



**SOUTH AFRICAN RESERVE BANK**  
Prudential Authority

# **SupTech API Reference Guide**

**Scope of Use :**  
**Externally-Facing APIs  
for Automated  
Submissions by  
Reporting Entities**

# Part 1 - Authentication

## Version Overview

Document Version	Creation Date	Valid as of Version	Chapter	Comment
V1.4	19.07.2023	R5.1.0.00_VIZ_10.08.22		Begin document version tracking

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## 1 PA SupTech API Service Overview

API documentation is key to successful uptake/usage of APIs. It improves developer experience by letting people integrate API efficiently and also increase user awareness. PA SupTech exposes API endpoints via the PA SupTech API Service (VAS).

PA SupTech APIs are JSON-based RESTful APIs to Open API Specifications (OAS 2.0). have predictable resource-oriented URLs, accept requests, return responses, and uses standard HTTP response codes, authentication, and verbs. VAS is the primary machine-to-machine communication to push data into and out of pull data out of PA SupTech.

Also note that:

- VAS supports **https** only, i.e. not http.
- VAS returns responses (information) in the preferred language of the user. It does not return exhaustive translatable fields.

## 2 Authentication Process

The purpose of this section of the document is to describe how machine-to-machine authentication can be achieved via the authentication endpoint, i.e. the process. The mechanism of integration is via OAS 2.0 standard RESTful APIs, allowing authentication of a user.

It is expected that the consumer of this document has the ability to develop a connection to an API endpoint.

The process is simply to call the authentication endpoint which, if successful, will return a JWT token to be used in any subsequent calls to other endpoints.

## 3 Endpoints

### 3.1 Authentication

A calling application will make a call to establish a connection to the API, using standard PA SupTech credentials such as username and password. Any user account that is authorised for submission on PA SupTech Portal is also authorised to do the same via VAS. Thus, a user account must be created and the user should login to PA SupTech Portal/PA SupTech Supervision Centre after initial creation to change their temporary password. After that, that account can be authorised against VAS. The endpoint for this is:

```
GET /oauth2/token
```

#### 3.1.1 Request

Authentication to the API is performed via OAuth2 password grant type credentials. The following request parameters apply to this endpoint:

Parameter Name	Required	Data Type	Parameter Type	Description	Comment
grant_type	Yes	string	body	The grant type for the authentication.	Must be one of the below options: <ul style="list-style-type: none"> <li>password</li> </ul>
username	Yes	string	body	The user name to authenticate.	Required for grant_type 'password'
password	Yes	string	body	The password to authenticate.	Required for grant_type 'password'

### Sample Curl Request

```
curl -X GET "{web address}/oauth2/token" ^
--header "Content-Type: application/json" ^
--header "Accept: application/json" ^
--data grant_type=password ^
--data username=john.smith@yourcompany.co.za ^ --data
password=abcd1234!
```

## 3.1.2 Response

On successful authentication, a token is returned to the user's application. The token contains all related information and access permissions of the user. This can lead to the length of the token being quite long if the user has access to many companies. The token is a JSON Web Token (JWT), is re-usable with subsequent calls and has a configurable expiry. The default token expiry is 30 minutes.

OAuth (Open Authorization) is an open standard for token-based authentication and authorization on the In APIs are OAuth 2.0 compliant. Authorization of an action execution is based on the authentication token produced during the authentication process.

The authorization data is an authentication token previously generated by the authentication server. It is transported as a 'Bearer' token by the HTTP 'Authorize' header of a HTTP request. By default, all existing requests require authentication token information.

The **access\_token** argument of the response contains the token for use in subsequent calls.

The below sample response has comments against each part of the response to explain it. Each comment starts with the # symbol. Comments will not be included in any actual response.

### Sample Response

```
{
  "access_token": "eyJhbGciOiJIodHRwOi8vd3d3LnczLm9yZyZyMDAx...", # The access token
  "token_type": "bearer", # The type of token
  "expires_in":
1799
# The token expiry time in seconds (1799 ~ 30 minutes)
}
```

The response parameters are:

Parameter Name	Type	Description	Comment
access_token	integer	The access token	The Return ID
token_type	string	The type of token	Always 'bearer'
expires_in	string	The token expiry time in seconds	1799 ~ 30 minutes

## 3.2 Well Known

This endpoint returns the server's public RSA key set that generated the token. This key is then used to verify authenticity, i.e. that the token was returned from VAS and has not been cryptographically tampered with. The endpoint for this is:

```
GET /.well-known/jwks
```

### 3.2.1 Request

Additional information can be found at:

- <https://tools.ietf.org/html/rfc7517>
- <https://connect2id.com/products/server/docs/api/jwk-set>

#### Sample Curl Request

```
curl -X GET "{web address}/.well-known/jwks" ^  
--header "Accept: application/json" ^  
--header "Authorization: Bearer eyJhbGciOiJodHRwOi8vd3d3LnczLm9y..."
```

### 3.2.2 Response

#### Sample Response

```
{  
  "AdditionalData": {},  
  "Keys": [  
    {  
      "AdditionalData": {},  
      "Alg": null,  
      "Crv": null,  
      "D": null,  
      "DP": null,  
      "DQ": null,  
      "E": null,  
      "K": null,  
      "KeyId": "70C69CD503...",  
      "Kid": "70C69CD503...",  
      "Kty": "RSA",  
      "N": null,  
      "Oth": null,  
      "P": null,  
      "Q": null,  
      "QI": null,  
      "Use": null,  
      "X": null,  
      "X5c": [  
        "MIIC8zCCAdugAwIBAgIQLDZBN7hgcrNBYNq3yqNAezANBgkqhkiG9w0BAQsFADAhMR8wHQYDVQDE..."  
      ],  
      "X5t": "cMac1QPPNWGGv...",  
      "X5tS256": null,  
      "X5u": null,  
      "Y": null,  
      "KeySize": 0,  
      "HasPrivateKey": false,  
      "CryptoProviderFactory": {  
        "CryptoProviderCache": {},  
        "CustomCryptoProvider": null,  
        "CacheSignatureProviders": true,  
        "SignatureProviderObjectPoolCacheSize": 8  
      }  
    }  
  ],  
  "SkipUnresolvedJsonWebKeys": true  
}
```

The response parameters are:

Parameter Name	Type	Description	Comment
alg	string	Algorithm	Identifies the algorithm intended for use with the key.
crv	string	Cryptographic curve used with the key	Values defined may be
d	string	Private exponent value of the RSA private key	Represented as base64url encoding of the value's unsigned big endian representation as a byte array.
...			

VAS uses conventional HTTP response **status** codes to indicate the success or failure. Response codes in the 2xx range indicate success. Codes in the 4xx range indicate an error that failed based information provided (e.g. a required parameter was omitted, etc.). Codes in the 5xx range indicate an internal server error.

The following response status codes will be returned depending upon the success or failure of the request.

HTTP Status Code	Reason	Description	Remedial Action
200	OK	Everything worked as expected	No action required.
204	NoContent	Response has no content	You may have no available response.
400	BadRequest	Malformed request syntax	Ensure the request complies with the request parameters.
401	Unauthorized	The user is not authorized	Check credentials or user is not locked
415	UnsupportedMediaType	Requested payload format is incorrect	Check that the content type is correct
500	InternalServerError	A generic error message indicating server error	Contact the system administrator

# Part 2 - Submission / Data Upload

## Version Overview

Document Version	Creation Date	Valid as of Version	Chapter	Comment
V1.0	19.07.2023	R5.1.0.00_VIZ_10.08.22		Begin document version tracking

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## 1 PA SupTech API Service Overview

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Also note that:

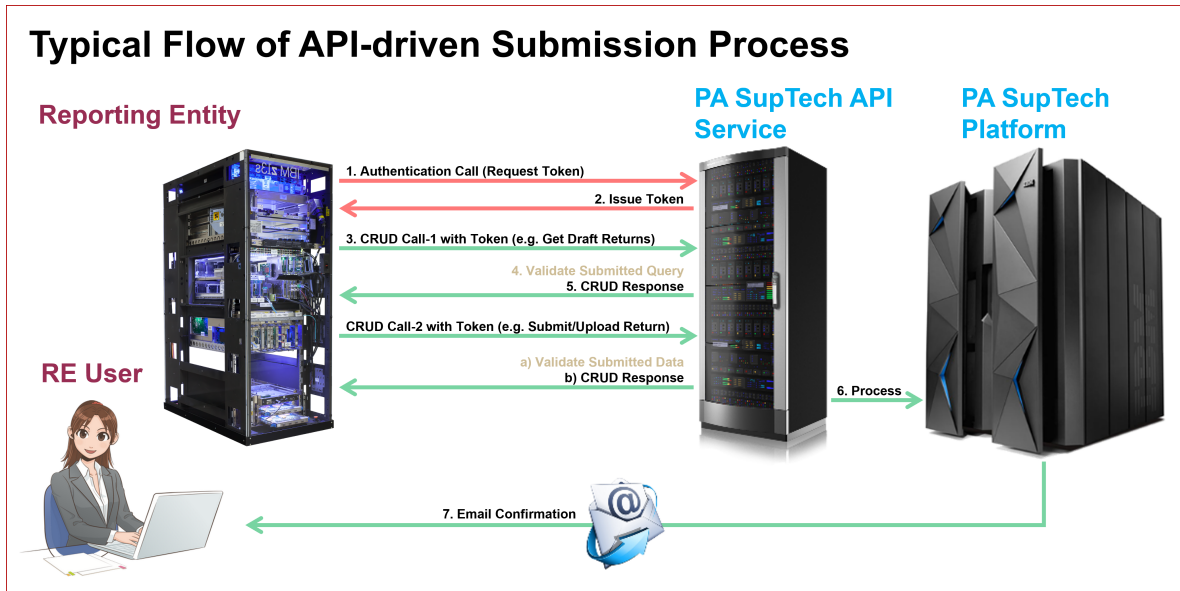
- VAS supports **https** only, i.e. not http.
- VAS returns responses (information) in the preferred language of the user. It does not return exhaustive translatable fields.

There are many endpoints described in this document for various processes. Currently the submission process is elaborated upon below as the most common use case. However all endpoints for all processes are described in the Endpoints section.

