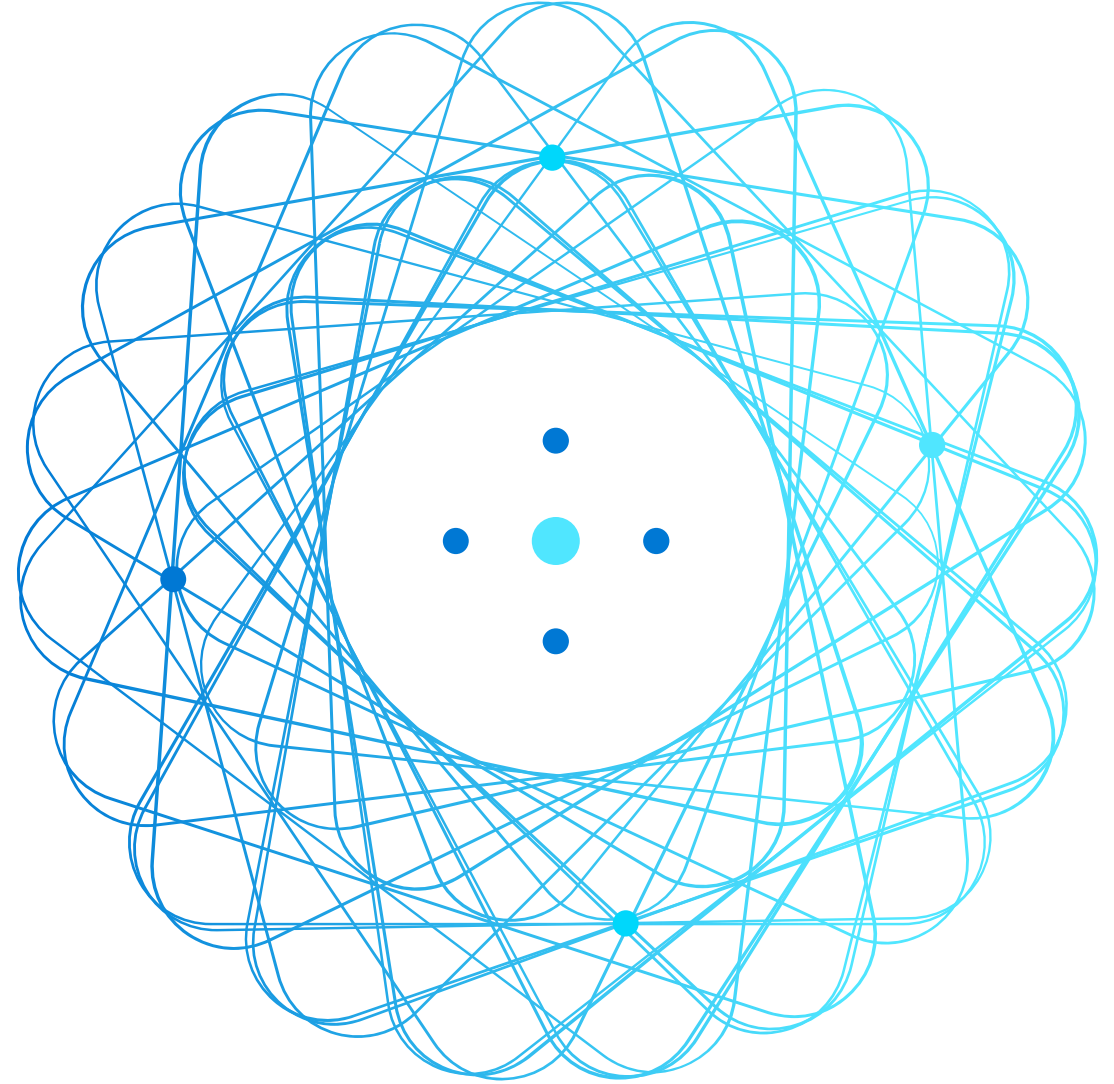


# AZ-140

## Configuring and Operating Azure Virtual Desktop



# AZ-140 Agenda

## Learning Path 1

1. Azure Virtual Desktop Architecture
2. Design the Azure Virtual Desktop architecture
3. Design for user identities and profiles

## Learning Path 2

4. Implement and manage networking for AVD
5. Implement and manage storage for AVD
6. Create and configure host pools and session hosts for AVD
7. Create and manage session host image for AVD

