Inside Module 1

Introduction to Suprtool

What is Suprtool?

- It is a software tool for the HP 3000 and HP 9000

- It extracts data quickly

- It does many data processing functions for files and databases: copies, selects, and sorts, reformats, prints

- It links data from several files into one

- It provides *FAST* serial processing of "flat" files, KSAM files, TurboIMAGE, Oracle, Allbase and Eloquence databases
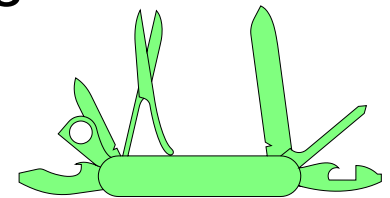
What is in Suprtool?

☐ Suprtool has six components on MPE and four on HP-UX:

1. Suprtool - main program
2. Suprlink - linking program
3. STExport - exporting program
4. Dbedit - TurboIMAGE editing utility (MPE only)
5. Speed Demon - TurboIMAGE extracting routines (MPE only)
6. Suprtool2 - interface routines

☐ Documentation on web site.
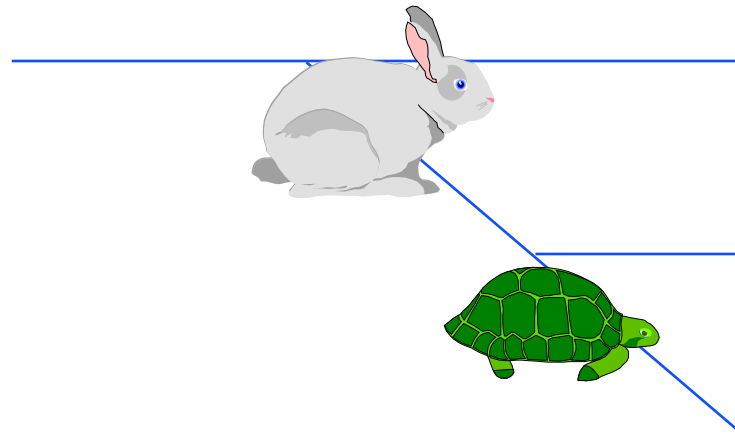
Why use Suprtool?

☐ It's speedy

☐ It has powerful, easy to use command syntax

☐ It maximises machine resources

☐ Its simple commands mean FAST programming

☐ It integrates well with other tools
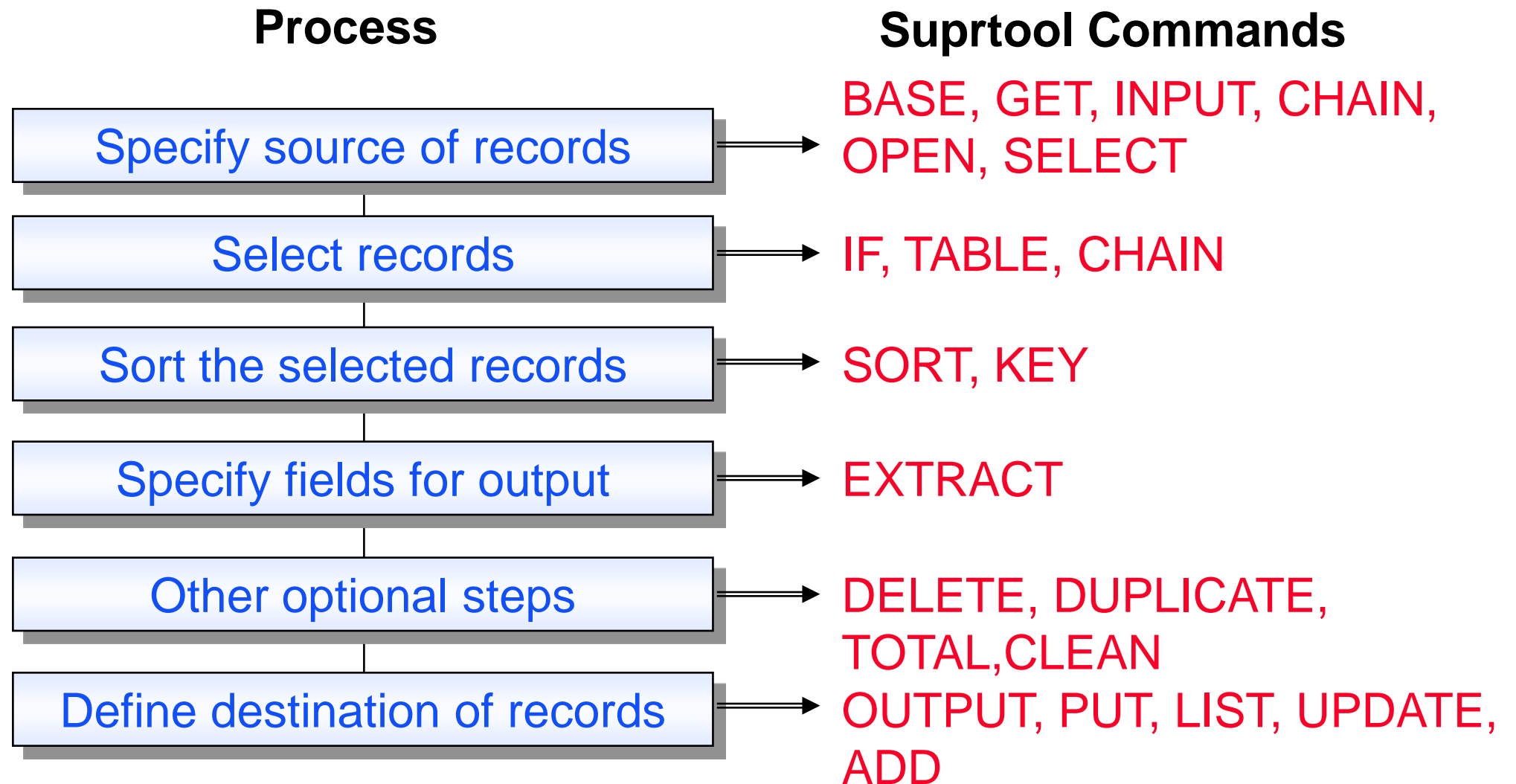
☐ It has powerful reformatting functions

