Niakwa Data Manager Release Notes
Revision 1.20
Report Date - December 15, 1993

I   INTRODUCTION

Enclosed is Revision 1.20 of the Niakwa Data Manager. The following release notes document changes to NDM 1.20 which were too late to incorporate with the actual printing of the NDM 1.20 Addendum.

Section II discusses NDM Revision 1.20 features.

Section III discusses any product notes for the NDM Revision 1.20.

Section IV contains documentation corrections.

Section V contains instructions for updating from Revision 1.00.

II   FEATURES

The following features and enhancements have been added to Revision 1.20 of the Niakwa Data Manager.

1.   Security has been eliminated. Only the NPL RunTime performs a security check.

2.   The NDM RunTime disk has been eliminated, since the NDM security checks have been eliminated. Files, not related to the security check, which were previously on the RunTime disk are now located on the Development Software diskette(s).

3.   The user limit is now only enforced on the NPL RunTime. No user check is performed by NDM 1.20.

4.   The serial number for NDM diskettes has been eliminated.

5.   NDM 1.20 supports calling all NDM functions by number or function name (NPL Release IV or greater only). Refer to Chapter 1 of the NDM 1.20 Addendum for details.

6.   The following NDM API functions have been added to version 1.20. Refer to Chapter 1 of the
        NDM 1.20 Addendum for details.

                31042   NDM_CREATE_CONV_TABLE_FOR_KEY_FROM_CAT
                31045   NDM_CREATE_CONV_TABLE_FROM_CAT
                31350   NDM_OPEN_FILE_FROM_CATALOG
                31405   NDM_SET_MAX_KEY_SEGS
                31415   NDM_SET_READ_BLOCKING

7.   The NDM Utilities (NDMUTIL) have been updated to support the new NDM function calls.
        Refer to Chapter 2 of the NDM 1.20 Addendum for details.

8.   The NDM Utility, "Export Data Dictionary to IQ" has been updated to support IQ 3.0. IQ 2.67
        (Niakwa version 1.0) is still supported by this utility. Refer to Chapter 2 of the NDM 1.20
        Addendum for details.

9.   On-line help has been added for the NDM API functions. Refer to item 4 in Section IV of these
        Release Notes for more information.

10.   A fully commented version of the NDM Utilities program is available on the Niakwa BBS at no
        charge. If you would like to download this version, please give us a call to arrange it (we would
        like to know who is getting it).

III   PRODUCT NOTES

1.   NDM is now sold on a per-programmer and per-platform basis, and developers must be licensed
        for an NDM Pak on a specific platform before they can distribute NDM. Updates, for developers
        who already have an NDM Starter Kit, are available. Contact the Niakwa Sales Department for
        details.

IV   DOCUMENTATION CORRECTIONS

The following items were too late to incorporate into the NDM 1.20 Addendum:

1.   When using the NDMUTIL to export a data dictionary to IQ 3.0, the process for creating
        individual categories for each data file exported to the IQ DD is no longer performed
        automatically (a category in IQ is a defined file or group of files that is used to produce the IQ
        report). Therefore, all IQ categories must be defined using the IQ 3.0 DDMAINT utility.

Within IQ, it is possible to link multiple files within a category. However, it is necessary to specify the relationships between the data fields in the various files. This information is not stored in NDM making it impossible for NDMUTIL to create the IQ category. Only the NDM DD and KD information is exported to IQ. To create the category and specify links between various files within the category, use the IQ 3.0 DDMAINT program. This is necessary even for a single file category (one that has no relational links established). Refer to the IQ 3.0 documentation for instructions on creating categories.

2. When NDM file information is exported to IQ, the data file's location is taken from the NDM catalog file. However, by default, IQ will always look for the data file in the IQ directory. Consequently, be sure to always specify the full path of the file name for the source file when exporting the NDM data dictionary to IQ and if necessary, when invoking IQ. If the path was not specified for the location of the NDM data file, this can be modified by using the DDMAINT program. Refer to the IQ 3.0 documentation for instructions on revising file information.

3. Because IQ does not recognize lower case field names, the NDM 1.20 Export to IQ utility automatically converts the field names to all capital letter. Consequently, users should be careful if using field names that differ only by case. For example, LastName and LASTNAME represent two different fields for NDM, but when converted to IQ, they would be identical.

