

THINSCALE

ThinScale Management PowerShell Module Guide





Table of Content

1. Introduction	2
2. Functions.....	3
3. Prerequisites	6
4. Installation	6
5. Permissions	7
6. Documentation	8
7. Usage	8
8. Parameters	9
9. Examples	10



1. Introduction

The ThinScale Management PowerShell module allows PowerShell scripts to be written which can call functions present in the ThinScale Management Console. This enables certain operations to be automated rather than them having to be performed manually from within the console itself.

How this Guide Works

ThinScale installation and administration guides are designed to assist with the installation and configuration ThinScale solutions within your environment by providing an easy to follow, comprehensive, step-by-step set of illustrated instructions.

Throughout this guide, you will see various types of text such as URL's, command line entries, and on-screen text all represented using different styles and formatting to distinguish between the type of text.

The following table shows examples of these different styles:

On-Screen Text	Indicates text shown on the screen, such as menus, options, and click buttons, and other text information
<u>External URL</u>	Indicates a link to an external page/web site
Internal URL	Indicates a link to an internal web page such as a console
Command Line	Indicates something that you need to type in, such as command line instructions, scripts, usernames, and passwords
Commands	Indicates a command name or variable
Section Reference	Indicates a reference to another section within the document, such as another page or heading
<code>\server\folder</code>	Indicates a path to a folder or a shared folder



Document Revision History

The current version of this document, plus the version history details of what has changed.

Revision/Version	Date	Author(s)	Description
V3.1.0	January 2019	David Coombes	First Release
V5.0	January 2020	David Coombes	Second Release
V.5.2	July 2020	David Coombes	Third Release
V.5.4	March 2021	David Coombes	Fourth Release
V 7.0	April 2021	David Coombes	Fifth Release

2. Functions

The functions available in this version of the module are as follows:

Add-TSTMGMFolderPackageAssignment

Add-TSTMGMFolderProfileAssignment

Add-TSTMGMProfileRevision

Connect-TSTMGMTServer

Disconnect-TSTMGMTServer

Export-TSTMGMProfile

Get-TSTMGMTAllData

Get-TSTMGMTAccessKey

Get-TSTMGMTAccessKeys

Get-TSTMGMTAPResults

Get-TSTMGMTDevice

Get-TSTMGMTDevices

Get-TSTMGMTDeviceInventory

Get-TSTMGMFolder

Get-TSTMGMFolders

Get-TSTMGMTLicenseData

Get-TSTMGMProfile



Get-TSTMGMTProfileObject
Get-TSTMGMTProfileRevisions
Get-TSTMGMTProfiles
Get-TSTMGMTRefreshData
Get-TSTMGMTRole
Get-TSTMGMTRoles
Get-TSTMGMTSite
Get-TSTMGMTSites
Get-TSTMGMTUser
Get-TSTMGMTUsers
Import-TSTMGMTProfileObject
Invoke-TSTMGMTAdminAction
Move-TSTMGMTObject
Move-TSTMGMTObjects
New-TSTMGMTAddAce
New- TSTMGMTAccessKey
New-TSTMGMTDevice
New-TSTMGMTFolder
New-TSTMGMTProfile
New-TSTMGMTProfileObject
New-TSTMGMTRole
New-TSTMGMTSite
New-TSTMGMTUser
Remove-TSTMGMTFolderPackageAssignment
Remove-TSTMGMTFolderProfileAssignment
Remove-TSTMGMTObject
Rename-TSTMGMTObject
Reset-TSTMGMTDeviceLocationData
Set-TSTMGMTAccessKey
Set-TSTMGMTDeviceNotes
Set-TSTMGMTFolder