## 2 Submit Process

The purpose of this section of the document is to describe how machine-to-machine submission of return data can be achieved via the submission endpoints. The mechanism of integration is via OAS 2.0 standard RESTful APIs, allowing authentication, data submission and tracking of the submission processing status. Essentially, it follows the same process as uploading a data file, in a structured format, e.g. Excel, XML or XBRL, via the web portal. It is expected that the consumer of this document has the ability to develop a connection to an API endpoint.

While individual endpoints can be used independently, the subsequent steps describe how API endpoints are best used in an end-to-end submission process of a single submission.



As can be seen in the above process. The first step is the filing application (Filing App) at the reporting entity first authenticates against the PA SupTech AP receive back a JWT token. Then, using that token from that point onwards, queries the API to get the list of available returns for submission. Then, uploads a data file to one of those returns for processing. Once the API accepts the file for processing it confirms in the response that it has received it. The processing is then carried out separately and the user is emailed when complete, i.e. it has passed or failed submission checks. The following sections describe how to make these calls and interpret the responses.

## 3 Endpoints

### 3.1 Authentication

Authentication/Authorisation is documented separately.

### 3.2 Get Available Returns

Once authorised the next step is typically to get the list of returns in draft, i.e. those available to be populated/submitted. The endpoint for this is:

```
GET /v{version}/returns
```

#### 3.2.1 Request

This operation retrieves the available Returns that are not yet submitted. The scope of the response includes all entities that the user is permitted to submit on behalf of. The following request parameters apply to this endpoint:

Parameter Name	Required	Data Type	Parameter Type	Description	Comment
page	Yes	string	query	Requests the specified page where multiple records are possible	The response indicates how many pages there are

entityReference	No	string	query	The reference of the entity to filter for. If left blank will show returns for all entities the user has access to.	
version	Yes	string	path	The version number of the API endpoint.	'1' is the required value as that is the current/only version.

### Sample Curl Request

```
curl -X GET "{web address}/v1/returns?page=1&entityReference=abc" ^
--header "Accept: application/json" ^
--header "Authorization: Bearer eyJhbGciOiJodHRwOi8vd3d3LnczLm9y..."
```

## 3.2.2 Response

The response contains information about each return available for completion as well as paging information for the response itself. The below sample response has comments against each part of the response to explain it. Each comment starts with the # symbol. Comments will not be included in any actual response.

### Sample Response

```
{
  "data":
  {
    # The return
    "id": 2,
    # The return ID
    "name": "New Return",
    # The return name
    "reference": "COM00002",
    # The return reference
    "endDate": "2020-08-01T00:00:00.000",
    # The return end date
    "status":
    {
      # Contains details of the status of the return, i.e. No Data, In Draft, Submitted, etc.
      "id":
      2,
      # The status ID of the return. 0 = No Data, 1 = In Draft, 2 = Valid, 3 = Submitted, 4 = Declined, 9 = Submitted for Approval
      "name": "Valid"
      # The status name of the return
    },
    "returnTypes": [
    # The array of return types, i.e. the content/return types. These can be retrieved from the endpoint
    {
      "id": "489fd2f5-0493-4a44-a6e5-12208b12dce6",
      # The return type ID
      "versionNo": 1,
      # The return type version number, i.e. of the content describing the return type
      "name": "Banking Return",
      # The name of the return type
      "status": {
      # The status of the return type
      "id": 2,
      # The status ID
      "name": "Validated"
      # The status name
      },
      "transformType": "XML",
      # The type of upload performed
      "submissionMode": "Offline",
      # The submission type
      "supportedExtensions": [
      # The array of types of file supported for upload
      "xml"
      ]
      }
    ],
    "entity":
    {
      # Contains details of the entity the return belongs to
```



```

    "id":
2, # The
entity ID # The
    "name": "ABC Bank", # The
entity name (in the default language for the user)
    "reference": "abc" # The
entity reference, if any
    },
    "revisions": [
# The array of revisions of the return. Only the specified revision is returned by this endpoint
    {
        "id": 2, #
The revision unique ID
        "major": 0,
# The revision major number
        "minor": 1,
# The revision minor number
        "isCurrent": true, #
Indicates if the revision is the latest or not
        "dueDate": "2020-08-31T00:00:00.000", # The revision due date
        "lastActionPerformed": "Created", # The last action
performed on the revision
        "stateLastChangedOn": "2020-08-10T12:13:14.000", # The date and time the revision last
changed
        "hasWarnings": false, # Indicates if
the revision has any validation warnings
        "hasErrors": true, #
Indicates if the revision has any validation errors
        "lastSaved": "2020-08-10T12:13:14.877", # Indicates the date and
time the revision was last saved
        "tags": [ #
The array of tags/categories on the return, if any, e.g. periodicity, reporting level, etc.
        {
            "id": "P", # The tag
ID
            "name": "Periodicity", # The tag name
            "options": [ # The array
of options selected for the tag on the revision
            {
                "id": "M", # The tag
option ID
                "name": "Monthly" # The tag option name
            }
        ]
    }
]
}
],
    "paging": { # Contains details of the paging
information of the response
        "totalItemsNumber": 2, # The total number of
predefined reasons in a resource
        "totalPagesNumber": 1, # The total number of pages
        "currentPageNumber": 1, # The current page number
        "hasPreviousPage": false, # Indicates if there is a
previous page to this
        "hasNextPage": false, # Indicates if there is a
subsequent page to this
        "isFirstPage": true, # Indicates if this is a first
page
        "isLastPage": true # Indicates if this is a last
page
    }
}
}

```

Further elaboration of the response parameters are below if required:

data

Parameter Name	Type	Description	Comment
id	integer	The Return unique system ID	The Return ID
name	string	The Return name	
reference	string	The Return reference	
endDate	datetime	The Return end date	YYYY-MM-DDThh:mm:ss.sTZD
status	{status}	The Return current status	The status of the last revision
returnTypes	{returnTypes}[]	The Return type	E.g. "Solvency II"
entity	{entity}	The entity the Return is associated with	
revisions	{revisions}[]	The Return revisions	The revisions of the Return

#### status

Parameter Name	Type	Description	Comment
id	integer	The status ID	It is recommended to use this parameter for machine-to-machine interactions. See Return Status for further details
name	string	The status name	Terminology depends on pre-defined values, e.g. id 1 for 'In Draft', id 2 for 'Valid'. See Return Status for further details

#### returnTypes

Parameter Name	Type	Description	Comment
id	GUID	The Return Type ID	The Return Type GUID
versionNo	integer	The Return type version number	
name	string	The Return type name	

#### entity

Parameter Name	Type	Description	Comment
id	integer	The entity ID	
name	string	The entity name	
reference	string	The entity reference code	

#### revisions

Parameter Name	Type	Description	Comment
id	integer	The revision ID	The Return revision ID
major	string	The revision major version	
minor	string	The revision minor version	
isCurrent	Boolean	Whether the revision is current	
dueDate	datetime	The revision end date	YYYY-MM-DDThh:mm:ss.sTZD
lastActionPerformed	string	The revision last action performed	E.g. 'Created', 'SubmissionValidation', etc. See View Audit Log <b>System Actions</b> section for further details
stateLastChangedOn	datetime	The revision date when state last changed	YYYY-MM-DDThh:mm:ss.sTZD
hasWarnings	Boolean	The revision warnings state	Only 'Public' Warnings are returned to the user
hasErrors	Boolean	The revision errors state	
lastSaved	datetime	The revision date when last saved	YYYY-MM-DDThh:mm:ss.sTZD
tags	{tags}[]	The revision tags/categories	

#### tags

Parameter Name	Type	Description	Comment
id	string	The tag ID	E.g. 'FI'
name	string	The tag name	E.g. 'Transmission Progress'

options	{options[]}	The tag option	
---------	-------------	----------------	--

options

Parameter Name	Type	Description	Comment
id	string	The option ID	
name	string	The option name	E.g. 'Quarterly', 'Annual'

### 3.3 Upload Data

Once you have retrieved details of the return to upload data into the next step is to populate data into that return by uploading a file via the upload API endpoint below:

```
POST /v{version}/returns/{revisionId}/upload/{returnTypeId}/{clearData}
```

#### 3.3.1 Request

This operation allows the user to populate data from a file into a single return type within the return. Once the file is received by the API endpoint and passes some initial checks, such as virus scanning, a 200 response status code is returned and the file is passed to a workflow to complete processing. The configuration of this workflow determines the extent of processing, e.g. validation only or validation and submission. Once processing is complete an email is received. Alternatively, the status of the processing can be queried via a separate endpoint, `/v{version}/returns/{revisionId}/validate/results`. The following request parameters apply to the upload endpoint:

Parameter Name	Required	Data Type	Parameter Type	Description	Comment
revisionId	Yes	integer	path	The globally unique ID of the return revision	Taken from the <b>data - revisions - id</b> parameter of the previous step
returnTypeId	Yes	string	path	The globally unique ID of the return type	Taken from the <b>data - revisions - id</b> parameter of the previous step
clearData	Yes	boolean	path	True to clear any previous existing data, false otherwise	
version	Yes	string	path	The version number of the API endpoint	'1' is the required value as that is the current version
file	Yes	file	formData	The file to upload	

#### Sample Curl Request

```
curl -X POST "{web address}/v1/returns/15610/upload/457fa7df-d8df-4e2d-9904-2d56f4341b9/true" ^
--header "Content-Type: multipart/form-data" ^
--header "Accept: application/json" ^
--header "Authorization: Bearer eyJhbGciOiJodHRwOi8vd3d3LnczLm9y..."
--form "file=@\"data_file.xml\""
```

#### 3.3.2 Response

The response should simply be the response code 200.

