



## Technical Articles

### *ASLMF Errors When Running on HP-UX 11.11/i*

HP has introduced some new twists on shared memory usage with the introduction of the HP-UX 11.11/i operating system. Some of these HP enhancements required similar changes in Micro Focus Application Server runtime licensing, as well as the runtime licensing for Server Express Developer. This article will cover these changes.

As more HP customers migrate their COBOL applications to HP-UX 11.11/i from older HP operating systems, which are no longer supported, Micro Focus SupportLine has recorded more cases of ASLMF memory failures. Here are two that are particular to this environment and are easily resolved.

#### **ASLM 1025 Due to misuse reboot is required**

This error may not be solely caused by the change to HP-UX 11.11/i for shared memory windows but the problem persists in all Server Express 2.0.10, 2.0.11, 2.0.11 SP1 and Server Express 2.2 and 2.2 SP1 when running on this HP platform.

It is critical that HP-UX 11.11/i customers apply the FixPack for Server Express 2.2 SP1 Fixpack 22.02\_2 or later. This FixPack contains the patch to ASLMF that recognizes the HP enhancement for shared memory and shared memory windows which requires that ASLMF check the setting for an HP internal parameter called IPC\_GLOBAL.

Customers who require the previous Server Express versions for compatibility with Third Party vendor packages should request that their UNIX administrators ensure that the system configuration for shared memory windows not be applied.

Note that Server Express 2.2 SP2, 4.0 and 4.0 SP1 have not experienced this particular error (at the time of this writing) with the exception of those UNIX housekeeping utilities that clean-up any and all shared memory usage.

#### **ASLM: shm open fail**

#### **ASLM: Errno 2013**

In 32-bit mode on HP-UX 11.11/i a new feature was introduced by HP to allow customers to increase memory utilization by about 1GB. This option is set with the 'chatr' command following the compile and link (cob -x) to a COBOL executable, for example, dummyread:

```
Set COBMODE=32
Export COBMODE
Cob -x dummyread.cbl
chatr +s enable +q3p enable dummyread
```

If the Server Express runtime (Application Server) version does not contain the ASLMF patch (as noted above for error ASLM 1025), then the execution of dummyread will fail with the ASLM 2013 error. Or, and even more confusing for customers as well as SupportLine, if a prior version of Server Express had been installed on the HP-UX 11.11/i machine and then Server Express 2.2 SP2 (or later version) is installed, this error will persist until the ASLM shared memory contents have been totally

reinitialized by a system reboot or by deleting and reinstalling the ASLMF software and Application Server license keys (or ./devas to restore Server Express Developer runtime licenses) .

Stay tuned for another technical article about what causes ASLM 2014 abends.

If you are curious about these shared memory utilization features, look at the HP man pages for details about the command, chatr.

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