Suprtool 5.0 for HP-UX:

Change Notice

by Robelle Solutions Technology Inc.

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Introducing Suprtool Version 5.0

Overview

Use Suprtool/UX to read, select, and sort data from Oracle, Allbase and Eloquence databases and data files with fixed-length records. Suprtool/UX is designed to be similar to Suprtool for MPE while providing necessary HP-UX features.

Suprlink/UX provides high-speed data-file linking based on a sort key. Use STExport to convert fields in a self-describing input file into an output file that can be imported into different applications.

Highlights in Suprtool 5.0

- Suprtool2 for HP-UX would abort with Signal 11 if the ROBSUPR variable was not set and thousands of invocations of Suprtool, thru the Suprtool2 interface. (5.0)

- Suprtool2 would write line feeds to the stdin file at 128 bytes if the command line write exceeded 128 bytes. (5.0)

- Suprtool would use the incorrect record size when writing out records directly from an Oracle table and with Set Oracle integer on or Set ifouroutput on.

- Set RealMap has been added to control if Suprtool for HP-UX maps Real Numbers to Ieee. The default is to do the mapping.

- STExport now supports SD file items that are considered R type. It will map them to IEEE automatically. Previously STExport would fail when trying to support R type items.

- Set HPUXCMDERR allows user to configure which commands are not considered fatal errors when running in batch. (4.9.06)

- The $split function would abort on some systems if the $split character was the last character in the string. (4.9.06)

- Suprtool now checks that the respective libraries have been loaded for the Open command for Oracle, and the Base command for Eloquence. (4.9.06)

- Suprtool has had some groundwork done for a new enhancement for fieldnames up to 32 characters to be supported in SD files. (4.9.05)

- Suprtool for HP-UX version 4.9.04 had calls to it's internal timer call information disabled which made progress messages display inaccurate wall time statistics. (4.9.05)

- Suprtool for HP-UX, dynamic Image loading version did not properly startup in some cases, specifically when trying to detect if it could use the Fastread option or not. (4.9.05)

- Suprtool for HP-UX would occasionally fail with mmap errors in some environments. (4.9.04)

- The Base command on it's own did not close the current database like it did on MPE. (4.9.04)

- Set varsubcompat flag has been added to control how variable substitution behaves on HP-UX. (4.9.04)

- STExport would fail if the input file did not have any line feeds and the XML command would in effect. (4.9.04)

- Oracle load warning messages are no longer printed by default. (4.9.04)

- Suprtool would abort if an invalid password was specified in some configurations of Eloquence and if used with other Image replacement libraries. (4.9.04)

- Suprtool for HP-UX would not set the return code variable $?, if it failed with some syntax errors. (4.9.03)

- Suprtool had some debug messages were left over in the Table module. (4.9.03)

- Suprtool would have a stack overflow when the input source was an Oracle table, the if command was used and no records were selected. (4.9.03)

- Suprcall would not always print the stdlist if the print-state was set to ER. (4.9.03)

- Suprcall now returns an error status if Suprtool run has an error. (4.9.03)

- A stack overflow error would occur when sorting with two sort keys and the input source was an Oracle Table. (4.9.02)

- Suprtool would output 100 blank records when reading an empty Eloquence dataset with set fastread on. (4.9.02)

- Suprtool2 fixed to work better with certain cobol compilers and compiler options. (4.9.02)

- Command lines that were not terminated with a null are now handled correctly in Suprtool2. (4.9.02)

- Print state and execution of print of stdout now works properly in all cases in Suprtool2. (4.9.02)

- Tmpnam call would occasionally abort on Itanium due to ineffective space allocation in Suprtool2. (4.9.02)

- The Total command now supports the $file and $list options. (4.9.01)

- Output=input now writes out the sort information if the file involved is self-describing. (4.9.01)

Known Problems

Occasionally and Add to an Oracle Table aborts, typically after multiple large adds. Currently the work around is to just start a fresh copy of Suprtool for the particular Add task that the abort occurs on.

If you have any questions or concerns or feedback on this or any other issue, please feel free to e-mail me at: neil@robelle.com

Compatibility

Previously, Suprtool would treat an "R" type field in an Eloquence database as an R type while the data inside Eloquence is stored and treated as IEEE therefore incorrect results would occur with coercions and arithmetic operations. Suprtool now by default maps all Real and Long fields to their respective IEEE fields. You can change Suprtool back to the previous behaviour with Set RealMap Off.

