



JRBUTILS

UTILITIES FOR MANAGING NETWORKWARE



Release Notes

New Programs

Applist

Lists the users associated with application objects. This program has similar functionality to *grplist* and *wgrplist*.

Fsrights

Displays the rights of selected bindery or NDS objects to a single file or directory, files selected via wild cards, or to all the files and/or directories in a directory tree. *Fsrights* allows filtering of the output by rights. For example, the output could be restricted to matching files and directories where the selected objects have the 'S' right, or perhaps have other than 'RF' rights. *Fsrights* can also show how the rights are derived by displaying inherited rights filters and relevant trustee assignments at each level from the volume root down to the selected file or directory.

JRBimprt

A replacement for Novell's *uimport* for mass creation of users. *Jrbimprt* supports all of *uimport*'s modes of operation i.e. 'c' (create), 'u' (update), 'b' (both create and update) and 'r' (remove) modes. *Jrbimprt* overcomes many of the limitations of *uimport*. Specifically it:

- Supports a wider range of attributes e.g. "Internet Email Address". *Jrbimprt* supports all text attributes and those of type 'integer', 'counter', 'interval' and 'boolean' including those added as custom schema extensions.
- Supports creation of home directories in the LONG name space allowing directories longer than 8 characters to be created. The "Home Directory" attribute will also be set in the LONG name space.
- Supports a "Template" control statement specifying the name of a template object to use e.g. "template=t_1.sales.abc". The template may be a user or template object.
- Supports attributes specific to template objects such as "New Object's DS Rights" and "Volume Space Restrictions". *Uimport* appears to ignore these.
- Supports a "Home directory rights" control statement specifying the rights to be granted to the home directory e.g. "home directory rights=RWCEMF".
- Supports a "Home directory restriction" control statement allowing a space restriction to be set on each user's home directory. The size of the restriction is specified in KB e.g. "home directory restriction=5000".
- Has an option (/c) to check the syntax of the input files and the validity of NDS objects referenced in the data file.
- Has an option (/x) to wait for a specified number of seconds after object creation to allow replication to occur.
- Has an option (/i) to initiate a replica synchronization after object creation to speed replication.
- Has an option (/s) to standardize the case in new user names. The first character is made uppercase, the remainder lowercase.
- Allows object names to be used as attribute values in the data file to be specified relative to the current context rather than the context in which the new users are to be created. This can be achieved by placing the import control statement "Use current context=y" before the "Name context" statement in the control file.
- Can do two passes through the data file for import modes 'b' and 'c'. Users are created on the first pass, attribute values are set on the second. This potentially avoids replication issues and the need to introduce delays after creating each user. Use the import control statement "Use two passes=y" to enable this option.
- Can create a subdirectory of sys:mail for each user. Use the import control statement "Create mail directory=y" to enable this option. It will be created on the same server as the home directory.
- By default when deleting users, *jrbimprt* deletes both the home directory and a mail directory (a subdirectory of sys:mail). These actions may be controlled via import control statements.

Jrbimprt will not delete the home directory if (a) the lowest level directory name does not match the user name, or (b) the user does not have RWCEMFA rights to the directory, but this behaviour can also be changed using import control statements.

- Can create an alias for each new user. This can be done in one of two ways. The first is to specify "alias" as a field name and to give the alias object name in the data file. The name may be a distinguished name with a leading '.', or it may be relative to the context in which the new user is created. The second method is controlled by two import control statements and creates aliases with the same name as the new object:

```
create aliases=[y/n]
```

```
alias context=<context>
```

- Supports NDS for NT (Corporate Edition). It can add each user to a domain via a template, or via a "Domain" import control statement, and can set NDS for NT passwords. Use the import control statement "Set NDS for NT passwords=Y" to set these in addition to the NetWare passwords. Adding a user to a domain is supported only in 32 bit versions.
- Can create subdirectories of each user's home directory via the "Create subdirectories" import control statement e.g. "create subdirectories=pmail,netscape\ini,photographs". Multiple levels may be created e.g. netscape\ini results in both the netscape and ini directories being created.
- Supports setting of both IP and IPX address restrictions.
- Does not require a "last name" field. When omitted, the last name is set to the user name.
- Is available in a 32 bit version.

JRBlist

A graphical utility to display the contents of a text file using the JRButils graphical display routines. This may be useful to redisplay output logged to a file, or to combine output from several programs (e.g. *dquota*, *lastlgn* and *pwdexp* in a login script) and then display it.

