- Create a **PowerShell Runbook** named StartAzureVMRunbook inside MyAutomationAccount.
- Edit the Runbook to start a specified **Azure Virtual Machine** when executed.
- Test the Runbook manually by executing it and verifying that the VM starts.
- Publish the Runbook and set up a **schedule** to automatically run it every day at **6:00 AM**.

Practical Task 8: Automate Resource Cleanup Using a PowerShell Runbook

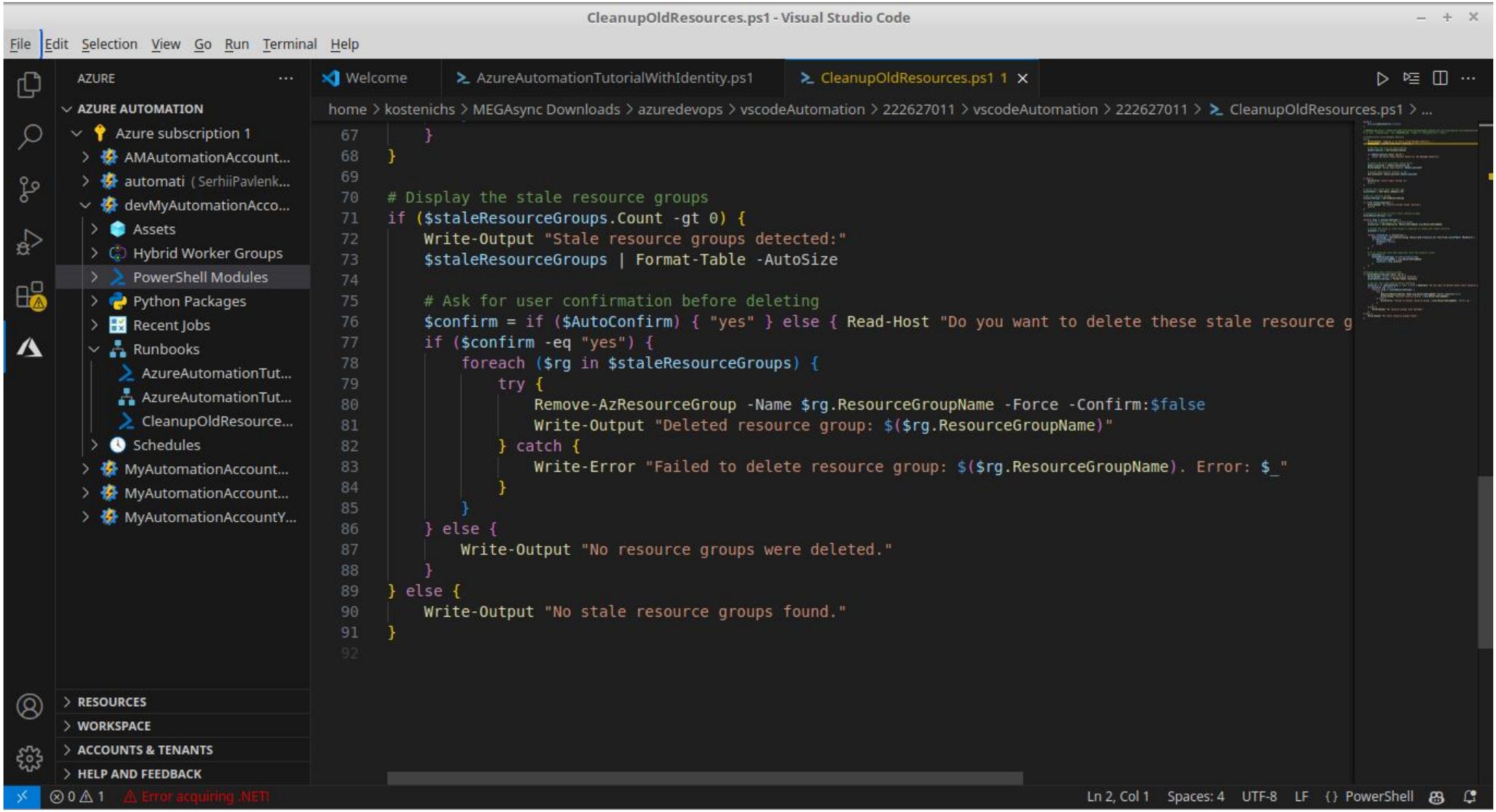
Requirements:

- Create a **new Runbook** named CleanupOldResources in MyAutomationAccount.
- Write a **PowerShell script** that:
  - Lists all **resource groups** that have not been used in the past **30 days**.
  - Deletes **unused** resource groups after user confirmation.
    - Test the Runbook in **Azure Automation**.
    - Publish the Runbook and configure a **webhook** to trigger it on demand.
    - Call the webhook using **Azure CLI** and verify the cleanup process.

Practical Task 9: Implement Desired State Configuration (DSC) to Enforce VM Settings

Requirements:

- Create a **new Azure Automation DSC Configuration** named MyDSCConfig.
- Define a DSC script that:
  - Ensures the Windows feature Web-Server (IIS) is installed on a **Windows VM**.
  - Ensures a specific configuration file (C:\inetpub\wwwroot\config.xml) exists with predefined content.
- Ensures that a required **Windows service** (e.g., w3svc) is always running.


