

# Image Assessor Resource API

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## Related

- [Image Assessor API](#)
- [How To Download Files via the XNAT REST API](#)

## Image Assessor Resource Organization (IN | OUT)



Image Assessor resource REST API calls support the **in** and **out** parameters (see below). Unlike many REST URL parameters, **in** and **out** are not processing directives or attribute values, but instead operate as taxonomies to help distinguish the origins of your archived data. This allows for the segregation of resources by their provenance in the generation process:

- The **in** specifier groups files that are used as processing inputs
- The **out** specifier groups files that are generated and output by the processing

This is used often in pipeline processing. For example, when XNAT performs Freesurfer processing on a session, the processing inputs to Freesurfer are put in the **in** folder. These are usually a collection of files, some of which may not have existed in XNAT. All of the files output by Freesurfer are then placed in the **out** section. When retrieving processing results, it is often necessary to have the exact files on which the processing was performed.

Placement of resources into the **in** and **out** folders can have practical effects other than clarification of provenance. For example, download operations usually ignore the content of the **in** folders, given that that data usually originates from the acquired data, meaning that the contents of the **in** folder are really duplicates of the acquired data. Data contained in **out** folders is included as a download option, since it's assumed that users would want the extrapolated data for further analysis.

## Get A Listing Of All Resource Collections Stored With An Image Assessor

```
GET - /data/experiments/{session-id}/assessors/{assessor-id}/resources
GET - /data/projects/{project-id}/subjects/{subject-label}/experiments/{session-label}/assessors/{assessor-label}/resources
```

## Parameters

<b>{project-id}</b>	Path parameter
<b>{subject-id} or {subject-label}</b>	Path parameter. Subject label is a project-specific field, and can only be used if a project is specified.
<b>{session-id} or {session-label}</b>	Path parameter. Session label is a project-specific field, and can only be used if a project is specified.
<b>{assessor-id} or {assessor-label}</b>	Path parameter. Assessor label is a project-specific field, and can only be used if a project is specified.
<b>format</b>	Optional querystring parameter. Specify the format of the returned response. <ul style="list-style-type: none"><li>• json (default)</li><li>• html</li><li>• xml</li><li>• csv</li></ul>

<b>sortBy</b>	Optional querystring parameter: Sort the returned results by one or more parameters in the Result array. Multiple parameters can be provided, separated by commas.
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**Response**

This call returns an array of resource descriptors, where the key values are "xnat\_abstractresource\_id" and "label", which can be used as a path parameter to return individual resource collections.

```
{
  "ResultSet": {
    "Result": [
      {
        "cat_desc": "string",
        "cat_id": "string",
        "category": "assessors",
        "content": "string",
        "element_name": "xnat:resourceCatalog",
        "file_count": "integer",
        "file_size": "integer (bytes)",
        "format": "string",
        "label": "string {resource-label}",
        "tags": "string",
        "xnat_abstractresource_id": "integer {resource-id}"
      }
    ],
    "totalRecords": "integer",
    "title": "Resources"
  }
}
```

**Get A Listing Of All Resource Files Stored With An Assessor**

```
GET - /data/experiments/{session-id}/assessors/{assessor-id}/files
GET - /data/projects/{project-id}/subjects/{subject-label}/experiments/{session-label}/assessors/{assessor-label}/files
```

**Parameters**

<b>{project-id}</b>	Path parameter
<b>{subject-id} or {subject-label}</b>	Path parameter. Subject label is a project-specific field, and can only be used if a project is specified.
<b>{session-id} or {session-label}</b>	Path parameter. Session label is a project-specific field, and can only be used if a project is specified.
<b>{assessor-id} or {assessor-label}</b>	Path parameter. Assessor label is a project-specific field, and can only be used if a project is specified.
<b>format</b>	Optional querystring parameter. Specify the format of the returned response. <ul style="list-style-type: none"> <li>• json (default)</li> <li>• html</li> <li>• xml</li> <li>• csv</li> </ul>
<b>sortBy</b>	Optional querystring parameter: Sort the returned results by one or more parameters in the Result array. Multiple parameters can be provided, separated by commas.

