
Suprtool 5.6.12 for HP e3000:

Change Notice

by Robelle Solutions Technology Inc.



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Introducing Suprtool Version 5.6

Introduction

Suprtool provides fast access to your data on the HP e3000. With Suprtool, you can perform many necessary DP functions easily, with just a few simple commands. At Robelle we are constantly working on your enhancement requests so that we can include them every year when we release an updated version of Suprtool.

Highlights in Suprtool 5.6.12

- Suprtool now has the \$proper function which will shift the first character in a string and any first character after a space or ampersand.
- Suprtool now has the Translate command and a \$translate function to obfuscate test data or any byte field from being readable.

Highlights in Suprtool 5.6

- Suprtools' extract command now has three special keywords to help with extract using a range, which is designed to make your Suprtool scripts more easily maintained. Suprtool now has \$all, \$first and \$last which respectively means all fields, the first field or the last field. Note that \$first and \$last may only be used in a range extract.
- \$subcount has been added to keep a running count for a given sort break.

Highlights in Suprtool 5.5

- Set XLTRIM On now tells Suprtool to close a file and release the disc space between EOF and the Flimit.
- STExport's Escape command has been re-engineered to fix some corner cases that didn't work previously.

- Due to an issue with Btrees, Suprtool would incorrectly select records when doing an update or delete, and if using chain with a btree index on a master dataset.
- The \$edit function did not work properly with alpha based edit masks and if the target was greater than 32 characters.
- Suprtool now treats KSAM64 files with labels as SD files, in the same manner as KSAMXL files are.
- A warning will print if a non-regular SD file is loaded into a Table with the data option. The data is not loaded into the table.
- An error will print if an extract command attempts to reference data when loaded from table that in turn was loaded when using a non-regular SD file, such as KSAM/XL, KSAM64 and CM KSAM.
- Suprtool did not print out a warning message when attempting to combine sort with output,else.

Highlights in Suprtool 5.4

- Bradmark's DBGeneral can produce Jumbo datasets that are a single chunk, Suprtool did not handle these single chunk master jumbo datasets properly as the last block calculation was done only after opening the last chunk itself. We have adjusted the logic in making sure the calculation is done for this case earlier. Adager does not create these single chunk jumbo datasets. There is an undocumented \$control directive in dbschema called \$forcejumbo, which will produce one of these single chunk jumbos so we are supporting it in Suprtool 5.3.11.
- The Output command has been enhanced to accept the new verb "else", which when invoked it will write out the records that do not qualify and write them to an external file.
- Suprtool did not properly clear the data field information from a table at the end of a task.
- Suprtool did not properly zero out a packed field target when an table entry was not found when extracting data from a table.
- If \$lookup can now return the data portion loaded into a table to use in a comparison.
- STExport HTML command did not calculate the maximum record size properly in some cases.
- Suprtools prefetch default value has been changed from 2 to 0.

Known Problems

Set Itemlock does not work in one particular case.

Compatibility

Suprtool/iX is compatible with MPE V, MPE XL, and MPE/iX, including MPE/iX 6.5, 7.0 and MPE/iX 7.5.

Suprtools default prefetch value has been changed from 2 to zero.

Ksam64 files were not assumed to be Self-describing like CM KSAM and KSAMXL files when it was the input file and had labels.

A warning will print if a non-regular SD file is loaded into a Table with the data option.

An error will print if an extract command attempts to reference data when loaded from table that in turn was loaded when using a non-regular SD file, such as KSAM/XL, KSAM64 and CM KSAM.

CPU Serial Number and CPU Name (HPSUSAN & HPCPUNAME)

Suprtool and its associated products run only on CPUs whose serial numbers have been encoded ("showvar hpsusan" on MPE/iX). They also may be encoded with your HPCPUNAME values. If it fails to run and you get an "invalid HPCPUNAME" or "invalid HPSUSAN" error message, contact Robelle for assistance.