## Learning Path 3

8. Manage access for AVD
9. Manage security for AVD

## Learning Path 4

10. Implement and manage FSLogix
11. Configure user experience settings
12. Install and configure apps on a session host

## Learning Path 5

13. Plan for disaster recovery
14. Automate Azure Virtual Desktop management tasks
15. Monitor and manage performance and health



# Automate Azure Virtual Desktop management tasks



# Introduction

- Scale session hosts using Azure Automation
- Create or update an Azure Automation account
- Create or update an Azure Automation account
- Create the Azure Logic App and execution



AZ-140: Monitor and maintain an Azure Virtual Desktop infrastructure (20-25%)

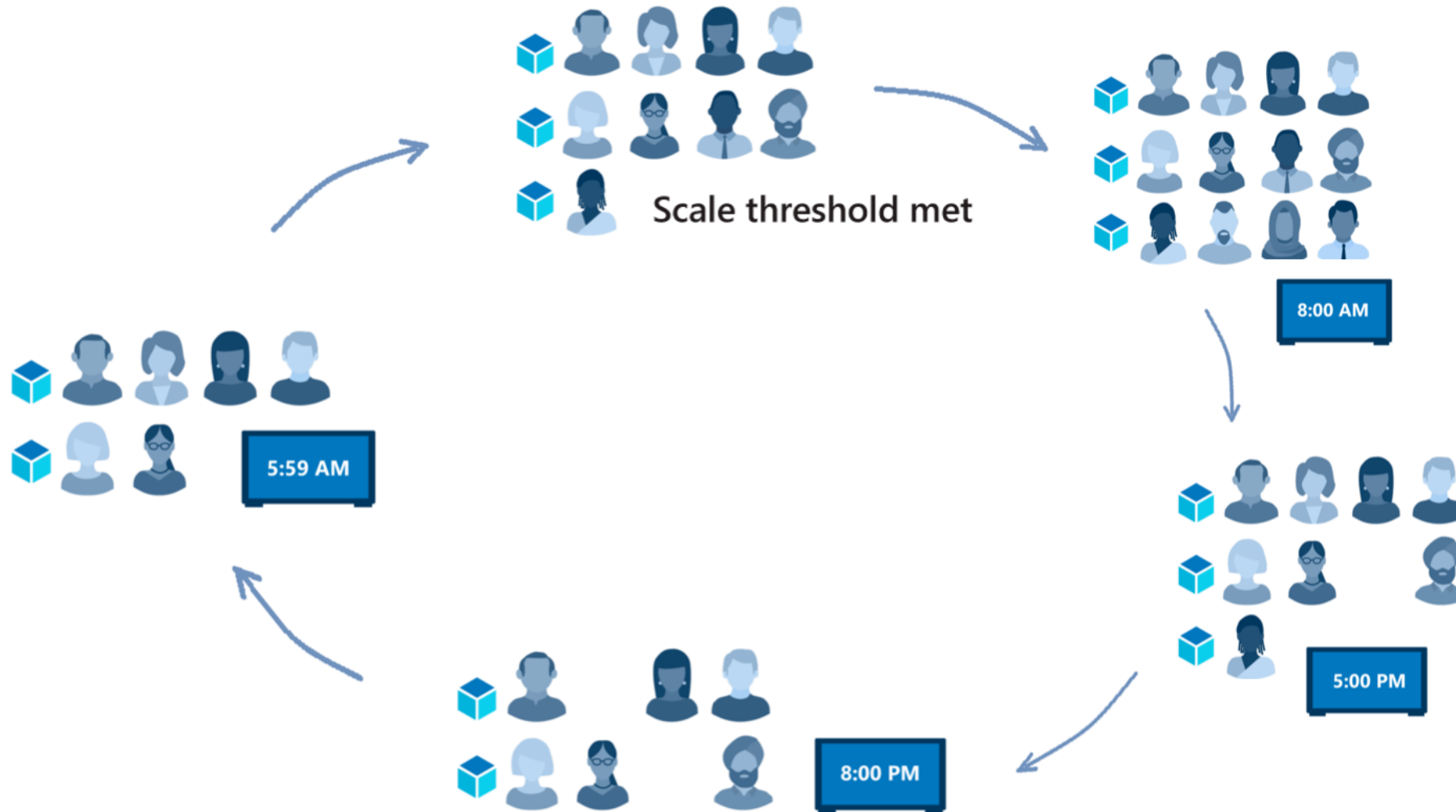
Automate Azure Virtual Desktop management tasks

- Conceptual knowledge of Azure compute solutions.
- Working experience with virtual machines, virtual networks, and app service.

