In-Process Component Activation

client

- client calls CoInitialize( )
- client calls CoCreateInstance( )

CLSID, interface pIX →

COM

- COM searches registry, finds InProcServer32 for CLSID and calls LoadLibrary( )
- COM calls GetProcAddress( ) for DllGetClassObject( )
- COM calls DllGetClassObject( ) gets pointer to class factory in server DLL
- COM calls class factory createInstance( ) asking for pIX
- COM returns pointer to requested object interface

inproc server

- server DLL loaded, DllMain( ) called
- DllGetClassObject( ) { - - }

← pCLFact

- Class Factory creates instance of object and returns pointer to COM

← pIX

← pIX

- Client uses pointer to access object's interface methods

← send and receive data →

- server responds to invocation

  this is a synchronous call

- client calls release( ) on object's interface

- object decrements reference count

- client calls CoUninitialize( )

- if refence count = 0 COM calls FreeLibrary( )

- server DLL is unloaded

client   # COM   # inproc server