

4.16 Structure Service

Structure Service

- [Create a new structure in a project](#)
 - [Get the structure details](#)
 - [Create a sub-node under the structure](#)
 - [Get the structure topology](#)
 - [Reorder the structure](#)
 - [Assign an object to the latest/last structure node](#)
 - [Assign additional objects to the latest structureElement node](#)
 - [Assign a project element\(s\) into existing hierarchy structure](#)
 - [Remove assigned object from the latest structureElement node](#)
 - [Copy the structure](#)
 - [Update the structure](#)
 - [Delete the structure](#)
 - [Download attachments of the structure](#)
-
- [Create new variant type in a project](#)
 - [Get the variant type details](#)
 - [Get the list of existing variant types in a project](#)
 - [Update the variant type](#)
 - [Delete the variant type](#)
 - [Copy content of source variant type to target variant type](#)

Structure Service

A hierarchical tree structure(eg: cost structure) could be added and later retrieved from a project/object using the Structure service

Create a new structure in a project

URL / Resource / JSON Structure

Resource: projects/<project_id>/structures

URL: https://api-stage.bimplus.net/v2/<team_slug>/projects/<project_id>/structures

Example:<https://api-stage.bimplus.net/v2/bimplus/projects/622272da-f1ff-45ab-a3f0-c8f1255c80e8/structures>

JSON Structure:

Name	Mandatory / Optional	Type	Description
parentId	mandatory	string(guid)	Parent node id of the structure (for the first structure, projectId is the parentId)
name	mandatory	string	Name of the structure
description	optional	string	Description of the structure
type	optional	string	Type of the structure (eg: costStructure, specificationStructure)
nr	will be ignored	integer	The index of the structure
color	optional	integer	Color of the structure
id	will be ignored	string(guid)	Unique guid of the structure
startDate	optional	string (date)	Start date (depends on type of structure)
endDate	optional	string (date)	End date (depends on type of structure)
attributeId	optional	string(guid)	Free attribute Id. When this value is set, the corresponding attribute must have a suitable controlType to define set of structures to be created. At a moment is supported only controlType "Enumeration", for all other controlType-s is returned status 404 Not found.
variantType	optional	string(guid)	Variant Type Id to whom the object will be assigned. Used only when attributeId is defined.

HTTP Method

POST

Description

Create a new structure(eg: cost structure, specification structure) under a project.

NOTE :

When is defined attributeld of attribute with controlType "Enumeration" will be created structure hierarchy.

The structure will be created under parent element (structure or project) together with its child structures.

Child structures will be created according enumDefinition (enumeration list) of attribute (defined by attributeld).

Request

Headers

Authorization: BimPlus 9c1874a62c974dcfa75e0132c423a088
Content-Type: application/json

JSON

A) Sample to create single structure:

```
{
  "parentId": "3904db18-cfla-4665-9c2b-152b84293259",
  "name": "TestStructure",
  "description": "FullLifeCycleTest",
  "type": "CostStructure"
}
```

B) Sample to create structure hierarchy:

```
{
  "parentId": "3904db18-cfla-4665-9c2b-152b84293259",
  "name": "Status structure",
  "attributeId": "02bbe8de-c623-489f-9baa-87f8ff3205f2",
  "description": "Status of the project (enumeration)"
}
```

Response

Status

Status: 201 Created

JSON

A) Sample to create single structure:

```
{
  "parentId": "3904db18-cf1a-4665-9c2b-152b84293259",
  "name": "TestStructure",
  "description": "FullLifeCycleTest",
  "type": "CostStructure",
  "nr": 1,
  "color": 0,
  "id": "179439d6-df16-41cc-bd2c-74d05b7995d5"
}
```

