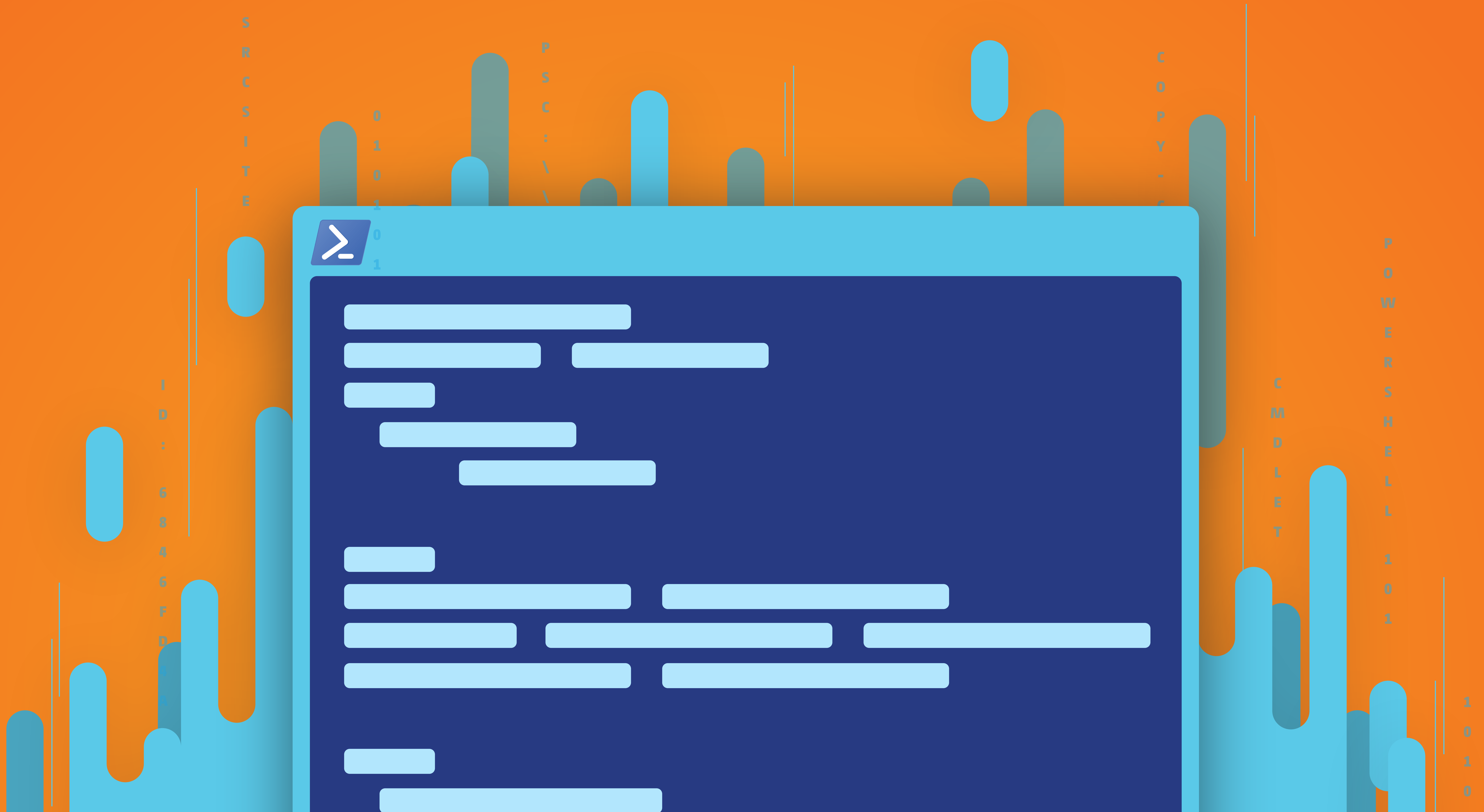
TOP 10 POWERSHELL COMMANDS

Every SharePoint Administrator Using Sharegate Should Know



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The History of PowerShell

PowerShell was first introduced in the fall of 2006, just a few months before the release of SharePoint 2007. Although the command line tool was available, STSADM was the tool all administrators used and that Microsoft considered the "standard command line tool" of choice. The release of SharePoint 2010 raised some eyebrows, as PowerShell introduced over 400 commands that interacted directly with any .NET object in a SharePoint environment, something STSADM wasn't able to do.

Fast forward to SharePoint 2013 and beyond, PowerShell is Microsoft's "standard command line tool" with more than 700 commands available on-premise and more being released frequently through the Office 365 platform. It's critical for administrators to understand how to utilize this powerful tool as it's the backbone to all things in your SharePoint environment.

What is PowerShell?

In its simplest form, PowerShell is a language that allows individuals to run scripts or single commands using what is called a cmdlet. A cmdlet is an executable or command that consist of two parts. The first is the call to action such as "Get", "Set", "Add" and "Remove". The second part is the object you want to take action on. For example, if I wanted a list of all my SharePoint site collections I could use the cmdlet "*Get-SPSite*".

While manually running single cmdlets can be extremely useful, PowerShell also has the ability to run scripts! Scripting through PowerShell is one of the most powerful ways to place automation around many of your day to day processes. An example of this may, be if your application pools are recycled each night to run a SharePoint warm-up script on your environment. This will ensure your SharePoint pages are ready to go each morning with maximum response times.

The Simple PowerShell Solution

Although out of the box SharePoint provides a total of 700+ cmdlets, there are a number of commands that Sharegate offers which are just damn simple to use. Whether you're looking to export migration reports for a recent deployment or simply want a list of subsites, in this White Paper we will cover the top 10 Sharegate PowerShell cmdlets that will make your life simpler.

Don't worry if you don't consider yourself an expert PowerShell user. Each of these cmdlets use a simple naming convention that will make it easy for you to identify and even remember as you begin to use them. Rest assured, you don't need to be a super geek, or even a geek for that matter, to benefit from these commands. With that said put your nerd glasses on and let's dive into these excellent commands.

CMDLET #1

Connecting to One or More Subsites

You're the SharePoint administrator for a company and you need a quick and simple way to get a list of all the subsites for a particular site in your environment. Sharegate has created a simple cmdlet that is easy to remember and use to resolve your issue!

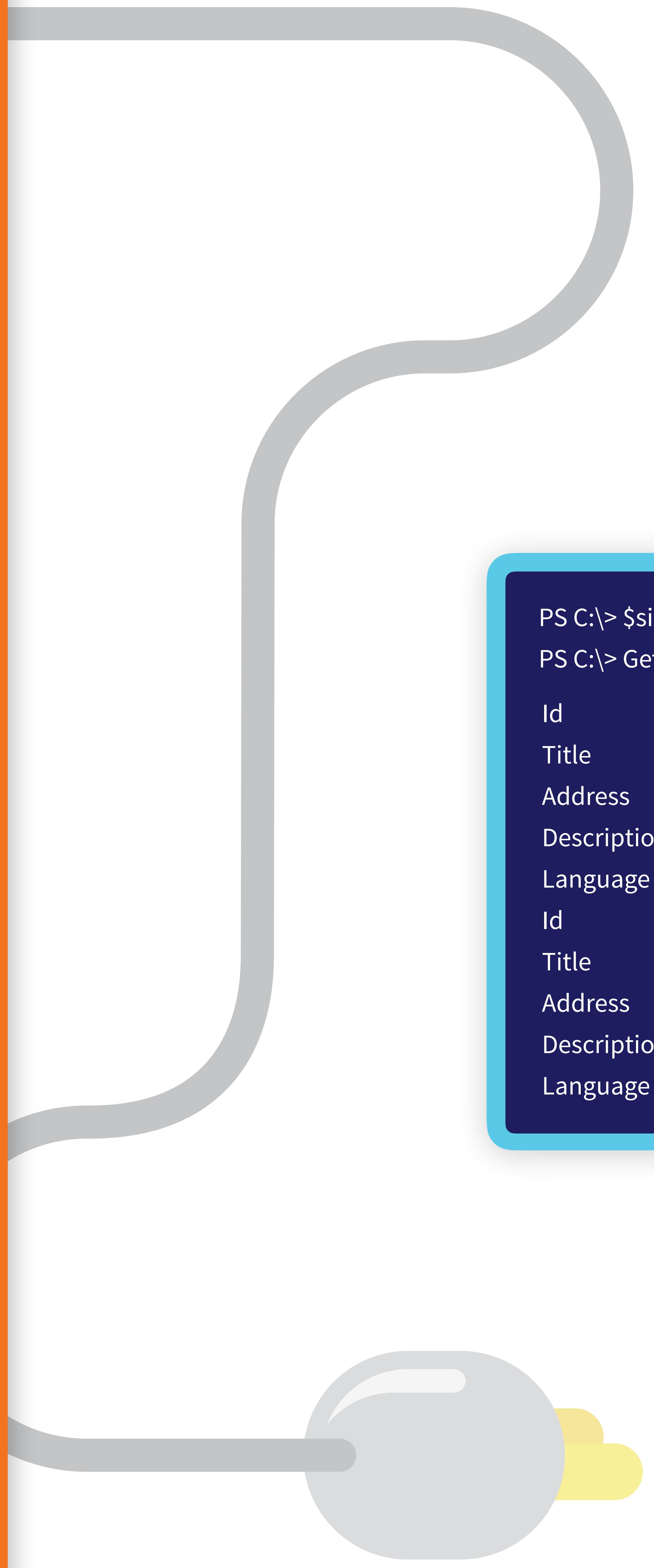
Get-Subsite

To utilize this and any other cmdlet within the Sharegate world, we first must connect to our SharePoint site. To do this we'd simply use the cmdlet.

