Branden Solomon
5/7/25
Professor Francis
CTEC 475

Capstone Module 9

1. Create a simple resource within your chosen service that you will monitor. The resource does not need any complex configuration or expensive features. Many of the most popular cloud services offer detailed tutorials for creating practice resources.

The cloud platform I'm using is Microsoft Azure.

2. Create a topic subscription or notification channel, depending on what is appropriate for your chosen cloud platform, so you can receive emails when an alarm or alert will be triggered.

Platform: Azure

Service: Virtual Machines

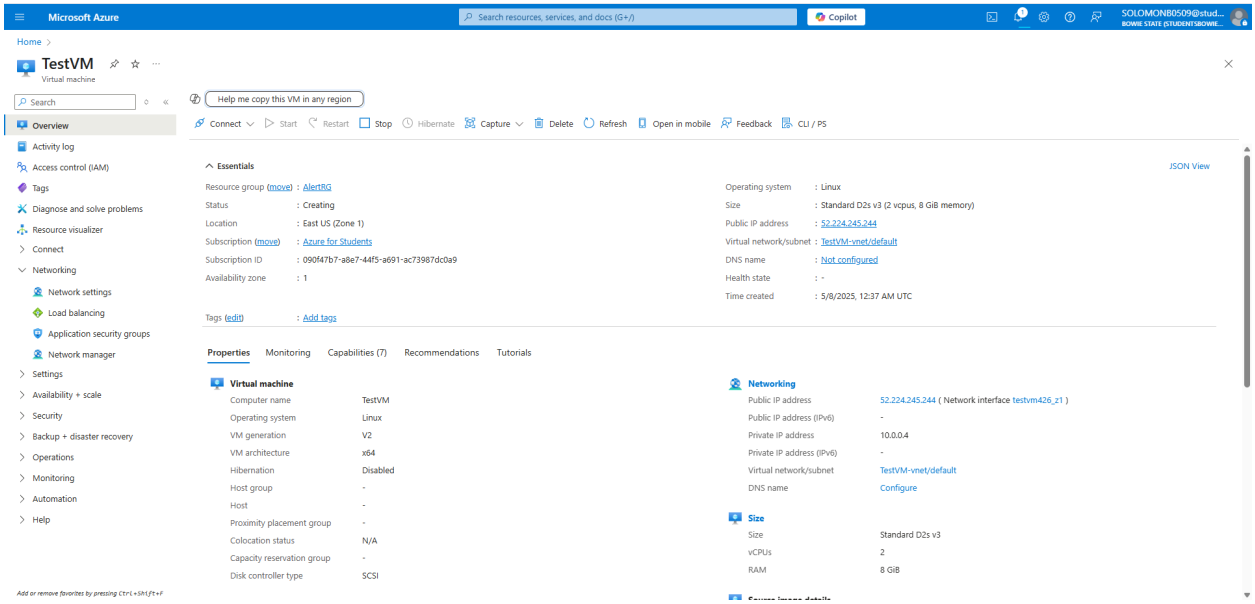
Resource Type: Virtual Machine

Metric: CPU Percentage

3. Create an alarm or alert that will trigger when you make a change to your resource or otherwise challenge your resource. For example, you might create an alarm that triggers when function code is invoked, or run. Or you might create an alarm that triggers when a storage volume sits idle for more than a minute. As you create the alarm or alert, examine the available metrics for monitoring your resource to help you decide which metric to choose. Make sure you choose a metric that you can easily control, and make sure you set the threshold at a point that you can easily exceed.