B) Sample to create structure hierarchy:

```
{
  "projectId": "3904db18-cf1a-4665-9c2b-152b84293259",
  "name": "Status structure",
  "description": "Status of the project (enumeration)",
  "type": "mainStructure2",
  "nr": 0,
  "id": "ee209608-19b1-40da-a089-53b20a858d41",
  "structuretypeid": "14clca64-4001-438f-a2f6-77ca951c488d",

  "children": [
    {
      "structuretypeid": "14clca64-4001-438f-a2f6-77ca951c488d",
      "children": [],
      "elements": [],
      "parentId": "ee209608-19b1-40da-a089-53b20a858d41",
      "name": "Undefined",
      "description": "0",
      "type": "mainStructure2",
      "nr": 0,
      "id": "40da49c5-3f3a-4e12-a4f8-94fb829c7c1e"
    },
    {
      "structuretypeid": "14clca64-4001-438f-a2f6-77ca951c488d",
      "children": [],
      "elements": [],
      "parentId": "ee209608-19b1-40da-a089-53b20a858d41",
      "name": "in planning stage",
      "description": "1",
      "type": "mainStructure2",
      "nr": 0,
      "id": "ecf9c518-1e24-4706-8557-d29d75fb7ddc"
    },
    .....
  ],

  "elements": []
}
```

[Get the structure details](#)

URL / Resource / JSON Structure

Resource: structures/<structure_id>

URL: https://api-stage.bimplus.net/v2/<team_slug>/structures/<structure_id>

Example: <https://api-stage.bimplus.net/v2/bimplus/structures/179439d6-df16-41cc-bd2c-74d05b7995d5>

HTTP Method

GET

Description

Get details of a specified structure.

Request

Headers
Authorization: BimPlus 9c1874a62c974dcfa75e0132c423a088 Content-Type: application/json

Response

Status
Status: 200 OK

JSON
<pre>{ "name": "TestStructure", "description": "FullLifeCycleTest", "type": "CostStructure", "nr": 1, "color": 0, "id": "179439d6-df16-41cc-bd2c-74d05b7995d5" }</pre>

Create a sub-node under the structure

URL / Resource / JSON Structure

Resource: projects/<project_id>/structures/<structure_id>

URL: https://api-stage.bimplus.net/v2/<team_slug>/projects/<project_id>/structures/<structure_id>

Example:<https://api-stage.bimplus.net/v2/bimplus/projects/228b0d93-f3fd-433a-9242-c4dbfe806b53/structures/179439d6-df16-41cc-bd2c-74d05b7995d5>

JSON Structure:

Name	Mandatory / Optional	Type	Description
parentId	mandatory	string(guid)	Parent node id of the structure (the id specified in the resource url)
name	mandatory	string	Name of the structure
description	optional	string	Description of the structure
type	optional	string	Type of the structure (eg: costStructure, specificationStructure)
nr	will be ignored	integer	The index of the structure
color	optional	integer	Color of the structure
id	will be ignored	string(guid)	Unique guid of the structure

HTTP Method

POST

Description

Create a sub-node under a particular structure

Request

Headers

Authorization: BimPlus 9c1874a62c974dcfa75e0132c423a088
Content-Type: application/json

JSON

```
{  
  "name": "Node 1"  
}
```

Response

Status

Status: 201 Created

JSON

```
{  
  "parentId": "179439d6-df16-41cc-bd2c-74d05b7995d5",  
  "name": "Node 1",  
  "type": "TopologyStructure",  
  "nr": 1,  
  "color": 0,  
  "id": "adf506ae-3628-4501-9af1-22bcf27e4ab4"  
}
```

Get the structure topology

URL / Resource / JSON Structure

Resource: structures/<structure_id>/topology?varianttype=<varianttype_id>

URL: https://api-stage.bimplus.net/v2/<team_slug>/structures/<structure_id>/topology?varianttype=<varianttype_id>

Example:<https://api-stage.bimplus.net/v2/bimplus/structures/179439d6-df16-41cc-bd2c-74d05b7995d5/topology?varianttype=733e429a-e232-4e5d-a41e-9bd50aa9763c>

Optional query parameters

Name	Type	Default value	Description
varianttype	string (guid)	Guid.Empty	id of the variant type

HTTP Method

GET

Description

Get details of a specified structure.

