

PTS Connect API Documentation

PTS Connect

This document describes the resources that make up PTS Connect, the official API for PTS.

General notes

- Current version is `beta`.
- **HTTPS only**. We require that all requests are done over HTTPS.
- All data is sent and received as **JSON**, except where specified.

OAuth 2.0

PTS Connect supports OAuth 2.0 for authenticating all API requests. OAuth 2.0 is a protocol that lets external apps request authorization to PTS.

All developers need to register their application before getting started. A registered OAuth 2.0 application is assigned a unique Client ID and Client Secret. The Client Secret should not be shared.

Web application flow

This describes the OAuth 2.0 flow from 3rd party web sites.

- **Redirect users to request PTS access**

```
GET https://connect.ptsforum.se/beta/oauth2/authorize
```

Parameters

Name	Type	Description
<code>client_id</code>	<code>string</code>	Required. The client ID you received from PTS when you registered.
<code>redirect_id</code>	<code>string</code>	Required. The URL in your app where users will be sent after authorization.
<code>response_type</code>	<code>string</code>	Required. The grant type requested: <code>code</code>
<code>scope</code>	<code>string</code>	A comma separated list of scopes.
<code>state</code>	<code>string</code>	An unguessable random string. It is used to protect against cross-site request forgery attacks.

- **PTS redirects back to your site**

If the user accepts your request, PTS redirects back to your site with a temporary code in a `code` parameter as well as the state you provided in the previous step in a `state` parameter. If the states don't match, the request has been created by a third party and the process should be aborted.

Exchange this for an access token:

```
Content-Type: application/x-www-form-urlencoded
POST https://connect.ptsforum.se/beta/oauth2/token
```

Parameters

Name	Type	Description
client_id	string	Required. The client ID you received from PTS when you registered.
client_secret	string	Required. The client secret you received from PTS when you registered.
code	string	Required. The code you received as a response to step 1.
grant_type	String	Required. The grant type, which must be <code>authorization code</code> .
redirect_id	string	Required. The URL in your app where users will be sent after authorization.

Response

```
access_token=MY_TOKEN
```

- **Use the access token to access the API**

The access token allows you to make requests to the API on behalf of a user. You pass the token in the Authorization header.

```
Authorization: Bearer MY_TOKEN
```

API

This section lists all available API requests. All requests require the following root endpoint:

```
https://connect.ptsforum.se/{version}/api/...
```

Get current project

Get current project that the authenticated user has granted access to.

```
GET /project
```

Response

```
{
  "Id": 1,
  "Name": "Mitt projekt",
  "Number": "123",
  "Manager": "Carina Carlsson",
  "InitiatedBy": "Anna Andersson",
  "InitiatedOn": "2014-09-08T00:00:00"
}
```

List zones

List the recent version of all approved zones in a given project.

```
GET /projects/{project_id}/zones
```

Response

```
[
  {
    "Name": "Från",
    "Guid": "3545081f-6a97-e411-9359-0050569a2eec",
    "Remarks": "Test data",
    "VersionNumber": "5.0",
    "Description": "test description",
    "Status": "Approved",
    "ApprovedBy": "Tomas Löfdahl"
  },
  {
    "Name": "Jämförelse",
    "Guid": "ae45081f-6a97-e411-9359-0050569a2eec",
    "Remarks": null,
    "VersionNumber": "1.0",
    "Description": null,
    "Status": "Approved",
    "ApprovedBy": "Tomas Löfdahl"
  }
]
```

Get zone details

Get detailed information about the recently approved given zone.

```
GET /projects/{project_id}/zones/{zone_guid}/details
```

Get detailed information about the recently given zone. The zone can be approved or just available to Connect.

```
GET /projects/{project_id}/zones/{zone_guid}/details?recent=true
```

