## **01/23/07** - Insight IBM uses for product maintenance to simplify the installation/post-install/fixes for Z/OS

Here is additional insight IBM uses for product maintenance to simplify the installation/post-install/fixes for z/OS, some if not all USS products include shell scripts now. These scripts perform processing when SMP/E installs elements into a UNIX file system. A <u>product packager</u> normally includes any necessary shell scripts with the product. For example, if the hierarchical file system element is a TAR or PAX file, you can provide a shell script that performs the necessary steps to restore the file. As with other products, you use SMP/E to copy the element (a TAR or PAX file) to a directory in a UNIX file system. However, you rely on the element's shell script to actually explode the file into its component subdirectories and files. SMP/E provides IBM and vendor product packagers with a generic interface for writing these UNIX shell scripts.

As a side note, to process a file in a UNIX file system, a shell script must be able to cope with both of the actions that SMP/E can potentially perform on the file: copy and delete. That is, SMP/E can copy the file to a directory in a UNIX file system (as a new file or a replacement for an existing file) and, later, SMP/E can delete the file from a UNIX file system directory. A shell script must be able to detect either of these conditions (copy or delete) and respond accordingly. Assume, for example, that as part of deleting or replacing a product on your system, you delete a function that was shipped in the product's tar file. SMP/E deletes only the original tar file from the directory in a UNIX file system. It is the responsibility of the shell script to clean up (delete) the tar file's exploded component subdirectories and files. Even through this install-maintenance process is an option it is gaining more popularity as a means of doing SMP.

This sample contains three steps to perform the following

//\* tasks: //\*

//\* Un-pax Step:

//\* Un-paxes the single download file into the component archive

//\* files that make up the download package.

//\*

//\* GIMUNZIP Step:

//\* Runs the SMP/E GIMUNZIP service routine to extract the FMIDs

//\* from the download package archive files.

//\*

- //\* SMP/E RECEIVE Step:
- //\* Runs SMP/E to receive the FMIDs from the data sets extracted
- //\* during the GIMUNZIP step.