in

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REVISION HISTORY

NUMBER	DATE	DESCRIPTION	NAME

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Chapter 1

in

1.1 main

                VirtualLink

   A SANA-II ethernet device for virtual point-to-point communication

   (C) Copyright 1999 Chris Brenner

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1.2 intro

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Introducing VirtualLink
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  VirtualLink was written primarily to establish a virtual ethernet link
  between MacTCP and Miami Deluxe when running Shapeshifter. This allows you
  to use Macintosh internet applications without stealing the modem away
  from Amiga internet applications. It might have other uses as well.

1.3 disclaimer

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Disclaimer
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  respect to this software. The entire risk as to its quality and
  performance is with the user. In no event will the author of this software
  be liable for any direct, indirect, or consequential damages resulting
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1.4 license

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  This software is freeware. It is strictly forbidden to include this
  software in any commercial product. The entire archive as uploaded to
  Aminet may be included on the Aminet CD. Non-profit Amiga user groups
  are allowed to include this software in their software library and/or
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  charge to the author of this software.

1.5 credits

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Credits
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  VirtualLink
  (C) Copyright 1999 Chris Brenner

  magPLIP
  (C) Copyright 1995 Jan Kratochvil & Martin Mares
  (C) Copyright 1995-1996 Marius Gröger

  VirtualLink is based on the wonderful magPLIP device written by Marius
  Gröger and further maintained by Stefan Ruppert. I recommend to anyone
  trying to write a SANA-II device that they get ahold of the source code
  for magPLIP. I found it to be the most straight-forward example of how to
  write a SANA-II device and VirtualLink would probably not exist without it.
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1.6 requirements

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System Requirements
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  · An Amiga with at least a 68020 processor

  · Miami Deluxe

  · ShapeShifter running MacTCP 2.0 (or Open Transport TCP 1.1) or higher
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1.7 install

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The Installation Procedure
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  In this archive you will find the following files

  vlink.device.020-030
  vlink.device.040
  vlink.device.060
  vlinkmirror.device.020-030
  vlinkmirror.device.040
  vlinkmirror.device.060

  Simply copy the appropriate vlink.device and vlinkmirror.device to the
  DEVS:Networks directory. If DEVS: does not contain a Networks directory,
  then you will have to create it first.

  For example, if your Amiga has a 68060 processor, you would install the
  appropriate files by issuing the following commands from a shell.

  copy vlink.device.060 DEVS:Networks/vlink.device
  copy vlinkmirror.device.060 DEVS:Networks/vlinkmirror.device
```

1.8   setup

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                    Setting Up The Software
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   Setting up VirtualLink requires adding the proper hardware and interface
   definitions to Miami Deluxe and configuring ShapeShifter and MacTCP.
   Step-by-Step instructions are provided for doing this. If you follow these
   steps you should have no problem getting VirtualLink up and running.
   Networking gurus may wish to take liberties with the setup procedure and
   configure Miami Deluxe and MacTCP to their own tastes.


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                    Miami Deluxe Setup
                    Configuring Miami Deluxe


                    ShapeShifter Setup
                    Configuring ShapeShifter


                    MacTCP Setup
                    Configuring the Macintosh
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1.9   miamisetup

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How To Configure Miami Deluxe
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  Create the hardware definition
   1. Bring up the Miami Deluxe interface and go to the Hardware page
   2. Click on the New button
   3. From the Hardware Type window click on the Ethernet button
   4. Type VirtualLink into the Name field
   5. Verify that the Type gadget is set to SANA-II driver
   6. Click on the file requester button next to the Driver field
   7. From the file requester select vlink.device and click on OK
   8. Verify that the Driver field contains DEVS:Networks/vlink.device
   9. Click on the SANA-II parameters... button
  10. Click on the Query device button and then click OK
  11. At this point click OK to accept this hardware definition
  12. Verify that a new definition named VirtualLink appears in the page

  Create the interface definition
  13. Go to the Interfaces page
  14. Click on the New button
  15. Set the Interface type to Etherenet
  16. Set the Interface to LAN
  17. Click OK
  18. Select VirtualLink from the window that pops up and click OK
  19. Set the IP address to 192.168.1.1
  20. Set the Netmask to 255.255.255.0

   21. Move the Gateway Pri slider to the right so that it reads 1
   22. Set the Gateway to 192.168.1.254
   23. Move the Gateway Pri slider back to the left so that it reads 0
   24. Click on the Events button
   25. Click on the Auto-online button so that it becomes checked
   26. Click OK
   27. At this point click OK to accept this Interface definition
   28. Verify that a new entry with the alias VirtualLink appears in the page

   Activate routing
   29. Go to the TCP/IP page
   30. Click on the Gateway gadget so that is becomes checked
   31. Click on the LAN-Connect... button
   32. Set IP-NAT to internal
   33. Verify that the FTP and IRC-DCC buttons are checked
   34. Click OK

   And finally
   35. Save these settings so you don't have to go through this again

1.10   sssetup

How To Configure ShapeShifter
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   1. Bring up the ShapeShifter Settings interface
   2. Click on the Network... button
   3. On the Network Settings window click on the Choose button
   4. From the file requester select vlinkmirror.device and click OK
   5. Verify that the driver field contains DEVS:Networks/vlinkmirror.device
   6. Close the Network Settings window
   7. Click on the Save button to save the settings

1.11   macsetup

How To Configure MacTCP
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   1. Bring up the TCP/IP control panel
   2. Set the Connect via selection pop-up to Ethernet
   3. Set the Configure selection pop-up to Manually
   4. Set the IP Address to 192.168.1.2
   5. Set the Subnet mask to 255.255.255.0
   6. Set the Router address to 192.168.1.1
   7. Set the Name server addr field to your provider's DNS address
   8. Add your provider's domain name to the Search domains field

1.12   notes

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Random Thoughts
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· One other possible use for VirtualLink is as a testing tool for network
  application developers

· The version of MacTCP that comes with MacOS 7.5.x is unstable and
  VirtualLink seems to aggravate it. If you are running MacOS 7.5 and
  are having trouble with VirtualLink, try installing the latest version
  of Open Transport TCP. This is available from Apple's FTP site.

· I didn't see a need to write an installer script since the installation
  procedure is simply a matter of copying two files from one directory to
  another.

· VirtualLink should work with AmiTCP. Unfortunately, I don't have AmiTCP
  so I haven't been able to test this. I would be interested in hearing
  from anyone who is using VirtualLink with AmiTCP.

· VirtualLink should work with Miami 3.2 but since Miami 3.2 doesn't
  support multiple interfaces, the usefulness of such a setup would be
  limited.

1.13 history

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VirtualLink Revision History
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  Version 1.1 12/21/99

· Fixed a bug that could cause a crash if VirtualLink is accessed without
  both devices resident

  Version 1.0 12/5/99

· First public release

1.14 contact

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How To Contact Me
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  Comments, Complaints, Criticisms, and Questions can be directed to

  Chris Brenner
  cbrenner@unlimited.net
  http://members.unlimited.net/~cbrenner/

  There's not much to see on my web page. One of these days I'll get around
  to putting some content up.