IBM NTuneMON V2R6 Adds Support for New ACF/NCP Functions

Overview
NTuneMON V2R6 has been enhanced to provide support for IBM ACF/Network Control Program (ACF/NCP) V7R8. In addition, this release of NTuneMON supports functions offered in previous ACF/NCP releases.

NTuneMON V2R6 provides monitoring capabilities for NCP Versions 4, 5, 6, and 7. It also offers monitoring and tuning capabilities for your communication controllers (IBM 3725, 3720, 3745, and 3745 with 3746 Model 900) in the OS/390®, MVS/ESA®, and VM/ESA® environments.

Increased Availability with the NTuneNCP Feature
NTuneNCP, an optional tuning feature, will be offered with NTuneMON V2R6. This tuning feature, in conjunction with NTuneMON, will help customers to increase network and NCP availability by providing interactive tuning capabilities.

The NTuneNCP Tuning feature runs on a 3745, 3720, or 3725 and supports ACF/NCP Versions 4, 5, 6, and 7.

Major Enhancements in NTuneMON V2R6

Support for Bisync, Start-Stop Lines:
NTuneMON V2R6 provides support for NCP Bisync and Start-Stop lines. The Physical Line List panel (ATUFC) will now provide a list of all Synchronous Data Link Control (SDLC), Bisync, Start-Stop or PEP (EP) lines. Using this panel, the user will be able to select and display the Pre-SNA Line panel (ATUPS).

New Fast Path Command (PL) for SDLC Lines:
This new command allows the operator to quickly display a single SDLC line. Entering this command, along with the NCP name and the line address, will bring up the SDLC Physical Line Details panel (ATUPL).

Improved CCU and Buffer Utilization Histograms:
On the NCP Utilization panel (ATUUT), NTuneMON currently displays a composite of the central control unit (CCU) utilization and a composite of the available number of free buffers. An enhancement to this panel allows operators to select a new panel called the Utilization History panel (ATUUH). The ATUUH displays a true histogram of what is happening in the NCP at the time of display. You can select either free buffer history or NCP cycle utilization.

Other enhancements in NTuneMON V2R6 include the following:
• Display of Virtual Route (VR) alert information
• Display of Transmission Group (TG) alert information
• Support for 3746 Model 900 Frame Relay Boundary Access Node (BAN) connection balancing
• Support for 3746 Model 900 Token-Ring connection balancing
• Line mode function for buffer slowdown
• Frame relay enhancements
• Token-Ring enhancements
• Display of the 3746 Model 900 serial number

Key Prerequisites
NTuneMON V2R6 and the NTuneNCP Tuning Feature require NetView® Version 2 or later with REXX support.

At a Glance
This new release of NTuneMON:
• Improves operator productivity with support for new ACF/NCP functions.
• Increases network availability with the NTuneNCP optional feature.
• Supports NCP Bisync and Start-Stop lines.
• Provides a new fast path command (PL) for Synchronous Data Link Control (SDLC) lines.
• Improves central control unit (CCU) and buffer utilization histograms.
• Displays the 3746 Model 900 serial number and virtual route (VR) alert information.
• Provides a line mode function for gathering buffer slowdown information.

For ordering, contact:
Your IBM representative, an IBM Business Partner, or IBM Americas Call Centers at 800-IBM-CALL

Planned Availability Date
September 24, 1999

This announcement is provided for your information only. For additional information, contact your IBM representative, call 800-IBM-4YOU, or visit the IBM home page at: http://www.ibm.com.
IBM NTuneMON V2R6 provides increased network and NCP availability by providing monitoring capabilities for additional NCP resources. NTuneMON V2R6 provides an NCP online analysis and diagnostic aid for system programmers and system operators responsible for maintaining communications controllers and networks.

Through color panels, reverse video, and graphic alerts, you have the capability to detect problems and prevent potential problems from occurring. Each NTuneMON panel allows current data to be saved to the NetView log. NTuneMON assists you in solving problems such as inability to logon or serious response time problems, using much less time, effort, and skill level.

NTuneMON V2R6 provides support for the new functions and enhancements in ACF/NCP V7R8.

### Online Interactive Tuning

The NTuneNCP Tuning Feature in conjunction with NTuneMON V2R6, provides increased network and NCP availability by providing interactive tuning capabilities for NCP generation parameters. System programmers and system operators will find these features desirable for managing NCP and maintaining communications controllers and networks.

