jwt

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Supported Clients

WebClient NGClient

Methods Summary

Algorithm	ES256(publicKey)	Builder to create a new Algorithm instance using SHA256withECDSA.
Algorithm	ES256(publicKey, privateKey)	Builder to create a new Algorithm instance using SHA256withECDSA.
Algorithm	ES256(publicKey)	Builder to create a new Algorithm instance using SHA256withECDSA.
Algorithm	ES256(publicKey, privateKey)	Builder to create a new Algorithm instance using SHA256withECDSA.
Algorithm	ES384(publicKey)	Builder to create a new Algorithm instance using SHA384withECDSA.
Algorithm	ES384(publicKey, privateKey)	Builder to create a new Algorithm instance using SHA384withECDSA.
Algorithm	ES384(publicKey)	Builder to create a new Algorithm instance using SHA384withECDSA.
Algorithm	ES384(publicKey, privateKey)	Builder to create a new Algorithm instance using SHA384withECDSA.
Algorithm	ES512(publicKey)	Builder to create a new Algorithm instance using SHA512withECDSA.
Algorithm	ES512(publicKey, privateKey)	Builder to create a new Algorithm instance using SHA512withECDSA.
Algorithm	ES512(publicKey)	Builder to create a new Algorithm instance using SHA512withECDSA.
Algorithm	ES512(publicKey, privateKey)	Builder to create a new Algorithm instance using SHA512withECDSA.
Algorithm	HS256()	Create a new Algorithm instance using HmacSHA256.
Algorithm	HS256(password)	Create a new HmacSHA256 Algorithm using the specified password.
Algorithm	HS384()	Create a new Algorithm instance using HmacSHA384.
Algorithm	HS384(password)	Create a new HmacSHA384 Algorithm using the specified password.
Algorithm	HS512()	Create a new Algorithm instance using HmacSHA512.
Algorithm	HS512(password)	Create a new Algorithm instance using HmacSHA512.
Algorithm	JWK(url)	Builder to create an algorithm instance based on a Json Web Key Set (JWKS) url.
Algorithm	RSA256(publicKey)	Builder to create a new Algorithm instance using SHA256withRSA.
Algorithm	RSA256(publicKey, privateKey)	Builder to create a new Algorithm instance using SHA256withRSA.
Algorithm	RSA256(publicKey)	Builder to create a new Algorithm instance using SHA256withRSA.
Algorithm	RSA256(publicKey, privateKey)	Builder to create a new Algorithm instance using SHA256withRSA.
Algorithm	RSA384(publicKey)	Builder to create a new Algorithm instance using SHA384withRSA.
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Algorithm	RSA384(publicKey, privateKey)	Builder to create a new Algorithm instance using SHA384withRSA.
Algorithm	RSA512(publicKey)	Builder to create a new Algorithm instance using SHA512withRSA.
Algorithm	RSA512(publicKey, privateKey)	Builder to create a new Algorithm instance using SHA512withRSA.
Algorithm	RSA512(publicKey)	Builder to create a new Algorithm instance using SHA512withRSA.
Algorithm	RSA512(publicKey, privateKey)	Builder to create a new Algorithm instance using SHA512withRSA.
Builder	builder()	Returns a JSON Web Token token builder.
String	create(payload)	Create a JSON Web Token for the given payload that is signed with the (shared) secret key 'jwt.
String	create(payload, expiresAt)	Create a JSON Web Token for the given payload that is signed with the HS256 algorithm and the (shared) secret key 'jwt.
Object	verify(token)	Verify a JSON Web Token with the HS256 algorithm and the (shared) secret key 'jwt.
Object	verify(token, algorithm)	Verify a JSON Web Token with a specific algorithm.

Methods Details

ES256(publicKey)

```
Builder to create a new Algorithm instance using SHA256withECDSA. Tokens specify this as "ES256".
```

Parameters

Array publicKey a byte array representing the publicKey (mostly used to verify tokens)

Returns

Algorithm an algorithm builder used to sign or verify JSON Web Tokens.

Supported Clients

SmartClient,WebClient,NGClient

Sample

ES256(publicKey, privateKey)

```
Builder to create a new Algorithm instance using SHA256withECDSA. Tokens specify this as "ES256".
```

Parameters

Array publicKey a byte array representing the publicKey (mostly used to verify tokens)
Array privateKey a byte array representing the privateKey (mostly used to create tokens)

Returns

Algorithm an algorithm used to sign or verify JSON Web Tokens.