# Scale session hosts using Azure Automation



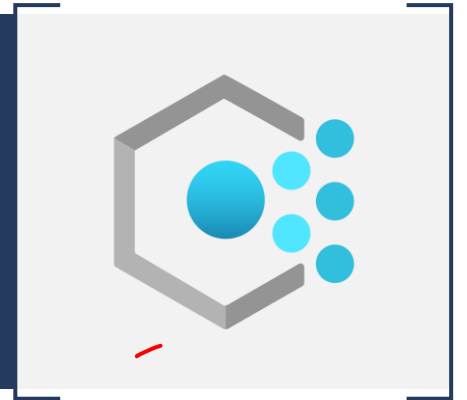
# Scale session hosts using Azure Automation



Automation Account  
5.1 | 7  
Schedule

Logic App No code  
Azure Functions Code  
"Serverless"

## Create or update an Azure Automation account



+ Update mgmt  
+ DSC pull server

# Create or update an Azure Automation account

To download the script for creating the Azure Automation account, run:

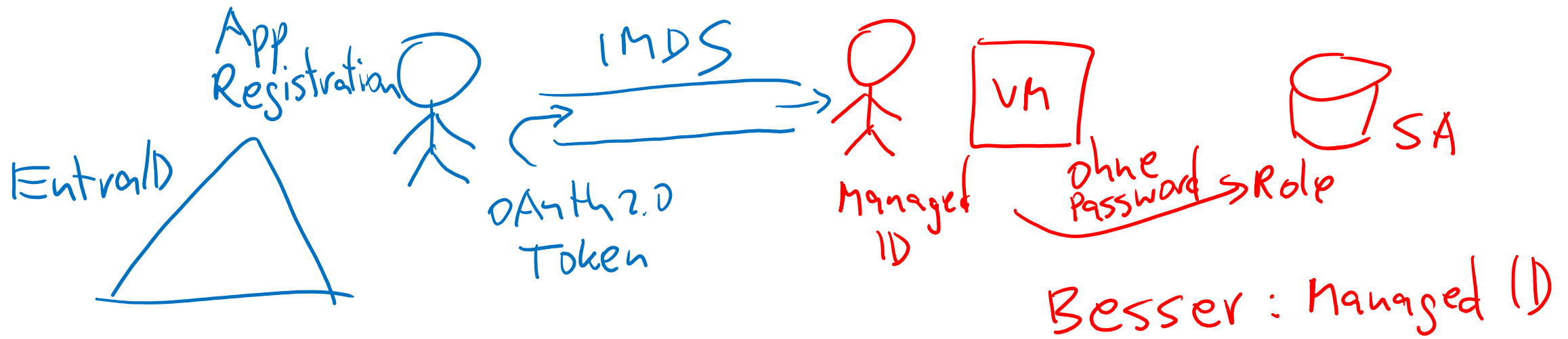
```
New-Item -ItemType Directory -Path "C:\Temp" -Force
Set-Location -Path "C:\Temp"
$Uri = "https://raw.githubusercontent.com/Azure/RDS-Templates/master/AVD-templates/AVD-scaling-script/CreateOrUpdateAzAutoAccount.ps1"
# Download the script
Invoke-WebRequest -Uri $Uri -OutFile ".\CreateOrUpdateAzAutoAccount.ps1"
```

To execute the script and create the Azure Automation account, run:

```
$Params = @{
    "AADTenantId"          = "<Azure_Active_Directory_tenant_ID>" # Optional. If not specified, it will use the current Azure context
    "SubscriptionId"       = "<Azure_subscription_ID>"           # Optional. If not specified, it will use the current Azure context
    "UseARMAPI"            = $true
    "ResourceGroupName"    = "<Resource_group_name>"            # Optional. Default: "AVDAutoScaleResourceGroup"
    "AutomationAccountName" = "<Automation_account_name>"        # Optional. Default: "AVDAutoScaleAutomationAccount"
    "Location"             = "<Azure_region_for_deployment>"
    "WorkspaceName"        = "<Log_analytics_workspace_name>"    # Optional. If specified, Log Analytics will be used to configure the custom
    log table that the runbook PowerShell script can send logs to
}
.\CreateOrUpdateAzAutoAccount.ps1 @Params
```

**Note:** To setup a standalone automation account and Run As account using the Azure portal, see [Create a standalone Azure Automation account](#).