### Major Enhancements in NTuneMON V2R6

#### Support for Bisync, Start-Stop Lines:
One of the major enhancements to NTuneMON V2R6 is support of NCP Bisync and Start-Stop lines. The Physical Line List panel (ATUFC) will now provide a list of all SDLC, Bisync, Start-Stop or PEP (EP) lines. We will refer to the older protocols such as Bisync and Start-Stop as Pre-SNA. Using this panel, the user will be able to select and display the Pre-SNA line panel (ATUPS). This panel will display the status of the line, time out parameters, line address, terminal type, and other generation information. From this panel, the operator can display the resources defined on the line. The Pre-SNA Terminals Panel (ATUPT) will display information such as the terminal type, status of the terminal, the terminal polling address if available, and the transmission count for this resource.

Additionally, the PEP Line Details panel (ATUED) will display an EP line in a PEP generation. Note that the gen must be a PEP gen and not EP only. NTuneMON uses the NCP storage display command to gather control block information which is not available in an EP only gen. Hence, an EP only gen cannot be supported by NTuneMON. From the Physical Line List panel (ATUFC) the EP line can be selected. This will bring up the PEP Line Details panel (ATUED) which will display:

- The high-low range of the channel adapter
- Channel adapter address
- Channel adapter type
- Sub-channel address of the line
- The line adapter being used
- Various control parameters
- Channel command status and sense codes while the line is operational.

#### New Fast Path Command for SDLC Lines:
The new command allows the operator to quickly display a single SDLC line. Entering this command along with the NCP name and the line address will bring up the SDLC Physical Line Details panel (ATUPL). Previously, this panel was only accessible by first displaying a list panel which could be time consuming.

#### Improved CCU and Buffer Utilization Histograms:
On the NCP Utilization panel (ATUUH), NTuneMON currently displays a composite of the CCU utilization and a composite of the available buffers. An enhancement has been made to this panel allowing the selection of a new panel called the Utilization History panel (ATUUH). The ATUUH will display a true histogram of what is occurring in the NCP at the time of display. Customers can then select either free buffer history or NCP cycle utilization.

#### Display of VR Alert Information:
Starting with NCP V7R3, the virtual route (VR) alert function was added. This allowed operators to send an alert when a VR was held for a predetermined period of time, and allowed the deactivation of that VR when a timer threshold was reached. NTuneMON V2R6 has added the ability to display and modify these parameters. The VR Alert Timer panel (ATUVT) displays the alert information for each individual VR and allows modification of the VR timers for either the alert or deactivation function. Modification of the alert or deactivation timer requires NTuneNCP in the NCP being displayed. If the NTuneNCP feature is not installed, these values can only be displayed.

#### Display of TG Alert Information:
The VR Alert Timer panel (ATUVT) also contains the TG alert and deactivation timer information. This is similar to the VR alert function. If the TG remains blocked until the deactivation time threshold is reached that TG will be deactivated. Both, the TG alert timer value and the TG activation timer values can be modified if NTuneNCP is in the NCP being displayed. If the NTuneNCP feature is not installed, these values can only be displayed.

#### Support for 3746 Model 900 Frame Relay BAN Connection Balancing:
The Frame Relay DLCI to Balance Table panel (ATUFBD) has been updated to support 3746 Model 900 frame relay BAN physical lines. The DLCIs and the balance factor will be displayed. The balance factor can be modified when the 3746 Model 900 frame relay physical line is inactive and NTuneNCP is in the NCP being displayed. If the NTuneNCP feature is not installed, these values can only be displayed.

#### Support for 3746 Model 900 Token-Ring Connection Balancing:
The connection balancing factor on the Token-Ring TIC Details panel (ATUTP1) has been updated to support 3746 Model 900 Token-Ring physical lines. The connection balancing factor can be modified when the 3746 Model 900 Token-Ring physical line is inactive and NTuneNCP is in the NCP being displayed. If the NTuneNCP feature is not installed, the field can only be displayed.

#### Line Mode Function for Buffer Slowdown:
NTuneMON currently displays buffer slowdown information. This function has been upgraded to allow the operator an easy method of gathering slowdown information. By using NTuneMON line mode function, all data that is normally displayed on the NCP Buffer Slowdown information panels (ATUBS, ATUBX) can be gathered and saved in the NetView netlog for review.

