

# Extending PowerShell

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## INTRODUCING POWERSHELL MODULES



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# Prerequisites

**Working with PowerShell  
console**

**Running and piping  
commands**

**Using PowerShell parameters**

**PowerShell language  
familiarity**



# Course Scenario



**Jill Anderson**

Desktop Support Engineer for  
Globomantics



# Course Overview



## **Introducing PowerShell modules**

- Understanding PowerShell modules
- Working with installed modules
- Module importing and Auto-Loading
- Identifying commands in a module

## **Managing PowerShell modules**



# Demo Environment

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# Packaging PowerShell Code

## Snapins

**Requires installation and  
registration**

**Lacking capabilities**

**The old way of doing things**

## Modules

**Preferred code package  
method**

**Typically script files,  
sometimes DLLs**



# PowerShell Modules

Reuse and  
abstraction of  
PowerShell code

Package of related  
commands

Commands are  
typically related to  
a single system or  
service



# BitsTransfer Module

**Get-BitsTransfer**

**Remove-BitsTransfer**

**Set-BitsTransfer**

**Start-BitsTransfer**

**Add-BitsTransfer**

**Complete-BitsTransfer**





# BitsTransfer Module

PowerShell  
Module



**Get-BitsTransfer**  
**Remove-BitsTransfer**  
**Set-BitsTransfer**  
**Start-BitsTransfer**  
**Add-BitsTransfer**  
**Complete-BitsTransfer**



# BitsTransfer Module

PowerShell  
Module



**Get-BitsTransfer**  
**Remove-BitsTransfer**  
**Set-BitsTransfer**  
**Start-BitsTransfer**  
**Add-BitsTransfer**  
**Complete-BitsTransfer**

**Dependencies, versioning and requirements**

**Publish to public repositories**



# PSModulePath



# Importing PowerShell Modules

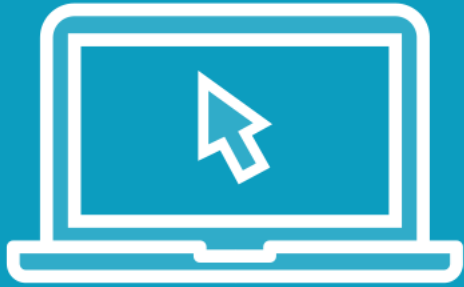
## Module Auto-Loading

### Import-Module

- NoClobber
- Prefix



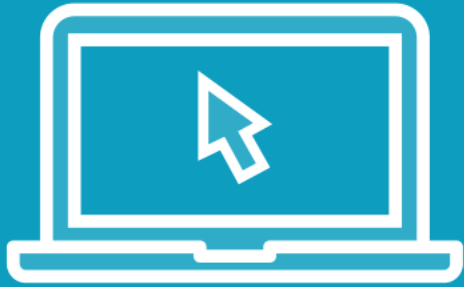
# Demo



## PowerShell module paths



# Demo



## Importing and Auto-Loading modules



# Demo



## Finding commands in modules



# Summary



**PowerShell modules, what and why?**

**Benefits of PSModulePath**

**Importing modules and exploring  
available commands**





Up Next:

Managing PowerShell Modules

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