CleanupOldResources.ps1 - Visual Studio Code
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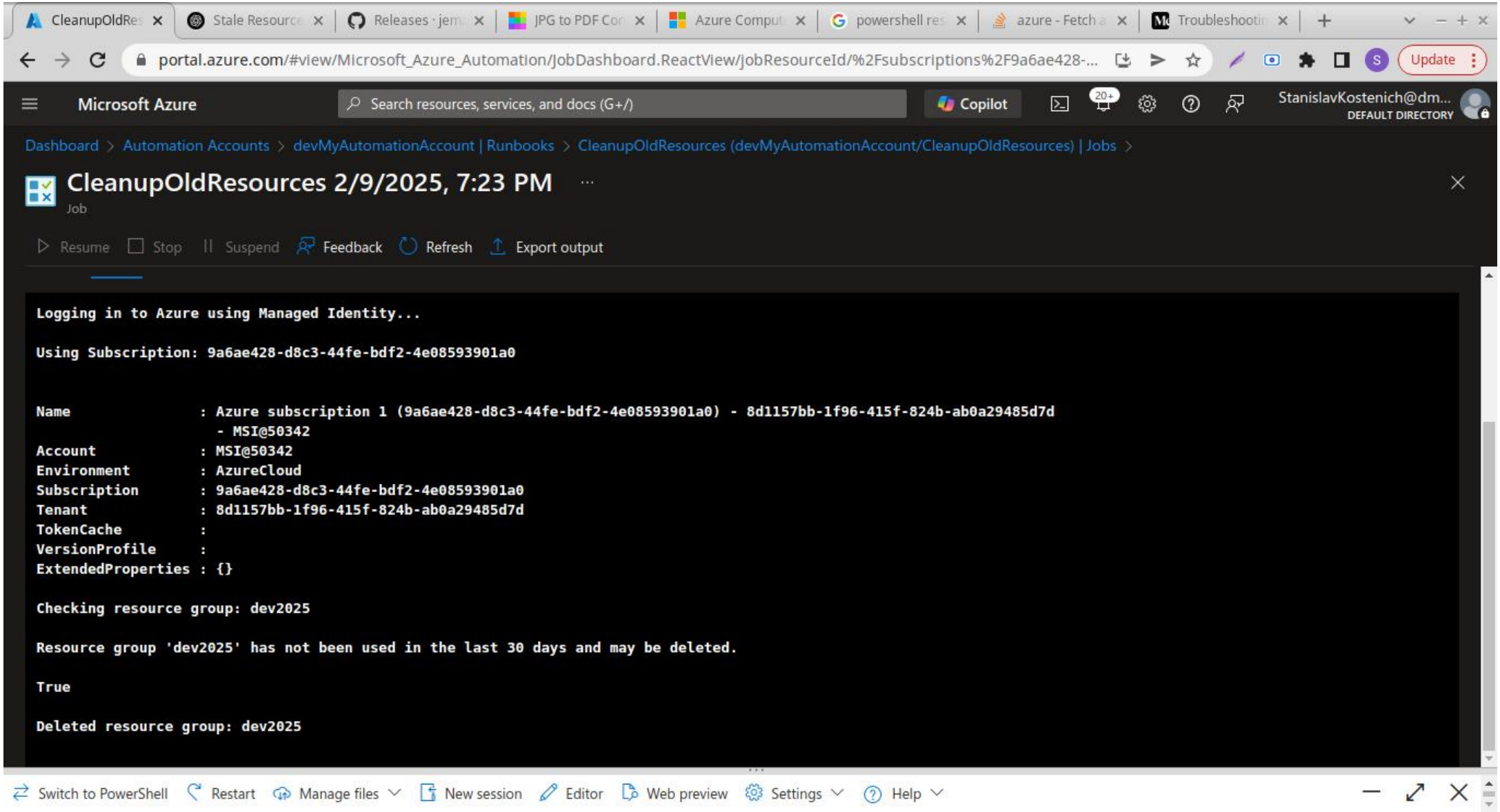
67 }
68 }
69
70 # Display the stale resource groups
71 if ($staleResourceGroups.Count -gt 0) {
72 Write-Output "Stale resource groups detected:"
73 $staleResourceGroups | Format-Table -AutoSize
74
75 # Ask for user confirmation before deleting
76 $confirm = if ($AutoConfirm) { "yes" } else { Read-Host "Do you want to delete these stale resource g
77 if ($confirm -eq "yes") {
78 foreach ($rg in $staleResourceGroups) {
79 try {
80 Remove-AzResourceGroup -Name $rg.ResourceGroupName -Force -Confirm:$false
81 Write-Output "Deleted resource group: $($rg.ResourceGroupName)"
82 } catch {
83 Write-Error "Failed to delete resource group: $($rg.ResourceGroupName). Error: $_"
84 }
85 }
86 } else {
87 Write-Output "No resource groups were deleted."
88 }
89 } else {
90 Write-Output "No stale resource groups found."
91 }
92
⊗ 0 ⚠ 1 ⚠ Error acquiring .NET
Ln 2, Col 1 Spaces: 4 UTF-8 LF { } PowerShell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Logging in to Azure using Managed Identity...
Using Subscription: 9a6ae428-d8c3-44fe-bdf2-4e08593901a0
Name : Azure subscription 1 (9a6ae428-d8c3-44fe-bdf2-4e08593901a0) - 8d1157bb-1f96-415f-824b-ab0a29485d7d - MSI@50342
Account : MSI@50342
Environment : AzureCloud
Subscription : 9a6ae428-d8c3-44fe-bdf2-4e08593901a0
Tenant : 8d1157bb-1f96-415f-824b-ab0a29485d7d
TokenCache :
VersionProfile :
ExtendedProperties : {}
Checking resource group: dev2025
Resource group 'dev2025' has not been used in the last 30 days and may be deleted.
