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SUBJECT: Stack header

In order to make rings work properly it becomes necessary to maintain a separate pointer to `signal_` in each ring that the FIM can use to call `signal_` in that ring. The signal pointer for a particular ring can most easily be kept in the stack header for that ring. As long as we must place the `signal_` pointer in the stack header it is a simple matter to maintain the other information in the stack header.

This other information is that proposed for users with the new call, `save`, return sequences and includes the stack end pointer, the LOT pointer, and the operators pointer. The stack end pointer must be maintained by the new `save` and return sequences so is of no interest to this proposal. However, the LOT pointer and the operators pointer need be set only once when a stack is created and can easily be initialized at the same time as the `signal_` pointer. Once the stack header contains these pointers then the PL/I compiler can be modified to take advantage of them.

The proposed locations of the pointers are as follows:

Word no.

0-1	stack end ptr
2-3	unused (now contains validation level)
4-5	LOT pointer
6-7	operators pointer
8-9	signal_ pointer
10-15	unused
16	beginning of dummy stack frame

Note that the dummy stack frame will have to be moved from word 8 of the stack to word 16.

Please let me know if you have any comments on this proposal.