



WebAPIv3_Examples

Home

- Getting Started
- About

Web API v3

- Overview
- Example Model

Example API Usage

- Actions and Functions
- Service Diagnostics
- OpenAPI Support
- iHub Sandbox

Neo4J

- Overview
- Local DB Instance
- Running DAL unit tests

Redis

- Overview

Coding Guides

- Coding Guides
- Querying Access Groups
- BI Service Method Information
- Graph Expansion
- EM specific configuration
- MutiThreading
- DynamicQuery

WCF Services

- WCF Web Config Entries
- WCF Services Unit Tests
- WCF Services
- WCF Services Change Notes
- WCF Services Architecture

DAL

- Layers of the DAL
- How does Criteria function
- SPF DAL SQL Layer
- How do Graph Expansions work
- Custom SQL queries in the Core layer
- Using the Dynamic Query Layer

Authorization

- OAuth external application

Site Contents

Last modified at 3/17/2020 5:53 AM by  ZUNGU Simangele [\[Edit this page\]](#)

Example Requests

Metadata

```
GET [OrgURI]/api/v3/ADW/$metadata
GET [OrgURI]/api/v3/ADW/Capabilities/$metadata
GET [OrgURI]/api/v3/ADW/Annotations/$metadata
GET [OrgURI]/api/v3/ADW/Vocabularies/Measures/$metadata
```

```
POST [OrgURI]/api/v3/RegenerateMetadata
```

Query

== Collection ==

```
GET [OrgURI]/api/v3/ADW/SPFFolders
GET [OrgURI]/api/v3/ADW/SPFFolders?$filter=Class eq 'SPFFolder'
GET [OrgURI]/api/v3/ADW/SPFFolders?$select=Name,Class,UID
GET [OrgURI]/api/v3/ADW/SPFFolders?$top=5&$count=true
GET [OrgURI]/api/v3/ADW/DevelopmentTags?$filter=Documents_DEV/any/(doc: doc/Name eq 'Doc001')
```

== Entity by key ==

```
GET [OrgURI]/api/v3/ADW/SPFFolders('6FHH000A')
GET [OrgURI]/api/v3/ADW/SPFFolders('SPF~3bb6a505-9c81-472c-9edb-49d72e563fdf')
```

== Relationship Expansions ==

```
GET [OrgURI]/api/v3/ADW/SPFFolders?$expand=PlantItems
GET [OrgURI]/api/v3/ADW/SPFFolders('6FHH000A')?$expand=PlantItems
GET [OrgURI]/api/v3/ADW/SPFFolders('6FHH000A')/PlantItems
GET [OrgURI]/api/v3/ADW/SPFFolders('6FHH000A')?$expand=*
GET [OrgURI]/api/v3/ADW/SPFFolders('6FHH000A')/PlantItems?$filter=Name eq 'Test'
```

== Property ==

```
GET [OrgURI]/api/v3/ADW/SPFFolders('6FHH000A')/UniqueKey
GET [OrgURI]/api/v3/ADW/SPFFolders('6FHH000A')/UniqueKey/$value
```

== Navigation Property ==

```
GET [OrgURI]/api/v3/ADW/SPFFolders('6FHH000A')/PlantItems('0039IDA')/UniqueKey
GET [OrgURI]/api/v3/ADW/SPFFolders('6FHH000A')/PlantItems('0039IDA')/UniqueKey/$value
```

Create

Note:

When creating an entity instance, the **Class** property is not required, if the correct **@odata.type** property is supplied. Class can be inferred from this property, from the Edm Model.

The exception to this is when an object is created in a deep insert against a navigation property that exposes an interface.

In this case, the **@odata.type** must be the exposed interface, and the **Class** property must be supplied.