#### Frame Relay Enhancements:
Several changes have been made to improve the frame relay information available to the user. The Physical Line List panel (ATUFC) now provides the total available logical links and the number of in use logical connections for each frame relay physical link.
The minimum frame relay working window size is now displayed. This new field is available on the Frame Relay Physical Details panel (ATUFP) along with the other DYNWIND parameters. This new variable is also modifiable if NTuneNCP is in the NCP being displayed. If the NTuneNCP feature is not installed, the minimum frame relay window size can only be displayed.

**Token-Ring Enhancements:** Various changes have been made to the Token-Ring data available to the user. The Token-Ring SNA Station List panel (ATUTA) now has an additional view option for the LLC status. Prior to this, the LLC status was only available on an individual station basis.

The DYNWIND keyword parameters DW and DWC are now displayed and can be modified for 3745 Token-Ring via the Token-Ring SNA Station Panel (ATUTL) and the Token-Ring TIC Details Panel (ATUTP1). These variables can only be modified if NTuneNCP is in the NCP being displayed. If the NTuneNCP feature is not installed, these values can only be displayed.

**Display of 3746 Model 900 Serial Number:** The NCP Summary panel (ATUSS) primarily shows information about the 3745. An enhancement has been made to this panel to display the 3746 Model 900 serial number when this controller is installed.

**Miscellaneous Enhancements:** The new adaptive session pacing maximum window size parameter has been added to the HPR and Other Flow Control panel (ATUHP). Both the subarea stage and the REXX stage maximum pacing window size variables can be modified if NTuneNCP is in the NCP being displayed. If the NTuneNCP feature is not installed, these values can only be viewed.

Information for several network wide parameters is now available on the Network CB Pools/Tables panel (ATUGP). The GWPACING variables can be modified if NTuneNCP is in the NCP being displayed. If the NTuneNCP feature is not installed, the pacing parameters can only be displayed. The changed pacing values will only be used for sessions that are established after the modification.

The network field on the Channel Adapter Details panel (ATUCH) and the 3746 Model 900 Station Details panel (ATUCL) is now modifiable for subarea channels. The channel must be inactive and NTuneNCP must be in the NCP being displayed.

NTuneMON V2R6 contains no new interfaces.

**Year 2000**

This product is Year 2000 ready. When used in accordance with its associated documentation, it is capable of correctly processing, providing, and/or receiving date data within and between the twentieth and twenty-first centuries, provided that all products (for example, hardware, software, and firmware) used with the product properly exchange accurate date data with it.

**Euro Currency**

This program is not impacted by euro currency.

**Product Positioning**

NTuneMON V2R6 is designed for customers who want to monitor their communication controllers (IBM 3725, 3720, 3745, and 3745 with 3746 Model 900) in the OS/390, MVS/ESA, and VM/ESA environments.
Technical Information

Specified Operating Environment

Hardware Requirements: NTuneMON V2R6 is designed to run in a virtual storage environment in any IBM system configuration that supports the following IBM licensed programs:

- OS/390®
- MVS/ESA™
- VM/ESA®

NTuneMON V2R6 and NTuneNCP Tuning Feature operate with at least one of the following communication controllers: IBM 3725, 3720, 3745, or 3745 with 3746 Model 900.

The NTuneNCP Tuning Feature runs on a 3745, 3720 or 3725 communication controller.

Software Requirements: NTuneMON V2R6 is supported under the following IBM licensed programs:

OS/390
- OS/390 (5645-001) Release 1 or later
- OS/390 (5647-A01) Version 2 Release 4 or later

MVS/ESA
- MVS/ESA (MVS/SP™ Version 5) — 5655-068 and 5655-069 or later

VM/ESA
- VM/ESA Version 2 (5654-030) or later

NTuneMON V2R6 and NTuneNCP Tuning Feature operate with currently supported releases of ACF/NCP.

- ACF/NCP Version 7 (5648-063) Releases 8, 7, 6, 5, 4, 3**, 2*, 1****
- ACF/NCP Version 6 (5688-231) Releases 3*, 2****
- ACF/NCP Version 5 (5668-738) Release 4
- ACF/NCP Version 4 (5668-854) Release 3.1

Prerequisites

NTuneMON V2R6 requires the following:

- Time Sharing Options Extensions (TSO/E) V2R5 (5685-025) or later for OS/390 or MVS/ESA
- NetView® V2R4 for MVS/ESA (5685-111)

- NetView Version 3 for MVS/ESA (5655-007)
- TME10 NetView for OS/390 Release 1 (5697-B82) or later with REXX support for OS/390 or MVS/ESA
- NetView V2R3 for VM/ESA (5756-051)

The NTuneNCP Tuning Feature requires one of the following:

- eNetwork™ Communications Server for OS/390 Release 1 (5645-001) or later
- eNetwork Communications Server for OS/390 V2R4 (5647-A01) or later
- VTAM® V4R3 for MVS/ESA (5695-117) or later
- VTAM V4R2 for VM/ESA (5654-010)
- VTAM Version 3 Release 4.2 for MVS/ESA (5685-085) with required maintenance

Refer to the program directory for additional details relative to the requirements for NTuneMON V2R6 for OS/390, MVS/ESA, and VM/ESA.

