class PKCS5::PBKDF2

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```
package PKCS5 { class PBKDF2 { ... } }
```

Synopsis

```
use PKCS5::PBKDF2;

my PKCS5::PBKDF2 $p .= new;

my Str $spw = $p.derive-hex(
  Buf.new('pencil'.encode),
  Buf.new( 65, 37, 194, 71, 228, 58, 177, 233, 60, 109, 255, 118),
  4096,
);

# returns '1d96ee3a529b5a5f9e47c01f229a2cb8a6e15f7d'
```

Methods

new

Defined as

```
submethod BUILD (
  Callable :$CGH = &sha1,
  Int :$dklen,
)
```

Use

```
my PKCS5::PBKDF2 $p .= new;
```

Initialize the derivation function. The cryptographic hash function CGH is set to sha1 from the

openSSL::Digest by default, Other supported subs are sha256 and md5 also from that module. Md5 can also be used from Digest::MD5 but is very much slower.

Dklen is the number of bytes output from the derive() function. When not given, it becomes the size of the output length of the CGH.

derive

Defined as

```
method derive ( Buf $pw, Buf $salt, Int $i --> Buf )
```

Calculate the derived key given the password $pw and a salt $salt. It returns a Buf of length dklen specified to new() when initializing.

derive-hex

Defined as

```
method derive-hex ( Buf $pw, Buf $salt, Int $i --> Str )
```

Does the same as derive() but converts the output Buf into a hexadecimal string.