Response

```
{
  "Spaces": [
    {
      "Guid": "99164e36-9b2b-4203-ada9-2b145553d7b4",
      "Name": "Arkiv",
      "Abbreviation": "ARKIV",
      "Number": null,
      "Classification": {
        "Id": 45,
        "Code": 45,
        "Name": "Arkiv"
      },
      "Category": "Personalbundna lokaler",
      "RefNo": "R-16",
      "FunctionCode": null,
      "ProgramArea": 0,
      "Comment": null,
      "OccupancyNumber": 0,
      "OccupancyNumberComment": null,
      "OccupancyTimes": null,
      "ZoneName": "Jämförelse",
      "ZoneGuid": "ae45081f-6a97-e411-9359-0050569a2eec",
      "ZoneVersion": "1.0",
      "ZoneStatus": "Approved",
      "SpaceGroupGuid": "08f2161f-6a97-e411-9359-0050569a2eec"
    },
    {
      "Guid": "29b2dc03-c722-4587-a1db-4f2722ce32f4",
      "Name": "Förråd",
      "Abbreviation": "FRD",
      "Number": "005",
      "Classification": {
        "Id": 25,
        "Code": 25,
        "Name": "Förråd"
      },
      "Category": "Försörjningslokaler",
      "RefNo": "R-97",
      "FunctionCode": null,
      "ProgramArea": 2,
      "Comment": "",
      "OccupancyNumber": 0,
      "OccupancyNumberComment": null,
      "OccupancyTimes": null,
      "ZoneName": "Jämförelse",
      "ZoneGuid": "ae45081f-6a97-e411-9359-0050569a2eec",
      "ZoneVersion": "1.0",
      "ZoneStatus": "Approved",
      "SpaceGroupGuid": "bf9694a0-e9f9-4214-b7bc-a9e3c8987961"
    }
  ]
}
```

```
    }  
  ],  
  "Name": "Jämförelse",  
  "Guid": "ae45081f-6a97-e411-9359-0050569a2eec",  
  "Remarks": null,  
  "VersionNumber": "1.0",  
  "Description": null,  
  "Status": "Approved",  
  "ApprovedBy": "Tomas Löfdahl"  
}
```

Get zone version details

Get detailed information about a given approved zone version.

```
GET /projects/{project_id}/zones/{zone_guid}/versions/{version}/details
```

Get detailed information about a given zone version. The zone can be approved or just available to Connect.

```
GET /projects/{project_id}/zones/{zone_guid}/versions/{version}/details?recent=true
```

Response

```
{
  "Spaces": [
    {
      "Guid": "99164e36-9b2b-4203-ada9-2b145553d7b4",
      "Name": "Arkiv",
      "Abbreviation": "ARKIV",
      "Number": null,
      "Classification": {
        "Id": 45,
        "Code": 45,
        "Name": "Arkiv"
      },
      "Category": "Personalbundna lokaler",
      "RefNo": "R-16",
      "FunctionCode": null,
      "ProgramArea": 0,
      "Comment": null,
      "OccupancyNumber": 0,
      "OccupancyNumberComment": null,
      "OccupancyTimes": null,
      "ZoneName": "Jämförelse",
      "ZoneGuid": "ae45081f-6a97-e411-9359-0050569a2eec",
      "ZoneVersion": "1.0",
      "ZoneStatus": "Approved",
      "SpaceGroupGuid": "08f2161f-6a97-e411-9359-0050569a2eec"
    },
    {
      "Guid": "29b2dc03-c722-4587-a1db-4f2722ce32f4",
      "Name": "Förråd",
      "Abbreviation": "FRD",
      "Number": "005",
      "Classification": {
        "Id": 25,
        "Code": 25,
        "Name": "Förråd"
      },
      "Category": "Försörjningslokaler",
      "RefNo": "R-97",
      "FunctionCode": null,
      "ProgramArea": 2,
      "Comment": "",
      "OccupancyNumber": 0,
      "OccupancyNumberComment": null,
      "OccupancyTimes": null,
      "ZoneName": "Jämförelse",
      "ZoneGuid": "ae45081f-6a97-e411-9359-0050569a2eec",
      "ZoneVersion": "1.0",
      "ZoneStatus": "Approved",
    }
  ]
}
```

```
        "SpaceGroupGuid": "bf9694a0-e9f9-4214-b7bc-a9e3c8987961"  
    }  
],  
"Name": "Jämförelse",  
"Guid": "ae45081f-6a97-e411-9359-0050569a2eec",  
"Remarks": null,  
"VersionNumber": "1.0",  
"Description": null,  
"Status": "Approved",  
"ApprovedBy": "Tomas Löfdahl"  
}
```

Get zone details including space details

Get detailed information about the recently approved given zone, including space details.

```
GET /projects/{project_id}/zones/{zone_guid}/full
```

Get detailed information about the recently given zone, including space details. The zone can be approved or just available to Connect.

```
GET /projects/{project_id}/zones/{zone_guid}/full?recent=true
```

Response

```
{
  "Spaces": [
    {
      "Equipment": [
        {
          "Code": "302-Z",
          "Name": "Toalettplatsutrustning",
          "Description": null,
          "ShortDescription": null,
          "Bsab": null,
          "Size": {
            "Width": 0,
            "Height": 0,
            "Depth": 0,
            "Length": 0,
            "Unit": ""
          },
          "Quantity": 5,
          "Comment": "yt"
        },
        {
          "Code": "650-5",
          "Name": "Telefonuttag",
          "Description": "Apparat för ingående och utgående externa samt interna samtal.",
          "ShortDescription": "RJ45 uttag. Enkelt, öppen huvudapparat",
          "Bsab": "TFA.12",
          "Size": {
            "Width": 0,
            "Height": 0,
            "Depth": 0,
            "Length": 0,
            "Unit": ""
          },
          "Quantity": 1,
          "Comment": null
        }
      ],
      "FunctionalRequirements": [
        {
          "Code": "N61-3",
          "Name": "Låsning",
          "Description": "bricka-styrning",
          "ShortDescription": "Med elektriskt lås menas kort eller",
          "Value": {
            "Value": "Elektriskt lås",
            "Unit": null,
            "Description": null,

