HPEC 2010
Automated Software Cache Management

WWW.GEDAE.COM
Standard Approach

Gedae Approach

**Gedae moves the complexity of hand coding, distribution of computation and resource management (e.g. load balancing) to the compiler.**
Compiler Creates a Code Tree

The OS kernel loads the code root. The compiler has built in functions to load as needed.

Compiler localizes each code module and aligns them in memory to maximize the transfer speed from system memory.
Each SPE Manages Its Own Code Tree

The PPE controls the mode of operation. Once set it informs each SPE of the code tree it is to run and each SPE then runs independently maximizing concurrency.