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AppleTalk: Description of SP_INIT and SP_GET_SESSION

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Some users involved in AppleTalk programming have asked for more
information about some of the ASP routines described in "Inside AppleTalk"
-- especially SP_INIT and SP_GET_SESSION.

The SP_INIT and SP_GET_SESSION routines have been more completely
documented in the newest printing of Inside AppleTalk (July 14, 1986).

Here is a reprint of the SP_INIT and SP_GET_SESSION documentation from
section XI, pages 6 and 7:

Before any workstation can open a session with a server, the server's SLS
must be established. This must be done by the ASP client at the server end.
This client must issue an OPEN-ATP-Responding-socket call to create the SLS.
Then it must call NBP to register the appropriate server entity name on
this socket. At this point, the SLS is set up so that a workstation can
discover its own network address through an NBP lookup.

However, a workstation still cannot open sessions with this client entity.
For this purpose, the ASP client in the server must now issue an SPInit call
to ASP (passing to ASP the network address, known as the SLSEnityIdentifier),
followed by one or more SPGetSession calls.

SP_Init

   Inputs:

      SLSEnityIdentifier -- SLS network identifier
      ServiceStatusBlock -- block with status information
      ServiceStatusBlockSize -- size of status information block

   Outputs:

```
        SPError -- error code returned by ASP
        SLSRefNum -- reference number for SLS


    Errors:


        TooManyClients -- ASP implementation cannot support another client
        SizeErr -- ServiceStatusBlockSize is greater then QuantumSize
```

This call is issued by the ASP client after having opened and named the SLS. The call passes the (network-dependent) SLSEntityIdentifier to ASP as well as a ServiceStatusBlock. This block is used to hold the service status information to be returned in reply to GetStatus request received at the SLS. The SLSEntityIdentifier is the complete internet address of the SLS.

SPInit returns the SLSRefNum (this is unique among all SLSs on the same server node) that is used in the SPGetSession call to make reference to the SLS passed in the SPInit call.


```
    SP_Get_Session

        Inputs:


            SLSRefNum -- reference number for the SLS

        Outputs:


            SPError -- error code returned by ASP
            SessRefNum -- session reference number

        Errors:


            ParamErr -- unknown SLSRefNum
            NoMoreSessions -- implementation cannot support another session
```

This call is issued by the ASP client to allow it to accept an OpenSession command received on the SLS identified by the SLSRefNum. Each SPGetSession request authorizes ASP to accept one more OpenSession request.

The call completes when such a request is received on the SLS and a corresponding session has been opened. The SessRefNum is returned to the server ASP client and must be used in all further calls to ASP that refer to this session.

Clearly, the SessRefNum must be unique among all sessions open to the server.

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