



UNIVERSAL APP INSTALLER - QUICK REFERENCE CARD

Print this page for quick reference during deployment

Most Common Commands

```
powershell

# Test installer directly
.\Universal-AppInstaller.ps1 -AppName "AppName" -InstallerFileName "app.exe" `

-InstallerType "EXE" -InstallArguments "/S" `

-DetectionMethod "File" -DetectionPath "C:\Program Files\App\app.exe"

# Dry run test
.\Orchestration-Master.ps1 -Phase Phase4 -DryRun

# Run Phase 4 only
.\Orchestration-Master.ps1 -Phase Phase4

# Check exit code
$LASTEXITCODE

# View recent log
Get-Content "C:\ProgramData\OrchestrationLogs\Apps\Install-AppName_*.log" -Tail 50
```

Exit Codes

| Code | Meaning |
|------|---|
| 0 |  Success |
| 1 |  General failure |
| 2 |  Installer not found |
| 4 |  Install failed |
| 5 |  Validation failed |
| 10 |  Already installed |

Configuration Template

```
powershell

@{
    TaskID = "APP-XXX"
    TaskName = "Install AppName"
    ScriptPath = "Scripts\Universal-AppInstaller.ps1"
    Enabled = $true
    Timeout = 600
    RunAs = "SYSTEM"
    RequiresReboot = $false
    AllowRetry = $true
    Critical = $false
    Description = "Installs AppName"
    Parameters = @{
        AppName = "Application Name"
        InstallerFileName = "installer.exe"
        InstallerType = "AUTO"
        InstallArguments = "/S"
        DetectionMethod = "File"          # Registry, File, AppX, Package
        DetectionPath = "C:\Path\file.exe"
        DetectionValue = ""              # Optional
        RequiredVersion = ""            # Optional
    }
}
```

Detection Methods

| Method | DetectionPath Example | Use When |
|----------|------------------------------|--------------------------|
| Registry | HKLM:\SOFTWARE\App | App writes registry |
| File | C:\Program Files\App\app.exe | Predictable install path |
| AppX | Microsoft.AppName | Modern Store apps |
| Package | AppName* | Package manager apps |

Common Silent Switches

| Installer | Switch | Example Apps |
|------------|---|-------------------|
| MSI | /quiet /norestart | 7-Zip, PuTTY |
| NSIS | /S | Notepad++, WinSCP |
| Inno Setup | /VERYSILENT /SUPPRESSMSGBOXES /NORESTART /SP- | Git, TreeSize |
| Adobe | /sAll /rs /msi EULA_ACCEPT=YES | Adobe Reader |

File Locations

```
Scripts\Universal-AppInstaller.ps1      ← The script  
Installers\Apps\                  ← Your installers  
C:\ProgramData\OrchestrationLogs\Apps\  ← App logs
```

Quick Troubleshooting

| Problem | Quick Fix |
|---------------------------------|------------------------------------|
| Installer not found | Check filename & location |
| Install fails | Test manually: (.installer.exe /S) |
| Detection fails | Verify path: (Test-Path "path") |
| Already installed keeps running | Fix detection method |

Testing Checklist

- Test installer manually
- Test Universal Installer script
- Test in dry run mode
- Test Phase 4 execution
- Check logs for errors
- Verify app works

Key Paths

```
powershell

# Check if installer exists
Test-Path ".\Installers\Apps\installer.exe"

# Check if app installed (File)
Test-Path "C:\Program Files\App\app.exe"

# Check if app installed (Registry)
Test-Path "HKLM:\SOFTWARE\App"
Get-ItemProperty "HKLM:\SOFTWARE\App"

# View logs
Get-ChildItem "C:\ProgramData\OrchestrationLogs\Apps\"
```

Detection Examples

Registry Detection:

```
powershell

DetectionMethod = "Registry"
DetectionPath = "HKLM:\SOFTWARE\7-Zip"
DetectionValue = "Path" # Optional
```

File Detection:

```
powershell

DetectionMethod = "File"
DetectionPath = "C:\Program Files\Notepad++\notepad++.exe"
RequiredVersion = "8.6.9" # Optional
```

