The NSK zipper can be found at:

http://www.info-zip.org/pub/infozip/UnZip.html#Tandem

```
Current directory is /pub/archiving/zip/TANDEM

                Welcome to the UUNET archive.
   A service of UUNET Technologies Inc, Falls Church, Virginia
   For information about UUNET, call +1 703 206 5600, or see the files
   in /uunet-info

   Please see http://www.us.uu.net/support/usepolicy/ for Acceptable
   Use Policy

   Access is allowed all day.  Current time is Fri Dec  1 14:56:38 2000 GMT.

   All transfers are logged with your host name and email address.
   If you don't like this policy, disconnect now!

   If your FTP client crashes or hangs shortly after login, try using a
   dash (-) as the first character of your password.  This will turn off
   the informational messages which may be confusing your ftp client.


Please read the file /info/README.ftp
  it was last modified on Fri Mar 29 21:26:09 1996 - 1707 days ago
Please read the file /info/README
  it was last modified on Fri Mar 29 20:59:32 1996 - 1707 days ago

Up to higher level directory
  README                                                4 Kb    Sun May 28 00:00:00 2000
  unz541xK.zip                                        180 Kb    Wed May 24 00:00:00 2000 Winzip32 File
  unzip541.bare                                       476 Kb    Wed May 24 00:00:00 2000
  zip23xK.zip                                         190 Kb    Sat Dec 25 00:00:00 1999 Winzip32 File
```

This directory contains executables for Tandem NSK.

```
  4798 May 28 2000  README          what you're reading right now
185224 May 24 2000  unz541xK.zip    UnZip 5.41, Tandem exe/docs, zipfile format
487424 May 24 2000  unzip541.bare   UnZip 5.41, bare Tandem executable
194679 Dec 25 1999  zip23xK.zip     Zip 2.3, Tandem exes/docs (no encryption)
```

Encryption binaries are only available from our European site,
ftp://ftp.icce.rug.nl/infozip/TANDEM/ :

  [none available]

All Info-ZIP packages contain documentation. The sources are in ../src .

The bare UnZip executable can be used to unpack the UnZip and Zip distribution
archives. Thanks to Dave D. Smith (smithdt@bp.com) for doing the Tandem ports
and providing the executables. Some notes from Dave:

    Note that this version of UnZip can only create unstructured, object
    and text files, not Enscribe files (Tandem's hierarchical database
    system, allowing key-sequenced files). I often use the PC PKZIP
    program to zip things up and then use the Tandem to unzip - or vice
    versa - with no problems (other than the file-type limitation). Each
    Tandem file has a file code that indicates (roughly) what the file
    contains:

```
      0     Enscribe or Unstructured
    100     Object
    101     Edit (ASCII)
    180     'C' Text file
```

[...]

    The Tandem does not support subdirectories. It has a fixed structure of

```
    \<system>.$<disk>.<subvol>.<file>
```

    where all the names have a maximum of 8 characters. Note that you can
    default the system disk and subvol parts to blank. Thus all the
    following are valid file names:

```
    \NODE1.$DATA8.DB.FILE1
    $DATA8.DB.FILE1
    DB.FILE1
    FILE1
    $DATA8.FILE1            (this form is not recommended)
```

    I've mapped this structure into the zipfile format as:

```
    //<node>/<disk>/<subvol>/<file/
```

    Thus the above files would appear as

```
    //node1/data8/db/file1
    /data8/db/file1
    /db/file1
    file1
    /data8/subvol/file1     (subvol part picked up from current defaults)
```

    In addition since Tandem does not support file extensions I have added
    the ability to specify extension names when zipping and storing as part
    of the ZIP internal name. For example:

```
    ZIP zipfile "zipdir.readme txt"
```

    is stored in the zipfile as /zipdir/readme.txt

```
    ZIP zipfile zipdir.readme
```

    as stored as /zipdir/readme

    The opposite operation is performed for UnZip - assuming that the
    mapping operation is OK. In the event that this fails it just uses
    the filename part of the name and throws away the directory information.

[...]

On Tandem (NSK) systems there are two sorts of processors - CISC and RISC. As you might expect, all current machines use RISC processors. However, until very recently all compilers produced CISC code. This CISC code runs on both CISC and RISC machines. When running CISC code on RISC machines it gets interpreted - which obviously slows things down.

To get around this Tandem introduced a product called AXCEL that 'accelerates' the CISC code. It adds an extra RISC code region to the object which makes the object a lot larger (factor of 3) but runs a lot faster. Programs such as Zip/UnZip that perform a lot of data manipulation run exponentially faster after being AXCELed.

In addition on Tandem the C compiler has a number of selectable memory models - currently SMALL, LARGE and WIDE. I have chosen the LARGE memory model as it means the object runs slightly faster. Selecting WIDE allows larger buffer sizes, as 'int' becomes 32-bit rather than 16, but still seemed slower when I tried it against the LARGE version.

[...]

Just to add complications each release of the Tandem operating system produces a new version of the C compiler and the AXCEL program. All of my objects are compiled under the "D30" operating system.

Users running on different versions of NSK should (ideally) re-AXCEL the objects. However, as is, the Zip/UnZip will probably run OK.

The common versions of NSK that people will have are:

C30	Zip/UnZip will NOT work, cannot even be compiled as they use 'D' series calls
D20	should work OK, re-AXCEL may help, re-compile should not be necessary
D30	will work 'as is'
D40	should work OK, re-AXCEL may run faster, also re-compile on D40 may run faster

D40 is the current release of NSK, though most sites will be on D20/30.

Send problem reports on Zip and UnZip to: Zip-Bugs@lists.wku.edu
Send problem reports on gzip to: support@gzip.org

Last updated: 28 May 2000