



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

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

NAME

New-SqlAzureKeyVaultColumnMasterKeySettings

SYNOPSIS

Creates a SqlColumnMasterKeySettings object describing an asymmetric key stored in Azure Key Vault.

SYNTAX

```
New-SqlAzureKeyVaultColumnMasterKeySettings [-KeyUrl] <String> [[-AllowEnclaveComputations]] [[-Signature]
<String>] [-KeyVaultAccessToken <String>]
[-ManagedHsmAccessToken <String>] [-ProgressAction <ActionPreference>] [<CommonParameters>]
```

DESCRIPTION

Creates a SqlColumnMasterKeySettings object describing a column master key stored in a key vault or in a managed HSM in Azure Key Vault.

If you're using the cmdlet to sign key metadata, you need to specify a valid authentication token for key vaults or managed HSMs. Alternatively, you can authenticate

to Azure with Add-SqlAzureAuthenticationContext before calling this cmdlet.

> `Module requirements: version 21+ on PowerShell 5.1; version 22+ on PowerShell 7.x.`

PARAMETERS

-AllowEnclaveComputations [<SwitchParameter>]

Specifies whether the column master key allows enclave computations. If the parameter is specified, server-side secure enclaves will be allowed to perform computations on data protected with the column master key. Not valid for SQL Server 2017 and older versions.

Required?	false
Position?	1
Default value	False
Accept pipeline input?	False
Accept wildcard characters?	false

-KeyUrl <String>

Specifies the link, as a URL, of the key in Azure Key Vault or a managed HSM.

Required?	true
Position?	0
Default value	None
Accept pipeline input?	False
Accept wildcard characters?	false

-KeyVaultAccessToken <String>

Specifies an access token for key vaults in Azure Key Vault. Use this parameter if the specified column master key is stored in a key vault in Azure Key Vault and the cmdlet is expected to sign key metadata.

Required?	false
Position?	named
Default value	None

Accept pipeline input? False

Accept wildcard characters? false

-ManagedHsmAccessToken <String>

Specifies an access token for managed HSMs in Azure Key Vault. Use this parameter if the specified column master key is stored in a managed HSM in Azure Key Vault and the cmdlet is expected to sign key metadata.

Required? false

Position? named

Default value None

Accept pipeline input? False

Accept wildcard characters? false

-ProgressAction <ActionPreference>

Determines how PowerShell responds to progress updates generated by a script, cmdlet, or provider, such as the progress bars generated by the Write-Progress cmdlet. The Write-Progress cmdlet creates progress bars that show a command's status.

Required? false

Position? named

Default value None

Accept pipeline input? False

Accept wildcard characters? false

-Signature <String>

Specifies a hexadecimal string that is a digital signature of column master key properties. A client driver can verify the signature to ensure the column master key properties have not been tampered with.

This parameter is allowed only if AllowEnclaveComputations is specified. If AllowEnclaveComputations is specified, but Signature is not, the cmdlet automatically

computes the signature and populates the Signature property of the new SqlColumnMasterKeySettings object.

Required? false
Position? 2
Default value None
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

SqlColumnMasterKeySettings

NOTES

- Example 1: Create a simple SqlColumnMasterKeySettings object -

```
$CMKSettings = New-SqlAzureKeyVaultColumnMasterKeySettings -KeyUri  
'https://myvault.vault.contoso.net/keys/CMK/4c05f1a41b12488f9cba2ea964b6a700'
```

This command creates a SqlColumnMasterKeySettings object that references a key in Azure Key Vault and stores the result in the variable named \$CMKSettings

Example 2: Create a SqlColumnMasterKeySettings with auto-signed properties allowing enclave computations

Obtain an access token for key vaults.

```
$keyVaultAccessToken=(Get-AzAccessToken-ResourceUrl'https://vault.azure.net').Token
```

Pass the token to the cmdlet. It will use the token to communicate with the key

vault containing the column master key to sign the column master key metadata properties.

```
$cmkSettings=New-SqlAzureKeyVaultColumnMasterKeySettings-KeyUrl'https://myvault.vault.azure.net/keys/CMK/4c05f1a41b12488f9cba2ea964b6a700'-AllowEnclaveComputation  
s?-keyVaultAccessToken$keyVaultAccessToken
```

This command creates a `SqlColumnMasterKeySettings` object that references a key in a key vault and stores the result in the variable named `$cmkSettings`. The key allows

enclave computations. Since the signature parameter is not specified, the cmdlet automatically computes the signature and populates the `Signature` property of the

`SqlColumnMasterKeySettings` object.

This example illustrates obtaining an authentication token for key vaults in Azure Key Vault, and passing it to the cmdlet.

Example 3: Create a `SqlColumnMasterKeySettings` object allowing enclave computations

Note: actual signature truncated for brevity

```
$signature = "0x19BEB4F27F582F...89D5433CE9266C6F867334654BE12"
```

```
$cmkSettings = New-SqlAzureKeyVaultColumnMasterKeySettings -KeyUrl  
'https://myvault.vault.contoso.net/keys/CMK/4c05f1a41b12488f9cba2ea964b6a700'  
-AllowEnclaveComputations -Signature $signature
```

This command creates a `SqlColumnMasterKeySettings` object that references a key in a key vault and stores the result in the variable named `$cmkSettings`. The key allows

enclave computations. The signature of the key properties is specified in the `Signature` parameter.

RELATED LINKS

Online Version: <https://learn.microsoft.com/powershell/module/sqlserver/new-sqlazurekeyvaultcolumnmasterkeysettings>

