

GSA FedRAMP Automation Project - Web API Documentation

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1 Web API Information

The General Services Administration (GSA) Federal Risk and Authorization Management Program (FedRAMP) Automation Web Application Programmer Interfaces (API) is a RESTful set of web APIs built on a microservices architecture providing automation capabilities for the FedRAMP Authorization to Operate (ATO) process.

In Section 1.1 you'll find a list of the base URLs that correspond to each specific service.

1.1 Base URLs for Services

Please note that each service has its own set of endpoints and may have specific requirements for the HTTP method and the parameters that can be sent. Detailed information about each service and its endpoints can be found in the corresponding sections of this documentation.

Service	Base URL
Authentication Service	https://appint.volpegroup.com:8080
Portal Service	https://appint.volpegroup.com:8081
Validation Service	https://appint.volpegroup.com:8082
Document Service	https://appint.volpegroup.com:8083
Integration Service	https://appdev.volpegroup.com:8084
ConMon Service	https://appint.volpegroup.com:8085
Reporting Service	https://appint.volpegroup.com:8086
RiskProfile Service	https://appint.volpegroup.com:8087
File Service	https://appdev.volpegroup.com:8089

1.2 Swagger Documentation

All Services support Swagger documentation in case you want an easy interface to test out the API methods. You can view the swagger page by adding “swagger/index.html” onto the URL. For example, here is the swagger documentation for the Portal Service:

```
https://appint.volpegroup.com:8081/swagger/index.html
```

2 Authentication

To use the services provided by the GSA Automation Web API, clients must authenticate themselves and obtain an Authorization Code.

2.1 Request Authorization Code (GET)

Returns Authorization Code (authcode) for downstream activities based on supplied credentials. There is a 60-minute expiration for authcode validity (TBD). Here is the endpoint:

```
/api/UserAuthentication
```

API Call	Query Params (3)	Returns
Service Authentication Service Example (development): <a href="http://localhost:8080/api/UserAuthentication?loginid=<LOGIN_ID>&passcode=<PASSCODE>&logintype=<LOGIN_TYPE>">http://localhost:8080/api/UserAuthentication?loginid=<LOGIN_ID>&passcode=<PASSCODE>&logintype=<LOGIN_TYPE> Example (integration environment): <a href="https://appint.volpegroup.com:8080/api/UserAuthentication?loginid=<LOGIN_ID>&passcode=<PASSCODE>&logintype=<LOGIN_TYPE>">https://appint.volpegroup.com:8080/api/UserAuthentication?loginid=<LOGIN_ID>&passcode=<PASSCODE>&logintype=<LOGIN_TYPE>	loginid passcode logintype – use a value of 2	Success: <JSON> Failure: NotFound() 404.

2.1.1 Example request

```
curl -X GET
'https://appint.volpegroup.com:8080/api/UserAuthentication?loginid=<LOGIN_ID>&passcode=<PASSCODE>&logintype=<LOGIN_TYPE>'
```

2.1.2 Example response

```
[ { "UserID": 0, "UserName": "John Doe", "RoleID": 0, "RoleName": "Dummy Role",
  "RegistrationID": 0, "APIKEY": "00000000-0000-0000-0000-000000000000", "OrganizationID":
  "00000000-0000-0000-0000-000000000000", "OrganizationName": "Dummy Organization",
  "AuthenticationCode": "00000000-0000-0000-0000-000000000000", "SystemID": 0,
  "PackageID": 0, "LastLogin": "0000-00-00T00:00:00.000", "PhoneNumber": "(000) 000-0000"
} ]
```

3 File Upload

The File service in the GSA Automation Web API provides functionality for uploading and retrieving files.

