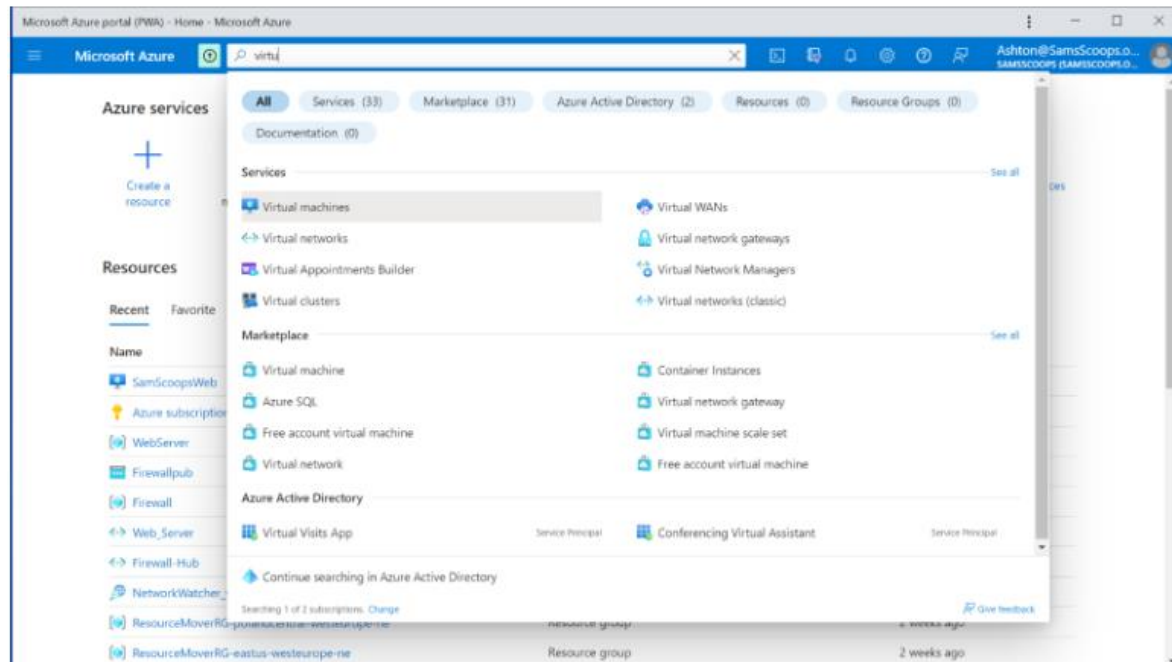


### Step 1: Enable Azure Defender for cloud

This is a free 30-day trial that converts to a paid for subscription after the 30 days.

1. From the [Azure home page](#), search for and select **Virtual machines**.



2. Select the **SamScoopsWeb** virtual machine.

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

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

Home > Virtual machines SamsScoops (SamsScoops.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. No grouping List view

<input type="checkbox"/>	Name ↑↓	Type ↑↓	Subscription ↑↓	Resource group ↑↓	Location ↑↓	Status ↑↓	Operating system ↑↓	Size ↑↓
<input type="checkbox"/>	SamScoopsWeb	Virtual machine	Azure subscription 1	WebServer	West Europe	Stopped (deallocated)	Windows	Standard_D2s_v3

< Previous Page 1 of 1 Next >

Give feedback

3. Select **Configuration** from the left-hand side menu.

The screenshot displays the Microsoft Azure portal interface for a virtual machine named "SamScoopsWeb". The left-hand navigation pane is visible, with the "Configuration" option highlighted by a red rectangle. The main content area shows the "Essentials" section, which includes details about the resource group, status, location, subscription, and public IP address. Below this, there are tabs for "Properties", "Monitoring", "Capabilities (8)", "Recommendations", and "Tutorials". The "Properties" tab is currently selected, showing the "Virtual machine" section with details like "Computer name" (SamScoopsWeb) and "Operating system" (Windows). The "Networking" section is also visible, showing the "Public IP address" (40.68.34.70) and "Network interface" (samscoopsweb362).

Microsoft Azure portal (PWA) - SamScoopsWeb - Microsoft Azure

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

Home > Virtual machines >

SamScoopsWeb Virtual machine

Search

Connect Start Restart Stop Capture Delete Refresh Open in mobile Feedback CLI / PS

Networking

Connect

Windows Admin Center

Disks

Size

Microsoft Defender for Cloud

Advisor recommendations

Extensions + applications

Availability + scaling

**Configuration**

Identity

Properties

Locks

Operations

Bastion

Auto-shutdown

Essentials

Resource group (move) WebServer

Status Stopped (deallocated)

Location West Europe

Subscription (move) Azure subscription 1

Subscription ID f7b5c2c8-674c-493b-9277-0693ca8d30af

Operating system Windows

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

Public IP address 40.68.34.70

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

Operating system Windows

Networking

Public IP address 40.68.34.70 ( Network interface samscoopsweb362 )

4. Select **Upgrade your Microsoft Defender for Cloud subscription to enable a just-in-time access.**

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 | Configuration

Virtual machine

Search Save Discard

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

Page 1 of 1

#### Just-in-time VM access

To improve security, enable just-in-time VM access.

