USING "WINDOWS FAX"

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USING "WINDOWS FAX"

• Real fax machine → virtual fax

Use “Windows Fax and Scan” inside “Windows” and a fax modem instead of a real fax machine
If you have a computer, you already have most of the parts of a fax machine so Microsoft "Windows Fax" and third-party "fax apps" provide you with a few missing firmware and software-based modules and you then have a virtual fax machine that works like a real one:
TRANSMITTER BLOCK

- CCD
- A/D Converter
- Digital data compression

RECEIVER BLOCK

- Thermal printer
- Digital data expansion
- Demodulator circuit
- Control logic
- Operator controls
- Motor control circuits

Modem circuit
- Telephone line interface

DIAL-UP MODEM

SCANNER

PRINTERS

ROLLER DRIVE MOTORS
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To learn more about the inner workings of fax machines, please go to


which is where we borrowed the diagram of a fax machine.
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• "Windows Fax" is available in:
  Windows 2000 Professional
  Windows XP Home Edition
  Windows XP Professional
  Windows Vista Business
  Windows Vista Ultimate
  Windows Vista Enterprise
  Windows 7 (all versions)
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- "Windows Fax" is not available in: Windows Vista Starter, Windows Vista Home Basic, Windows Vista Home Premium
- In other words, "Windows Vista" is "Windows Fax"-challenged!
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• If your "Windows.." computer does not have "Windows Fax", you can use the "fax apps" that are bundled on the software CDs that are shipped with dial-up modems.

→ see Appendix 1 "Using Fax Apps"
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• For detailed screenshots and troubleshooting advice for "Windows Fax and Scan", see

http://aztcs.org/meeting_notes/winhard sig/windowsfax/windowsfax.pdf
• In this document, we also tell you how you can send faxes to a phone number that require "long distance" dialing by using a calling card with a phone line that only allows local calls.
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• Dial-up Modem Interface Options:
  o Modem that is integral on the motherboard (most laptops)
  o PCI card (older desktop computers)
  o PCIe card (newer desktop computers)
  o PC card/PCMCIA card (older laptops)
  o ExpressCard (newer laptops)
  o USB (both laptops and desktops)
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• Dial-up Modem Architecture Options:
  o Controller-based modems
  o Controllerless or Winmodems
  o Softmodems

(See http://www.usr.com/education/modem2.asp)
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Controller-based

Controllerless/Winmodem™

Softmodems

MCU=Microcontroller Unit
DPU=Data Pump Unit
DAA=Data Access Arrangement

(http://www.usr.com/education/modem1.asp and ..modem2.asp)
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• The "US Robotics" model 5637 USB Dial-up Modem is about $45
See
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- "Trendnet" model TFM-561U USB Dial-up Modem is about $48
  See
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• For older desktop computers, "Trendnet" model TFM-PCIV92U PCI Modem is about $12. See http://www.trendnet.com/products/proddetail.asp?prod=130TFM-561U&cat=51

At this price, it has to be a "Softmodem".
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• For newer desktop computers, "US Robotics" model 5638 USB Dial-up Modem is about $45. See http://www.usr.com/products/modem/modem-product.asp?sku=USR5638
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• Two ways to start "Windows Fax":
  – In "Windows 7" double-click on "Fax" in "Devices and Printers" to start "Windows Fax and Scan"
  – Or from within any document or Web page, click on "File", "Print", and then select the "Fax" printer.
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- In "Windows XP" or "Windows Vista", you have to turn on "Windows Fax" in "Add or remove programs" or "Programs and Features" in the "Control Panel":
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• In "Windows 7", "Fax" automatically appears in the "Printers and Faxes" section in "Devices and Printers" when you attach an dial-up modem or a scanner to the computer, so "Windows 7" users can usually skip steps 1 through 6 of the following procedure:
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• Step 1: Open the "Control Panel" of "Windows XP" or "Windows Vista":
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Step 2: Double-click on "Add or Remove Programs" in "Windows XP" or "Programs and Features" in "Windows Vista":
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• Step 3: Double-click on "Add /Remove Windows Components": 
Windows Components Wizard

Windows Components
You can add or remove components of Windows XP.