**Response**

This call returns an array of file listings, where each has a unique URI path to the resource file. Note the "out" in the URI path, signifying that the resource is downloadable.

```

{
  "ResultSet": {
    "Columns": [
      {
        "key": "URI",
        "serverRoot": ""
      }
    ],
    "Result": [
      {
        "cat_ID": "integer {resource-id}",
        "collection": "string {resource-label}",
        "file_content": "string",
        "file_format": "string",
        "file_tags": "string",
        "digest": "hash",
        "Name": "string {filename}",
        "Size": "integer",
        "URI": "/data/experiments/{session-id}/assessors/{assessor-id}/out/resources/{resource-id}/files/{filename}"
      },
      ...
    ],
    "title": "Files"
  }
}

```

## Create A New Experiment Resource Folder

Note: **{resource-label}** must be new and unique in this assessor. Once created, resource descriptors cannot be modified.

```

PUT - /data/projects/{project-id}/subjects/{subject-label}/experiments/{experiment-label}/assessors/{assessor-label}/resources/{resource-label}
PUT - /data/experiments/{experiment-id}/assessors/{assessor-id}/resources/{resource-label}

```

### Parameters

<b>{project-id}</b>	Required path parameter
<b>{subject-id} or {subject-label}</b>	Required path parameter
<b>{experiment-id} or {experiment-label}</b>	Required path parameter
<b>{resource-label}</b>	Required path parameter. Specify the label of the resource that you want to create. XNAT will automatically assign an ID.
<b>format</b>	Optional querystring parameter. Specify a string format descriptor for this resource folder.
<b>tags</b>	Optional querystring parameter. Specify a comma-separated list of tags for this resource folder.
<b>content</b>	Optional querystring parameter. Specify a string description of the resource folder's content.

**Response:** None

## Get The Contents Of An Image Assessor Resource File



This URI returns the raw contents of a resource file. If your client cannot parse this file's MIME type, it will not provide a usable output. See [How To Download Files via the XNAT REST API](#) for help on downloading resources.

```
GET - /data/experiments/{session-id}/assessors/{assessor-id}/{in|out}/resources/{resource-id}/files/{filename}
GET - /data/projects/{project-id}/subjects/{subject-label}/experiments/{session-label}/assessors/{in|out}
/resources/{resource-label}/files/{filename}
```

#### Parameters

<b>{project-id}</b>	Path parameter
<b>{subject-id} or {subject-label}</b>	Path parameter. Subject label is a project-specific field, and can only be used if a project is specified.
<b>{session-id} or {session-label}</b>	Path parameter. Session label is a project-specific field, and can only be used if a project is specified.
<b>{assessor-id} or {assessor-label}</b>	Path parameter. Assessor label is a project-specific field, and can only be used if a project is specified.
<b>{in out}</b>	Path parameter. If you don't know this, query the /files API above to find the URI. <ul style="list-style-type: none"> <li>• "out" is the standard grouping for downloadable resources</li> <li>• "in" is the standard grouping for resources meant to be consumed by pipelines or other processes</li> </ul>
<b>{resource-id} or {resource-label}</b>	Path parameter
<b>{filename}</b>	Path parameter

#### Response:

RAW file content

## Upload A New Experiment Resource File

#### Notes:

- **{filename}** must be unique within this resource folder, otherwise the file will not be uploaded.
- If **{resource-id}** does not exist in this assessor, it will be automatically created.

```
PUT - /data/experiments/{session-id}/assessors/{assessor-id}/{in|out}/resources/{resource-id}/files/{filename}
PUT - /data/projects/{project-id}/subjects/{subject-label}/experiments/{session-label}/assessors/{assessor-label}/{in|out}/resources/{resource-label}/files/{filename}
```

