

This is a demonstration of using the md5sum command in Linux to check the hash value of a file.

### Desktop Folder



Firefox



My Computer



Office



Online Help



openSUSE



System tray area containing:
 

- Navigation arrows
- Language indicator (US)
- Volume icon
- Network icon
- System information icon
- Time: 11:09 am
- Lock icon
- Power icon
- Refresh icon



### Desktop Folder



**instructor (preuss) on linux-msctc** openSUSE™

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We need the command prompt. This will also work using putty to connect to the Linux system.

```
preuss : bash
File Edit View Scrollback Bookmarks Settings Help
preuss@linux-msctc:~> █
```

preuss : bash



```

preuss : bash
File Edit View Scrollback Bookmarks Settings Help
preuss@linux-msctc:~> ls
archive.tgz Downloads new3.doc public_html test3.txt
bin HOSTNAME.bak new.txt set.txt test4.txt
cptr2224.txt md5test.txt Pictures tar_list.txt Videos
cptr2236.txt me.txt preuss1.txt Templates
Desktop Music preuss2.txt test1.txt
Documents new2.doc Public test2.txt
preuss@linux-msctc:~> █

```

This is just a listing of files in my home directory.

```
preuss : bash
```

```

preuss : bash
File Edit View Scrollback Bookmarks Settings Help
preuss@linux-msctc:~> ls
archive.tgz  Downloads  new3.doc  public_html  test3.txt
bin          HOSTNAME.bak  new.txt   set.txt      test4.txt
cptr2224.txt md5test.txt  Pictures  tar_list.txt Videos
cptr2236.txt me.txt      preuss1.txt  Templates
Desktop     Music      preuss2.txt  test1.txt
Documents  new2.doc   Public      test2.txt
preuss@linux-msctc:~> md5sum archive.tgz

```

The command  
 md5sum archive.tgz  
 will caculate the hash value of  
 archive.tgz

```
preuss : bash
```

```

preuss : bash
File Edit View Scrollback Bookmarks Settings Help
preuss@linux-msctc:~> ls
archive.tgz Downloads new3.doc public_html test3.txt
bin HOSTNAME.bak new.txt set.txt test4.txt
cptr2224.txt md5test.txt Pictures tar_list.txt Videos
cptr2236.txt me.txt preuss1.txt Templates
Desktop Music preuss2.txt test1.txt
Documents new2.doc Public test2.txt
preuss@linux-msctc:~> md5sum archive.tgz
e30afad40f84a449d4adf29d4976a882 archive.tgz
preuss@linux-msctc:~> █

```

The hex number is the md5 hash value for archive.tgz

```
preuss : bash
```

```

preuss : bash
File Edit View Scrollback Bookmarks Settings Help
preuss@linux-msctc:~> ls
archive.tgz Downloads new3.doc public_html test3.txt
bin HOSTNAME.bak new.txt set.txt test4.txt
cptr2224.txt md5test.txt Pictures tar_list.txt Videos
cptr2236.txt me.txt preuss1.txt Templates
Desktop Music preuss2.txt test1.txt
Documents new2.doc Public test2.txt
preuss@linux-msctc:~> md5sum archive.tgz
e30afad40f84a449d4adf29d4976a882 archive.tgz
preuss@linux-msctc:~> md5sum archive.tgz > testmd5.txt

```

Should you want to automate the process, redirect the hash value to a file like the command above.

```
preuss : bash
```



```

preuss : bash
File Edit View Scrollback Bookmarks Settings Help
preuss@linux-msctc:~> ls
archive.tgz Downloads new3.doc public_html test3.txt
bin HOSTNAME.bak new.txt set.txt test4.txt
cptr2224.txt md5test.txt Pictures tar_list.txt Videos
cptr2236.txt me.txt preuss1.txt Templates
Desktop Music preuss2.txt test1.txt
Documents new2.doc Public test2.txt
preuss@linux-msctc:~> md5sum archive.tgz
e30afad40f84a449d4adf29d4976a882 archive.tgz
preuss@linux-msctc:~> md5sum archive.tgz > testmd5.txt
preuss@linux-msctc:~> █

```

The name of the file does not matter, just that the md5 hash value is in the file followed by the file name.

```
preuss : bash
```

```

preuss : bash
File Edit View Scrollback Bookmarks Settings Help
preuss@linux-msctc:~> ls
archive.tgz  Downloads  new3.doc  public_html  test3.txt
bin          HOSTNAME.bak  new.txt   set.txt      test4.txt
cptr2224.txt md5test.txt  Pictures  tar_list.txt Videos
cptr2236.txt me.txt      preuss1.txt  Templates
Desktop     Music      preuss2.txt  test1.txt
Documents  new2.doc   Public      test2.txt
preuss@linux-msctc:~> md5sum archive.tgz
e30afad40f84a449d4adf29d4976a882  archive.tgz
preuss@linux-msctc:~> md5sum archive.tgz > testmd5.txt
preuss@linux-msctc:~> md5sum -c testmd5.txt
archive.tgz: OK
preuss@linux-msctc:~> █

```

The md5sum command with the -c option automatically compares the md5 hash value calculated with the md5 hash in the file.

```

preuss : bash
File Edit View Scrollback Bookmarks Settings Help
preuss@linux-msctc:~> ls
archive.tgz  Downloads  new3.doc  public_html  test3.txt
bin          HOSTNAME.bak  new.txt   set.txt      test4.txt
cptr2224.txt md5test.txt  Pictures  tar_list.txt Videos
cptr2236.txt me.txt      preuss1.txt  Templates
Desktop     Music      preuss2.txt  test1.txt
Documents  new2.doc   Public      test2.txt
preuss@linux-msctc:~> md5sum archive.tgz
e30afad40f84a449d4adf29d4976a882  archive.tgz
preuss@linux-msctc:~> md5sum archive.tgz > testmd5.txt
preuss@linux-msctc:~> md5sum -c testmd5.txt
archive.tgz: OK
preuss@linux-msctc:~> █

```