Compatibility: NTuneMON V2R6 will run in conjunction with the NTuneNCP Tuning Feature. NTuneMON V2R6 will not be supported in conjunction with NTuneNCP V1R1 (5648-089).

Limitations: NTuneMON V2R6 and NTuneNCP Tuning Feature operate with at least one of the following communication controllers: IBM 3725, 3720, 3745, or 3745 with 3746 Model 900, running ACF/NCP Versions 4, 5, 6, and 7.

Planning Information

Direct Customer Support: Direct customer support is provided by the S/390® Support Family. For more information on services available, contact the IBM Support Family Inside Sales at 800-IBM-4YOU (426-4968).

Packaging: NTuneMON V2R6 will be shipped on either one magnetic tape reel (9/6250 bpi), on a 3480 tape cartridge, or a 4-mm tape.

The NTuneNCP Tuning Feature is included with NTuneMON V2R6 media.

Security, Auditability, and Control

NTuneMON security and auditability features are dependent upon the features or functions of the operating system on which NTuneMON is running. The customer is responsible for evaluation, selection, and implementation of security features, administrative procedures, and appropriate controls in application systems and communication facilities.
Customer Financing

IBM Global Financing offers attractive financing to credit-qualified commercial and government customers and Business Partners in more than 40 countries around the world. IBM Global Financing is provided by the IBM Credit Corporation in the United States. Offerings, rates, terms and availability may vary by country. Contact your local IBM Global Financing organization. Country organizations are listed on the Web at:

http://www.financing.ibm.com

Ordering Information

Current Licensees

Current licensees of NTuneMON Version 2 will be sent a program reorder form which may be returned directly to IBM Software Delivery and Fulfillment (SDF). The mailing of these reorder forms is scheduled to be completed by October 8, 1999. Reorder forms returned to SDF will be processed within 10 work days of receipt.

New Licensees

Orders for new licenses are now being accepted.

Shipment will begin on the planned availability date.

- Orders that ship prior to the planned availability date will receive NTuneMON Version 2 Release 5.
- Orders that ship after the planned availability date will receive NTuneMON Version 2 Release 6.

New users of NTuneMON Version 2 should specify:

**Type**
5648

**Model**
141

**Basic License:** To order a basic license, specify the program number and feature number 9001 for asset registration.

Specifying feature number 4001 for a monthly license charge.

Specify the feature number for the desired distribution medium, for the host shown below.

Separate media is not required for the NTuneNCP Tuning Feature. The NTuneNCP Tuning Feature may be distributed to any number of 3720, 3725 and 3745 machines for a monthly license charge per each machine distribution. The number of NTuneNCP Tuning Feature features licensed must equal the number of communication controllers for which the NTuneNCP Tuning Feature capabilities will be applied.

To order the NTuneNCP Tuning distributed feature, specify feature number 4002 for a monthly license charge.

**Single Version Charging:** To elect single version charging, the customer must notify and identify to IBM the prior program, replacement program, and the designated machine on which the programs are operating.

**Version-To-Version Upgrade Credit:** To upgrade from a prior program acquired for a one-time charge to a replacement program using a version-to-version upgrade credit, the customer must notify and identify to IBM the applicable prior program and replacement program participating in the upgrade credit.

**Basic Machine-Readable Material:** To order, select the feature number of the host desired distribution medium:

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<th>Environment</th>
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* Contains RESTRICTED MATERIAL OF IBM

**Customization Options:** Select the appropriate feature number(s) to customize your order, to specify the delivery options desired. These features can be specified on the initial or MES orders.

**Example:** If publications are not desired for the initial order, and for future updates, specify feature numbers 3470 to ship media only, and 3480 to ship media updates only. In the future, if publication updates were required, order an MES to remove feature number 3480, and the publications will ship with the next release for the program.