Connect-Site

Ok so let's look at a few examples:

See Get-Subsite Examples



EXAMPLE 1

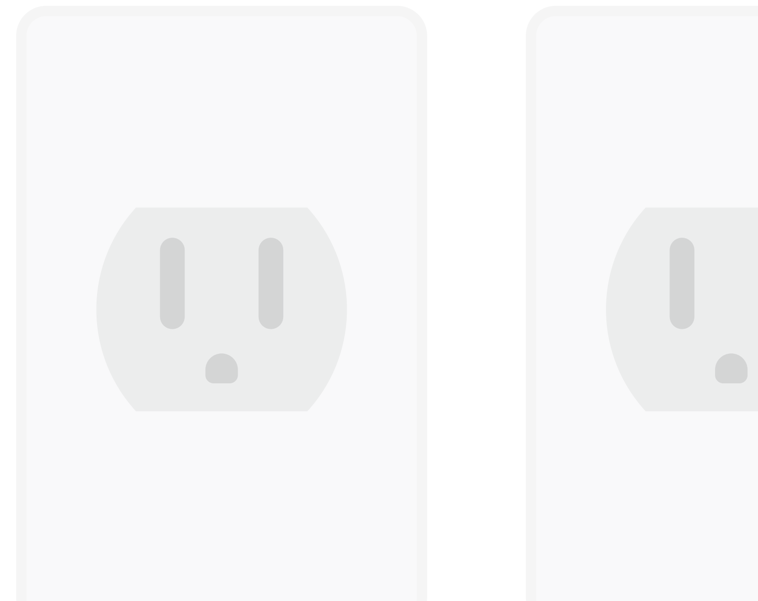
Our manager has requested a listing of all our Subsites.

This example would consist of us connecting to the site and then running the *Get-Subsite* cmdlet with the Site parameter (in our case using the variable *$site*) to identify which site to get the subsite listing.

```
PS C:\> $site = Connect-Site -Url http://myfarm1/sites/mysitecollection
PS C:\> Get-Subsite -Site $site

Id            : 6846fd4a-8790-4b69-9ae4-546121b4e95f
Title         : A Subsite 1
Address       : http://myfamr1/sites/mysitecollection/ASubsite1/
Description   :
Language      : English (United States)
Id            : 897fd4a-8790-4b69-9ae4-546121b4e95f
Title         : A Subsite 2
Address       : http://myfamr1/sites/mysitecollection/ASubsite2/
Description   :
Language      : English (United States)
```

Our results show there are two subsites (*A Subsite 1* and *A Subsite 2*) located in the *mysitecollection* site.



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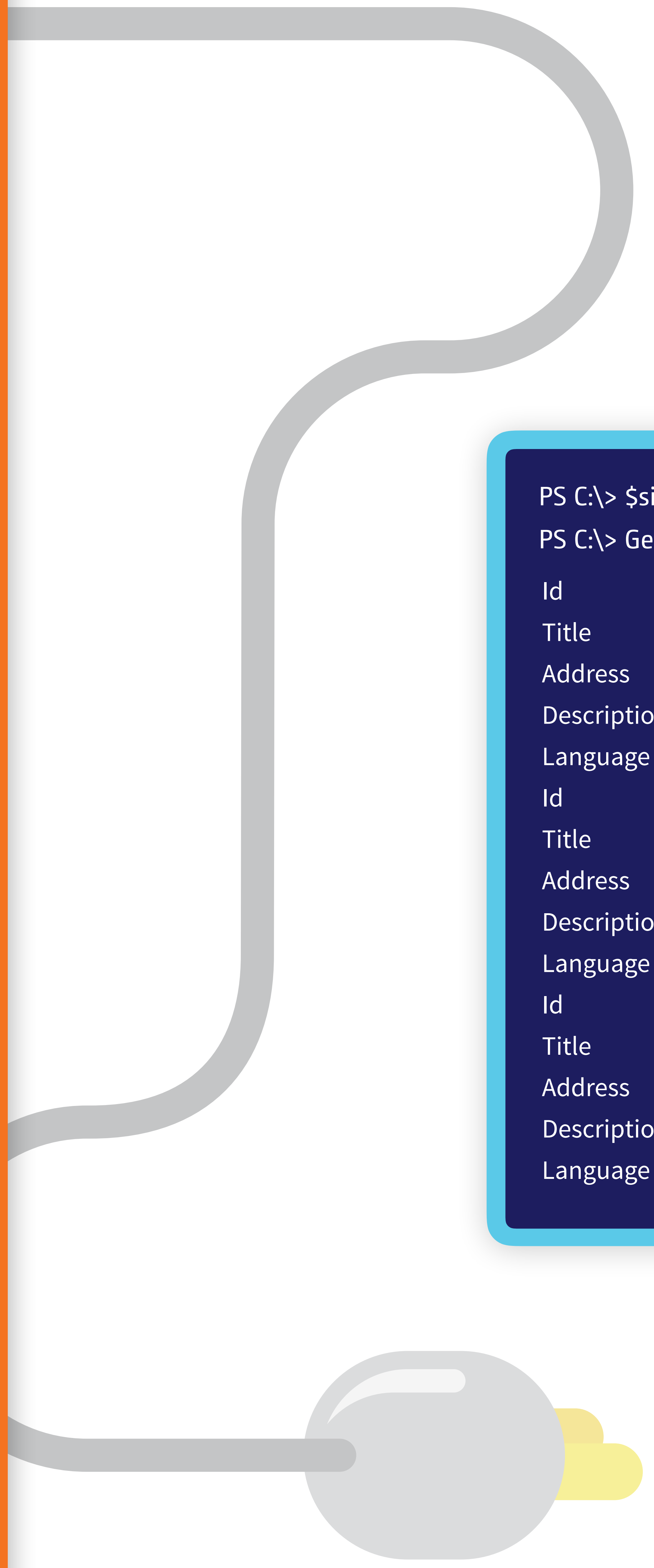


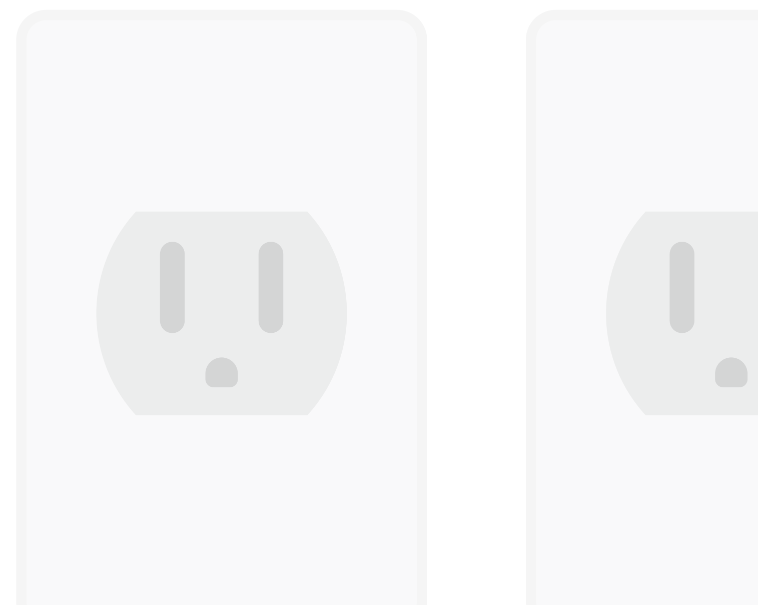
EXAMPLE 2

We are working on a large project that is utilizing multiple subsites.

Each of the subsite names start with *MyName* or *MySpecificName*. We can use the Name parameter along with the *Get-Subsite* cmdlet to list only these subsites.

```
PS C:\> $site = Connect-Site -Url http://myfarm1/sites/mysitecollection
PS C:\> Get-Subsite -Site $site -Name MyName*,MySpecificName
Id           : 6846fd4a-8790-4b69-9ae4-546121b4e95f
Title        : MyNameSubsite1
Address      : http://myfarm1/sites/mysitecollection/MyNameSubsite1/
Description  :
Language     : English (United States)
Id           : 897fd4a-8790-4b69-9ae4-546121b4e95f
Title        : MyNameSubsite2
Address      : http://myfarm1/sites/mysitecollection/MyNameSubsite2/
Description  :
Language     : English (United States)
Id           : 897fd4a-8790-4b69-9ae4-546121b4e95f
Title        : MySpecificName
Address      : http://myfarm1/sites/mysitecollection/MySpecificName/
Description  :
Language     : English (United States)
```

The results show that we have two subsites that start with *MyName,* and one subsite returned as *MySpecificName.*



CMDLET #2

Configure One or More Copy Settings

There may be instances in your daily tasks that will require you to work with two identical lists. Maybe two departments share the same files or you have a list that needs to be copied to another location. Digging deeper into the file structure, you may even notice identical documents in both departments. You can easily copy only the newest or updated versions of a file by using the cmdlet *New-CopySettings.*

New-CopySettings

Let's take a look at a few examples of how this works.

See New Copy Settings Examples

EXAMPLE 1

You have a library named *mysrclist* within the *mysourcesite* site. We need to copy the documents to another library named *mydstlist* in the *mydestinationsite* site. Most of the documents in the *mysrclist* are unique, but there are a few documents we can identify that are the same in the *mysrclist* and the *mydstlist* libraries. For these documents that are identical, we only want the most recent document.

To perform this task, we can create a variable $*copysettings*, set it equal to the *New-CopySettings* cmdlet and add the parameter *OnContentItemExists* set to *IncrementalUpdate*. If a source document already exists at the destination, Sharegate will look at the modified date and only overwrite if the modified date is greater at the source than at the destination.

```
PS C:\> $copysettings = New-CopySettings -OnContentItemExists IncrementalUpdate
PS C:\> $srcSite = Connect-Site -Url http://myfarm1/sites/mysourcesite
PS C:\> $dstSite = Connect-Site -Url http://myfarm1/sites/mydestinationsite
PS C:\> $srcList = Get-List -Name mysrclist -Site $srcSite
PS C:\> $dstList = Get-List -Name mydstlist -Site $dstSite
PS C:\> Copy-Content -SourceList $srcList -DestinationList $dstList -CopySettings $copysettings

Result          : Operation completed successfully.
```

CMDLET #2

Configure One or More Copy Settings

There may be instances in your daily tasks that will require you to work with two identical lists. Maybe two departments share the same files or you have a list that needs to be copied to another location. Digging deeper into the file structure, you may even notice identical documents in both departments. You can easily copy only the newest or updated versions of a file by using the cmdlet *New-CopySettings.*

New-CopySettings

Let's take a look at a few examples of how this works.

See New Copy Settings Examples

EXAMPLE 2

We now want to copy all the lists in the *mysourcesite* site over to the *mydestinationsite* site. Additionally, if we return any errors or warnings on the copy, we want to cancel the action. If there are any identical objects, then we want to skip the copy, and we want to set the *VersionOrModerationComment* to *"Moderate by migration"*.

