

Procedure linkages

The linkage divides responsibility between *caller* and *callee*

	Caller	Callee
Call	<i>pre-call</i>	<i>prologue</i>
	<ol style="list-style-type: none">1. allocate basic frame2. evaluate & store params.3. store return address4. jump to child	<ol style="list-style-type: none">1. save registers, state2. store FP (dynamic link)3. set new FP4. store static link5. extend basic frame (for local data)6. initialize locals7. fall through to code
Return	<i>post-call</i>	<i>epilogue</i>
	<ol style="list-style-type: none">1. copy return value2. deallocate basic frame3. restore parameters (if copy out)	<ol style="list-style-type: none">1. store return value2. restore state3. cut back to basic frame4. restore parent's FP5. jump to return address

At compile time, generate the code to do this

At run time, that code manipulates the frame & data areas