

# Working with Dependencies

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# Dependencies

**Setup ahead of time to run an accurate test**

**Assumed components when writing code**

**Incredibly important to a successful Pester test**



# Infrastructure Dependencies = Validation Routines

## Code

Get content

```
if (Test-Path -Path C:\File.txt -PathType  
Leaf) { Get-Content -Path C:\File.txt }
```

## Use

Basic test

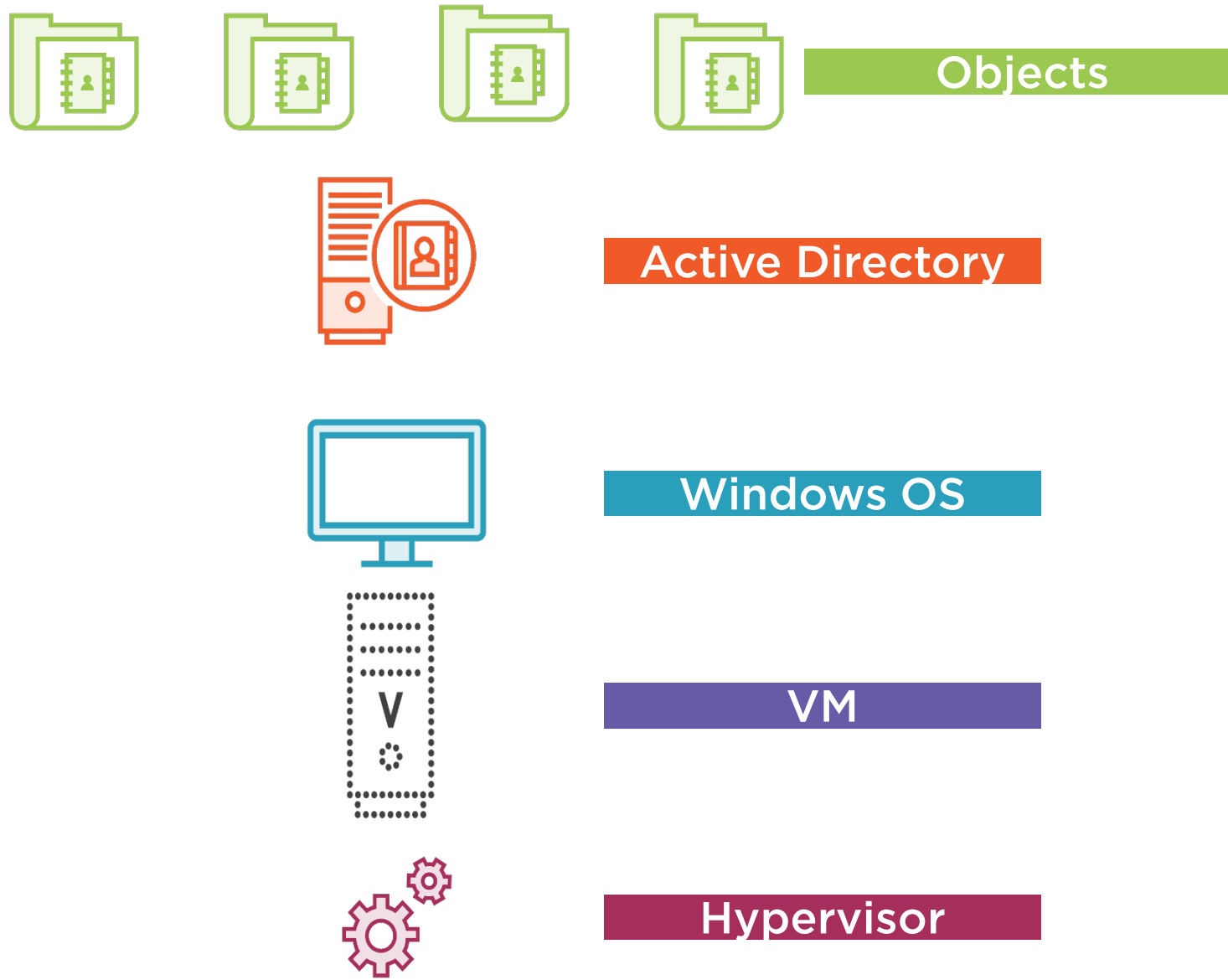
Assume file is available

First checks file is available

Checking to see if file exists is a  
dependency



# Dependency Tree



# Demo



## Identifying Infrastructure Dependencies



# Dependencies as Prerequisites

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# Ways to Handle Dependencies

## As Prerequisites

Identify and account for dependencies

Similar to validation

Incremental halts until dependency has  
been met

## Building at Test Time

Create dependencies ahead

Supports building out infrastructure  
with code

Creates dependencies as needed

Does not kill off tests



# Demo



## Dependencies as prerequisites





# Building Dependencies on the Fly

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# Demo



Create the dependency from code



# George's Progress – Domain Controller

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# Demo



## Explore George's Progress



# Building Tests for Active Directory

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# Demo



## Testing George's Domain Controller



# Working with George's Script Dependencies

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# Demo



Identify all dependencies George will manage

Avoid false positive of a false negative





## Building vs. Managing

**Managing is different than building on the fly**

**Treat dependencies as separate entity**

**Build dependencies on the fly for tasks not related to the test**



# George's Progress – Creating AD Objects

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# Demo



Overview of George's code to create AD objects



# Demo



## Building Active Directory infrastructure tests for :

- Users
- Groups
- OUs
- CSV file



# Teardown Code

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# Teardown Code

**Used with built dependencies and automation scripts**

**Cleans up infrastructure after finishing testing**

**Essential when re-using various components**



# Demo



## Destroying George's work



# Summary



Working with dependencies

Discovering dependencies

Managing dependencies as prerequisites  
and stopping the tests

Managing dependencies by building  
them on the fly

Used teardown code to clean up