   What metric and threshold did you choose? CPU Percentage

   On the next screen, choose your SNS topic, and then finish creating the alarm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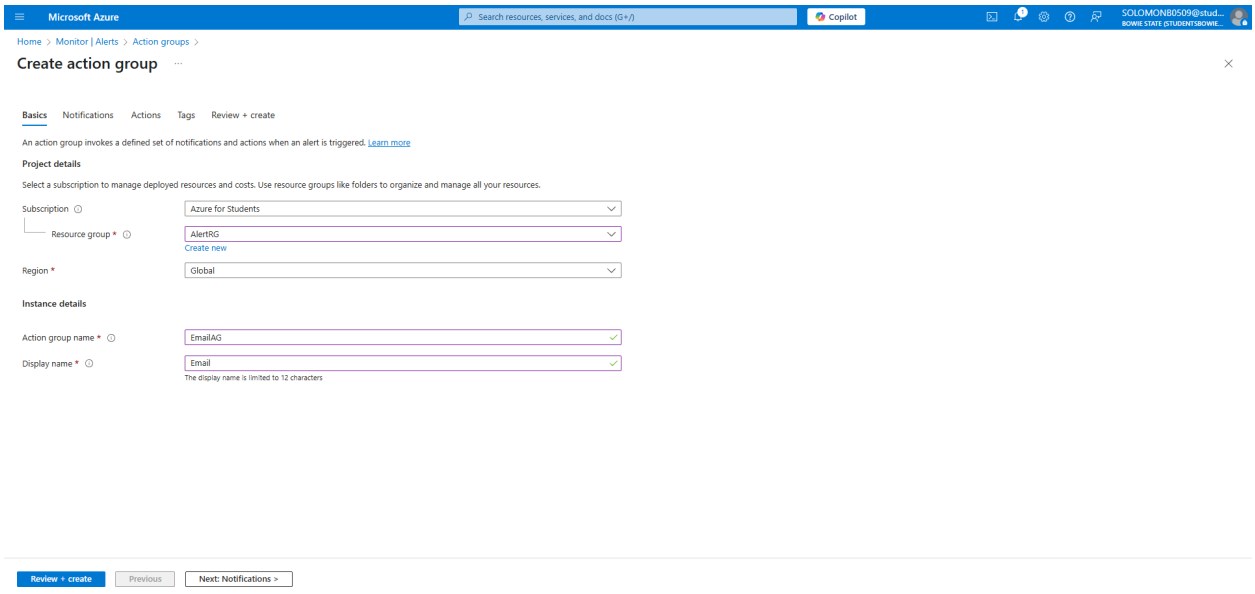
Home
TestVM
Virtual machine
Search
Overview
Activity log
Access control (IAM)
Tags
Diagnose and solve problems
Resource visualizer
Connect
Networking
Network settings
Load balancing
Application security groups
Network manager
Settings
Availability + scale
Security
Backup + disaster recovery
Operations
Monitoring
Automation
Help
Add or remove favorites by pressing Ctrl+Shift+F
Help me copy this VM in any region
Connect
Start
Restart
Stop
Hibernate
Capture
Delete
Refresh
Open in mobile
Feedback
CLI / PS
Essentials
JSON View
Resource group (move) : AlertRG
Status : Creating
Location : East US (Zone 1)
Subscription (move) : Azure for Students
Subscription ID : 090f47b7-a8e7-44f5-a691-ac73987dc0a9
Availability zone : 1
Operating system : Linux
Size : Standard D2s v3 (2 vcpus, 8 GiB memory)
Public IP address : 52.224.245.244
Virtual network/subnet : TestVM-vnet/default
DNS name : Not configured
Health state : -
Time created : 5/8/2025, 12:37 AM UTC
Tags (edit) : Add tags
Properties
Monitoring
Capabilities (7)
Recommendations
Tutorials
Virtual machine
Computer name TestVM
Operating system Linux
VM generation V2
VM architecture x64
Hibernation Disabled
Host group -
Host -