To accomplish this task, we need to set our variable *$copysettings* equal to the cmdlet *New-CopySettings* and add the parameters *OnError* set to cancel and *OnWarning* set to cancel in the event there is an error or warning. We also need to set both the *OnContentItemExists* and *OnSiteObjectExists* to skip in the event an identical item is identified. Lastly, we set the *VersionOrModerationComment* to *"Moderate by migration"*.

```
PS C:\> $copysettings = New-CopySettings -OnError Cancel -OnWarning Cancel -OnContentItemExists
Skip -OnSiteObjectExists Skip -VersionOrModerationComment "Moderate by migration"
PS C:\> $srcSite = Connect-Site -Url http://myfarm1/sites/mysourcesite
PS C:\> $dstSite = Connect-Site -Url http://myfarm1/sites/mydestinationsite
PS C:\> Copy-List -All -SourceSite $srcSite -DestinationSite $dstSite -CopySettings $copysettings

Result          : Operation completed successfully.
```

CMDLET #3

Select One or More Objects

A common action when working with objects, whether it's a list, library, site column or term set is to get an object. One of the more popular items to "get" is a list or a library. This can easily be accomplished with Sharegate PowerShell cmdlets by simple using *Get-List.*

Get-List

Using the *Get-List* cmdlet along with its parameters Name and Site, you'll have the flexibility to identify a SharePoint site and name of a list or library that you are looking to get. Let's take a look at a few scenarios.

View Get-List Examples

You're the admin of a site and were asked to get a list of all the lists within a particular SharePoint site. The SharePoint farm has a large number of sites, but we only need a list of all the SharePoint lists for the site *mysitecollection*.

We'd start by creating a variable (*$site*) which would connect to our site named *mysitecollection*. We would then run the *Get-List* cmdlet along with the *Site* parameter to get a full listing of all the lists in that site.

After we run the command, we'll notice we've pulled a full listing of the two lists named *Announcements* and *Calendar,* as well as one library named *Customized Reports* from our site.

EXAMPLE 1

```
PS C:\> $site = Connect-Site -Url http://myfarm1/sites/mysitecollection
PS C:\> Get-List -Site $site

Id                    : 6846fd4a-8790-4b69-9ae4-546121b4e95f
Title                 : Announcements
BaseType              : List
Source                : /sites/mysitecollection/
ContentApproval       : False
RootFolder            : /sites/mysitecollection/Lists/Announcements/
EnableAttachments     : True
EnableVersioning      : False
EnableMinorVersions   : False
ForceCheckout         : False
Site                  : Sharegate.Automation.Entities.Site
Id                    : 4686fd4a-8790-4b69-9ae4-546121b4e95f
Title                 : Calendar
BaseType              : List
Source                : /sites/mysitecollection/
ContentApproval       : False
RootFolder            : /sites/mysitecollection/Lists/Calendar
EnableAttachments     : True
EnableVersioning      : False
EnableMinorVersions   : False
ForceCheckout         : False
Site                  : Sharegate.Automation.Entities.Site
Id                    : 5146fd4a-8790-4b69-9ae4-546121b4e95f
Title                 : Customized Reports
BaseType              : Document Library
```

CMDLET #3

Select One or More Objects

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View Get-List Examples

EXAMPLE 2

Now that we've pulled a listing of all the lists and libraries within the site, we'd like to pull a list by a particular id next. Using the *Get-List* cmdlet, we can utilize the ID parameter to get the needed list!

```
PS C:\> $site = Connect-Site -Url http://myfarm1/sites/mysitecollection
PS C:\> Get-List -Site $site -Id 1ca5588e-1283-41fa-b3df-511b39f28756

Id              :  1ca5588e-1283-41fa-b3df-511b39f28756
Title           :  MySpecificName
BaseType        :  Document Library
Source          :  /sites/mysitecollection/
```

Exactly as expected, we've pulled the list for the needed ID and we can see that the list name is *MySpecificName*.

HINT: Did you know that you can also do the same to map users, roles. site columns, and site templates ?!

CMDLET #4

Copy Site Objects

For anyone who has had to copy or move lists with regular PowerShell cmdlets in the past, the mere thought of performing these tasks doesn't exactly inspire excitement. What if I told you there was a simple cmdlet available with a plethora of parameters called *Copy-List*.

Copy-List

This cmdlet allows users the to copy lists or libraries from one SharePoint site to another using a source parameter named *SourceSite* and a destination parameter named *DestinationSite*. Using these parameters, along with specifying a list to copy, you will be well on your way to SharePoint guru status!

Discover Copy-List Examples

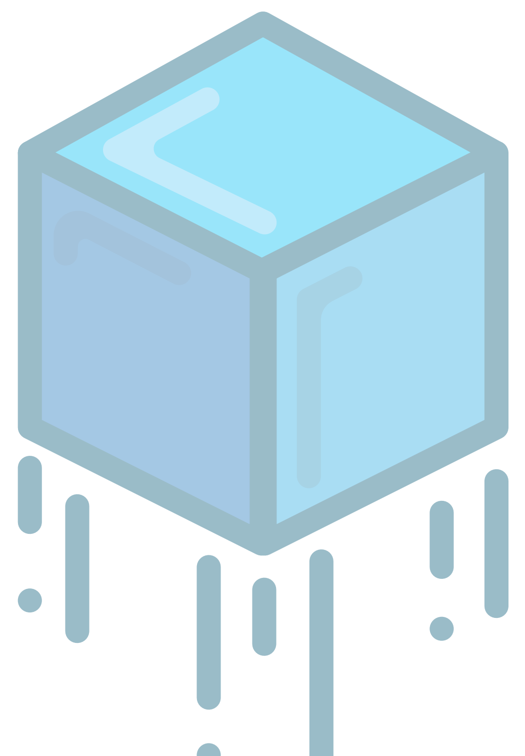
EXAMPLE 1

You're the administrator and you're asked to quickly move all the lists from the *mysourcesite* site to the *mydestinationsite* site.

To accomplish this task, we would first create a variable for both the source and destination sites. Secondly, we would create a copy variable (*$toCopy*) to get the lists from the source site. Lastly, we would need to copy the lists to the destination by running the cmdlet *Copy-List* as follows:

```
PS C:\> $srcSite = Connect-Site -Url http://myfarm1/sites/mysourcesite
PS C:\> $dstSite = Connect-Site -Url http://myfarm1/sites/mydestinationsite
PS C:\> $toCopy = Get-List -Site $srcSite
PS C:\> Copy-List -List $toCopy -DestinationSite $dstSite

Result             : Operation completed successfully.
SessionId          : 140221-1
SiteObjectsCopied  : 129
ItemsCopied        : 459
Warning            : 0
Errors             : 0
```



We can confirm that the copy action was successful as the result gives us an "*Operation completed successfully*" prompt. We can also see that there was a total of 459 items that were copied to the destination site.

CMDLET #4

Copy Site Objects

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Discover Copy-List Examples

EXAMPLE 2

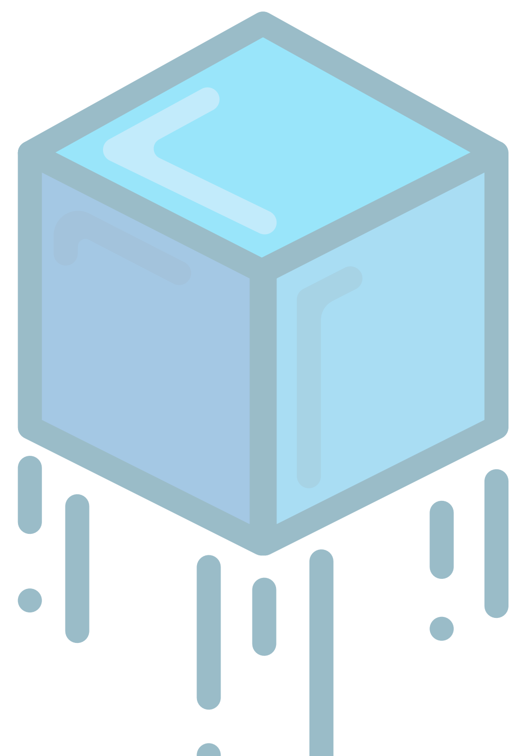
You're looking to quickly move source site content to the destination site. But this time, instead of all the lists and libraries, we only want to copy over the *MySpecificTitle* list, as well as any list that begins with *MyTitle*.

To accomplish the above task, we'd create a variable for the destination, connect to the source and use a pipeline to copy the list to the specified lists. Lastly, we need to add the *DestinationSite* parameter that would use the destination variable (*$dstSite*) created to tell the copy action where to go which, in our example, is to *http://myfarm1/sites/mydestinationsite*.

```
PS C:\>  $srcSite = Connect-Site -Url http://farm1/sites/mysourcesite
PS C:\> $dstSite = Connect-Site -Url http://myfarm1/sites/mydestinationsite
PS C:\> Copy-List -Name MyTitle*,MySpecificTitle -SourceSite $srcSite -DestinationSite $dstSite

Result               :  Operation completed successfully.
SessionId            :  140221-4
SiteObjectsCopied    :  9
ItemsCopied          :  52
Warning              :  0
Errors               :  0
```

