

**NAME**

gnutls\_aead\_cipher\_decrypt - API function

**SYNOPSIS**

```
#include <gnutls/crypto.h>
```

```
int gnutls_aead_cipher_decrypt(gnutls_aead_cipher_hd_t handle, const void * nonce, size_t nonce_len,
                               const void * auth, size_t auth_len, size_t tag_size, const void * ctext, size_t ctext_len, void * ptext,
                               size_t * ptext_len);
```

**ARGUMENTS**

gnutls\_aead\_cipher\_hd\_t handle  
is a **gnutls\_aead\_cipher\_hd\_t** type.

const void \* nonce  
the nonce to set

size\_t nonce\_len  
The length of the nonce

const void \* auth  
additional data to be authenticated

size\_t auth\_len  
The length of the data

size\_t tag\_size  
The size of the tag to use (use zero for the default)

const void \* ctext  
the data to decrypt (including the authentication tag)

size\_t ctext\_len  
the length of data to decrypt (includes tag size)

void \* ptext the decrypted data

size\_t \* ptext\_len  
the length of decrypted data (initially must hold the maximum available size)

## DESCRIPTION

This function will decrypt the given data using the algorithm specified by the context. This function must be provided the complete data to be decrypted, including the authentication tag. On several AEAD ciphers, the authentication tag is appended to the ciphertext, though this is not a general rule. This function will fail if the tag verification fails.

## RETURNS

Zero or a negative error code on verification failure or other error.

## SINCE

3.4.0

## REPORTING BUGS

Report bugs to <bugs@gnutls.org>.

Home page: <https://www.gnutls.org>

## COPYRIGHT

Copyright (C) 2001-2023 Free Software Foundation, Inc., and others.

Copying and distribution of this file, with or without modification, are permitted in any medium without royalty provided the copyright notice and this notice are preserved.

## SEE ALSO

The full documentation for **gnutls** is maintained as a Texinfo manual. If the /usr/local/share/doc/gnutls/ directory does not contain the HTML form visit

<https://www.gnutls.org/manual/>