A form command will still show the fields as being "R2" or "R4", but internally Suprtool will treat as IEEE, which is how Eloquence stores and treats the numbers.

Consequently STExport will now support items in SD files that are condidered R type, however it correctly will map them to IEEE.

Suprtool/UX 4.9 is now compatible with,all versions of HP-UX 11.2x, as well as Oracle version 8 and higher.

Suprtool/UX version 4.8.02 and lower is compatible with HP-UX 9.0 and higher and Oracle 7.

CPU Serial Number (uname)

This program runs only on CPUs whose serial numbers have been encoded (the "uname" on HP-UX). If it fails to run and you get an "invalid HPSUSAN" error message, contact Robelle for assistance, via support@robelle.com or the support number at 1-800-453-8970.

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.

You can download our manuals and Change Notices in PDF format or HTMLHelp format (.CHM) and even order printed (hardcopy) manuals from our web site at:

Installation

Overview

The following instructions describe the installation process of a new Suprtool release. The new version overwrites an existing version of Suprtool on your HP-UX system.

Installation Instructions

There are typically two main types of installations. The first and most often utilized is the Download instructions. You can find the HP-UX download install instructions here:

http://www.robelle.com/downloads/install-sxprod.html

Tape installation instructions can be found here:

http://www.robelle.com/support/install/tape/sxprod.html

Installation Assistance

If you have any questions 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 1.800.453.8970. Technical support can also be obtained via e-mail at: support@robelle.com If your new version of software will not run, you can page someone from technical support by calling the 1.800 number, or you can typically easily run extend with the disaster

option to tide you over until business hours. Instructions for this are available at:

http://www.robelle.com/disaster/

Enhancements in Version 5.0

Introduction

Suprtool is constantly updated with new features and bug fixes. The following section describes all the changes for this pre-release.

Base and Open Commands

If the Eloquence and Oracle libraries are not loaded the Base and Open commands will print an error saying that the appropriate libraries were not loaded when the Base and Open commands are entered. Previously, Suprtool would simply abort.

Set HPUXCmdErr "<string>"

HP-UX and MPE are different in terms of the errors that are generated with some file operations that are impacting scripts that are converted from MPE. The most common example is the "purge" or rm of a file that does not exist.

On MPE this is not considered a hard error but rather a warning. HP-UX does not have this granularity and is just considered an error. The net result of this is that a script will stop working if the rm of the file is done inside Suprtool for HP-UX. For example the ksh returns an error code of 2 if you attempt to remove a file that does not exist.

```
rm file1x

rm: file1x non-existent

echo $?

2
```

We have added Set HPUXCmdErr command which will tell Suprtool to ignore errors from certain OS commands. Please note that this does not impact Suprtool's internal checking of Suprtool commands.

For example if you want Suprtool to ignore the common occurrence of stopping a script when an "error" occurs you just need to set the string in HPUXCmdErr as follows:

```
/opt/robelle/bin/suprtool << \!EOD
set hpuxcmderrs "rm,:rm,!rm"
:rm file1x
rm file1y
!rm file1y
exit
!EOD
```

If the command returns an error Suprtool will check to see if it was an rm,:rm or !rm command and ignore the error.

Set SDEXtname On | Off

Groundwork has been done for support of fieldnames up to 32 characters and have that information in SD files. This has been completed in Suprtool, however, it has been disabled for this release until Suprlink can be enhanced for the pre-release 5.0.10.

Set VarsubCompat On | Off

The Set VarsubCompat flag has been added to Suprtool for HP-UX to have variable substitution be more flexible. On MPE variable substitution would pass the name of the variable thru to be parsed even if the variable was not set. On HP-UX the default behaviour was to return spaces if the environment variable was not set. This is still the default behaviour, however if you set varsubcompat on, Suprtool will return the environment variable name similar to how MPE works with unresolved variables.

Dynamic Loading

In the last few versions of Suprtool we have used two different methods of dynamically loading the Oracle routines. Starting with this version of Suprtool, you can now vary how Suprtool chooses to dynamically load the routines. By default, Suprtool will use shl_load and findsym to load the Oracle and Eloquence routines.

You can force Suprtool to dlopen and dlsym if you set the environment variable ROBELLE_DYN_LOAD to any value. This does not impact the version of Suprtool that loads the Image replacement intrinsics used by the ROBELLELIB_IMAGE as this version will always use findsym.

Suprtool version 4.9.03 used dlopen in some cases and this did not always work in terms of loading the Oracle libraries. This enhancement is to provide control over the method for loading the libraries while reverting back to shl_load which works better and the new methods allows for greater flexibility.

