

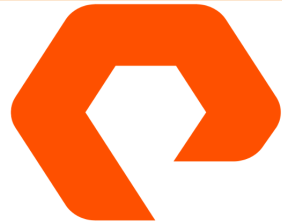
# Demystifying APIs: A Practical Guide to Streamlined Data Management and Performance Insights

Anthony E. Nocentino

@nocentino

April 8-11, 2024

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PURESTORAGE®



ScriptRunner®

The #1 for PowerShell Management



PDQ DataOn®



PATCH  
MY PC



MANNING



SNIA®



# Anthony E. Nocentino

Principal Field Solution Architect @ Pure Storage

- **Specialize in system architecture, performance, SQL Server, Kubernetes, Containers, Microsoft Azure and VMware**
- **Masters Computer Science**

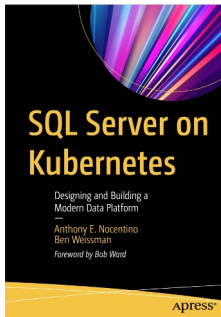
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# Agenda

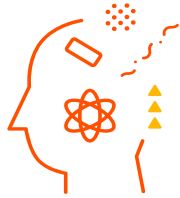
- What's a REST API
- Learning how to use an API
- Let's get into some code...

This isn't a vendor session...

# What's a REST API

- REST – REpresentational State Transfer
- Architectural style based on HTTP protocol and Uniform Resource Identifiers (URI) standards
- Client/Server model, independent of each other, modular and stateless
- Allows access & manipulation of text representations of resources
- Perform CRUD operations – create, read, update and delete
- Uses uniform & predefined HTTP methods
  - **GET, POST, PUT, PATCH and DELETE**
- APIs have versions

