

# *Inside Module 9*

## **Latest Features in Suprtool**

- Variable Substitution
- \$Counter
- \$Clean and \$FindClean
- \$Total and \$Subtotal
- \$SPLIT
- \$EDIT
- \$NUMBER
- Suprlink's Join Command
- Output,else
- FastRead (non-MPE Platforms)
- Dcredit (non-MPE Platforms)
- List Command (non-MPE Platforms)
- Dynamic Loading of Eloquence (non-MPE Platforms)

# *Development is a continuous process*

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- We are always working on new features
- New version every month or so

# Variable Substitution

- MPE version has had Variable Substitution for two years
  - Internal MPE routine
  - Same as used by the CI
- HP-UX now has the same feature
  - Suprtool functions take precedence
  - \$stddate, \$total, \$date, \$today are not replaced
  - Variable must be set and exported prior to running program
  - Suprtool command line, \$read function
  - STExport and Suprlink as well
  - Must have Set Varsub On

# *\$counter function*

- Sequential number function
- Allows you to retain original output order
  - > get morder
  - > def mycount,1,4,double
  - > ext mycount=\$counter
  - > ext orderno
  - > out myfile,link
  - > xeq

# *Clean my data*

- \$clean function in Suprtool
  - clean “^9”
  - Set cleanchar “ “
  - update
  - extract mybytefield=\$clean(mybytefield)

## *Clean Example*

```
>base mydb,1,;  
>get customer  
>clean "^9","^10","^0","^7"  
>set cleanchar " "  
>update  
>ext address(1) = $clean(address(1))  
>ext address(2) = $clean(address(2))  
>ext address(3) = $clean(address(3))  
>xeq
```

## *\$FindClean Example*

- Users did not want to blindly \$clean all records
- Some wanted to track strange characters and corruptions
- \$FindClean will find fields that could be cleaned

>base membrs

>get member-file

>Clean special

>If \$findclean(name)

>output toclean,link

>xex

# *\$Total*

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- \$Total and \$subtotal functions
- Provide running grand total and subtotals
- Data is stored in a Packed field



# *\$Subtotal*

- Syntax for the \$subtotal function in the extract command is:
- `extract target = $subtotal(field,sort-field)`
- Must specify a sort
- Sort fields must match
  - >def mytot,1,14,packed
  - >get orders
  - >sort ordnum
  - >ext ordnum
  - >ext part-number,description,sales-amount
  - >ext mytot=\$subtotal(sales-amount,ordnum)
  - >out sales,link
  - >xeq

# *\$Split*

- \$split function
  - Extracts out variable length strings from data
  - Extract from beginning to “/” character
- ```
>extract first-name=$split(name,first,"/")  
>extract last-name=$split(name,"/",last)
```
- Can also split on multiple occurrences of a certain character

Consider the following data:

```
Armstrong/ Neil/ Patrick
```

```
Green/ Bob/ Miller
```

```
Edwards/ Janine/
```

```
Armstrong/Arthur/Derek
```

## *\$split details*

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- Occurrence is honored
- No need to specify an occurrence of one
- Can nest inside a \$trim or similar string function
- \$split does check for overflow
- First and Last keywords available

# \$edit

- \$edit function
- Converts from numeric or byte to formatted string of bytes
- Uses syntax and rules similar to Cobol Edit-Masks
- Placeholders and Format characters
- Two sets of rules byte type and numeric based on source data type
- `>ext formatdate=$edit(a, "xxxx/xx/xx" )`
- `FORMATDATE = 2003/09/24`

# Numeric source \$edit masks

- Numeric source \$edit masks

```
>ext a=$edit(int-field,"$$,$$$.99-")
>ext b=$edit(int-field,"99,999.99-")
>ext c=$edit(int-field,"cr99999.99")
>ext d=$edit(int-field,"-$9999.99")
>ext e=$edit(int-field,"**,***.99+")
>ext f=$edit(int-field,"zz,zzz.99+")
>list
>xeq
>IN FILE1SD.NEIL.GREEN (0) >OUT $NULL (0)
A      =      $11.11-      B      = 00,011.11-
C      = CR00011.11      D      =  -$0011.11
E      =  ****11.11-      F      =      11.11
```

## *Handling the sign*

- +, -, CR and DB allowed
- Depends on state of the data
- Positive, negative, neutral

## *Rules for \$ sign*

- Fixed \$ sign edit
- Floating \$ edit invoked if two “\$\$” appear in the edit mask
- Suprtool attempts to fixup most odd cases
  - \$,123.45 becomes \$123.45

# *Decimal places*

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- Data is adjusted to number of decimal places
- Default Decimal symbol is “.”
- Can be changed to “,” or any other single character
- Source field decimal value is honored



# *Currency symbol and overflow*

- Currency symbol can be up to four characters
- Set currencysymbol "\$"
- Suprtool by default will not stop if overflow occurs
- Set editstoperror on

# *\$number*

- \$number function
- Converts free-form numbers to numeric in one step
- Honors signs, decimal places and currency symbols
- This means numbers in New-Price can be read by \$number:

| Item-number | New-Price |
|-------------|-----------|
| 12345       | +123.45   |
| 34563       | + 27.5    |
| 21312       | + 1.545   |

# *\$number details*

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- Rounding and decimal places
- Error conditions
- Currency, Decimals and thousand symbols

# *Suprlink*

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- Combines two files by common key
- Link command allows for many to one relationship
- Join command allows for many to many relationships
- SQL- like feature
- Inner Join
- Outer Join

# *SQL continued*

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- Left Outer Join
- Right Outer Join
- Simple Join task

## *Join continued*

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- Only one Join per task
- Can specify a secondary key to join on

# *Output,else*

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- One Process Output two files
- If condition
- Output,else = if NOT condition
- MPE Temp file
- Other Platforms filename.else

# *Set FastRead On*

- MPE and MR Nobuf
- Set FastRead uses Eloquence Block read routines
- Two to Five times faster
- Less CPU and Wall Time



# *Dynamic Loading*

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- Dynamically loads whatever version of Eloquence library you have
- Shlib\_path
- Most applications providers set this for you
- Enhancement for the future

# ***Dbedit***

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- Edit Single Records
- Popular in MPE version for editing/fixing single records
- Now will work with Eloquence databases on HP-UX

# *Future*

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- Reporting?
- More work in a single pass