3270 LAN Workstation for DOS V2.02 Upgrade
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PRODUCT: NetWare 3270 LAN Workstation for DOS
PRODUCT VERSION: 2.0
SUPERSEDES: All prior 3270 LAN Workstation for DOS Maintenance PTFs and the "Update Files for NetWare 3270 LAN Workstation for DOS" which shipped with SAA V1.1.

This PTF will be in NOVLIB Library 9 as *WSDUP.ZIP*.

NOTICE: These files do not constitute the entire product and are to be used only in conjunction with authorized purchased copies of 3270 Workstation for DOS 2.0. The product is Copyrighted under law and is not shareware.

MOD5.ZIP is the central portion of the upgrade from v2.00 to v2.02. The other portions have been broken down into several PTFs in order to facilitate downloading from NetWire.
They can be found in:
    - *HLLAPI.ZIP* for the HLLAPI upgrade
    - *MOD5.ZIP* for support of additional Model 5 adapters
    - *FTRANS.ZIP* for the File Transfer upgrade
    - Several Country Group ZIPs" for code page 500 and 850 support.
    Over the next few days the following files will be uploaded to Library 9:
        - *BELG.ZIP* for Belgium
        - *FRANCE.ZIP* for France
        - *GERMAN.ZIP* for Germany and Austria
        - *HOLL.ZIP* for Holland
        - *ITAL.ZIP* for Italy
        - *JAPAN.ZIP* for Japan
        - *PORT.ZIP* for Portugal
        - *SCANDA.ZIP* for Denmark, Finland, Norway, and Sweden
        - *SPAN.ZIP* for Spain and "Spanish Speaking"
        - *SWISS.ZIP* for Switzerland
        - *UK.ZIP* for the United Kingdom
        - *USCAN.ZIP* for the United States & Canada (including French Canadian)

V2.02 provides many additional features for sites using the Workstation together with NetWare for SAA:

1. INCREASE AVAILABLE CONVENTIONAL MEMORY FOR DOS APPLICATIONS
The ability to increase available conventional memory for applications by placing part of the workstation control program (WSLAN) into upper memory.

The amount of memory saved will vary widely depending on your system's configuration and the applications running on your system.

This feature is available without additional hardware on all 386 machines and above. A 286 machine typically requires an added memory card with memory management that is compatible with the LIM Expanded Memory Specification (EMS) 4.0.

See MEMORY.DOC for configurations recommended in order to make available the maximum amount of available conventional memory and information on disabling the upper memory load feature.

DISABLING THE UPPER MEMORY LOAD FEATURE
You can load WSLAN into conventional memory (0 to 640 KB), without having to change CONFIG.SYS, by disabling the Upper Memory Load feature.
    Add /UN to the WSLAN command, for example:
        WSLAN config_filename /UN

2. **PASSWORD ENCRYPTION**
Encrypted passwords remain unreadable to others, even when LAN traffic is being monitored or traced.

IMPORTANT: Only a NetWare for SAA v1.2 communications server can read encrypted passwords. If the workstation will only be using NetWare for SAA v1.1, DO NOT configure the workstation for password encryption.

However, if your network contains both NetWare for SAA V1.1 and V1.2 a user on a workstation configured for password encryption might attempt to log in to a NetWare for SAA v1.1 communications server. NetWare provides a way to prevent a lag in response time when a workstation is connecting to a NetWare v1.1 communications server.

NOTE: Encrypting passwords requires 37 KB of conventional memory in the workstation and lengthens login time. It can take up to 15 seconds for a server to accept encrypted passwords.

For instructions regarding the configuration of a Workstation for Password Encryption and a method of preventing a lag in response time when a workstation using Encryption is connecting to a NetWare v1.1 communications server see ENCRYPT.DOC.

3. **SPEED PRINTING**
The WSLAN command has a new parameter: PRINT/DOS BALANCE. This give you the ability to speed redirectable printing by balancing print and DOS resources by adjusting the rate at which the print stream coming from the Host is forwarded to the print queue on the file server.

IMPORTANT: Increasing throughput for Host printing will result in fewer CPU

resources being devoted to DOS functions. Each site must determine the appropriate balance between DOS functions and redirectable (or Host) printing.

