## ScalES-PPM - Feature #344

# Add support for OpenSSL 1.1.0 crypto

09/25/2017 07:24 PM - Matthew Krupcale

Status:	Closed	Start date:	09/25/2017
Priority:	Normal	Due date:	
Assignee:		% Done:	100%
Category:		Estimated time:	0:00 hour
Target version:			

### Description

src/crypto/ppm\_checksum\_c.c was designed around the pre-1.1.0 OpenSSL API and uses a stack-allocated digest context, EVP\_MD\_CTX. In the post-1.1.0 OpenSSL API (in particular, after commit 7638370ca6cb1d89eba5d891f522776b9da3d6e7), the EVP\_MD\_CTX type was made opaque and must be dynamically allocated using the new EVP\_MD\_CTX\_{new,free} functions (renamed from EVP\_MD\_CTX\_{create,destroy} in commit 959ed5316c84d0e12ad18acfd40cefe15603ddfb).

The attached patch uses the old method for OPENSSL\_VERSION\_NUMBER < 0x1010000fL and uses the new methods otherwise. It also uses the recommended EVP\_Digest{Init,Final}\_ex functions rather than the EVP\_Digest{Init,Final} counterparts which perform additional initialization and cleanup on mdctx and are unnecessary since we are explicitly initializing and freeing the digest contexts within the scope of the PPM\_checksum function--see OpenSSL doc/man3/EVP\_DigestInit.pod for details. Finally, the patch also does explicit checking for the success or failure of the EVP\_Digest functions and aborts if there is a failure.

#### History

#### #1 - 08/05/2020 09:26 AM - Thomas Jahns

- Status changed from New to Resolved

- % Done changed from 0 to 100

This issue was addressed in commit:17317332d1485a4, part of release 1.0.6.

### #2 - 03/18/2022 10:07 AM - Thomas Jahns

- Status changed from Resolved to Closed

#### Files

 $scales-ppm\_ppm\_checksum\_c.c-openssl-1.1.0.patch$ 

2.04 KB 09/25/2017

Matthew Krupcale