**Upgrade your Microsoft Defender for Cloud subscription to enable a just-in-time access.**

**Information** A just-in-time access enables you to lock down inbound traffic to your VM by allowing access for only a limited time. The just-in-time feature is available as part of the Microsoft Defender for Cloud standard tier. [Learn more about just-in-time access](#)

#### Licensing

Save up to 49% with a license you already own using Azure Hybrid Benefit. [Learn more](#)

Would you like to use an existing Windows Server license? ☐ Yes ☒ No

[Review Azure hybrid benefit compliance](#)

#### Proximity placement group

Proximity placement group

No proximity placement groups found

Proximity placement groups can only be updated when the virtual machine is deallocated.

5. Select **Upgrade** on the **Microsoft Defender for Cloud** page.

The screenshot shows the Microsoft Azure portal interface for Microsoft Defender for Cloud. The breadcrumb navigation at the top reads: Home > Virtual machines > SamScoopsWeb | Configuration > Microsoft Defender for Cloud. The main heading is "Microsoft Defender for Cloud | Getting started" with a subtext "Showing subscription 'Azure subscription 1'". Below the heading are three tabs: "Upgrade" (selected), "Get started", and "Install agents". A left-hand navigation pane lists various security and management tools, including Inventory, Cloud Security Explorer, Workbooks, Community, Diagnose and solve problems, Cloud Security, Security posture, Regulatory compliance, Workload protections, Firewall Manager, DevOps Security (Preview), Management, Environment settings, Security solutions, and Workflow automation. The main content area features a large blue cloud icon with a lightning bolt and the text: "Enable Microsoft Defender for Cloud's enhanced security features on your subscriptions. Get started with a 30-day free trial". Below this, it says "Upgrade to get advanced capabilities including hybrid support, networking, security policies, just-in-time administration and adaptive application controls. [Learn more >](#)". Three feature cards are displayed: "Cloud security posture management" (Get continuous assessment and prioritized security recommendations with secure score, and verify compliance with regulatory standards), "Cloud workload protection for machines" (Harden workloads running on Azure, hybrid, and multi-cloud environments. Protections include server EDR, vulnerability scanning, workload hardening, and more.), and "Advanced threat protection for PaaS" (Prevent threats and detect unusual activities on PaaS workloads including App Service plans, Storage accounts, and SQL servers). At the bottom of the main content area, a blue "Upgrade" button is highlighted with a red rectangular box. A small disclaimer at the bottom right states: "Microsoft Defender rates will be automatically charged on supported resource types, with a 30-day free trial if not previously used. Virtual machines, SQL Servers, App Service instances and Kubernetes Service instances plans are billed hourly. For more information on pricing, visit the [pricing page](#)."

6. Select **continue without installing agents** on the right-hand side.

Microsoft Azure portal (PWA) - Microsoft Defender for Cloud - Microsoft Azure

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

Ashton@SamsScoops.o... SAMSSCOOPS (SAMSSCOOPS.D...)

Home > Virtual machines > SamScoopsWeb | Configuration > Microsoft Defender for Cloud

### Microsoft Defender for Cloud | Getting started

Showing subscription 'Azure subscription 1'

Search Upgrade Get started **Install agents**

**General**

- Overview
- Getting started**
- Recommendations
- Security alerts
- Inventory
- Cloud Security Explorer
- Workbooks
- Community
- Diagnose and solve problems

**Cloud Security**

- Security posture
- Regulatory compliance
- Workload protections
- Firewall Manager
- DevOps Security (Preview)

## Make the most of Defender for Cloud by enabling data collection agents

To receive security alerts and recommendations, agents must be installed on your virtual machines for data collection.

[Learn more >](#)

**Install agents automatically**  
The Log Analytics agent will be automatically installed on all the virtual machines in selected subscription.