Documentation

The user manual contains the full description of all the Suprtool suite of products including Dbedit, Suprlink, STExport and Suprtool2, as well as usage tips and commands for each. The manuals are up-to-date with all the latest changes. To see only the changes in the latest version, see the "What's New" section of the manual, or see the change notice.

You can download our manuals and change notices in various formats and you can order printed (hardcopy) manuals from our web site at:

<http://www.robelle.com/library/manuals/>

Installation

Overview

We have two types of Installations, Tape and Download. We provide links to the Installation instructions on our web site for each type of Install.

Ecometry Users

Users of the Ecometry application need to use the installation instructions supplied by Ecometry Corporation. Those instructions have extra steps for updating the Ecometry code accounts.

You will find the Ecometry version of these instructions at <http://www.robelle.com/ecometry/>

Types of installations, tape, download combined qedit and suprtool tape.

Installation Instructions

If you received a production release tape from Robelle, then you can install using the instructions on this web page:

<http://www.robelle.com/support/install/tape/stprod.html>

If you downloaded the Suprtool production release from our web site then the instructions can be found here for the ftp download method:

<http://www.robelle.com/downloads/install-stprod-ftp.html>

and here for the WRQ download method:

<http://www.robelle.com/downloads/install-stprod-wrq.html>

Installation Assistance

If you have any questions about the upgrade process or run into any problems, please call us. Technical support is available on weekdays from 8 a.m. to 4 p.m. Pacific time at 289.480.1060 or you can e-mail your question to support@robelle.com.

Enhancements in Version 5.6.12

Introduction

Suprtool is constantly being updated with new features. The following section describes the new enhancements to Suprtool since Suprtool 5.6.

\$Proper

Suprtool now has the \$proper function which will shift to upper case the first character of a byte type field and after any space or ampersand. It will also shift to lower case any other characters in the byte-field.

```
>in mprod
>list stan
>xeq
Apr 29, 2014 13:00          File: mprod          Page 1

PRODUCT-DESC

skil 3/8" variable speed drill
b&d router
skil var. sp. auto-scroll saw
skil 8 1/2" circular saw
b&d cordless screwdriver
makita 8 1/4" circular saw
b&d variable speed jigsaw
makita 1/2" router
makita 3/8" var. speed drill
skil router
b&d 7 1/4" circular saw
b&d 3/8" variable speed drill
makita 1" jigsaw
```

Considering the following data, you can fix all of the product names with one simple task:

```
>in mprod
>ext product-desc=$proper(product-desc)
>list stan
>xeq
May 01, 2014 11:40          File: MPROD          Page 1

PRODUCT-DESC

Skil 3/8" Variable Speed Drill
B&D Router
Skil Var. Sp. Auto-Scroll Saw
Skil 8 1/2" Circular Saw
B&D Cordless Screwdriver
Makita 8 1/4" Circular Saw
B&D Variable Speed Jig Saw
Makita 1/2" Router
Makita 3/8" Var. Speed Drill
Skil Router
B&D 7 1/4" Circular Saw
B&D 3/8" Variable Speed Drill
Makita 1" Jig Saw
```


Note that any character after a space, “&”, or “-“ is upshifted for a proper name. Suprtool will also downshift those characters that do not qualify as needing proper capitalization and it is a capital character, the proper function will downshift those characters. See an example below:

```
>IN NAME
>LIST
>XEQ
>IN NAME.NEIL.GREEN (0) >OUT $NULL (0)
NAME      = NEIL ARMSTRONG

>IN NAME
>EXT NAME=$PROPER(NAME)
>LIST
>XEQ
>IN NAME.NEIL.GREEN (0) >OUT $NULL (0)
NAME      = Neil Armstrong
```

The \$proper function only works on byte type fields.