The command syntax for PRINT/DOS BALANCE is:
    WSLAN config_filename /Bnn
        where
    config_filename
is the name of the configuration file that you used when your workstation was configured.

"/B" is the BALANCE parameter.
"nn" is a two-digit number.

If your printing or your DOS session is unacceptably slow, you can increase the CPU resources devoted to printing by specifying a value between 1 and 99 in the PRINT/DOS BALANCE parameter.

The default value of this parameter is 20.

If you set the parameter value to 0 or a number larger than 99, you will receive the following error message: Invalid switch parameter in command line

4. **EBCDIC Code Page 500 & ASCII Code Page 850 Support**
Available in the language support ZIP for several countries (see above).

5. **SUPPRESS UNDESIRED FORM FEEDS**
You can now allow the Host to control form feeds by setting the Maximum Print Line parameter to 0.
For page printers, this feature instructs the workstation to not issue form feeds at the bottom of a page except in response to a Form Feed received from the Host.
For line printers, the feature is equivalent to setting the Maximum Print Line parameter to 1, which instructs the workstation to issue a single line feed.

Because of this change, depending on your configuration, there can be rare situations in which extra form feeds are generated (because both the host and WSLAN provide form feeds).
If this should occur, it may be necessary to add "1" to the "Number of Lines per Page" in the WSLAN configuration. (Refer to page 3-15 of the Configuration Guide.)

For instructions on the use of the Maximum Print Line Parameter see LINE.DOC.

6. **IBM 122-key KEYBOARD SUPPORT**
You can specify the IBM 122-key keyboard (for PS/2). BOARD.DOC contains

instructions.

A. You can configure the Workstation for use of the IBM 122 key keyboard by selecting it as the keyboard option using WSCONFIG.

      OR

B. When loading WSLAN can override configured keyboard type in order to assign the IBM 122 keyboard to the workstation:

At the DOS Command Line enter the following WSLAN command at the command line:

      WSLAN config_filename /KI

7. SWAP RESET BETWEEN LEFT <CTRL> and RIGHT <ALT> KEYS

You can change the key that is normally mapped to the Reset function (Right ALT) on an Enhanced (101-key) keyboard to the left <Ctrl> key.

The use of Right ALT is the same as prior support. Use of Left Ctrl conforms to IBM standards.

If mapped as the reset key, left <Ctrl> key serves as a dual key:
- As a Reset Key when pressed and released alone .
- As a <Ctrl> key when you pressed another> key.

For instructions in the use of the Keyboard Definition Utility (KEYDEF) to make this change see KEY.DOC.

8. Configurable LU Names

Permits specification of dedicated LU names or LU pool names in the Workstation configuration.

A complete explanation of these categories is in ADDWS.TXT in NOVLIB Library 9. For detailed information on configuring dedicated LUs see:

   - v1.1, "Configuring Individual LUs" on page 5-31 of the NetWare Communication Services Administration
      Guide.
  - v1.2, "Configuring Dedicated Lus" in Chapter 9 of the SAA v1.2 Administration Guide.

When you select Dedicated... in the Select LU Category menu and press <Return>, the Specify Dedicated LU Name window is presented on the screen.

The Dedicated LU Name field accepts no more than 8 characters.

The upper limit for the LU pool name remains 47 characters. There is no LU name for either the PUBLIC or ANY category.

9. HLLAPI support for "Easel" and "Mozart".

High Level Language Application Program Interface (HLLAPI) has been changed to be compatible with the third party front-ends "Easel" and "Mozart".

For this support download *HLLAPI.ZIP*.

10. **The ability to use "wild cards" in WSCONFIG**.
This means that you can use an asterisk (*) in the User Name field to have the Workstation use the NetWare login name, thereby allowing users to log in only once, rather than having to log in to the network and then again on the communications server.

However, you will be prompted for a password if:
    - Logged in as Supervisor, or
    - Logged on to a server other than the one NetWare for SAA is loaded on, for example
        when using Runtime v3.11 communications server

11. **CONSISTENT ENTRY**
The same naming "rules" for the Workstation, NetWare, CSCON and NetWare Communication Services:
    A. Maximum Name lengths
    B. Invalid characters
For additional information see ENTRY.DOC.