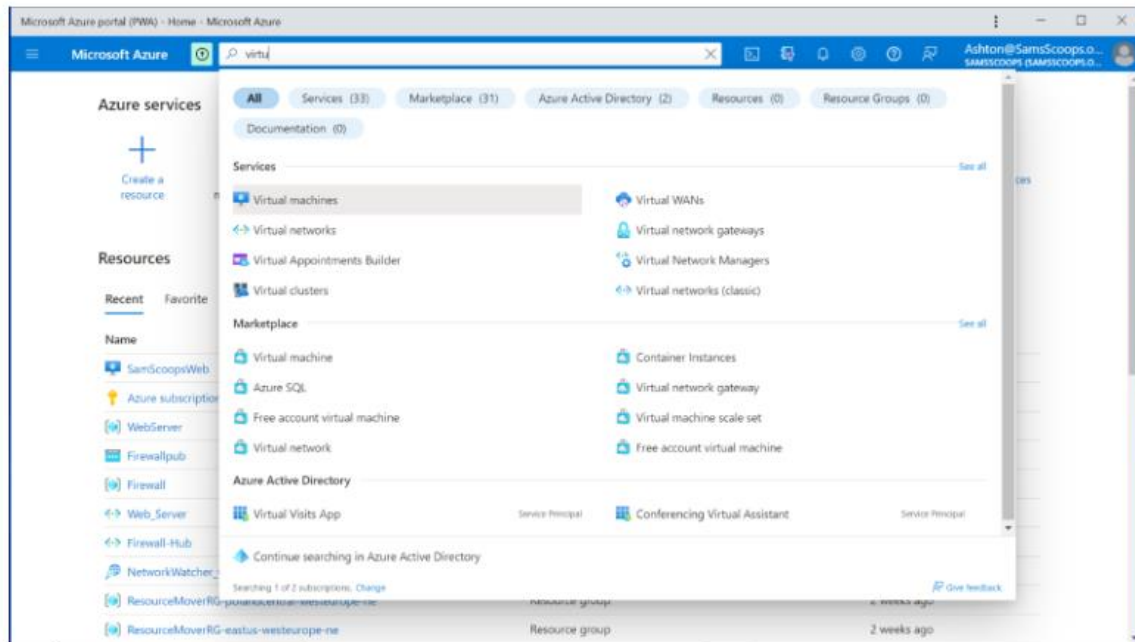
^ All set! All of your Azure subscriptions have automatic agent installation enabled

**Continue without installing agents**  
Many important security features won't work if you don't install agents.

**Continue without installing agents**

## Step 2: Enable JIT access

1. From the [Azure homepage](#), search for and select **Virtual machines**.



2. Select the **SamScoopsWeb** virtual machine.

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

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

Ashton@SamScoops.o... SAMSCOOPS (SAMSCOOPS.O...)

Home > 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. No grouping List view

<input type="checkbox"/> Name ↑↓	Type ↑↓	Subscription ↑↓	Resource group ↑↓	Location ↑↓	Status ↑↓	Operating system ↑↓	Size ↑↓
<input checked="" type="checkbox"/> SamScoopsWeb	Virtual machine	Azure subscription 1	WebServer	West Europe	Stopped (deallocated)	Windows	Standard_D2s_v3

< Previous Page 1 of 1 Next > Give feedback



3. In the left-hand menu, select **Configuration**.

The screenshot displays the Microsoft Azure portal interface for a virtual machine named "SamScoopsWeb". The left-hand navigation menu is visible, with the "Configuration" option highlighted by a red rectangle. The main content area shows the "Essentials" section, which includes details about the resource group, status, location, subscription, and subscription ID. Below this, the "Properties" tab is selected, showing the "Virtual machine" section with details like computer name, operating system, and network interface. The "Networking" section is also visible, showing the public IP address and network interface.

Microsoft Azure portal (PWA) - SamScoopsWeb - Microsoft Azure

Home > Virtual machines > SamScoopsWeb

Virtual machine

Search

Connect Start Restart Stop Capture Delete Refresh Open in mobile Feedback CLI / PS

Networking

Connect

Windows Admin Center

Disks

Size

Microsoft Defender for Cloud

Advisor recommendations

Extensions + applications

Availability + scaling

**Configuration**

Identity

Properties

Locks

Operations

Bastion

Auto-shutdown

Essentials

Resource group (move) WebServer

Status Stopped (deallocated)