Request

Headers

Authorization: BimPlus 9c1874a62c974dcfa75e0132c423a088
Content-Type: application/json

Response

Status
Status: 200 OK

JSON
<pre>{ "parent": null, "name": "TestStructure", "type": "Structure", "children": [{ "parent": "179439d6-df16-41cc-bd2c-74d05b7995d5", "name": "Node 1", "type": "Structure", "children": [], "id": "adf506ae-3628-4501-9af1-22bcf27e4ab4" }], "id": "179439d6-df16-41cc-bd2c-74d05b7995d5" }</pre>

Reorder the structure

URL / Resource / JSON Structure

Resource: structures/<structure_id>/reorder?varianttype=<varianttype_id>

URL: https://api-stage.bimplus.net/v2/<team_slug>/structures/<structure_id>/reorder?varianttype=<varianttype_id>

Example:<https://api-stage.bimplus.net/v2/bimplus/structures/179439d6-df16-41cc-bd2c-74d05b7995d5/reorder?varianttype=733e429a-e232-4e5d-a41e-9bd50aa9763c>

Optional query parameters

Name	Type	Default value	Description
varianttype	string (guid)	Guid.Empty	id of the variant type

HTTP Method

PUT

Description

Reorder the structure for specified variant type.

Request

Headers
Authorization: BimPlus 9c1874a62c974dcfa75e0132c423a088 Content-Type: application/json

Response

Status
Status: 200 OK

JSON

```
{
  "parent": null,
  "name": "TestStructure",
  "type": "Structure",
  "children": [
    {
      "parent": "179439d6-df16-41cc-bd2c-74d05b7995d5",
      "name": "Node 1",
      "type": "Structure",
      "children": [],
      "id": "adf506ae-3628-4501-9af1-22bcf27e4ab4"
    }
  ],
  "id": "179439d6-df16-41cc-bd2c-74d05b7995d5"
}
```

Assign an object to the latest/last structure node

URL / Resource / JSON Structure

Resource: structures/<structure_id>/assign/<object_id>

URL: https://api-stage.bimplus.net/v2/<team_slug>/structures/<structure_id>/assign/<object_id>

Example:<https://api-stage.bimplus.net/v2/bimplus/structures/179439d6-df16-41cc-bd2c-74d05b7995d5/assign/df4a81d6-42fb-4187-bbce-82a2fc093b2f>

JSON Structure:

Name	Mandatory / Optional	Type	Description
color	optional	string(guid)	The id of the last node to which an object will be assigned
objectId	will be ignored	string(guid)	The id of the object to whom a structure will be assigned
name	mandatory	string	The name of the structure-object connection
nr	will be ignored	integer	The index of the structure-object connection
id	will be ignored	string(guid)	Unique guid of the structure-object connection
variantType	optional	string(guid)	Variant Type Id to whom the object will be assigned
IfcGloballyUniqueId	optional	string	IFC globally unique ID

HTTP Method

POST

Description

Assign an object to the latest/last structure node

Note :

Works with two different inputs

1. Object ID is present in the url - this object ID is used
2. Object ID is not present, but content json contains IfcGloballyUniqueId - a corresponding Bimplus object is found and used as input object ID
- if this IFC id is not found -> return "404 Not Found", if present multiple times -> return "409 Conflict"

Request

Headers

Authorization: BimPlus 9c1874a62c974dcfa75e0132c423a088
Content-Type: application/json

JSON

```
{
  "name": "WallConnection",
  "variantType" : "35b986c2-e9cd-482e-9281-6000671a49f0"
}
```

Response

Status

Status: 201 Created

JSON

```
{
  "structureId": "adf506ae-3628-4501-9af1-22bcf27e4ab4",
  "objectId": "df4a81d6-42fb-4187-bbce-82a2fc093b2f",
  "name": "WallConnection",
  "nr": 1,
  "id": "35b986c2-e9cd-482e-9281-6000671a49f0"
}
```

Assign additional objects to the latest structureElement node

Url

Resource: structures/<structureElement_id>/assign/<object_id>

URL: https://api-stage.bimplus.net/v2/<team_slug>/structures/<structureElement_id>/assign/<object_id>

Example:<https://api-stage.bimplus.net/v2/bimplus/structures/179439d6-df16-41cc-bd2c-74d05b7995d5/assign/df4a81d6-42fb-4187-bbce-82a2fc093b2f>

