 of 1 records.

Name	Type	Subscription	Resource group	Location	Status	Operating system	Size
SamScoopsWeb	Virtual machine	Azure subscription 1	WebServer	West Europe	Running	Windows	Standard_D2s_v3

< Previous Page 1 of 1 Next >

Give feedback



1. At the top of the page, select **Connect**.

Microsoft Azure portal (PWA) - SamScoopsWeb - Microsoft Azure

Microsoft Azure Search resources, services, and docs (G+)

Home > Virtual machines > SamScoopsWeb

Virtual machines

SamScoops (SamScoops.onmicrosoft.com)

+ Create Switch to classic ...

Filter for any field...

Name

SamScoopsWeb

Search

Connect

Overview Activity log Access control (IAM) Tags Diagnose and solve problems

Settings Networking Connect Windows Admin Center Disks Size Microsoft Defender for Cloud Advisor recommendations Extensions + applications Availability + scaling Configuration

Essentials

Resource group (move) WebServer Status Running Location West Europe Subscription (move) Azure subscription 1 Subscription ID f7b5c2c8-674c-493b-9277-0693ca8d30af

Operating system Windows (Windows Server 2016 Datacenter)

Size Standard D2s v3 (2 vcpus, 8 GiB memory)

Public IP address 51.124.205.99

Virtual network/subnet Web_Server/default

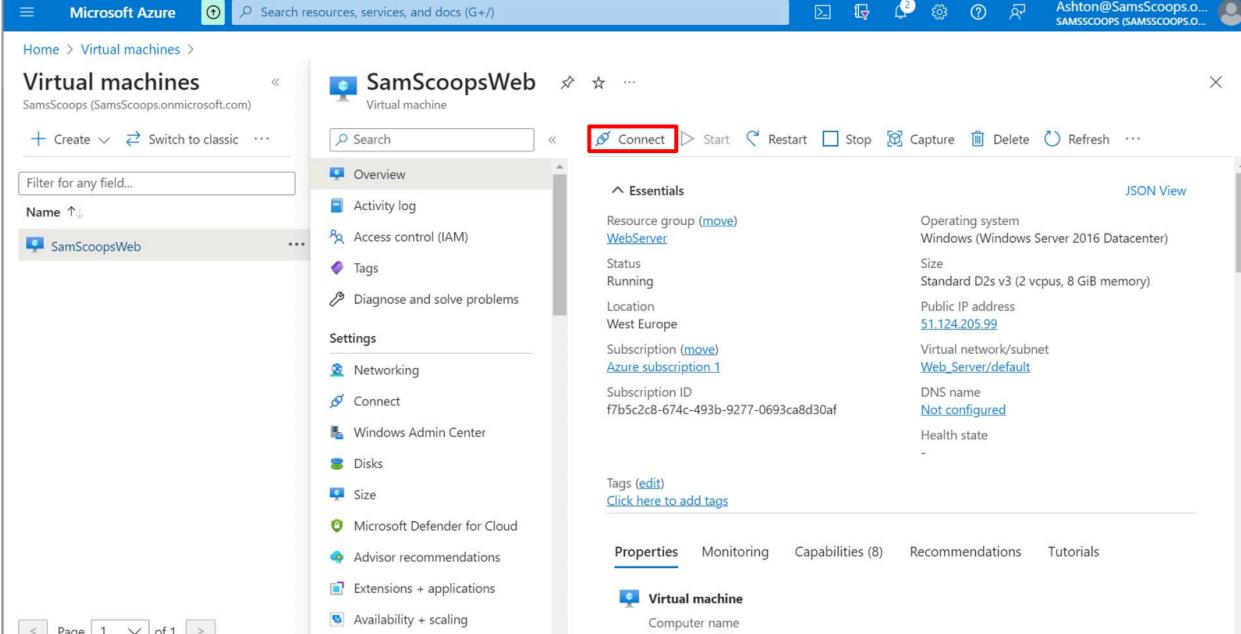
DNS name Not configured

Health state

Tags (edit) Click here to add tags

Properties Monitoring Capabilities (8) Recommendations Tutorials

Virtual machine Computer name SamScoopsWeb



1. From the IP address drop down select **Private IP address**.

This VM has a just-in-time access policy. Select "Request access" before connecting.

RDP SSH Bastion

Connect with RDP

Suggested method for connecting

Azure has checked the status for the most common prerequisites when connecting using this method.

- ✖ Port prerequisite not met. Add an inbound network security group rule with destination port 3389. [Learn more](#)
- ✓ The VM's network interface has a Public IP address. [Learn more](#)
- ✓ The VM is running.