Location West Europe

Subscription (move) Azure subscription 1

Subscription ID f7b5c2e8-674c-493b-9277-0693ca8d30af

Operating system Windows

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

Public IP address 40.68.34.70

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

Operating system Windows

Networking

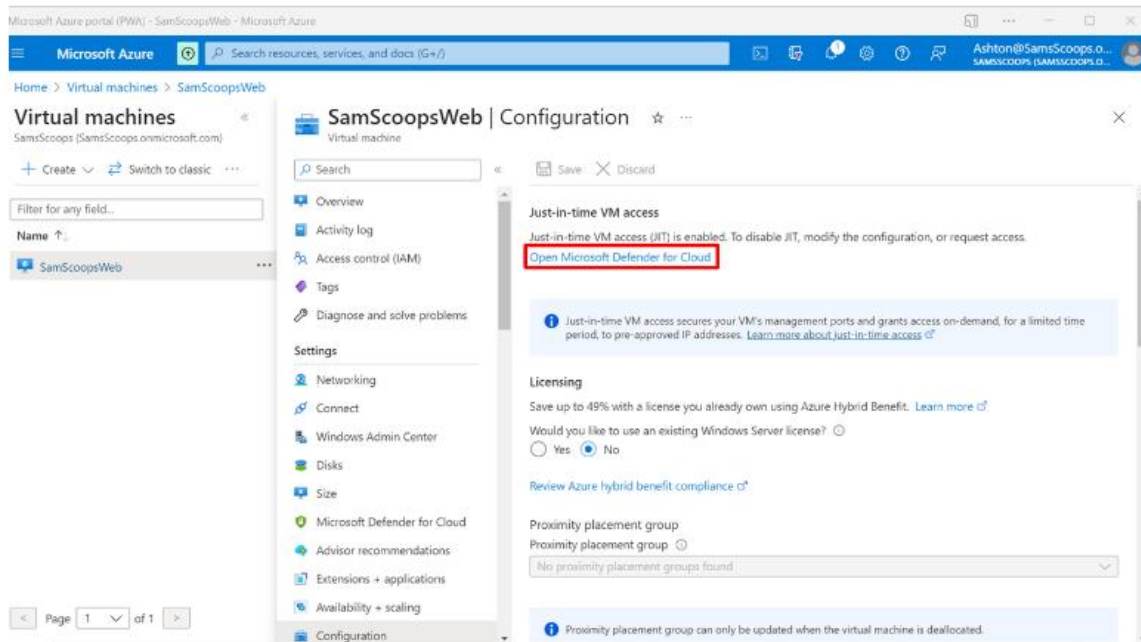
Public IP address 40.68.34.70 ( Network interface samscoopsweb362 )

#### 4. Select **Enable just-in-time**.

The screenshot displays the Microsoft Azure portal interface for configuring a virtual machine named 'SamScoopsWeb'. The left-hand navigation pane shows the 'Virtual machines' section, with 'SamScoopsWeb' selected. The main content area is titled 'SamScoopsWeb | Configuration'. Within this configuration page, the 'Just-in-time VM access' section is highlighted with a red rectangular box. This section contains the text 'To improve security, enable a just-in-time access.' and a prominent blue button labeled 'Enable just-in-time'. Below this button, there is an information icon and a note stating: 'Just-in-time VM access secures your VM's management ports and grants access on demand, for a limited time period, to pre-approved IP addresses. [Learn more about just-in-time access](#)'. The configuration page also includes sections for 'Licensing' (with a 'No' selection for using an existing Windows Server license) and 'Proximity placement group' (showing 'No proximity placement groups found').

### Step 3: Configure JIT policies for SSH and RDP from Microsoft Defender for Cloud

1. From the SamScoopsWeb Configuration page select **Open Microsoft Defender for Cloud**.



2. From the **Configured** tab, right-click on the VM to which you want to add a port, and select **edit**.

Microsoft Azure portal (PWA) - Just-in-time VM access - Microsoft Azure

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

Home > Virtual machines > SamScoopsWeb | Configuration >

## Just-in-time VM access

Last week

> What is just-in-time VM access?

> How does it work?

### Virtual machines

Configured Not Configured Unsupported

VMs for which the just-in-time VM access control is already in place. Presented data is for the last week.

1 VMs Request access

Search to filter items...

Virtual machine ↑↓	Approved ↑↓	Last access ↑↓	Connection details	Last user ↑↓
<input type="checkbox"/> SamScoopsWeb	0 Requests...	N/A	-	N/A

Properties

Activity Log

Edit

Remove

3. To add SSH select **Add** and add the port number for SSH which is **22**.

Microsoft Azure portal (PWA) - JIT VM access configuration - Microsoft Azure

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

Home > Virtual machines > SamScoopsWeb | Configuration > Just-in-time VM access >

### JIT VM access configuration

SamScoopsWeb

**+ Add** Save Discard

Configure the ports for which the just-in-time VM access will be applicable

Port	Protocol	Allowed source IPs	IP range	Time range (hours)	
3389	Any	Per request	N/A	3 hours	...

4. Select **TCP** and leave the defaults.

5. Select **OK**.

Microsoft Azure portal (PWA) - Add port configuration - Microsoft Azure

Microsoft Azure Search resources, services, and docs (5+)

Ashton@SamsScoops.o... SAMSSCOOPS (SAMSSCOOPS.O...)