Set ItemLock <fieldname>

Suprtool now supports Item Level locking thru the Set ItemLock <fieldname> command. The set command must be specified after the Base and Get/Chain command has been specified.

However, some users worked around this issue by doing the following:

```
!run suprtool.pub.robelle
base order,1,;
get dline
set itemlock item-num
del
out save,link
exit
```

Item Level locking is only effective for Deletes and Updates.

Dynamic Load Warnings

When loading Oracle libraries Suprtool would report warnings on startup if it failed to load the Oracle libraries. Suprtool by default no longer prints these warnings. To check if your libraries were loaded you can run Suprtool with the –lw option:

```
./suprtool -lw
```

Set RealMap On | Off

Previously, Suprtool would treat an "R" type field in an Eloquence database as an R type while the data inside Eloquence was stored and treated as IEEE therefore incorrect results would occur with coercions and arithmetic operations. Suprtool now by default maps all Real and Long fields to their respective IEEE fields. You can change Suprtool back to the previous behaviour with Set RealMap Off.

A form command will still show the fields as being "R2" or "R4", but internally Suprtool will treat as IEEE, which is how Eloquence stores and treats the numbers.

This will also include Self-Describing files as being the input source. Suprtool will still not allow the definition of a Real or Long datatype.

Consequently STExport will now support items in SD files that are condidered R type, however it correctly will map them to IEEE.

Bugs Fixed

Bugs Fixed In Suprtool 5.0

Suprtool2 for HP-UX. Suprtool2 would abort with Signal 11 if the ROBSUPR variable was not set and thousands of invocations of Suprtool, thru the Suprtool2 interface. (5.0)

Suprtool2 for HP-UX. Suprtool2 would write line feeds to the stdin file at 128 bytes if the command line write exceeded 128 bytes. (5.0)

Real Numbers. Suprtool for HP-UX would incorrectly treat "R" (real and long) fields as Real and Long when it should have treated and mapped them to Ieee. (5.0)

Set IfourOutput. Suprtool would use the incorrect record size when writing out records directly from an Oracle table and with Set Oracle integer on or Set ifouroutput on.

Bugs Fixed In Suprtool 4.9.06

$split bug. Suprtool for HP-UX would abort on some versions of HP-UX if the split character was the last character in the string.

Bugs Fixed In Suprtool 4.9.05

Progress Messages. Suprtool for AMXW had calls to it's internal timer call information disabled which made progress messages not to have correct Wall Time stats.

Dynamic Loading. Suprtool for AMXW, dynamic Image loading version did not properly startup in some cases, specifically when trying to detect if it could use the Fastread option or not.

Bugs Fixed In Suprtool 4.9.04

Table Command. Suprtool would occasionally fail with mmap errors on HP-UX.

Base Command. The Base command on it's own did not close the current database like it did on MPE.

Fastread and Locking. Suprtool would fail with a dbstatus 17, no current record found when doing an update or delete operation with Set Fastread on and Set Lock 0.

Update from a Table. Update from a Table would incorrectly update some fields with spaces if the record was not found in the table.

XML Command. Suprtool would core abort if the input file did not have line feeds and the XML options was used.

Bugs Fixed In Suprtool 4.9.03

OS Communication. Suprtool for HP-UX would not set the return code variable $?, if it failed with some syntax errors.

Table Command. Suprtool had some debug messages were left over in the Table module.

Oracle Access. Suprtool would have a stack overflow when the input source was an Oracle table, the if command was used and no records were selected.

Suprtool2. Suprcall for AMXW would not build a tempfile even if the Build command was specified in the Suprtool task.

Suprtool2. Suprcall would not always print the stdlist if the print-state was set to ER.

Suprtool2. Suprcall now returns an error status if Suprtool run has an error, in both the AMXW version and the regular HP-UX version.

Bugs Fixed In Suprtool 4.9.02

Oracle Access. A stack overflow error would occur when sorting with two sort keys and the input source was an Oracle Table.

Set FastRead On. Suprtool would output 100 blank records when reading an empty Eloquence dataset with set fastread on.

Suprtool2. Command lines that were not terminated with a null are now handled correctly in Suprtool2.

Suprtool2. Print state and execution of print of stdout now works properly in all cases in Suprtool2.

Suprtool2. Tmpnam call would occasionally abort on Itanium due to ineffective space allocation in Suprtool2.