True
Deleted resource group: dev2025
Switch to PowerShell
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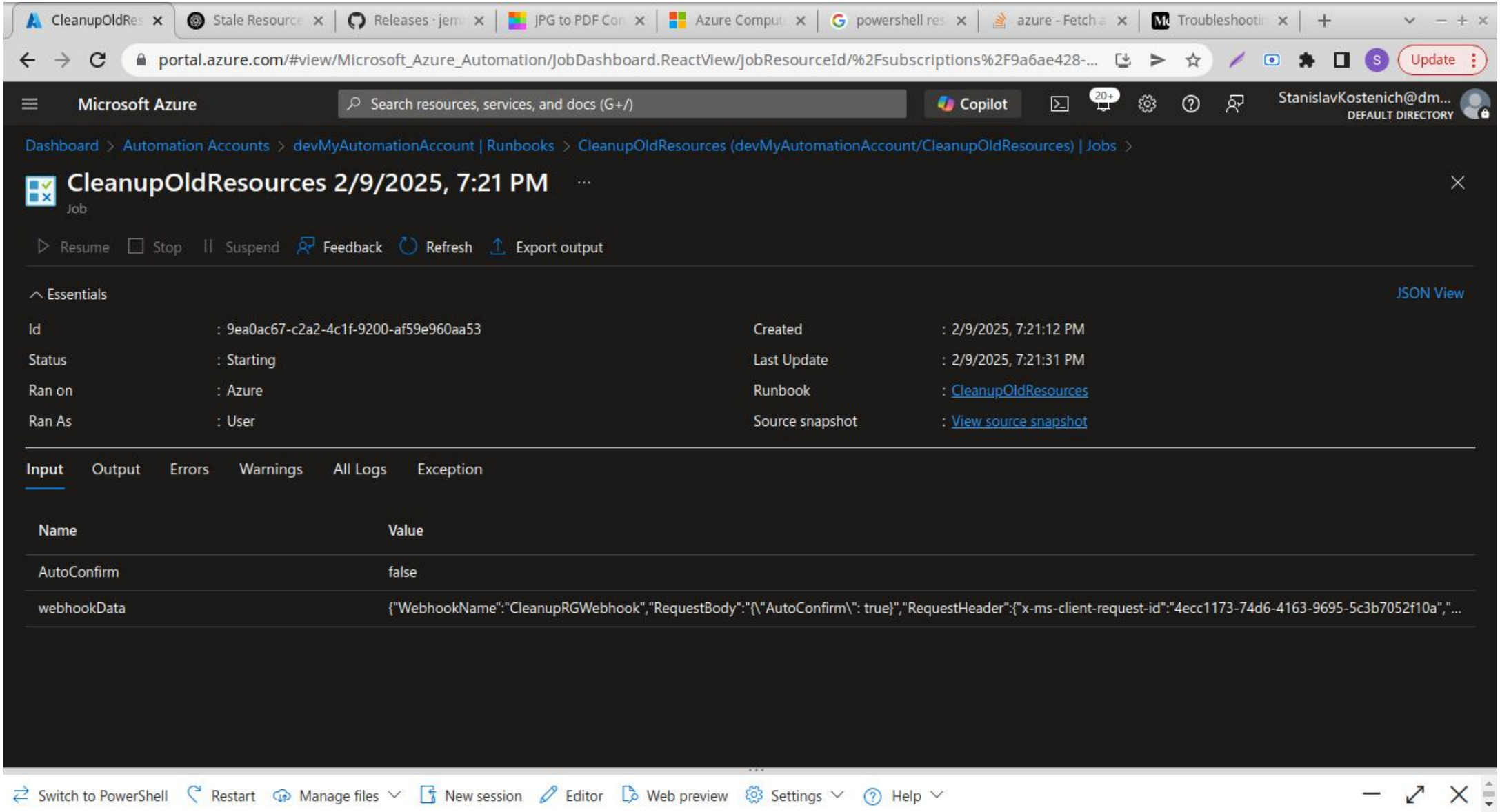
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Essentials
JSON View
Id : 9ea0ac67-c2a2-4c1f-9200-af59e960aa53
Status : Starting
Ran on : Azure
Ran As : User
Created : 2/9/2025, 7:21:12 PM
Last Update : 2/9/2025, 7:21:31 PM
Runbook : CleanupOldResources
Source snapshot : View source snapshot
Input
Output
Errors
Warnings
All Logs
Exception
Name
Value
AutoConfirm
false
webhookData
{"WebhookName":"CleanupRGWebhook","RequestBody":"{\"AutoConfirm\": true}","RequestHeader":{"x-ms-client-request-id":"4ecc1173-74d6-4163-9695-5c3b7052f10a",...
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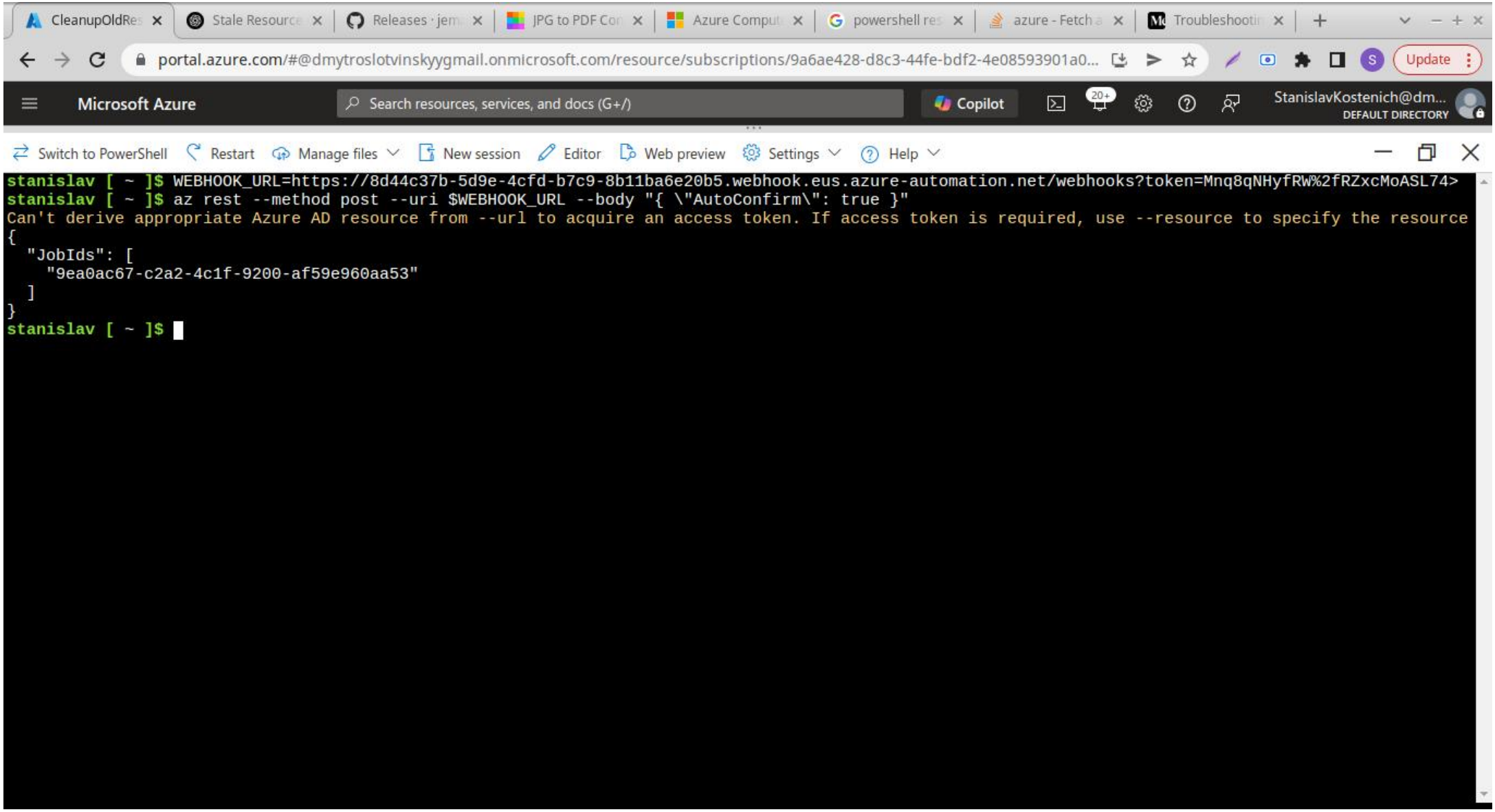
