Suprtool Master Class

A Robelle Tutorial
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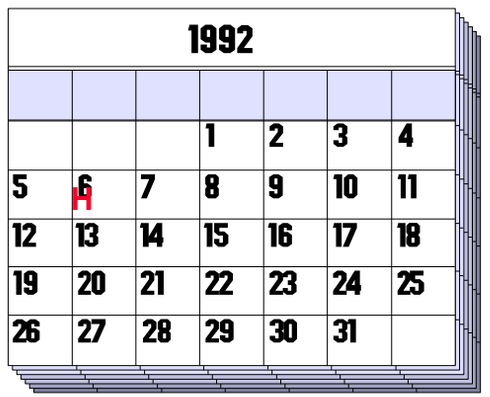
Warm-up project

- Suprtool in operations
- How to skip the backup on holidays?
  - Assume a file contains dates to skip
- How to get today's date in a format you can use?
- How to check today's date against the Date file?
- How to tell Suprtool the format of the Date file?



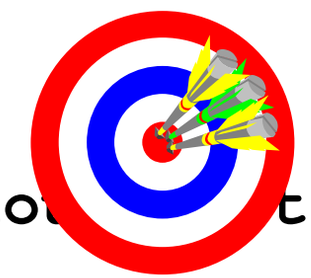
Suprtool in operations: verifying the job queue

- Certain background jobs should always be running
  - Mail transport
  - Spooler
  - Transaction posters
- How can we alert the System Manager if jobs are missing?
- 3 steps required:
  - Create a list of running jobs
  - Compare the list against a control file
  - Notify System Manager

Step 2: Compare the current jobs against a target list

```
>input jcontrol                          {the file of desired job names}
>define jobname,1,30,byte
>table current,jobname,file,exec         {file from previous slide}
>if not $lookup(current,jobname)
>extract jobname
>output notexec,temp
>exit
```

- Step 3: Notify System Manager



```
                                         :if suprtoolo      t >
  0 then                                 {error!}
  comment alert the System Manager
```

What does this Suprtool task do?

```
>base test.db
>get custmaster
>sort custnumber
>duplicate only keys
>delete
>output dupkeys
>xeq
>exit
```

- Hint: DELETE is an input operation.

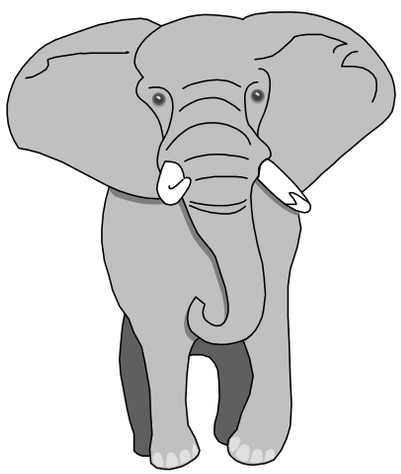
Suprtool and the hierarchical file system (HFS)

- HFS filenames work in 3.7, but the maximum length is 36 characters
- 3.7.11 increases the maximum length to 239 characters

```
>input /SOMEACCT/SOMEGRP/somedir/some_file_in_my_space
>output ./results/file1x
>form ./linkfile
>listredo all;out ./redofile
>table cust-tbl,cust-no,file,./customertablefile
>use ./stcmds
```