HttpMethod

POST

Json

```
{
  "structureId": "adf506ae-3628-4501-9af1-22bcf27e4ab4",
  "objectId": "df4a81d6-42fb-4187-bbce-82a2fc093b2f",
  "name": "WallConnection",
  "nr": 1,
  "id": "35b986c2-e9cd-482e-9281-6000671a49f0",
  "variantType" : "35b986c2-e9cd-482e-9281-6000671a49f0"
}
```

Assign a project element(s) into existing hierarchy structure

URL / Resource / JSON Structure

Resource: projects/<project_id>/structures/<structure_id>/attributeassign

URL: https://api-stage.bimplus.net/v2/<team_slug>/projects/<project_id>/structures/<structure_id>/attributeassign

Example:<https://api-stage.bimplus.net/v2/bimplus/projects/f1ee5e9a-c7c9-40bc-8871-5d13a99d5794/structures/b7d583e2-a3a6-4e11-b324-401f8723840e/attributeassign>

JSON Structure:

Name	Mandatory / Optional	Type	Description
attributeId	mandatory	string(guid)	Free attribute Id.
variantType	optional	string(guid)	Variant Type Id to whom the object will be assigned.

HTTP Method

PUT

Description

Assign a project element(s) into existing hierarchy structure according attribute value of element (i.e. structure hierarchy description is identical to free attribute value)

Request

Headers

Authorization: BimPlus 9c1874a62c974dcfa75e0132c423a088
Content-Type: application/json

JSON

{
 "attributeId": "8ef4d2fd-8959-4aa1-8da9-3e238b1c7705",
 "variantType": "d120adc6-8382-4a0c-9638-a0d246590ed3"
}

Response

Status

Status: 201 Created
Function ended OK and minimal one project element was assigned to structure node

Status: 204 NoContent
Function ended OK, but no project element was assigned to structure node (i.e. no project element with requested free attribute was found)

JSON

```
{
  "structuretypeid": "512b5bcd-619d-4ef5-9644-7fe5d783b73a",
  "children": [
    {
      "structuretypeid": "512b5bcd-619d-4ef5-9644-7fe5d783b73a",
      "children": [],
      "elements": [
        {
          "structureId": "f0ebc65f-6ddc-4fa3-8f02-2911665adee4",
          "objectId": "72bd0a48-f0e8-4385-9d95-f242d42deb60",
          "name": "Basic Wall:Standard 20.0:491928",
          "nr": 0,
          "id": "23ee744f-0cca-4e39-adcd-e91396ad10ea"
        },
        {
          "structureId": "f0ebc65f-6ddc-4fa3-8f02-2911665adee4",
          "objectId": "228b0d93-f3fd-433a-9242-c4dbfe806b53",
          "name": "Basic Wall:Standard 20.0:491025",
          "nr": 0,
          "id": "c2586c7a-5b61-456a-ba84-c27ffe0976d6"
        }
      ],
      "parentId": "653afdf7-7cfb-42e5-a9b5-e99275ce5cf4",
      "name": "Subnode3",
      "description": "TestStrukturyPreAtributy1",
      "type": "FreeAttrTestStructure",
      "nr": 4,
      "color": 0,
      "disableElementAssignment": false,
      "id": "f0ebc65f-6ddc-4fa3-8f02-2911665adee4"
    }
  ],
  "elements": [],
  "projectId": "3904db18-cf1a-4665-9c2b-152b84293259",
  "name": "FreeAttrStructure",
  "description": "MainNode",
  "type": "FreeAttrTestStructure",
  "nr": 1,
  "color": 0,
  "disableElementAssignment": false,
  "id": "653afdf7-7cfb-42e5-a9b5-e99275ce5cf4"
}
```

Remove assigned object from the latest structureElement node

Url / Resource

Resource: structures/<structureElement_id>/delete/<object_id>

URL: https://api-stage.bimplus.net/v2/<team_slug>/structures/<structureElement_id>/delete/<object_id>

Example: <https://api-stage.bimplus.net/v2/bimplus/structures/35b986c2-e9cd-482e-9281-6000671a49f0/delete/df4a81d6-42fb-4187-bbce-82a2fc093b2f>