Home > Virtual machines > SamScoopsWeb | Configuration > Just-in-time VM access >

### JIT VM access configuration

SamScoopsWeb

+ Add Save Discard

Configure the ports for which the just-in-time VM access will be applicable

Port	Protocol	Allowed source IPs	IP range
3389	Any	Per request	N/A

#### Add port configuration

Port \* 22 ✓

Protocol Any **TCP** UDP

Allowed source IPs Per request CIDR block

IP addresses

Max request time 3 (hours)

Discard **OK**

Home > Virtual machines > SamScoopsWeb | Configuration > Just-in-time VM access >

## JIT VM access configuration

SamScoopsWeb

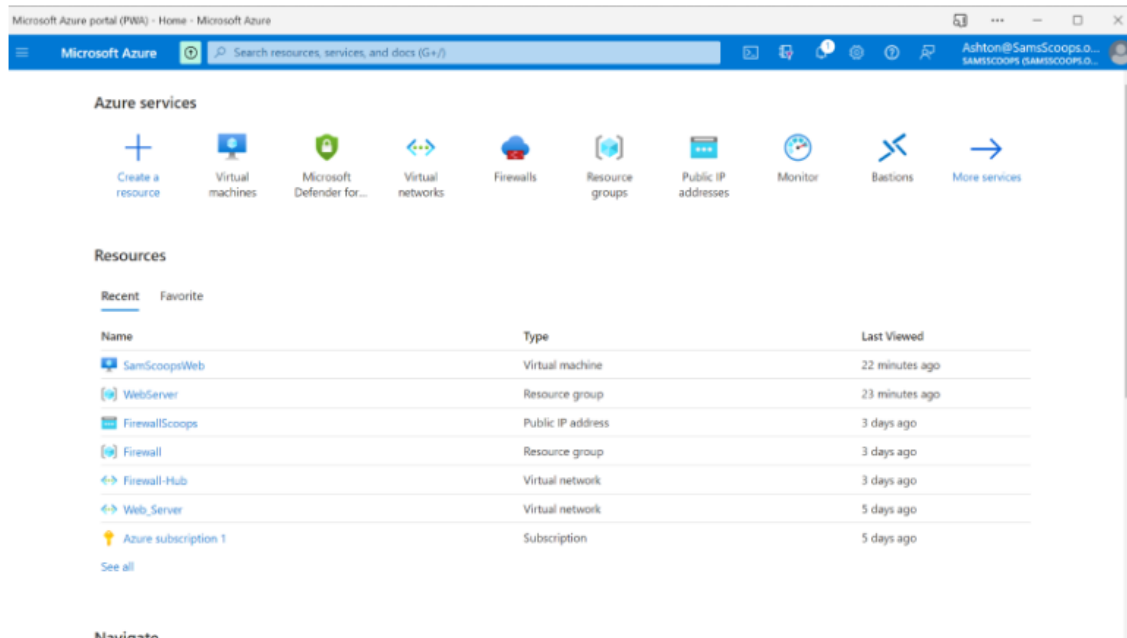
+ Add Save X Discard

Configure the ports for which the just-in-time VM access will be applicable

Port	Protocol	Allowed source IPs	IP range	Time range (hours)	
3389	Any	Per request	N/A	3 hours	...
22	TCP	Per request	N/A	3 hours	...

