

## **TransSys Dial-Up IP Software**

### **Author:**

Louis Mamakos  
Mamakos\TransSys Consulting  
14813 Ashford Place  
Laurel, MD 20707-3771  
louie@TransSys.COM

### **Category:**

Networking/Communications Software

### **Description:**

An implementation of the SLIP, a Serial Line IP facility. It allows the use of one or more serial ports as network interfaces, similar to the Ethernet interface. Remote NeXT system can then use telnet, rlogin, FTP, etc over a dial-up modem connection.

**NeXTStep Version:** Release 2.1, 2.2, 3.0 PR1, 3.0 PR2 (and possibly 3.0, but not yet tested with actual release)

**Installation Instructions:** See Manual.wn, a WriteNow document in the package.

**Cost:** This version is available for use free of cost. A "commercial" version with expanded functionality is also available, usually for \$75 per copy for qualified educational users. See other attached file for more information.

### **Release Notes and futher information:**

This is another public release of a port of the DialUp-IP software done by Louis A. Mamakos of **Mamakos\TransSys Consulting**. The software in this

package is freely redistributable and implements SLIP (Serial Line IP) for the NeXT.

Like the first release, this software is free and implements "plain vanilla" SLIP on your NeXT. It is also a slimy demo of an added, for-money implementation of TCP Header Compressed SLIP. The software is supplied with a license key which will turn on the Compressed SLIP version for an hour after you've booted your NeXT. Try it, you'll like it! Compressed SLIP is the only extra-cost, demo feature in this package. All of the other capabilities and enhancements work in the "free" SLIP code too.

There are few changes of note in this version. This version has been updated to work with both 3.0 PR1 and 3.0 PR2; this consisted of updating tables of patch locations to repair a bug in the **tcp\_output()** function. This particular problem is only an issue when using TCP header compression.

TCL error reporting has been enhanced by an error walkback to help diagnose and locate TCL script errors which may occur. Also, it is now possible to vary the tracing level from the TCL script. This is handy to turn off tracing once the connection has been established so that subsequent TCL hook invocations are not traced.

Also, all of the configuration information has been moved out of the `/usr/dialupip/config/rc.slip` file into the file `/usr/dialuipip/config/config.slip`.

There are some minor bug fixes between this version and the previous versions.

The documentation has been improved somewhat; please read `/usr/dialupip/man/Documentation/Manual.wn` for instructions on how to use this software.

You really ought to have Release 2.1 running on your system to use this

software reliably; there are bugs in the 2.0 serial drivers that just are not worth the trouble of tracking down.

To ensure that you have an uncorrupted version of the distribution, you can perform the following steps once you have retrieved the distribution (assumed to be in `/tmp/SLIP_920802.tar`):

```
cd /tmp
tar xfv SLIP_920802.tar
cd SLIP_v1
./md5 SLIP_v1.pkg/* > checkit
diff -c SLIP_920802.md5 checkit
```

The "md5" program computes a message digest function over the files specified, and produces a 128 bit product. It uses a much more reliable algorithm than, say, the UNIX "sum" command. The diff command checks the result of the message digest computation against the same operation performed when the distribution was generated; there should be no differences noted.

Once you have extracted the distribution **tar** archive, invoke the Installer application by double clicking on the `/tmp/SLIP_v1/SLIP_v1.pkg` icon in the Workspace Browser, and install it in the default directory of `/usr/dialupip`. Once installed, consult the manual in `/usr/dialupip/man/docs/Manual.wn` for further information. You may also want to index the documentation provided; see the Manual for more details.

This software is a fully functional implementation of SLIP. The Compressed SLIP capability is available at an extra cost. Educational pricing is available. Please see the **Info** and **OrderForm** files for more information.

Of course, the base level SLIP function will *always* be free, as it should be on every UNIX box, including the NeXT.

Louis A. Mamakos  
louie@TransSys.COM