

Summary of PowerShell App Deployment Toolkit (PSADT)

The PowerShell App Deployment Toolkit (PSADT) is an open-source framework designed to simplify and standardize enterprise application deployment using PowerShell scripting.

1. Platform Value & Concepts:

PSADT streamlines complex scripting, provides a consistent user experience, and improves deployment success rates. It achieves this through pre-defined functions, user interface elements, and an ADTSession object that stores deployment information. PSADT supports interactive, silent, and non-interactive deployment modes, offering flexibility for various scenarios. Being open-source, it's freely available and can be extended by the community.

2. Folder Structure & Key Files:

PSADT organizes deployment packages with a specific folder structure to keep files organized:

- **Toolkit:** Contains the core PSADT framework files, including AppDeployToolkitMain.ps1 which holds the main logic and functions.
- **Files:** This is where you place the primary application installation files (e.g., MSI, EXE).
- **SupportFiles:** Holds additional supporting files, configuration scripts, or other necessary assets for the deployment.
- **Deploy-Application.exe:** An executable that acts as a wrapper, ensuring correct execution policy when calling the main deployment script.
- **Deploy-Application.ps1:** This is the central PowerShell script where you customize the specific deployment logic for installation, uninstallation, and repair actions.

3. Configuration:

PSADT's configuration is centralized in the AppDeployToolkitConfig.xml file. This file allows administrators to set default options for logging, customize UI elements (like banners and icons), define MSI installation parameters, and manage UI messages across different languages. This centralized approach ensures consistency and reduces repetitive scripting.

4. Script Customization & Execution:

The Deploy-Application.ps1 script is highly customizable and structured into distinct phases: "Pre-Install," "Install," and "Post-Install" for installations, with corresponding "Pre-Uninstall," "Uninstall," and "Post-Uninstall" sections for removals. IT professionals define actions within these sections using PSADT's built-in functions (e.g., Execute-MSI for installing MSIs, Remove-MSIApplications for uninstalling). Scripts can be executed directly via PowerShell (e.g., powershell.exe -executionpolicy bypass -file Deploy-Application.ps1 -DeploymentType Install) or by running Deploy-Application.exe. Additionally, PSADT offers features like autocomplete in PowerShell ISE and a help file (AppDeployToolkitHelp.ps1) to assist with function usage.