Supported Clients

SmartClient,WebClient,NGClient

Sample

ES256(publicKey)

`Builder to create a new Algorithm instance using SHA256withECDSA. Tokens specify this as "ES256".`

Parameters

String publicKey a String representing the publicKey (mostly used to verify tokens)

Returns

Algorithm an algorithm builder used to sign or verify JSON Web Tokens.

Supported Clients

SmartClient,WebClient,NGClient

Sample

```
plugins.jwt.ES256('MFkwEwYHKoZIzj0CAQYIKoZIzj0DAQcDQgAEEV....')
     .kid('2X9R4H....')
```

ES256(publicKey, privateKey)

`Builder to create a new Algorithm instance using SHA256withECDSA. Tokens specify this as "ES256".`

Parameters

String publicKey a String representing the publicKey (mostly used to verify tokens)
String privateKey a String representing the privateKey (mostly used to create tokens)

Returns

Algorithm an algorithm used to sign or verify JSON Web Tokens.

Supported Clients

SmartClient,WebClient,NGClient

Sample

```
plugins.jwt.ES256.publicKey('MFkwEwYHKoZIzj0CAQYIKoZIzj0DAQcDQgAEEV....',
'MIGHAgEAMBMGByqGSM49AgEGCCqGSM49AwEHBG0wa...')
     .kid('2X9R4H....')
```

ES384(publicKey)

`Builder to create a new Algorithm instance using SHA384withECDSA. Tokens specify this as "ES384".`

Parameters

Array publicKey a byte array representing the publicKey (mostly used to verify tokens)

Returns

Algorithm an algorithm builder used to sign or verify JSON Web Tokens.

Supported Clients

SmartClient,WebClient,NGClient

Sample

ES384(publicKey, privateKey)

`Builder to create a new Algorithm instance using SHA384withECDSA. Tokens specify this as "ES384".`

Parameters

Array publicKey a byte array representing the publicKey (mostly used to verify tokens)
Array privateKey a byte array representing the privateKey (mostly used to create tokens)

Returns

Algorithm an algorithm used to sign or verify JSON Web Tokens.

Supported Clients

SmartClient,WebClient,NGClient

Sample

ES384(publicKey)

`Builder to create a new Algorithm instance using SHA384withECDSA. Tokens specify this as "ES384".`

Parameters

String publicKey a String representing the publicKey (mostly used to verify tokens)

Returns

Algorithm an algorithm builder used to sign or verify JSON Web Tokens.

Supported Clients

SmartClient,WebClient,NGClient

Sample

```
plugins.jwt.ES384('MFkwEwYHKoZIzj0CAQYIKoZIzj0DAQcDQgAEEV....')
     .kid('2X9R4H....')
```

ES384(publicKey, privateKey)

`Builder to create a new Algorithm instance using SHA384withECDSA. Tokens specify this as "ES384".`

Parameters

String publicKey a String representing the publicKey (mostly used to verify tokens)
String privateKey a String representing the privateKey (mostly used to create tokens)

Returns

Algorithm an algorithm used to sign or verify JSON Web Tokens.

Supported Clients

SmartClient,WebClient,NGClient

Sample

```
plugins.jwt.ES384.publicKey('MFkwEwYHKoZIzj0CAQYIKoZIzj0DAQcDQgAEEV....',
'MIGHAgEAMBMGByqGSM49AgEGCCqGSM49AwEHBG0wa...')
     .kid('2X9R4H....')
```

ES512(publicKey)

`Builder to create a new Algorithm instance using SHA512withECDSA. Tokens specify this as "ES512".`

Parameters

Array publicKey a byte array representing the publicKey (mostly used to verify tokens)

Returns

Algorithm an algorithm builder used to sign or verify JSON Web Tokens.

Supported Clients

SmartClient,WebClient,NGClient

Sample

ES512(publicKey, privateKey)

`Builder to create a new Algorithm instance using SHA512withECDSA. Tokens specify this as "ES512".`

Parameters

Array publicKey a byte array representing the publicKey (mostly used to verify tokens)
Array privateKey a byte array representing the privateKey (mostly used to create tokens)

Returns

Algorithm an algorithm used to sign or verify JSON Web Tokens.

Supported Clients

SmartClient,WebClient,NGClient

Sample

ES512(publicKey)

Builder to create a new Algorithm instance using SHA512withECDSA. Tokens specify this as "ES512".

