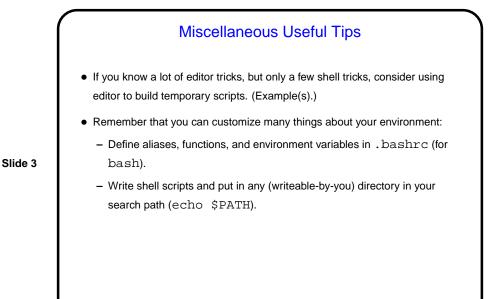


Slide 1

"Cron jobs" are the traditional-UNIX way of scheduling periodic tasks. A background process (crond on our system) checks every minute, and can run things at specified intervals. Typically these are shell scripts. What to run is determined by contents of some system directories (/etc/cron.* on our systems), and per-user "crontabs".

A Few (More) Words About "Cron Jobs"

- crontab command can be used to list and edit.
- ${\tt man}~{\tt 5}~{\tt crontab}$ gives details of syntax.
- Output is mailed to user. So there must be a mail transport agent running (e.g., sendmail). Also, if not forwarded, mail goes to local mail spool. Use a .forward file to forward, or a mailreader than can check the local mail spool.



A Very Little about CGI • What's CGI? "Common Gateway Interface" - protocol for communicating between Web forms and (your) programs. • Programs can be in any language that can read from stdin, write to stdout, and read environment variables. • May require some setup/configuration in Web server. More information in tutorials linked from "Useful links" page (here). • Notice that there are security implications — you're letting anyone with a Web browser execute these programs on your computer. No problem if they're harmless, but "be careful"?

CGI "Scripts"
Input is one long string of name-value pairs, either from an environment variable or from stdin. (More about this in next slide.)
Output begins with a single line giving content type, e.g.: Content-type: text/plain or Content-type: text/html followed by a blank line. After that, it can be anything appropriate for the content type.
See print* examples from class, linked from "Sample programs" page, (here). Also notice that Web "dynamic content" can provided in other ways than CGI - e.g., PHP example supplied by a former student (sample program notcgi.php).

