4.4 MRAPI Memory

MRAPI supports two memory concepts: shared memory and remote memory. Shared memory is semantically the same as shared memory in, e.g., POSIX® except that it is also supported for heterogeneous systems (here heterogeneity may mean hardware or software), otherwise there would be no need to have it in the MRAPI standard. Remote memory caters to non-uniform memory architecture machines such as the Cell processor, where the SPEs cannot access PPE main memory via load and store instructions, and must use DMA or a software cache, or special purpose accelerators such as graphics processing units which also use DMA.

For both memory types, remote and shared, a node must attach before using the memory and detach when finished.