Windows PowerShell Get-Help on Cmdlet 'New-AzRecoveryServicesBackupProtectionPolicy'

PS:\>Get-HELP New-AzRecoveryServicesBackupProtectionPolicy -Full

NAME

New-AzRecoveryServicesBackupProtectionPolicy

SYNOPSIS

Creates a Backup protection policy.

SYNTAX

New-AzRecoveryServicesBackupProtectionPolicy [-Name] <System.String> [-WorkloadType] {AzureVM | AzureFiles | MSSQL} [[-BackupManagementType] {AzureVM | AzureStorage | AzureWorkload}] [[-RetentionPolicy] <Microsoft.Azure.Commands.RecoveryServices.Backup.Cmdlets.Models.RetentionPolicyBase>] [[-SchedulePolicy] <Microsoft.Azure.Commands.RecoveryServices.Backup.Cmdlets.Models.SchedulePolicyBase>] [[-MoveToArchiveTier] <System.Nullable`1[System.Boolean]>] [[-TieringMode] {TierRecommended | TierAllEligible}] [[-TierAfterDuration] <System.Nullable`1[System.Int32]>] [[-TierAfterDurationType] {Days | Months}] [-BackupSnapshotResourceGroup <System.String>] [-BackupSnapshotResourceGroupSuffix <System.String>] [-DefaultProfile <Microsoft.Azure.Commands.Common.Authentication.Abstractions.Core.IAzureContextContainer>] [-SnapshotConsistencyType {Default | OnlyCrashConsistent}] [-VaultId <System.String>] [-Confirm] [-WhatIf] [<CommonParameters>]

DESCRIPTION

The New-AzRecoveryServicesBackupProtectionPolicy cmdlet creates a Backup protection policy in a vault. A protection policy is associated with at least one retention

policy. The retention policy defines how long a recovery point is kept with Azure Backup. You can use the Get-AzRecoveryServicesBackupRetentionPolicyObject cmdlet to

get the default retention policy. And you can use the Get-AzRecoveryServicesBackupSchedulePolicyObject cmdlet to get the default schedule policy. The SchedulePolicy

and RetentionPolicy objects are used as inputs to the New-AzRecoveryServicesBackupProtectionPolicy cmdlet. Set the vault context by using the

Set-AzRecoveryServicesVaultContext cmdlet before you use the current cmdlet.

PARAMETERS

-BackupManagementType <System.Nullable`1[Microsoft.Azure.Commands.RecoveryServices.Backup.Cmdlets.Models.BackupManagementType]>

The class of resources being protected. The acceptable values for this parameter are: - AzureVM

- AzureStorage

- AzureWorkload

Required? false

Position? 3

Default value None

Accept pipeline input? True (ByPropertyName)

Accept wildcard characters? false

-BackupSnapshotResourceGroup <System.String>

Custom resource group name to store the instant recovery points of managed virtual machines. This is optional

Required? false

Position? named

Default value None

Accept pipeline input? False

Accept wildcard characters? false

-BackupSnapshotResourceGroupSuffix <System.String>

Custom resource group name suffix to store the instant recovery points of managed virtual machines. This is optional

Required? false

Position? named

Default value None

Accept pipeline input? False

Accept wildcard characters? false

-DefaultProfile <Microsoft.Azure.Commands.Common.Authentication.Abstractions.Core.IAzureContextContainer>

The credentials, account, tenant, and subscription used for communication with azure.

Required? false

Position? named

Default value None

Accept pipeline input? False

Accept wildcard characters? false

-MoveToArchiveTier <System.Nullable`1[System.Boolean]>

Specifies whether recovery points should be moved to archive storage by the policy or not. Allowed values are $true, $false

Required? false

Position? 6

Default value None

Accept pipeline input? False

Accept wildcard characters? false

-Name <System.String>

Specifies the name of the policy.

