**ArcGIS API REST Information Guide**

This document provides guidance on accessing and managing various ArcGIS REST API endpoints, including server, portal, datastore administration, and data validation.

**Accessing the ArcGIS API REST Endpoints**

**1. Generate a Token for Portal Authentication**

* Endpoint: /portal/sharing/rest/generateToken
* Use this endpoint to acquire an access token for the portal. Include parameters such as username, password, and expiration to create an authenticated session.
* Example: [URL]/portal/sharing/rest/generateToken

**2. Validate Data Store Connection**

* Endpoint: /server/admin/data/items/enterpriseDatabases/<DataStore\_ID>/machines/<Machine\_Name>
* Validates the connection status of your datastore across specified machines.
* Example: [URL]/server/admin/data/items/enterpriseDatabases/<DataStore\_ID>/machines/<Machine\_Name>

**3. List Federated Servers**

* Endpoint: /portal/portaladmin/federation/servers
* Lists all servers federated with the ArcGIS Portal. Useful for checking server associations and federation status.
* Example: [URL]/portal/portaladmin/federation/servers

**4. Check Portal Machine Status**

* Endpoint: /portal/portaladmin/machines/status/<Machine\_Name>
* Provides the status of specific machines within the portal's infrastructure.
* Example: [URL]/portal/portaladmin/machines/status/<Machine\_Name>

**5. Portal Administration Overview**

* Endpoint: /portal/portaladmin/?f=pjson
* Provides information on the portal's configuration, licensing, and available resources.
* Example: [URL]/portal/portaladmin/?f=pjson

**6. Server Administration Login**

* Endpoint: /server/admin/login
* This login endpoint initiates a session with administrative privileges.
* Example: [URL]/server/admin/login

**7. Validate All Data Items in Server**

* Endpoint: /server/admin/data/validateAllDataItems
* Validates all data items to ensure connectivity and proper configuration across services.
* Example: [URL]/server/admin/data/validateAllDataItems

**8. Check Server Machine Status**

* Endpoint: /server/admin/machines/<Machine\_Name>
* Checks and returns the status of specific server machines within the system.
* Example: [URL]/server/admin/machines/<Machine\_Name>

**9. Data Store Administration**

* Endpoint: /server/admin/data/items/enterpriseDatabases
* Lists all enterprise databases registered within the ArcGIS Data Store. Provides an overview of registered databases and relevant settings.
* Example: [URL]/server/admin/data/items/enterpriseDatabases

**Configuration Examples for ArcGIS API Endpoints**

**1. Portal Federation**

* To acquire a portal token, connect to /portal/sharing/rest/generateToken and specify the Webapp URL as /server/admin for federated servers.

**2. Data Store Information Example**

##json

{

"path": "/enterpriseDatabases/<DataStore\_ID>",

"type": "datadir",

"id": "<DataStore\_UUID>"

}

**3. Machine Status Information Example**

##json

{

"machineName": "<Machine\_Name>",

"platform": "Windows Server",

"ports": {

"HTTP": 6080,

"HTTPS": 6443

},

"ServerStartTime": "<Timestamp>",

"adminURL": "[URL]/arcgis/admin",

"configuredState": "STARTED",

"underMaintenance": false

}

**Important URLs for ArcGIS REST Management**

**Server Components**

* Admin: /server/admin/
* Manager: /server/manager
* Services: /server/services
* REST Services: /server/services/rest/services/folder/service/MapServer
* Example: [URL]/server/admin, [URL]/server/services

**Portal Components**

* Home: /portal/home/
* Admin: /portal/portaladmin
* Sharing REST: /portal/home/sharing/rest
* Example: [URL]/portal/home, [URL]/portal/portaladmin

**Additional Notes**

* **Data Store Validation**: Always ensure data store items are validated to avoid connectivity issues.
* **Machine Maintenance**: Review machine status regularly to ensure consistent uptime.
* **Security Precaution**: Always sanitize credentials and sensitive information in API requests and responses.
* **Error Logging**: Utilize the system logs for troubleshooting failed connections or lock issues.

This guide provides a structured reference for accessing and managing ArcGIS API REST endpoints, helping to streamline system administration and ensure effective data management across environments.