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DEFAULT DIRECTORY
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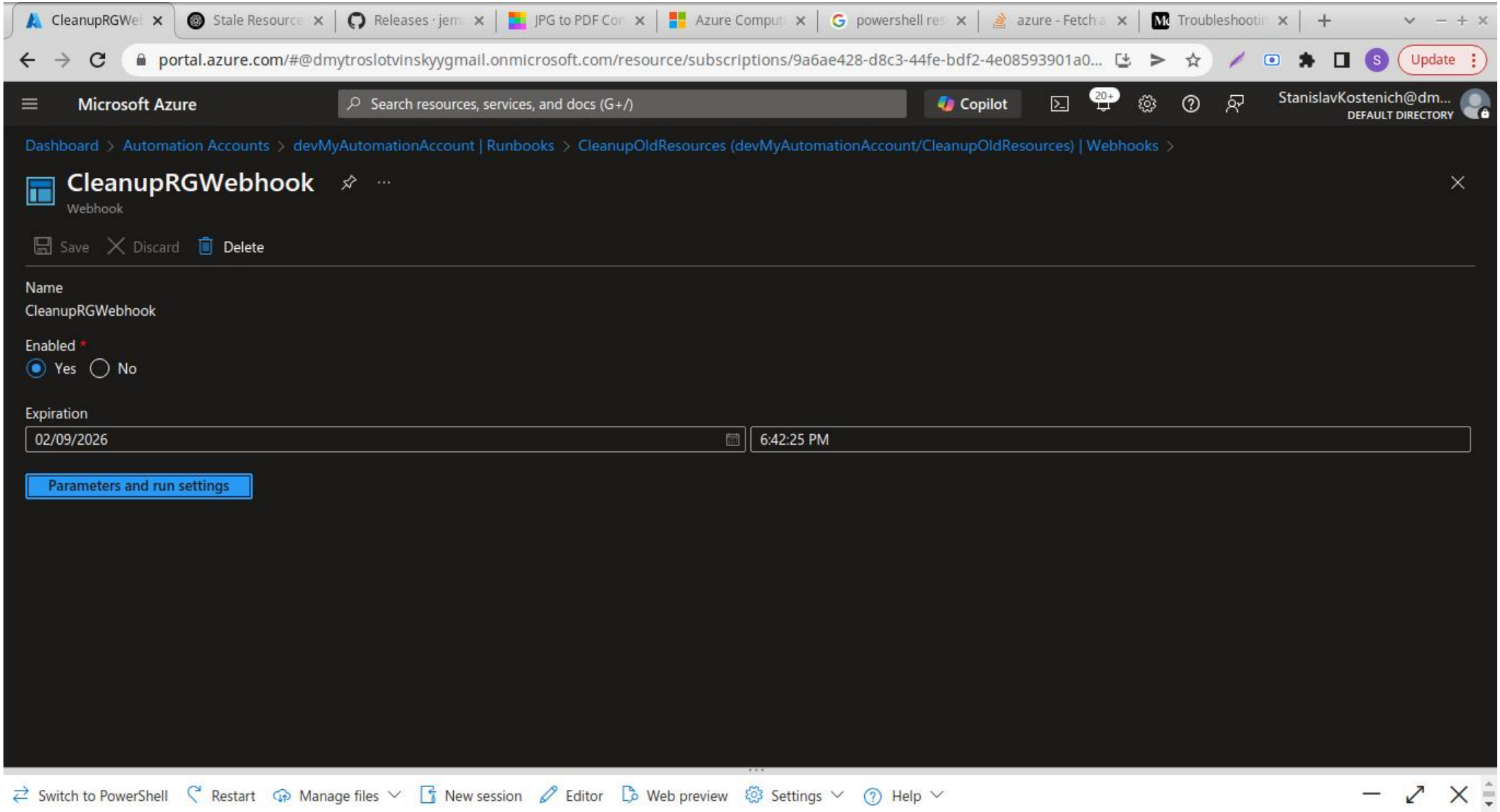
stanislav [~]$ WEBHOOK_URL=https://8d44c37b-5d9e-4cfd-b7c9-8b11ba6e20b5.webhook.eus.azure-automation.net/webhooks?token=Mnq8qNHyfRW%2fRZxcMoASL74>
stanislav [~]$ az rest --method post --uri $WEBHOOK_URL --body "{ \"AutoConfirm\": true }"
Can't derive appropriate Azure AD resource from --url to acquire an access token. If access token is required, use --resource to specify the resource
{
"JobIds": [
"9ea0ac67-c2a2-4c1f-9200-af59e960aa53"
]
}
stanislav [~]$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Enabled *
Yes
No
Expiration
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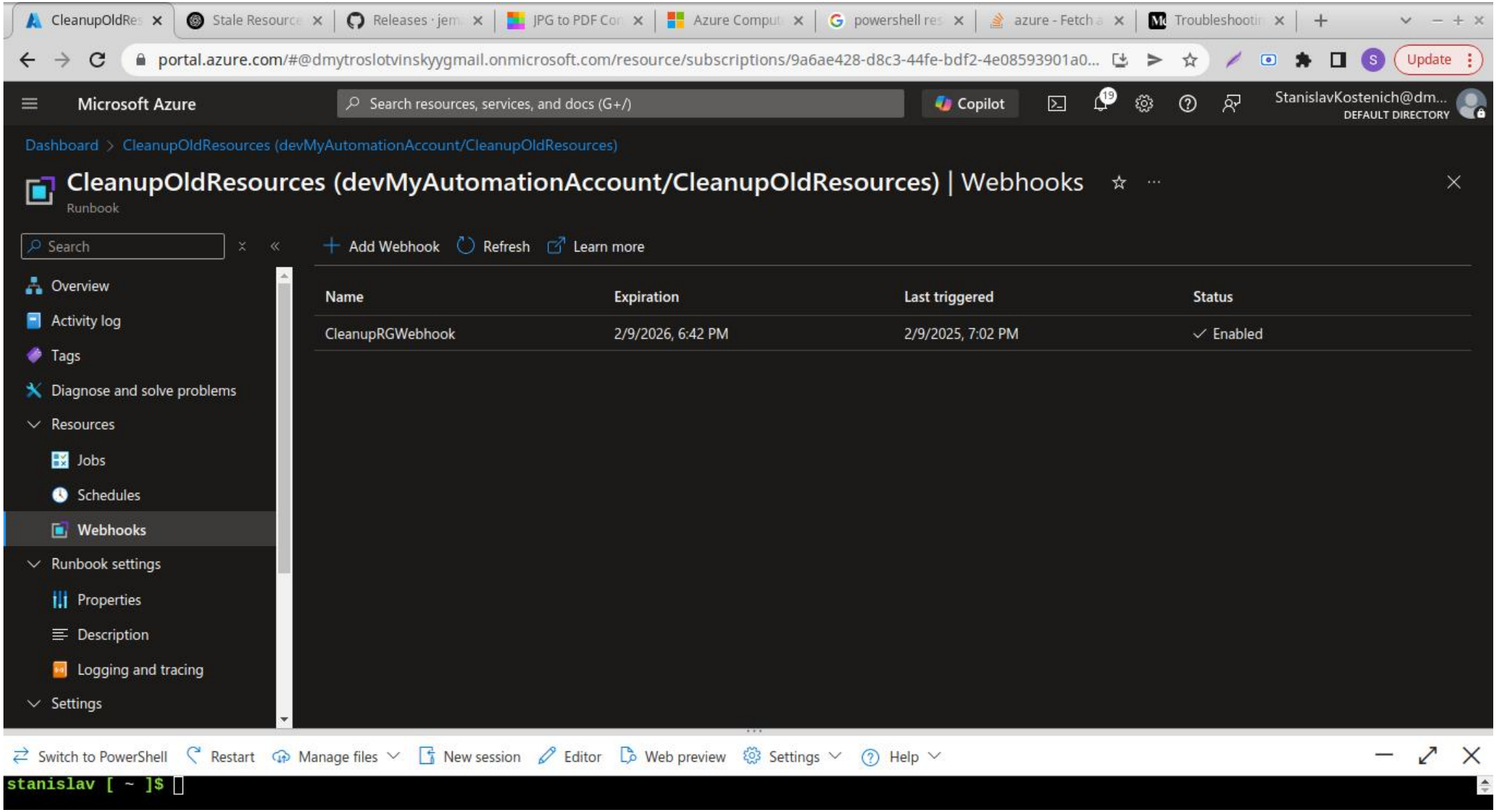