HTTP Status Code	Reason	Description	Remedial Action
200	OK	Everything worked as expected	No action required.
204	NoContent	Response has no content	You may have no available response.
400	BadRequest	Malformed request syntax	Ensure the request complies with the request parameters.
401	Unauthorized	The user is not authorized	Check credentials or user is not locked
403	Forbidden	The action is not permitted	Check user permissions to the entity and/or return type
415	UnsupportedMediaType	Requested payload format is incorrect	Check that the content type is correct
500	InternalServerError	A generic error message indicating server error	Contact the system administrator

## 3.4 Return Validation Results (from Release R5.3.0.00\_VIZ\_30.06.23)

When a file has been processed the below API endpoint can be called to retrieve the validation results, if any, i.e. warning or error validation failure messages. The endpoint can also be used to check on the progress of processing of an upload.

```
GET /v{version}/returns/{revisionId}/validate/results
```

### 3.4.1 Request

This operation allows the user to specify a specific return revision to retrieve validation results for, if any. The following request parameters apply to this endpoint:

Parameter Name	Required	Data Type	Parameter Type	Description	Comment
revisionId	Yes	integer	path	The globally unique ID of the return revision	Taken from the <b>data revisions id</b> parameter from earlier
version	Yes	string	path	The version number of the API endpoint	'1' is the required value as that is the current version

#### Sample Curl Request

```
curl -X GET "{web address}/v1/returns/15610/validate/results" ^  
--header "Accept: application/json" ^  
--header "Authorization: Bearer eyJhbGciOiJodHRwOi8vd3d3LnczLm9y..."
```

### 3.4.2 Response

The response should simply be the response code 200 or 206 if the upload is processing.

HTTP Status Code	Reason	Description	Remedial Action
200	OK	Everything worked as expected	No action required.
204	NoContent	Response has no content	You may have no available response.
206	Processing	The upload is still processing	Wait and try again later
400	BadRequest	Malformed request syntax	Ensure the request complies with the request parameters.
401	Unauthorized	The user is not authorized	Check credentials or user is not locked
415	UnsupportedMediaType	Requested payload format is incorrect	Check that the content type is correct
500	InternalServerError	A generic error message indicating server error	Contact the system administrator

A 200 response contains information about each return available for completion as well as paging information for the response itself. The below sample response has comments against each part of the response to explain it. Each comment starts with the # symbol. Comments will not be included in any actual response.

#### Sample Response

```
{  
  "data":  
  {  
    return # The  
      "id":  
    2, # The  
    return ID  
      "name": "New Return", #  
    The return name  
      "reference": "COM00002", # The  
    return reference  
      "endDate": "2020-08-01T00:00:00.000", # The return end date  
      "status":  
    { # Contains  
      details of the status of the return, i.e. No Data, In Draft, Submitted, etc.  
      "id":  
    2, # The status
```

```

ID of the return. 0 = No Data, 1 = In Draft, 2 = Valid, 3 = Submitted, 4 = Declined, 9 = Submitted for Approval
  "name": "Valid" # The
status name of the return
  },
  "returnTypes": [ #
The array of return types, i.e. the content/return type. These can be retrieved from the endpoint
  {
    "id": "489fd2f5-0493-4a44-a6e5-12208b12dce6", # The return type ID
    "versionNo": 1, #
The return type version number, i.e. of the content describing the return type
    "name": "Banking Return", # The name of the
return type
    "status": {
# The status of the return type
      "id": 2,
# The status ID
      "name": "Validated" # The status
name
    },
    "transformType": "XML", # The type
of upload performed
    "submissionMode": "Offline", # The submission type
    "supportedExtensions": [ # The array of
types of file supported for upload
      "xml"
    ]
  }
],
  "entity":
{ # Contains
details of the entity the return belongs to
  "id":
2, # The entity
ID
  "name": "ABC Bank", # The
entity name (in the default language for the user)
  "reference": "abc" #
The entity reference, if any
},
  "revisions": [ #
The array of revisions of the return. Only the specified revision is returned by this endpoint
  {
    "id": 2, #
The revision unique ID
    "major": 0,
# The revision major number
    "minor": 1,
# The revision minor number
    "isCurrent": true, #
Indicates if the revision is the latest or not
    "dueDate": "2020-08-31T00:00:00.000", # The revision due date
    "lastActionPerformed": "Created", # The last action
performed on the revision
    "stateLastChangedOn": "2020-08-10T12:13:14.000", # The date and time the revision last
changed
    "hasWarnings": false, # Indicates if
the revision has any validation warnings
    "hasErrors": true, #
Indicates if the revision has any validation errors
    "lastSaved": "2020-08-10T12:13:14.877", # Indicates the date and
time the revision was last saved
    "tags": [ #
The array of tags/categories on the return, if any, e.g. periodicity, reporting level, etc.
  {
    "id": "P", # The tag ID
    "name": "Periodicity", # The tag name
    "options": [ # The
array of options selected for the tag on the revision
  {
    "id": "M", # The tag
option ID

```

```

        "name": "Monthly" # The tag option name
    }
  ]
}
],
"rules": {
# Contains information on validation rules
  "failed": [ #
The array of failed rules
    {
      "name": "VAL-500", # The rule name
      "type": "Error", # The
rule type (Error, Warning or Private Warning)
      "validationMessage": "Ref ID already exists", # The rule failure message
      "expression": null, # The rule
expression
      "suggestedCourseOfAction": null, # The rule suggested
course of action (currently not populated, always null)
      "members": null # The
rule members (currently not populated, always null)
    }
  ],
  "passed": null
# The array of passed rules (currently not populated, always null)
}
}
}

```

**Note:** ValidationMessage will contain "\n" at the end when rule failure message contains line breaks in the builder.

Expression will contain spaces when rule expression contains spaces and/or line breaks in the builder.

Further elaboration of the response parameters are below if required:

Parameter Name	Type	Description	Comment
id	integer	The Return's unique system ID	The Return ID
name	string	The Return name	
reference	string	The Return reference	
endDate	datetime	The Return's end date	YYYY-MM-DDThh:mm:ss.STZD
status	{status}	The Return's current status	The status of the last revision
returnTypes	{returnTypes}[]	The Return's type	E.g. 'Solvency II'
entity	{entity}	The entity the Return is associated with	
revisions	{revision}[]	The Return's revisions	The revisions of the Return
rules	{rules}	The failed and passed rules	Note: Passed rules are not returned. Future scope.

status

Parameter Name	Type	Description	Comment
id	integer	The status ID	It is recommended to use this parameter for machine-to-machine interactions. See Return Status for further details.
name	string	The status name	Terminology depends on pre-defined values, e.g. id 1 for 'In Draft', id 2 for 'Valid'. See Return Status for further details.

returnTypes

Parameter Name	Type	Description	Comment
----------------	------	-------------	---------

id	GUID	The Return type's ID	The Return Type GUID
versionNo	integer	The Return type's version number	
name	string	The Return type's name	
status	{status}	The Return type's status	Terminology depends on pre-defined values, e.g. id 1 for 'In Draft', id 2 for 'Valid'
transformType	string	The Return type's transform type, i.e. file upload type	E.g. 'Excel', 'XML'
submissionMode	string	The Return types submission mode	I.e. 'Online', 'Offline'
supportedExtensions	string[]	The Return Type's set of supported extensions	E.g. '.xml'

#### entity

Parameter Name	Type	Description	Comment
id	integer	The entity's ID	
name	string	The entity's name	
reference	string	The entity's reference code	

#### revisions

Parameter Name	Type	Description	Comment
id	integer	The revision ID	The Return's revision ID
major	string	The revision's major version.	
minor	string	The revision's minor version.	
isCurrent	Boolean	Whether the revision is current.	
dueDate	datetime	The revision's due date	YYYY-MM-DDThh:mm:ss.sTZD
lastActionPerformed	string	The revision's last action performed	E.g. 'Created', 'SubmissionValidation' etc. See View Audit <b>Log System</b> Actions section for further details
stateLastChangedOn	datetime	The revision's date when state last changed	YYYY-MM-DDThh:mm:ss.sTZD
hasWarnings	Boolean	The revision's warnings state.	Only 'Public' Warnings are returned to the user
hasErrors	Boolean	The revision's errors state	
lastSaved	datetime	The revision's date when last saved.	YYYY-MM-DDThh:mm:ss.sTZD
tags	{tags}[]	The revision's tags/categories	

#### tags

Parameter Name	Type	Description	Comment
id	string	The tag ID	E.g. 'FI'
name	string	The tag name	E.g. 'Transmission Progress'
options	{options}[]	The tag option	

#### options

Parameter Name	Type	Description	Comment
id	string	The option ID	
name	string	The option name	E.g. 'Quarterly', 'Annual'

rules

Parameter Name	Type	Description	Comment
failed	{failed}[]	The list of rules that have failed	If a rule is executed more than once on a data set, e.g. on each row in a table, then each failing row /instance is output here
passed	{passed}[]	The list of rules that have passed	Always null. Passed rules are not returned. Future scope

failed

Parameter Name	Type	Description	Comment
name	string	The rule name	
type	string	The rule type	Error, Warning, Private Warning
validationMessage	string	The rule failure message	This will have no value for passed rules
expression	string	The rule expression	Currently not populated, always null
suggestedCourseOfAction	string	The suggested course of action in response to the rule failing	Currently not populated, always null
members	{members}[]	The data points involved in the expression	Currently not populated, always null

## 3.5 Returns Search

This below endpoint retrieves a set of Returns filtered by certain criteria.

```
GET /v{version}/returns/search
```

### 3.5.1 Request

Unlike the endpoint `GET /v{version}/returns` this endpoint retrieves all returns (filtered by the below parameters) instead of just those available for submission. The following are the request parameters. Note that at least one parameter must be input along with the `version` parameter or a 400 response will be received.

Parameter Name	Required	Data Type	Parameter Type	Description	Comment
version	Yes	string	path	The version number of the API endpoint.	'1' is the required value as that is the current/only version.
page	Yes	string	query	Requests the specified page where multiple records are possible	The response indicates how many pages there are
name	No	string	query	Name of the return to filter for	
reference	No	string	query	Reference of the return to filter for	
status	No	string	query	Status of the return to filter for, id or name	It is recommended to use id as the parameter as this will never change.  0 = No Data, 1 = In Draft, 2 = Valid, 3 = Submitted, 4 = Declined, 9 = Submitted for Approval
entity	No	integer	query	The ID of the entity to filter for	
entityReference	No	string	query	The reference of the entity to filter for. If left blank will show returns for all entities the user has access to.	This parameter is only available from release Q2, 2021.
dueDate	No	datetime	query	The return due date	YYYY-MM-DDThh:mm:ss.STZD
endDate	No	datetime	query	The return end date	YYYY-MM-DDThh:mm:ss.STZD
categories	No	string[]	query	A set of tags/categories to filter for	Provide multiple values in different lines



### Sample Curl Request

```
curl -X GET "{web address}/v1/returns/search?status=Submitted" ^
--header "Accept: application/json" ^
--header "Authorization: Bearer eyJhbGciOiJodHRwOi8vd3d3LnczLm9y..."
```

### 3.5.2 Response

The response contains information about each return for the filter criteria as well as paging information for the response itself. The below sample response has comments against each part of the response to explain it. Each comment starts with # the symbol. Comments will not be included in any actual response.

