## **Throttling**

Throttling is similar to permissions, in that it determines if a request should be authorized. Throttles indicate a temporary state, and are used to control the rate of requests that clients can make to an API.

Your API might have a restrictive throttle for unauthenticated requests, and a less restrictive throttle for authenticated requests.

### **Throttling**

The default throttling policy may be set globally, using the DEFAULT\_THROTTLE\_CLASSES and DEFAULT\_THROTTLE\_RATES settings. For example.

```
REST FRAMEWORK = {
'DEFAULT THROTTLE CLASSES': [
   'rest framework.throttling.AnonRateThrottle',
   'rest framework.throttling.UserRateThrottle'
'DEFAULT THROTTLE RATES': {
   'anon': '100/day',
   'user': '1000/day'
                         Note:- The rate descriptions used in DEFAULT THROTTLE RATES may include second,
                         minute, hour or day as the throttle period.
```

#### **AnonRateThrottle**

The AnonRateThrottle will only ever throttle unauthenticated users. The IP address of the incoming request is used to generate a unique key to throttle against.

The allowed request rate is determined from one of the following (in order of preference).

The rate property on the class, which may be provided by overriding AnonRateThrottle and setting the property.

The DEFAULT\_THROTTLE\_RATES['anon'] setting.

AnonRateThrottle is suitable if you want to restrict the rate of requests from unknown sources.

#### <u>UserRateThrottle</u>

The UserRateThrottle will throttle users to a given rate of requests across the API. The user id is used to generate a unique key to throttle against. Unauthenticated requests will fall back to using the IP address of the incoming request to generate a unique key to throttle against.

The allowed request rate is determined from one of the following (in order of preference).

The rate property on the class, which may be provided by overriding UserRateThrottle and setting the property.

The DEFAULT\_THROTTLE\_RATES['user'] setting.

# ScopedRateThrottle

The ScopedRateThrottle class can be used to restrict access to specific parts of the API. This throttle will only be applied if the view that is being accessed includes a *throttle\_scope* property. The unique throttle key will then be formed by concatenating the "scope" of the request with the unique user id or IP address.

The allowed request rate is determined by the DEFAULT\_THROTTLE\_RATES setting using a key from the request "scope".