Sharing in current systems

- Shared memory
  
  Process 1
  fh = CreateFile("abc");
  mh = CreateFileMapping(fh, …, “s1”);
  p1 = MapViewOfFile(mh, …);
  *p1 = ‘A’
  
  Process 2
  mh = OpenFileMapping(…, “s1”);
  p2 = MapViewOfFile(mh, …);
  Cout<<*p2; //Displays A

- Other IPC mechanisms
  - Message passing, Pipes
Opal

- Motivation
  - Support Integrated Software environments – Boeing CAD

- Key Characteristics
  No “programs” – All codes exist as procedures/lib residing in shared address space.
  Protection domain is an execution context for threads.
  A portal is an entry point to a domain through which interdomain communication is done.