JRBpass

A graphical utility to set a password for a single user under NetWare and optionally on the NT workstation that the user is using, or their NDS for NT password. This is intended primarily to allow users to change their NetWare, NT and/or NDS for NT passwords simultaneously, but may also be used to change the passwords of other users. Administrators changing the passwords of other users may optionally retain the current password expiration date, or update it by the password expiration interval.

Changes to multiple programs

- Updated those programs which can process a list of file servers, to use new APIs allowing the servers to be located in a network with Pure IP only and no IPX. Unfortunately these APIs are available only in the 32 bit environment. DOS versions of JRButils may not be able to locate all servers in a Pure IP environment.
- Updated the help in all programs to give a list of related programs.
- Updated the help in all programs to list further keywords (nowrap, date, time) available for /e and /l. These had previously been described only in the manual.

Changes to individual programs

Accexp

- Created a graphical version.
- Added /t to the graphical version to cause the dialog box warning of impending expiration to close after the specified time in seconds e.g. /t=20.

Chkhome

- Added /a which produces output which can be used as input to *sethome2* to re-establish values for "Home Directory" attributes, HOME_DIR bindery properties, or "Message Server" attributes. For example:

```
chkhome * /a/l=hds.log
```

```
sethome2 @hds.log /a/o
```

- Added /s to sort by object or directory
- Modified so that when using /c, it also checks if the lowest level directory of the path stored in the "Home Directory" attribute matches the object name.
- Added /i to correct the "Home Directory" attribute where a DOS path contains lowercase characters, or the name space is recorded incorrectly (*nwadmin* allows a LONG path to be stored, but sets the name space field to DOS).

Copy_obj

- Modified so that when copying users, it checks all text attributes for values equal to the user name, and changes them to the new user name.

- Modified so that when copying users and creating a home directory, the new user is given the same rights to the home directory as the user being copied has.
- Modified so that when /t (copy trustees) is used, and the source object is a user, the new user is not given rights to the source user's home directory.
- Modified to allow objects of different classes in an input file.
- Added support for adding new users to NDS for NT (Corporate Edition) domains, and to NT groups.
- Added support when copying users, for changing the user name in the NDS for NT attribute "IWS:Profile Path".
- Added /i to initiate a partition synchronization after creation of each object.
- Added /n to allow copying of some items to be suppressed. Possible values are:
 - g Do not copy group memberships for users or templates, or the members when copying groups.
 - s Do not copy security equivalences.

Creatobj

- Fixed an issue where object classes beginning with a digit e.g. "3x Client Config Policy" when specified via /o were being treated as bindery object types, and hence resulting in an error.
- Added /# which forces *creatobj* to comply with TID 2936561. This requires that when using a template object, and the template has a "Trustees of New Object" attribute, the default trustees of a user object are not assigned. The default trustees are [Root], [Public] and the new user itself. Use of /# requires that all required trustees of the new user are assigned via the template's "Trustees of New Object" attribute.
- Added /s allowing a list of directories, separated by commas, to be specified e.g. /s="Pmail,ini\netscape,Accounting". These will be created as subdirectories of each new user's home directory. Multi-level directories may be specified.
- Changed its behaviour so that when creating home directories in the LONG name space, it creates them in the same case as the user name. It was previously converting the second and subsequent characters to lowercase.
- Provided a means of specifying the rights to be granted for new users to their home directories without using a template. This is done via /g e.g. /g=rwcmf. Note that /g was previously used to indicate that each new object was a group, but this can be done via /o instead.
- Worked around an unexplained problem where sometimes on NSS volumes, the home directory was correctly created in the LONG name space, but was stored in the "Home Directory" attribute in the DOS name space.
- Added support for adding new users to NT domains when Corporate Edition (NDS for NT) is installed. This may be done by specifying a domain via /u (which was previously used to indicate each new object is a user), or by adding a template to a domain. Any password specified via /w, or in an input file will also be set for NDS for NT. Note that NDS for NT is supported only in 32 bit versions of *creatobj*.

Delobj

- Modified to display paths and files being deleted, in the LONG name space when /v is used.
- Modified to query whether or not to delete a home directory when the lowest level does not match the user name. The name in the LONG name space is used if this is loaded on the volume.
- Modified /a to allow a value (/a=r) which prevents the user being deleted if he/she does not have [RWCEMFA] rights to the directory stored in their "Home Directory" attribute or bindery HOME_DIR property.
- Added /c to force deletion of home directories where the lowest level does not match the user name. However, if /c=r is used, the user is not deleted when there is a mismatch.

Dquota

- Fixed what appears to be a long standing bug where it reported incorrect usage for a directory quota of zero and a usage of zero. However, it reported correct usage and free space for a zero quota and non zero usage (i.e. negative free space).
- Fixed an issue where under certain conditions it could display the wrong volume quota for a user.
- Added /n=g for use from the version with graphical output to suppress opening a window unless the user has less free space than the specified threshold.
- Changed the default warning threshold from 16 KB to 64 KB.