```



```

        "Type": null
      },
      "Comment": null,
      "BimParameter": null,
      "BimParameterValue": null
    }
  ],
  "Surfaces": [
    {
      "Code": "201-16",
      "Name": "Golvartert",
      "Description": null,
      "ShortDescription": "Matta uppvikt mot väggen?",
      "Bsab": null,
      "Comment": "Test asrfas",
      "BimParameter": null,
      "BimParameterValue": null
    },
    {
      "Code": "203-3",
      "Name": "Vägg",
      "Description": null,
      "ShortDescription": "Målad, hygienklass 2, glansvärde 20",
      "Bsab": "ZZ",
      "Comment": null,
      "BimParameter": null,
      "BimParameterValue": null
    }
  ],
  "Guid": "99164e36-9b2b-4203-ada9-2b145553d7b4",
  "Name": "Arkiv",
  "Abbreviation": "ARKIV",
  "Number": null,
  "Classification": {
    "Id": 45,
    "Code": 45,
    "Name": "Arkiv"
  },
  "Category": "Personalbundna lokaler",
  "RefNo": "R-16",
  "FunctionCode": null,
  "ProgramArea": 0,
  "Comment": null,
  "OccupancyNumber": 0,
  "OccupancyNumberComment": null,
  "OccupancyTimes": null,
  "ZoneName": "Jämförelse",
  "ZoneGuid": "ae45081f-6a97-e411-9359-0050569a2eec",
  "ZoneVersion": "1.0",
  "ZoneStatus": "Approved",
  "SpaceGroupGuid": "08f2161f-6a97-e411-9359-0050569a2eec"
},
{
  "Equipment": [],
  "FunctionalRequirements": [],
  "Surfaces": [],
  "Guid": "29b2dc03-c722-4587-a1db-4f2722ce32f4",
  "Name": "Förråd",
  "Abbreviation": "FRD",
  "Number": "005",
  "Classification": {
    "Id": 25,
    "Code": 25,
    "Name": "Förråd"
  },
  "Category": "Försörjningslokaler",
  "RefNo": "R-97",

```

```
        "FunctionCode": null,  
        "ProgramArea": 2,  
        "Comment": "",  
        "OccupancyNumber": 0,  
        "OccupancyNumberComment": null,  
        "OccupancyTimes": null,  
        "ZoneName": "Jämförelse",  
        "ZoneGuid": "ae45081f-6a97-e411-9359-0050569a2eec",  
        "ZoneVersion": "1.0",  
        "ZoneStatus": "Approved",  
        "SpaceGroupGuid": "bf9694a0-e9f9-4214-b7bc-a9e3c8987961"  
    }  
],  
"Name": "Jämförelse",  
"Guid": "ae45081f-6a97-e411-9359-0050569a2eec",  
"Remarks": null,  
"VersionNumber": "1.0",  
"Description": null,  
"Status": "Approved",  
"ApprovedBy": "Tomas Löfdahl"  
}
```

Set zone details including space details

Set detailed information about the given zone, including space details.

```
POST /projects/{project_id}/zones/{zone_guid}/full
```

