• Loading ACE software onto the network processor
• Creating and initializing each ACE
• Resolving names
• Managing the operation of ACEs
• Allocating and reclaiming resources such as memory
• Controlling microengine operation
• Providing communication among ACE core components
• Providing an interface to non-ACE applications
• Providing an interface to operating system facilities
• Forwarding packets between the core component of an ACE and the microblock(s)