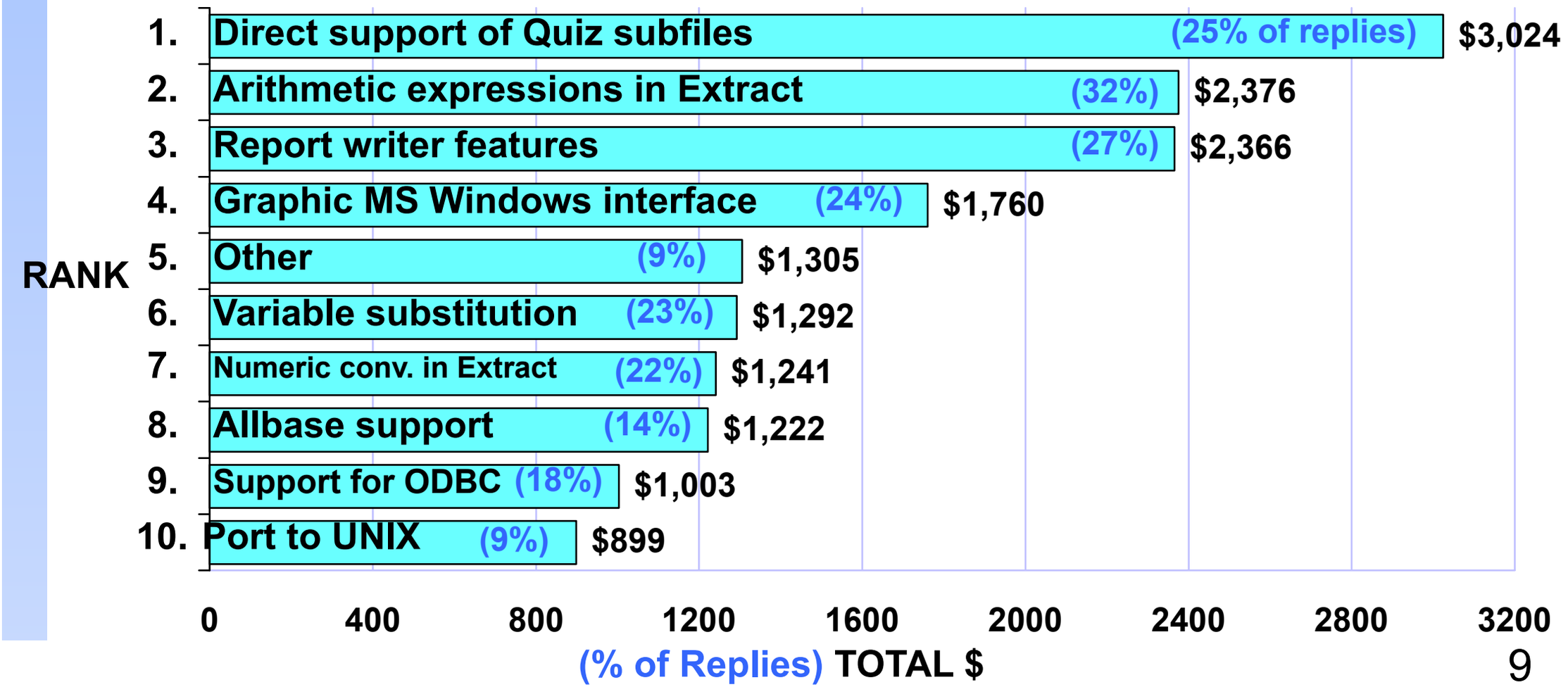
Jumbo databases

- TurboIMAGE now supports datasets greater than 4 gigabytes
- You need a special version of Suprtool 3.7 (Plus)
  - No extra charge for Suprtool/Plus
  - Alternatively, you can wait for Suprtool 3.8
- Can you sort more than 4 gigabytes?
- Can you output more than 4 gigabytes?

