Overview

Help us improve the Bimplus API doc by providing your valuable comments. You can find the comment section at the bottom of the page.

Bimplus Introduction

- Bimplus is an open, “All-Connect” platform for connecting people, information and BIM models to build faster. Bimplus is Open BIM compliant.
- Bimplus provides universal access, sharing and connection of relevant building information; enabling seamless collaboration among all people in the project
- Bimplus is designed, using the latest Internet computing, cloud technologies, mobile devices and social communication.
- Bimplus is the future of the Internet based building Industry.
- You can find more information about Bimplus from our Bimplus website
- A bunch of video tutorials are available here

- **What is Bimplus ?**

- **Benefits of Bimplus**

Bimplus API

Bimplus API provides RESTful services for accessing, creating, modifying and deleting different levels of information in a building model on our Bimplus platform. It connects the building project information to a vast number of developers providing innovative Apps / applications that can operate on the building models and information.There are four types of database operation defined for manipulating the building content. i.e Create, Read, Update, Delete (CRUD) can be performed against the resources(URI, which are building information in our case) which are essentially the building blocks of REST.

The following HTTP methods implement these operations in the persistent level:

Operation	SQL	HTTP
Create a resource on the server	INSERT	POST
Retrieve the resource from the server	SELECT	GET
Update the resource on the server	UPDATE	PUT
Delete the resource from the server	DELETE	DELETE

All necessary information for resource manipulation will be sent within a HTTP request. It includes

- Resource identificator (URL)
- Data type / format (HTTP header)
- Authentication information (HTTP header)
- Operation, which will be performed against the resource (HTTP method)

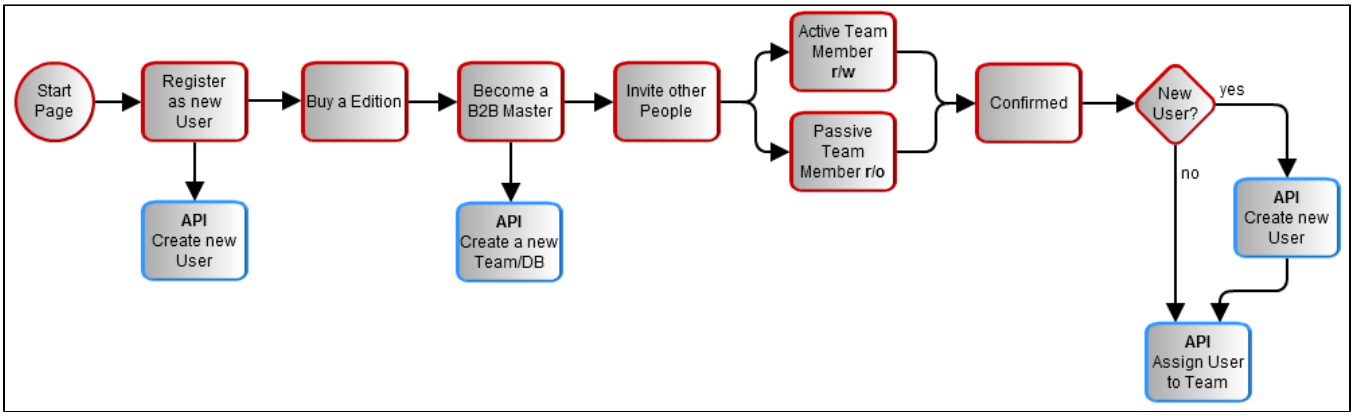
Things to remember:

- The JSON objects which will be used as the Bimplus data exchange format will be based on the IFC standard in terms of structure and naming.
- The resource paths contain the team name and the project name to support multi-tenancy.
- The **project slug** (which should be provided during the creation of a project) should be provided as part of the URL for accessing all the project relevant resources. This is also necessary to verify the user's access rights on the project in an early stage of processing the API call (before any business data will be touched and any business logic will be executed)

Connect with Bimplus and become a Bimplus compliant developer/partner

- Bimplus portal is the first place of contact of the user/developer for using the Bimplus platform(stage version). The production version of the portal can be found under https://www.bimplus.net where you can purchase different editions of Bimplus cloud platform. Here you can also find a few critical foundation apps like the Bimplus Explorer, Bimplus Viewer and Bimplus Problem Spotter. The portal takes care of the user registration (developer registration) as well.
- The Bimplus API(stage version url : https://api-stage.bimplus.net/v2) provides an interface for accessing the building information and models. It connects the building project information to a vast number of developers providing innovative Apps / applications that can operate on the building models and information.

The following figure describes the relation between the Bimplus portal and the API.



- Please register here for accessing the Bimplus resources and become a Bimplus compliant developer and a partner. You will receive an authentication token after the registration.
- A Team is a tenant/company which work on the projects. The team has to be specified and setup through the bimplus portal as so called slugs to present a clean URL . The team slug will be used to know which tenant database to work on.
- Using the authentication token and the team slug, you can start working with the building projects which you are a member of, using our Bimplus api.
- Please find a quick start tutorial here.

Bimplus Services

Bimplus API provides RESTful services for accessing, creating, modifying and deleting different levels of information in a building model on our Bimplus platform.

These are the project relevant services available at the moment:

- Project Service
- Object Service
- ElementType Service
- Model Service
- Attachment Service
- Issue Service
- Pin Service
- Import Service

These are the administration relevant services available at the moment:

- Authorization Service
- User Management Service
- Team Management Service
- Membership Management Service

For further details see the Bimplus api reference

Client request example:

HTTP Method

GET

URL / Resource / JSON Structure

Resource: projects

URL: https://api-stage.bimplus.net/v2/<team>/projects

Example: https://api-stage.bimplus.net/v2/bimplus/projects

Description

Gets the available project list with main properties.

Request

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

Response

Status
`Status: 200 OK`