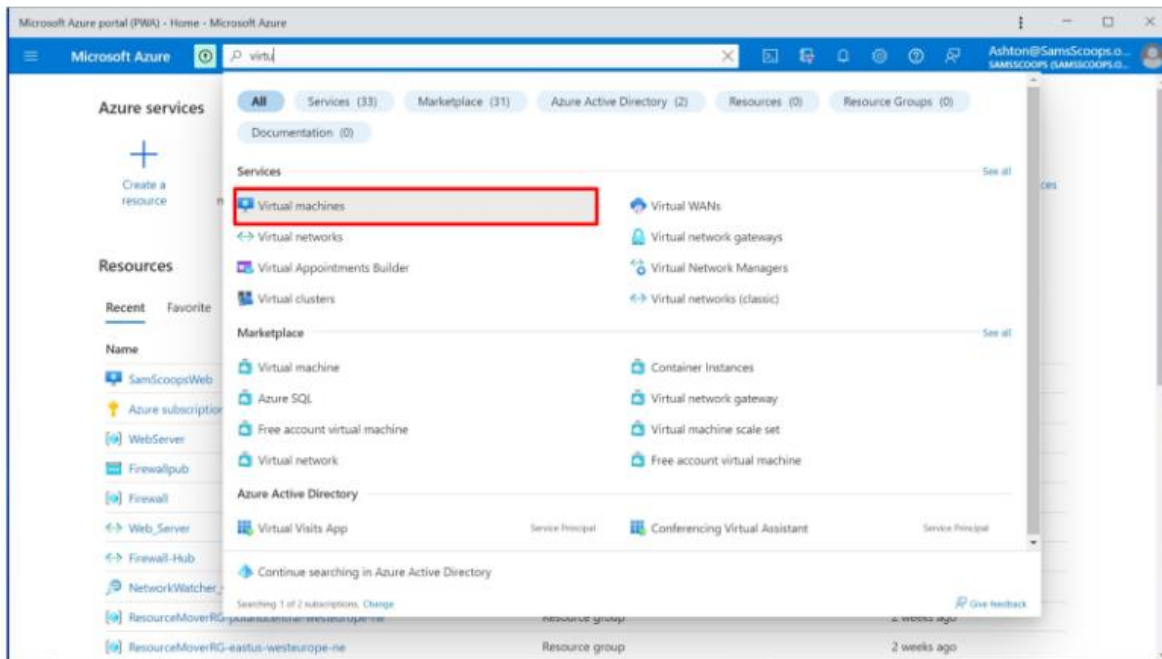
#### Step 4: Test remote access

1. Select **Microsoft Azure** at the top of the page to take you back to the portal home page.





2. Search for and select **Virtual machines**.



3. Select the **SamScoopsWeb** virtual machine.

The screenshot shows the Microsoft Azure portal interface for managing virtual machines. The page title is 'Virtual machines' and the user is logged in as 'Ashton@SamScoops.com'. The interface includes a search bar, a filter bar with filters for 'Subscription equals Azure subscription 1', 'Type equals all', 'Resource group equals all', and 'Location equals all'. Below the filter bar, it says 'Showing 1 to 1 of 1 records.' and 'No grouping' is selected. The table below lists the virtual machines:

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

The 'SamScoopsWeb' virtual machine is highlighted with a red box. At the bottom of the page, there is a pagination bar showing 'Page 1 of 1' and a 'Give feedback' link.

4. Select **Start** to power on virtual machine from top of page.

The screenshot displays the Microsoft Azure portal interface for a virtual machine named 'SamScoopsWeb'. The top navigation bar includes the 'Microsoft Azure' logo, a search bar, and user information for 'Ashton@SamsScoops.o...'. The left sidebar shows the 'Virtual machines' section with a list of VMs, including 'SamScoopsWeb'. The main content area shows the details for 'SamScoopsWeb', which is currently 'Stopped (deallocated)'. The 'Start' button is highlighted with a red box. Below the 'Start' button, there is an 'Advisor' recommendation and a table of 'Essentials' including Resource group, Operating system, Size, Location, Subscription, and Subscription ID. The bottom of the page shows a pagination bar indicating 'Page 1 of 1'.

Microsoft Azure portal (PWA) - SamScoopsWeb - Microsoft Azure

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

Home > Virtual machines >

Virtual machines SamScoops (SamsScoops.onmicrosoft.com)

+ Create Switch to classic

Filter for any field...

Name ↑

SamScoopsWeb

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

SamScoopsWeb Virtual machine

Connect Start Restart Stop Capture Delete Refresh

Advisor (1 of 5): Virtual machines should encrypt temp disks, caches, and data flows between Compute and Storage resources

Essentials

Resource group (move) WebServer

Status Stopped (deallocated)

Location West Europe

Subscription (move) Azure subscription 1

Subscription ID f7b5c2c8-674c-493b-9277-0693ca8d30af

Operating system Windows

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 (5) Tutorials

Page 1 of 1

5. Select **Connect** from the left-hand menu.

The screenshot displays the Microsoft Azure portal interface. The top navigation bar shows the user is logged in as 'Ashton@SamScoops.O...'. The main content area is titled 'Virtual machines' and shows a list of virtual machines, with 'SamScoopsWeb' selected. The left-hand menu is expanded, and the 'Connect' option under the 'Networking' section is highlighted with a red rectangle. The right-hand pane shows the details for the 'SamScoopsWeb' virtual machine, including its status (Running), location (West Europe), and various configuration details. The 'Connect' button is visible in the top action bar of the virtual machine details pane.

Microsoft Azure portal (PWA) - SamScoopsWeb - Microsoft Azure

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

Home > Virtual machines >

Virtual machines SamScoops (SamScoops.onmicrosoft.com)

+ Create Switch to classic

Filter for any field...