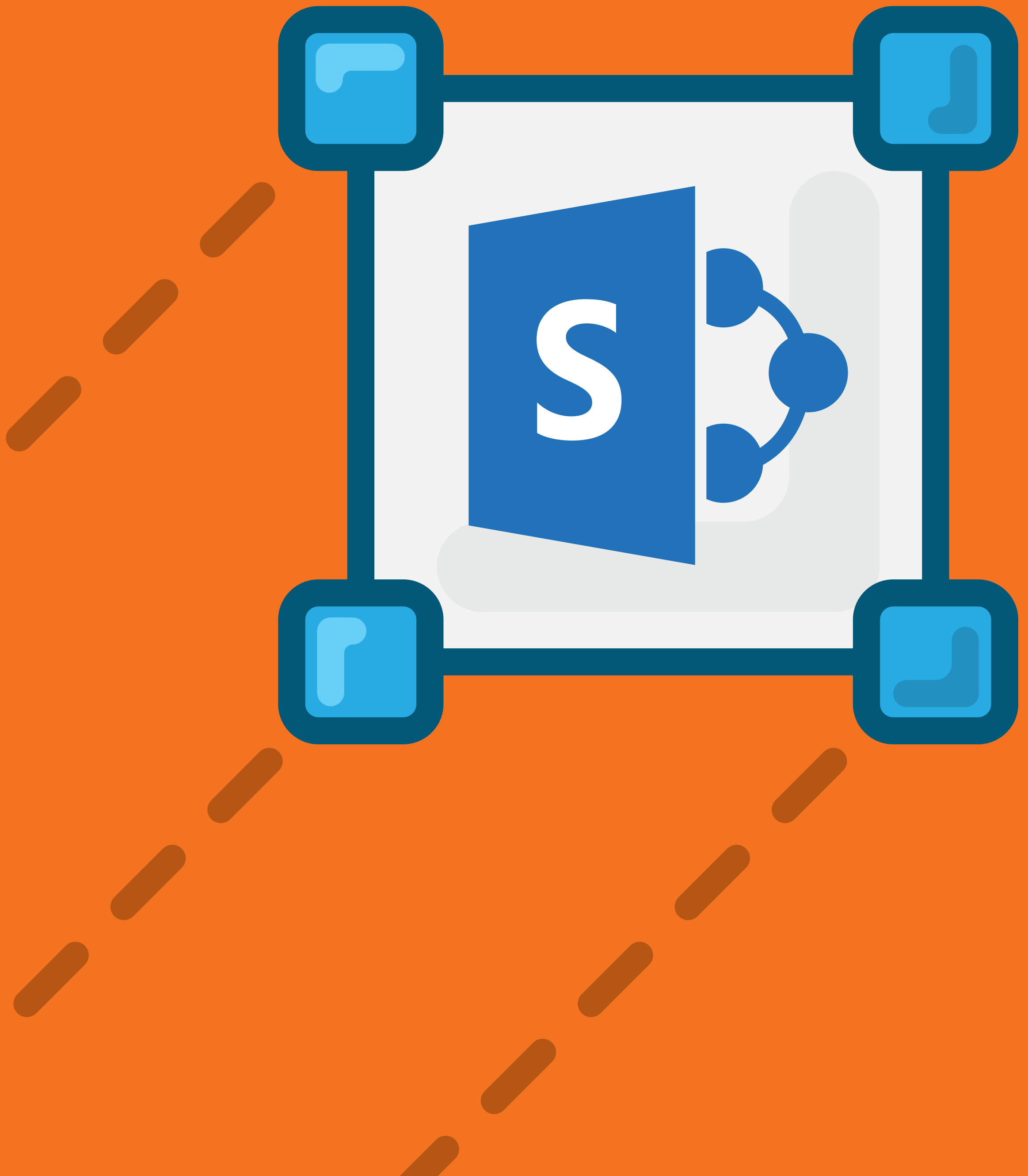
The results of our command show that the "*Operation completed successfully*" with 52 items copied!



CMDLET #5

Copy SharePoint Content

Similar to the previous cmdlet where we looked at moving site objects to another destination, cmdlet #5 focuses on copying objects at the item level. We may have sites that have 20 lists. Instead of moving them, we simply want to copy items from one list to another. For this, we'll use the cmdlet *Copy-Content.*



Copy-Content

There's a few cmdlets that administrators should be familiar with, and this one could arguably be number 1 on the list. How many times a month or week does an end-user ask "how do I move this document in *libraryA* to *libraryB*?". Of course, one of our options is to use the explorer view option within the two libraries and simply drag and drop the files to *libraryB*. However, what if we need to move multiple files in a large library quickly? Let's look at a few scenarios where this cmdlet can make our jobs a little easier.

See Copy-Content Examples

EXAMPLE 1

Let's start simple. Pretend you're asked to copy all content from a list named *mysrclist* located in the *mysourcesite* site to a list named *mydstlist* list located in the *mydestinationsite* site.

We can accomplish this by creating variables for the source site ($srcSite), destination site (*$dstSite*), source list (*$srcList*), and destination lists (*$dstList*). We would then run the cmdlet *Copy-Content* using the parameters *SoureList* and *DestinationList*.

```
PS C:\> $srcSite = Connect-Site -Url http://myfarm1/sites/mysourcesite
PS C:\> $dstSite = Connect-Site -Url http://myfarm1/sites/mydestinationsite
PS C:\> $srcList = Get-List -Name mysrclist -Site $srcSite
PS C:\> $dstList = Get-List -Name mydstlist -Site $dstSite
PS C:\> Copy-Content -SourceList $srcList -DestinationList $dstList

 Result              :  Operation completed successfully.
 SessionId           :  140226-1
 SiteObjectsCopied   :  0
 ItemsCopied         :  403
 Warning             :  0
 Errors              :  0
```

Our successful results show we have copied 403 items to the destination list. Hooray!!!

CMDLET #5

Copy SharePoint Content

Similar to the previous cmdlet where we looked at moving site objects to another destination, cmdlet #5 focuses on copying objects at the item level. We may have sites that have 20 lists. Instead of moving them, we simply want to copy items from one list to another. For this, we'll use the cmdlet *Copy-Content.*

Copy-Content

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See Copy-Content Examples

EXAMPLE 2

In this example, we need to copy all content from the list named *mysrclist* located in the *mysourcesite* site to the list named *mydstlist,* located in the *mydestinationsite* site. This time, we want to increase the speed of the action by copying the content as quickly as possible. Therefore, we would use the Insane Mode parameter.

You'll notice the variables and cmdlets are all the same from example 1, only this time we've added the *InsaneMode* parameter to increase the copy speed.

```
PS C:\> $srcSite = Connect-Site -Url http://myfarm1/sites/mysourcesite
PS C:\> $dstSite = Connect-Site -Url http://myfarm1/sites/mydestinationsite
PS C:\> $srcList = Get-List -Name mysrclist -Site $srcSite
PS C:\> $dstList = Get-List -Name mydstlist -Site $dstSite
PS C:\> Copy-Content -SourceList $srcList -DestinationList $dstList -InsaneMode

Result             :  Operation completed successfully.
SessionId          :  150505-1
SiteObjectsCopied  :  0
ItemsCopied        :  403
Warning            :  0
Errors             :  0
```

Click here for more on Insane Mode

CMDLET #5

Copy SharePoint Content

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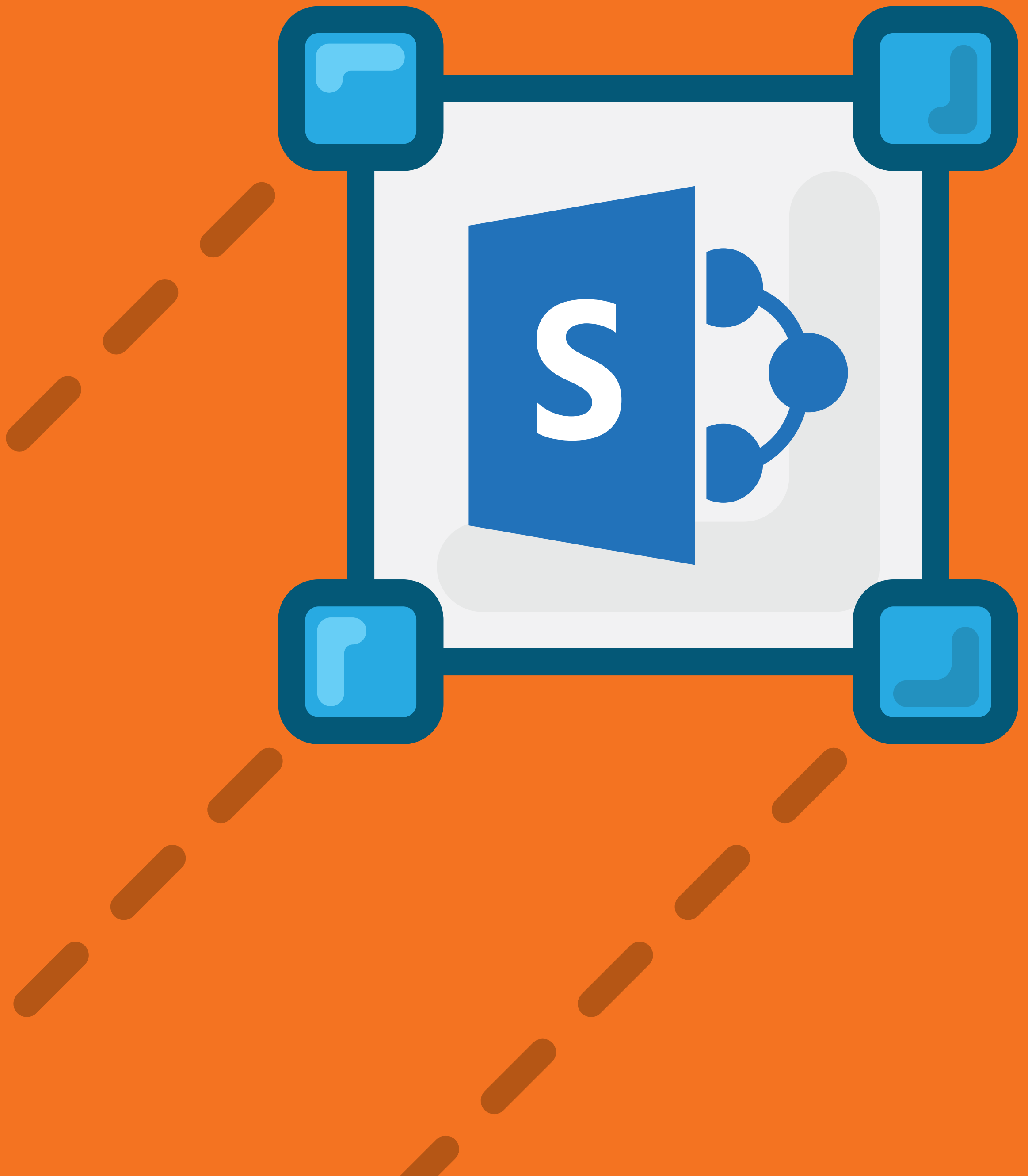


Copy-Content

There's a few cmdlets that administrators should be familiar with, and this one could arguably be number 1 on the list. How many times a month or week does an end-user ask "how do I move this document in *libraryA* to *libraryB*?". Of course one of our options is to use the explorer view option within the two libraries and simply drag and drop the files to *libraryB.* However, what if we need to move multiple files in a large library quickly? Let's look at a few scenarios where this cmdlet can make our jobs a little easier.