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<td>Ship Media Only (suppresses initial shipment of documentation)</td>
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<td>Ship Documentation Only (suppresses initial shipment of media)</td>
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<td>Update Shipments</td>
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<td>Ship Documentation Only (suppresses update shipment of media)</td>
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<td>Suppress Updates (suppresses update shipment of media and documentation)</td>
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<td>Expedite Shipments</td>
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<td>Local IBM Office Expedite (for IBM use only)</td>
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<tr>
<td>Customer Expedite Process Charge ($30 charge for each product)</td>
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Expedites shipments will be processed to receive 72-hour delivery from the time SDF receives the order. SDF will then ship the order via overnight air transportation.

**DSLO License:** To order a DSLO license for NTuneMON V2R6, specify the program number and feature number 9537 for a monthly license charge.
Ordering a DSLO feature will result in IBM maintaining a record of this customer location as a DSLO user only. All material for the DSLO license must be ordered by the basic licensee. If a user selects DSLO, no other feature numbers are valid for this order, and no program materials or updates will be shipped.

Unlicensed Documentation: For all users of NTuneMON Version 2 Release 6, a memo, a program directory, and one copy of the following publications are supplied automatically with the basic machine-readable material:

<table>
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<tr>
<td>NTuneMON User’s Guide</td>
<td>SC31-6266</td>
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<tr>
<td>NTuneMON V2 Licensed Program Specifications</td>
<td>GC31-6267</td>
</tr>
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</table>

Additional copies of unlicensed publications will be available for a fee at product availability.

These copies can be ordered from your IBM representative, through the Publication Notification System (PNS), or by direct order.

Displayable Softcopy Publications: NTuneMON V2R6 manuals are offered in displayable softcopy form. All unlicensed and licensed manuals are included. The displayable manuals are shipped on CD-ROM (LK2T-0414), IBM Online Library: ACF/NCP, ACF/SSP, EP, NPSI, NTuneMON Softcopy Collection Kit. For your convenience, the CD-ROM also contains displayable manuals for several other related products.

One copy of the CD-ROM is orderable with the product at no additional charge by specifying the feature number 7110 for ACF/NCP Version 7 Release 8 (5648-063). Additional copies can be ordered for a fee by specifying feature number 8110 for ACF/NCP Version 7 Release 8 (5648-063).

Note: The CD-ROM feature numbers 7110 and 8110 are not orderable on 5648-141. They are orderable only on 5648-063.

The displayable manuals can be used with the BookManager® READ licensed programs in any of the READ-supported environments. They can also be used with the IBM Library Reader™ in DOS, OS/2® and Windows™ environments. IBM Library Reader has the same functions as the BookManager READ/DOS and READ/2 licensed programs, except that it only reads IBM-produced manuals shipped before April 1992. As IBM replaces softcopy manuals shipped before April 1992, the replacement softcopy will be readable by IBM Library Reader.

The IBM Library Readers for DOS, OS/2 and Windows are supplied at no additional charge.

Licensed Documentation: The following documentation material will be available from IBM by September 24, 1999. To order, contact your IBM representative.

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Subsequent updates (technical newsletters or revisions between releases) to the publications shipped with the product will be distributed to the user of record for as long as a license for this software remains in effect. A separate publication order or subscription is not needed.

Customer Financing

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http://www.financing.ibm.com

Terms and Conditions

The terms for NTuneMON V2, as previously announced in Software Announcement 295-208, dated May 30, 1995, licensed under the IBM Customer Agreement are unaffected by this announcement.

Program Currency

Program Services: IBM NTuneMON Version 2 Release 6 (5648-141) Available until: 12 months written notice

Program services for the following releases, previously announced as being withdrawn, will be extended to January 31, 2001:

- NTuneMON Version 2 Release 1 for MVS and VM
- NTuneMON Version 1 Release 2 for MVS and VM
- NTuneMON Version 1 Release 1 for VSE

Support Line: Yes

Other Support: System/390®

Charges

Current charges are unaffected by this announcement.
Call Now to Order

Contact the IBM Americas Call Centers (to help IBM serve you, use the Reference Code):

Phone: 800-IBM-CALL
Fax: 800-2IBM-FAX
Internet: ibm_direct@vnet.ibm.com
Mail: IBM Americas Call Centers
      Dept. LE001
      P.O. Box 2690
      Atlanta, GA 30301-2690
Reference Code: LE001

You can also contact your local IBM Business Partner or IBM representative. To identify them, call 800-IBM-4YOU.

Note: Shipments will begin after the planned availability date.

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Year 2000 Readiness Disclosure