Body

```
{
  "Spaces": [
    {
      "Equipment": [
        {
          "Code": "302-Z",
          "Name": "Toalettplatsutrustning",
          "Description": null,
          "ShortDescription": null,
          "Bsab": null,
          "Size": {
            "Width": 0,
            "Height": 0,
            "Depth": 0,
            "Length": 0,
            "Unit": ""
          },
          "Quantity": 5,
          "Comment": "yt"
        },
        {
          "Code": "650-5",
          "Name": "Telefonuttag",
          "Description": null,
          "ShortDescription": "RJ45 uttag. Enkelt, öppen huvudapparat
Apparat för ingående och utgående externa samt interna samtal.",
          "Bsab": "TFA.12",
          "Size": {
            "Width": 0,
            "Height": 0,
            "Depth": 0,
            "Length": 0,
            "Unit": ""
          },
          "Quantity": 1,
          "Comment": null
        }
      ],
      "FunctionalRequirements": [
        {
          "Code": "N61-3",
          "Name": "Låsning",
          "Description": null,
          "ShortDescription": "Med elektriskt lås menas kort eller
bricka-styrning",
          "Value": {
            "Value": "Elektriskt lås",
            "Unit": null,
            "Description": null,
            "Type": null
          },
          "Comment": null,
          "BimParameter": null,
          "BimParameterValue": null
        }
      ],
      "Surfaces": [
```

```

    {
      "Code": "201-16",
      "Name": "Golvartert",
      "Description": null,
      "ShortDescription": "Matta uppvikt mot väggen?",
      "Bsab": null,
      "Comment": "Test asrfas",
      "BimParameter": null,
      "BimParameterValue": null
    },
    {
      "Code": "203-3",
      "Name": "Vägg",
      "Description": null,
      "ShortDescription": "Målad, hygienklass 2, glansvärde 20",
      "Bsab": "ZZ",
      "Comment": null,
      "BimParameter": null,
      "BimParameterValue": null
    }
  ],
  "Guid": "99164e36-9b2b-4203-ada9-2b145553d7b4",
  "Name": "Arkiv",
  "Abbreviation": "ARKIV",
  "Number": null,
  "Classification": {
    "Id": 45,
    "Code": 45,
    "Name": "Arkiv"
  },
  "Category": "Personalbundna lokaler",
  "RefNo": "R-16",
  "FunctionCode": null,
  "ProgramArea": 0,
  "Comment": null,
  "OccupancyNumber": 0,
  "OccupancyNumberComment": null,
  "OccupancyTimes": null,
  "ZoneName": "Jämförelse",
  "ZoneGuid": "ae45081f-6a97-e411-9359-0050569a2eec",
  "ZoneVersion": "1.0",
  "ZoneStatus": "Approved",
  "SpaceGroupGuid": "08f2161f-6a97-e411-9359-0050569a2eec"
},
{
  "Equipment": [],
  "FunctionalRequirements": [],
  "Surfaces": [],
  "Guid": "29b2dc03-c722-4587-a1db-4f2722ce32f4",
  "Name": "Förråd",
  "Abbreviation": "FRD",
  "Number": "005",
  "Classification": {
    "Id": 25,
    "Code": 25,
    "Name": "Förråd"
  },
  "Category": "Försörjningslokaler",
  "RefNo": "R-97",
  "FunctionCode": null,
  "ProgramArea": 2,
  "Comment": "",
  "OccupancyNumber": 0,
  "OccupancyNumberComment": null,
  "OccupancyTimes": null,
  "ZoneName": "Jämförelse",
  "ZoneGuid": "ae45081f-6a97-e411-9359-0050569a2eec",

```

```
        "ZoneVersion": "1.0",
        "ZoneStatus": "Approved",
        "SpaceGroupGuid": "bf9694a0-e9f9-4214-b7bc-a9e3c8987961"
    }
},
"Name": "Jämförelse",
"Guid": "ae45081f-6a97-e411-9359-0050569a2eec",
"Remarks": null,
"VersionNumber": "1.0",
"Description": null,
"Status": "Approved",
"ApprovedBy": "Tomas Löfdahl"
}
```

Get space details

Get detailed information about a given space in the recent version of an approved zone.

```
GET /projects/{project_id}/zones/{zone_guid}/spaces/{space_guid}/details
```

Get detailed information about a given space. The space can be in the recent version of an approved zone or in the recent version of a zone available to Connect.

```
GET /projects/{project_id}/zones/{zone_guid}/spaces/{space_guid}/details?recent=true
```

Response

```
{
  "Equipment": [
    {
      "Code": "302-Z",
      "Name": "Toalettplatsutrustning",
      "Description": null,
      "ShortDescription": null,
      "Bsab": null,
      "Size": {
        "Width": 0,
        "Height": 0,
        "Depth": 0,
        "Length": 0,
        "Unit": ""
      },
      "Quantity": 5,
      "Comment": "yt"
    },
    {
      "Code": "650-5",
      "Name": "Telefonuttag",
      "Description": null,
      "ShortDescription": "RJ45 uttag. Enkelt, öppen huvudapparat Apparat för ingående och utgående externa samt interna samtal.",
      "Bsab": "TFA.12",
      "Size": {
        "Width": 0,
        "Height": 0,
        "Depth": 0,
        "Length": 0,
        "Unit": ""
      },
      "Quantity": 1,
      "Comment": null
    }
  ],
  "FunctionalRequirements": [
    {
      "Code": "N61-3",
      "Name": "Låsning",
      "Description": null,
      "ShortDescription": "Med elektriskt lås menas kort eller bricka-styrning",
      "Value": {
        "Value": "Elektriskt lås",
        "Unit": null,
        "Description": null,
        "Type": null
      }
    }
  ]
}
```

```

    },
    "Comment": null,
    "BimParameter": null,
    "BimParameterValue": null
  }
],
"Surfaces": [
  {
    "Code": "201-16",
    "Name": "Golvartert",
    "Description": null,
    "ShortDescription": "Matta uppvikt mot väggen?",
    "Bsab": null,
    "Comment": "Test asrfas",
    "BimParameter": null,
    "BimParameterValue": null
  },
  {
    "Code": "203-3",
    "Name": "Vägg",
    "Description": null,
    "ShortDescription": "Målad, hygienklass 2, glansvärde 20",
    "Bsab": "ZZ",
    "Comment": null,
    "BimParameter": null,
    "BimParameterValue": null
  }
],
"Guid": "99164e36-9b2b-4203-ada9-2b145553d7b4",
"Name": "Arkiv",
"Abbreviation": "ARKIV",
"Number": null,
"Classification": {
  "Id": 45,
  "Code": 45,
  "Name": "Arkiv"
},
"Category": "Personalbundna lokaler",
"RefNo": "R-16",
"FunctionCode": null,
"ProgramArea": 0,
"Comment": null,
"OccupancyNumber": 0,
"OccupancyNumberComment": null,
"OccupancyTimes": null,
"ZoneName": "Jämförelse",
"ZoneGuid": "ae45081f-6a97-e411-9359-0050569a2eec",
"ZoneVersion": "1.0",
"ZoneStatus": "Approved",
"SpaceGroupGuid": "08f2161f-6a97-e411-9359-0050569a2eec"
}