Required? true

Position? 1

Default value None

Accept pipeline input? False

Accept wildcard characters? false

-RetentionPolicy <Microsoft.Azure.Commands.RecoveryServices.Backup.Cmdlets.Models.RetentionPolicyBase>

Specifies the base RetentionPolicy object. You can use the Get-AzRecoveryServicesBackupRetentionPolicyObject cmdlet to get a RetentionPolicy object.

Required? false

Position? 4

Default value None

Accept pipeline input? True (ByPropertyName)

Accept wildcard characters? false

-SchedulePolicy <Microsoft.Azure.Commands.RecoveryServices.Backup.Cmdlets.Models.SchedulePolicyBase>

Specifies the base SchedulePolicy object. You can use the Get-AzRecoveryServicesBackupSchedulePolicyObject cmdlet to get a SchedulePolicy object.

Required? false

Position? 5

Default value None

Accept pipeline input? True (ByPropertyName)

Accept wildcard characters? false

-SnapshotConsistencyType <Microsoft.Azure.Commands.RecoveryServices.Backup.Cmdlets.Models.SnapshotConsistencyType>

Snapshot consistency type to be used for backup. If set to OnlyCrashConsistent, all associated items will have crash consistent snapshot. Possible values are

OnlyCrashConsistent, Default

Required? false

Position? named

Default value None

Accept pipeline input? False

Accept wildcard characters? false

-TierAfterDuration <System.Nullable`1[System.Int32]>

Specifies the duration after which recovery points should start moving to the archive tier, value can be in days or months. Applicable only when TieringMode is

TierAllEligible

Required? false

Position? 8

Default value None

Accept pipeline input? False

Accept wildcard characters? false

-TierAfterDurationType <System.String>

Specifies whether the TierAfterDuration is in Days or Months

Required? false

Position? 9

Default value None

Accept pipeline input? False

Accept wildcard characters? false

-TieringMode <Microsoft.Azure.Commands.RecoveryServices.Backup.Cmdlets.Models.TieringMode>

Specifies whether to move recommended or all eligible recovery points to archive

Required? false

Position? 7

Default value None

Accept pipeline input? False

Accept wildcard characters? false

-VaultId <System.String>

ARM ID of the Recovery Services Vault.

Required? false

Position? named

Default value None

Accept pipeline input? True (ByValue)

Accept wildcard characters? false

-WorkloadType <Microsoft.Azure.Commands.RecoveryServices.Backup.Cmdlets.Models.WorkloadType>

Workload type of the resource. The acceptable values for this parameter are: - AzureVM

- AzureFiles

- MSSQL

Required? true

Position? 2

Default value None

Accept pipeline input? True (ByPropertyName)

Accept wildcard characters? false

-Confirm <System.Management.Automation.SwitchParameter>

Prompts you for confirmation before running the cmdlet.

Required? false

Position? named

Default value False

Accept pipeline input? False

Accept wildcard characters? false

-WhatIf <System.Management.Automation.SwitchParameter>

Shows what would happen if the cmdlet runs.

Required? false

Position? named

Default value False

Accept pipeline input? False

Accept wildcard characters? false

<CommonParameters>

This cmdlet supports the common parameters: Verbose, Debug,

ErrorAction, ErrorVariable, WarningAction, WarningVariable,

OutBuffer, PipelineVariable, and OutVariable. For more information, see

about_CommonParameters (https:/go.microsoft.com/fwlink/?LinkID=113216).

INPUTS

Microsoft.Azure.Commands.RecoveryServices.Backup.Cmdlets.Models.WorkloadType

System.Nullable`1[[Microsoft.Azure.Commands.RecoveryServices.Backup.Cmdlets.Models.BackupManagementType,

Microsoft.Azure.PowerShell.Cmdlets.RecoveryServices.Backup.Models, Version=1.0.0.0, Culture=neutral,

PublicKeyToken=null]]

Microsoft.Azure.Commands.RecoveryServices.Backup.Cmdlets.Models.RetentionPolicyBase

Microsoft.Azure.Commands.RecoveryServices.Backup.Cmdlets.Models.SchedulePolicyBase