Fsupdate

- Fixed an issue when using /m /s and /t, it was not mirroring trustees for the specified target directory. It was however, for all subdirectories, and for all files in the target directory and its subdirectories.
- Fixed an issue in 32 bit versions when using /m and /t where it was incorrectly removing trustees from files where the DOS and LONG names for the file or the path did not match.
- Fixed an issue when using /m but not /t, it would sometimes mirror trustees despite /t not being used.
- Added /f allowing setting of file and directory attributes rather than copying, deleting or renaming files. The required attributes are set using /a and /b.
- Modified /a and /b allowing '-' to precede the attributes to indicate that they are to be removed. When using '-', the value must be enclosed in double quotes e.g. /a="-h". For example /a=+h adds the hidden attribute without changing others, /a=h sets the attributes to h, and /a="-h" removes h without changing others.
- Added /u=n for consistency with *netcopy*. This allows copying of files where either the size or modification dates differ between the source and destination directories, whereas /u without a value copies only files from the source directory which are newer than those in the target directory.

- Modified to display the name of the file being copied before the copy begins rather than stating the file has been copied once the copying is complete. This means the user knows which file is being copied, which is useful for large files which may take some time.
- Fixed an issue when copying to NW 5 from NW 3 or 4, or vice versa caused by the different scheme used for creating DOS names from LONG names under NW 5 (wheelbarrow.exe will have DOS name WHEELBAR.EXE under NW 3 or 4, WHEELB~1.EXE under NW 5). *Fsupdate* was using DOS names when checking the existence of a file on the target volume, it now uses the LONG name. *Fsupdate* now does not attempt to preserve the DOS name when copying to/from NW 5 to other NW versions to allow for the different naming convention.
- Added /u=x which functions as per /u, except that it will only update each file on the target server, if a copy of the file already exists. This provides a means of updating files on multiple servers and ensuring that you only copy files to where they already existed.
- Worked around a bug in some versions of NSS where the SDK function NWAFFPGetFileInformation sometimes fails. This function is used to get the DOS name of a newly created Mac file or directory.
- Added /n=n to prevent *fupdate* trying to retain the same DOS name for copied files and directories. Note that *fupdate* does not attempt to do this regardless when copying from NW 3.x or 4.x to 5.x or vice versa because of the different scheme under NW 5 for deriving DOS names from LONG names.

Getequiv

- Added /i to check for security equivalence to groups without being a member of the group. For each group that a user is security equivalent to, *getequiv* checks that the user appears in the group's "Members" attribute, and the group appears in the user's "Group Membership" attribute. Output is limited to groups which fail these tests. /i can be used with /z.

Getname

- Fixed a problem introduced in v6.0 where when using /o=*, it was not displaying objects in sorted order of object class with headings for each class.
- Added /s=x to sort objects by context. Objects are subsorted by common name.
- Added /s=r to allow sorting in reverse order.
- Fixed a problem where it was always giving the attribute name as "Full Name" in the heading when using an input file. Values for the requested attribute were displayed correctly.
- Fixed an issue where if *getname* retrieved date/time values from a server in a different time zone to the local timezone, it displayed the values in that server's local time. Note that the 16 bit version of *getname* will still do this unless a TZ variable is set - it cannot retrieve timezone information from Win95/98/NT/2000.
- Fixed an issue where *getname* could incorrectly expand an attribute name, when the complete name was given but the attribute was not valid for the object class. For example, "Locality" is stored in an attribute named "L" but using /a=l and /o="3x computer system policy" resulted in the "Last Referenced Time" attribute being displayed when in fact "l" is an actual attribute name which should not be expanded.

- Updated to correctly display “DNIP:Address Number”, “DNIP:Start Address Number” and “DNIP:End Address Number” attributes. These are used by various DHCP objects.
- Added /c to remove carriage returns and line feeds when displaying text values for attributes such as “Description”. They are replaced by a space.
- Added support for ‘srx’ to display yes or no indicating whether each object has station restrictions present.
- Modified to allow multiple attributes to be specified on the command line via /a. A string can now be given including both text and identifiers. This is the equivalent of using a template file containing a single line e.g. /a=“%login_name was created on %creation_date”.
- Added support for decoding new ZEN attributes such as “ZEN:INV Disk Info” and “ZEN:INV NIC Type”.