Name ↑

SamScoopsWeb

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

SamScoopsWeb Virtual machine

Search

Connect Start Restart Stop Capture Delete Refresh

Advisor (1 of 5): Virtual machines should encrypt temp disks, caches, and data flows between Compute and Storage resources

Essentials

Resource group (move) WebServer

Status Running

Location West Europe

Subscription (move) Azure subscription 1

Subscription ID f7b5c2c8-674c-493b-9277-0693ca8d90af

Tags (edit) Click here to add tags

Operating system Windows (Windows Server 2016 Datacenter)

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

Public IP address 51.124.205.92

Virtual network/subnet Web\_Server/default

DNS name Not configured

Health state -

Properties Monitoring Capabilities (8) Recommendations (5) Tutorials

Page 1 of 1

## 6. Select **Request access**.

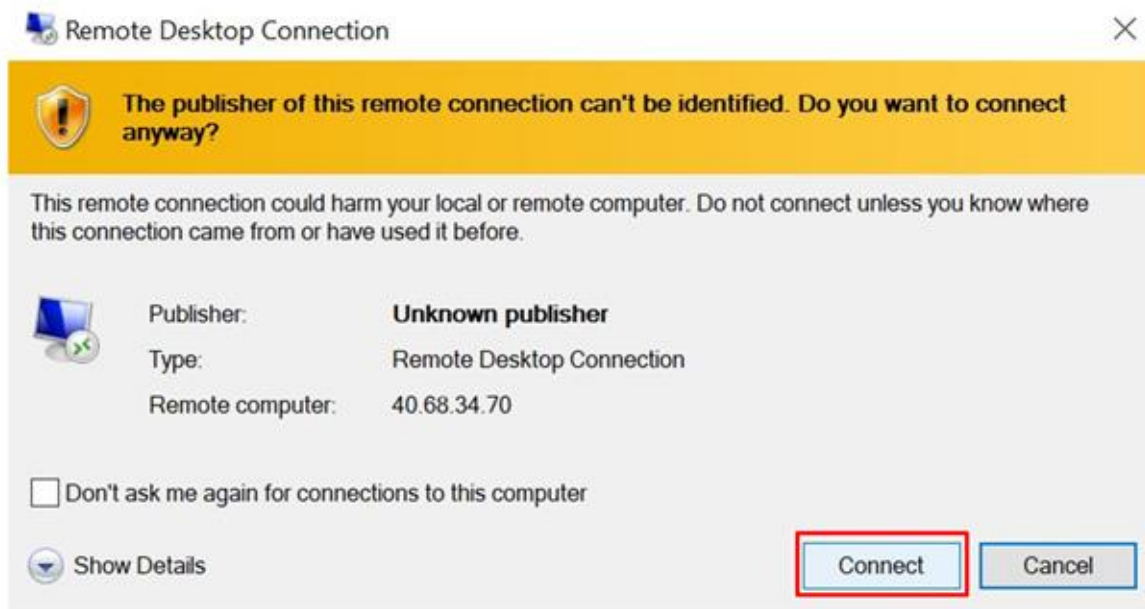
The screenshot shows the Microsoft Azure portal interface. The top navigation bar includes the Microsoft Azure logo, a search bar, and the user's profile. The left sidebar shows the 'Virtual machines' section with a list of VMs, including 'SamScoopsWeb'. The main content area displays the 'Connect' page for 'SamScoopsWeb'. A message at the top states: 'This VM has a just-in-time access policy. Select "Request access" before connecting.' Below this, the 'Connect with RDP' section is visible. It includes a 'Suggested method for connecting' section with a list of prerequisites. One prerequisite is marked as 'Port prerequisite not met', while others are 'The VM's network interface has a Public IP address' and 'The VM is running'. Below the prerequisites, there are fields for 'IP address' (set to 'Public IP address (51.124.205.99)') and 'Port number' (set to '3389'). At the bottom, there are buttons for 'My IP', 'Other IP/IPv6', and 'All configured IPs'. The 'Request access' button is highlighted with a red box, and a 'Download RDP file anyway' link is visible next to it.