```

List zone equipment

List all equipment for every space in the recent version of a given approved zone.

```
GET /projects/{project_id}/zones/{zone_guid}/equipment
```

List all equipment for every space in the recent version of a given zone. The equipment can be in the recent version of an approved zone or in the recent version of a zone available to Connect.

```
GET /projects/{project_id}/zones/{zone_guid}/equipment?recent=true
```

Response

```
[
  {
    "Equipment": [
      {
        "Code": "302-0",
        "Name": "Toalettplatsutrustning",
        "Description": null,
        "ShortDescription": "ospec",
        "Bsab": "XB",
        "Size": {
          "Width": 0,
          "Height": 0,
          "Depth": 0,
          "Length": 0,
          "Unit": ""
        },
        "Quantity": 1,
        "Comment": null
      },
      {
        "Code": "631-1",
        "Name": "Vägguttag",
        "Description": null,
        "ShortDescription": "dubbelt, 230 V, 10A-16A",
        "Bsab": "SMB.11",
        "Size": {
          "Width": 0,
          "Height": 0,
          "Depth": 0,
          "Length": 0,
          "Unit": ""
        },
        "Quantity": 3,
        "Comment": "via belysningsbrytaren utanför rummet"
      },
      {
        "Code": "650-1",
        "Name": "Datauttag",
        "Description": null,
        "ShortDescription": "Enkelt - RJ45 uttag för data, telefoni, snabbtelefon samt utrustning för TCP/IP kommunikation",
        "Bsab": "TFA.12",
        "Size": {
          "Width": 0,
          "Height": 0,
          "Depth": 0,
          "Length": 0,
          "Unit": ""
        }
      }
    ]
  }
]
```



```

        "Quantity": 1,
        "Comment": null
    },
    {
        "Code": "650-5",
        "Name": "Telefonuttag",
        "Description": null,
        "ShortDescription": "RJ45 uttag. Enkelt, öppen huvudapparat
Apparat för ingående och utgående externa samt interna samtal.",
        "Bsab": "TFA.12",
        "Size": {
            "Width": 0,
            "Height": 0,
            "Depth": 0,
            "Length": 0,
            "Unit": ""
        },
    },
    "Quantity": 1,
    "Comment": null
}
],
"Guid": "99164e36-9b2b-4203-ada9-2b145553d7b4",
"Name": "Arkiv",
"Abbreviation": "ARKIV",
"Number": null,
"Classification": {
    "Id": 45,
    "Code": 45,
    "Name": "Arkiv"
},
"Category": "Personalbundna lokaler",
"RefNo": "R-16",
"FunctionCode": null,
"ProgramArea": 0,
"Comment": null,
"OccupancyNumber": 0,
"OccupancyNumberComment": null,
"OccupancyTimes": null,
"ZoneName": "Jämförelse",
"ZoneGuid": "ae45081f-6a97-e411-9359-0050569a2eec",
"ZoneVersion": "1.0",
"ZoneStatus": "Approved",
"SpaceGroupGuid": "08f2161f-6a97-e411-9359-0050569a2eec"
},
{
    "Equipment": [
        {
            "Code": "362-0",
            "Name": "Hylla/hyllsektion",
            "Description": null,
            "ShortDescription": "ospec",
            "Bsab": "XBD.3",
            "Size": {
                "Width": 0,
                "Height": 0,
                "Depth": 0,
                "Length": 0,
                "Unit": "mm"
            },
        },
        "Quantity": 0,
        "Comment": null
    },
    {
        "Code": "411-8",
        "Name": "Postsorteringsfack",
        "Description": null,
        "ShortDescription": null,
    }
}