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Runbook
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Overview
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Tags
Diagnose and solve problems
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Webhooks
Runbook settings
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Description
Logging and tracing
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Refresh
Learn more
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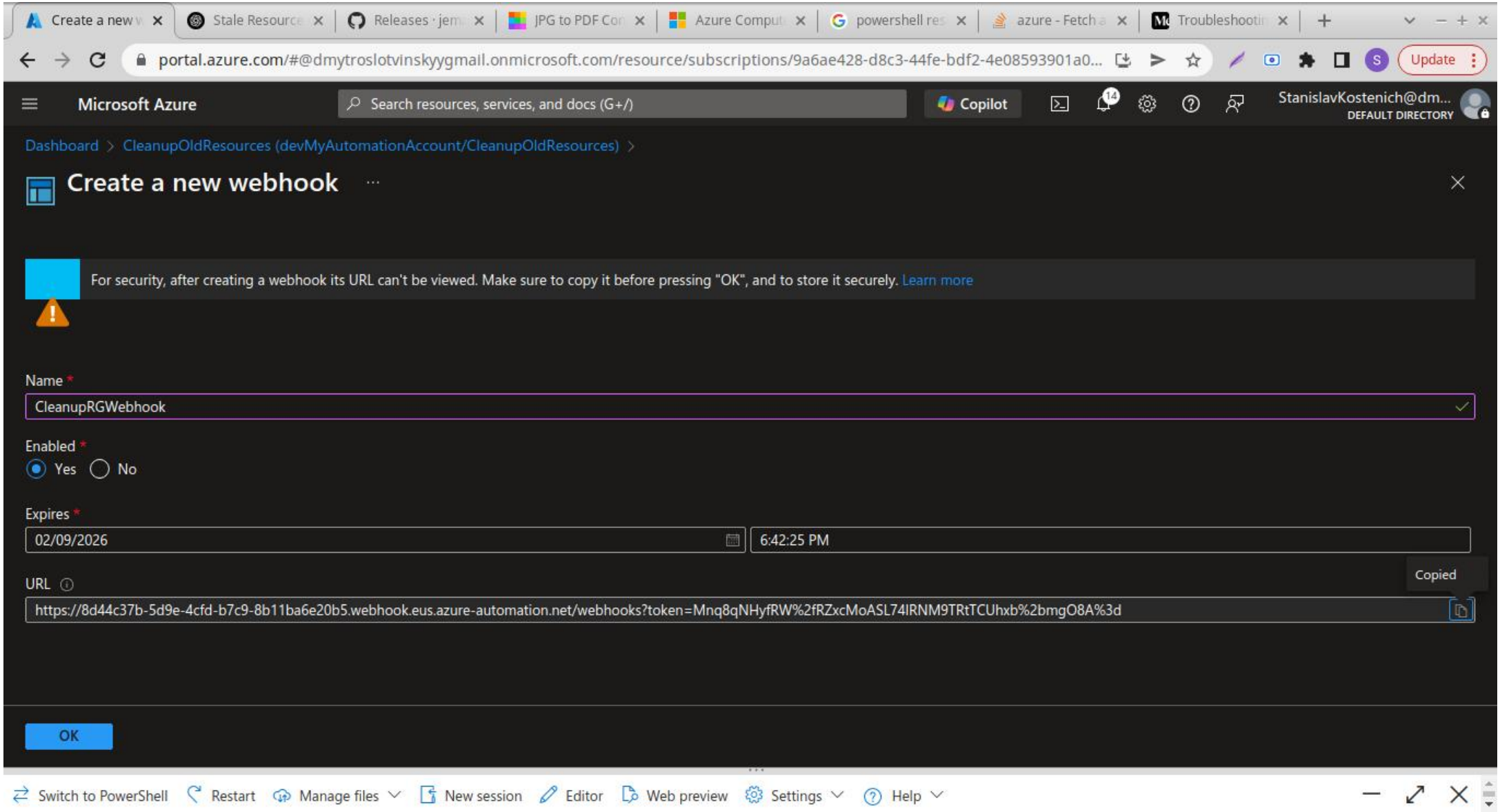
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Create a new webhook
For security, after creating a webhook its URL can't be viewed. Make sure to copy it before pressing "OK", and to store it securely. Learn more