## 7. Select **Download RDP file**.

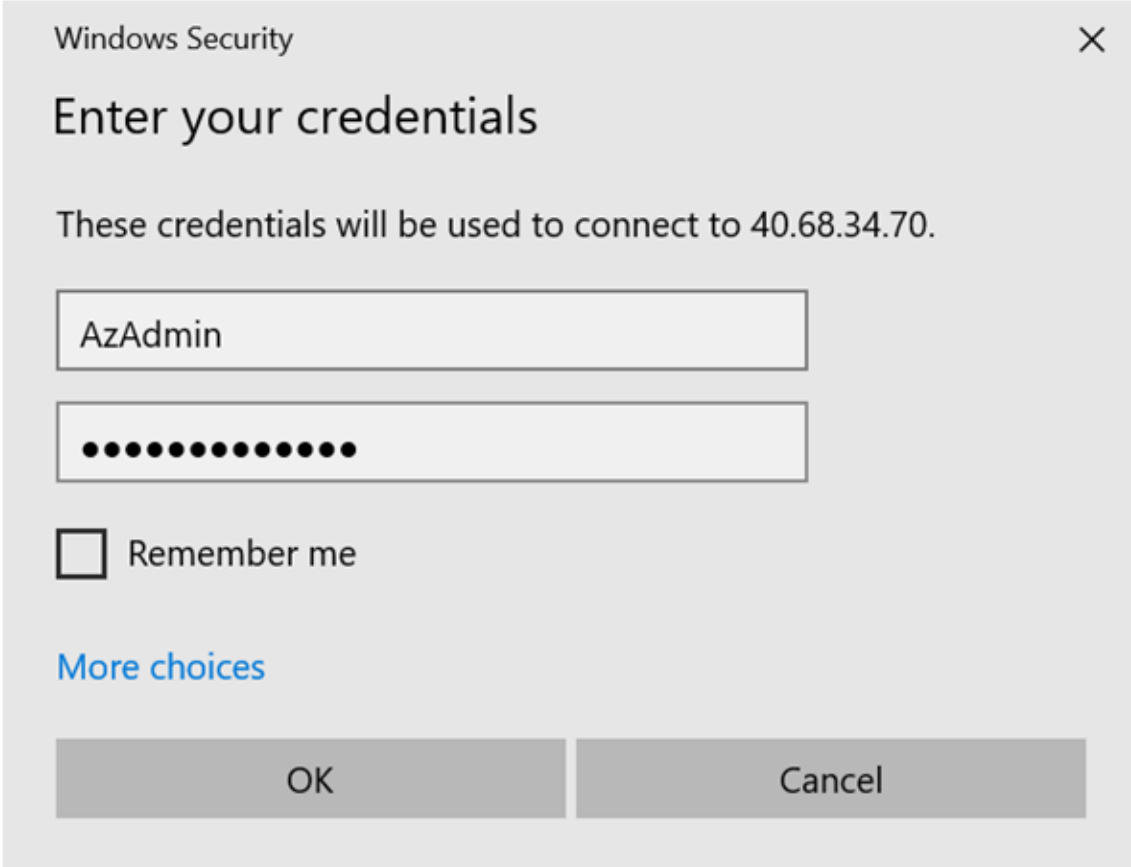
The screenshot shows the Microsoft Azure portal interface for a virtual machine named 'SamScoopsWeb'. The left sidebar contains navigation options like 'Overview', 'Activity log', 'Access control (IAM)', 'Tags', 'Diagnose and solve problems', 'Settings', 'Networking', 'Connect', 'Windows Admin Center', 'Disks', 'Size', 'Microsoft Defender for Cloud', 'Advisor recommendations', 'Extensions + applications', 'Availability + scaling', and 'Configuration'. The main content area is titled 'SamScoopsWeb | Connect' and shows a 'Request approved' notification at the top right. Below the notification, a green banner states 'Access approved on port 3389 from the selected IPs. You can now connect.' The 'Connect with RDP' section includes a 'Suggested method for connecting' and a list of prerequisites: 'Port prerequisite not met. Add an inbound network security group rule with destination port 3389', 'The VM's network interface has a Public IP address', and 'The VM is running'. A 'Just-in-time access approved' message indicates that the user can connect via RDP by downloading the RDP file. The 'IP address' field shows 'Public IP address (51.124.205.99)' and the 'Port number' is '3389'. The 'Source IP' section has three options: 'My IP', 'Other IP/IPv6', and 'All configured IPs', with 'All configured IPs' selected. A red box highlights the 'Download RDP File' button. At the bottom, there is a 'Can't connect?' link.

8. Select the downloaded RDP file from your downloads folder.

9. Select **Connect**.



10. Enter the username **AzAdmin** and the password **P@\$\$@1234567** and select **OK**.



A screenshot of a Windows Security dialog box titled "Enter your credentials". The dialog box has a close button (X) in the top right corner. Below the title, it says "These credentials will be used to connect to 40.68.34.70." There are two input fields: the first contains the text "AzAdmin", and the second contains a series of dots representing a masked password. Below the password field is a checkbox labeled "Remember me". At the bottom, there is a link "More choices" in blue text. At the very bottom are two buttons: "OK" and "Cancel".

Windows Security

Enter your credentials

These credentials will be used to connect to 40.68.34.70.

AzAdmin

.....

☐ Remember me

[More choices](#)

OK Cancel



You have now connected to the webserver using JIT access and you should see a window like the one below.