Parameters

String publicKey a String representing the publicKey

Returns

Algorithm an algorithm builder used to sign or verify JSON Web Tokens.

Supported Clients

SmartClient,WebClient,NGClient

Sample

```
plugins.jwt.ES512('MFkwEwYHKoZIzj0CAQYIKoZIzj0DAQcDQgAEEV....')
     .kid('2X9R4H....')
```

ES512(publicKey, privateKey)

Builder to create a new Algorithm instance using SHA512withECDSA. Tokens specify this as "ES512".

Parameters

String publicKey a String representing the publicKey (mostly used to verify tokens)
String privateKey a String representing the privateKey (mostly used to create tokens)

Returns

Algorithm an algorithm used to sign or verify JSON Web Tokens.

Supported Clients

SmartClient,WebClient,NGClient

Sample

```
plugins.jwt.ES512.publicKey('MFkwEwYHKoZIzj0CAQYIKoZIzj0DAQcDQgAEEV....',
'MIGHAgEAMBMGByqGSM49AgEGCCqGSM49AwEHBG0wa...')
     .kid('2X9R4H....')
```

HS256()

Create a new Algorithm instance using HmacSHA256. Tokens specify this as "HS256".
The password used to configure the algorithm is the (shared) secret key 'jwt.secret.password' that has to be configured on the admin page for this plugin.

Returns

Algorithm an algorithm used to sign or verify JSON Web Tokens.

Supported Clients

WebClient,NGClient

Sample

```
plugins.jwt.HS256()
```

HS256(password)

Create a new HmacSHA256 Algorithm using the specified password. Tokens specify this as "HS256".

Parameters

String password the secret used to encrypt and decrypt the tokens

Returns

Algorithm an algorithm used to sign or verify JSON Web Tokens.

Supported Clients

SmartClient,WebClient,NGClient

Sample

HS384()

Create a new Algorithm instance using HmacSHA384. Tokens specify this as "HS384".
The password used to configure the algorithm is the (shared) secret key 'jwt.secret.password' that has to be configured on the admin page for this plugin.

Returns

Algorithm an algorithm used to sign or verify JSON Web Tokens.

Supported Clients

WebClient,NGClient

Sample

```
plugins.jwt.HS384()
```

HS384(password)

Create a new HmacSHA384 Algorithm using the specified password. Tokens specify this as "HS384".

Parameters

String password the secret used to encrypt and decrypt the tokens

Returns

Algorithm an algorithm used to sign or verify JSON Web Tokens.

Supported Clients

SmartClient,WebClient,NGClient

Sample

```
plugins.jwt.HS384('your secret password.....')
```

HS512()

Create a new Algorithm instance using HmacSHA512. Tokens specify this as "HS512".
The password used to configure the algorithm is the (shared) secret key 'jwt.secret.password' that has to be configured on the admin page for this plugin.

Returns

Algorithm an algorithm used to sign or verify JSON Web Tokens.

Supported Clients

WebClient,NGClient

Sample

```
plugins.jwt.HS512.secret()
```

HS512(password)

Create a new Algorithm instance using HmacSHA512. Tokens specify this as "HS512".

Parameters

String password the secret used to encrypt and decrypt the tokens

Returns

Algorithm an algorithm used to sign or verify JSON Web Tokens.

Supported Clients

SmartClient,WebClient,NGClient

Sample

```
plugins.jwt.HS512.secret('your secret password.....')
```

JWK(url)

Builder to create an algorithm instance based on a Json Web Key Set (JWKS) url.
Please note that the returned algorithm can only be used to verify tokens.

Parameters

String url the jwks url

Returns

Algorithm an algorithm which can only be used to VERIFY Json Web Tokens.

Supported Clients

SmartClient,WebClient,NGClient

Sample

```
var alg = plugins.jwt.JWK('https://....')
        var verified = plugins.jwt.verify(token, alg)
```

RSA256(publicKey)

`Builder to create a new Algorithm instance using SHA256withRSA. Tokens specify this as "RS256".`

Parameters

Array publicKey a byte array representing the publicKey (mostly used to verify tokens)

Returns

Algorithm an algorithm used to sign or verify Json Web Tokens.

Supported Clients

SmartClient,WebClient,NGClient

Sample

RSA256(publicKey, privateKey)

`Builder to create a new Algorithm instance using SHA256withRSA. Tokens specify this as "RS256".`

Parameters

Array publicKey a byte array representing the publicKey (mostly used to verify tokens)
Array privateKey a byte array representing the privateKey (mostly used to create tokens)

Returns

Algorithm an algorithm used to sign or verify Json Web Tokens.