See Copy-Content Examples

EXAMPLE 3

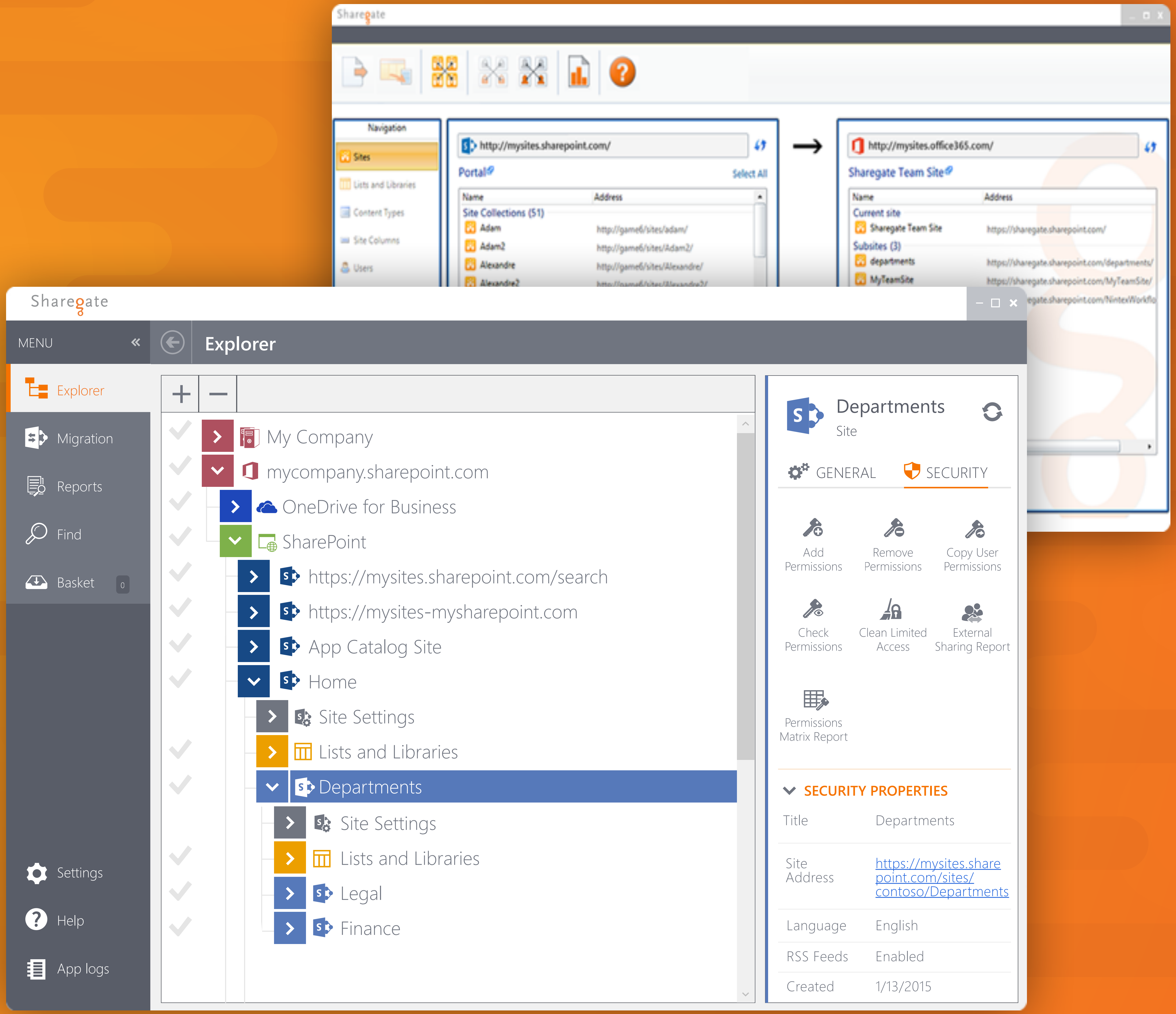
In our last example, we dealt with files that only needed to be moved. This time, however, we need to move them to a folder where we can maintain the documents. Like example 1 and 2 we will need to specify the source site and library as well as the destination site and library. We will then run our *Copy-Content* cmdlet using the parameter S*ourceFilePath* to identify the specific files to copy, and also the *DestinationFolder* parameter to specify which folder to copy the files to.

```
PS C:\> $srcSite = Connect-Site -Url http://myfarm1/sites/mysourcesite
PS C:\> $dstSite = Connect-Site -Url http://myfarm1/sites/mydestinationsite
PS C:\> $srcList = Get-List -Name mysrclist -Site $srcSite
PS C:\> $dstList = Get-List -Name mydstlist -Site $dstSite
PS C:\> Copy-Content -SourceList $srcList -DestinationList $dstList -SourceFilePath “Document1.txt”,
“Folder/Document2.txt” -DestinationFolder “MyDestinationFolder”

Result              :  Operation completed successfully.
SessionId           :  140226-1
SiteObjectsCopied   :  0
ItemsCopied         :  2
```

Sharegate

Your #1 Tool to Simplify SharePoint & Office 365 Management

Start Using PowerShell with Sharegate



CMDLET #6

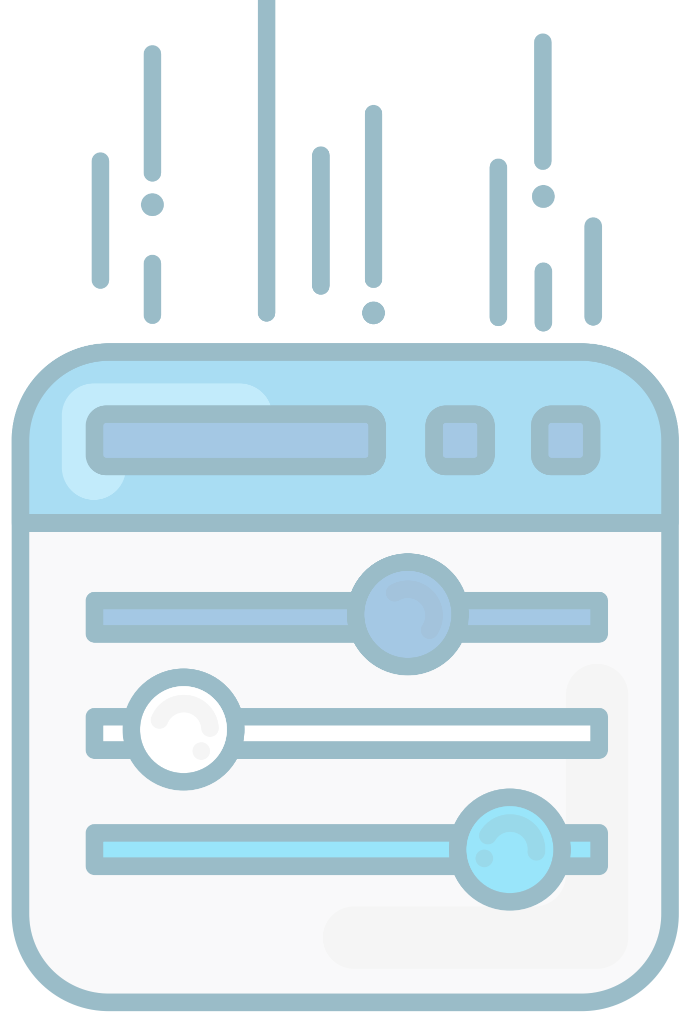
Create a Property Template

If you're looking for greater control when copying content during a migration, then the property template is your best friend. The property template allows you to select the options used for copying and setting custom actions for all of the destination list or library columns. To create a new property template, you would run the cmdlet called *New-PropertyTemplate.*

New-PropertyTemplate

The easiest way to understand this command is to see it in action, so here we go.

See New-PropertyTemplate Examples



EXAMPLE

You're the administrator for your company and you've noticed that when you're using the *Copy-Content* cmdlet, all the metadata on the items, such as the version history, timestamps and permissions aren't being copied over to the destination list. We need to create a simple way to consistently preserve all the necessary document metadata each time we perform a copy action. Our requirements are to preserve the authors and timestamps, version history, permissions, webparts, specific version limit, and content approvals must stay the same. Lastly, we need to ensure we copy all metadata for an object during the full 2012 calendar year.

To accomplish this task, we can simply create a variable (*$propertytTemplate*) setting it equal to the *New-PropertyTemplate* cmdlet while adding the appropriate parameters to the template. We would then specify the source site to connect to, and get the source list. Then, we'd do the same for the destination site and list. Lastly, we need to run the *Copy-Content* cmdlet to perform the copy, while ensuring the Template parameter is using the property template variable we created under *$propertyTemplate*.

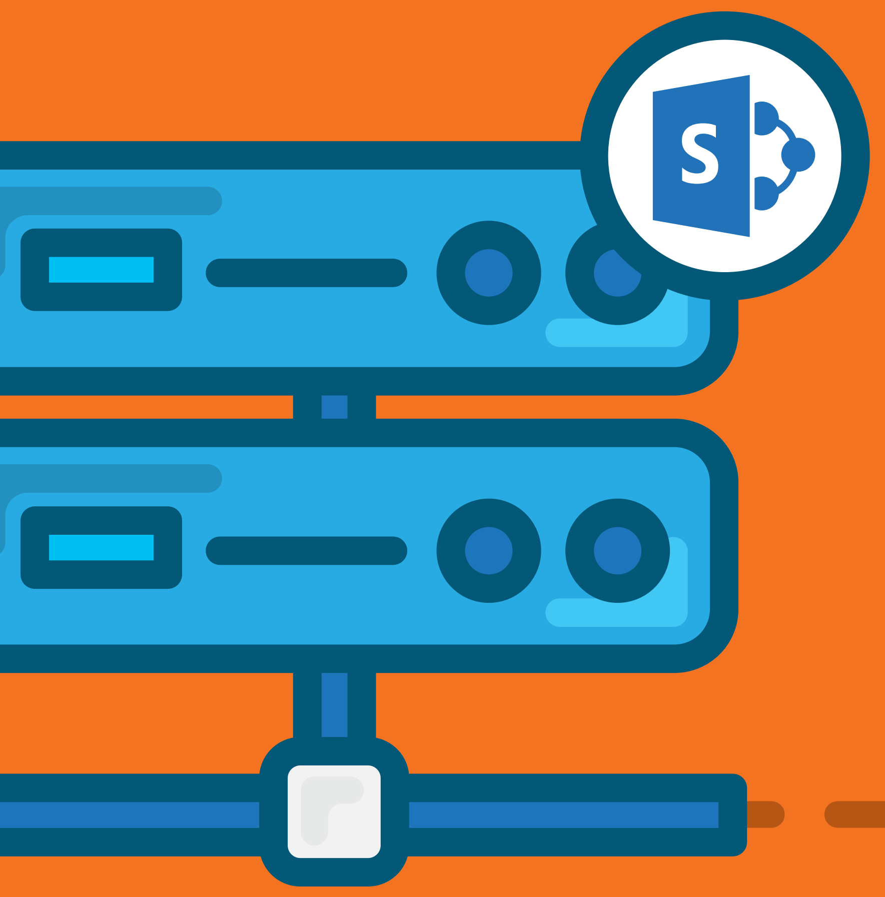
```
PS C:\> $propertyTemplate = New-PropertyTemplate -AuthorsAndTimestamps -VersionHistory
-Permissions -WebParts -NoLinkCorrection -FlattenFolders -VersionLimit 5 -CheckInAs Publish
-ContentApproval SameAsCurrent -From2012-01-01 -To 2012-12-31
PS C:\> $srcList = Connect-Site -Url http://myfarm1/sites/mysourcesite | Get-List -Name mysrclist
PS C:\> $dstList = Connect-Site -Url http://myfarm1/sites/mydestinationsite | Get-List -Name mydstlist
PS C:\> Copy-Content -SourceList $srcList -DestinationList $dstList -Template $propertyTemplate

Result                    :  Operation completed successfully.
```

The results show "*Operation completed successfully*", with all the appropriate metadata preserved during the copy.

