

Configuring Microsoft SNA-server with downstream PU, for 570,670 and mainframe

In a downstream configuration, the SNA-server has two types of connections, one to the host system and one to the downstream system. The host connection LU is configured with an LU number corresponding to the LOCADR in the LU configuration of the mainframe. The downstream connection LU is configured with a downstream LU number corresponding to the address in the downstream system. These two addresses (host locadr and downstream system address) are tied together in the downstream connection LU properties of SNA-server. In this configuration the client/server interface of SNA-server is not used, instead the downstream system appears to be directly connected to the host.

What in general must be configured:

1. Configure host connection
2. Configure downstream connection
3. Select host connection and assign one or more downstream LU:s to it
4. Optionally pool downstream LU:s
5. Select downstream connection and associate the downstream LU:s (from step 3) and/or the LU pools (from step 4) with that connection
6. If necessary, reorder the downstream LU numbers, that is, the LU numbers used by the downstream system
7. To connect multiple PUs (boxes) repeat step 2-6

1. Example of a host connection configuration for SDLC:

Select server, then from online menu choose Services and New connection and set the SDLC connection. Then you get a new window where you can fill in the following:

- Give the connection a name
- Choose link service (must be pre-configured in SNA server set-up)
- Remote end: Host system
- Activation: On Server Start-up

Press the Set-up button

- Local Node Name, Local Node ID: Default (05D FFFFF)
- Remote Node Name (Network Name, Control Point Name, Remote Node ID) Not necessary fill in

Press the Advanced button

- XID Type: Format 0
- Encoding: Ask the mainframe system administrator for this
- Duplex: Ask the mainframe system administrator for this
- Data Rate: Ask the mainframe system administrator for this
- Poll Address: Ask the mainframe system administrator for this
- The rest of the fields can be left at default

2. Example of a downstream connection on Ethernet

Select the server on which to connect the downstream connection and then from online menu choose Services and New connection and set the 802.2 connection. Then you get a new window where you

can fill in the following:

- Give the connection a name
- Choose link service (must be pre-configured in SNA server set-up)
- Remote end: Downstream
- Activation: On Server Start-up

Press the Set-up button

- Remote Network Address: Mac address of the box
- Local Node Name, Local Node ID: Default (05D FFFFF)
- Remote Node Name (Network Name, Control Point Name, Remote Node ID) Not necessary fill in

Press the Advanced button

- XID Type: Format 0
- The rest of the fields normally can be left at default

3. Configuring a downstream LU for host connection

Select the host connection to which you want to connect the downstream LU and then from online menu choose Services and Assign LUs. In the Insert LU window choose Downstream and click OK, then you get the LU properties dialogue window were you fill in the following:

- Type in the number that identifies the LU to the host. It should match the LOCADDR in VTAM or NCP (it doesn't need to match the number of the downstream system)
- Downstream LU number is set by the SNA-server and can't be changed except if you create blank LUs
- Type a name to identify this LU
- The connection is displayed and can't be changed during configuration. If the LU already is assigned to a pool, the name is shown here.

4. Configuring a range of downstream LUs

Select the host connection to which you want to connect the downstream range of LUs and then from online menu choose Services and Assign LUs. In the Insert LU window choose Downstream and Range of LUs then click OK, after that you get the Add LU Range dialogue window were you fill in the following:

- Type in the name on which the numbered range will be built (not more than eight characters for name plus range extension)
- Type in the First LU Number in the range that identifies the LU to the host. It should match the LOCADDR in VTAM or NCP (it doesn't need to match the number of the downstream system)
- Type in the number of LUs you want in the range
- Selected LU Range displays the numbers you have specified

5. Associating downstream LUs with a downstream connection

Select downstream connection and then from online menu choose Services and Assign LUs. In the Assign Downstream LU/Pool Sessions window, choose, under Available LUs and Pools (only downstream LUs and pools are listed), the LUs and/or pools you want connected.

Problems with DIX and 802.3 on Ethernet when connected to 570

If your Axis 570 doesn't activate the downstream connection in SNA-server you must change a parameter in windows NT. When SNA-server activates the connection, both 802.3 and DIX frames are generated. AXIS 570 will answer on both, resulting in no connection at all. Workaround: Decide the frame type you want to use and change in NT.

1. Start the registry editor by running REGEDT32.EXE
2. Open HKEY_LOCAL_MACHINE
3. Open SYSTEM\CurrentControlSet\Services\"The Link Service Name\"
Parameters\ExtraParameters (in SNA Server Admin select the downstream connection and "Services properties", then you will find "The Link Service Name" under Link Services)
4. Select Edit, Add Value. Value name: FrameType
5. Change Data Type to REG_DWORD, click OK.
6. Enter value 2 or 3 (se table below)
7. Restart server.

VALUE	FRAMETYPE	RESULT
Without parameter	Both	Does not work
0*	802.3 or DIX	OK
1	Both	Does not work
2	802.3	OK
3	DIX	OK

(* If 0, the frame type is controlled via another registry parameter:

SYSTEM\CurrentControlSet\Services\DLC\Parameters\UseDIXOverEthernet

VALUE	FRAMETYPE
0	802.3 (Default)
1	DIX

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