To add or remove a component, click the checkbox. A shaded box means that only part of the component will be installed. To see what's included in a component, click Details.

Components:

- **Accessories and Utilities** - 18.0 MB
  - Fax Services - 3.8 MB
  - Indexing Service
  - Internet Explorer - 0.0 MB
  - Management and Monitoring Tools - 2.0 MB

Description: Includes Windows Accessories and Utilities for your computer.

Total disk space required: 0.0 MB
Space available on disk: 218853.6 MB
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• Step 4a: If you are running "Windows XP", put in a checkmark for "Fax Services":
Windows Components Wizard

Windows Components
You can add or remove components of Windows XP.

To add or remove a component, click the checkbox. A shaded box means that only part of the component will be installed. To see what's included in a component, click Details.

Components:

- Accessories and Utilities 18.0 MB
- Fax Services 3.8 MB
- Indexing Service 0.0 MB
- Internet Explorer 0.0 MB
- Management and Monitoring Tools 2.0 MB

Description: Allows fax to be sent and received

Total disk space required: 1.7 MB
Space available on disk: 218853.6 MB

< Back Next > Cancel
Step 4b: If you are running "Windows Vista", put a checkmark for "Windows Fax and Scan":

Turn Windows features on or off

To turn a feature on, select its check box. To turn a feature off, clear its check box. A filled box means that only part of the feature is turned on.

- Tablet PC Optional Components
- Telnet Client
- Telnet Server
- TFTP Client
- Windows DFS Replication Service
- Windows Fax and Scan
- Windows Meeting Space
- Windows PowerShell
- Windows PowerShell Integrated Scripting Environment
- Windows Process Activation Service

[OK]  [Cancel]
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• Step 5: Click on the "OK" button.
• Step 6: Follow any additional wizards that pop up:
Configuring Components
Setup is making the configuration changes you requested.

Please wait while Setup configures the components. This may take some time.

Insert Disk

Please insert the Compact Disc labeled 'Windows XP Home Edition CD-ROM' into your CD-ROM drive (D:) and then click OK.

You can also click OK, if you want files to be copied from an alternate location, such as a floppy disk or a network server.
Completing the Windows Components Wizard

You have successfully completed the Windows Components Wizard.

To close this wizard, click Finish.
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• In "Windows XP" "Windows Fax and Scan" shows up prominently in the "Start" menu:
  "All Programs" → "Accessories" → "Communications" → "Fax"
Welcome to the Send Fax Wizard

This wizard helps you create and send a fax.

To fax a document, create or open it in a Windows-based application, and print to a fax printer.
Recipient Information

Enter the name and number of the person you want to send the fax to, or click Address Book to select a fax recipient.

To:  
Location: United States (1)  
Fax number:  

Use dialing rules: My Location  

To send to multiple recipients, type each recipient’s information above, and then click Add to add the recipient to the list below.

Recipient name | Fax number
--- | ---
Recipient Information

Enter the name and number of the person you want to send the fax to, or click Address Book to select a fax recipient.

To: [John Smith]

Location: United States (1)

Fax number: ( ) 1-888-473-2963

☐ Use dialing rules

To send to multiple recipients, type each recipient’s information above, and then click Add to add the recipient to the list below.

<table>
<thead>
<tr>
<th>Recipient name</th>
<th>Fax number</th>
</tr>
</thead>
</table>

| Add | Remove | Edit |

< Back Next > Cancel
Windows Fax and Scan

Review fax status

Sending page 1 of 1

Elapsed time: 0:38

Sending fax to <333-3333>

<table>
<thead>
<tr>
<th>Event</th>
<th>Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sending page 1 of 1</td>
<td>12:43:55 PM</td>
</tr>
<tr>
<td>Dialing: 333-3333</td>
<td>12:43:30 PM</td>
</tr>
<tr>
<td>☢ The fax was canceled</td>
<td>12:40:13 PM</td>
</tr>
<tr>
<td>Canceling the fax...</td>
<td>12:40:11 PM</td>
</tr>
<tr>
<td>Dialing: 333</td>
<td>12:40:06 PM</td>
</tr>
<tr>
<td>☢ The fax call was not answered.</td>
<td>12:40:05 PM</td>
</tr>
<tr>
<td>Dialing: 333</td>
<td>12:38:52 PM</td>
</tr>
<tr>
<td>☢ The fax was canceled</td>
<td>12:17:33 PM</td>
</tr>
<tr>
<td>Canceling the fax...</td>
<td>12:17:31 PM</td>
</tr>
</tbody>
</table>