CMDLET #7

Import Documents From a Local Computer into SharePoint

Let's face it, although SharePoint is a highly available platform that's backed up daily, we sometimes aren't too smart, and save files to our local computer anyway. The outcome of losing an important file we think may be "safe" can result in a disaster if the computer dies. No worries, we can easily add these files to SharePoint by running the *Import-Document* cmdlet.



Import-Document

The *Import-Document* provides numerous parameters in which we can easily use to import a document to a SharePoint library. When using the cmdlet, you must have some sort of source such as a *SourceFolder, SourceFilePath* or *ExcelFilePath*. It also must have a specified destination path, such as the parameter *DestinationList* or *DestinationFolder* to copy the file(s) to. Additionally, you have a number of other parameters such as *InsaneMode*, mapping to another location with the *MappingSettings*, copy the same settings with *CopySettings*, as well as the *PropertyTemplate* we discussed earlier.

View Import Document Examples

EXAMPLE 1

We currently have a folder on our local computer that has a few documents we need to move to a SharePoint library named *mydstlib*.

To import all the documents located in the folder named *documentsToImport*, we first need to create a variable that will connect to the destination site (*$dstSite*) and also a variable to the destination library (*$dstList*). Lastly, we need to run the cmdlet *Import-Document* with the parameters *SourceFolder* and *DestinationList*.

```
PS C:\> $dstSite = Connect-Site -Url http://myfarm1/sites/mydestinationsite
PS C:\> $dstList = Get-List -Name mydstlib -Site $dstSite
PS C:\> Import-Document -SourceFolder \\mysharedrive\documentsToImport\ -DestinationList $dstL

Result              :  Operation completed successfully.
SessionId           :  140226-1
SiteObjectsCopied   :  0
ItemsCopied         :  26
Warning             :  0
Errors              :  0
```

We can see that the "*Operation completed successfully*", with all 26 documents in the source folder imported to the SharePoint library.

CMDLET #7

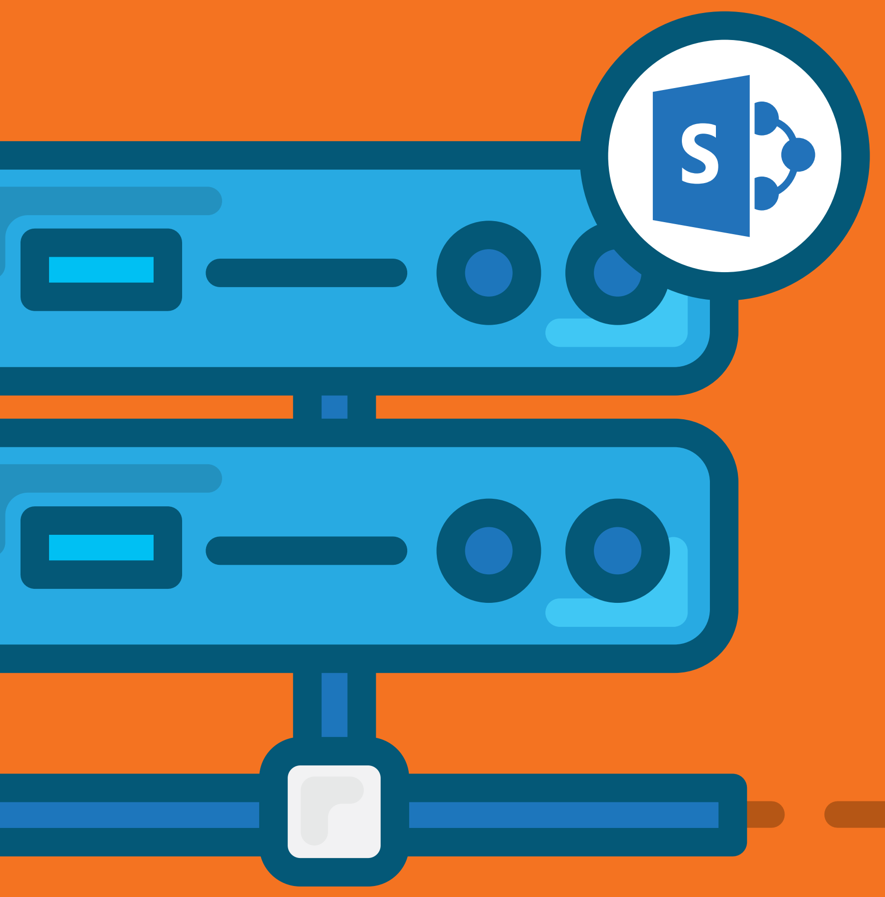
Import Documents From a Local Computer into SharePoint

Let's face it, although SharePoint is a highly available platform that's backed up daily, we sometimes aren't too smart, and save files to our local computer anyway. The outcome of losing an important file we think may be "safe" can result in a disaster if the computer dies. No worries, we can easily add these files to SharePoint by running the *Import-Document* cmdlet.

Import-Document

The *Import-Document* provides numerous parameters in which we can easily use to import a document to a SharePoint library. When using the cmdlet, you must have some sort of source such as a *SourceFolder, SourceFilePath* or *ExcelFilePath*. It also must have a specified destination path, such as the parameter *DestinationList* or *DestinationFolder* to copy the file(s) to. Additionally, you have a number of other parameters such as *InsaneMode*, mapping to another location with the *MappingSettings*, copy the same settings with *CopySettings*, as well as the *PropertyTemplate* we discussed earlier.

View Import Document Examples



EXAMPLE 2

Similar to example 1, we want to import documents to a SharePoint library named *mydstlib*, but this time we only need to import files titled *Document1.txt* and *Document2.txt*. Additionally, instead of importing them straight to the library, we need to import them within a folder in the library named MyDestinationFolder.

To accomplish this task, we'll connect to the destination site *mydestinationsite*, get the library *mydstlib* and now we can run the cmdlet *Import-Document* using the parameters *DestinationList*, *SourceFilePath* to identify the two documents and the *DestinationFolder* parameter to identify the folder we want to import too.

```
PS C:\> $dstSite = Connect-Site -Url http://myfarm1/sites/mydestinationsite
PS C:\> $dstSite = Get-List -Name mydstlib -Site $dstSite
PS C:\> Import-Document -DestinationList $dstList -SourceFilePath "\\mysharedrive
\documentsToImport\Document1.txt", "\\mysharedrive\Folder\Document2.txt" -DestinationFolder
"MyDestinationFolder"

Result              : Operation completed successfully.
SessionId           : 140226-1
SiteObjectsCopied   : 0
ItemsCopied         : 2
Warning             : 0
Errors              : 0
```

The two takeaways to understand are that we used the *SourceFilePath* when selecting specific files, and that we used the *SourceFolder* parameter when importing all documents within a specific folder. We see that the two documents were successfully imported!

CMDLET #8

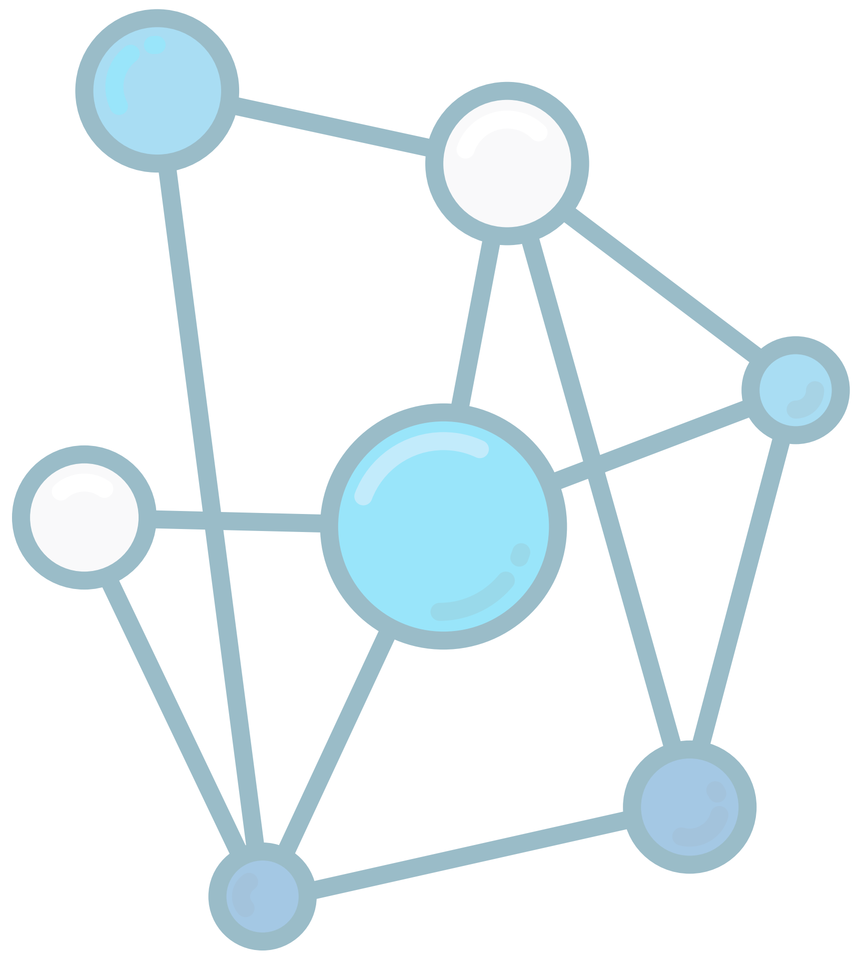
Import Property Mappings Previously Exported

In a case where we've exported a set of property mappings, user and group mappings, content type mappings, site template mappings or permission level mappings, we can use the unique mapping cmdlet to import the files back to our environment. While each of these mappings use a different cmdlet name, they all share similar parameters which we'll dive into shortly. First, let's look at the *Import-PropertyMapping* cmdlet.