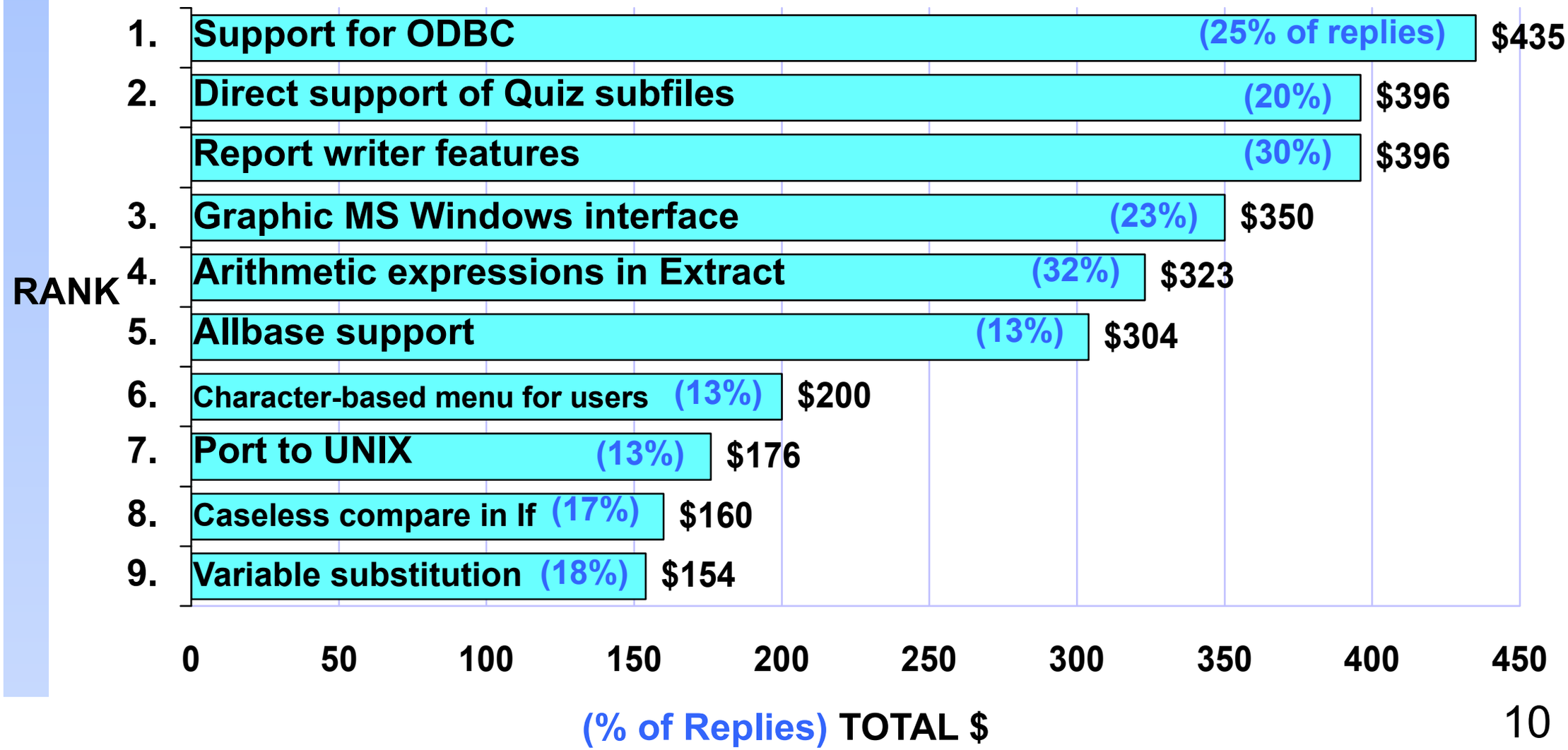


1994 Suprtool User Survey
North American results

- How you spent your $100 on enhancements:



How overseas users rated the enhancements



Arithmetic expressions in Extract (3.7.12)

- Create computed fields for the output phase
- EXTRACT <field-name> = <expression>

```
>extract double-field = int-field + 10
>extract total-cost = unit-cost * sales-qty
```

- Must be last item in each EXTRACT command
- SET IGNORE ON ignores divide by zero

Numeric data conversion in Extract (3.7.12)

- Convert from any numeric data-type to another
- Syntax:

  EXTRACT <target-field> = <source-field>

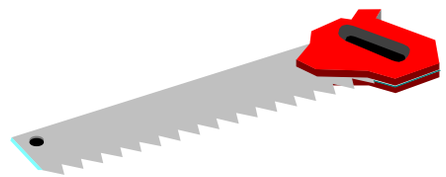
- Use DEFINE to create new output fields of specified type

```
>get cust-master
>define custno-j2,1,4,int                {create J2 output field}
>define custno-in,cust-no,8,display  {make X8 numeric}
>extract custno-j2 = custno-in
```

Shorten or lengthen byte type fields (3.7.12)

- Syntax:

  EXTRACT <target-field> = <source-field>



- Example:

```
>get d-sales
>define part-warehouse-no,part-no[5],4
>extract warehouse-no = part-warehouse-no
>update
>xeq
```

New opportunities for importing data

- OUTPUT writes to a file, PUT writes to a dataset
- Enhancements to EXTRACT will convert input format

```
   >input flatfile
>define in-key-item,1,6
>define in-packed-qty,7,5,packed
>define put-integer-qty,7,4,integer
>define ...
>extract in-key-item
>extract put-integer-qty=in-packed-field
>extract ...
>put detail-set
>xeq
```

Importing data with Suprtool

- Converting variable-delimited data to fixed column
  (see Qedit Master Class)

- Data conversions in EXTRACT
  - Numeric to numeric only version 3.7.12 or higher

- Writing new records into the database
  - PUT command - output record must match dataset full field list
  - EXTRACT command
    dummy fields = " " or = 0 to fill out new records

Porting Suprtool to HP-UX

- Fast read and sort of fixed-length records
- Watch out for line feeds - they can drive you crazy
- Syntax to specify record length, and line feed separators
- Self-describing files are like portable datasets
  - Retain structure on FTP from MPE to HP-UX
  - Input and output SD files
  - Create SD files using DEFINE and EXTRACT

What database should Suprtool/UX support first?

- Please give a show of hands:
  - Allbase?
  - Oracle?
  - Other?

- What is more important?
  - High-speed for a single, specific database

    or
  - Flexibility and SQL access to many databases

What you learned in Suprtool Master Class

- Operations staff should be learning Suprtool
- DELETE is an input operation, not output
- Suprtool is up to date with MPE and IMAGE, even HP-UX
- Read/write Quiz subfiles is the most popular enhancement choice
- Enhancements in beta release make it easier to import files