3.1 Upload a System Security Plan (SSP)

To upload a System Security Plan, clients can send a POST request to the following endpoint:

```
/api/FileServices
```

API Call	Query Params (6)	Returns
Service File Service Example (development): <a href="https://appdev.volpegroup.com:8089/api/FileServices?AuthCode=<AUTHCODE>&PackageId=<PACKAGE_ID>&SystemId=<SYSTEM_ID>&DocDesc=<DOC_DESC>&FileTypeId=<FILETYPE_ID>&DocObjTypeId=<DOCOBJ_TYPE_ID>">https://appdev.volpegroup.com:8089/api/FileServices?AuthCode=<AUTHCODE>&PackageId=<PACKAGE_ID>&SystemId=<SYSTEM_ID>&DocDesc=<DOC_DESC>&FileTypeId=<FILETYPE_ID>&DocObjTypeId=<DOCOBJ_TYPE_ID>	AuthCode PackageId SystemId DocDesc FileTypeId DocObjTypeId	Success: <JSON> Failure: NotFound() 404.

3.1.1 Example request

```
curl -X POST
'https://appdev.volpegroup.com:8089/api/FileServices?AuthCode=<AUTHCODE>&PackageId=<PACKAGE_ID>&SystemId=<SYSTEM_ID>&DocDesc=<DOC_DESC>&FileTypeId=<FILETYPE_ID>&DocObjTypeId=<DOCOBJ_TYPE_ID>' \
-F 'RawData=<YOUR_RAW_DATA>'
```

3.1.2 Example response

```
[{"ID":0,"DOCOBJID":0,"FILEIDENTIFIER":"abc1239f-ebfd-4533-a450-5dd1471ce7a4","FileName":"DummyFile.xml","DocumentDesc":"Dummy desc","OSCALDocUUID":"abc1233c-3e67-4f3f-94c8-535fef442346","FILETYPEID":1,"UploadDate":"2023-08-28T18:58:41.253"}]
```

4 Validations

The Validations service offers REST API endpoints to ensure files comply with FedRAMP standards. Getting the validation results back for a file consists of three steps:

1. File upload to Validations service: Users first submit a file for validation to the validation service.

2. Validation: The service validates the file against FedRAMP rules.
3. Fetch Results: Users can quickly fetch the results of the validation.

4.1 Step 1 - File upload to Validations service

API Call	Request body (3)	Returns
Service Validations Service Example (development): http://localhost:8082/api/fileupload Example (integration environment): https://appint.volpegroup.com:8082/api/fileupload	multipartFile _authcode revision – can be string values of “rev4” or “rev5”	Success: <JSON> Failure: NotFound() 404.

4.1.1 Example request

```
curl -X POST 'https://appint.volpegroup.com:8082/api/fileupload' \
  -F 'multipartFile=@/path/to/your/file/dummyfile.xml' \
  -F '_authcode=<AUTHCODE>' \
  -F 'revision=<REVISION>'
```

4.1.2 Example response

```
{
  "Rev": "rev4",
  "file_name": "dummyfile.xml",
  "file_uploaded": true,
  "http_status": 200,
  "message": "File has been uploaded."
}
```

4.2 Step 2 – Validation

API Call	Query params (2)	Returns
Service Validations Service Example (development): http://localhost:8082/api/validatefile?filename=dummyfile.xml&revision=rev4 Example (integration environment): https://appint.volpegroup.com:8082/api/validatefile?filename=dummyfile.xml&revision=rev4	filename revision – can be string values of “rev4” or “rev5”	Success: <JSON> Failure: NotFound() 404.

4.2.1 Example request

```
curl -X POST
'https://appint.volpegroup.com:8082/api/validatefile?filename=dummyfile.xml&revision=rev
4'
```

4.2.2 Example response

```
{
  "validated": true,
  "http_status": 200,
  "message": "SVRL Created",
  "filename_created": "dummyfile.xml"
}
```

4.3 Step 3 – Fetch results

API Call	Query params (1)	Returns
Service Validations Service Example (development): http://localhost:8082/api/jsonconverter?filePath=dummyfile.xml__ssp.results.xml Example (integration environment): https://appint.volpegroup.com:8082/api/jsonconverter?filePath=dummyfile.xml__ssp.results.xml	filePath	Success: <JSON> Failure: NotFound() 404.

4.3.1 Example request

```
curl -X POST
'https://appint.volpegroup.com:8082/api/jsonconverter?filePath=dummyfile.xml__ssp.result
s.xml'
```

4.3.2 Example response

The response will be the FedRAMP Schematron results. Use Section 1.2 to view the response in SwaggerUI.