Import-PropertyMapping

The purpose of this command is to import the property mappings from a previously exported file. The parameters that each of these cmdlets use consist of the *MappingSettings* parameter and the *Path* parameter which points to the location of the previously exported mapping file.

View Import Property Mapping Examples



EXAMPLE 1

You exported a property mapping file to *C:\MyMappings\MyPropertyMappingFileName.sgpm* and you need to import it. Simply run the cmdlet *Import-PropertyMapping* with the path of the file.

```
PS C:\> $mappingSettings = Import-PropertyMapping -Path C:\MyMappings
\MyPropertyMappingsFileName.sgpm
PS C:\>$mappingSettings

PropertyMappings        :        Author           -> Author
                             KEY Created          -> Created
                                 Editor           -> Editor
                                 Modified         -> Modified
                                 <NO SOURCE>      -> Multiple Column
                                 MyCustomField    -> MyCustomField
                             KEY Title            -> Title
```

We see that all the mappings that we previously exported are now mapped back to our existing setup.

CMDLET #8

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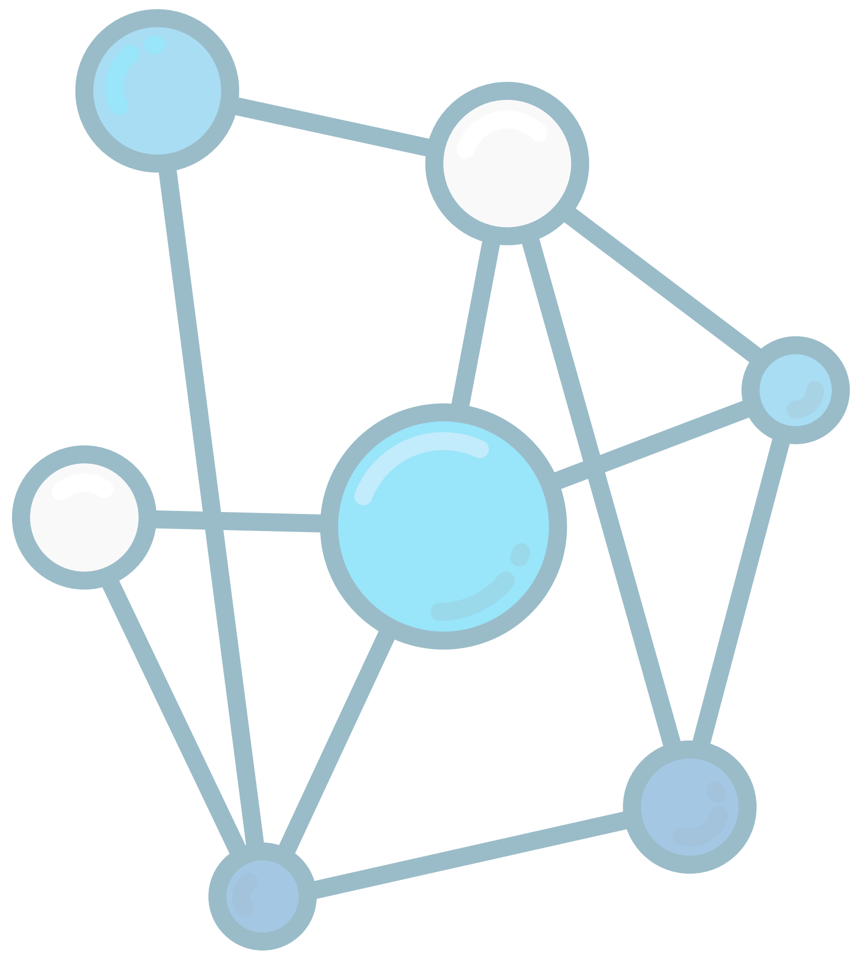
View Import Property Mapping Examples



EXAMPLE 2

We can take this a step further and say we want to set *column1* to Multiple Column while additionally adding a *column2* and *column3* from example 1. Our results will show the three new columns while *column1* is mapped to *MultipleColumn*.

```
PS C:\> $mappingSettings = Set-PropertyMapping -Source Col1, Col2, Col3 -Destination “Multiple
Column”
PS C:\>$mappingSettings = Import-PropertyMapping -MappingSettings $mappingSettings -Path C:
\MyMappings\MyPropertyMappingsFileName.sgpm
PS C:\> $mappingSettings

PropertyMappings        :         Author          -> Author
                            KEY   Created         -> Created
                                  Editor          -> Editor
                                  Modified        -> Modified
                                  Col1            -> Multiple Column
                                  Col2            -> _________I
                                  Col3            -> _________I
                                  MyCustomField   -> MyCustomField
                            KEY   Title           -> Title
```

CMDLET #9

Create Property Mappings

Expanding on our previous cmdlet, number 9 will discuss the use of creating or setting a property mapping. Keep in mind that parameters for property mappings, user and group mappings, content type mappings, site template mappings, and permission level mappings are all identical, as they work similarly. Let's review the *Set-PropertyMapping* cmdlet.

Set-PropertyMapping

The purpose of this command is to set the property mappings for a field or set of fields. Let's look at some examples.

Explore Set Property Mapping Examples

EXAMPLE 1

We have a set of custom fields and we need to map them to a specific destination. In this example, we want to map custom *column1* to the *MulitpleColumn*. We can create this property mapping by simply using the *Set-PropertyMapping* along with the parameters *Source* and *Destination*.

```
PS C:\> $mappingSettings = Set-PropertyMapping -Source Col1, Col2, Col3 -Destination
MultipleColumn
PS C:\>$mappingSettings

PropertyMappings        :    Col1                    -> Multiple Column
                             Col2                    -> _________|
                             Col3                    -> _________|
```

Our results show us that *column1* is now mapped to the destination *MultipleColumn*.

CMDLET #9

Create Property Mappings

Expanding on our previous cmdlet, number 9 will discuss the use of creating or setting a property mapping. Keep in mind that parameters for property mappings, user and group mappings, content type mappings, site template mappings, and permission level mappings are all identical, as they work similarly. Let's review the *Set-PropertyMapping* cmdlet.

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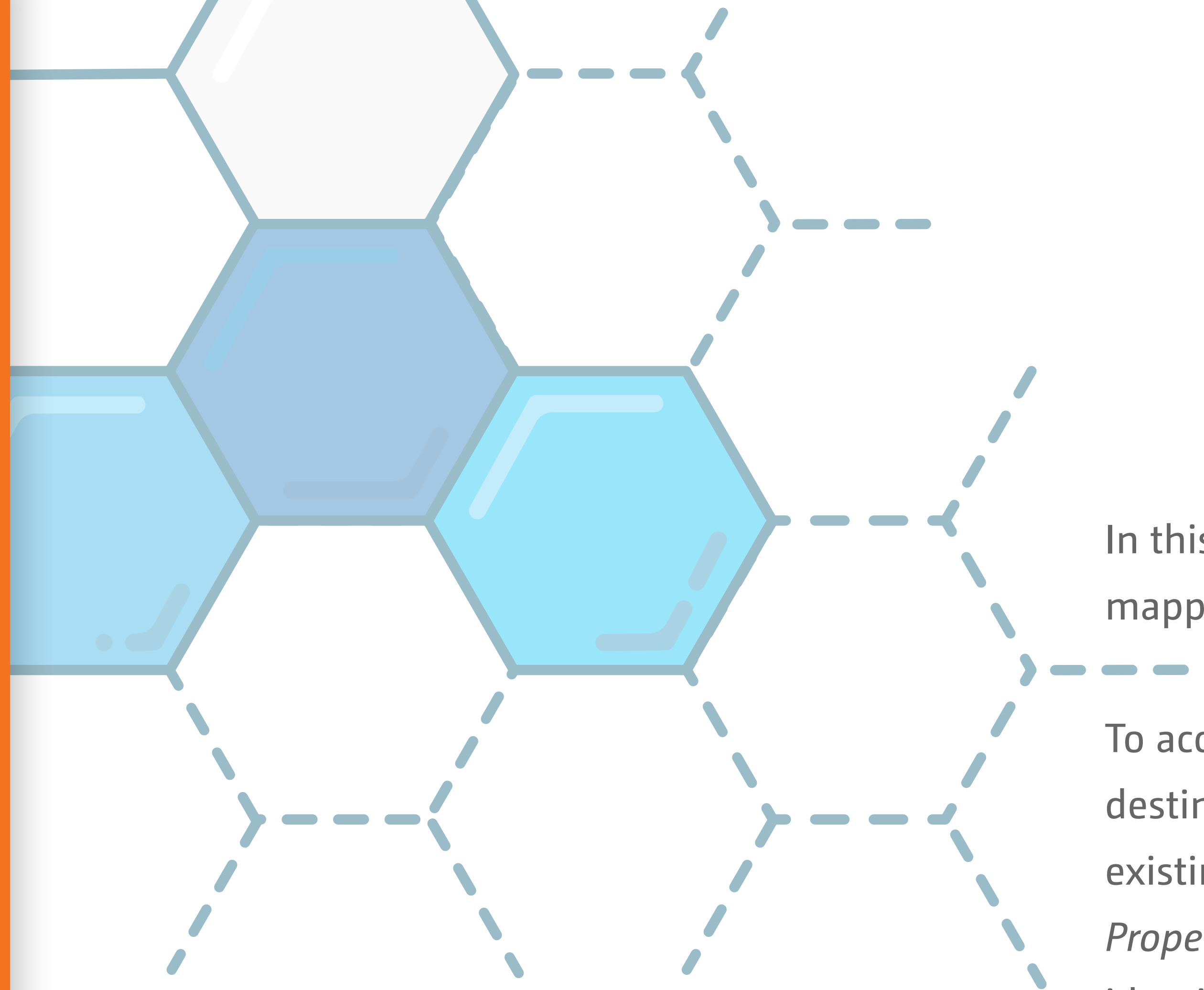
Explore Set Property Mapping Examples



EXAMPLE 2

In this example we need to set a custom mapping on an existing mapping from a source list and a destination list.