Supported Clients

SmartClient,WebClient,NGClient

Sample

RSA256(publicKey)

`Builder to create a new Algorithm instance using SHA256withRSA. Tokens specify this as "RS256".`

Parameters

String publicKey a String representing the publicKey (mostly used to verify tokens)

Returns

Algorithm an algorithm used to sign or verify Json Web Tokens.

Supported Clients

SmartClient,WebClient,NGClient

Sample

```
plugins.jwt.RSA256('MIIBIjANBgkqhkiG9w0BAQEFAAOCAQ8AMIIBCgKCAQEAnzyis...')
     .kid('2X9R4H....')
```

RSA256(publicKey, privateKey)

`Builder to create a new Algorithm instance using SHA256withRSA. Tokens specify this as "RS256".`

Parameters

String publicKey a String representing the publicKey (mostly used to verify tokens)
String privateKey a String representing the privateKey (mostly used to create tokens)

Returns

Algorithm an algorithm used to sign or verify Json Web Tokens.

Supported Clients

SmartClient,WebClient,NGClient

Sample

```
plugins.jwt.RSA256('MIIBIjANBgkqhkiG9w0BAQEFAAOCAQ8AMIIBCgKCAQEAnzyis...',
'MIIEogIBAAKCAQEAnzyis1ZjfNB0bBgKFMSvvkTtwlvB...')
     .kid('2X9R4H....')
```

RSA384(publicKey)

`Builder to create a new Algorithm instance using SHA384withRSA. Tokens specify this as "RS384".`

Parameters

Array publicKey a byte array representing the publicKey (mostly used to verify tokens)

Returns

Algorithm an algorithm used to sign or verify JSON Web Tokens.

Supported Clients

SmartClient,WebClient,NGClient

Sample

RSA384(publicKey, privateKey)

`Builder to create a new Algorithm instance using SHA384withRSA. Tokens specify this as "RS384".`

Parameters

Array publicKey a byte array representing the publicKey (mostly used to verify tokens)
Array privateKey a byte array representing the privateKey (mostly used to create tokens)

Returns

Algorithm an algorithm used to sign or verify JSON Web Tokens.

Supported Clients

SmartClient,WebClient,NGClient

Sample

RSA384(publicKey)

`Builder to create a new Algorithm instance using SHA384withRSA. Tokens specify this as "RS384".`

Parameters

String publicKey a String representing the publicKey (mostly used to verify tokens)

Returns

Algorithm an algorithm used to sign or verify JSON Web Tokens.

Supported Clients

SmartClient,WebClient,NGClient

Sample

```
plugins.jwt.RSA384('MIIBIjANBgkqhkiG9w0BAQEFAAOCAQ8AMIIBCgKCAQEAnzyis...')
     .kid('2X9R4H....')
```

RSA384(publicKey, privateKey)

`Builder to create a new Algorithm instance using SHA384withRSA. Tokens specify this as "RS384".`

Parameters

String publicKey a String representing the publicKey (mostly used to verify tokens)
String privateKey a String representing the privateKey (mostly used to create tokens)

Returns

Algorithm an algorithm used to sign or verify JSON Web Tokens.

Supported Clients

SmartClient,WebClient,NGClient

Sample

```
plugins.jwt.RSA384.publicKey('MIIBIjANBgkqhkiG9w0BAQEFAAOCAQ8AMIIBCgKCAQEAnzyis...',
'MIIEogIBAAKCAQEAnzyis1ZjfNB0bBgKFMSvvkTtwlvB...')
     .kid('2X9R4H....')
```

RSA512(publicKey)

`Builder to create a new Algorithm instance using SHA512withRSA. Tokens specify this as "RS512".`

Parameters

Array publicKey a byte array representing the publicKey (mostly used to verify tokens)

Returns

Algorithm an algorithm used to sign or verify JSON Web Tokens.

Supported Clients

SmartClient,WebClient,NGClient

Sample

RSA512(publicKey, privateKey)

`Builder to create a new Algorithm instance using SHA512withRSA. Tokens specify this as "RS512".`

Parameters

Array publicKey a byte array representing the publicKey (mostly used to verify tokens)
Array privateKey a byte array representing the privateKey (mostly used to create tokens)

Returns

Algorithm an algorithm used to sign or verify JSON Web Tokens.