Set-TSTMGMTOBJECTSecurity

Set-TSTMGMTRole

Set-TSTMGMTSite

Set-TSTMGMTUser

Test-TSTMGMTObjectExists



3. Prerequisites

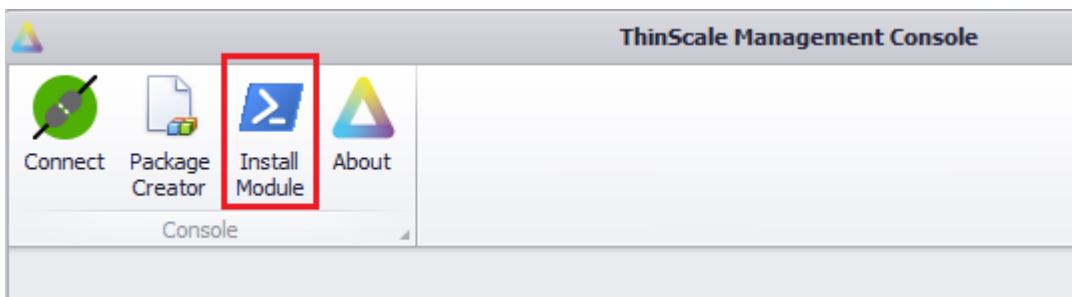
The module will only work on a machine where the ThinScale Management Console is also installed since it depends on some of the installed files.

The module requires a minimum of version 7.0 of PowerShell.

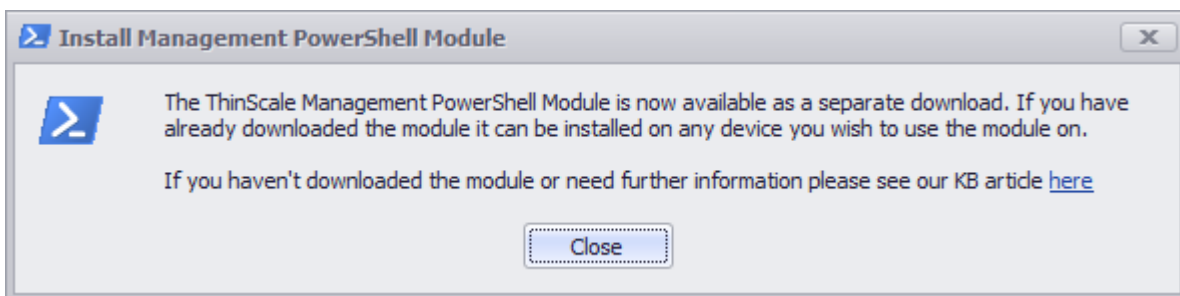
4. Installation

The module can be installed using the 'Install Module' icon from within the ThinScale Management Console.

Note: Powershell 7.x is required



This will allow you to install the module for just the current user or all users on the machine (requires administrative privileges)



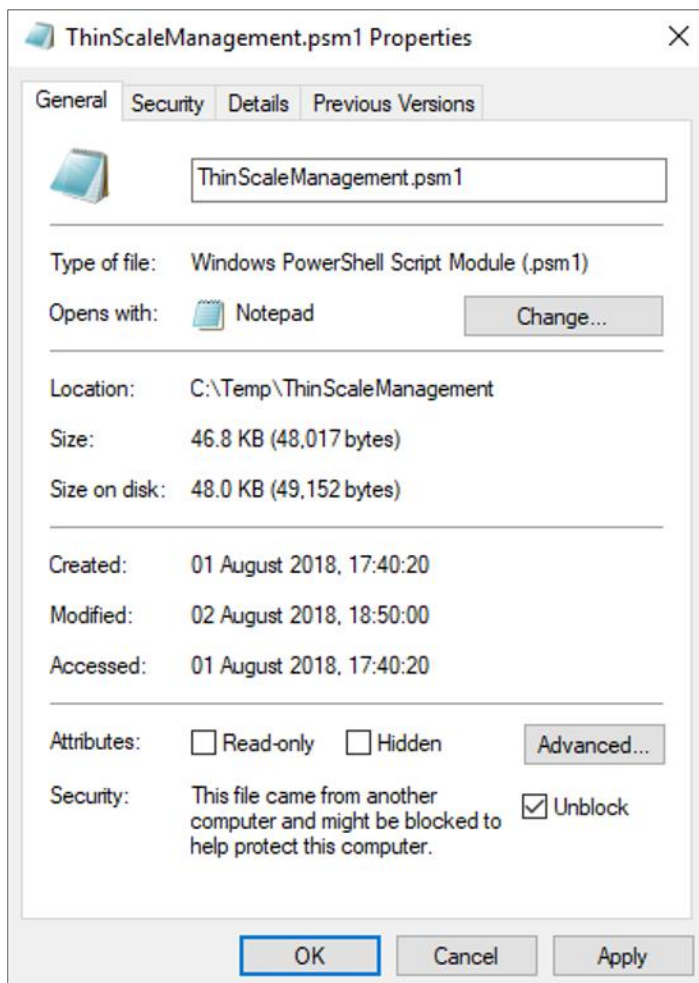
```
C:\Windows\System32\WindowsPowerShell\v1.0\Modules
<MyDocuments>\WindowsPowerShell\Modules
```

