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***Rocky Enterprise Linux 9.2 Manual Pages on command 'EVP RAND-SEED-SRC.7ssl'***

***\$ man EVP RAND-SEED-SRC.7ssl***

EVP RAND-SEED-SRC(7SSL)                      OpenSSL                      EVP RAND-SEED-SRC(7SSL)

**NAME**

EVP RAND-SEED-SRC - The randomness seed source EVP RAND implementation

**DESCRIPTION**

Support for deterministic random number generator seeding through the EVP RAND API.

The seed sources used are specified at the time OpenSSL is configured for building using the --with-rand-seed= option. By default, operating system randomness sources are used.

**Identity**

"SEED-SRC" is the name for this implementation; it can be used with the EVP RAND\_fetch() function.

**Supported parameters**

The supported parameters are:

"state" (OSSL RAND\_PARAM\_STATE) <integer>

"strength" (OSSL RAND\_PARAM\_STRENGTH) <unsigned integer>

"max\_request" (OSSL RAND\_PARAM\_MAX\_REQUEST) <unsigned integer>

These parameters work as described in "PARAMETERS" in EVP RAND(3).

## NOTES

A context for the seed source can be obtained by calling:

```
EVP RAND *rand = EVP RAND_fetch(NULL, "SEED-SRC", NULL);  
EVP RAND_CTX *rctx = EVP RAND_CTX_new(rand);
```

## EXAMPLES

```
EVP RAND *rand;  
EVP RAND_CTX *seed, *rctx;  
unsigned char bytes[100];  
OSSL_PARAM params[2], *p = params;  
unsigned int strength = 128;  
  
/* Create a seed source */  
rand = EVP RAND_fetch(NULL, "SEED-SRC", NULL);  
seed = EVP RAND_CTX_new(rand, NULL);  
EVP RAND_free(rand);  
  
/* Feed this into a DRBG */  
rand = EVP RAND_fetch(NULL, "CTR-DRBG", NULL);  
rctx = EVP RAND_CTX_new(rand, seed);  
EVP RAND_free(rand);  
  
/* Configure the DRBG */  
*p++ = OSSL_PARAM_construct_utf8_string(OSSL_DRBG_PARAM_CIPHER,  
                                         SN_aes_256_ctr, 0);  
*p = OSSL_PARAM_construct_end();  
EVP RAND_instantiate(rctx, strength, 0, NULL, 0, params);  
  
EVP RAND_generate(rctx, bytes, sizeof(bytes), strength, 0, NULL, 0);  
  
EVP RAND_CTX_free(rctx);  
EVP RAND_CTX_free(seed);
```

## SEE ALSO

EVP RAND(3), "PARAMETERS" in EVP RAND(3)

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