

# How to speed up your BNA NFT file transfers

It's magic!

(Steve Koss had nothing to do with this presentation)

This all started with an inquiry to Unisys Support about the NFT WINDOWSIZE attribute (which I found by accident, after years of doing NFT Copies.

- It is on the Marc NFT Continue Copy screen and also in the WFL manual
- Specify the amount of data which can be sent before waiting for that data to be acknowledged by the destination host
- (FROM Host; WINDOWSIZE octet count)
- (TO Host; WINDOWSIZE octet count)

Experimentation showed that altering it (from the non-documented default window size) actually made NFT copies even slower – **so don't use this!**

In discussion with Andy Montford at Unisys Support  
found out about this BNA SWSF attribute

**(Thank you very much Andy!)**

- The host uses the special window size factor to calculate the special window size for a remote host; this value is the product of the special window size factor and the current hop count to the remote host.
- The default is zero – the maximum is 60
- So we experimented

First, established a baseline by doing a COPY [NFT] of  
\*SYMBOL/GENERALSUPPORT from each system to the  
other

- That had an average elapsed time of **17** seconds each way
- Then we added the following at the end of each hosts BNA init file (which after over 20 years of working with BNA was news to me that one could do this – cough –cough!)
- NW ENDINITIALIZATION;% for UHOSTA1
- % To improve NFT performance
- **% BNA needs to be in Operating mode so after ENDINITIALIZATION**
- %
- NW SWSF FROM UHOSTB2 = 60;% max - see PLE 18441454
- NW ENDINITIALIZATION;% for UHOSTB2
- % To improve NFT performance
- **% BNA needs to be in Operating mode so after ENDINITIALIZATION**
- %
- NW SWSF FROM UHOSTA1 = 60;% max - see PLE 18441454

## Dramatic Improvement !

- Reran COPY [NFT] of \*SYMBOL/GENERALSUPPORT between each system
- Elapsed times in both directions dropped to **4 seconds**
- Conclusion – You mileage may vary (standard disclaimer) but we really like SWSF !
- Note – systems involved are two Libra 690's, about 1500 miles apart, 1GB FC3-IOP network interface, 10 GB backbone.