System.String

OUTPUTS

Microsoft.Azure.Commands.RecoveryServices.Backup.Cmdlets.Models.PolicyBase

NOTES

--------- Example 1: Create a Backup protection policy ---------

```
$SchPol = Get-AzRecoveryServicesBackupSchedulePolicyObject -WorkloadType "AzureVM"
$SchPol.ScheduleRunTimes.Clear()
$Dt = Get-Date
$SchPol.ScheduleRunTimes.Add($Dt.ToUniversalTime())
$RetPol = Get-AzRecoveryServicesBackupRetentionPolicyObject -WorkloadType "AzureVM"
$RetPol.DailySchedule.DurationCountInDays = 365
New-AzRecoveryServicesBackupProtectionPolicy -Name "NewPolicy" -WorkloadType AzureVM -RetentionPolicy $RetPol
-SchedulePolicy $SchPol
```

The first command gets a base SchedulePolicyObject , and then stores it in the $SchPol variable. The second command removes all scheduled run times from the schedule

policy in $SchPol. The third command uses the Get-Date cmdlet to get the current date and time. The fourth command adds the current date and time in $Dt as the

scheduled run time to the schedule policy. The fifth command gets a base RetentionPolicy object, and then stores it in the $RetPol variable. The sixth command sets

the retention duration policy to 365 days. The final command creates a BackupProtectionPolicy object based on the schedule and retention policies created by the

previous commands.

Example 2: Create a fileshare policy for multiple backups per day

```
$schedulePolicy = Get-AzRecoveryServicesBackupSchedulePolicyObject -WorkloadType AzureFiles -BackupManagementType AzureStorage -ScheduleRunFrequency Hourly
$timeZone = Get-TimeZone
$schedulePolicy.ScheduleRunTimeZone = $timeZone.Id
$startTime = Get-Date -Date "2021-12-22T06:00:00.00+00:00"
$schedulePolicy.ScheduleWindowStartTime = $startTime.ToUniversalTime()
$schedulePolicy.ScheduleInterval = 6
$schedulePolicy.ScheduleWindowDuration = 14
$retentionPolicy = Get-AzRecoveryServicesBackupRetentionPolicyObject -WorkloadType AzureFiles -BackupManagementType AzureStorage -ScheduleRunFrequency Hourly
$retentionPolicy.DailySchedule.DurationCountInDays = 10
New-AzRecoveryServicesBackupProtectionPolicy -Name "NewPolicy" -WorkloadType AzureVM -RetentionPolicy $retentionPolicy -SchedulePolicy $schedulePolicy
```

The first command gets a base hourly SchedulePolicyObject , and then stores it in the $schedulePolicy variable. The second and third command fetches the timezone and

updates the timezone in the $schedulePolicy. The fourth and fifth command initializes the schedule window start time and updates the $schedulePolicy. Please note the

start time must be in UTC even if the timezone is not UTC. The sixth and seventh command updates the interval (in hours) after which the backup will be retriggered on

the same day, duration (in hours) for which the schedule will run. The eighth command gets a base hourly RetentionPolicy object, and then stores it in the

$retentionPolicy variable. The ninth command sets the retention duration policy to 10 days. The final command creates a BackupProtectionPolicy object based on the

schedule and retention policies created by the previous commands.

---------- Example 3 ----------

New-AzRecoveryServicesBackupProtectionPolicy -Name 'NewPolicy' -RetentionPolicy $RetPol -SchedulePolicy $SchPol -VaultId $vault.ID -WorkloadType AzureVM

Example 4: Create new AzureVM policy to enable Archive smart tiering with TieringMode TierRecommended

$pol = New-AzRecoveryServicesBackupProtectionPolicy -Name newTierRecommendedPolicy -WorkloadType AzureVM -BackupManagementType AzureVM -RetentionPolicy $retPol
-SchedulePolicy $schPol -VaultId $vault.ID -MoveToArchiveTier $true -TieringMode TierRecommended

This command is used to create policy to enable archive smart tiering for tiering mode TierRecommended, we set -MoveToArchiveTier parameter to $true to enable smart
tiering. We set TieringMode to TierRecommended to move all recommended recovery points to archive. Please note that tiering mode TierRecommended is only supported for
workload type AzureVM.

