

## NAME

**bfed** — perform blowfish encryption/decryption

## SYNOPSIS

**bfed** [ **-deh** ] **-k** *key*

## DESCRIPTION

The **bfed** utility can be used to perform symmetric encryption/decryption of the input stream using the blowfish(3) block cipher.

## OPTIONS

**bfed** supports the following command-line options:

- d** Perform decryption of the input stream.
- e** Perform encryption of the input stream.
- h** Print a short usage and exit.
- k** *key* Use the given string as the symmetric key. *key* must be exactly 16 hexadecimal characters.

## DETAILS

**bfed** reads data from stdin and either encrypts or decrypts it (depending on the **-d** or **-e** flag). It uses OpenSSL's blowfish(3) cipher using a 128 bit (16 byte) key (specified via the **-k** flag) and an **ivec** initialized to zero.

Since the *key* is given on the command-line, **bfed** prevents leaking the secret into the process table by using setproctitle(3) (where available) or by manipulating **argv**.

Output is written to stdout.

## EXAMPLES

The following examples show common usage.

To encrypt the contents of the file 'file' using the key 'cafefacedeadbeef' and storing the encrypted output in 'file.enc':

```
bfed -e -k 'cafefacedeadbeef' <file >file.enc
```

To decrypt the contents of that file again:

```
bfed -d -k 'cafefacedeadbeef' <file.enc
```

## EXIT STATUS

**bfed** exits 0 on success, and >0 if an error occurred.

## SEE ALSO

blowfish(3), EVP\_EncryptInit(3)

## HISTORY

The **bfed** program was first assigned as a stand-alone programming assignment for the class “Advanced Programming in the UNIX Environment” at Stevens Institute of Technology in the Fall of 2012.

## BUGS

Well, let's see...