Why is Suprtool/iX so much faster?

- Traditional reports gather information in an inefficient way

- Suprtool uses serial scans to retrieve records in the order they are stored on the disk

- Suprtool sorts data more quickly than the system sort

- Suprtool can quickly extract, sort, and merge information from many sources

Some Suprtool Commands

Process

Suprtool Commands

Specify source of records → BASE, GET, INPUT, CHAIN, OPEN, SELECT

Select records → IF, TABLE, CHAIN

Sort the selected records → SORT, KEY

Specify fields for output → EXTRACT

Other optional steps → DELETE, DUPLICATE, TOTAL,CLEAN

Define destination of records → OUTPUT, PUT, LIST, UPDATE, ADD

What is a task?

- A task is Suprtool's basic unit of work

- A task has one source of records and one destination for output records

- A task is executed using the XEQ or EXIT commands

- A task can be canceled or reset by using the RESET or EA commands

- The job you are doing may require multiple tasks

Getting into Suprtool

- To get into Suprtool for MPE, you simply use the RUN command

  `:``run`` suprtool.pub.robelle`

- To get into Suprtool for HPUX you simply type:

  `/opt/robelle/bin/suprtool`

Copying an entire dataset to a file

- Use the BASE command to access a database and copy dataset to a file

  ```
  >base store,5,reader
  >get d-sales
  >output salesout
  >xeq
  ```

- By default, Suprtool creates a new output file

Copying a subset of records to a file

☐ Use the IF command to select records from a dataset

```
>get d-inventory
>if on-hand-qty < 5
>list standard
>output testfile
>xeq
```

Looking at the contents of a file

□ You can look at any file using INPUT and OUTPUT

□ Beware of unprintable characters

```
>input lowstock
>output *
>xeq
159    ,19970828    ,1              ,50532001 ,5053      ,94.49
133    ,19971016    ,1              ,50522001 ,5052      ,80.59
138    ,19971016    ,4              ,50522501 ,5052      ,41.53
107    ,19970812    ,2              ,50512001 ,5051      ,146.39
111    ,19970916    ,3              ,50513001 ,5051      ,128.99
IN=5, OUT=5. CPU-Sec=1. Wall-Sec=1.
```

Exercise
Copying the m-customer dataset

□ Open the Store database and copy the m-customer dataset into a file called Custfile:

```
> base store,1,WRITER
> get m-customer
> output custfile
> xeq
```

□ Then look at the contents of Custfile

```
> input custfile
> list
> xeq
```

□ Repeat, but create a "link" file:

```
> output custfile,link
```

First Rule of output:

