



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

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

NAME

New-AzMLWorkspaceSweepJobObject

SYNOPSIS

Create an in-memory object for SweepJob.

SYNTAX

```

New-AzMLWorkspaceSweepJobObject -ObjectiveGoal <Goal> -ObjectivePrimaryMetric <String>
-SamplingAlgorithmType <SamplingAlgorithmType> -SearchSpace <IAny>
-TrialCommand <String> -TrialEnvironmentId <String> [-DistributionType <DistributionType>]
[-EarlyTerminationDelayEvaluation <Int32>]
[-EarlyTerminationEvaluationInterval <Int32>] [-EarlyTerminationPolicyType <EarlyTerminationPolicyType>] [-JobInput
<ISweepJobInputs>] [-LimitMaxConcurrentTrial
<Int32>] [-LimitMaxTotalTrial <Int32>] [-LimitTimeout <TimeSpan>] [-LimitTrialTimeout <TimeSpan>] [-JobOutput
<ISweepJobOutputs>] [-ResourceInstanceCount <Int32>]
[-ResourceInstanceType <String>] [-ResourceProperty <IResourceConfigurationProperties>] [-TrialCodeId <String>]
[-TrialEnvironmentVariable
<ITrialComponentEnvironmentVariables>] [-ComputeId <String>] [-DisplayName <String>] [-ExperimentName <String>]
[-IdentityType <IdentityConfigurationType>]

```

[-IsArchived <Boolean>] [-ServiceEndpoint <String>] [-ServicePort <Int32>] [-ServiceProperty <IJobServiceProperties>]
[-ServiceType <String>] [-Description <String>]
[-Property <IResourceBaseProperties>] [-Tag <IResourceBaseTags>] [<CommonParameters>]

DESCRIPTION

Create an in-memory object for SweepJob.

PARAMETERS

-ObjectiveGoal <Goal>

[Required] Defines supported metric goals for hyperparameter tuning.

Required? true

Position? named

Default value

Accept pipeline input? false

Accept wildcard characters? false

-ObjectivePrimaryMetric <String>

[Required] Name of the metric to optimize.

Required? true

Position? named

Default value

Accept pipeline input? false

Accept wildcard characters? false

-SamplingAlgorithmType <SamplingAlgorithmType>

[Required] The algorithm used for generating hyperparameter values, along with configuration properties.

Required? true

Position? named

Default value

Accept pipeline input? false

Accept wildcard characters? false

-SearchSpace <IAny>

[Required] A dictionary containing each parameter and its distribution.

The dictionary key is the name of the parameter.

Required? true

Position? named

Default value

Accept pipeline input? false

Accept wildcard characters? false

-TrialCommand <String>

[Required] The command to execute on startup of the job.

eg.

"python train.py".

Required? true

Position? named

Default value

Accept pipeline input? false

Accept wildcard characters? false

-TrialEnvironmentId <String>

[Required] The ARM resource ID of the Environment specification for the job.

Required? true

Position? named

Default value

Accept pipeline input? false

Accept wildcard characters? false

-DistributionType <DistributionType>

[Required] Specifies the type of distribution framework.

Required? false

Position? named

Default value

Accept pipeline input? false

Accept wildcard characters? false

-EarlyTerminationDelayEvaluation <Int32>

Number of intervals by which to delay the first evaluation.

Required? false

Position? named

Default value 0

Accept pipeline input? false

Accept wildcard characters? false

-EarlyTerminationEvaluationInterval <Int32>

Interval (number of runs) between policy evaluations.

Required? false

Position? named

Default value 0

Accept pipeline input? false

Accept wildcard characters? false

-EarlyTerminationPolicyType <EarlyTerminationPolicyType>

[Required] Name of policy configuration.

Required? false

Position? named

Default value

Accept pipeline input? false

Accept wildcard characters? false

-JobInput <ISweepJobInputs>

Mapping of input data bindings used in the job.

To construct, see NOTES section for JOBINPUT properties and create a hash table.

Required? false

Position? named

Default value

Accept pipeline input? false

Accept wildcard characters? false

-LimitMaxConcurrentTrial <Int32>

Sweep Job max concurrent trials.

Required? false

Position? named

Default value 0

Accept pipeline input? false

Accept wildcard characters? false

-LimitMaxTotalTrial <Int32>

Sweep Job max total trials.

Required? false

Position? named

Default value 0

Accept pipeline input? false

Accept wildcard characters? false

-LimitTimeout <TimeSpan>

The max run duration in ISO 8601 format, after which the job will be cancelled.

Only supports duration with precision as low as Seconds.

Required? false

Position? named

Default value

Accept pipeline input? false

Accept wildcard characters? false

-LimitTrialTimeout <TimeSpan>

Sweep Job Trial timeout value.

Required? false

Position? named

Default value

Accept pipeline input? false

Accept wildcard characters? false

-JobOutput <ISweepJobOutputs>

Mapping of output data bindings used in the job.

To construct, see NOTES section for JOBOUTPUT properties and create a hash table.

Required? false

Position? named

Default value

Accept pipeline input? false

Accept wildcard characters? false

-ResourceInstanceCount <Int32>

Optional number of instances or nodes used by the compute target.

Required? false

Position? named

Default value 0
Accept pipeline input? false
Accept wildcard characters? false

-ResourceInstanceType <String>

Optional type of VM used as supported by the compute target.