# Pure is API First - How can YOU Use Our APIs?



## Automation

Scale your teams by Automating Storage, Migration and Compute Management Tasks



## Cloud Integration

Enable Hybrid Cloud and Data Services with Consistent API's



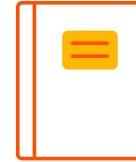
## Monitoring

Gain System Performance Insight with Correlated Metrics



## Forward Thinking Data Protection

Safeguard data against loss, breach, ransomware or availability interruption



## Orchestration

Control Your Environment With Ansible, Puppet, or Even Your Own



## Virtualization and Cloud Native

Deploy and Manage Compute and Storage on VMware, HyperV and PortWorx<sub>6</sub>



# PowerShell SDK 2.26

- Support for REST 1.0 – 2.31
  - Versioning aligns to Purity API releases
- Versions
  - SDK 1.19 (last update)
  - SDK 2.26
- cmdlet backward compatibility
- Windows PowerShell 5.1 & 7.x support
- Cross-platform with PowerShell Core
  - Linux, Windows, macOS
- PowerShell Gallery install or MSI via GitHub repo
- Get-Help updated
- Release model aligns to API Governance

```
Administrator: PowerShell
PS C:\> $PSVersionTable.PSVersion

Major Minor Patch PreReleaseLabel BuildLabel
-----
7      3      3

PS C:\> Get-Command -Module PureStoragePowerShellSDK2

CommandType Name Version Source
-----
Alias Get-Pfa2PGroup 2.16.12.0 PureStorage
Alias New-Pfa2PGroup 2.16.12.0 PureStorage
Alias Remove-Pfa2PGroup 2.16.12.0 PureStorage
Alias Update-Pfa2PGroup 2.16.12.0 PureStorage
Cmdlet Connect-Pfa2Array 2.16.12.0 PureStorage
Cmdlet Disconnect-Pfa2Array 2.16.12.0 PureStorage
Cmdlet Get-Pfa2ActiveDirectory 2.16.12.0 PureStorage
Cmdlet Get-Pfa2Admin 2.16.12.0 PureStorage
Cmdlet Get-Pfa2AdminApiToken 2.16.12.0 PureStorage
Cmdlet Get-Pfa2AdminCache 2.16.12.0 PureStorage
Cmdlet Get-Pfa2AdminSetting 2.16.12.0 PureStorage
Cmdlet Get-Pfa2Alert 2.16.12.0 PureStorage
Cmdlet Get-Pfa2AlertEvent 2.16.12.0 PureStorage
Cmdlet Get-Pfa2AlertWatcher 2.16.12.0 PureStorage
Cmdlet Get-Pfa2AlertWatcherTest 2.16.12.0 PureStorage
Cmdlet Get-Pfa2ApiClient 2.16.12.0 PureStorage
Cmdlet Get-Pfa2ApiVersion 2.16.12.0 PureStorage
Cmdlet Get-Pfa2App 2.16.12.0 PureStorage
Cmdlet Get-Pfa2AppNode 2.16.12.0 PureStorage
Cmdlet Get-Pfa2Array 2.16.12.0 PureStorage
Cmdlet Get-Pfa2ArrayCloudProviderTag 2.16.12.0 PureStorage
Cmdlet Get-Pfa2ArrayConnection 2.16.12.0 PureStorage
Cmdlet Get-Pfa2ArrayConnectionKey 2.16.12.0 PureStorage
Cmdlet Get-Pfa2ArrayConnectionPath 2.16.12.0 PureStorage
Cmdlet Get-Pfa2ArrayEula 2.16.12.0 PureStorage
Cmdlet Get-Pfa2ArrayFactoryResetToken 2.16.12.0 PureStorage
Cmdlet Get-Pfa2ArrayNtpTest 2.16.12.0 PureStorage
Cmdlet Get-Pfa2ArrayPerformance 2.16.12.0 PureStorage
Cmdlet Get-Pfa2ArraySpace 2.16.12.0 PureStorage
Cmdlet Get-Pfa2Audit 2.16.12.0 PureStorage
Cmdlet Get-Pfa2Certificate 2.16.12.0 PureStorage
Cmdlet Get-Pfa2Connection 2.16.12.0 PureStorage
Cmdlet Get-Pfa2Controller 2.16.12.0 PureStorage
Cmdlet Get-Pfa2Directory 2.16.12.0 PureStorage
Cmdlet Get-Pfa2DirectoryExport 2.16.12.0 PureStorage
Cmdlet Get-Pfa2DirectoryPerformance 2.16.12.0 PureStorage
Cmdlet Get-Pfa2DirectoryPolicy 2.16.12.0 PureStorage
Cmdlet Get-Pfa2DirectoryPolicyNfs 2.16.12.0 PureStorage
Cmdlet Get-Pfa2DirectoryPolicyQuota 2.16.12.0 PureStorage
Cmdlet Get-Pfa2DirectoryPolicySmb 2.16.12.0 PureStorage
Cmdlet Get-Pfa2DirectoryPolicySnapshot 2.16.12.0 PureStorage
Cmdlet Get-Pfa2DirectoryQuota 2.16.12.0 PureStorage
Cmdlet Get-Pfa2DirectoryService 2.16.12.0 PureStorage
Cmdlet Get-Pfa2DirectoryServiceRole 2.16.12.0 PureStorage
```



# The PowerShell SDK is the most consumed automation integration for FlashArray.

40k+ Downloads





# Let's get into some demos...



# Resources From Today's Webinar

- **Today's Demo Code**

- <https://github.com/nocentino/PureApiTechTalk/>

- **FlashArray API Reference**

- [https://support.purestorage.com/bundle/m\\_microsoft\\_platform\\_guide/page/FlashArray/PurityFA/Purity\\_FA\\_REST\\_API/topics/reference/r\\_flasharray\\_rest\\_api\\_reference\\_guides.html](https://support.purestorage.com/bundle/m_microsoft_platform_guide/page/FlashArray/PurityFA/Purity_FA_REST_API/topics/reference/r_flasharray_rest_api_reference_guides.html)

- **Blog**

- [www.nocentino.com](http://www.nocentino.com)
- <https://www.nocentino.com/categories/pure-storage-powershell-sdk-2-series/>



# THANK YOU

Please review this session



Session Review

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