### Sample Response

```
{
  "data":
  {
    #
    The return
    "id": 2,
    # The return ID
    "name": "New Return",
    # The
    return name
    "reference": "COM00002",
    # The
    return reference
    "endDate": "2020-08-01T00:00:00.000",
    # The return end date
    "status":
    {
      # Contains
      details of the status of the return, i.e. No Data, In Draft, Submitted, etc.
      "id":
      2,
      # The
      status ID of the return. 0 = No Data, 1 = In Draft, 2 = Valid, 3 = Submitted, 4 = Declined, 9 = Submitted for
      Approval
      "name": "Valid"
      # The
      status name of the return
    },
    "returnTypes": [
    #
    The array of return types, i.e. the content/return type. These can be retrieved from the endpoint
    {
      "id": "489fd2f5-0493-4a44-a6e5-12208b12dce6",
      # The return type ID
      "versionNo": 1,
      #
      The return type version number, i.e. of the content describing the return type
      "name": "Banking Return",
      # The name of the
      return type
      "status": {
      # The status of the return type
      "id": 2,
      #
      The status ID
      "name": "Validated"
      # The status
      name
      },
      "transformType": "XML",
      # The type
      of upload performed
      "submissionMode": "Offline",
      # The submission type
      "supportedExtensions": [
      # The array of
      types of file supported for upload
      "xml"
      ]
    }
  ],
  "entity":
  {
    # Contains
    details of the entity the return belongs to
    "id":
    2,
    # The
    entity ID
    "name": "ABC Bank",
    # The
    entity name (in the default language for the user)
```

```

    "reference": "abc" # The
entity reference, if any
  },
  "revisions": [
# The array of revisions of the return. Only the specified revision is returned by this endpoint
    {
      "id": 2, #
The revision unique ID
      "major": 0,
# The revision major number
      "minor": 1,
# The revision minor number
      "isCurrent": true, #
Indicates if the revision is the latest or not
      "dueDate": "2020-08-31T00:00:00.000", # The revision due date
      "lastActionPerformed": "Created", # The last action
performed on the revision
      "stateLastChangedOn": "2020-08-10T12:13:14.000", # The date and time the revision last
changed
      "hasWarnings": false, # Indicates if
the revision has any validation warnings
      "hasErrors": true, #
Indicates if the revision has any validation errors
      "lastSaved": "2020-08-10T12:13:14.877", # Indicates the date and
time the revision was last saved
      "tags": [ #
The array of tags/categories on the return, if any, e.g. periodicity, reporting level, etc.
        {
          "id": "P", # The tag
ID
          "name": "Periodicity", # The tag name
          "options": [ # The array
of options selected for the tag on the revision
            {
              "id": "M", # The tag
option ID
              "name": "Monthly" # The tag option name
            }
          ]
        }
      ]
    }
  ],
  "paging": { # Contains details of the paging
information of the response
    "totalItemsNumber": 2, # The total number of
predefined reasons in a resource
    "totalPagesNumber": 1, # The total number of pages
    "currentPageNumber": 1, # The current page number
    "hasPreviousPage": false, # Indicates if there is a
previous page to this
    "hasNextPage": false, # Indicates if there is a
subsequent page to this
    "isFirstPage": true, # Indicates if this is a first
page
    "isLastPage": true # Indicates if this is a last
page
  }
}

```

Further elaboration of the response parameters are below if required:

data

Parameter Name	Type	Description	Comment
id	integer	The Return unique system ID	The Return ID
name	string	The Return name	

reference	string	The Return reference	
endDate	datetime	The Return end date	YYYY-MM-DDThh:mm:ss.STZD
status	{status}	The Return current status	The status of the last revision
returnTypes	{returnTypes}[]	The Return type	E.g. "Solvency II"
entity	{entity}	The entity the Return is associated with	
revisions	{revisions}[]	The Return revisions	The revisions of the Return

#### status

Parameter Name	Type	Description	Comment
id	integer	The status ID	It is recommended to use this parameter for machine-to-machine interactions. See Return Status for further details
name	string	The status name	Terminology depends on pre-defined values, e.g. id 1 for 'In Draft', id 2 for 'Valid'. See Return Status for further details

#### returnTypes

Parameter Name	Type	Description	Comment
id	GUID	The Return Type ID	The Return Type GUID
versionNo	integer	The Return type version number	
name	string	The Return type name	

#### entity

Parameter Name	Type	Description	Comment
id	integer	The entity ID	
name	string	The entity name	
reference	string	The entity reference code	

#### revisions

Parameter Name	Type	Description	Comment
id	integer	The revision ID	The Return revision ID
major	string	The revision major version	
minor	string	The revision minor version	
isCurrent	Boolean	Whether the revision is current	
dueDate	datetime	The revision end date	YYYY-MM-DDThh:mm:ss.STZD
lastActionPerformed	string	The revision last action performed	E.g. 'Created', 'SubmissionValidation', etc. See View Audit Log <b>System Actions</b> section for further details
stateLastChangedOn	datetime	The revision date when state last changed	YYYY-MM-DDThh:mm:ss.STZD
hasWarnings	Boolean	The revision warnings state	Only 'Public' Warnings are returned to the user
hasErrors	Boolean	The revision errors state	
lastSaved	datetime	The revision date when last saved	YYYY-MM-DDThh:mm:ss.STZD
tags	{tags}[]	The revision tags/categories	

#### tags

Parameter Name	Type	Description	Comment
id	string	The tag ID	E.g. 'FI'
name	string	The tag name	E.g. 'Transmission Progress'
options	{options}[]	The tag option	

#### options

Parameter Name	Type	Description	Comment
id	string	The option ID	
name	string	The option name	E.g. 'Quarterly', 'Annual'

### 3.6 Return Information

This endpoint retrieves the details of a specific requested revision of a Return.

```
GET /v{version}/returns/{revisionId}
```

#### 3.6.1 Request

The following request parameters apply to this endpoint:

Parameter Name	Required	Data Type	Parameter Type	Description	Comment
revisionId	Yes	integer	path	The unique ID of the return revision	
version	Yes	string	path	The version number of the API endpoint.	'1' is the required value as that is the current/only version.

#### Sample Curl Request

```
curl -X GET "{web address}/v1/returns/15945" ^
--header "Accept: application/json" ^
--header "Authorization: Bearer eyJhbGciOiJodHRwOi8vd3d3LnczLm9y..."
```

#### 3.6.2 Response

The response shows the details of just the specified return revision. The below sample response has comments against each part of the response to explain it. Each comment starts with the # symbol. Comments will not be included in any actual response.

#### Sample Response

```
{
  "data":
  {
    # The return
    "id": 2,
    # The return ID
    "name": "New Return",
    # The return name
    "reference": "COM00002",
    # The return reference
    "endDate": "2020-08-01T00:00:00.000",
    # The return end date
    "status":
    {
      # Contains details of the status of the return, i.e. No Data, In Draft, Submitted, etc.
      "id":
      2,
      # The status ID of the return. 0 = No Data, 1 = In Draft, 2 = Valid, 3 = Submitted, 4 = Declined, 9 = Submitted for Approval
      "name": "Valid",
      # The status name of the return
    },
    "returnTypes": [
      # The array of return types, i.e. the content/return types. These can be retrieved from the endpoint
      {
        "id": "489fd2f5-0493-4a44-a6e5-12208b12dce6",
        # The return type ID
        "versionNo": 1,
        # The return type version number, i.e. of the content describing the return type
        "name": "Banking Return",
        # The name of the return type
      }
    ]
  }
}
```

```

        "status": {
# The status of the return type
        "id": 2,
The status ID
        "name": "Validated"
name
        },
        "transformType": "XML",
of upload performed
        "submissionMode": "Offline",
        "supportedExtensions": [
types of file supported for upload
        "xml"
        ]
    },
    ],
    "entity":
    {
# Contains
    details of the entity the return belongs to
        "id":
    2,
entity ID
        "name": "ABC Bank",
entity name (in the default language for the user)
        "reference": "abc"
entity reference, if any
    },
    "revisions": [
# The array of revisions of the return. Only the specified revision is returned by this endpoint
    {
        "id": 2,
The revision unique ID
        "major": 0,
# The revision major number
        "minor": 1,
# The revision minor number
        "isCurrent": true,
Indicates if the revision is the latest or not
        "dueDate": "2020-08-31T00:00:00.000",
# The revision due date
        "lastActionPerformed": "Created",
# The last action
        "stateLastChangedOn": "2020-08-10T12:13:14.000",
# The date and time the revision last
changed
        "hasWarnings": false,
the revision has any validation warnings
        "hasErrors": true,
Indicates if the revision has any validation errors
        "lastSaved": "2020-08-10T12:13:14.877",
# Indicates the date and
time the revision was last saved
        "tags": [
The array of tags/categories on the return, if any, e.g. periodicity, reporting level, etc.
        {
            "id": "P",
ID
            "name": "Periodicity",
# The tag name
            "options": [
# The array
of options selected for the tag on the revision
                {
                    "id": "M",
option ID
                    "name": "Monthly"
# The tag option name
                }
            ]
        }
    ]
    },
    ],
    "paging": {
# Contains details of the paging
    information of the response
        "totalItemsNumber": 2,
# The total number of
predefined reasons in a resource
    }
}

```

```

    "totalPagesNumber": 1, # The total number of pages
    "currentPageNumber": 1, # The current page number
    "hasPreviousPage": false, # Indicates if there is a
previous page to this
    "hasNextPage": false, # Indicates if there is a
subsequent page to this
    "isFirstPage": true, # Indicates if this is a first
page
    "isLastPage": true # Indicates if this is a last
page
  }
}
}