Clear list
Review fax status

Ready to send or receive a fax

<table>
<thead>
<tr>
<th>Event</th>
<th>Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>The fax was sent successfully.</td>
<td>12:44:12 PM</td>
</tr>
<tr>
<td>The fax call is finished.</td>
<td>12:44:12 PM</td>
</tr>
<tr>
<td>Sending page 1 of 1</td>
<td>12:43:55 PM</td>
</tr>
<tr>
<td>Dialing: 333-3333</td>
<td>12:43:30 PM</td>
</tr>
<tr>
<td>The fax was canceled</td>
<td>12:40:13 PM</td>
</tr>
<tr>
<td>Canceling the fax...</td>
<td>12:40:11 PM</td>
</tr>
<tr>
<td>Dialing: 333</td>
<td>12:40:06 PM</td>
</tr>
<tr>
<td>The fax call was not answered.</td>
<td>12:40:05 PM</td>
</tr>
<tr>
<td>Dialing: 333</td>
<td>12:38:52 PM</td>
</tr>
</tbody>
</table>
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• In "Windows XP", "Windows Vista", and "Windows 7", the virtual Windows-provided "Fax" shows up wherever printers are displayed:
Add Printer

Fax
0
Ready
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- Since "Windows Fax" acts like a "faux printer", in "Windows XP", "Windows Vista", and "Windows 7", you can also start "Fax" by clicking on "File", "Print", and then selecting the "Fax" printer from any document or Web browser page.
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• In "Windows Vista" and "Windows 7", "Windows Fax and Scan" shows up prominently in the "Start" menu:
To test your virtual "Windows Fax", send a fax to 1-888-473-2963 which is the free "HP Fax Test Service". After a few minutes, they will send you a fax to your fax phone number several minutes after they receive your fax.

See
1. Send a one page black and white text fax to **1-888-hpfaxme** (1-888-473-2963).

2. When your fax is received by the HP Test Fax Service, we will generate a return fax to you within five minutes confirming that we received your fax. This verifies that you can both send and receive a fax with your fax machine.

If you do not receive a return fax within 5-7 minutes, there may be a problem with the setup of your fax machine. Consult the user manual that came with the product for proper setup and configuration.

**NOTE:** The most common cause of failure is that the fax number set in the Fax Header on the machine does not match the number of the phone line connected to the fax. Also, ensure that the fax header contains the full 10-digit telephone number of the fax machine, including the area code.

For more information or assistance, click **Contact HP** at the top of this page.
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• After you send them a fax, the fax that the "HP Fax Test Service" sends to you will look like this:
FaxBack System Test

Thank you for choosing hp.

Other useful hp web sites

www.hp.com/register
Use this web address to register your HP product.

www.hp.com/support
Use this web address to obtain additional support for your product.

www.hpshopping.com
Use this web address to order supplies and accessories for your HP product.

Help us help you

We're interested in your feedback on this fax verification process. Send your comments to:

fax.feedback@hp.com
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• Three ways to send a fax:
  o File-->Print-->Select the "Fax" printer from inside a document or photo
  o Double-click on the "Fax" icon inside "Devices and Printers" (in "Windows 7" or "Windows 8"
  o Start "Fax" from the "Start Menu" in all versions of "Windows.."

