

## ARTIGO: 11595

### dart + crypto + hmac + aqueduct

#### Dart

```
import 'dart:convert';
import 'package:convert/convert.dart';
import 'package:crypto/crypto.dart';

var key = "my key";
var message = "my message";

// use sha1 algorithm
var hmac = new Hmac(sha1, UTF8.encode(key));

// conver message, or use bytes from body request if is webserver
var bytes = UTF8.encode(message);

// calcule hash
var digest = hmac.convert(bytes);

// encode hash to base64
var calculedHash = BASE64.encode(digest.bytes);
```

#### Aqueduct

```
class ApiController extends HTTPController {

    // prepare controller to handler original bytes from request
    @override
    void willDecodeRequestBody(HTTPRequestBody body) {
        body.retainOriginalBytes = true;
    }

    @httpPost
    Future<Response> send() async{

        // get post signature
        var signature = request.innerRequest.headers.value("Hub-Signature");

        var apiKey = "my api key";
        var hmac = new Hmac(sha1, UTF8.encode(apiKey));
        var bytes = request.body.asBytes();
        var digest = hmac.convert(bytes);

        var calculedSignature = BASE64.encode(digest.bytes);

        // check signature
        if(calculedHash != calculedSignature){
            return new Response.unauthorized();
        }

        // do anything

        return new Response.ok({ "message": "my message" });
    }
}
```