12. **ADDITIONAL MODEL 5 DISPLAY DRIVERS**
Drivers to support these additional display adapter cards are included in *MOD5.ZIP*:
   Everex Micro Enhancer Deluxe
   Boca Basic VGA
   VGA cards using a Western Digital chip set (such as Paradise VGA and TopVGA)
   IBM PS2 Models 35/40/56/57

13. **Added FILE TRANSFER Features available in *FTRANS.ZIP***.
    A. Translation of host printer formatting control characters.
    B. Directly download host file to LAN printer.
    C. Time Send/Receive wait before canceling file transfer.

14. Some tips on using the NetWare 3270 LAN Workstation for DOS v2.02.
A. **MOUSE**
- The manual states that if a mouse is to be used in the host session, it must be Microsoft compatible.
- Specifically it should be compatible with Microsoft Mouse Release 7.0 and above.
- The manual also recommends the use of a mouse port or a bus mouse.
- A mouse connected to the serial port may also be used.

B. **HEAP SIZE**

- The "Heap Size: Base" option allows you to specify the size of the heap space that serves as the amount of working storage allocated for running WSLAN. The documentation refers to a 2-digit field.
- In reality, the software has been modified to allow for 3 digits; however the maximum value must be equal to or less than 120.

C. **WSEXIT**
When using WSEXIT or the <Alt><End> key sequence to unload WSLAN, be sure to unload any DOS applications loaded after WSLAN first.

D. **DISPLAY ADAPTER MEMORY TO SAVE FOR THE DOS SESSION**
One of the "DOS Session Options" is entitled "Display Adapter Memory to Save for the DOS Session:"
Be aware that the colors of a DOS application's screen may be changed upon hot-keying back to it from the host session.

15. **OUTSTANDING PROBLEMS AND WORKAROUNDS**
A. TRANSFER.EXE fails with "RENAME error 3" message under certain instances when attempting to export a file.
> *Workaround*: Do not specify a subdirectory for the destination file.
If you must specify a subdirectory for the destination file, do not specify a file name extension.

B. Timeouts when page printing to a COM port.
> *Workaround*: Use LPT port for page printing.
If you need to use a COM port, select line printing.

C. "Free Error Alignment" on Workstations and Gateway when using Gateway Status Utility broadcast feature in a stress environment.
> *Workaround*: Increase Heap on the Gateway.

Any future "fixes" for 3270 LAN Workstation 2.02 will be placed in a file called *WSDPTF.ZIP* in NOVLIB Library 9.   As of 5/27/92 *WSDPTF.ZIP* does not yet exist.

16. **AS/400 Keyboard Files**
A. The AS/400 does not support the 3270 PRINT function. Therefore, the 3270 PRINT key will not function when the NetWare 3270 LAN Workstation is used with an IBM AS/400. To print a host screen in 5250, you must use the function key that represents the PRINT function. This function key will be F4, if you have chosen to remap the function keys using the AS/400 keyboard remapping procedure (see Appendix E of the 3270 LAN Workstation for DOS Configuration Guide) or PA1/F4, if you have not remapped the function keys.

B. NUMLOCK affects all the keys on the numberpad.
For example:

- When using the 101-key enhanced keyboard with NUMLOCK set to ON, the NEWLINE key will not function.
- When using the 83/84-key standard keyboard, ERROR RESET will be disabled if NUMLOCK is set ON. In all cases, you must hot-key to DOS and turn NUMLOCK to OFF to use the numberpad keys.

C. When SHIFT LOCK is ON, the function keys will act as uppercase function keys (F13 - F24).

17. MANUALS

This document is based on the assumption that you have available for reference the following manuals:
- 3270 LAN Workstation for DOS Configuration Guide
- 3270 Workstation for DOS User's Guide
- 3270 File Transfer User's Guide
- 3270 Keyboard Definition Utility User's Guide

However, the new features of 3270 LAN Workstation for DOS described in this document are not covered by the current version of the manuals.

18. TO USE PTF 318

Copy the files in the PTF over the files in the existing working directory of NetWare 3270 LAN Workstation for DOS.

Reconfigure.

19. FILES IN *WSDUP.ZIP*

See FILES.DOC