Name *
CleanupRGWebhook
Enabled *
Yes
No
Expires *
02/09/2026
6:42:25 PM
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https://8d44c37b-5d9e-4cfd-b7c9-8b11ba6e20b5.webhook.eus.azure-automation.net/webhooks?token=Mnq8qNHyfRW%2fRZxcMoASL74IRNM9TRtTCUhxb%2bmgO8A%3d
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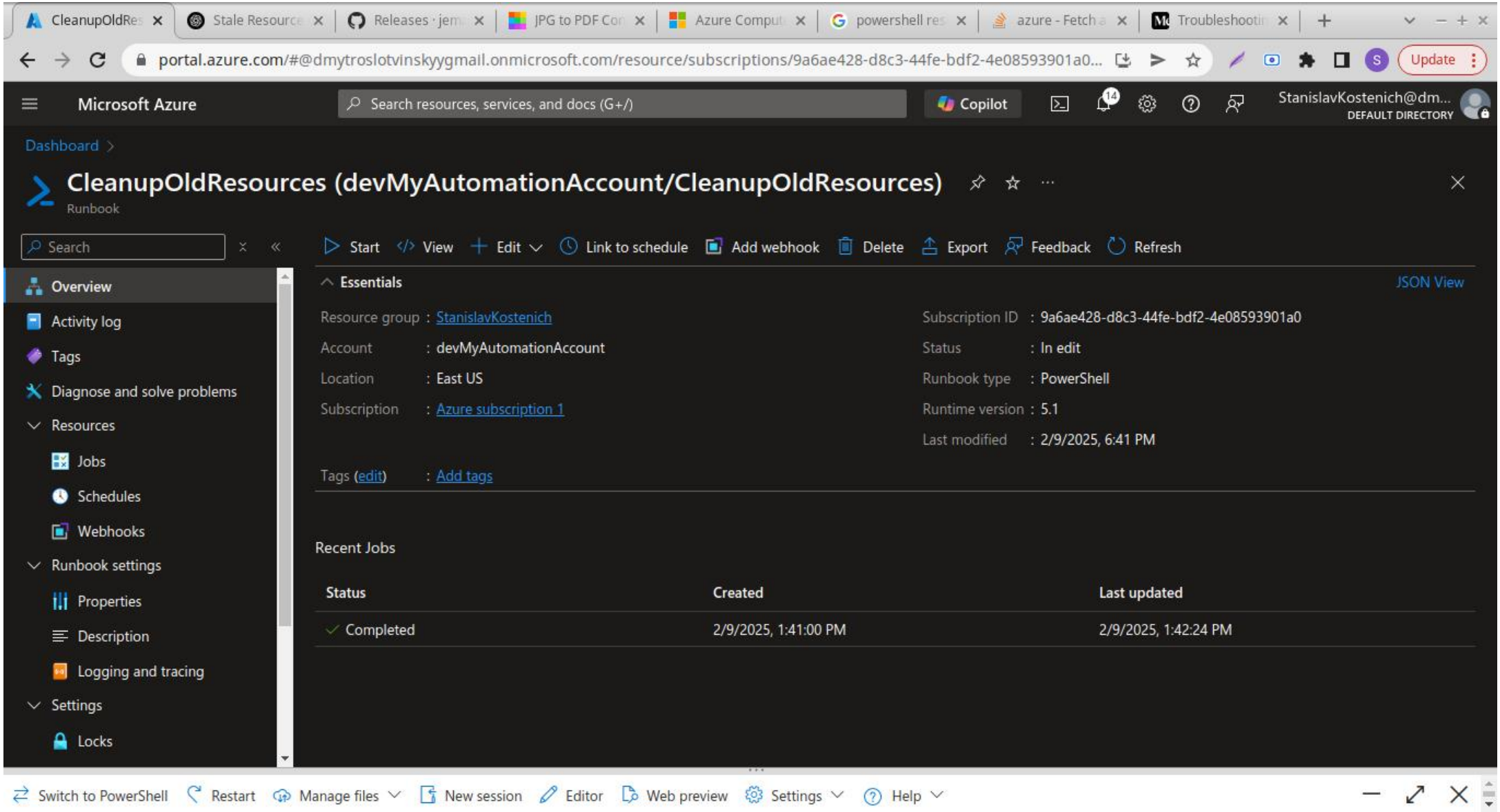
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Activity log
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Diagnose and solve problems
Resources
Jobs
Schedules
Webhooks
Runbook settings
Properties
Description
Logging and tracing
Settings
Locks
Start
View
Edit
Link to schedule
Add webhook
Delete
Export
Feedback
Refresh
Essentials
JSON View
Resource group : StanislavKostenich
