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# Mesh All The Things!

— tinc, VPN and mesh networking —  
tool for remote devices!

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# Your Problems

- You're addicted to devices
- You've got too many public IP addresses in your life
- You haven't figured out how to be in many places at once
- The internet isn't flat anymore
- There just aren't enough bits in an IPv4 address for your liking
- You forgot to cancel a 3D Print, you're two miles away and the California International Marathon is preventing you from crossing the city.



# The Fix: tinc

- Cross-platform, lightweight mesh networking VPN application
- Control more network-level routing properties
- Small, active development team
- Easy to install and configure



# Quick Install Demo!

```
DOSHELP .HLP      DOSKEY.COM      DRUSPACE .EXE   DRUSPACE .HLP   DRUSPACE .INF
DRUSPACE .SYS    DRUSPACE .TXT  MSD .EXE        UFINTD .386     DRIVER .SYS
EDIT .HLP        FASTHELP .EXE  FASTOPEN .EXE  FC .EXE         FIND .EXE
GRAPHICS .COM    GRAPHICS .PRO  HELP .COM       HELP .HLP       HIMEM .SYS
INTERLNK .EXE   INTERSUR .EXE  LABEL .EXE      LOADFIX .COM    MEMMAKER .EXE
MEMMAKER .HLP   MEMMAKER .INF  MODE .COM       MONOUMB .386    MORE .COM
MOVE .EXE       MSBACKUP .EXE  MSBCONFIG .HLP  MSBCONFIG .OVL  MSTOOLS .DLL
MWBACR .DLL     POWER .EXE     SHARE .EXE      QBASIC .HLP     RAMDRIVE .SYS
SETVER .EXE     SORT .EXE      SMARTDRU .EXE  SMARTMON .EXE  UNFORMAT .COM
SMARTMON .HLP   MSBACKUP .OVL  MSAU .EXE       MSAU .HLP       MSAUHELP .OVL
MSBACKUP .HLP   MSBACKDB .OVL  MSAUABS1 .DLL  MSAUABS1 .DLL  MSAUHELP .OVL
MSAVIRUS .LST   MSAU .HLP      MSAUABS2 .DLL  MSAUABS2 .DLL  MSAUHELP .OVL
MMAU .EXE       MSAUMGR .DLL  MSAUSCAN .DLL  MSAUSCAN .DLL  MSAUHELP .OVL
MMAUDRUL .DLL   MMBACKUP .EXE  MSAUSDS .DLL   MSAUSDS .DLL   MSAUHELP .OVL
MWBACR .DLL     UNDELETE .EXE  MMBACKUP .HLP  MMBACKUP .HLP  MSAUHELP .OVL
MMUNDEL .HLP    BILLIARD.COM   USAF .COM       WNTTOOLS .GRP   WNTTOOLS .GRP
```

126 file(s)

5,846,313 bytes

100,470,784 bytes free

C:\DOS>date

Current date is Wed 01-01-1992

Enter new date (mm-dd-yy): 1-31-92

C:\DOS>billiard\_

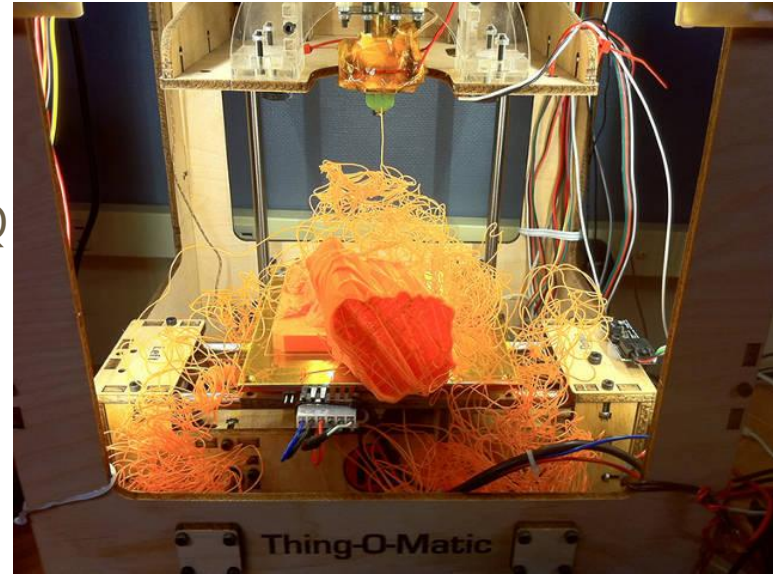
# Your world - connected by tinc

- Connect all of your devices in a private, secure fashion
- Allows a personal cloud with redundancy of hosts even if part of the network goes down
- Minimal port forwarding needed
- Possibility of bringing back the old days of just a few hosts on the internet, but in this case, it is just your friends.



# tinc in a makerspace

- Background on our network setup at MHQ
- Installation on one host gives access to entire network segment
- Allows for interaction with host's services
- Great for allowing temporary access
- Of course, be smart!



# Usage Demo

```
BRNDLOG   TXT           9,053   03-04-12  10:28a
OFFLIN~1  <DIR>           03-04-12  10:24a
DEWABLOG  TXT            471    03-04-12  10:25a
SCHEDLOG  TXT           1,908   04-08-13   1:59p
DEFAULT   SFO           76,690   05-03-99   1:29p
DEFAULT   SFC           75,584   03-04-12  10:26a
BRNDLOG   BAK            237    03-04-12  10:24a
IE4ERR~1  TXT            1,115   06-09-12  11:34a
MOZUER    DAT            2,650   06-10-12   5:52p
MINST~1   XE           100,475   06-10-12   5:52p
MSREG     AT              0    06-10-12   5:52p
TUNEUP    W98           110,592   04-23-99  10:22p
LOGOW     W98           129,080   04-23-99  10:22p
LOGOW     SYS           129,080   05-01-98   3:01p
SECCAST   ICD            4,710   05-01-98   3:01p
SMTIDY    EXE           65,536   05-01-98   3:01p
TUNEUP    EXE           102,912   05-01-98   3:01p
SDDINST   INI             175    04-01-13   4:16p
ST6UNST   EXE           74,752   04-07-13   2:19p
SETUP1    EXE           290,816   04-07-13   2:19p
EXITTO~1  PIF            967    04-08-13   1:59p
214 file(s) 61,357,342 bytes
22 dir(s)   9,810.68 MB free
```

# tinc Development Goals

- New, easier installation!
- Built in network monitoring tools
- Allows plugins
- Certificate-based authorization (“web of trust”)