\$Translate

Suprtool now has a \$translate function which in conjunction with the translate command allows you to build a translation table, whereby you can translate from any byte character to any character. We have also added a method to a supplied translate table which will allow you to obscure the data such that it can't be read.

```
>in newprod
>list
>xeq
>IN NEWPROD.NEIL.GREEN (0) >OUT $NULL (0)
PRODUCT-DESC = Skil 3/8" Variable Speed Drill

>IN NEWPROD.NEIL.GREEN (1) >OUT $NULL (1)
PRODUCT-DESC = B&D Router

>in newprod
>translate tounread
>ext product-desc=$translate(product-desc)
>out unread,link
>xeq
IN=13, OUT=13. CPU-Sec=1. Wall-Sec=1.

>in unread
>num 1
>list
>xeq
>IN UNREAD.NEIL.GREEN (0) >OUT $NULL (0)
PRODUCT-DESC = Hzxo .2)? Epcxpqot Hatts Rcxoo
Warning: NUMRECS exceeded; some records not processed.
IN=2, OUT=1. CPU-Sec=1. Wall-Sec=1.

>in unread
>translate toread
>ext product-desc=$translate(product-desc)
>list
>xeq
>IN UNREAD.NEIL.GREEN (0) >OUT $NULL (0)
PRODUCT-DESC = Skil 3/8" Variable Speed Drill

>IN UNREAD.NEIL.GREEN (1) >OUT $NULL (1)
PRODUCT-DESC = B&D Router
```


You can make your own Translate table using the Translate command, where you can specify the character you want to translate and what you want to translate to, using Decimal Notation. So if you want to translate “A” to “Z”, you would type the command:

```
Translate “^65:^90”
```

So you specify the from character on the left in decimal which is the capital-A and the to-character is also in decimal format which is capital-Z, which is decimal 90. If you want to reverse the translation you can simply do the following command and translate the field back with:

```
Translate “^90:^65”
```

This is not meant to be an encryption solution, but it will help obfuscate test data really quickly.

Enhancements in Version 5.6

Introduction

Suprtool is constantly being updated with new features. The following section describes the new enhancements to Suprtool since Suprtool 5.5

Extract Command

Suprtool's extract command now has three new keywords, which can be used for extract range feature. You can now say extract \$all, extract \$first / \$last on an SD file or Image/Eloquence dataset. The intention is to make your scripts more easily maintained. If you had a script that you wanted to put a sequence number at the beginning and then extract the rest of the dataset you previously had to specify the starting field and the ending field. For example if the first field in a dataset was order-no and the last field was pst-code you may have a script that looked like this.

```
base orddb
get customers
def seq-no,1,4,double
ext seq-no=$counter
ext order-no / pst-code
out newfile,link
xeq
```

If you added any fields to the beginning or end of the dataset you would have to re-write the script. Now you can write the script as being:

```
base orddb
get customers
def seq-no,1,4,double
ext seq-no=$counter
ext $all
out newfile,link
xeq
```

You can also write the script using \$first / \$last as your preference, but \$first and \$last are also useful if you need to add data into the middle of the fields you extract:

```
base orddb
get customers
def seq-no,1,4,double
ext $first / zip
ext seq-no=$counter
ext tax-code / $last
out newfile,link
xeq
```

Please note that if a self-describing file has a fieldname that is a duplicate field and one of the duplicate fields is the last field in the file, then \$first / \$last and \$all, will only extract up to the first occurrence of the duplicate fieldname. This may seem as an issue but it is consistent with what Suprtool does currently with extract from a

range. Currently and prior to the \$first / \$last enhancement Suprtool would have extracted only up to the first occurrence of the field if you had a file such as this:

```
>form
File: newfile      (SD Version B.00.00)  Has linefeeds
  Entry:
    CHAR-FIELD      X5      1
    INT-FIELD       I1      6
    DBL-FIELD       I2      8
    PACKED-FIELD    P12     12
    PACKED*-FIELD   P12     18
    QUAD-FIELD      I4     24
    ID-FIELD        I1     32
    LOGICAL-FIELD   K1     34
    DBLLOG-FIELD    K2     36
    ZONED-FIELD     Z5     40
    FILLER          X36    45
    FILLER          X36    81
Entry Length: 116  Blocking: 1
```

Notice that FILLER is a duplicate named field, so if you entered, extract char-field / filler, Suprtool would only extract up to and including the first FILLER field. For consistency, extract \$first / \$last behaves the same way.