```

Further elaboration of the response parameters are below if required:

data

Parameter Name	Type	Description	Comment
id	integer	The Return unique system ID	The Return ID
name	string	The Return name	
reference	string	The Return reference	
endDate	datetime	The Return end date	YYYY-MM-DDThh:mm:ss.sTZD
status	{status}	The Return current status	The status of the last revision
returnTypes	{returnTypes}[]	The Return type	E.g. "Solvency II"
entity	{entity}	The entity the Return is associated with	
revisions	{revisions}[]	The Return revisions	The revisions of the Return

status

Parameter Name	Type	Description	Comment
id	integer	The status ID	It is recommended to use this parameter for machine-to-machine interactions. See Return Status for further details
name	string	The status name	Terminology depends on pre-defined values, e.g. id 1 for 'In Draft', id 2 for 'Valid'. See Return Status for further details

returnTypes

Parameter Name	Type	Description	Comment
id	GUID	The Return Type ID	The Return Type GUID
versionNo	integer	The Return type version number	
name	string	The Return type name	

entity

Parameter Name	Type	Description	Comment
id	integer	The entity ID	
name	string	The entity name	
reference	string	The entity reference code	

revisions

Parameter Name	Type	Description	Comment
id	integer	The revision ID	The Return revision ID
major	string	The revision major version	
minor	string	The revision minor version	
isCurrent	Boolean	Whether the revision is current	

dueDate	datetime	The revision end date	YYYY-MM-DDThh:mm:ss.STZD
lastActionPerformed	string	The revision last action performed	E.g. 'Created', 'SubmissionValidation', etc. See View Audit Log <b>System Actions</b> section for further details
stateLastChangedOn	datetime	The revision date when state last changed	YYYY-MM-DDThh:mm:ss.STZD
hasWarnings	Boolean	The revision warnings state	Only 'Public' Warnings are returned to the user
hasErrors	Boolean	The revision errors state	
lastSaved	datetime	The revision date when last saved	YYYY-MM-DDThh:mm:ss.STZD
tags	{tags}[]	The revision tags/categories	

tags

Parameter Name	Type	Description	Comment
id	string	The tag ID	E.g. 'FI'
name	string	The tag name	E.g. 'Transmission Progress'
options	{options}[]	The tag option	

options

Parameter Name	Type	Description	Comment
id	string	The option ID	
name	string	The option name	E.g. 'Quarterly', 'Annual'

### 3.7 Create Return (from Release R5.3.0.00\_VIZ\_30.06.23)

Just as on the web portal the same returns that can be created there can be created via API. The endpoint to create this return is:

```
GET /v{version}/returns/create
```

#### 3.7.1 Request

This operation allows the user to create a return.

The below sample model has comments against each part of the JSON to explain it. Each comment starts with the # symbol. Comments should not be included in any actual model.

### Sample Request

```

{
  "entityId": 0,                                     # The entity
  (firm) ID.

  # Retrieved
  initially from the system and unique per environment
  "returnTypes": [                                   # The array
  of types of return
    {
      "returnTypeId": "00000000-0000-0000-0000-000000000000" # The ID of
  type of return to create
    }
  ],
  "names": [                                         # The array
  of names to give the return, one per language/culture in the system
    {
      "culture": "string",                             # The
  culture for the return name
      "value": "string"                               # The return
  name for the culture
    }
  ],
  "endDate": "2023-06-01T00:00:00.000Z",            # The return
  end date.
  "tags": [                                          # The array
  of tags/categories on the return, if any, e.g periodicity, reporting level etc.
    {
      "id": "string",                                  # The tag ID
      "optionId": "string"                             # The tag
  option ID
    }
  ]
}

```

The following request parameters apply to this endpoint:

Parameter Name	Required	Data Type	Parameter Type	Description	Comment
model	Yes	string	application/json	The JSON model containing the information of the return to create	
version	Yes	string	path	The version number of the API endpoint.	'1' is the required value as that is the current /only version.

model

Parameter Name	Required	Data Type	Description	Comment
entityId	Yes	integer	The entity (firm) ID	Taken from the entity_instance_id
returnTypes	Yes	{returnTypes}[]	The Return type	E.g. "Solvency II"
names	Yes	{names}[]	The names to give to the return, one per culture/language supported	
endDate	Yes	datetime	The return end date	Any time component will be ignored. Accepted formats are standard date YYYY-MM-DD and ISO format YYYY-MM-DDThh:mm:ss.sTZD e.g. 2024-05-06 and 2024-05-06T00:00:00.000Z
tags	Yes	{tags}[]	A set of tags/categories to filter for	Provide multiple values in different lines. Some tags may be mandatory to be provided.

returnTypes

Parameter Name	Required	Data Type	Description	Comment
----------------	----------	-----------	-------------	---------



returnTypeId	Yes	GUID	The globally unique ID of the return type	The format should be 00000000-0000-0000-0000-000000000000
--------------	-----	------	---	---

names

Parameter Name	Required	Data Type	Description	Comment
culture	Yes	string	The unique name of a culture, used in the solution. Can be one or multiple. The format of the culture is e.g. en-GB	
value	Yes	string	The required return name. This should correspond to the return name expression.	

tags

Parameter Name	Required	Data Type	Description	Comment
id	Yes	string	The globally unique ID of the category	Taken from the response for GET /v{version}/returns/tags
optionId	Yes	string	The globally unique ID of the category option	Taken from the response for GET /v{version}/returns/tags

### Sample Curl Request

```
curl -X POST "{web address}/v1/returns/create" ^
--header "Content-Type: application/json" ^
--header "Accept: application/json" ^
--header "Authorization: Bearer eyJhbGciOiJodHRwO..." ^
-d "{  \"entityId\": 3,  \"returnTypes\": [  {  \"returnTypeId\": \"5CF65CD7-4745-4587-A389-DC0D251A7A5E\"  },  {  \"returnTypeId\": \"5CF65CD7-4745-4587-A389-DC0D251A7A5E\"  }  ],  \"names\": [{\"culture\": \"sl-SI\", \"value\": \"Data1\"}, {\"culture\": \"ar-JO\", \"value\": \"DATA1\"}],  \"endDate\": \"2023-12-14T00:00:00.000Z\",  \"tags\": [ {\"id\": \"DisclosureStatus\", \"optionId\": \"Public\"} ] }"
```

### 3.7.2 Response

The below sample response has comments against each part of the JSON to explain it. Each comment starts with the # symbol. Comments will not be included in any actual response.

## Sample Response

```
{
  "data": # The return
  {
    "id": 2, # The return ID
    "name": "Annual Return", # The return name
    "reference": "AR00016", # The return reference
    "endDate": "2023-12-31T00:00:00.000", # The return end date
    "status": { # Contains details of the status of the return, i.e.
      # No Data, In Draft, Submitted, etc.
      "id": 0, # The status ID of the return. 0 = No Data,
      # 1 = In Draft, 2 = Valid, 3 = Submitted,
      # 4 = Declined, 9 = Submitted for Approval
      "name": "No Data" # The status name of the return
    },
    "returnTypes": [ # The array of return types, i.e. content.
      # These can be retrieved from the endpoint
      {
        "id": "c167af85-9ec8-4163-b533-5ebdb46bde26", # The return type ID
        "versionNo": 2, # The return type version number, i.e.
        # of the content describing the return type
        "name": "Annual Return", # The name of the return type
      }
    ],
    "entity": { # The details of the entity the return belongs to
      "id": 2, # The entity ID
      "name": "ABC Bank", # The entity name (in the default language for the
      # user)
      "reference": "abc" # The entity reference, if any
    },
    "revisions": [ # The array of revisions of the return. Only the
      # specified revision is returned by this endpoint
      {
        "id": 2, # The revision unique ID
        "major": 0, # The revision major number
        "minor": 1, # The revision minor number
        "isCurrent": true, # Indicates if the revision is the latest or not
        "dueDate": "2020-08-31T00:00:00.000", # The revision due date
        "lastActionPerformed": "Created", # The last action performed on the revision
        "stateLastChangedOn": "2020-08-10T12:13:14.000", # The date and time the revision last changed
        "hasWarnings": false, # Indicates if the revision has any validation
        # warnings
        "hasErrors": true, # Indicates if the revision has any validation
        # errors
        "lastSaved": "2020-08-10T12:13:14.877", # Indicates the date and time the revision was
        # last saved
        "tags": [ # The array of tags/categories on the return,
          # if any, e.g. periodicity, reporting level, etc.
          {
            "id": "P", # The tag ID
            "name": "Periodicity", # The tag name
            "options": [ # The array of options selected for the tag on
              # the revision
              {
                "id": "M", # The tag option ID
                "name": "Monthly" # The tag option name
              }
            ]
          }
        ]
      }
    ],
  }
}
```

Further elaboration of the response parameters are below if required:

data

Parameter Name	Type	Description	Comment
id	integer	The Return unique system ID	The Return ID
name	string	The Return name	
reference	string	The Return reference	
endDate	datetime	The Return end date	YYYY-MM-DDThh:mm:ss.sTZD
status	{status}	The Return current status	The status of the last revision
returnTypes	{returnTypes}[]	The Return type	E.g. "Solvency II"
entity	{entity}	The entity the Return is associated with	
revisions	{revisions}[]	The Return revisions	The revisions of the Return

#### status

Parameter Name	Type	Description	Comment
id	integer	The status ID	It is recommended to use this parameter for machine-to-machine interactions. See Return Status for further details
name	string	The status name	Terminology depends on pre-defined values, e.g. id 1 for 'In Draft', id 2 for 'Valid'. See Return Status for further details

#### returnTypes

Parameter Name	Type	Description	Comment
id	GUID	The Return Type ID	The Return Type GUID
versionNo	integer	The Return type version number	
name	string	The Return type name	

#### entity

Parameter Name	Type	Description	Comment
id	integer	The entity ID	
name	string	The entity name	
reference	string	The entity reference code	

#### revisions

Parameter Name	Type	Description	Comment
id	integer	The revision ID	The Return revision ID
major	string	The revision major version	
minor	string	The revision minor version	
isCurrent	Boolean	Whether the revision is current	
dueDate	datetime	The revision end date	YYYY-MM-DDThh:mm:ss.sTZD
lastActionPerformed	string	The revision last action performed	E.g. 'Created', 'SubmissionValidation', etc. See View Audit Log <b>System Actions</b> section for further details
stateLastChangedOn	datetime	The revision date when state last changed	YYYY-MM-DDThh:mm:ss.sTZD
hasWarnings	Boolean	The revision warnings state	Only 'Public' Warnings are returned to the user
hasErrors	Boolean	The revision errors state	
lastSaved	datetime	The revision date when last saved	YYYY-MM-DDThh:mm:ss.sTZD
tags	{tags}[]	The revision tags/categories	

