Trimble Unity Construct - API Admin Guide

September 2024

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Trimble Unity Construct REST APIs

Trimble Unity Construct's Application Programming Interface (API) provides you with the framework to create custom transactional integrations between Trimble Unity Construct and your other applications and tools.

Use of APIs in Trimble Unity Construct

Use of Trimble Unity Construct APIs is governed by the Trimble Unity API Acceptable Use Policy.

Trimble Unity Construct's API is built on the REST protocol using JSON document payloads. Customers and partners can unlock the data stored in Trimble Unity Construct to build transactional integrations with various systems. Developers have built integrations with ERPs, CRMs, CMSs, and Asset Management systems.

> **Note:** If your requirements go beyond transactional integrations and require bulk data extraction, we offer more comprehensive integration capabilities in the Trimble Unity Construct Data Warehouse.

> **Important:** An API user is required to be created in order to use the APIs. This user should not be an individual user, but should be a system user created specifically for API access. An API user is expected to have full administrative permissions to interact with the APIs effectively, and therefore should not be an individual user.

Trimble Unity Construct Enterprise API Rate Limiting

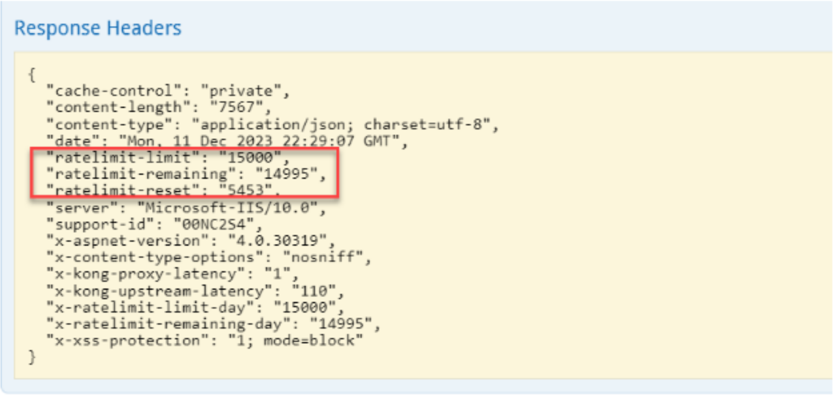
There are limits on the number of API calls per account per day.

The limits are:

- Up to 15,000 calls per day - included in the base subscription
- Up to 30,000 calls per day - please contact your account or customer success manager.

You can determine your rate limit, the number of calls remaining in the current day, and the rate limit reset value by reviewing the response header of any API call. The rate limit reset value is how many seconds remain until your total limit is available again.

Rate limits are reset at UTC Midnight.



Response Headers

```
{
  "cache-control": "private",
  "content-length": "7567",
  "content-type": "application/json; charset=utf-8",
  "date": "Mon, 11 Dec 2023 22:29:07 GMT",
  "ratelimit-limit": "15000",
  "ratelimit-remaining": "14995",
  "ratelimit-reset": "5453",
  "server": "Microsoft-IIS/10.0",
  "support-id": "00NC2S4",
  "x-aspnet-version": "4.0.30319",
  "x-content-type-options": "nosniff",
  "x-kong-proxy-latency": "1",
  "x-kong-upstream-latency": "110",
  "x-ratelimit-limit-day": "15000",
  "x-ratelimit-remaining-day": "14995",
  "x-xss-protection": "1; mode=block"
}
```

When you reach your call limit, you will receive a 426 response code with the error message “API rate limit exceeded". At that point, you cannot make additional API calls until the reset at UTC Midnight.

Access the Trimble Unity Construct Enterprise API Documentation

To access the detailed API documentation, go to https://developer.e-builder.net.

Contact Support for Trimble Unity Construct APIs

To contact API Support for Trimble Unity Construct, email ebuilder-support@trimble.com.

Getting Started

The Trimble Unity Construct documentation is built using the OpenAPI 3.0 documentation standard. This provides a consistent method for describing endpoints and providing request/ response examples as well as code samples. The endpoints are grouped together by module. Each module and its endpoints are further described to help developers understand their usage. Each endpoint also includes a mock response example and response schema.

Before You Start

There is no special set-up required to use the Trimble Unity Construct API; however, the instance should be fully configured and must be in use. Access to the API is granted by account administrators. Once your account is enabled for API Access, and you are granted an API Access Key, you can use the API for transactional integrations as per the API Acceptable Use Policy.

> **Note:** An API user is required to be created to use the APIs. This user should not be an individual user but should be a system user created specifically for API access. An API user is expected to have full administrative permissions to interact with the APIs effectively, and therefore should not be an individual user.