

## Introduction



## Silver Peak's REST APIs

- 3 Robust REST APIs
  - Appliances
  - Orchestrator
  - Orchestrator<sup>SP</sup>
- Allows installation, configuration, troubleshooting and monitoring



#### Goals

At the end of the course, you should be able to:

- Describe common REST API use cases
- Use embedded Silver Peak API documentation tools
- Program Silver Peak REST API calls
- Describe common structures used in Silver Peak REST API calls



#### **Audience**

This class is for anyone who intends to automate and/or integrate Silver Peak management tasks

- Enterprise Customers
- Silver Peak Partners
- Service Providers
- Silver Peak Implementation Teams



### **Pre-Requisites**

- Experience Programming
- Experience with REST APIs
- Experience with Silver Peak Products
  - Silver Peak Service Provider Training (Optional)
  - Deploying SDWAN Technologies (DST)
  - Advanced SDWAN Deployments (ASD) (Optional)



#### **Common Use Cases**

- All Audiences
  - Automate Large Deployments
  - Integration with Management Systems
  - Monitoring and Reporting
- Partners and Service Providers
  - Leverage Configurations
    - Deployment Profiles
    - Business Intent Overlays Security Settings
    - Templates
    - Users

- Alarm Thresholds
- Network Configurations
- Etc.



## **Agenda**

- Overview
- Using API Documentation
  - Example 1: HelloOrchestrator
- Common Structures
  - Example 2: GET/POSTTemplateGroup
  - Example 3: HelloAppliance
- Wrap-up

#### Resources

- Built-in Documentation
- Example Code
- White Papers
- Deployment Guides



## **Getting Resources**



#### Resources

- Example Files
  - OrchMiniHelp
  - VxoaMiniHelp
  - Example 1: HelloOrchestrator
  - Example 2: GETTemplateGroup and POSTTemplateGroup
  - Example 3: HelloAppliance

Note: Python and included modules are not contained

# **Using API Documentation**



### **Documentation Features**

- Describes REST API calls
- Integrated into the Web Application
- Built-in API Testing

### **Keys to a REST API Call**

- GET/POST/DELETE
- URL
- Required Input (JSON)
- Return Code
  - 200 Success
  - 204 Success (from POST with no content returned)
  - 401 Unauthorized access for a resource users must login first
  - 404 Resource not found
  - 400 Bad request (typically invalid input)
  - 500 Internal server error (Something went wrong)

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### **Development Process**

- Configure an Example System
- Use Built-In REST API Documentation
  - Locate Calls
  - Test Calls
  - Document Required REST API Parameters
- Build the Application
  - Code
  - Test

# Example 1: HelloOrchestrator



## **Common Structures**



## **Common Structures and Terms**

Item	Use	Example
nePk	Primary key for an appliance	7.NE
groupPk	Primary key for a group (Tree View)	2.Network
grNodePk	Primary key for a node (long/lat)	4.GrNode
userPk	Primary key for an Orchestrator user	0.User
ld	ID labels inside objects (seePk above)	Context sensitive
Key	An identifier, used in arrays of discovered, approved or denied appliances	12
cached	Will data come from the Orchestrator database, or directly from the appliance	True

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## **Example 2: GET/POSTTemplateGroup**



# **Example 3: HelloAppliance**



# Wrap-up



#### Goals

You should now be able to:

- Describe common REST API use cases
- Use embedded Silver Peak API documentation tools
- Program Silver Peak REST API calls
- Describe common structures used in Silver Peak REST API calls