Required? false
Position? named
Default value
Accept pipeline input? false
Accept wildcard characters? false

-ResourceProperty <IResourceConfigurationProperties>

Additional properties bag.

To construct, see NOTES section for RESOURCEPROPERTY properties and create a hash table.

Required? false
Position? named
Default value
Accept pipeline input? false
Accept wildcard characters? false

-TrialCodeId <String>

ARM resource ID of the code asset.

Required? false
Position? named
Default value
Accept pipeline input? false
Accept wildcard characters? false

-TrialEnvironmentVariable <ITrialComponentEnvironmentVariables>

Environment variables included in the job.

To construct, see NOTES section for TRIAENVIRONMENTVARIABLE properties and create a hash table.

Required? false

Position? named

Default value

Accept pipeline input? false

Accept wildcard characters? false

-ComputeId <String>

ARM resource ID of the compute resource.

Required? false

Position? named

Default value

Accept pipeline input? false

Accept wildcard characters? false

-DisplayName <String>

Display name of job.

Required? false

Position? named

Default value

Accept pipeline input? false

Accept wildcard characters? false

-ExperimentName <String>

The name of the experiment the job belongs to.

If not set, the job is placed in the "Default" experiment.

Required? false

Position? named

Default value

Accept pipeline input? false

Accept wildcard characters? false

-IdentityType <IdentityConfigurationType>

[Required] Specifies the type of identity framework.

Required? false

Position? named

Default value

Accept pipeline input? false

Accept wildcard characters? false

-IsArchived <Boolean>

Is the asset archived?.

Required? false

Position? named

Default value False

Accept pipeline input? false

Accept wildcard characters? false

-ServiceEndpoint <String>

Url for endpoint.

Required? false

Position? named

Default value

Accept pipeline input? false

Accept wildcard characters? false

-ServicePort <Int32>

Port for endpoint.

Required? false
Position? named
Default value 0
Accept pipeline input? false
Accept wildcard characters? false

-ServiceProperty <IJobServiceProperties>

Additional properties to set on the endpoint.

To construct, see NOTES section for SERVICEPROPERTY properties and create a hash table.

Required? false
Position? named
Default value
Accept pipeline input? false
Accept wildcard characters? false

-ServiceType <String>

Endpoint type.

Required? false
Position? named
Default value
Accept pipeline input? false
Accept wildcard characters? false

-Description <String>

The asset description text.

Required? false
Position? named
Default value
Accept pipeline input? false

Accept wildcard characters? false

-Property <IResourceBaseProperties>

The asset property dictionary.

To construct, see NOTES section for PROPERTY properties and create a hash table.

Required? false

Position? named

Default value

Accept pipeline input? false

Accept wildcard characters? false

-Tag <IResourceBaseTags>

Tag dictionary.

Tags can be added, removed, and updated.

To construct, see NOTES section for TAG properties and create a hash table.

Required? false

Position? named

Default value

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

OUTPUTS

NOTES

COMPLEX PARAMETER PROPERTIES

To create the parameters described below, construct a hash table containing the appropriate properties. For information on hash tables, run Get-Help

about_Hash_Tables.

JOBINPUT <ISweepJobInputs>: Mapping of input data bindings used in the job.

[(Any) <IJobInput>]: This indicates any property can be added to this object.

JOBOUTPUT <ISweepJobOutputs>: Mapping of output data bindings used in the job.

[(Any) <IJobOutput>]: This indicates any property can be added to this object.

PROPERTY <IResourceBaseProperties>: The asset property dictionary.

[(Any) <String>]: This indicates any property can be added to this object.

RESOURCEPROPERTY <IResourceConfigurationProperties>: Additional properties bag.

[(Any) <Object>]: This indicates any property can be added to this object.

SERVICEPROPERTY <IJobServiceProperties>: Additional properties to set on the endpoint.

[(Any) <String>]: This indicates any property can be added to this object.

TAG <IResourceBaseTags>: Tag dictionary. Tags can be added, removed, and updated.

[(Any) <String>]: This indicates any property can be added to this object.

TRIALENVIRONMENTVARIABLE <ITrialComponentEnvironmentVariables>: Environment variables included in the job.

[(Any) <String>]: This indicates any property can be added to this object.

----- EXAMPLE 1 -----

PS C:\># You can use following commands to create job input or job oupt as vaule pass to JobInput or JobOutput parameter of the New-AzMLWorkspaceSweepJobObject

```
# New-AzMLWorkspaceCustomModelJobInputObject
# New-AzMLWorkspaceCustomModelJobOutputObject
# New-AzMLWorkspaceLiteralJobInputObject
# New-AzMLWorkspaceMLFlowModelJobInputObject
# New-AzMLWorkspaceMLFlowModelJobOutputObject
# New-AzMLWorkspaceMLTableJobInputObject
# New-AzMLWorkspaceMLTableJobOutputObject
# New-AzMLWorkspaceSharedPrivateLinkResourceObject
# New-AzMLWorkspaceTritonModelJobInputObject
# New-AzMLWorkspaceTritonModelJobOutputObject
# New-AzMLWorkspaceUriFileJobInputObject
# New-AzMLWorkspaceUriFileJobOutputObject
# New-AzMLWorkspaceUriFolderJobInputObject
# New-AzMLWorkspaceUriFolderJobOutputObject
```

```
New-AzMLWorkspaceSweepJobObject
```

RELATED LINKS

<https://learn.microsoft.com/powershell/module/az.MLWorkspace/new-AzMLWorkspaceSweepJobObject>