

```
1  #pragma once
2
3  #ifndef SERVER_SOCKET_H
4  #define SERVER_SOCKET_H
5
6  // THIS_IS_SERVICE_APP is defined in the PAM project under C++ | Preprocessor Definitions
7
8  #ifdef THIS_IS_SERVICE_APP
9  // #define MAIN_DLG_NAME CTscanDlg
10 #else
11 #define MAIN_DLG_NAME CTscanDlg
12 #endif
13
14
15 #ifndef SERVER_CONNECTION_MANAGEMENT_H
16 #include "afxsock.h"
17 #include "ServerConnectionManagement.h"
18 #include "CCmdFifo.h"
19 #endif
20 #include "HwTimer.h"
21
22
23 #define MAX_PAM_BYTES 1260*8
24 // expected msg size is 1260*8 = 10080
25
26 // Listener thread creates and holds the eListener socket
27 // Permanent Server connection thread are designated as eServerConnection
28 // The temporary socket used by OnAccept to build the server connection socket is the eOnStack socket
29 enum { eListener, eServerConnection, eOnStack };
30
31 // CServerSocket command target
32
33 class CServerConnectionManagement;
34 class CServerSocketOwnerThread;
35
36 // *pSCM;
37 class CServerSocket : public CAsyncSocket
38 {
39 public:
40     CServerSocket();
41     CServerSocket(CServerConnectionManagement *pSCM, int nOwningThreadType);
42
43     virtual ~CServerSocket();
44     void Init(void);
45     virtual void OnAccept(int nErrorCode);
46     virtual void OnReceive(int nErrorCode);
47     virtual void OnClose(int nErrorCode);
48
49     int InitListeningSocket(CServerConnectionManagement * pSCM);
50     void SetSCM(CServerConnectionManagement *pSCM) { m_pSCM = pSCM; }
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51  CServerConnectionManagement * GetSCM(void)      { return m_pSCM; }
52
53  void OnAcceptInitializeConnectionStats(ST_SERVERS_CLIENT_CONNECTION *pscc,  ↗
54      int nMyServer, int nClientPortIndex);
55  //void KillpClientConnectionStruct(void);
56
57  //int SendPacket(BYTE *pB, int nBytes, int nDeleteFlag);
58
59  void LockRcvPktList(void)      { if (m_pSCC) { if (m_pSCC->pCSRcvPkt)  ↗
60      EnterCriticalSection(m_pSCC->pCSRcvPkt); } }
61  void AddTailRcvPkt(void *pV)  { if (m_pSCC) { if (m_pSCC->pRcvPktList)  ↗
62      m_pSCC->pRcvPktList->AddTail(pV); } }
63  int GetRcvListCount(void)      { if (m_pSCC) { if (m_pSCC->pRcvPktList)  ↗
64      return m_pSCC->pRcvPktList->GetCount(); } return 0; }
65  void UnLockRcvPktList(void)    { if (m_pSCC) { if (m_pSCC->pCSRcvPkt)  ↗
66      LeaveCriticalSection(m_pSCC->pCSRcvPkt); } }
67
68  void LockSendPktList(void)     { if (m_pSCC) { if (m_pSCC->pCSSendPkt)  ↗
69      EnterCriticalSection(m_pSCC->pCSSendPkt); } }
70  void AddTailSendPkt(void *pV) { if (m_pSCC) { if (m_pSCC->pSendPktList)  ↗
71      m_pSCC->pSendPktList->AddTail(pV); } }
72  void UnLockSendPktList(void)   { if (m_pSCC) { if (m_pSCC->pCSSendPkt)  ↗
73      LeaveCriticalSection(m_pSCC->pCSSendPkt); } }
74
75  //void KillMyThread(void)      { m_pSCC->bExitThread = 1;  ↗
76      }
77
78  UINT GetPacketsSent(void)      { return (m_pSCC ? m_pSCC->uPacketsSent :  ↗
79      NULL ); }
80  void SetClientIp4(CString s)    { m_sClientIp4 = s; }
81  CString GetClientIp4(void)     { return m_sClientIp4; }
82
83  //void * GetWholePacket(int nPacketSize, int *pReceived);
84
85  BYTE GetConnectionStatus(void) { return (m_pSCC ? m_pSCC->bConnected :  ↗
86      eInstrumentNotPresent); }
87  void SetConnectionStatus(BYTE s) { if (m_pSCC) m_pSCC->bConnected =  ↗
88      s; }
89
90  void SetClientPortIndex( int indx ) { m_nClientIndex = indx; }
91  // call these get/set function from ServerSocketOwnerThread ExitInstance to  ↗
92  // update
93  // the values
94  ST_SERVERS_CLIENT_CONNECTION * GetpSCC( void );
95  void SetpSCC( ST_SERVERS_CLIENT_CONNECTION* p ) { m_pSCM->m_pstSCM-  ↗
96      >pClientConnection[m_nClientIndex] = p; }
97  void NullpSCC(void)            { m_pSCM->m_pstSCM-  ↗
98      >pClientConnection[m_nClientIndex] = 0; }
99
100  // variables
101  CServerConnectionManagement *m_pSCM;      // ptr to the controlling class

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88     ST_SERVERS_CLIENT_CONNECTION *m_pSCC;           // ptr to my connection info/
               statistics/objects
89     ST_SERVER_CONNECTION_MANAGEMENT *m_pstSCM;      // pointer to my global structure
               instance
90     int m_nMyServer;                                // which server are we connected
               stSCM[MAX_SERVERS]
91     int m_nClientIndex;                             // which instance of
               pClientConnection[MAX_CLIENTS_PER_SERVER];
92     CWinThread * m_pThread;                         // ptr to thread which created
               the socket
93     int m_nOwningThreadType;                        // 0=Listener, 1=ServerConnection
               thread owns this socket class
94     int m_nOwningThreadId;                          // debugging
95     int m_nAsyncSocketCnt;                          // debugging
96
97     CString m_sClientIp4;                          // IP4 address... 192.168.123.123
               etc of server connected socket
98
99     CCmdFifo *m_pFifo;                             // In ClientConnectionManagement get PAG commands.
               Here gets instrument data
100                                     // created in CServerSocket::CServerSocket
               (CServerConnectionManagement *pSCM)
101                                     // deleted in CServerSocket::~CServerSocket()
102     CString szName;
103     CHwTimer *m_pElapseTimer;                      // created in CServerSocket::CServerSocket()
104                                     // deleted in CServerSocket::~CServerSocket()
105     int m_nElapseTime;
106     int m_nOnAcceptClientIndex;                    // cheating to let OnAccept pass info to
               OnClose
107     int m_nSeqCntDbg[1024];
108     int m_nSeqIdx;
109     USHORT m_nLastSeqCnt;
110
111     // debugging
112     GenericPacketHeader m_HeaderDbg[8];
113     int m_dbg_cnt;                                  // counter to select pHeaderDbg variable
114     int m_nListCount;                              // how deep is the linked list?
115     int m_nListCountChanged;
116     };
117
118 #endif
119
120

```