Proximity placement group -
Colocation status N/A
Capacity reservation group -
Disk controller type SCSI
Networking
Public IP address 52.224.245.244 (Network interface testvm426_z1)
Public IP address (IPv6) -
Private IP address 10.0.0.4
Private IP address (IPv6) -
Virtual network/subnet TestVM-vnet/default
DNS name Configure
Size
Size Standard D2s v3
vCPUs 2
RAM 8 GiB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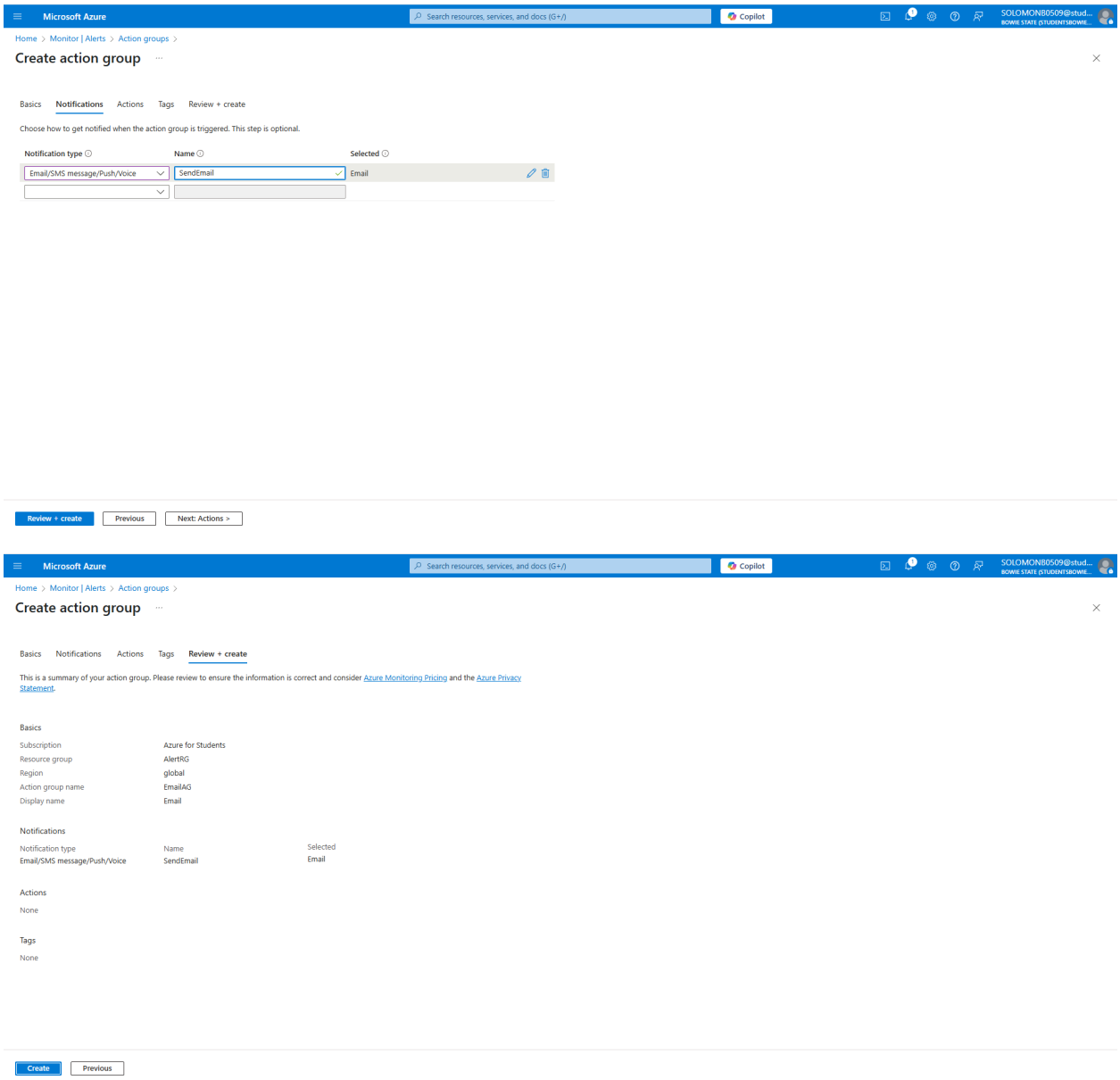
Home
Monitor | Alerts
Action groups
Create action group
Basics
Notifications
Actions
Tags
Review + create
An action group invokes a defined set of notifications and actions when an alert is triggered. Learn more
Project details
Select a subscription to manage deployed resources and costs. Use resource groups like folders to organize and manage all your resources.
Subscription
Azure for Students
Resource group *
AlertRG
Create new
Region *
Global
Instance details
Action group name *
EmailAG
Display name *
Email
The display name is limited to 12 characters
Review + create
Previous
Next: Notifications >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Home > Monitor | Alerts > Action groups >
Create action group
Basics
Notifications
Actions
Tags
Review + create
Choose how to get notified when the action group is triggered. This step is optional.
Notification type
Name
Selected
Email/SMS message/Push/Voice
SendEmail
Email
Review + create
Previous
Next: Actions >

