This is a list of all changes introduced to SALT and Spice (User commands) since V12.1.

# **Changes to SALT**

SALT can now save some root Variables. They are limited to arrays not containing refs or ORs

The editor now allows you to save changes on top of the current version. For example, if the current version is 5 then, upon exiting the editor after a change, the prompt will allow you to create a new version (#6), overwrite the current one (#5) or skip saving the changes onto file. Similarly, the prompt for non-versioned files has been modified to make it clear what YES and NO mean.

All commands dealing with filenames now accept dot (.) to mean "the same folder currently in use" thus, if the current folder name is **C:\apl\mywss\utils** 

load ./mu1

will load from file C:\apl\mywss\utils\mu1.dyalog

Save also accepts '=' as the <u>last</u> character to mean "same name as the object", thus

]save VeryLongNameToType /my/path/=

will save the object in \my\path\VeryLongNameToType.dyalog

The non-versioned filename of a script now represents the CURRENT version and is identical to the LAST version file of a script, e.g. a script whose last version is 23 in file **S.23.dyalog** will have an identical file named **S.dyalog**. This allows external programs like SubVersion to pick the latest version without having to rename the last versioned file.

#### Commands

The *List* command now accepts switch **-type** to show the type of object in a SALT file (fn, var, ns, class). With **-version** it no longer lists the non-versioned file (it still lists it if **-version** is not used).

The *Load* command now accepts **-protect** to prevent existing objects from being overwritten. It also accepts a value of **no** for **-source** which allows you to *Load* a namespace in the workspace without a script, thus saving space.

The *RemoveVersions* command now returns (shyly) the number of files processed (0=no change, -1=user cancelled). It treats the non-versioned file appropriately when **-collapse** is used.

The Save and Snap commands now accept a **-banner** switch to include a banner in <u>converted</u> namespace scripts as a comment on top of the script. If the banner is  $\underline{\phi}$  expression then the value of 'expression' is used instead.

Snap now accepts **-nosource** to allow a *load\_ws* function to recreate namespaces without a source (using **Load '... -source=no'**)

## **User commands**

Results can now be assigned to a variable:

```
lx \leftarrow cmdz ...
```

Multiple help levels: the function <Help> can be written with a left argument which will contain the level of <a href="extra">extra</a> help needed, e.g.

```
1??cmd
```

will call <Help> with a left argument of 1 (because of ONE extra '?' specified)

```
]? Now returns a LIST a la )FNS of the available commands and ]?+ provides a detailed list as was ]? Previously
```

The groups have also been reorganised.

Debugging: user commands written in scripted namespaces now use and update the copy in the workspace if it is there. Previously if you made changes to the script while executing it would only update the local copy and you were forced to reload the script if you wanted the latest copy. Note that debugging must be turned ON for this to happen.

## **Modified commands:**

UDebug can now turn system debug flags ON/OFF

CPUtime now accepts -repeat=number and/or time. Time is denoted by a number followed by

an 's' (for seconds) or 'm' (for milisecs).

ffind (renamed from find) 2 new switches

freplace (renamed from replace) 2 new switches

fncalls works on objects in the workspace; new switch -file allows it to act on files instead

summary works on objects in the workspace; new switch -file allows it to act on files instead

svnci now accepts versioned SALT files. When versioned files are used, all versions but the

last one can be removed with the **-clean** switch before the last version is used to commit to subversion. This allows you to do finer updates in APL and coarser

updates in, for example, SubVersion.

xref works on objects in the workspace; new switch -file allows it to act on files instead

### **New commands:**

Snap same as the SALT Snap function.

HelpExample shows how to make use of multiple level help

UClean removes all traces of SALT in the workspace

UMonitor turns monitoring on or off. When ON MONITOR information is kept in global

variable #.UCMDMonitor as a list of pairs consisting of the <a>ICR</a> of each function in

your command that generated data followed by its MONITOR data. This information can subsequently be used to do control and code coverage.

calendar this utility can display a yearly or monthly calendar

dinput execute or define a multi-line D-expression

disp display expressions as per the <disp> utility function

factors of returns the factors of a number

profile for V13 only: produce a detailed report of CPU usage using the new PROFILE

system function

tohtml produces browser ready output

wspeek executes an expression in a temporary copy of WORKSPACE

wscompare compares 2 workspaces

varcompare compares 2 variables

fncompare compares 2 functions

supdate updates a script with the new items added to it in non-scripted form