Supported Clients

SmartClient,WebClient,NGClient

Sample

RSA512(publicKey)

`Builder to create a new Algorithm instance using SHA512withRSA. Tokens specify this as "RS512".`

Parameters

String publicKey a String representing the publicKey (mostly used to verify tokens)

Returns

Algorithm an algorithm used to sign or verify JSON Web Tokens.

Supported Clients

SmartClient,WebClient,NGClient

Sample

```
plugins.jwt.RSA512('MIIBIjANBgkqhkiG9w0BAQEFAAOCAQ8AMIIBCgKCAQEAnzyis...')
     .kid('2X9R4H....')
```

RSA512(publicKey, privateKey)

`Builder to create a new Algorithm instance using SHA512withRSA. Tokens specify this as "RS512".`

Parameters

String publicKey a String representing the publicKey (mostly used to verify tokens)
String privateKey a String representing the privateKey (mostly used to create tokens)

Returns

Algorithm an algorithm used to sign or verify JSON Web Tokens.

Supported Clients

SmartClient,WebClient,NGClient

Sample

```
plugins.jwt.RSA512
('MIIBIjANBgkqhkiG9w0BAQEFAAOCAQ8AMIIBCgKCAQEAnzyis...','MIIEogIBAAKCAQEAnzyis1ZjfNB0bBgKFMSvvkTtwlvB...')
     .kid('2X9R4H....')
```

builder()

Returns a JSON Web Token token builder.

Returns

Builder an object which creates a jwt token.

Supported Clients

SmartClient,WebClient,NGClient

Sample

```
var algorithm = plugins.jwt.ES256(publicKey, privateKey);

                  var token = plugins.jwt.builder()
                   .payload({'some': 'data', 'somemore': 'data2'})
                   .sign(algorithm);
                  if (token != null) {
                      //success
                      application.output(token);
                  }
       else {
           application.output('Could not create a token.');
       }

       var verified = plugins.jwt.verify(token, algorithm);
       if (verified != null) {
            //success
                      application.output(verified);
       }
       else {
           application.output('The token is not valid.');
       }
```

create(payload)

Create a JSON Web Token for the given payload that is signed with the (shared) secret key 'jwt.secret.password'.
The 'jwt.secret.password' plugin property has to be configured on the admin page.
The payload can be for example a user:username of the current user, so that with this token if it verifies with the same secret key you can assume it is the same user that wants to login.
This is a shorthand method of the #builder() method with a HS256 algorithm.

Parameters

Object payload a json containing the data, e.g. {'some': 'data', 'somemore': 'data2'}

Returns

String a string representing the encrypted data or null if the token cannot be generated

Supported Clients

WebClient,NGClient

Sample

```
```

create(payload, expiresAt)

Create a JSON Web Token for the given payload that is signed with the HS256 algorithm and the (shared) secret key 'jwt.secret.password'.
The 'jwt.secret.password' plugin property has to be configured on the admin page.
The payload can be for example a user:username of the current user, so that with this token if it verifies with the same secret key you can assume it is the same user that wants to login.
The expiresAt makes sure this token is only valid until that date.
This is a shorthand method of the #builder() method with a HS256 algorithm.

Parameters

Object payload a json containing the data, e.g. {'some': 'data', 'somemore': 'data2'}
Date expiresAt the date when the created token expires, after the expired date the token won't be verified

Returns

String a string representing the encrypted data or null if the token cannot be generated

Supported Clients

WebClient,NGClient

Sample

verify(token)

```
Verify a JSON Web Token with the HS256 algorithm and the (shared) secret key 'jwt.secret.password'.
The 'jwt.secret.password' plugin property has to be configured on the admin page.
This will only verify and return the payload that was given if the token was created with the HS256 algorithm
and the 'jwt.secret.password'.
Will also return null if the token passed its expire date.
```

Parameters

String token a JSON Web Token

Returns

Object the payload or null if the token can't be verified

Supported Clients

WebClient,NGClient

Sample

verify(token, algorithm)

```
Verify a JSON Web Token with a specific algorithm.
The token could be external or created with the #builder() method.

This will only verify and return the payload that was given if the token could be verified with the provided
algorithm.
Will also return null if the token passed its expire date.
```

Parameters

String token a JSON Web Token
Algorithm algorithm an algorithm used to verify the signature

Returns

Object the payload or null if the token can't be verified

Supported Clients

SmartClient,WebClient,NGClient

Sample