```

```

        "Bsab": "XBD.3",
        "Size": {
            "Width": 0,
            "Height": 0,
            "Depth": 0,
            "Length": 0,
            "Unit": "mm"
        },
        "Quantity": 1,
        "Comment": null
    },
    {
        "Code": "631-1",
        "Name": "Vägguttag",
        "Description": null,
        "ShortDescription": "dubbelt, 230 V, 10A-16A",
        "Bsab": "SMB.11",
        "Size": {
            "Width": 0,
            "Height": 0,
            "Depth": 0,
            "Length": 0,
            "Unit": ""
        },
        "Quantity": 1,
        "Comment": null
    }
}
],
"Guid": "29b2dc03-c722-4587-a1db-4f2722ce32f4",
"Name": "Förråd",
"Abbreviation": "FRD",
"Number": "005",
"Classification": {
    "Id": 25,
    "Code": 25,
    "Name": "Förråd"
},
"Category": "Försörjningslokaler",
"RefNo": "R-97",
"FunctionCode": null,
"ProgramArea": 2,
"Comment": "",
"OccupancyNumber": 0,
"OccupancyNumberComment": null,
"OccupancyTimes": null,
"ZoneName": "Jämförelse",
"ZoneGuid": "ae45081f-6a97-e411-9359-0050569a2eec",
"ZoneVersion": "1.0",
"ZoneStatus": "Approved",
"SpaceGroupGuid": "bf9694a0-e9f9-4214-b7bc-a9e3c8987961"
]

```

List zone functional requirements

List all functional requirements for every space in a given zone. List all equipment for every space in the recent version of a given approved zone.

```
GET /projects/{project_id}/zones/{zone_guid}/functional-requirements
```

List all equipment for every space in the recent version of a given zone. The equipment can be in the recent version of an approved zone or in the recent version of a zone available to Connect.

```
GET /projects/{project_id}/zones/{zone_guid}/functional-requirements?recent=true
```

Response

```
[
  {
    "FunctionalRequirements": [
      {
        "Code": "H16-1",
        "Name": "Belysningsstyrka",
        "Description": null,
        "ShortDescription": "belysningsstyrka enligt
branschrekommendation för denna typ av rum.",
        "Value": {
          "Value": "Normal",
          "Unit": null,
          "Description": null,
          "Type": null
        },
        "Comment": null,
        "BimParameter": null,
        "BimParameterValue": null
      },
      {
        "Code": "N61-3",
        "Name": "Låsning",
        "Description": null,
        "ShortDescription": "Med elektriskt lås menas kort eller bricka-
styrning",
        "Value": {
          "Value": "Elektriskt lås",
          "Unit": null,
          "Description": null,
          "Type": null
        },
        "Comment": null,
        "BimParameter": null,
        "BimParameterValue": null
      }
    ],
    "Guid": "99164e36-9b2b-4203-ada9-2b145553d7b4",
    "Name": "Arkiv",
    "Abbreviation": "ARKIV",
    "Number": null,
    "Classification": {
      "Id": 45,
      "Code": 45,
      "Name": "Arkiv"
    },
    "Category": "Personalbundna lokaler",
    "RefNo": "R-16",
```

```

    "FunctionCode": null,
    "ProgramArea": 0,
    "Comment": null,
    "OccupancyNumber": 0,
    "OccupancyNumberComment": null,
    "OccupancyTimes": null,
    "ZoneName": "Jämförelse",
    "ZoneGuid": "ae45081f-6a97-e411-9359-0050569a2eec",
    "ZoneVersion": "1.0",
    "ZoneStatus": "Approved",
    "SpaceGroupGuid": "08f2161f-6a97-e411-9359-0050569a2eec"
  },
  {
    "FunctionalRequirements": [
      {
        "Code": "G33-1",
        "Name": "Min luftflöden l/s m²",
        "Description": null,
        "ShortDescription": null,
        "Value": {
          "Value": "0,35",
          "Unit": "l/s m²",
          "Description": null,
          "Type": null
        },
        "Comment": null,
        "BimParameter": null,
        "BimParameterValue": null
      }
    ],
    "Guid": "d86724cf-326b-45c2-876f-74e6a25d0214",
    "Name": "Arkiv",
    "Abbreviation": "ARKIV",
    "Number": null,
    "Classification": {
      "Id": 45,
      "Code": 45,
      "Name": "Arkiv"
    },
    "Category": "Personalbundna lokaler",
    "RefNo": "R-17",
    "FunctionCode": null,
    "ProgramArea": 0,
    "Comment": null,
    "OccupancyNumber": 0,
    "OccupancyNumberComment": null,
    "OccupancyTimes": null,
    "ZoneName": "Jämförelse",
    "ZoneGuid": "ae45081f-6a97-e411-9359-0050569a2eec",
    "ZoneVersion": "1.0",
    "ZoneStatus": "Approved",
    "SpaceGroupGuid": "08f2161f-6a97-e411-9359-0050569a2eec"
  },
  {
    "FunctionalRequirements": [
      {
        "Code": "I11-8",
        "Name": "Ljudisolering",
        "Description": null,
        "ShortDescription": "Inga särskilda krav",
        "Value": {
          "Value": "Inga särskilda krav",
          "Unit": "R'w",
          "Description": null,
          "Type": null
        },
        "Comment": null,