HttpMethod

DELETE

response

HttpStatusCode.OK

Copy Structure

Url / Resource /Json

Resource: structures/<structure_id>/copy

URL: https://api-stage.bimplus.net/v2/<team_slug>/structures/<structure_id>/copy?varianttype=<varianttype_id>

Example:<https://api-stage.bimplus.net/v2/bimplus/structures/179439d6-df16-41cc-bd2c-74d05b7995d5/copy?varianttype=733e429a-e232-4e5d-a41e-9bd50aa9763c>

JSON Structure:

Name	Mandatory / Optional	Type	Description
name	mandatory	string	Name of the new structure
type	optional	string	Type of the new structure (eg: costStructure, specificationStructure)
nr	will be ignored	integer	The index of the new structure
color	optional	integer	Color of the new structure
id	will be ignored	string(guid)	Unique guid of the structure
startDate	optional	string (date)	Start date (depends on type of structure)
endDate	optional	string (date)	End date (depends on type of structure)

Optional query parameters

Name	Type	Default value	Description
varianttype	string (guid)	Guid.Empty	id of the variant type

HttpMethod

POST

Update the structure

URL / Resource / JSON Structure

Resource: structures/<structure_id>

URL: https://api-stage.bimplus.net/v2/<team_slug>/structures/<structure_id>

Example:<https://api-stage.bimplus.net/v2/bimplus/structures/179439d6-df16-41cc-bd2c-74d05b7995d5>

JSON Structure:

Name	Mandatory / Optional	Type	Description
parentId	optional	string(guid)	Parent node id of the structure (for the first structure, projectId is the parentId)
name	optional	string	Name of the structure
description	optional	string	Description of the structure
type	optional	string	Type of the structure (eg: costStructure, specificationStructure)
nr	optional	integer	The index of the structure
color	optional	integer	Color of the structure
id	will be ignored	string(guid)	Unique guid of the structure

HTTP Method

PUT

Description

Update the specified structure

Request

Headers

Authorization: BimPlus 9c1874a62c974dcfa75e0132c423a088
Content-Type: application/json

JSON

```
{
  "name": "Updated Structure"
}
```

Response

Status

Status: 200 OK

JSON

```
{
  "parentId": "622272da-f1ff-45ab-a3f0-c8f1255c80e8",
  "name": "Updated Structure",
  "description": "FullLifeCycleTest",
  "type": "CostStructure",
  "nr": 1,
  "color": 0,
  "id": "179439d6-df16-41cc-bd2c-74d05b7995d5"
}
```

Delete the structure

URL / Resource / JSON Structure

Resource: structures/<structure_id>

URL: https://api-stage.bimplus.net/v2/<team_slug>/structures/<structure_id>

Example:<https://api-stage.bimplus.net/v2/bimplus/structures/db540336-47a3-426e-b3bf-1e532bfac8ea>

JSON Structure:

Name	Mandatory / Optional	Type	Description
parentId	optional	string(guid)	Parent node id of the structure (for the first structure, projectId is the parentId)
name	optional	string	Name of the structure
description	optional	string	Description of the structure
type	optional	string	Type of the structure (eg: costStructure, specificationStructure)
nr	optional	integer	The index of the structure
color	optional	integer	Color of the structure
id	will be ignored	string(guid)	Unique guid of the structure

Optional query parameters

Name	Type	Default value	Description
forceDelete	string(boolean)	false	if true delete also all attachments which are under structure and are not lock, if under structure are locked document return 207 and delete just not locked document and structure.

deleteAll	string (boolean)	false	if true delete also all attachments which are under structure and are not lock, if under structure are locked document return forbidden.
-----------	---------------------	-------	--

HTTP Method

DELETE

Description

Deletes a specified structure.

Request

Headers
Authorization: BimPlus 9c1874a62c974dcfa75e0132c423a088 Content-Type: application/json

Response

Status
Status: 200 OK

Download attachments of the structure

URL / Resource / JSON Structure

Resource: structures/<structure_id>/downloadattachments

URL: https://api-stage.bimplus.net/v2/<team_slug>/structures/<structure_id>/downloadattachments

Example: <https://api-stage.bimplus.net/v2/bimplus/structures/db540336-47a3-426e-b3bf-1e532bfac8ea/downloadattachments>

HTTP Method

GET

Description

Downloads all attachments assigned to the required structure node including all children.