#### tags

Parameter Name	Type	Description	Comment
id	string	The tag ID	E.g. 'FI'
name	string	The tag name	E.g. 'Transmission Progress'

options	{options}[]	The tag option	
---------	-------------	----------------	--

options

Parameter Name	Type	Description	Comment
id	string	The option ID	
name	string	The option name	E.g. 'Quarterly', 'Annual'

Response codes explanation:

HTTP Status Code	Reason	Description	Remedial Action
200	OK	Everything worked as expected	No action required
400	BadRequest	<ol style="list-style-type: none"> <li>The <code>version</code> parameter is not valid</li> <li>Any of the model validation rules do not pass. See Remedial Action column</li> </ol>	Ensure the request complies with the parameters including <ul style="list-style-type: none"> <li><i>all the values are populated and correct</i></li> </ul>
401	Unauthorized	The user is not authorized	Check credentials or user is not locked
403	Forbidden	Request was authenticated but execution of the requested operation is not permitted	Check any of the following: <ol style="list-style-type: none"> <li>the user must have permissions to the company /return type</li> <li>entity ID should exist</li> <li>the user should be a VP user</li> </ol>
415	UnsupportedMedia Type	Requested payload format is incorrect	Check that the content type is correct
500	InternalServerError	A generic error message indicating server error	Contact the system administrator

## 3.8 Return Types

This endpoint provides the GUIDs required to identify each type of return, or more specifically each set of forms within a return, that data can be uploaded into.

```
GET /v{version}/returns/types/{entityId}
```

### 3.8.1 Request

A return consists of one or more return types (though typically just one). A return type is a set of forms/data within the return. A file can be uploaded to populate a single return type at a time. The endpoint provides the unique identifiers of each return type the user has permission to complete/submit for a particular entity.

The following describes the parameters for the request:

Parameter Name	Required	Data Type	Parameter Type	Description	Comments
entityId	Yes	integer	path	The ID of the entity for which to retrieve the return types	
version	Yes	string	path	The version number of the API	'1' is the required value as that is the current /only version
page	No	integer	query	Requests a specified page where multiple records are possible	

#### Sample Curl Request

```
curl -X GET "{web address}/v1/returns/types/3658" ^
--header "Accept: application/json" ^
--header "Authorization: Bearer eyJhbGciOiJodHRwO..." ^
```

### 3.8.2 Response

The response shows the details of just the return types. The below sample response has comments against each part of the response to explain it. Each comment starts with the # symbol. Comments will not be included in any actual response.

### Sample Response


```
{
  "data": [                                     # The array of return types
    {
      "id": "72a39839-8aa9-4953-afcb-33434c3166c6", # The return type ID
      "name": "Banking Annual Return"             # The return type name
    },
    {
      "id": "c62638be-f8b6-46f9-828b-7d7a1c7d6c74",
      "name": "Solvency II"
    },
    {
      "id": "c0f961d7-b5f4-4ddc-8667-cl36d53c1334",
      "name": "Change of Director Submission"
    },
    {
      "id": "2e7887ff-0ef8-4d97-8a2b-3b46aa525433",
      "name": "Annual Declaration"
    }
  ],
  "paging": {                                   # Contains details of the paging
    information of the response
    "totalItemsNumber": 2,                       # The total number of
    predefined reasons in a resource
    "totalPagesNumber": 1,                       # The total number of
    pages
    "currentPageNumber": 1,                      # The current page number
    "hasPreviousPage": false,                   # Indicates if there is
    a previous page to this
    "hasNextPage": false,                       # Indicates if there is
    a subsequent page to this
    "isFirstPage": true,                       # Indicates if this is a
    first page
    "isLastPage": true                          # Indicates if this is a
    last page
  }
}
```

Further details of the response parameters are as below:

Parameter Name	Type	Description	Comment
id	string	The ID of the return type for which the users is permitted for the given entity	
name	string	The name/label of the return type for which the user is permitted for the given entity	

## 3.9 Create Resubmission Request (from Release R5.3.0.00\_VIZ\_30.06.23)

Posts a resubmission request for an existing return.

 POST /v{version}/returns/{revisionId}/resubmission/request

Note: Each comment in any samples below starts with the # symbol. Comments will not be included in any actual response.

### 3.9.1 Request

This request will differ for a Financial Authority depending on whether they choose to enable a **basic** or **detailed** resubmission request for this API. Both are detailed later in this section under the heading **Basic Resubmission Request** and **Detailed Resubmission Request** but please check with your Financial Authority which should be posted.

### Sample Curl Request

```
curl -X POST "http://localhost/VAS/v1/returns/1005/resubmission/request"
--header "Content-Type: multipart/form-data"
--header "Accept: application/json"
--header "Authorization: Bearer eyJhbGciOiJodHRwOi8vd3d3LnczLm9yZy8yMDAxLzA0L3htbGRzaW9yZSNoWFJLX..."
-F model=%7B%0A%20%20%22predefinedReasonId%22%3A%20%2C%0A%20%20%22reasonDescription%22%3A%20%22Describe%
20reas...
```

The following is a description of the parameters for a **basic** request:

Parameter Name	Required	Data Type	Parameter Type	Description	Comments
version	Yes	string	path	The version number of the API.	'1' is the required value as that is the current version
revisionId	Yes	integer	path	The globally unique ID of the return revision.	
model	Yes	string	formData	The model detailing the resubmission request.	See model and sample below

model

Parameter Name	Required	Data Type	Parameter Type	Description	Comments
reasonDescription	Yes	string	query	Free text describing reason for resubmission.	Cannot be greater than 1000 characters.

### Sample model

```
{
  "reasonDescription": "Submission contained data error."
} # Free text describing
reason for resubmission. Mandatory. Cannot be greater than 1000 characters.
```

The following is a description of the parameters for a **detailed** request:

Parameter Name	Required	Data Type	Parameter Type	Description	Comments
version	Yes	string	path	The version number of the API.	'1' is the required value as that is the current version
revisionId	Yes	integer	path	The globally unique ID of the return revision.	
model	Yes	string	formData	The model detailing the resubmission request.	See model and sample below
file	No	file	formData	Optional file to upload.	

model

Parameter Name	Required	Data Type	Parameter Type	Description	Comments
predefinedReasonId	Yes	integer	query	Id of the predefined reason for resubmission request.	Taken from GET {web address}/v1/returns/resubmission/reasons
reasonDescription	Yes	string	query	Free text describing reason for resubmission.	Cannot be greater than 1000 characters.
changeDescription	Yes	string	query	Free text describing what has changed sine last submission.	Cannot be greater than 1000 characters.

### Sample model

```
{
  "predefinedReasonId": 1, # Id of a reason from GET /v{version}
/returns/resubmission/reasons endpoint. Mandatory.
  "reasonDescription": "Data errors found in submission.", # Free text describing reason for
resubmission. Mandatory. Cannot be greater than 1000 characters.
  "changeDescription": "Data error corrected." # Free text describing what has
changed sine last submission. Mandatory. Cannot be greater than 1000 characters.
}
```

## 3.9.2 Response

Response contains a flag indicating whether resubmission request is automatically being granted.

### Sample Response

```
{
  "data": {
    "automaticallyGrantResubmission": true # Indicates whether
resubmission request is automatically granted
  }
}
```

The following describes the parameters for the response:


Parameter Name	Type	Description	Comment
automaticallyGrantResubmission	boolean	Indicates whether resubmission request is automatically granted	

### Response Codes

HTTP Status Code	Reason	Description	Remedial Action
200	OK	Everything worked as expected	No action required
204	NoContent	Response has no content	Predefined reasons are not enabled
400	BadRequest	Malformed request syntax	Ensure the request complies with the parameters
401	Unauthorized	Request could not be authenticated	Check credentials by manually logging Reporting Entity.
403	Forbidden	Request was authenticated but execution of the requested operation is not permitted	Could be one of the reasons: <ul style="list-style-type: none"><li>• User does not have access to any entity</li><li>• User does not have access to a return</li><li>• User does not have 'Submission' permission for the entity</li><li>• Submission version is not current</li><li>• Submission is not in <i>Submitted</i> or <i>Submitted For Approval</i> state</li><li>• Resubmission request already exists for this revisionId</li></ul>
415	UnsupportedMedia Type	Payload format is incorrect	Check that the content type is correct
500	InternalServerError	A generic error message indicating server error	Contact the system administrator

## 3.10 Resubmission Request Predefined Reasons (from Release R5.3.0.00\_VIZ\_30.06.23)

This endpoint provides a list of predefined reasons for making resubmission requests. These are required only when *predefinedReasonId* parameter is mandatory in POST `/v{version}/returns/{revisionId}/resubmission/request` endpoint.

 GET `/v{version}/returns/resubmission/reasons`

Note: Each comment in any samples below starts with the # symbol. Comments will not be included in any actual response.

### 3.10.1 Request

The following are the parameters for this request:

Parameter Name	Required	Data Type	Parameter Type	Description	Comment
version	Yes	string	path	The version number of the API	'1' is the required value as that is the current version
page	No	integer	query	The page of the data set to return	

#### Sample Request

```
curl -X GET "{web address}/v1/returns/resubmission/reasons"
--header "Accept: application/json"
--header "Authorization: Bearer eyJhbGciOiJodHRwOi8vd3d3LnczLm9yZy8yMDAxLzA0L3htbGRzaWctbW9yZSNoYWZjLXNoYy..."
```

### 3.10.2 Response

The response provides an enumerated collection of predefined reasons.