4. The new NDM help file includes help for all NDM 1.20 API external calls (this is supported by NPL Release IV only because the help screens are longer than 19 lines). To enable the help file, include the following lines with the start of your program:

        $HELPINDEX=X:\YYYY\NDM
        $HELP="NDMINDEX"

   where: X =   The drive where the NDM help files (NDM.HLP and NDM.IDX) are stored. This is typically the same drive specified by the NDM environment variable.

           Y =   The full directory path where the NDM help files are stored. This is typically the same path specified by the NDM environment variable.

   All help entry names for the NDM API calls are in the form of "NDM3xxxx". For example, the entry for NDM_CLOSE_FILE is "NDM31020".

   To reference a help entry in a program, specify:

        $HELP="NDM3XXXX"

   where: 3XXXX =   The specific NDM API call to be displayed.

   Once entered, press Esc to display the help information.

Another tool that may be useful for development is to add the line:

    DEFFN'0 "$HELP"; HEX(22); "NDM3"

to the program. Then when F1 is pressed, "$HELP=NDM3" will be displayed. Then add the next four digits to see that particular help entry.

The main index for the NDM help is referenced by specifying:

    $HELP="NDMINDEX"

Return codes for NDM are as follows:

RTRNCODE	NDM return codes common to all platforms.
AS400 RETURN CODES	NDM return codes specific to the IBM AS/400.

ISAM specific return codes are also displayable as:

    ISAM RETURN CODES Main menu for the following help entries.

AS400 ISAM CODES	IBM AS/400 return codes.
BTRIEVE ISAM CODES	Btrieve return codes.
CISAM ISAM CODES	C-ISAM return codes.

5.   On MS-DOS based operating environments, if an " Native error 00097" is issued, the /D Btrieve (or Brequest) startup option, used to set the number of data buffers, must be set to a higher value.

6.   Under the UNIX implementation of NDM, the NDM Utility program, "Export Data Dictionary to IQ" allows for the conversion of a NDM data dictionary to IQ version 2.67. Although this conversion is allowed under UNIX , this version of IQ is not supported by Niakwa.

7.   Two additional fields are displayed on the NDM Utility "Set NDMUTIL Options" that are not documented in Section 2.2.4 of the NDM 1.20 Addendum.

The additional fields are:

Maximum Key Segments:	Allows the developer to specify the maximum number of key segments that can be used by NDM when in the NDM Utilities. The default is 24 key segments.
Maximum Fields:	Allows the developer to specify the maximum number of fields to display in the NDM Utility program "Access User Data". The default is 128 fields.

8.   NPL data fields that correspond to native type TIME should be set to a length of 8 bytes, even if the native field type has less than 8 bytes.

V   UPDATE INSTRUCTIONS

The NDM 1.20 Update contains the following materials:

    * A Release Notes Tab
    * These Release Notes
    * A Bug Report Tab
    * An Addenda Tab
    * The Generic NDM Development Package Revision 1.20 Addendum
    * One or more Operating System-Specific Tab(s) (based on the NDM Paks you have licensed)
    * The Operating System-Specific NDM development Package Addendum
    * The NDM Revision 1.20 Development Package diskettes (both media sizes are provided)

The following steps will help you with the update procedure.

1.   Insert the new Release Notes tab and Release Notes at the beginning of the NDM Programmer's Guide. Then place your old NDM 1.00 Release Notes behind this documentation.

2.   Insert the new Bug Report tab behind all the associated Release Note materials and place the NDM Bug Report #1 (which you should have already) behind this tab.

3.   Insert the Addenda tab behind the generic NDM Programmer's Guide and place the new NDM 1.20 Addendum behind this.

4.   Discard any old Revision 1.00 NDM Platform-Specific Addenda you may have.

5.   Insert the appropriate Operating System-Specific tab behind the NDM 1.20 Addendum and place the new NDM 1.20 Operating System-Specific Addendum behind this.

6.   Review all new documentation based on the list above.

7.   Install the new NDM 1.20 Development Package software as directed in Chapter 1 of the appropriate Operating Systems-Specific Addendum (Chapter 2 for IBM AS/400 sites).

8.   Install the new NDM 1.20 BESDK software (if necessary) as directed in Chapter 2 of the appropriate Operating System-Specific Addendum (Chapter 3 for IBM AS/400 sites).

9.   For sites using UNIX, AIX, NPL 386/DOS-Extender Revision 3.20 RunTimes, and/or external
          calls, create the linked executables as directed in Chapter 2 of the appropriate Operating System-
          Specific Addendum (Chapter 3 for IBM AS/400 sites).