Downloaded content is a compressed zip file. The directory structure in downloaded zip file reflects hierarchy of the structure nodes where structure names represent folder names. As a attachment name are used original filenames of the attachments.

The requested attachment types included in result zip file can be defined in query parameters.

e.g. <https://api-stage.bimplus.net/v2/bimplus/structures/db540336-47a3-426e-b3bf-1e532bfac8ea/downloadattachments?attachmentType=AllplanLayout&attachmentType=AllplanDrawing>

When query parameter is missing will be returned all attachments of the structure node tree.

More about attachmentType can be found here [Filter for getting project-only attachments & attachments that belong to a particular attachment-type](#)

Details about created attachments can be found in [4.4 Object service](#), e.g. [Create a new attachment in the object](#) or in [4.8 Attachment Service](#)

If there are not any attachments in required structure tree the return code is 404 Not Found.

Request

Headers
Authorization: BimPlus 9c1874a62c974dcfa75e0132c423a088 Content-Type: application/zip

Response

Status
Status: 200 OK

The response format is application/octet-stream.

Create a new variant type in a project

URL / Resource / JSON Structure

Resource: projects/<project_id>/variants

URL: https://api-stage.bimplus.net/v2/<team_slug>/projects/<project_id>/variants

Example:<https://api-stage.bimplus.net/v2/bimplus/projects/622272da-f1ff-45ab-a3f0-c8f1255c80e8/variants>

JSON Structure:

Name	Mandatory / Optional	Type	Description
name	mandatory	string	Name of the variant type
description	optional	string	Description of the variant type
id	will be ignored	string(guid)	Unique guid of the variant type

HTTP Method

POST

Description

Create a new variant type of defined structure(eg: cost structure, specification structure) under a project

Request

Headers
Authorization: BimPlus 9c1874a62c974dcfa75e0132c423a088 Content-Type: application/json

JSON
<pre>{ "name": "TestVariant type", "description": "Description of the Test variant type" }</pre>

Response

Status
Status: 201 Created

JSON
<pre>{ "name": "TestVariant type", "description": "Description of the Test variant type", "id": "733e429a-e232-4e5d-a41e-9bd50aa9763c" }</pre>

Get the variant type details

URL / Resource / JSON Structure

Resource: projects/<project_id>/variants/<varianttype_id>

URL: https://api-stage.bimplus.net/v2/<team_slug>/projects/<project_id>/variants/<varianttype_id>

Example:<https://api-stage.bimplus.net/v2/bimplus/projects/622272da-f1ff-45ab-a3f0-c8f1255c80e8/variants/733e429a-e232-4e5d-a41e-9bd50aa9763c>

HTTP Method

GET

Description

Get details of a specified variant type.

Request

Headers
Authorization: BimPlus 9c1874a62c974dcfa75e0132c423a088 Content-Type: application/json

Response

Status
Status: 200 OK

JSON
<pre>{ "name": "TestVariant type", "description": "Description of the Test variant type", "id": "733e429a-e232-4e5d-a41e-9bd50aa9763c" }</pre>

Get the list of existing variant types in the project

URL / Resource / JSON Structure

Resource: projects/<project_id>/variants

URL: https://api-stage.bimplus.net/v2/<team_slug>/projects/<project_id>/variants

Example:<https://api-stage.bimplus.net/v2/bimplus/projects/622272da-f1ff-45ab-a3f0-c8f1255c80e8/variants>

HTTP Method

GET

Description

Gets the list of existing variant types created in the project.