\$SubCount

\$SubCount has been added to provide a counter that only gets reset at a given sort break.

```
In filelsd
Sort char-field
Def control-count,1,4,double
Ext $first / $last
Ext control-count=$subcount(char-field)
Out newfile,link
xeq
```

What Suprtool will do in this case is start incrementing a number starting with 1, and increase by 1 for any given char-field value. This way you can add a counter based on a sort break for a given field.

Enhancements in Version 5.5

Introduction

Suprtool is constantly being updated with new features. The following section describes the new enhancements to Suprtool since Suprtool 5.4.

Set XLTRIM

Suprtool now has the command Set xltrim on, which tells Suprtool to close the output file in a manner in which it releases the disc space between EOF and the Flimit, but the Flimit remains the same. This trim will only occur if set squeeze is not set or if set squeeze is off.

Escape Command

STExports Escape command has been revised to be faster and a couple of corner cases.

Enhancements in Version 5.4

Introduction

Suprtool is constantly being updated with new features. The following section describes the new enhancements to Suprtool since Suprtool 5.3.

Get Command

Bradmark's Adager can produce Jumbo datasets that are a single chunk, Suprtool did not handle these single chunk master jumbo datasets properly as the last block calculation was done only after opening the last chunk itself. We have adjusted the logic in making sure the calculation is done for this case earlier. Adager does not create these single chunk jumbo datasets. There is an un-documented \$control directive in dbschema called \$forcejumbo, which will produce one of these single chunk jumbos so we are supporting it in Suprtool 5.3.11.

Output Command

The Output command has been enhanced to accept the new verb "else", which when invoked it will write out the records that do not qualify and write them to an external file.

Consider the following task:

```
base mydb
get customers
if custno >= "50A"
out mycusts,link,else
xeq
```

Suprtool will create two files one called mycusts and another called else which will be a temporary file. This works for flat files, Image (via get and chain) and KSAM files. The temporary ELSE file will NOT prompt if there is a duplicate. It will simply purge the file prior to creating the new temporary file. You can of course use file equations to re-direct the output to another named temporary file but the user is responsible for insuring that the file equated filename doesn't exist so that the write operation will work.

You cannot combine output ,else with the num or key options. In this case Suprtool will tell you it is ignoring the ,else operation. You cannot combine output,else with any of the dup or nodup options or the duplicate command. Suprtool will generate an error in this case.

Bugs Fixed

Bugs Fixed In Suprtool 5.5

Ksam64 files. Ksam64 files were not assumed to be Self-describing like CM KSAM and KSAMXL files when it was the input file and had labels.

Sedit function. The \$edit function did not work well with alpha based edit masks and if the target was greater than 32 characters.

Table File Data Load. A warning will print if a non-regular SD file is loaded into a Table with the data option. The data is not loaded into the table.

Table File Data Lookup. An error will print if an extract command attempts to reference data when loaded from table that in turn was loaded when using a non-regular SD file, such as KSAM/XL, KSAM64 and CM KSAM.

BTrees and Chain. Due to an issue with Btrees, Suprtool would incorrectly select records when doing an update or delete, and if using chain with a btree index on a master dataset.

Bugs Fixed In Suprtool 5.4.01

Output, Else. Suprtool would not print a warning when output,else was specified during a sort operation.

Bugs Fixed In Suprtool 5.3.11

GET Command. The Get command would get too many records if the dataset was a single chunk jumbo dataset. Only Dbgeneral and dbschemas \$forcejumbo can make these single chunk datasets.

Table Command. Suprtool did not properly clear the data field information from a table at the end of a task.

Extract from Table. Suprtool did not properly zero out a packed field target when an table entry was not found when extracting data from a table and the Packed field was P12 or higher.