```

```

        "BimParameter": null,
        "BimParameterValue": null
    },
    {
        "Code": "I12-1",
        "Name": "Stegljudsnivå",
        "Description": null,
        "ShortDescription": "Inga särskilda krav",
        "Value": {
            "Value": "Inga särskilda krav",
            "Unit": "dB",
            "Description": null,
            "Type": null
        },
        "Comment": null,
        "BimParameter": null,
        "BimParameterValue": null
    },
    {
        "Code": "I13-1",
        "Name": "Rumsakustik",
        "Description": null,
        "ShortDescription": "Inga särskilda krav",
        "Value": {
            "Value": "Inga särskilda krav",
            "Unit": null,
            "Description": null,
            "Type": null
        },
        "Comment": null,
        "BimParameter": null,
        "BimParameterValue": null
    }
],
"Guid": "29b2dc03-c722-4587-a1db-4f2722ce32f4",
"Name": "Förråd",
"Abbreviation": "FRD",
"Number": "005",
"Classification": {
    "Id": 25,
    "Code": 25,
    "Name": "Förråd"
},
"Category": "Försörjningslokaler",
"RefNo": "R-97",
"FunctionCode": null,
"ProgramArea": 2,
"Comment": "",
"OccupancyNumber": 0,
"OccupancyNumberComment": null,
"OccupancyTimes": null,
"ZoneName": "Jämförelse",
"ZoneGuid": "ae45081f-6a97-e411-9359-0050569a2eec",
"ZoneVersion": "1.0",
"ZoneStatus": "Approved",
"SpaceGroupGuid": "bf9694a0-e9f9-4214-b7bc-a9e3c8987961"
}
]

```

List zone surfaces

List all surfaces for every space in the recent version of a given approved zone.

```
GET /projects/{project_id}/zones/{zone_guid}/surfaces
```

List all surfaces for every space in the recent version of a given zone. The surfaces can be in the recent version of an approved zone or in the recent version of a zone available to Connect.

```
GET /projects/{project_id}/zones/{zone_guid}/surfaces?recent=true
```

Response

```
[
  {
    "Surfaces": [
      {
        "Code": "201-16",
        "Name": "Golvartert",
        "Description": null,
        "ShortDescription": "Matta uppvikt mot väggen?",
        "Bsab": null,
        "Comment": "Test asrfas",
        "BimParameter": null,
        "BimParameterValue": null
      },
      {
        "Code": "203-3",
        "Name": "Vägg",
        "Description": null,
        "ShortDescription": "Målad, hygienklass 2, glansvärde 20",
        "Bsab": "ZZ",
        "Comment": null,
        "BimParameter": null,
        "BimParameterValue": null
      }
    ],
    "Guid": "99164e36-9b2b-4203-ada9-2b145553d7b4",
    "Name": "Arkiv",
    "Abbreviation": "ARKIV",
    "Number": null,
    "Classification": {
      "Id": 45,
      "Code": 45,
      "Name": "Arkiv"
    },
    "Category": "Personalbundna lokaler",
    "RefNo": "R-16",
    "FunctionCode": null,
    "ProgramArea": 0,
    "Comment": null,
    "OccupancyNumber": 0,
    "OccupancyNumberComment": null,
    "OccupancyTimes": null,
    "ZoneName": "Jämförelse",
    "ZoneGuid": "ae45081f-6a97-e411-9359-0050569a2eec",
    "ZoneVersion": "1.0",
    "ZoneStatus": "Approved",
    "SpaceGroupGuid": "08f2161f-6a97-e411-9359-0050569a2eec"
  },
  {
    "Surfaces": [
```

```

    {
      "Code": "201-16",
      "Name": "Golvartert",
      "Description": null,
      "ShortDescription": "Matta uppvikt mot väggen?",
      "Bsab": null,
      "Comment": "Test asrfas",
      "BimParameter": null,
      "BimParameterValue": null
    },
    {
      "Code": "203-3",
      "Name": "Vägg",
      "Description": null,
      "ShortDescription": "Målad, hygienklass 2, glansvärde 20",
      "Bsab": "ZZ",
      "Comment": null,
      "BimParameter": null,
      "BimParameterValue": null
    }
  ],
  "Guid": "d86724cf-326b-45c2-876f-74e6a25d0214",
  "Name": "Arkiv",
  "Abbreviation": "ARKIV",
  "Number": null,
  "Classification": {
    "Id": 45,
    "Code": 45,
    "Name": "Arkiv"
  },
  "Category": "Personalbundna lokaler",
  "RefNo": "R-17",
  "FunctionCode": null,
  "ProgramArea": 0,
  "Comment": null,
  "OccupancyNumber": 0,
  "OccupancyNumberComment": null,
  "OccupancyTimes": null,
  "ZoneName": "Jämförelse",
  "ZoneGuid": "ae45081f-6a97-e411-9359-0050569a2eec",
  "ZoneVersion": "1.0",
  "ZoneStatus": "Approved",
  "SpaceGroupGuid": "08f2161f-6a97-e411-9359-0050569a2eec"
},
{
  "Surfaces": [
    {
      "Code": "201-16",
      "Name": "Golv",
      "Description": null,
      "ShortDescription": "Matta uppvikt mot vägg",
      "Bsab": null,
      "Comment": null,
      "BimParameter": null,
      "BimParameterValue": null
    },
    {
      "Code": "203-3",
      "Name": "Vägg",
      "Description": null,
      "ShortDescription": "Målad, hygienklass 2, glansvärde 20",
      "Bsab": "ZZ",
      "Comment": null,
      "BimParameter": null,
      "BimParameterValue": null
    }
  ],