== Create an Object ==

```
POST [OrgURI]/api/v3/ADW/SPFFolders
Content-Type: application/json
```

Page Rating

☆☆☆☆☆ | 0

Categories

No categories were selected

```
{
  "@odata.type": "#Intergraph.SPF.Server.API.Model.SPFFolder",
  "Name": "Folder-01-0010",
  "Description": "Folder-01-0010a",
  "Class": "SPFFolder"
}
```

== Create and Deep Link (1-n) ==

```
POST [OrgURI]/api/v3/ADW/SPFFolders
Content-Type: application/json
{
  "@odata.type": "#Intergraph.SPF.Server.API.Model.SPFFolder",
  "Name": "Folder-05-0010",
  "Description": "Folder-05-0010",
  "Class": "SPFFolder",
  "DomainUID": "SPF",
  "PlantItems@odata.bind" : [
    "DevelopmentTags('0039IHA')"
  ]
}
```

== Create and Deep Link (1-1) ==

```
POST [OrgURI]/api/v3/ADW/DevelopmentTags
Content-Type: application/json
{
  "@odata.type": "#Intergraph.SPF.Server.API.Model.DevelopmentTag",
  "Name": "Tag-01-0010",
  "Description": "Tag-01-0010",
  "DomainUID": "SPF",
  "Primary_Classification@odata.bind" : "SPFClassifications('0039IHA')"
}
```

== Create and Deep Insert Link ==

```
POST [OrgURI]/api/v3/ADW/SPFFolders
Content-Type: application/json
{
  "@odata.type": "#Intergraph.SPF.Server.API.Model.SPFFolder",
  "Name": "Folder-05-0010",
  "Description": "Folder-05-0010",
  "DomainUID": "SPF",
  "PlantItems" : [
    {
      "@odata.type": "#Intergraph.SPF.Server.API.Model.SPFFPlantItem",
      "Name": "System-05-01-0010",
      "Description": "System-05-01-0010",
      "Class": "DEVSystem",
      "DEVHazardous": false
    },
    {
      "@odata.type": "#Intergraph.SPF.Server.API.Model.SPFFPlantItem",
      "Name": "Tag-05-01-0010",
      "Description": "Tag-05-01-0010",
      "Class": "DevelopmentTag"
    }
  ]
}
```

== Create and Deep Insert Link ==

```
PUT [OrgURI]/api/v3/ADW/SPFFolders('6FHN000A')/PlantItems/$ref
Content-Type: application/json
{
  "@odata.id": "[OrgURI]/api/v3/ADW/DevelopmentTags('0039JLA')"
}
```

Update

== Update an object ==

```
PATCH [OrgURI]/api/v3/ADW/DEVSystems('6FIA000A')
Content-Type: application/json
{
  "@odata.type": "#Intergraph.SPF.Server.API.Model.SPFFFolder",
  "DEVHazardous": false
}
```

```
}
-----
}
```

== Add/Remove an optional interface ==

Note:

This is currently **not** supported. But will be implemented in a later story. This update will use the extended property "@Interfaces" to allow optional interfaces to be added or removed.

```
PATCH [OrgURI]/api/v3/ADW/SPFFolders('6FIA000A')
Content-Type: application/json
{
  "@odata.type": "#Intergraph.SPF.Server.API.Model.SPFFolder",
  "@Interfaces": { "ISPFFolderExt1" : true, "ISPFFolderExt2" : false }
}
```

== Replace One-To-One Relationship ==

```
PUT [OrgURI]/api/v3/ADW/SPFFolders('6FHN000A')/OneToOneRel/$ref
Content-Type: application/json
{
  "@odata.id": "[OrgURI]/api/v3/ADW/DevelopmentTags('0039JLA') "
}
```

Delete

== Delete an object ==

```
DELETE [OrgURI]/api/v3/ADW/DEVSystems('6FIA000A')
```

Note:

If an update or delete is refused with an HTTP 428 (Precondition Required), you must pass the If-Match header with either "*" value or the current ETag value for the entity instance (e.g. "000000000000D2F3", note you not include the W/ or the escape characters).
(see Smart API SDK information on [Data Modification](#))

== Delete a Relationship (1-1) ==

```
DELETE [OrgURI]/api/v3/ADW/SPFFolders('6FHN000A')/OneToOneRel/$ref
```

== Delete a Relationship (1-n) ==

```
DELETE [OrgURI]/api/v3/ADW/SPFFolders('6FHN000A')/OneToManyRel/$ref?$id=
[OrgURI]/api/v3/ADW/DevelopmentTags('0039JLA')
```

Terminate

== Terminate a property ==

```
DELETE [OrgURI]/api/v3/ADW/SPFFolders('6FHN000A')/Description
```