Example 5: Create new policy with archive smart tiering disabled

$pol = New-AzRecoveryServicesBackupProtectionPolicy -VaultId $vault.ID -WorkloadType AzureVM -BackupManagementType AzureVM -RetentionPolicy $retPol -SchedulePolicy
$schPol -MoveToArchiveTier $false

This command is used to disable archive smart tiering while creating a policy, we set MoveToArchiveTier parameter to $false to disable tiering.

Example 6: Create a non UTC timezone standard policy for workloadType MSSQL

$schedulePolicy = Get-AzRecoveryServicesBackupSchedulePolicyObject -WorkloadType MSSQL -BackupManagementType AzureWorkload -PolicySubType Standard

```
$timeZone = Get-TimeZone -ListAvailable | Where-Object { $_.Id -match "Tokyo" }
$date= Get-Date -Hour 9 -Minute 0 -Second 0 -Year 2022 -Day 26 -Month 12 -Millisecond 0
$date = [DateTime]::SpecifyKind($date,[DateTimeKind]::Utc)
$schedulePolicy.FullBackupSchedulePolicy.ScheduleRunFrequency = "Weekly"
$schedulePolicy.FullBackupSchedulePolicy.ScheduleRunTimes[0] = $date
$schedulePolicy.FullBackupSchedulePolicy.ScheduleRunTimeZone = $timeZone[0].Id

$schedulePolicy.IsDifferentialBackupEnabled = $true
$schedulePolicy.DifferentialBackupSchedulePolicy.ScheduleRunDays[0] = "Wednesday"
$schedulePolicy.DifferentialBackupSchedulePolicy.ScheduleRunTimes[0] = $date.AddHours(1)

$retentionPolicy = Get-AzRecoveryServicesBackupRetentionPolicyObject -WorkloadType MSSQL
-BackupManagementType AzureWorkload

$retentionPolicy.DifferentialBackupRetentionPolicy.RetentionCount = 15

$retentionPolicy.FullBackupRetentionPolicy.IsDailyScheduleEnabled = $false
$retentionPolicy.FullBackupRetentionPolicy.IsMonthlyScheduleEnabled = $false
$retentionPolicy.FullBackupRetentionPolicy.WeeklySchedule.DurationCountInWeeks = 35
$retentionPolicy.FullBackupRetentionPolicy.YearlySchedule.DurationCountInYears = 2

New-AzRecoveryServicesBackupProtectionPolicy -Name "Tokyo-mssql-policy" -WorkloadType MSSQL
-BackupManagementType AzureWorkload -RetentionPolicy $retentionPolicy
-SchedulePolicy $schedulePolicy -VaultId $vault.ID
```

The first command gets a SchedulePolicyObject , and then stores it in the $schedulePolicy variable. The second command block fetches the timezone and datetime

(localtime marked as UTC) and updates the timezone and time in the $schedulePolicy. Please note that the datetime should always be marked as UTC as the timezone is

given separately. Also note, for other workload types timezone should be given in $schedulePolicy.ScheduleRunTimeZone attribute. The third command block updates the

Differential schedule policy. Then, we get the RetentionPolicyObject and update differential and full backup retention

settings. Finally we create a

BackupProtectionPolicy object based on the schedule and retention policies created by the previous commands.

RELATED LINKS

Online Version:

https://learn.microsoft.com/powershell/module/az.recoveryservices/new-azrecoveryservicesbackupprotectionpolicy

Enable-AzRecoveryServicesBackupProtection

Get-AzRecoveryServicesBackupProtectionPolicy

Get-AzRecoveryServicesBackupRetentionPolicyObject

Get-AzRecoveryServicesBackupSchedulePolicyObject

Remove-AzRecoveryServicesBackupProtectionPolicy

Set-AzRecoveryServicesBackupProtectionPolicy