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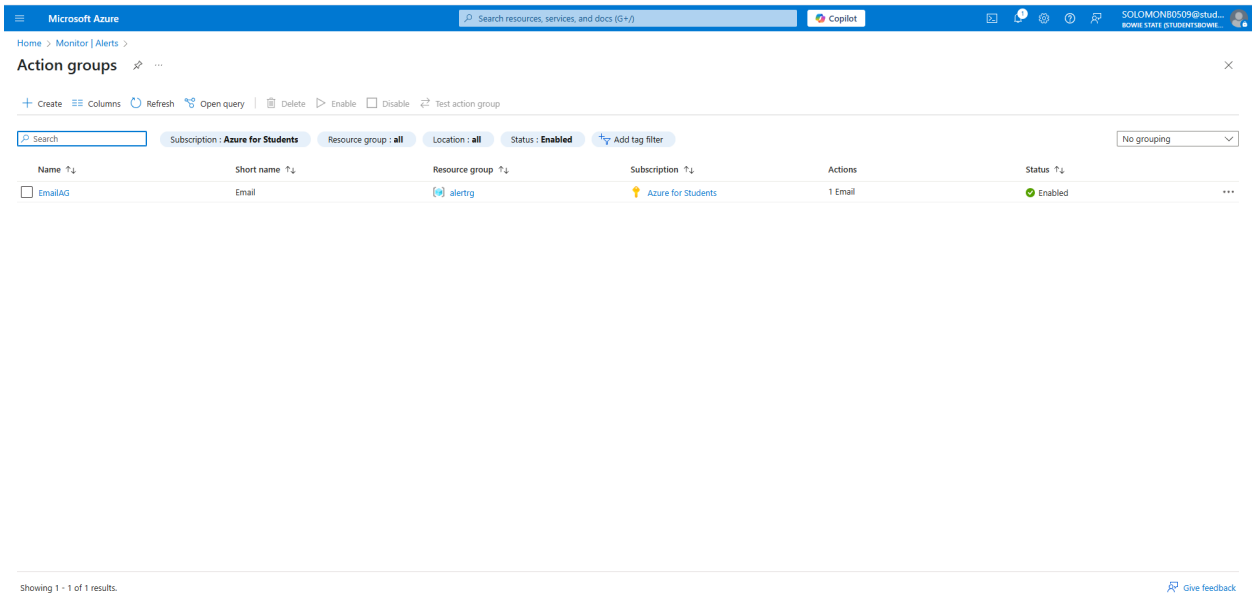
Home > Monitor | Alerts > Action groups >
Create action group
Basics
Notifications
Actions
Tags
Review + create
This is a summary of your action group. Please review to ensure the information is correct and consider Azure Monitoring Pricing and the Azure Privacy Statement.
Basics
Subscription