#### Sample Response

```
{
  "data": [
    {
      "id": "1",
      "name": "Data errors identified by reporter"
    }
  ],
  "paging": {
    "totalItemsNumber": 2,
    "totalPagesNumber": 1,
    "currentPageNumber": 1,
    "hasPreviousPage": false,
    "hasNextPage": false,
    "isFirstPage": true,
    "isLastPage": true
  }
}
```

# The reason id  
# The display name of a reason in the default language for the user

# Contains details of the paging  
# The total number of predefined reasons in a resource  
# The total number of pages  
# The current page number  
# Indicates if there is a previous page to this  
# Indicates if there is a subsequent page to this  
# Indicates if this is a first page  
# Indicates if this is a last page

The following describes the parameters for this response:

Parameter Name	Type	Description	Comment
id	integer	The reason id	
name	string	The display name of a reason in the default language for the user	

#### Response Codes


HTTP Status Code	Reason	Description	Remedial Action
200	OK	Everything worked as expected	No action required



204	NoContent	Response has no content or predefined reasons are off	Check with you administrator whether predefined reasons have been set correctly
400	BadRequest	The <i>version</i> parameter is not valid	Ensure the request complies with the parameters
401	Unauthorized	The user is not authorized	Check credentials or user is not locked
403	Forbidden	Request was authenticated but execution of the requested operation is not permitted	Check that the user has a 'Submission' permission for at least one entity
415	UnsupportedMediaTypes	Requested payload format is incorrect	Check that the content type is correct
500	InternalServerError	A generic error message indicating server error	Contact the system administrator

### 3.11 Get Comments (From Release R5.3.0.00\_VIZ\_30.06.23)

Retrieves the comments of an existing return.

 GET /v{version}/returns/{revisionId}/comments

#### 3.11.1 Request

This operation retrieves return comments. The scope of the response includes all comments that the user is permitted to see.

The following request parameters apply to this endpoint.

Parameter Name	Required	Data Type	Parameter Type	Description	Comment
revisionId	Yes	integer	path	The globally unique ID of the return revision	
version	Yes	string	path	The version number of the API	'1' is the required value as that is the current version

#### Sample Request

```
curl -X GET "{web address}/v1/returns/1007/comments"
--header "Accept: application/json"
--header "Authorization: Bearer eyJhbGciOiJodHRwOi8vd3d3LnczLm9yZy8yMDAxLzA0L3htbGRzaWctbW9yZSNoYW50YWFjLXNoYy..."
```

#### 3.11.2 Response

The response provides the list of responses to a comment. Comments (and responses) are shown against the latest revision only, regardless of what revision they were added/updated against. Conversely, previous revisions do not show any comments.

Sample Response

Each JSON comment in the sample below starts with the # symbol. JSON comments will not be included in any actual response.

#### Sample Response

```
{
  "data":
  {
    "id": 2,
    "name": "New Return",
    "reference": "COM00002",
    "endDate": "2020-08-01T00:00:00.000",
    "status": {
      "id": 2,
      "name": "Valid"
    }
  }
}
# The return
# The return ID
# The return name
# The return reference
# The return end date
# Contains details of the status of the return, i.e.
# No Data, In Draft, Submitted, etc.
# The status ID of the return. 0 = No Data,
# 1 = In Draft, 2 = Valid, 3 = Submitted,
# 4 = Declined, 9 = Submitted for Approval
# The status name of the return
```

```

    },
    "returnTypes": [
types.
        # The array of return types, i.e. content/return
        # These can be retrieved from the endpoint
        {
            "id": "489fd2f5-0493-4a44-a6e5-12208b12dce6", # The return type ID
            "versionNo": 1, # The return type version number, i.e.
            # of the content describing the return type
            "name": "Banking Return", # The name of the return type
            "status": { # The status of the return type
                "id": 2, # The status ID
                "name": "Validated" # The status name
            },
            "transformType": "XML", # The type of upload performed
            "submissionMode": "Offline", # The submission type
            "supportedExtensions": [ # The array of types of file supported for upload
                "xml"
            ]
        }
    ],
    "entity": { # The details of the entity the return belongs to
        "id": 2, # The entity ID
        "name": "ABC Bank", # The entity name (in the default language for the
        # user)
        "reference": "abc" # The entity reference, if any
    },
    "revisions": [ # The array of revisions of the return. Only the
        # specified revision is returned by this endpoint
        {
            "id": 2, # The revision unique ID
            "major": 0, # The revision major number
            "minor": 1, # The revision minor number
            "isCurrent": true, # Indicates if the revision is the latest or not
            "dueDate": "2020-08-31T00:00:00.000", # The revision due date
            "lastActionPerformed": "Created", # The last action performed on the revision
            "stateLastChangedOn": "2020-08-10T12:13:14.000", # The date and time the revision last changed
            "hasWarnings": false, # Indicates if the revision has any validation
            # warnings
            "hasErrors": true, # Indicates if the revision has any validation
            # errors
            "lastSaved": "2020-08-10T12:13:14.877", # Indicates the date and time the revision was
            # last saved
            "tags": [ # The array of tags/categories on the return,
                # if any, e.g. periodicity, reporting level, etc.
                {
                    "id": "P", # The tag ID
                    "name": "Periodicity", # The tag name
                    "options": [ # The array of options selected for the tag on
                        # the revision
                        {
                            "id": "M", # The tag option ID
                            "name": "Monthly" # The tag option name
                        }
                    ]
                }
            ]
        }
    ],
    "comments": [ # The comments (initial comments and responses).
        # It is an empty array if there are no comments
        {
            "id": 1, # The comment id. Set to -1 for system comments such
            # as approval comments and the change status comments
            "type": "Return", # The comment type. Set to "Return" for user, change
            # status comments. Approval comment types are
            # "ApprovalReject", "ApprovalDecline"
            "text": "Please review Total Assets value", # The comment text. Can contain "\r" and "\n" symbols
            # when the comment contains carriage returns and line
            # breaks respectively
            "major": 4, # The revision major number of return that this

```

```

"minor": 0,
"author": "PA SupTech Supervision Centre User",
"created": "2023-03-06T10:18:08",
"lastUpdated": "2023-03-07T10:18:08",
"fileId": "906c84de-ab63-433b-b00a-0657e9e1af95",
"fileName": "Feedback.xlsx",
"notifiedUsersFlag": true,
"attributes": [
  {
    "key": "Form Code",
    "value": "ABC"
  }
],
"status": "Open",
"portal": true,
"dueDate": "2023-03-15T00:00:00"
"responses" : [
  {
    "id": 2,
    "text": "Total Assets is correct",
    "author": "John Doe",
    "created": "2023-03-06T10:28:08",
    "lastUpdated": "2023-03-07T10:38:08",
    "fileId": null,
    "fileName": null,
    "notifiedUsersFlag": true
  }
],
{
  "id": -1,
  "type": "ApprovalReject",
  "text": "It is duplicated",
  "major": 5,

```

# comment was created against. Can be null if the  
# comment was not against a specific revision  
# The revision minor number of return that this  
# comment was created against. Can be null if the  
# comment was not against a specific revision  
# The comment author name (shows "PA SupTech Supervision  
# Centre User" if the user is an authority user)  
# The date and time when the comment was created  
# The date and time when the comment was updated. This  
# will be "null" if the comment has not been updated  
# The file ID (globally unique identifier, GUID) of  
# any file attached to the comment. Or "null" if no  
# file is attached  
# The name of the file attached to the comment.  
# Or "null" if no file is attached  
# Indicates if any user was notified about the comment  
# An array of optional additional info values. These  
# fields, if any, are at the discretion of the  
# authority  
# The attribute key. These will differ per system as  
# they are at the discretion of the authority. E.g.  
# "Form Code", "Data Item ID", etc.  
# The attribute value. Corresponds to the type.  
# These will differ per system as they are at the  
# discretion of the authority  
# The comment status. Statuses are "Open" or  
# "Resolved". Will be "null" for approval  
# Always set to "true" as all comments for the web  
# users are public only comments  
# The comment due date. Time part is always zeros.  
# Approval comments cannot be responded to so will  
# have value "null"  
# The comment responses, if any. It is an empty array  
# if there are no responses  
# The comment response ID  
# The comment response text  
# The comment response author name (shows "PA SupTech  
# Supervision Centre User" if the user is an  
# authority user)  
# The date and time when the comment response was  
# created  
# The date and time when the comment response was  
# updated.  
# This will be "null" if the comment response has not  
# been updated  
# The file ID (globally unique identifier, GUID) of  
# the file attached to the comment response. Or "null"  
# if no file is attached  
# The name of the file attached to the comment  
# response. Or "null" if no file is attached  
# Indicates if any user was notified about the  
# comment response  
# The comment id. Set to -1 for system comments such  
# as approval comments and the change status comments  
# The comment type. Set to "Return" for user, change  
# status comments. Approval comment types are  
# "ApprovalReject", "ApprovalDecline"  
# The comment text. Can contain "\r" and "\n" symbols  
# when the comment contains carriage returns and line  
# breaks respectively  
# The revision major number of return that this  
# comment was created against. Can be null if the

```

"minor": 0,
"author": "PA SupTech Supervision Centre User",
"created": "2023-03-10T10:18:08",
"lastUpdated": null,
"fileId": null,
"fileName": null,
"notifiedUsersFlag": false,
"attributes": []
"status": null,
"isPublic": null,
portal
"dueDate": null,
"responses": []
}
]
}
# comment was not against a specific revision
# The revision minor number of return that this
# comment was created against. Can be null if the
# comment was not against a specific revision
# The comment author name (shows "PA SupTech Super
# Centre User" if the user is an authority user)
# The date and time when the comment was created
# The date and time when the comment was updated. This
# will be "null" if the comment has not been updated
# The file ID (globally unique identifier, GUID) of
# any file attached to the comment. Or "null" if no
# file is attached
# The name of the file attached to the comment.
# Or "null" if no file is attached
# Indicates if any user was notified about the
# comment
# An array of optional additional info values. These
# fields, if any, are at the discretion of the
# authority
# The comment status. Statuses are "Open" or
# "Resolved". Will be "null" for approval
# Always set to "true" as all comments for the web
# users are public only comments
# The comment due date. Time part is always zeros.
# Approval comments cannot be responded to so will
# have value "null"
# The comment responses, if any. It is an empty array
# if there are no responses

```

The order of comments and responses in the above JSON will be the same as the order one would view them in the web portal.