Account : devMyAutomationAccount
Location : East US
Subscription : Azure subscription 1
Subscription ID : 9a6ae428-d8c3-44fe-bdf2-4e08593901a0
Status : In edit
Runbook type : PowerShell
Runtime version : 5.1
Last modified : 2/9/2025, 6:41 PM
Tags (edit) : Add tags
Recent Jobs
Status
Created
Last updated
Completed
2/9/2025, 1:41:00 PM
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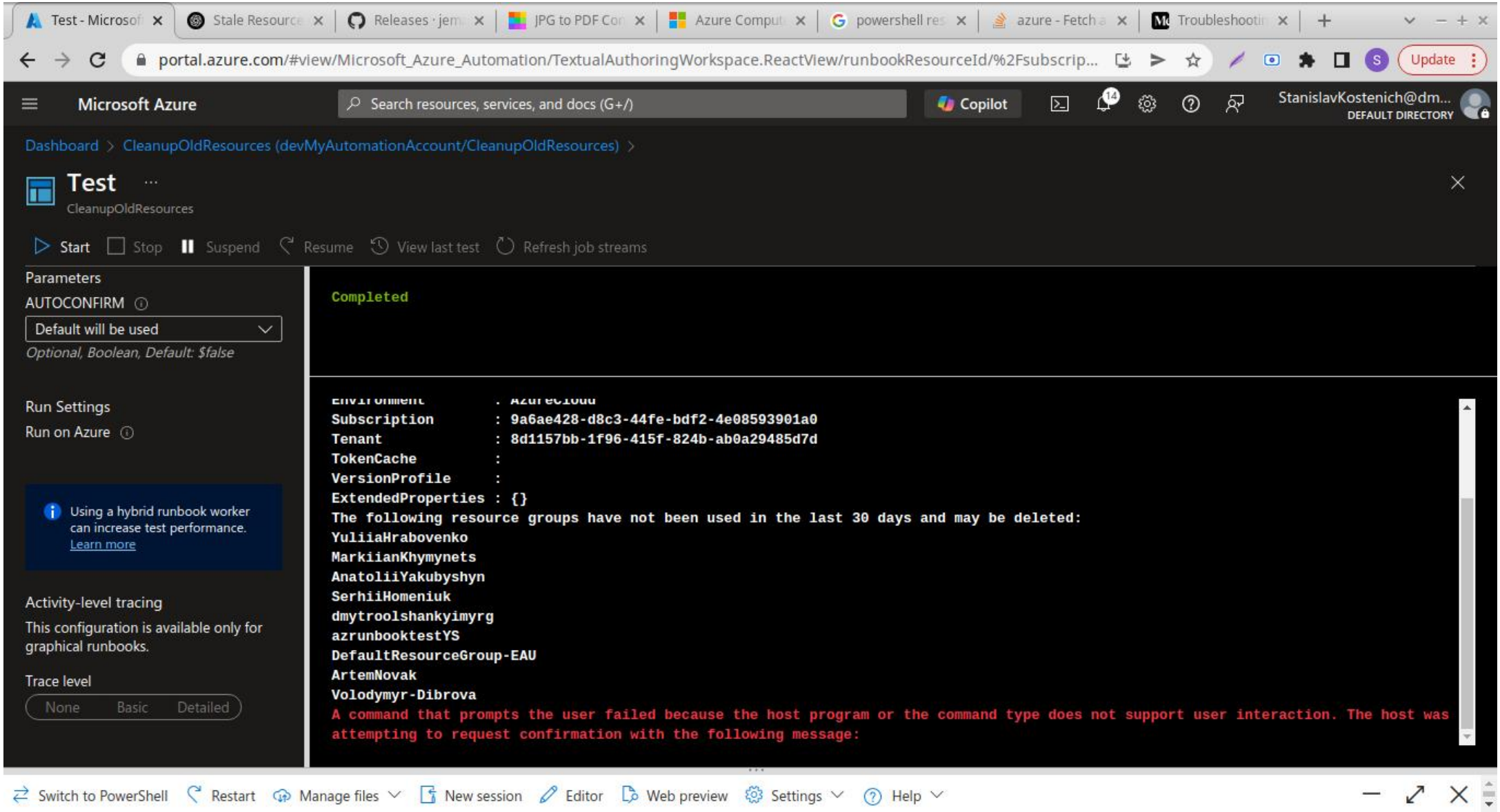
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Test
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Start
Stop
Suspend
Resume
View last test
Refresh job streams
Parameters
AUTOCONFIRM
Default will be used
Optional, Boolean, Default: $false
Run Settings
Run on Azure
Using a hybrid runbook worker can increase test performance.