Azure for Students
Resource group
AlertRG
Region
global
Action group name
EmailAG
Display name
Email
Notifications
Notification type
Email/SMS message/Push/Voice
Name
SendEmail
Selected
Email
Actions
None
Tags
None
Create
Previous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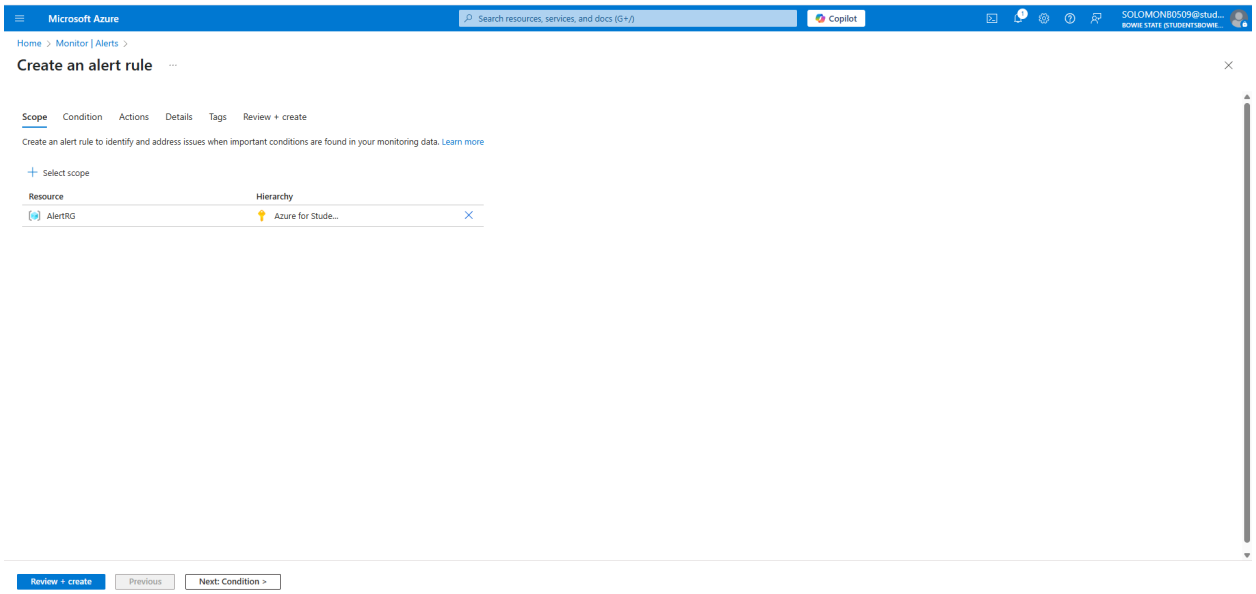
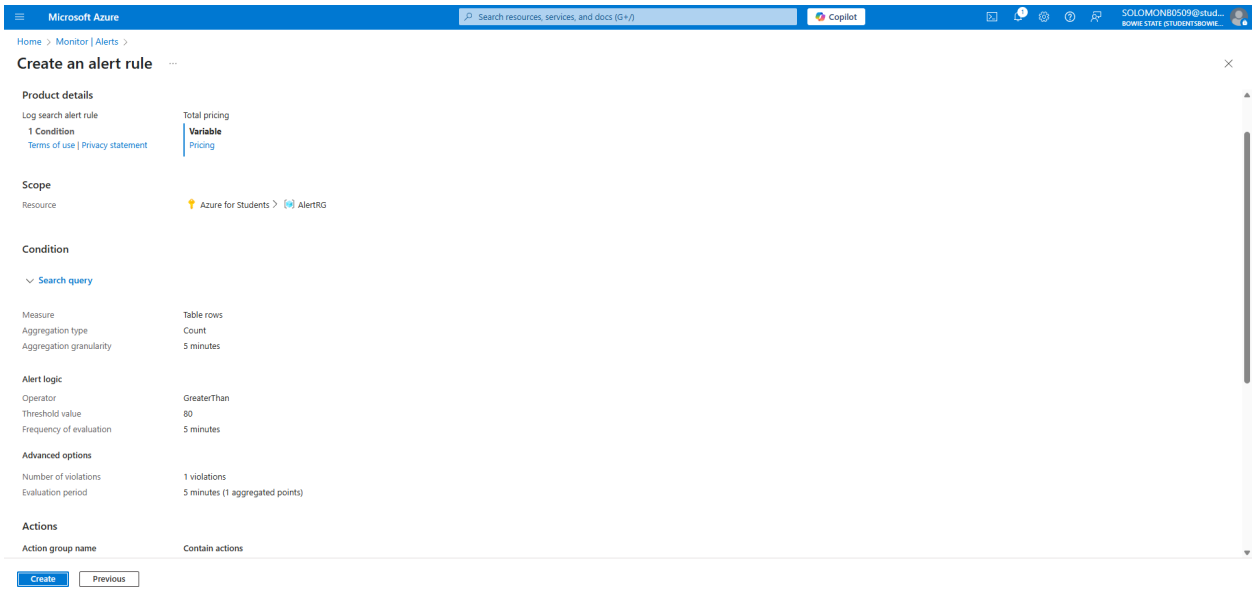
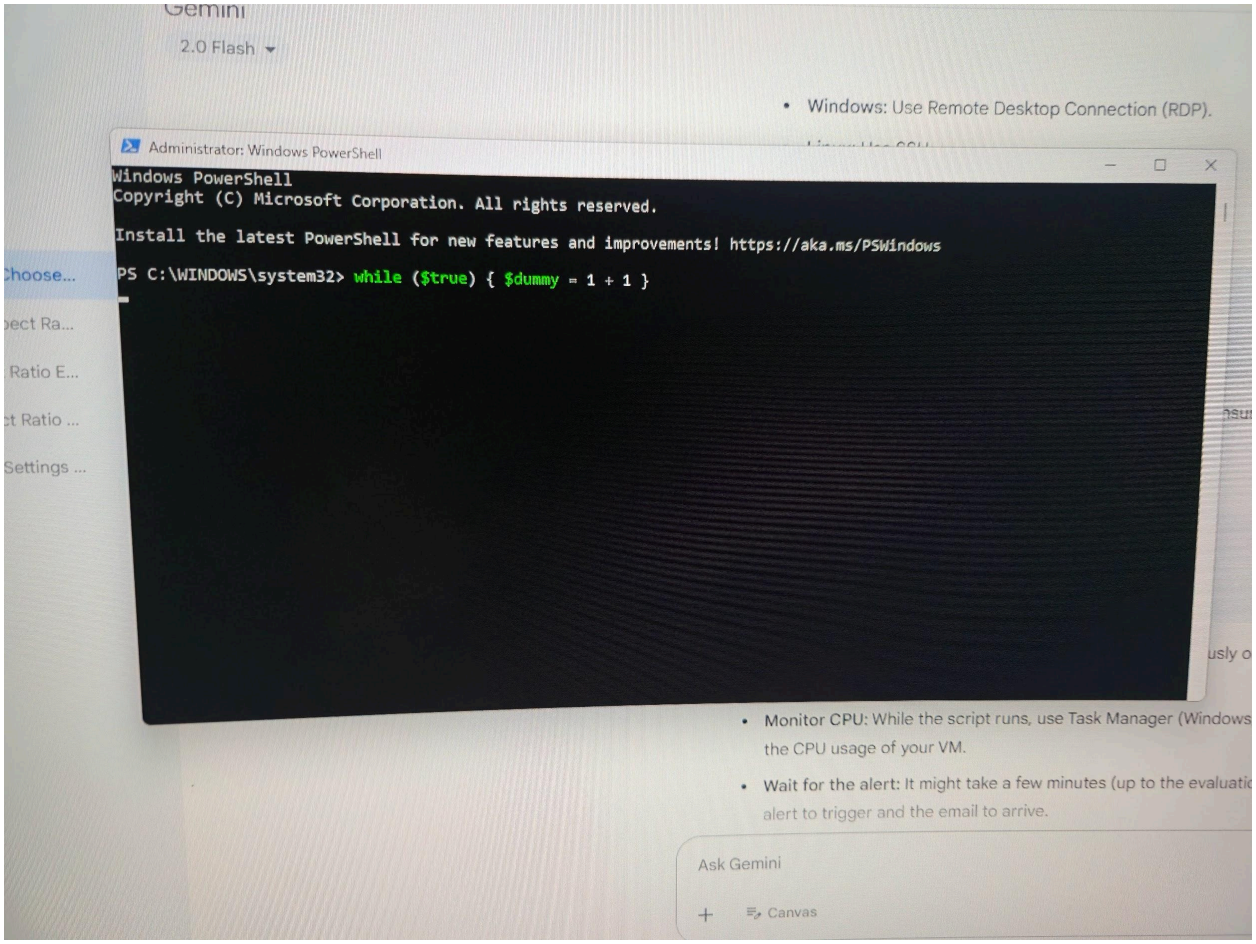
Action groups
Create
Columns
Refresh
Open query
Delete
Enable
Disable
Test action group
Search
Subscription : Azure for Students
Resource group : all
Location : all
Status : Enabled
Add tag filter
No grouping
Name
Short name
Resource group
Subscription
Actions
Status
EmailAG
Email
alertrg
Azure for Students
1 Email
Enabled
Showing 1 - 1 of 1 results.
Give feedback