#### Parameters

<b>{project-id}</b>	Required path parameter
<b>{subject-id} or {subject-label}</b>	Required path parameter
<b>{experiment-id} or {experiment-label}</b>	Required path parameter
<b>{assessor-id} or {assessor-label}</b>	Required path parameter
<b>{in out}</b>	Required path parameter. <ul style="list-style-type: none"> <li>• "out" is the standard grouping for downloadable resources</li> <li>• "in" is the standard grouping for resources meant to be consumed by pipelines or other processes</li> </ul>
<b>{resource-id} or {resource-label}</b>	Required path parameter. If this resource collection is not already defined, it will be defined automatically by this call.
<b>{filename}</b>	Required path parameter. This will be the name of the file as it is stored in XNAT. It can be different from the original name of your uploaded file.

<b>inbody=true</b>	Optional querystring parameter. Use if including the file in the body of the request as opposed to part of a multi-part form data
<b>file</b>	Required body or form parameter.
<b>format</b>	Optional querystring parameter. Specify a string format descriptor for this resource folder.
<b>content</b>	Optional querystring parameter. Specify a string description of the resource folder's content.

#### Response Codes

<b>200</b>	OK - File Created
	OK - Duplicates Existing File (File not created or updated)
	OK - User does not have permission to upload files (File not created or updated)

## Update An Existing Image Assessor Resource File

```
POST - /data/experiments/{session-id}/assessors/{assessor-id}/{in|out}/resources/{resource-id | resource-label}
/files/{filename}?overwrite=true
```


#### Parameters

<b>{session-id}</b>	Required path parameter
<b>{assessor-id}</b>	Required path parameter
<b>{in out}</b>	Required path parameter. <ul style="list-style-type: none"> <li>"out" is the standard grouping for downloadable resources</li> <li>"in" is the standard grouping for resources meant to be consumed by pipelines or other processes</li> </ul>
<b>{resource-id} or {resource-label}</b>	Required path parameter.
<b>{filename}</b>	Required path parameter. This must match an existing file name as it is stored in XNAT.
<b>overwrite=true</b>	Required querystring parameter. This must be set to allow your new file to overwrite your existing one
<b>file</b>	Required body parameter
<b>inbody=true</b>	Optional querystring parameter. Use if including the file in the body of the request as opposed to part of a multi-part form data

#### Response Codes

<b>200</b>	OK
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## Delete An Image Assessor Resource Collection

 This URI will also delete all resource files in the collection

```
DELETE - /data/experiments/{session-id}/assessors/{assessor-id}/{in|out}/resources/{resource-id | resource-label}
```

#### Parameters

<b>{session-id}</b>	Required path parameter
<b>{assessor-id}</b>	Required path parameter
<b>{in out}</b>	Required path parameter. <ul style="list-style-type: none"> <li>• <b>"out"</b> is the standard grouping for downloadable resources</li> <li>• <b>"in"</b> is the standard grouping for resources meant to be consumed by pipelines or other processes</li> </ul>
<b>{resource-id} or {resource-label}</b>	Required path parameter.

#### Response Codes

<b>200</b>	OK
<b>403</b>	Forbidden

Response: None

## Delete An Image Assessor Resource File

```
DELETE - /data/experiments/{session-id}/assessors/{assessor-id}/{in|out}/resources/{resource-id | resource-label}/files/{filename}
```

#### Parameters

<b>{session-id}</b>	Required path parameter
<b>{assessor-id}</b>	Required path parameter
<b>{in out}</b>	Required path parameter. <ul style="list-style-type: none"> <li>• <b>"out"</b> is the standard grouping for downloadable resources</li> <li>• <b>"in"</b> is the standard grouping for resources meant to be consumed by pipelines or other processes</li> </ul>
<b>{resource-id} or {resource-label}</b>	Required path parameter.
<b>{filename}</b>	Required path parameter. This must match an existing file name as it is stored in XNAT.

#### Response Codes

<b>200</b>	OK
<b>403</b>	Forbidden

Response: None