Getquota

- Fixed what appears to be a long standing bug where it reported incorrect usage for a directory quota of zero and a usage of zero. However, it reported correct usage and free space for a zero quota and non zero usage (i.e. negative free space).
- Fixed an error in the calculation of expanded usage.

Getrest

- Added /o to allow the NDS object class to be specified. Possible values, are ‘user’, ‘group’ and ‘template’. This is primarily to provide a means of using wild cards for templates.
- Added support for displaying NW 3.x server intruder lockout settings. New restriction values are:

il	Intruder lockout enabled
ila	Intruder lockout attempts
ilt	Intruder lockout time in minutes
irt	Intruder reset time in minutes

For example, *getrest yogi/ il* displays whether or not intruder lockouts are enabled on server yogi.

- Modified so that when filtering on maximum concurrent connections, and using ‘gt’ or ‘ge’, *getrest* will also display those users with no connection limit. This anomaly dates back to NW 3.x and earlier because a value of zero indicated ‘no connection limit’.
- Added support for the GroupWise attributes “NGW: Visibility” and “NGW: Mailbox Expiration Time”.
- Added support for displaying and filtering on network addresses under NDS via the restriction ‘na’.

Grpadd

- Fixed an issue when using a file of groups and /c, where the group names were converted to uppercase rather than being created in the exact case used in the file.

Grplist

- Added /r for use with /x to search for objects from [Root].
- Added /m to provide an alternative output format where one group and one member name is given per line and they are separated by a comma.
- Added /s=x to sort objects by context. Objects are subsorted by common name.
- Added /s=r to allow sorting in reverse order.

Home2

- Fixed a strange problem where on some DOS machines, the mapping for the current drive was being changed correctly, but the current drive was then changing to some other drive letter such as m:. The cause of the problem was external to *home2*, but has been worked around by checking for a change in the current drive letter and changing back to the original if necessary.
- When mapping a drive under NT, and /r is not used (i.e. the drive is not map rooted), *home2* is now able to modify the parent process so that the path relative to the volume root is set correctly. This means it works as it does under DOS. Note that under Win95/98 the drive will still be mapped to the volume root.

Jrbcx

- Fixed a problem where values for /y and /n were case sensitive. Upper case values resulted in errors.
- Added /a to display the primary and preferred servers.

Jrbmap

- Added /m which forces creation of a file containing a 'set' command for storing the drive letter which has been mapped in an environment variable. This is intended for use with ***jrbmap next*** under Win95/98 and provides a mechanism by which the drive letter which has been mapped can be made available to other programs. For example:

```
jrbmap next:=hewey/apps:jrb /m=x.bat /w=nd
call x
if exist %nd%:\mydir\whatever.exe whatever
```

- Fixed an issue where it failed to map a drive to a path given in the LONG name space which included spaces.

- Fixed an issue in 32 bit versions where they could produce an application error when the command line exceeded 128 characters in length.
- Modified the 32 bit versions when using /r and /w to store the environment variable in the environment of the parent process when it is cmd.exe and the OS is NT/2000.
- The 32 bit versions when run at a command prompt under NT/2000 now correctly apply the relative path when not performing a 'map root'. For example, the command ***jrbmap p:=vol1:app\dodgy*** previously resulted in P being mapped to vol1: after *jrbmap* had run. Now P will be mapped to the full path and if you select drive P, the command prompt is 'P:\app\dodgy>'.
p:=vol1:app\dodgy
- Worked around a problem in the 16 bit version where the current drive was sometimes changing when changing the mapping of that drive e.g. when your current drive was p: and you remapped p: your current drive became h:. The problem was external to *jrbmap*, and appeared to be machine specific.

Killconn

- Added support for clearing connections via *openfile.nlm*. *Killconn* will automatically attempt to do this if the user running *killconn* has insufficient rights to clear the connection directly, and the server is running NW 4.x or later.
- Added /h to force clearing of connections via *openfile.nlm*.
- Modified to clear the address from a user's "Network Address" attribute prior to clearing the connection. NetWare does not appear to do this.

Listobj

- Added /s=x to sort by context, and sub-sort by common name
- Added /o=container to list container objects, whatever their class.

Lscripts

- Modified so that when creating bindery mail directories (subdirectories of sys:mail) and when displaying bindery login scripts, it assumes that they are on the user's default server (message server) rather than on whatever server the person running *lscripts* is connected to.

Mattach

- Added /x to display the license count for servers which the client workstation is authenticated to.

Move_dir

- Fixed an issue where the 32 bit version was failing to move directories on volumes with the LONG name space loaded.

Move_obj

- Modified to allow objects of different classes in an input file. Previously they had to belong to the class specified via /o, or be of the same class as the first object in the file.

