

## ARTIGO: 314

### 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);

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

// encode hash to base64
var calculatedHash = 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 calculatedSignature = BASE64.encode(digest.bytes);

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

    // do anything

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