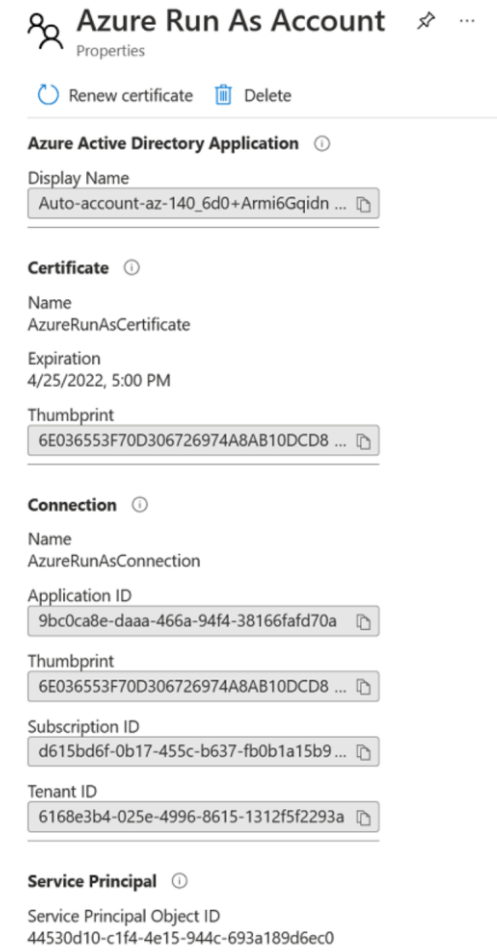
~~Create an Azure Automation Run As account~~



# Create an Azure Automation account and Run As account

An Azure Automation Run As account provides authentication for managing resources in Azure with Azure cmdlets.

- When you create a Run As account, it creates a new service principal user in Azure Active Directory and assigns the Contributor role to the service principal user at the subscription level.
- An Azure Run As account allows you to authenticate securely with certificates and a service principal name without needing to store a username and password in a credential object.



The screenshot shows the 'Properties' page for an 'Azure Run As Account'. At the top, there are buttons for 'Renew certificate' and 'Delete'. Below this, the 'Azure Active Directory Application' section displays the 'Display Name' as 'Auto-account-az-140\_6d0+Armi6Gqidn ...'. The 'Certificate' section shows the 'Name' as 'AzureRunAsCertificate', the 'Expiration' as '4/25/2022, 5:00 PM', and a 'Thumbprint' of '6E036553F70D306726974A8AB10DCD8 ...'. The 'Connection' section shows the 'Name' as 'AzureRunAsConnection', the 'Application ID' as '9bc0ca8e-daaa-466a-94f4-38166fafd70a', and a 'Thumbprint' of '6E036553F70D306726974A8AB10DCD8 ...'. Below this, the 'Subscription ID' is 'd615bd6f-0b17-455c-b637-fb0b1a15b9 ...' and the 'Tenant ID' is '6168e3b4-025e-4996-8615-1312f5f2293a'. Finally, the 'Service Principal' section shows the 'Service Principal Object ID' as '44530d10-c1f4-4e15-944c-693a189d6ec0'.

**Azure Run As Account** Properties

Renew certificate Delete

**Azure Active Directory Application**

Display Name  
Auto-account-az-140\_6d0+Armi6Gqidn ...

**Certificate**

Name  
AzureRunAsCertificate

Expiration  
4/25/2022, 5:00 PM

Thumbprint  
6E036553F70D306726974A8AB10DCD8 ...

**Connection**

Name  
AzureRunAsConnection

Application ID  
9bc0ca8e-daaa-466a-94f4-38166fafd70a

Thumbprint  
6E036553F70D306726974A8AB10DCD8 ...

Subscription ID  
d615bd6f-0b17-455c-b637-fb0b1a15b9 ...