Learn more
Activity-level tracing
This configuration is available only for graphical runbooks.
Trace level
None
Basic
Detailed
Completed
Environment : AzureCloud
Subscription : 9a6ae428-d8c3-44fe-bdf2-4e08593901a0
Tenant : 8d1157bb-1f96-415f-824b-ab0a29485d7d
TokenCache :
VersionProfile :
ExtendedProperties : {}
The following resource groups have not been used in the last 30 days and may be deleted:
YuliiaHrabovenko
MarkiianKhymynets
AnatoliiYakubyshyn
SerhiiHomeniuk
dmytroolshankyimyrg
azrunbooktestYS
DefaultResourceGroup-EAU
ArtemNovak
Volodymyr-Dibrova
A command that prompts the user failed because the host program or the command type does not support user interaction. The host was attempting to request confirmation with the following message:
Switch to PowerShell
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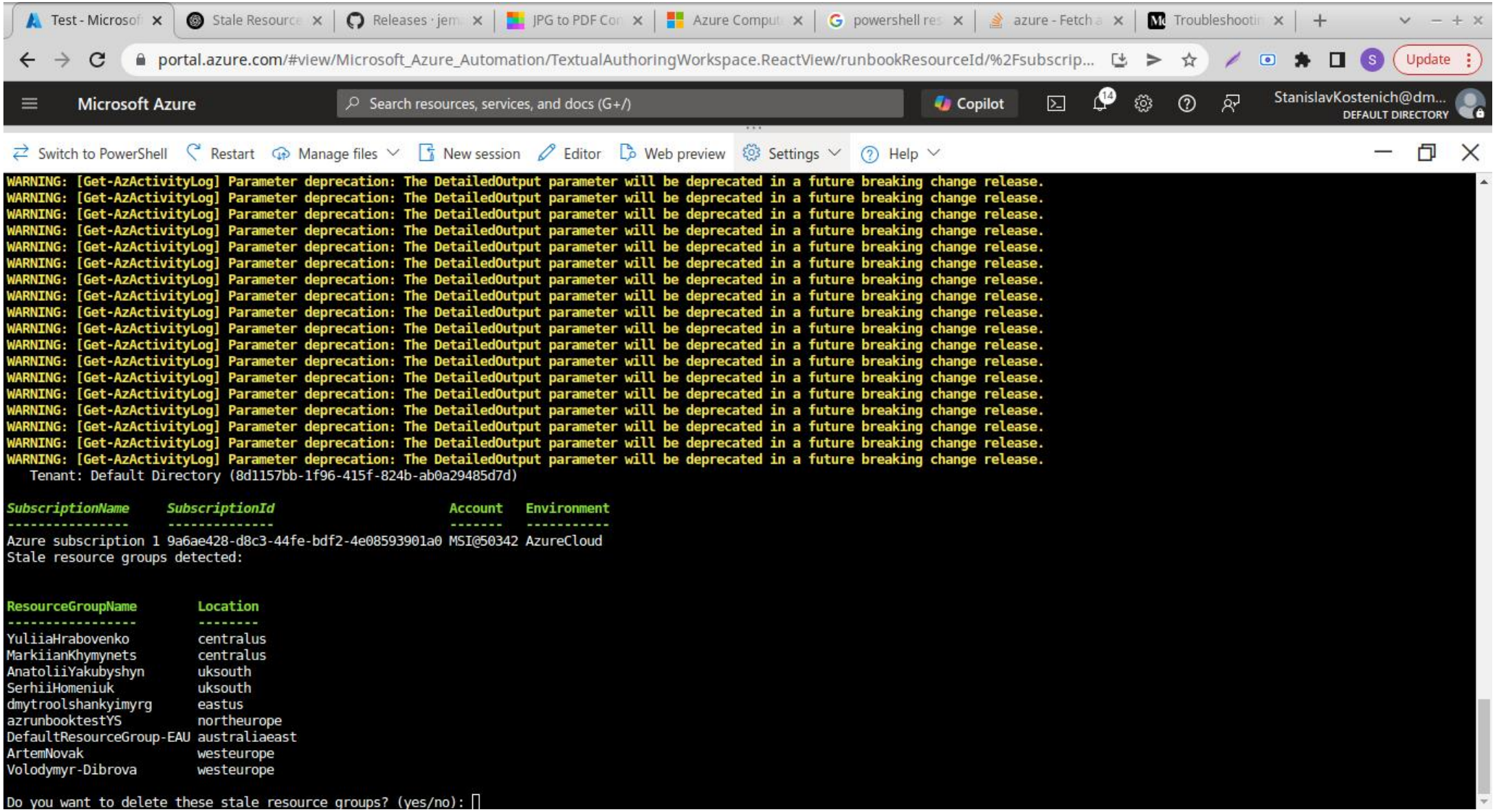
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Switch to PowerShell
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WARNING: [Get-AzActivityLog] Parameter deprecation: The DetailedOutput parameter will be deprecated in a future breaking change release.
Tenant: Default Directory (8d1157bb-1f96-415f-824b-ab0a29485d7d)
SubscriptionName SubscriptionId Account Environment
Azure subscription 1 9a6ae428-d8c3-44fe-bdf2-4e08593901a0 MSI@50342 AzureCloud
Stale resource groups detected:
ResourceGroupName Location
YuliiaHrabovenko centralus
MarkiianKhymynets centralus
AnatoliiYakubyshyn uksouth
SerhiiHomeniuk uksouth
dmytroolshankyimyrg eastus
azrunbooktestYS northeurope
DefaultResourceGroup-EAU australiaeast
ArtemNovak westeurope
Volodymyr-Dibrova westeurope
Do you want to delete these stale resource groups? (yes/no):