

0

"string constant"

chaining key

hash function
application

input variable

pseudo-random label

output

Global Domains

PROTOCOL

"mac"

spkt

MAC_WIRE_DATA

mac

"cookie"

COOKIE_WIRE_DATA

cookie

"peer id"

spki // spkr

pidi // pidr

"biscuit additional data"

spkr

sidi

sidr

biscuit_ad

"key chaining extract"

"mix"

mix

"user"

"rosenpass.eu"

"wireguard psk"

osk

"responder session encryption"

res_enc

"initiator session encryption"

ini_enc

"handshake encryption"

hs_enc

InitHello

"key chaining init"

spkr

< mix

sidi

< mix

epki

< mix

spkr

< mix

sctr

< mix

sptr

encaps spkr

encrypt ltk

< hs_enc

pidi

AEAD::enc(pidi)

< mix

spki

< mix

psk

< hs_enc

AEAD::enc(empty())

< mix

encrypt auth

RespHello

state from InitHello

< mix

sidr

< mix

sidi

< mix

epki

< mix

ecti

< mix

epti

encaps epki

encaps spki

< mix

spki

< mix

scti

< mix

spti

< mix

spki

< mix

psk

< hs_enc

AEAD::enc(empty())

< mix

encrypt auth

ck

pidi

store_biscuit()

biscuit

key

auth

ct

InitConf

state from RespHello

< mix

sidi

< mix

sidi

< mix

sidr

encrypt auth

< hs_enc

AEAD::enc(empty())

key

auth

< mix

osk

osk

< res_enc

ini_enc

< ini_enc

res_enc