Tenant ID  
6168e3b4-025e-4996-8615-1312f5f2293a

**Service Principal**

Service Principal Object ID  
44530d10-c1f4-4e15-944c-693a189d6ec0

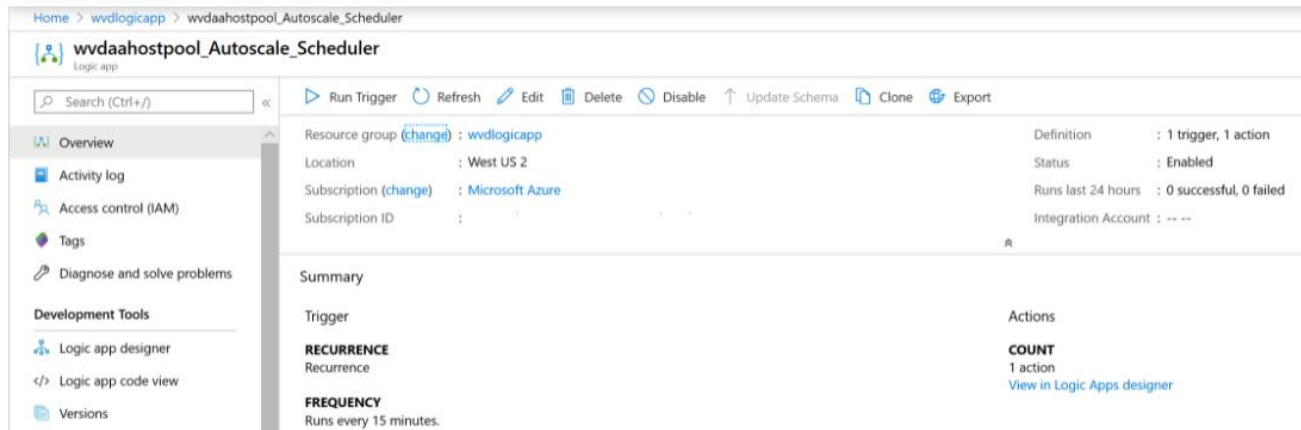
# Create the Azure Logic App and execution



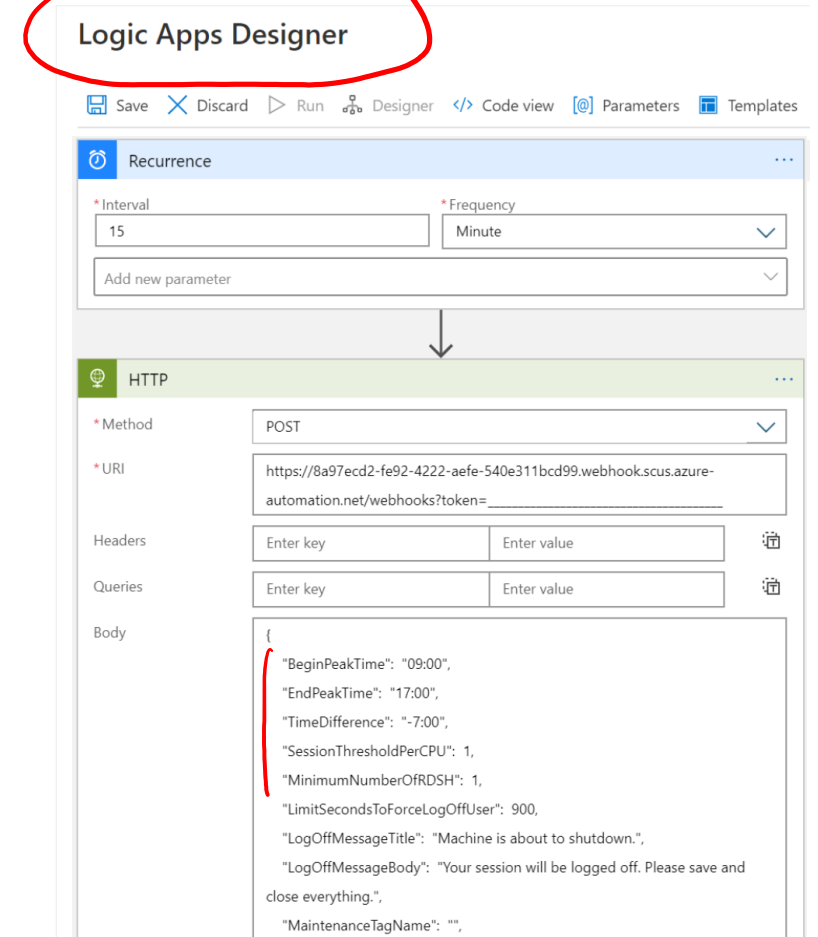
# Create the Azure Logic App and execution schedule

Create the Azure Logic App and set up an execution schedule for your new scaling tool.

1. To create the Azure Logic App and execution schedule for a host pool using PowerShell, run the script located at [Create the Azure Logic App and execution schedule](#).



2. To make changes to the execution schedule, open the Logic App and use the Logic Apps Designer.



# Knowledge check and Summary

## Check your knowledge



## What you learned:

- Describe how to scale session hosts using Azure Automation.
- Create or update an Azure Automation account.
- Create an Azure Automation Run As account.
- Create the Azure Logic App and execution schedule.

# End of presentation

