# ABS Tech Note: SNA•ps16 Independent LU Config (2/93)

Article Created: 26 February 1993

TOPIC -----------------------------------------------------------

This technical note describes the configuration of SNA•ps independent 6.2 LUs.

DISCUSSION -----------------------------------------------------

Introduction
------------
SNA•ps supports both independent (ILU) and dependent (DLU) 6.2 LUs. Significant differences exist in their abilities to handle sessions. Primary among these differences is the capability of independent LUs to support parallel sessions. The use of parallel sessions has a number of advantages and they are simple to define and easy to manage using SNA•ps Config and SNA•ps Admin.

Overview
--------
The term dependent/independent LU is based on whether or not an LU is dependent on an SSCP for session establishment (and has an SCCP-LU session).

An independent (of an SSCP) 6.2 LU can act either as a primary LU (can send a BIND) or as a secondary LU. Hence, a SNA•ps ILU can establish a session (send a BIND) with another ILU. On the other hand, a dependent 6.2 LU is always a secondary LU (must wait to receive a BIND). A further distinction is that an ILU has the ability to have parallel and multiple sessions while a DLU is always restricted to a single session with a partner LU.

Independent LUs and Network Qualified Names
-------------------------------------------
Unlike DLUs, ILUs do not have LU-IDs associated with them. IBM uses LU-IDs equal to zero to specify that an LU is SSCP-independent in some of its implementations.

Note: To determine if an LU is dependent or independent - examine a line trace showing the BINDs.

Since independent LUs are identified by name rather than ID, it is important that the names associated with these LUs be unique throughout the

network. Qualified names help ensure that when communicating across networks (that is multiple domain systems), all LU names will be unique. For this reason it is highly recommended that network qualifiers be used for both DLUs and ILUs whenever communication across SNI (SNA Interconnect) networks. In general, the use of network-id qualified names when communicating using ILUs is recommended.

## Specifying Independent LUs using SNA•ps Config

Using SNA•ps Config, select the peer option for the partner resource. If the gateway (that is PU) network name and network qualifier are known, enter these as well.

Next, edit the Local LU name in the APPC resource, entering the network LU name and qualifier. The network LU name and qualifier, defined as characteristics of the local LU, together constitute the name that will be issued in the BIND. Generally this will match the name of the locally defined LU, but this is not necessary.

Edit the remote LU resource. Select the parallel session option for the remote LU and enter the network LU name and network qualifier for the LU defined locally at the remote system. You will notice that the LU ID field for the remote LU is grayed out. The SNA•ps gateway will automatically set the LUID=0. You do not need to enter LUID=0 using SNA•ps Config.

Edit the Mode resource, making sure that the maximum sessions defined at both systems are equal. The contention winners parameters defined at both systems should total the maximum sessions. This parameter determines which of the two LUs has the right to control use of the session. If the two LUs attempt to initiate a conversation on the same session simultaneously, the LU that is contention winner for that session will succeed and the other, the contention loser, will fail.

Note: When using a SNA•ps gateway for terminal emulation to an AS/400, configure the SNA•ps contention winner parameter equal to the number of simultaneous users who will be performing terminal emulation at any given time (that is configure SNA•ps contention winners equal or nearly equal to the maximum sessions). This will minimize the session establishment overhead and provide optimal performance.

## Independent LU Administration

Parallel sessions are managed through the use of an IBM architected Change Number of Session (CNOS) transaction program. SNA•ps simplifies use of Independent LUs and parallel sessions by shielding the users from having to deal directly with CNOS. The SNASVCMG mode, visible using SNA•ps Admin, is automatically created for use by the CNOS TP and always has two sessions defined. One of these session is contention winner the other contention loser. The SNASVCMG mode must always be activated prior to activating any user defined modes. Once the SNASVCMG sessions are active, the user mode can be activated and sessions will be displayed.

Keywords:  <None>

==========

This information is from the Apple Technical Information Library.

19960215 11:05:19.00

Tech Info Library Article Number:  11740