Network tools: rdesktop

You can, if necessary, access Windows machines running terminal services (or remote desktop) via rdesktop.
Network tools: rdesktop
Running `rdesktop`

`rdesktop [-f] HOSTNAME`

The `-f` option puts you in fullscreen mode (`CTRL-ALT-ENTER` to shift back).
Network tools: ftp

ftp is an older interactive method of transferring files. It is still useful occasionally, though since it is insecure it should only be run within a safely sheltered environment.

Invocation:

ftp [-p] HOSTNAME

The option -p is not found on every version of ftp (modern versions of ftp default to this mode), but
when it is, it allows you to specify passive mode for data transfers, which can help you use ftp going through firewalls.
ftp commands

cd RDIR  # chdir on the remote machine to RDIR
lcd LDIR  # chdir on the local machine to LDIR
dir [RDIR]  # get a directory of the remote directory RDIR (defaults to .)
get RNAME [LNAME]  # get a single file RNAME from the remote machine, using LNAME as the local name if specified
put LNAME [RNAME]  # put a single file LNAME from the local machine to the remote machine, using RNAME as the remote name if specified
mget RNAMEPATTERN  # get multiple files fitting RNAMEPATTERN (expansion is done remotely)
mput LNAMEPATTERN  # put multiple files fitting LNAMEPATTERN (expansion is done locally)
hash  # show a hash mark every time 1k is sent or received
del  # delete a remote file
mdel RNAMEPATTERN  # delete remote files fitting pattern (expansion is done remotely)
quit  # exit ftp
! [CMD]  # if no CMD is given, start a shell; otherwise, execute the CMD locally
Sending file trees

The easiest way to send a file tree with $ftp$ is to use $tar$ first, and then $ftp$ the tarfile. For example:

```
[2006-Fall]$ tar cfz /tmp/somedir.tgz somedir
[2006-Fall]$ ftp ftp.redhat.com
Connected to ftp.redhat.com.
220 Red Hat FTP server ready. All transfers are logged. (FTP) [no EPSV]
Name (ftp.redhat.com:ftp): ftp
331 Please specify the password.
Password:langley@ftp
230 Login successful.
Remote system type is UNIX.
Using binary mode to transfer files.
ftp> lcd /tmp
Local directory now /tmp
ftp> put somedir.tgz
```
Like `ftp`, `telnet` is an older, insecure program which should be avoided outside of secure environments unless you are using it in a situation for which security is not relevant, such as testing a mail server.

**Invoking:**

```
telnet HOSTNAME [PORT]
```
Using **telnet**

One of the most useful ways to still use **telnet** is for testing mail servers:
[2006-Fall]$ telnet mail.cs.fsu.edu 25
Trying 128.186.120.4...
Connected to mail.cs.fsu.edu (128.186.120.4).
Escape character is '^]'.
220 mail.cs.fsu.edu ESMTP Postfix
helo machine.cs.fsu.edu
250 mail.cs.fsu.edu
mail from: <langley@cs.fsu.edu>
250 Ok
rcpt to: <langley@cs.fsu.edu>
250 Ok
data
354 End data with <CR><LF>.
Subject: This is a test

This message is a test message.

.
250 Ok: queued as B01E3F2F50
quit
221 Bye
Connection closed by foreign host.
The \textit{r} family

The “r” programs \texttt{rlogin}, \texttt{rsh}, and \texttt{rcp} should all be avoided these days since the “s” programs \texttt{ssh} and \texttt{scp} are more than adequate replacements.
Web browsers, email clients

There are a large number of web browsers and email clients available on Unix machines.

The traditional line-oriented email client is `mail`; two more recent ones are `pine` and `elm`. 
[2006-Fall]$ mail
"/var/spool/mail/langley": 2 messages 2 new

> N 1 root@machine.cs.fsu.e Thu Oct 20 15:54 16/630 "test456"
N 2 root@machine.cs.fsu.e Thu Oct 20 15:54 16/627 "test"
& x
The **mail** program is very lightweight, and you can quickly read mail messages using it.

If you use “q” to quit, the state of your message box will be updated to indicate things such as whether or not you have read a message. If you use “x”, the message box is not updated.
elm and pine: deprecated

Both elm and pine are designed as “screen” mailers rather than just a line mailer.

While some people prefer them, they lack many features that other mailers have: mail is fast and lightweight, and graphic mailers generally are able to handle imap and pop, which makes handling multiple mailboxes uniformly very simple.
The program links is a nice screen-based webbrowser. While it doesn’t handle such as things as flash very well, it is a very responsive webbrowser.
links (a.k.a. lynx or elinks)

Using the “g” command
**links** *(a.k.a. lynx or elinks)*

A typical web page rendered in **links**.
links (a.k.a. lynx or elinks)

A typical web page rendered in links.
Default keybindings in `links`

- `PageDown` page down
- `" "` page down
- `PageUp` page up
- `b` page up
- `Down` down
- `Up` up
- `Ctrl-C` copy clipboard
- `Ctrl-P` scroll up
- `Ctrl-N` scroll down
- `[ ` scroll left
- `] ` scroll right
- `Home` home
- `Ctrl-A` home
- `Ctrl-E` end
- `Enter` enter
- `Left` back
- `d` download
- `/` search
- `?` search back
<table>
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<tr>
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<td>g</td>
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<td>s</td>
<td>bookmark manager</td>
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<tr>
<td>q</td>
<td>quit</td>
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Graphic webbrowsing and email

You can now run a variety of graphic webbrowsers and email clients in many Unix/Linux environments.

Browsers:

epiphany
firefox
galeon
konqueror
mozilla
Graphic webbrowsing and email

Email clients:

- evolution
- mozilla mail
- thunderbird
- xmail

(Another popular option with email is to use a webbrowser reader, such as squirrelmail or openwebmail.)
Most graphic email clients can gracefully handle multiple mailboxes on multiple servers. One of the easiest ways to do this is via imap, which allows you to leave the mail on the server rather than the pop paradigm of pulling it to the local machine.