

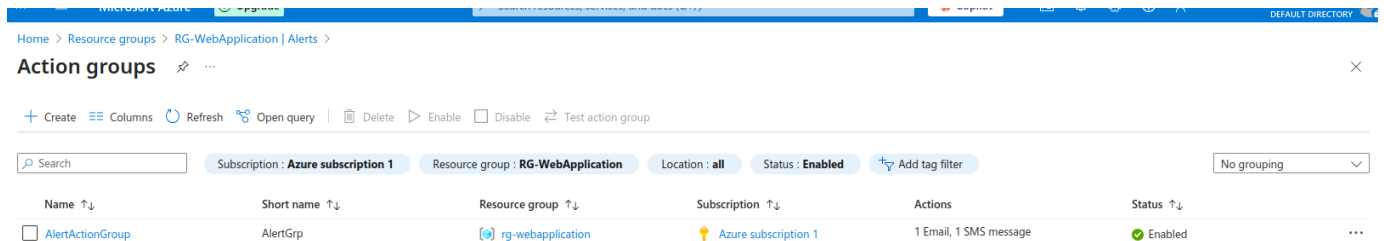
VM Alert Setup:

Check default definition for a VM (This is automatically setup during VM creation):

az monitor metrics list-definitions --resource \$(az vm show --name App-VM1 --resource-group RG-WebApplication --query id -o tsv)

Create Action Group for getting notification:

az monitor action-group create --name AlertActionGroup --resource-group RG-WebApplication --short-name AlertGrp --action email MyEmailAction <EMAIL-ID>

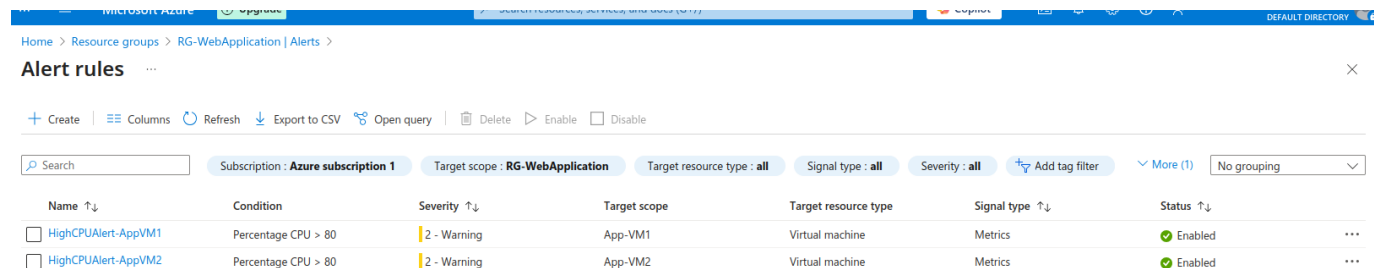


Name ↑↓	Short name ↑↓	Resource group ↑↓	Subscription ↑↓	Actions	Status ↑↓
AlertActionGroup	AlertGrp	rg-webapplication	Azure subscription 1	1 Email, 1 SMS message	Enabled

Create Rule for HighCPU alert notification to Action Group:

az monitor metrics alert create --name HighCPUAlert-AppVM1 --resource-group RG-WebApplication --scopes \$(az vm show --name App-VM1 --resource-group RG-WebApplication --query id -o tsv) --condition "avg Percentage CPU > 80" --window-size 5m --evaluation-frequency 1m --action AlertActionGroup

az monitor metrics alert create --name HighCPUAlert-AppVM2 --resource-group RG-WebApplication --scopes \$(az vm show --name App-VM2 --resource-group RG-WebApplication --query id -o tsv) --condition "avg Percentage CPU > 80" --window-size 5m --evaluation-frequency 1m --action AlertActionGroup



Name ↑↓	Condition	Severity ↑↓	Target scope	Target resource type	Signal type ↑↓	Status ↑↓
HighCPUAlert-AppVM1	Percentage CPU > 80	2 - Warning	App-VM1	Virtual machine	Metrics	Enabled
HighCPUAlert-AppVM2	Percentage CPU > 80	2 - Warning	App-VM2	Virtual machine	Metrics	Enabled

Create Rule for VM (Start/Stop) alert notification to Action Group:

az monitor activity-log alert create --name VMDeallocatedAlert --resource-group RG-WebApplication --scope /subscriptions/<Subscription-Id> --condition category=Administrative and operationName=Microsoft.Compute/virtualMachines/deallocate/action and status=Succeeded --action-group AlertActionGroup

az monitor activity-log alert create --name VMStartAlert --resource-group RG-WebApplication --scope /subscriptions/<Subscription-Id> --condition category=Administrative and operationName=Microsoft.Compute/virtualMachines/start/action and status=Succeeded --action-group AlertActionGroup

VM Alert Testing:

Test Case for High CPU:

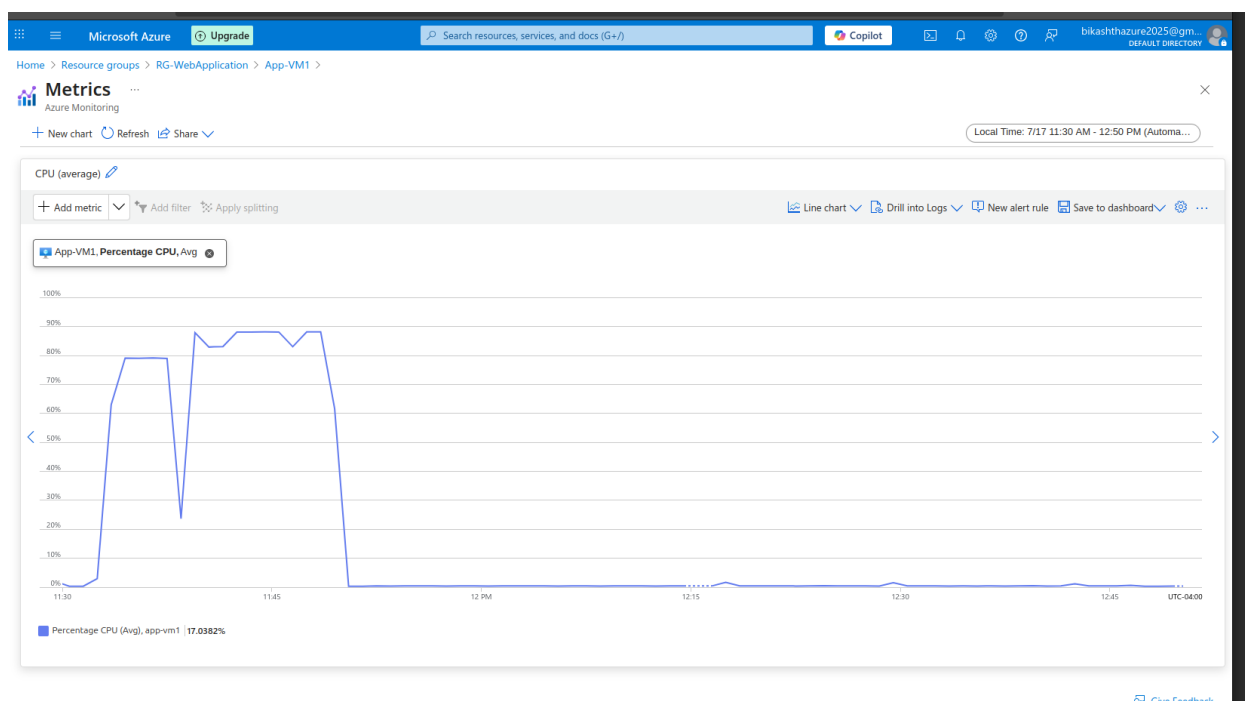
Step 1: Install stress-ng application.

```
sudo apt install stress-ng
```

Step 2: Run below stress-ng command to utilize high cpu into the VM.

```
stress-ng --cpu 2 --cpu-load 100 --timeout 300s
```

Step 3: Monitor if the CPU reaches to Highest Side:



4. Check if you receive email notification.

5. Check Alert in Azure portal.

Home > Resource groups > RG-WebApplication

RG-WebApplication | Alerts

Resource group

Search View as timeline (preview) Create Alert rules Action groups Alert processing rules Change user response Actions Refresh

Overview Activity log Access control (IAM) Tags Resource visualizer Events Settings Cost Management Monitoring Insights (preview) Alerts Metrics Diagnostic settings Logs Advisor recommendations Workbooks

Search Resource group: RG-WebApplication Time range: Past 24 hours Alert condition: Fired Severity: all Add filter

Total alerts: 7 Critical: 0 Error: 0 Warning: 0 Informational: 0 Verbose: 7 No grouping

Name	Severity	Affected resource	Alert condition	User response	Fire time
<input type="checkbox"/> VMDeallocatedAlert	4 - Verbose	app-vm2	Fired	New	7/17/2025, 12:01 PM
<input type="checkbox"/> VMStartAlert	4 - Verbose	app-vm2	Fired	New	7/17/2025, 12:01 PM
<input type="checkbox"/> VMStartAlert	4 - Verbose	app-vm2	Fired	New	7/17/2025, 11:36 AM
<input type="checkbox"/> VMDeallocatedAlert	4 - Verbose	app-vm2	Fired	New	7/17/2025, 11:36 AM
<input type="checkbox"/> VMStartAlert	4 - Verbose	app-vm1	Fired	New	7/17/2025, 11:26 AM
<input type="checkbox"/> VMDeallocatedAlert	4 - Verbose	app-vm1	Fired	New	7/17/2025, 11:16 AM
<input type="checkbox"/> VMDeallocatedAlert	4 - Verbose	app-vm1	Fired	New	7/17/2025, 11:16 AM

Test Case VM Start/Stop:

1. Stop VM
2. Start VM
3. Check email if you receive email notification.
4. Check Alert in Azure portal.

Home > Resource groups > RG-WebApplication

RG-WebApplication | Alerts

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<input type="checkbox"/> VMDeallocatedAlert	4 - Verbose	app-vm2	Fired	New	7/17/2025, 11:36 AM
<input type="checkbox"/> VMStartAlert	4 - Verbose	app-vm1	Fired	New	7/17/2025, 11:26 AM
<input type="checkbox"/> VMDeallocatedAlert	4 - Verbose	app-vm1	Fired	New	7/17/2025, 11:16 AM
<input type="checkbox"/> VMDeallocatedAlert	4 - Verbose	app-vm1	Fired	New	7/17/2025, 11:16 AM