```

```
"Guid": "29b2dc03-c722-4587-aldB-4f2722ce32f4",
>Name": "Förråd",
>Abbreviation": "FRD",
>Number": "005",
>Classification": {
>  "Id": 25,
>  "Code": 25,
>  "Name": "Förråd"
>},
>Category": "Försörjningslokaler",
>RefNo": "R-97",
>FunctionCode": null,
>ProgramArea": 2,
>Comment": "",
>OccupancyNumber": 0,
>OccupancyNumberComment": null,
>OccupancyTimes": null,
>ZoneName": "Jämförelse",
>ZoneGuid": "ae45081f-6a97-e411-9359-0050569a2eec",
>ZoneVersion": "1.0",
>ZoneStatus": "Approved",
>SpaceGroupGuid": "bf9694a0-e9f9-4214-b7bc-a9e3c8987961"
}
]
```


Version history

2015-02-12	First draft
2015-09-10	<p>OAuth2 token request: parameter <code>redirect_uri</code> is required</p> <p>New space parameters:</p> <ul style="list-style-type: none"> • <code>OccupancyNumber</code> • <code>OccupancyNumberComment</code> • <code>OccupancyTimes</code> • <code>ZoneName</code> • <code>ZoneGuid</code> <p>New functional requirement parameters:</p> <ul style="list-style-type: none"> • <code>BimParameter</code> • <code>BimParameterValue</code> <p>New surface parameters:</p> <ul style="list-style-type: none"> • <code>BimParameter</code> • <code>BimParameterValue</code> <p>CSV format shall use <code>Accept</code> header <code>text/csv</code></p>
2016-02-17	<p>New space parameter:</p> <ul style="list-style-type: none"> • <code>SpaceGroupGuid</code> <p>New functional requirement parameter:</p> <ul style="list-style-type: none"> • <code>Value.Type</code> (<code>Text</code>, <code>Integer</code>, <code>Decimal</code> or <code>Boolean</code>)
2016-04-14	<p>New API requests:</p> <ul style="list-style-type: none"> • <code>GetZones</code> • <code>GetZoneDetails</code> • <code>GetVersionZoneDetails</code> • <code>GetSpaceDetails</code> • <code>GetZoneEquipment</code> • <code>GetZoneFunctionalRequirements</code> • <code>GetZoneSurfaces</code> <p>Deprecate API requests:</p> <ul style="list-style-type: none"> • <code>GetSpaces</code> • <code>GetSpaceEquipment</code> • <code>GetSpaceFunctionalRequirements</code> • <code>GetSpaceSurfaces</code> • <code>GetSpaceDetails</code> <p>New space parameter:</p> <ul style="list-style-type: none"> • <code>ZoneVersion</code> • <code>ZoneStatus</code> (<code>Preliminary</code>, <code>ForApproval</code> or <code>Approved</code>)
2017-03-08	<p>New API requests:</p> <ul style="list-style-type: none"> • <code>SetZoneDetails</code> • <code>GetFullZoneDetails</code> • <code>SetFullZoneDetails</code> <p>Removed deprecate API requests:</p> <ul style="list-style-type: none"> • <code>GetSpaces</code> • <code>GetSpaceEquipment</code> • <code>GetSpaceFunctionalRequirements</code> • <code>GetSpaceSurfaces</code> • <code>GetSpaceDetails</code>