



Infrastructure validation using Pester

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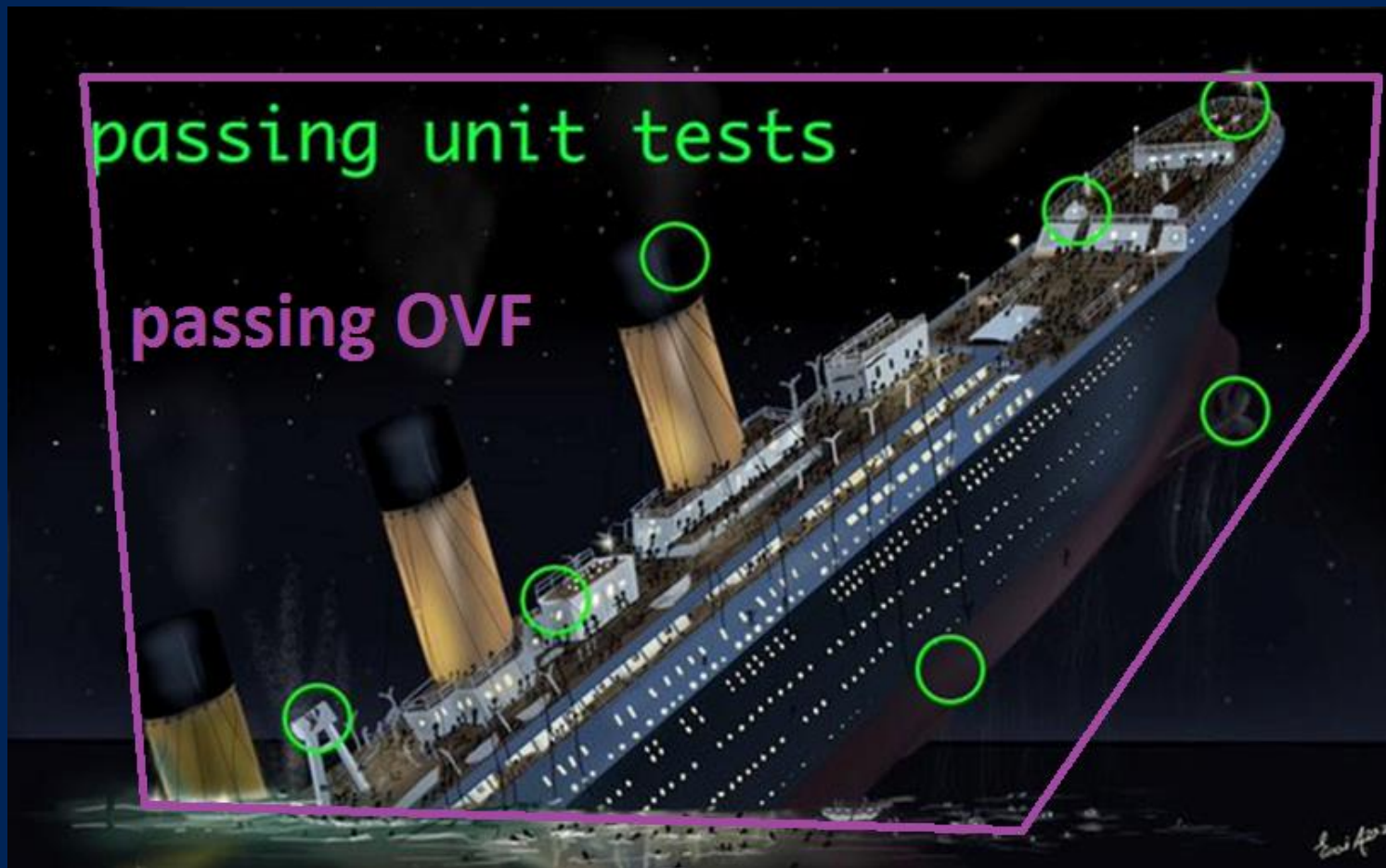
Agenda

- Why OVF and the benefits
- JEP (Just Enough Pester) for OVF
- Writing OVF Tests
- Demos
- Comments

Why Operation Validation



Passing OVF test vs unit test



Why use OVF tests?

- No eyeballing the expected results
- If possible use the source input used to automate the process
- Verify operational functionality

JEP (Just Enough Pester)

Blocks

- Describe
 - Context
 - It
 - Before-,After-

Assertions

- Should
- Operators
 - Be,BeIn,BeExactly,BeLessThan...
 - Contain,ContainExactly...
 - Match, MatchExactly
 - Exists

TestCases

```
Describe "This is the beginning of a simple OVF
test"{
  It 'Notepad exists in Windows folder' {
    'C:\Windows\notepad.exe' |
    Should -Exist
  }
}
```

Describing This is the beginning of a simple
OVF test

[+] Notepad exists in windows folder 248ms




```
Describe "Here's another simple OVF test"{
  Beforeall{
    $explorer = Get-ChildItem 'C:\windows\explorer.exe'
  }
  Context "Verifying explorer.exe assumptions"{

    It 'Explorer.exe exists in Windows folder' {
      $explorer.VersionInfo.FileName |
      Should -Exist
    }

    It 'Production version is exactly 10.0.16299.15'{
      $explorer.VersionInfo.Productversion |
      Should BeExactly '10.0.16299.15'
    }

    it "File description equals `Windows Explorer`" {
      $explorer.VersionInfo.FileDescription |
      Should Be 'Windows Explorer'
    }
  }
}
```



Describing Here's another simple OVF test

Context Verifying explorer.exe assumptions

[+] Explorer.exe exists in windows folder 150ms

[+] Production version equals 10.0.16299.15 26ms

[+] File description equals 'Windows Explorer' 22ms



Demo

Onboarding a customer in AD

- Create default Ous, Groups
- Create default Folders

Onboard customer users

- Validate users
- Update users

Offboarding a customer in AD

- Delete OU and all sub ADOjects
- Delete Folders

Summary

- OVF is more the mindset of Ops
- Never trust a Test that doesn't fail
- Pester is also Ops not just Dev
- OVF is about testing what's critical or mandatory
- Have fun learning how to use Pester for OVF!

Next Steps

- Now: 15 min break
- Grab a coffee
- Stay here to enjoy next presentation
- Change track and switch to another room
- Ask me questions or meet me in a breakout session room afterwards

Questions?

about_Author

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