Where *<MyDocuments>* is the path to the installing user's documents folder, which is typically *%UserProfile%\Documents* unless folder redirection is in use.



Alternatively, copy the folder containing the module's files into a path contained within the `%PSModulePath%` environment variable or add the full path to the folder to this environment variable.

Depending on the unzip mechanism used and the location of the zip file, the PowerShell module files may be blocked. They can be unblocked using the `Unblock-File` cmdlet or by ticking the **Unblock** option in its properties and then clicking **OK** or **Apply**, as shown in the screenshot below:



5. Permissions

The module is digitally signed so can be run when the PowerShell execution policy is set to **AllSigned**.



6. Documentation

The module includes PowerShell compatible help for all functions. This can be accessed in two ways:

Using PowerShell's Get-Help cmdlet

Pressing the F1 key with the cursor in a ThinScale Management function when using PowerShell ISE

7. Usage

Once installed, the module is loaded by running the following command:

```
Import-Module ThinScaleManagement
```

A connection to a ThinScale Management server must then be made which returns an object which needs to be passed to all further ThinScale functions so should be stored in a variable:

```
Connect-TSTMGMTServer -uri "https://d7.thinscale.com" -username  
"bob@thinscale.com" -password "mypassworD"
```

An alternative to passing the URI, username and password is to set some, or all, of them in the environment variables [THINSCALE_URI](#), [THINSCALE_USERNAME](#) and [THINSCALE_PASSWORD](#) respectively.

The required function(s) can then be called bypassing the interface variable and other parameters as per the module's self-contained documentation. For example:

```
$alldata = Get-TSTMGMTAllData
```

Once all operations have been completed, the session should be disconnected using the following command:

```
Disconnect-TSTMGMTServer
```

This will invalidate the interface variable so if subsequent ThinScale functions need to be called, the [Connect-TSTMGMTServer](#) function must be called again and a new interface variable stored.



8. Parameters

Where existing objects, such as devices or folders, need to be passed as parameters to ThinScale functions, there are two ways of achieving this:

Specify it as an absolute string path such as **Devices\Production\Luxemburg\Device1234**

Specify the unique GUID for the item which can be obtained via the data returned from the [Get-TSTMGMTAllData](#) function or a call to [New-TSTMGMTFolder](#) or [New-TSTMGMTDevice](#)

All functions which require existing objects to be specified require different parameters to be used depending on whether a string or GUID is being passed to identify that object. For example:

```
New-TSTMgmtFolder -FolderName '\Devices\Production'  
New-TSTMgmtFolder -FolderName 'UAT' -ParentId 'A7955CE0-8743-44CD-  
87A1-BD6418085912' -DeviceState Disabled -  
DeviceStateMessage 'Devices in this folder are disabled'
```

Where the GUID passed via **-parentId** is the GUID of the folder **\Devices\Production**



9. Examples

An example script is available from ThinScale which demonstrates calling all the module's functions.

The script 'ThinScaleManagementExamples.ps1' is located in the PowerShellModule folder in the ThinScale Management Console installation folder.

For example: C:\Program Files (x86)\ThinScale Management Console\PowerShellModule, or alternatively have a look at the Knowledge Base articles which will explain in more details every single cmdlets.