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• Two ways to receive a fax
  o Manually click on "Receive a Fax Now" inside the "Fax" applet window.
  o Automatically receive a fax after a certain number of rings, if you set it up in "Tools"--->"Fax settings" in the "Fax" applet window.
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To make yourself a "Fax Confirmation" report for a "Sent" fax:

- Start "Windows Fax"
- Click on the "Sent" Click on "Tools" in the "Menu bar"
- Click on "Fax Status Monitor"
- Use "Print Screen" or shift + "Print Screen" or "Snipping Tool" to save the relevant "events" to an empty .DOC or .RFT document in "Word", "Wordpad", or "Wordperfect"
Review fax status

Ready to send or receive a fax

- The fax was sent successfully.
  - The fax call is finished.
  - Sending page 1 of 1
  - Dialing: 333-3333
- The fax was canceled
  - Canceling the fax...
  - Dialing: 333
- The fax call was not answered.
  - Dialing: 333

Time:
- 12:44:12 PM
- 12:44:12 PM
- 12:43:55 PM
- 12:43:30 PM
- 12:40:13 PM
- 12:40:11 PM
- 12:40:06 PM
- 12:40:05 PM
- 12:38:52 PM
APPENDIX 1
USING "FAX APPS"

• "Fax apps" are especially useful for
  Windows Vista Starter
  Windows Vista Home Basic
  Windows Vista Home Premium
because "Windows Fax" is not available for these versions of
"Windows.."
• Even if "Windows Fax" is available in your version of "Windows..", you might prefer to use a "fax app" instead of "Windows Fax".
• The "Classic Phone Tools" software program is bundled with the "US Robotics" USB dial-up modem". See
APPENDIX 1
USING "FAX APPS" (continued)

• The "Classic Phone Tools" software program is also bundled with the "Trendnet" USB dial-up modem.
• The "Communicate! Lite" (version 8) software program by "Communique Laboratory" is bundled with the "Hayes"/"Zoom" USB dial-up modem. See http://www.01com.com
APPENDIX 1
USING "FAX APPS" (continued)

• The Web site for "Classic Phone Tools" is located at

http://www.avanquest.com/USA/software/classic-phonertools-9-27401?gclid=CPTVh9vWxK8CFWvktgodyndQ
• The Web site for "Communicate!" is located at http://www.01com.com/communicate-voicemail-fax/
APPENDIX 1

USING "FAX APPS" (continued)

• In "Windows7", a "faux printer" ("fake printer") icon automatically appears in the "Printers and Faxes" section in "Devices and Printers" when you install any "fax app".
APPENDIX 1
USING "FAX APPS" (continued)
APPENDIX 1
USING "FAX APPS" (continued)

• In "Windows XP", a "fax app" will usually show up prominently in the "Start" menu:
  "All Programs" → "Accessories" → "Communications" → <name of fax app>
Welcome to the Send Fax Wizard

This wizard helps you create and send a fax.

To fax a document, create or open it in a Windows-based application, and print to a fax printer.
Recipient Information

Enter the name and number of the person you want to send the fax to, or click Address Book to select a fax recipient.

To: [blank]
Location: United States [1]
Fax number: [blank]

Use dialing rules: My Location
Dialing rules...

To send to multiple recipients, type each recipient's information above, and then click Add to add the recipient to the list below.

<table>
<thead>
<tr>
<th>Recipient name</th>
<th>Fax number</th>
</tr>
</thead>
</table>

Add
Remove
Edit

< Back  Next >  Cancel
Recipient Information

Enter the name and number of the person you want to send the fax to, or click Address Book to select a fax recipient.

To: John Smith
Location: United States (1)
Fax number: 1-888-473-2963

To send to multiple recipients, type each recipient's information above, and then click Add to add the recipient to the list below.

Recipient name | Fax number
--- | ---

Add | Remove | Edit

< Back | Next | Cancel
• In "Windows XP", "Windows Vista", and "Windows 7", the virtual "faux printer" for the "fax app" shows up wherever printers are displayed:
APPENDIX 1

USING "FAX APPS" (continued)

• You can also start a "fax app" by clicking on "File", "Print", and then selecting the "Fax" printer from any document or Web browser page.
APPENDIX 1
USING "FAX APPS" (continued)

• In "Windows Vista" and "Windows 7", the "fax app" shows up prominently in the "Start" menu:


APPENDIX 2
USING LEGACY FAX MACHINES, FAX MODEMS, AND CREDIT CARD MACHINES ON "VOICE OVER IP" (VOIP) PHONE LINES

• See http://aztcs.org/meeting_notes/winhardsig/windowsfax/fax-and-Internet.pdf