The following describes the response parameters:

data

Parameter Name	Type	Description	Comment
id	integer	The Return unique system ID	The Return ID
name	string	The Return name	
reference	string	The Return reference	
endDate	datetime	The Return end date	YYYY-MM-DDThh:mm:ss.STZD
status	{status}	The Return current status	The status of the last revision
returnTypes	{returnTypes}[]	The Return type	E.g. "Solvency II"
entity	{entity}	The entity the Return is associated with	
revisions	{revisions}[]	The Return revisions	The revisions of the Return
comments	{comments}[]	The Return comments	The comments of the Return. It is an empty array if there are no comments

status

Parameter Name	Type	Description	Comment
id	integer	The status ID	It is recommended to use this parameter for machine-to-machine interactions. See Return Status for further details
name	string	The status name	Terminology depends on pre-defined values, e.g. id 1 for 'In Draft', id 2 for 'Valid'. See Return Status for further details

returnTypes

Parameter Name	Type	Description	Comment
id	GUID	The Return Type ID	The Return Type GUID

versionNo	integer	The Return type version number	
name	string	The Return type name	

#### entity

Parameter Name	Type	Description	Comment
id	integer	The entity ID	
name	string	The entity name	
reference	string	The entity reference code	

#### revisions

Parameter Name	Type	Description	Comment
id	integer	The revision ID	The Return revision ID
major	string	The revision major version	
minor	string	The revision minor version	
isCurrent	Boolean	Whether the revision is current	
dueDate	datetime	The revision end date	YYYY-MM-DDThh:mm:ss.sTZD
lastActionPerformed	string	The revision last action performed	E.g. 'Created', 'SubmissionValidation', etc. See View Audit Log <b>System Actions</b> section for further details
stateLastChangedOn	datetime	The revision date when state last changed	YYYY-MM-DDThh:mm:ss.sTZD
hasWarnings	Boolean	The revision warnings state	Only 'Public' Warnings are returned to the user
hasErrors	Boolean	The revision errors state	
lastSaved	datetime	The revision date when last saved	YYYY-MM-DDThh:mm:ss.sTZD
tags	{tags}[]	The revision tags/categories	

#### tags

Parameter Name	Type	Description	Comment
id	string	The tag ID	E.g. 'FI'
name	string	The tag name	E.g. 'Transmission Progress'
options	{options}[]	The tag option	

#### options

Parameter Name	Type	Description	Comment
id	string	The option ID	
name	string	The option name	E.g. 'Quarterly', 'Annual'

#### comments

Parameter Name	Type	Description	Comment
id	integer	The comment ID	E.g. 1001. Set to -1 for system comments such as approval comments and the change status comments
type	string	The comment type	Set to "Return" for user, change status comments. Approval comment types are "ApprovalReject", "ApprovalDecline"
text	string	The comment text	Can contain "\r" and "\n" symbols when the comment contains carriage returns and line breaks respectively
major	string	The revision major version	Can be "null" if the comment was not against a specific revision
minor	string	The revision minor version	Can be "null" if the comment was not against a specific revision
author	string	The comment author name	Shows "PA SupTech Supervision Centre User" if the user is an authority user
created	datetime	The date and time when the comment was created	YYYY-MM-DDThh:mm:ss.sTZD

lastUpdated	datetime	The date and time when the comment was updated	YYYY-MM-DDThh:mm:ss.sTZD. This will be "null" if the comment has not been updated
fileId	string	The file ID of any file attached to the comment	"null" if no file is attached
fileName	string	The name of the file attached to the comment	"null" if no file is attached
notifiedUsersFlag	Boolean	Whether any user is notified about the comment	
attributes	{attributes}[]	The comment additional info values	These fields, if any, are at the discretion of the authority
status	string	The comment status. Allowed values: "Open", "Resolved"	Will be "null" for approval
isPublic	Boolean	Whether the comment is public comment	Always set to "true" as all comments for external users
dueDate	datetime	The comment due date	Time part is always zeros. Approval comments cannot be responded to so will have value "null"
responses	{responses}[]	The comment responses	It is an empty array if there are no responses

#### attributes

Parameter Name	Type	Description	Comment
key	string	The attribute key	E.g. 'Form Code', 'Data Item ID'. These will differ per system as they are at the discretion of the authority.
value	string	The attribute value	Corresponds to the type. These will differ per system as they are at the discretion of the authority

#### responses


Parameter Name	Type	Description	Comment
id	integer	The comment response ID	E.g. 1001
text	string	The comment response text	
author	string	The comment response author name	Shows "PA SupTech Supervision Centre User" if the user is an authority L
created	datetime	The date and time when the comment response was created	YYYY-MM-DDThh:mm:ss.sTZD
lastUpdated	datetime	The date and time when the comment response was updated	YYYY-MM-DDThh:mm:ss.sTZD. This will be "null" if the comment response has not been updated
fileId	string	The file ID of any file attached to the comment response	"null" if no file is attached
fileName	string	The name of the file attached to the comment response	"null" if no file is attached
notifiedUsersFlag	Boolean	Whether any user is notified about the comment response	

#### Response Codes

HTTP Status Code	Reason	Description	Remedial action
200	OK	Everything worked as expected	No action required
204	NoContent	The revisionId does not exist	Check your revision ID
400	BadRequest	The version of the API is not valid	Ensure the request complies with the mandatory parameters revisionId and version
401	Unauthorized	The user is not authorized	Check credentials or user is not locked
403	Forbidden	The request was authenticated but the execution of the requested operation is not permitted	Check the user permissions
500	InternalServerError	A generic error message indicating server error	Contact the system administrator

## 3.12 Get File (from Release R5.3.0.00\_VIZ\_30.06.23)

Allows the caller to retrieve a file that is attached to a return. Currently supported types of files are described in the "fileType" request parameter options below.

 GET /v{version}/returns/{revisionId}/file

### 3.12.1 Request

This operation gets a file of a certain type. The following describes the parameters for this request:

Parameter Name	Required	Data Type	Parameter Type	Description	Comment
revisionId	Yes	integer	path	The ID of the return revision	
fileId	Yes	string	query	The ID of the file attached to the return	
fileType	Yes	string	query	Allowed values: "Comment"	"Comment" indicates that a file that is attached to a comment is being requested
version	Yes	string	path	The version number of the API	'1' is the required value as that is the current version

#### Sample Request

```
curl -X GET "{web address}/v1/returns/1007/file?fileId=918d5491-adc1-4b20-b17e-0d752c98979d&fileType=Comment"
--header "Accept: application/json"
--header "Authorization: Bearer eyJhbGciOiJodHRwOi8vd3d3LnczLm9yZy8yMDAxLzA0L3htbGRzaWctbW9yZSNoYW9yZSNoYWFjLXNoYy..."
```

### 3.12.2 Response


The response supplies the file. The file is provided in the body response in binary format.

#### Response Codes

HTTP Status Code	Reason	Description	Remedial action
200	OK	Everything worked as expected	No action required
204	NoContent	The revisionId does not exist	Check your revision ID
400	BadRequest	The version of the API is not valid	Ensure the request complies with the mandatory parameters revisionId and version
401	Unauthorized	The user is not authorized	Check credentials or user is not locked
403	Forbidden	The request was authenticated but the execution of the requested operation is not permitted	Check the user permissions
500	InternalServerError	A generic error message indicating server error	Contact the system administrator

### 3.13 Post Comment Response (from Release R5.3.0.00\_VIZ\_30.06.23)

Allows posting of a response to an existing comment.

 POST /v{version}/returns/{revisionId}/comment

#### 3.13.1 Request

The following request parameters apply for this endpoint:

Parameter Name	Required	Data Type	Parameter Type	Description	Comment
version	Yes	string	path	The version number of the API.	'1' is the required value as that is the current version
revisionId	Yes	integer	path	The globally unique ID of the return revision.	
model	Yes	string	formData	The model detailing the comment response data.	See model and sample below
file	No	file	formData	Optional file to upload as an attachment to the comment response.	

model

Parameter Name	Required	Data Type	Description	Comment
parentId	Yes	int	Parent comment ID	Must be greater than 0. Should specify existing comment from the same submission.
commentText	Yes	string	Comment text	Cannot be empty.

#### Sample model

```
{
  "parentId": 1,                                     # Parent ID
  "commentText": "Waiting for clarification from reporting company" # Comment text
}
```

#### Sample Curl Request

```
curl -X POST "{web address}/v1/returns/1006/comment"
--header "Content-Type: multipart/form-data"
--header "Accept: application/json"
--header "Authorization: Bearer eyJhbGciOiJodHRwOi8vd3d3LnczLm9yZy8yLlBrZU0oJswzPYvBb-4"
--form "model=\"{'parentId':1,'commentText':'Waiting for clarification from reporting company'}\""
```

### 3.13.2 Response

Returns an ID of the comment response. The following describes the parameters in the response:

Parameter Name	Type	Description
id	int	ID assigned to a created comment response

#### Sample Response

```
{
  id: 1 # ID assigned to a created comment response
}
```

#### Response Codes

HTTP Status Code	Reason	Description	Remedial Action
200	OK	Everything worked as expected	No action required
204	NoContent	Return does not exist	Check your revision ID
400	BadRequest	<ol style="list-style-type: none"> <li>The <i>version</i> parameter is not valid</li> <li>Any of the model validation rules do not pass. See Remedial Action column</li> </ol>	Ensure the request complies with the parameters including <ul style="list-style-type: none"> <li><i>parentId</i> must be greater than 0</li> <li><i>commentText</i> cannot be empty</li> <li><i>parentId</i> must refer to comment (not a comment response)</li> <li>optional attachment does not exceed allowed maximum size</li> </ul>
401	Unauthorized	The user is not authorized	Check credentials or user is not locked



403	Forbidden	Request was authenticated but execution of the requested operation is not permitted	<p>Check any of the following:</p> <ol style="list-style-type: none"> <li>1. User must have permissions to post replies</li> <li>2. parentId must refer to existing comment</li> <li>3. Parent comment (referred with parentId) must belong to the same return specified by revisionId parameter</li> <li>4. Parent comment must be a regular comment (e.g not a Change Status/system comment)</li> <li>5. Parent comment must be in an <i>Open</i> state</li> <li>6. Check with Authority that comments functionality is enabled</li> </ol>
415	UnsupportedMediaType	Requested payload format is incorrect	Check that the content type is correct
500	InternalServerError	A generic error message indicating server error	Contact the system administrator



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