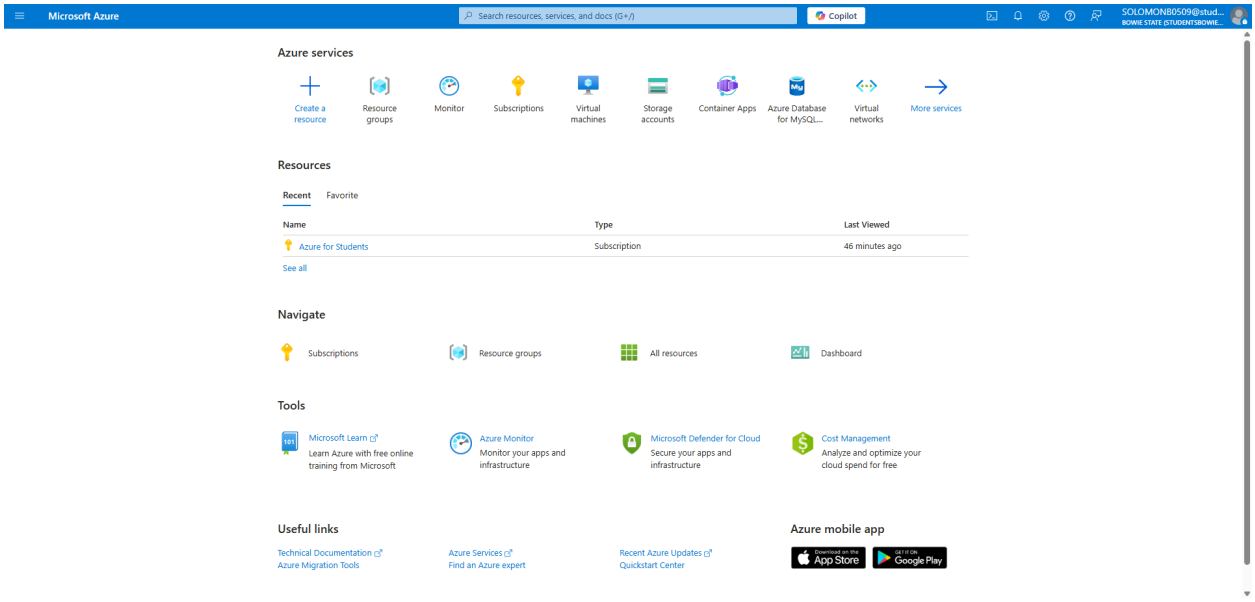




4. Do something to your resource to trigger the alarm or alert. Take a screenshot showing the alarm or alert in its triggered state or showing the email notification you received; include this visual with your responses to this project's questions.



5. Delete all resources you created for this project, including any resource groups, projects, notifications, alerts, or alarms. Check through your account to ensure you permanently deleted or terminated any resources created in this project.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Container Apps
Azure Database for MySQL...
Virtual networks
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Resources
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Favorite
Name
Type
Last Viewed
Azure for Students
Subscription
46 minutes ago
See all
Navigate
Subscriptions
Resource groups
All resources
Dashboard
Tools
Microsoft Learn
Learn Azure with free online training from Microsoft
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