*"Unless you have a really good reason not to, **always** make your output files self-describing"*

```
> output myfile,link
```

Getting out

There are 4 ways to complete a task:

- XEQ - executes task, remains in Suprtool

- EXIT- executes task, exits Suprtool, suspending
  if possible

- EXIT ABORT (EA) - cancels task, terminates and
  exits Suprtool

- EXIT SUSPEND (ES) - puts task "on hold", suspends
  and exits Suprtool

Redoing a task

□ A task can be easily corrected and repeated if a mistake has been made

□ Use these commands to avoid retyping long lists of commands:

>   LISTREDO
>   REDO
>   DO
>   BEFORE
>   MPEX abbreviations

```
>do if
>if on-hand-qty < 5
>
```

Do, Redo, and Listredo

- DO re-executes the last command or any prior command, as-is

- REDO re-executes the last command or any prior command after making changes to the command

- LISTREDO

  - List some prior commands, to the screen or to a file

  - Useful for saving work to a file that may become a script

```
>do
>do 5/10
>redo in
>listredo all;unn;out=savefile
```

Getting on-line Help

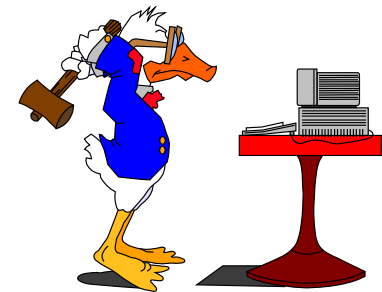☐ Try these Help keywords to access the user manual:

   Help

   Help Intro

   Help News

   HQ

   HQ List

☐ Press "+" to show the Help tree, which lists Help keywords hierarchically

Command conventions

- No command line may be over 256 characters

- Separate multiple commands on the same line with semi-colon   ;

- Continue a long line to the next line by ending it with ampersand   &

- Append comments to commands using braces   {comment}

```
>base store,5,reader  {read access only}
>get d-sales; item deliv-date,date,yyyymmdd
>if deliv-date < $today(-30) and product-no = 123456,&
>>234567,345678
```

Execute sequences of commands - Use

- Save a set of commands in a file

- Use the file to execute all the commands

- Create usefiles of DEFINE and ITEM commands for datasets and flat files

- Create usefiles with LISTREDO

- Suppress listing the commands with USEQ

- Suprmgr.Pub.Sys or /opt/robelle/suprmgr are always used at startup

- Use files can be "nested"

Set and Verify options

- Enable or disable processing options using SET

- Check the current state of affairs using VERIFY

- Put SET commands for all tasks in Suprmgr files

Using OS commands within Suprtool

- If Suprtool and the OS do not have the same command name, a leading colon is optional with OS commands. For example,

  >`:showtime` is equivalent to >`showtime`   {only MPE}

  >`:reset` is not the same as >`reset`   {MPE and Suprtool}

- OS commands cannot be abbreviated

- On MPE, you can execute :Run, Command Files, and User Defined Commands (UDC) inside Suprtool

- No more OS commands can be executed in Suprtool after the SET LIMITS MPE OFF command

Run Suprtool on MPE

- **`Parm=4; Info="use foo.defs"`**
  Execute Info string once at startup   **`UX: -c"use foo.defs"`**

- **`Parm=8; Info="use doit"`**
  Execute Info string upon each re-activation

- **`Parm=16`**
  Copy the input file to the output file

- **`Parm=32`**
  Terminate completely; don't suspend

- **`Parm=64`**   **`UX: suprtool -v`**
  Check with user before exiting

Running Suprtool for HP-UX

□ Options entered in normal HP-UX conventions

□ suprtool [-cv -oc]

□ -c"use usefile"

□ -v {Verify exit }

□ -oc { sets .stoutcount }

- if [`cat .stoutcount` -ge 10]; then
- echo "More than 10 records found"
- fi

Quick Vocabulary

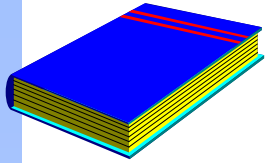|	
database	LIST
dataset	OUTPUT
EXTRACT	REDO
EXIT	record
file	SORT
GET	task
IF	XEQ

Summary

- Six Suprtool components on MPE four on HP-UX

- Documentation and helpful web site.

- Fast processing

- Edit data interactively on MPE

- Basic Suprtool tasks

- On-line Help