Request

Headers

Authorization: BimPlus 9c1874a62c974dcfa75e0132c423a088
Content-Type: application/json

Response

Status

Status: 200 OK

JSON

```
[
  {
    "name": "TestVariantType1",
    "description": "Description of the Test variant type 1",
    "id": "6dc03014-8601-49fd-bae9-ef5b185603b6"
  },
  {
    "name": "TestVariantType2",
    "description": "Description of the Test variant type 2",
    "id": "4c1fda6b-7fd9-42a7-a4ae-88eababd3082"
  },
  {
    "name": "TestVariantType3",
    "description": "Description of the Test variant type 3",
    "id": "f2cf9b21-c1bb-463d-bbee-a6fbfb5e8b3e"
  },
  {
    "name": "TestVariantType4",
    "description": "Description of the Test variant type 4",
    "id": "733e429a-e232-4e5d-a41e-9bd50aa9763c"
  }
]
```

Update the variant type

URL / Resource / JSON Structure

Resource: projects/<project_id>/variants/<varianttype_id>

URL: https://api-stage.bimplus.net/v2/<team_slug>projects/<project_id>/variants/<varianttype_id>

Example:<https://api-stage.bimplus.net/v2/bimplus/projects/622272da-f1ff-45ab-a3f0-c8f1255c80e8/variants/733e429a-e232-4e5d-a41e-9bd50aa9763c>

JSON Structure:

Name	Mandatory / Optional	Type	Description
name	optional	string	Name of the variant type
description	optional	string	Description of the variant type
id	will be ignored	string(guid)	Unique guid of the variant type

HTTP Method

PUT

Description

Update the specified variant type

Request

Headers

Authorization: BimPlus 9c1874a62c974dcfa75e0132c423a088
Content-Type: application/json

JSON

```
{
  "name": "Updated TestVariantType4 name"
  "description": "Updated description of the TestVariantType4"
}
```

Response

Status

Status: 200 OK

JSON

```
{
  "name": "Updated TestVariantType4 name",
  "description": "Updated description of the TestVariant type 4",
  "id": "733e429a-e232-4e5d-a41e-9bd50aa9763c"
}
```

Delete the variant

URL / Resource / JSON Structure

Resource: projects/<project_id>/variants/<varianttype_id>

URL: https://api-stage.bimplus.net/v2/<team_slug>projects/<project_id>/variants/<varianttype_id>

Example:<https://api-stage.bimplus.net/v2/bimplus/projects/622272da-f1ff-45ab-a3f0-c8f1255c80e8/variants/733e429a-e232-4e5d-a41e-9bd50aa9763c>

HTTP Method

DELETE

Description

Deletes a specified variant type.

Request

Headers

Authorization: BimPlus 9c1874a62c974dcfa75e0132c423a088
Content-Type: application/json

Response

Status

Status: 200 OK

Copy content of source variant type to target variant type

Url / Resource /Json

Resource: projects/<project_id>/variants/<targetvarianttype_id>/copyfrom

URL: https://api-stage.bimplus.net/v2/<team_slug>projects/<project_id>/variants/<targetvarianttype_id>/copyfrom

Example:<https://api-stage.bimplus.net/v2/bimplus/projects/622272da-f1ff-45ab-a3f0-c8f1255c80e8/variants/733e429a-e232-4e5d-a41e-9bd50aa9763c/copyfrom>

JSON Structure:

Name	Mandatory / Optional	Type	Description
name	will be ignored	string	Name of the variant type
description	will be ignored	string	Description of the variant type
id	mandatory	string(guid)	Unique guid of the source variant type

HttpMethod

PUT

Description

Updates the specified target variant type with all structure element's assignments of elements from source variant type.
When variant type id is missing will be used internally default variant type (Guid.Empty) as a source variant type

Note:

In case when at least one element is already assigned in target variant type and the same element is also present in source variant type, such api call will return Conflict response and target variant type will not be updated.

Request

Headers

Authorization: BimPlus 9c1874a62c974dcfa75e0132c423a088
Content-Type: application/json

JSON

```
{
  "name": "ignored variant type name",
  "description": "ignored description of variant type",
  "id": "f2cf9b21-clbb-463d-bbee-a6fbfb5e8b3e"
}
```

Response

Status

Status: 200 OK

JSON

```
{
  "name": "Updated TestVariantType4 name",
  "description": "Updated description of the TestVariant type 4",
  "id": "733e429a-e232-4e5d-a41e-9bd50aa9763c"
}
```