You need to request access to connect to your virtual machine. Select an IP address, optionally change the port number, and select "Request access". [Learn more](#)

IP address *

Private IP address (172.16.1.4)

Port number *

Public IP address (51.124.205.99)

3389 Private IP address (172.16.1.4)

Source IP

My IP Other IP/ IPs All configured IPs

1. Select Request access.

This VM has a just-in-time access policy. Select "Request access" before connecting.

RDP SSH Bastion

Connect with RDP

Suggested method for connecting

Azure has checked the status for the most common prerequisites when connecting using this method.

- ✖ Port prerequisite not met. Add an inbound network security group rule with destination port 3389. [Learn more](#)
- ✓ The VM's network interface has a Public IP address. [Learn more](#)
- ✓ The VM is running.

You need to request access to connect to your virtual machine. Select an IP address, optionally change the port number, and select "Request access". [Learn more](#)

IP address *

Public IP address (51.124.205.99)

Port number *

3389

Source IP

My IP Other IP/ IPs All configured IPs

Request access Download RDP file anyway

You'll note a message in the top right corner saying that the request has been approved.

The screenshot shows the Microsoft Azure portal interface for a virtual machine named 'SamScoopsWeb'. The left sidebar lists various settings like Overview, Activity log, and Connect. The main pane displays the 'SamScoopsWeb | Connect' page. At the top right, there is a success message in a red-bordered box: 'Request approved' and 'Access to SamScoopsWeb on port 3389 from the selected IPs has been approved.' Below this, there are several green checkmarks indicating successful access approval: 'Access approved on port 3389 from the selected IPs. You can now connect.', 'The VM's network interface has a Public IP address. Learn more.', and 'The VM is running.' A section titled 'Just-in-time access approved' provides instructions to download an RDP file. The 'IP address' dropdown is set to 'Private IP address (172.16.1.4)', and the 'Port number' is '3389'. Under 'Source IP', the 'All configured IPs' tab is selected. A 'Download RDP File' button is present. Below these fields, there are sections for 'Can't connect?' (with links to 'Test network security groups' and 'Run a comprehensive RDP connectivity test'), 'Provide feedback' (with a link to 'Tell us about your RDP experience'), and a 'Feedback' input field.

1. At the top of the page, select **Bastion** to go to the Bastion page.
2. Select **Use Bastion**.

The screenshot shows the same Microsoft Azure portal interface for the 'SamScoopsWeb' virtual machine. The 'Connect' section is visible on the left. In the main pane, the 'Bastion' tab is selected. A blue information box states: 'This VM has a just-in-time access policy. Select "Request access" before connecting.' Below this, there is a note: 'Bastion is an Azure service that allows fast, secure connections to any VM within a VNet. [Learn more](#)'. A large red box highlights the 'Use Bastion' button, which is located in the bottom right corner of the main pane.

1. Complete the required authentication values. In this case, for the SamScoops VM the username is **AzAdmin** and **P@\$\$@1234567** is the password.
2. To open the VM session in a new browser tab, leave **Open in a new browser tab** selected.
3. Click **Connect** to connect to the VM.

Microsoft Azure portal (PWA) - SamScoopsWeb - Microsoft Azure

Microsoft Azure Search resources, services, and docs (G+)

Home > Virtual machines > SamScoopsWeb

Virtual machines

SamScoops (SamScoops.onmicrosoft.com)

+ Create Switch to classic

Filter for any field...

Name ↑

SamScoopsWeb

SamScoopsWeb | Bastion Virtual machine

Azure Bastion protects your virtual machines by providing lightweight, browser-based connectivity without the need to expose them through public IP addresses. Deploying will automatically create a Bastion host on a subnet in your virtual network. [Learn more](#)

Using Bastion: **SamScoops**, Provisioning State: **Succeeded**

Please enter username and password to your virtual machine to connect using Bastion.

Connection Settings

Username: AzAdmin

Authentication Type: Password

Password: P@\$\$@1234567

Hide

Open in new browser tab

Connect

Tell us what you think of the Bastion experience

Page 1 of 1

The connection to this virtual machine, via Bastion, will open directly in the Azure portal (over HTML5) using port 443 and the Bastion service.

SamScoopsWeb

https://bst-6d4cb5a2-df67-4c6f-9161-49dd1eb301a7.bastion.azure.com/#/client/U2FtU2Nvb3BzV2ViAGMAYmlmcm9zdA...

Server Manager

Server Manager • Dashboard

WELCOME TO SERVER MANAGER

1 Configure this local server

2 Add roles and features

3 Add other servers to manage

4 Create a server group

5 Connect this server to cloud services

QUICK START

WHAT'S NEW

LEARN MORE

ROLES AND SERVER GROUPS

Roles: 0 | Server groups: 1 | Servers total: 1

Local Server 1

All Servers 1

Manageability

10:00 AM 5/17/2023