

Bob Jenkins' One-At-A-Time hashing algorithm in PHP

Bob Jenkins' One-At-A-Time hashing algorithm is simply known as `jenkins_hash()` providing 8 bytes long hash value.

```
<?php

// Bob Jenkins' One-At-A-Time hashing algorithm.
function jenkins_hash($key)
{
    $key = (string)$key;
    $len = strlen($key);
    for($hash = $i = 0; $i < $len; ++$i)
    {
        $hash += ord($key[$i]);
        $hash += ($hash << 10);
        $hash ^= ($hash >> 6);
    }
    $hash += ($hash << 3);
    $hash ^= ($hash >> 11);
    $hash += ($hash << 15);
    return str_pad(dechex($hash),16,0,STR_PAD_LEFT);
}

?>
```

For better security, I prefer to add salt as following:

```
<?php

// Bob Jenkins' One-At-A-Time hashing algorithm with Salt
function jenkins_hash($key, $salt=337)
{
    $key = (string)$key;
    $len = strlen($key);
    for($hash = $salt, $i = 0; $i < $len; ++$i)
    {
        $hash += ord($key[$i]);
        $hash += ($hash << 10);
        $hash ^= ($hash >> 6);
    }
    $hash += ($hash << 3);
    $hash ^= ($hash >> 11);
    $hash += ($hash << 15);
    return str_pad(dechex($hash),16,0,STR_PAD_LEFT);
}

?>
```

If you want more shorter hash value, please refer [32bits simple hash function in PHP](#).