IT 240
Shell Scripting for Administrators

Chapter 8
Creating Command Pipelines

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The Unix Philosophy

- Everything is a file

- Every process runs in an environment

- Commands are small and perform a single task well

- Commands accept input from the standard input and output to the standard output

- Commands may be linked together using piplines

Pipeline Basics

- Standard input is the keyboard

- Standard output is the shell window

- Standard error is the same as standard output

- Standard input/output may be redirected with the > or < symbol

- Standard error may be redirected by the 2> symbol

- Both standard error and output may be redirected with the &> symbol

Pipeline Basics

- Using the > operator will destroy an existing file

- To append output to a file, use the >> operator

- If the file does not exist, it will be created, otherwise it will be appended

- Files can be truncated with the : > symbol

- */dev/null* is the system 'black hole'

Linking Commands

- The previous examples work fine for input/output redirection, but a new method is needed to link commands

- The pipe symbol | may be used to join the output of one command to the input of another