To accomplish this, we would first connect to both the source and destination sites, get both source and destination lists, pulling the existing mappings for the source list by running the cmdlet *Get-PropertyMapping.* And then, finally, setting the mappings to the identified source columns which in our case is *Col1* and set the destination parameter to the existing destination *MultipleColumn*.

```
PS C:\> $srcSite = Connect-Site -Url http://myfarm1/sites/mysourcesite
PS C:\> $dstSite = Connect-Site -Url http://myfarm1/sites/mydestinationsite
PS C:\> $srcList = Get-List -Name mysrclist -Site $srcSite
PS C:\> $dstList = Get-List -Name mydstlist -Site $dstSite
PS C:\> $mappingSettings = Get-PropertyMapping -SourceList $srcList -DestinationList $dstList
PS C:\> $mappingSettings = Set-PropertyMapping -MappingSettings $mappingSettings -Source Col1,
Col2, Col3 -Destination MultipleColumn
PS C:\> $mappingSettings

PropertyMappings      :      Author          -> Author
                      Key   Created          -> Created
                             Editor          -> Editor
                             Modified        -> Modified
                             Col1            -> MultipleColumn
                             Col2            -> _________I
                             Col3            -> _________I
                             MyCustomField   -> MyCustomField
```

CMDLET #10

Export Migration Reports to a Local Computer

Being asked to create reports for completed projects is a pretty regular occurrence. The Sharegate PowerShell cmdlets provide users with a simple way to export a report of all the details of a migration by using the *Export-Report* cmdlet.

Export-Report

The *Export-Report* cmdlet allows administrators to save a migration report with one simple action. Let's dive into an example.

View Export Report Examples

EXAMPLE 1

As we did in an earlier cmdlet, let's say we want to copy a list to another site. We have a list named *mysrclist* that we want to copy to the *mydstlist* list. First, we create a variable to connect to the source site (*$srcSite*) and also to connect to the destination site (*$dstSite*).

Secondly, we get the source and destination lists we want to copy from and too, then create a variable (*$result*) that we can pull when we run the *Copy-Content* cmdlet. Finally, we run the *Export-Report* cmdlet with our variables in place ensuring we add the *$results* variable and a Path to send the report to.

```
PS C:\> $srcSite = Connect-Site -Url http://myfarm1/sites/mysourcesite
PS C:\> $dstSite = Connect-Site -Url http://myfarm1/sites/mydestinationsite
PS C:\> $srcList = Get-List -Name mysrclist -Site $srcSite
PS C:\> $dstList = Get-List -Name mydstlist -Site $dstSite
PS C:\> $result = Copy-Content -SourceList $srcList -DestinationList $dstList
PS C:\> Export-Report $result -Path C:\MyReports\CopyContentReports.xlsx
Report exported with success to: C:\MyReports\CopyContentReports.xlsx
```

Our results show us that the report was successfully exported to our specified path.

CMDLET #10

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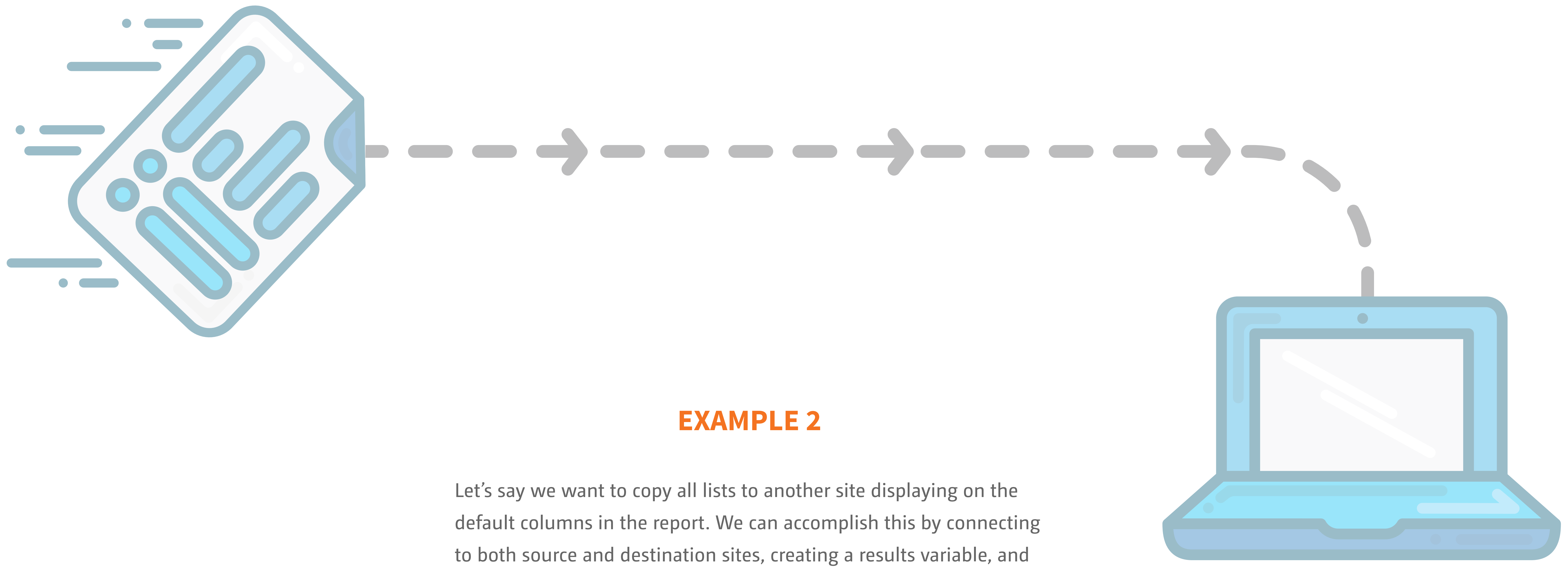
View Export Report Examples



EXAMPLE 2

Let's say we want to copy all lists to another site displaying on the default columns in the report. We can accomplish this by connecting to both source and destination sites, creating a results variable, and running the *Export-Report* cmdlet against it as follows.

```
PS C:\> $srcSite = Connect-Site -Url http://myfarm1/sites/mysourcesite
PS C:\> $dstSite = Connect-Site -Url http://myfarm1/sites/mydestinationsite
PS C:\> $result = Copy-List -All -SourceSite $srcSite -DestinationSite $dstSite
PS C:\> Export-Report $result -Path C:\MyReports\CopyContentReports.xlsx -DefaultColumns
Report exported with success to: C:\MyReports\CopyContentReports.xlsx
```

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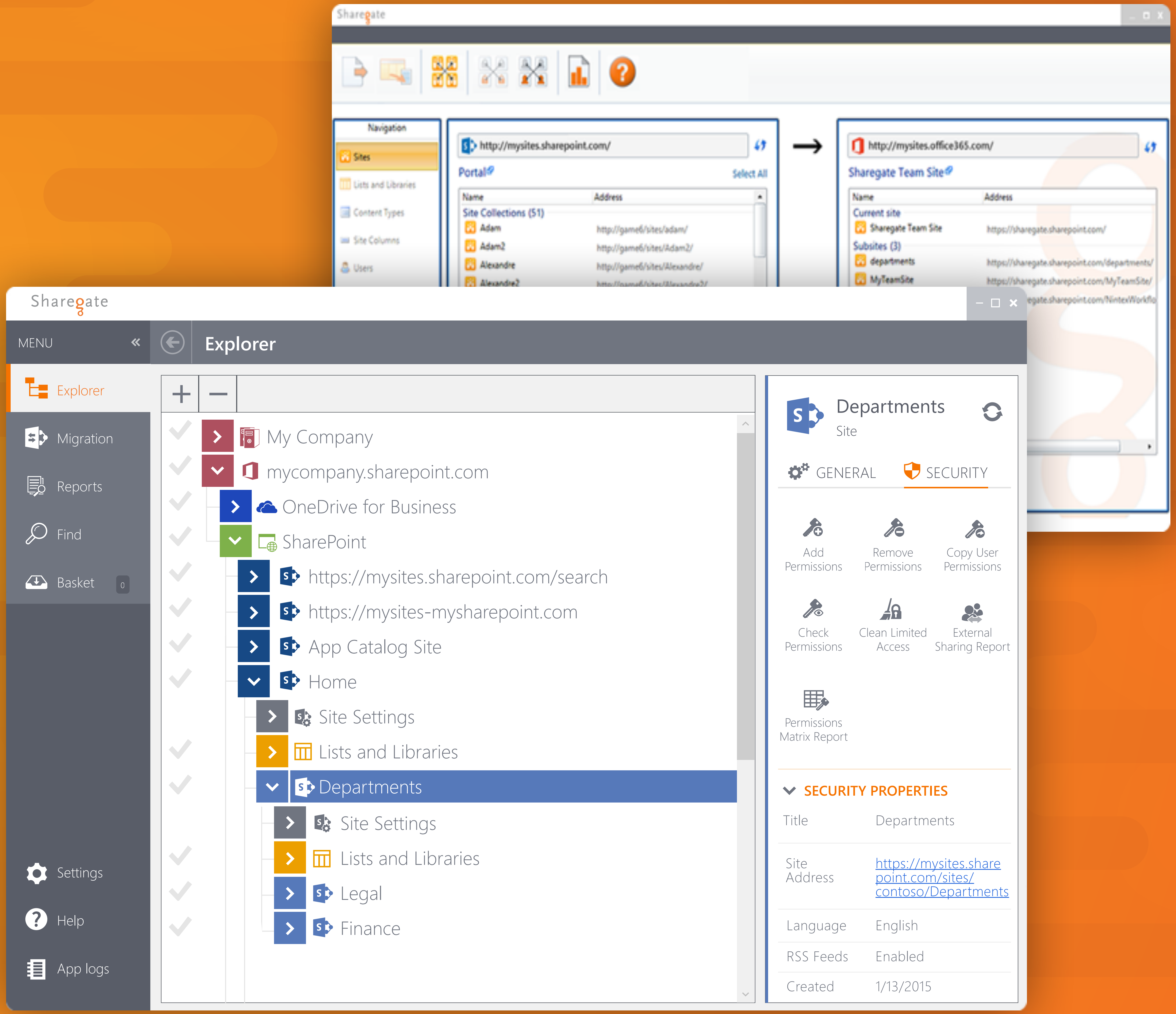

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Site Address	https://mysites.sharepoint.com/sites/contoso/Departments
Language	English
RSS Feeds	Enabled
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