Tech Info Library

SNA•ps 5250: Configuring to Multiple AS/400 Computers (2/94)

```
Revised:        2/17/94
Security:       Everyone
```

SNA•ps 5250: Configuring to Multiple AS/400 Computers (2/94)

===

Article Created: 14 May 1993
Article Reviewed/Updated: 9 February 1994

TOPIC --

With SNA•ps 5250 client software is there a way to configure a true
passthru so you can connect to two or more different AS/400 computers at
the same time? I know that you can have multiple sessions but can they be
to multiple AS/400 computers. If so, what needs to be done to configure
that?

DISCUSSION ---

If you have two or more AS/400 computers, you can have sessions to each at
the same time using SNA•ps 5250.

First to a short tutorial. If you were using a dumb 5250 terminal and were
attached locally (Twinax) to Local400 and wanted to get a session on
Remote400, you would request Display Station Passthru (DSPT) to the
Remote400. The session on the Local400 would be suspended and a new signon
screen presented. A dumb terminal can only do DSPT once! You could not
log on to a third AS/400 from Remote400. You would have to return to
Local400 and initiate a new DSPT to the third AS/400 (assuming SNA routing,
APPN).

Now SNA•ps 5250 does not employ the concept of Local terminal. The
connection to the Local400 is done using a DSPT from the SNA•ps 5250 client
acting (during the connection time) as an AS/400. Once the connection is
made, the SNA•ps 5250 client drops back into dumb terminal mode. These
operations are performed in the SNA•ps 5250 Control Panel application. So
SNA•ps 5250 has already used its allowed DSPT to get to the local AS/400,
and CANNOT request a DSPT to Remote400 using the normal passthru user
calls.

Since the SNA•ps Gateway is an APPC LENNODE, it can play in an APPN
environment, it just has to be configured completely on all AS/400

computers. It is possible to configure a second Local LU-Remote LU pair on
the SNA•ps Gateway which is connected via APPN routing to a second AS/400.
This concept is used everyday by users of a third party product over SNA•ps
Gateways.

The SNA•ps 5250 product however, cannot do this as simply since the SNA•ps
5250 Control Panel device requires the SNA•ps name for the Local LU to be
entered and it applies for all gateway connections. The default name is
PASSTHRU. This means SNA•ps 5250 will be able to connect to any and all
gateways which have named the SNA•ps name (not the SNA name) of the LU
PASSTHRU. If you try to add a second Local LU-Remote LU pair to an
existing SNA•ps gateway with a Local LU named PASSTHRU, SNA•ps config
objects that a Local LU already exists with that name and will not allow
another one.

However it is possible to configure the gateway so that SNA•ps 5250 can
connect to a second AS/400 through an APPN connection. Instead of trying
to create a second local LU, just do the following:

• Create a 2nd remote LU connected to the already existing local LU. The
  network name of the remote LU should match the default local location
  name (usually the same as the system name) of the AS/400 that you want to
  connect to.

• The mode must exist on the intermediate and the target AS/400.
  What is meant by the intermediate and the target AS/400? The target
  AS/400 is the actual AS/400 you desire to have a session with. Therefore
  when the SNA•ps 5250 connection is to be done to the Local AS/400 which
  has the SNA•ps LEN node attached to it, the target AS/400 is the Local
  AS/400; or if you want to make a session to another remote AS/400 in the
  APPN network, the target AS/400 is the remote AS/400 you want a session
  with. The intermediate AS/400 is any AS/400 (can be more that one) used
  in APPN routing to get to the target AS/400.

  To illustrate:

  1) Display Station passthru to local AS/400

```
      -----------              ----------- DSPT  -----------
     SNA•ps 5250  --->   SNA•ps GW   --->  Local AS400    The target AS/400
      -----------              -----------         -----------
```

  2) Display Station passthru to remote AS/400 using APPN routing

```
      -----------              ----------- APPN  ----------- DSPT  ------------
     SNA•ps 5250  --->   SNA•ps GW   --->  Local AS400 --->  Remote AS/400
      -----------              -----------         -----------         ------------
                                               Intermediate         Target
                                                  AS/400            AS/400
                                              (can be more than 1)
```

  The requirement for the MODE being known is from the IBM APPN routing
  rules. The Display Station Passthru call carries with it a MODE to be

used. When the DSPT call is to the local AS/400, the MODE has to be
known on that computer only. When the DSPT call is to a remote AS/400,
you are first setting up an APPC session between the SNA•ps Gateway to
the local AS/400 and the MODE used is taken from the DSPT call. The MODE
named in the DSPT call has to be defined (known) to the intermediate
AS/400. As the DSPT call is APPN routed to the target AS/400, there are
additional APPC sessions opened between computers and all along the way
the MODE must be defined including the target AS/400.

• If QAUTOCFG is off on the target AS/400, then create a device description
  for the Macintosh on the target AS/400 - remote LU name is the network
  name in the PASSTHRU local LU description; attach the device description
  to the controller description for the intermediate AS/400.

• Vary on the device description on the target AS/400.

That's it - the connection dialog in SNA•ps 5250 will show the two remote
LU's (that is intermediate AS/400 & target AS/400). Defining the SNA•ps
local LU in the APPN remote location list of the intermediate AS/400
appears not to be necessary for applications like SNA•ps 5250, where the
transaction program is initiated from the Macintosh.

A third remote LU can be defined to a third target AS/400. Be sure you
have the proper Net ID for the third target (like you needed for the second
target above). Then you need to be sure the implemented APPN routing will
know how to find the third target and the MODE definition being used by the
DSPT call is known to all APPN Nodes along the way.

Another way you could get to two AS/400s from a single SNA•ps APPC gateway
is to configure another entire token ring line which makes a direct
connection to the target AS/400. The Partner definition would have to be
configured but the Local LU can be given a SNA•ps name of PASSTHRU and the
Local LU-Remote LU pairs can be configured directly on the remote AS/400.
This connection uses the bridging of token ring networks to provide the
attachment not APPN. If the connection is via SDLC, then a second Hydra
head on the Serial card has to be attached to a second modem to the second
AS/400. The MCP cards will probably need a 0.5 Meg RAM upgrade and
possibly a 2 Meg upgrade.

Another workaround is to install a second gateway in the same Macintosh as
the first gateway or in a separate Macintosh. The second gateway needs
another Token Ring card and is free to contact the Local400 but specify a
Local LU-Remote LU pair in the Remote400 and use APPN routing to get there.
The second gateway can also be setup to attach directly to Remote400 by
specifying the token ring address of the Remote400 token ring adapter;
token ring bridging provides the connection path.

The only connection limitation of SNA•ps 5250 is connecting to multiple
gateways that don't follow a convention in naming the local LU (SNA•ps
name) - for example if you have two gateways, one of which calls the local
LU "PASSTHRU" and the other "DSPT", you can't use SNA•ps 5250
simultaneously on both gateways. You have to exit SNA•ps 5250 (and SNA•ps
Print) and modify the control panel.

Article Change History:
09 Feb 1994 - Included additional information for clarity.

Tech Info Library Article Number:12127