AppX Detection:

```
powershell
```

DetectionMethod = "AppX"

DetectionPath = "Microsoft.WindowsTerminal"

⚡ Quick App Add

60-Second App Addition:

1. Copy installer to `(Installers\Apps\)`
2. Test: `(.\installer.exe /S)`
3. Note install location
4. Copy config template
5. Update: TaskID,AppName,InstallerFileName,InstallArguments,DetectionPath
6. Test: `(.\Orchestration-Master.ps1 -Phase Phase4 -DryRun)`
7. Deploy: `(.\Orchestration-Master.ps1 -Phase Phase4)`

📘 Documentation Files

| File | Purpose |
|-------------------------|----------------------|
| QuickStart.md | 5-min setup |
| Documentation.md | Complete reference |
| Sample.ps1 | 20+ examples |
| Architecture.md | System design |
| Checklist.md | Implementation steps |
| README.md | Overview |

🎯 When to Use

| Use Universal Installer | Use Custom Script |
|--|--|
| <input checked="" type="checkbox"/> Standard EXE/MSI | <input checked="" type="checkbox"/> Microsoft Office |
| <input checked="" type="checkbox"/> Simple detection | <input checked="" type="checkbox"/> SQL Server |

| Use Universal Installer | Use Custom Script |
|---|--|
| <input checked="" type="checkbox"/> 7-Zip, Notepad++ | <input type="checkbox"/> Chrome policies |
| <input checked="" type="checkbox"/> VLC, Adobe Reader | <input type="checkbox"/> Complex config |
| <input checked="" type="checkbox"/> 80% of apps | <input type="checkbox"/> 20% of apps |

Pro Tips

1. Always test manually first
2. Use MSI when available
3. Prefer File over Registry detection
4. Set realistic timeouts
5. Enable retry for all apps
6. Document custom switches
7. Keep installer names consistent
8. Review logs regularly

Common Mistakes

Don't:

- Forget to copy installer to Apps folder
- Misspell installer filename
- Use wrong silent switch
- Skip testing manually first
- Ignore log files

Do:

- Test each step incrementally
- Review logs after each run
- Use descriptive TaskNames

- Document special requirements
 - Keep installers organized
-

Success Metrics

Target Goals:

- Success Rate: >95%
 - Install Time: <5 min avg
 - Detection: 100% reliable
 - Support Tickets: <5% of deployments
-

Quick Links

Package Contents:

- Universal-AppInstaller.ps1 (879 lines)
- Phase4-Applications-Sample.ps1 (645 lines)
- Documentation.md (804 lines)
- QuickStart.md (461 lines)
- Architecture.md (550 lines)
- Checklist.md (600+ lines)
- README.md (510 lines)

Total: 130 KB, 4,500+ lines

Copy-Paste Templates

MSI App:

```
powershell
```

```
@{  
    TaskID = "APP-XXX"; TaskName = "Install AppName"  
    ScriptPath = "Scripts\Universal-AppInstaller.ps1"  
    Enabled = $true; Timeout = 600; RunAs = "SYSTEM"  
    RequiresReboot = $false; AllowRetry = $true; Critical = $false  
    Parameters = @{  
       AppName = "AppName"; InstallerFileName = "app.msi"  
       InstallerType = "MSI"; InstallArguments = "/quiet /norestart"  
       DetectionMethod = "Registry"; DetectionPath = "HKLM:\SOFTWARE\App"  
    }  
}
```

EXE App:

```
powershell  
  
@{  
    TaskID = "APP-XXX"; TaskName = "Install AppName"  
    ScriptPath = "Scripts\Universal-AppInstaller.ps1"  
    Enabled = $true; Timeout = 600; RunAs = "SYSTEM"  
    RequiresReboot = $false; AllowRetry = $true; Critical = $false  
    Parameters = @{  
       AppName = "AppName"; InstallerFileName = "app.exe"  
       InstallerType = "EXE"; InstallArguments = "/S"  
       DetectionMethod = "File"; DetectionPath = "C:\Program Files\App\app.exe"  
    }  
}
```

Keep this card handy for quick reference during deployments!

© Universal App Installer v1.0 - Part of Windows 11 Enterprise Orchestration Framework