Ndsrghs

- Removed a harmless error message which could occur under NW 5 when [attribute] equaled "[Entry Rights]". The error was

NDSRGHTS: Cannot determine if '[Entry Rights]' is defined as 'Public Read'

Reason(s): Attempt to read data from an empty buffer

- Fixed an issue with filtering on rights under NW 5.

Netcopy

- Fixed an issue where the use of '*' as a file specification failed to copy files without extensions. The problem arose due to a change of SDK functions used in the v6.0 release.
- Fixed an issue where last access dates were not being retained when copying files from a NetWare volume to an NTFS drive.
- Fixed an issue where the last access dates were not being reset on files in the source directory when copying from a NetWare volume to a local drive.
- The 32 bit versions now retain directory creation dates when copying directories from NetWare to WinNT/2000 or from WinNT/2000 to WinNT/2000. NetWare does not use a directory modification date, but WinNT/2000 does. When copying from NetWare to WinNT/2000, the modification date is set to the creation date but this will be subsequently updated if files are copied into the directory.
- The 32 bit versions now copy directory attributes hidden, read-only and archive to local directories.
- Fixed an issue in 32 bit versions with retaining LONG names when copying to a local drive.
- Added /g to control the handling of empty directories. Using /g without a value prevents copying of empty directories. This may still result in an empty directory being created if the source is non-empty but filtering e.g. via /a results in no files being copied. Using /g=a covers this situation because it attempts to delete the directory after copying is complete. This will also delete empty directories already present in the target directory structure, providing that there is a corresponding directory in the source directory structure. Directories flagged Di will be deleted only if /o is also used.
- When /c is used, it will now create all levels of the target directory if necessary.
- Modified to display the name of the file being copied before the copy begins rather than stating the file has been copied once the copying is complete. This means the user knows which file is being copied, which is useful for large files which may take some time.

- Fixed an issue when copying to NW 5 from NW 3 or 4, or vice versa caused by the different scheme used for creating DOS names from LONG names under NW 5 (wheelbarrow.exe will have DOS name WHEELBAR.EXE under NW 3 or 4, WHEELB~1.EXE under NW 5). *Netcopy* was using DOS names when checking the existence of a file on the target volume, it now uses the LONG name. *Netcopy* now does not attempt to preserve the DOS name when copying to/from NW 5 to other NW versions to allow for the different naming convention.
- Fixed an issue where it failed to copy directories when the name space in which the directory was created was not present on the target volume.
- Fixed an issue where it reported being unable to verify the path when copying to or from a local drive specified just as the drive letter with colon e.g. c:, and the current path for the drive was the drive root. It worked correctly when c:\ was specified, or the current path was any directory other than the drive root.
- Worked around a bug in some versions of NSS where the SDK function NWAFFPGetFileInformation sometimes fails. This function is used to get the DOS name of a newly created Mac file or directory.
- Added /n=n to prevent *netcopy* trying to retain the same DOS name for copied files and directories. Note that *netcopy* does not attempt to do this regardless when copying from NW 3.x or 4.x to 5.x or vice versa because of the different scheme under NW 5 for deriving DOS names from LONG names.

Nsrename

- Fixed a cosmetic issue where it would give an error reporting nothing was found when processing an empty directory. It now reports an error only when a file name has been specified, and the file does not exist.
- Added /c allowing a name change to occur in all name spaces. By default, the name is changed only in the name space specified via /n.
- Fixed a problem where under some circumstances it was incorrectly displaying the path for the renamed file or directory, even though the renaming had been done correctly. The last level of the path was being repeated so that vol1:hardware/wheelbarrows was being displayed as vol1:hardware/wheelbarrows/wheelbarrows.

Openfile

- Added /m=l to display only files which are locked. The lock information is not displayed, just the file names.
- Now accepts 0 as a valid connection number which shows files held open by the server. When displaying the connections holding a file open, it will now display connection 0 if the server has the file open.
- Added /v to allow a message to be sent to those objects holding a file open e.g. /v="Please log off now". /v can be used only when /d is used i.e. <entity> is a file.

Orgroles

- Added /x for use when displaying role occupants to locate organizational roles in containers below the starting container.
- Added /r for use with /x to begin the search from [Root].

Pqadd

- Fixed an issue when using a file of groups and /c, where the queue names were converted to uppercase rather than being created in the exact case used in the file.
- Modified to partially work around an NDS8 bug where the SDK function NWDSSearch fails to find any objects when the search pattern includes underscores. This was causing a command such as ***pqadd H123_ps fred*** to fail. *Pqadd* now uses NWDSSearch to locate queues only if wild cards are used, so that the example above will now work correctly, but ***pqadd H123_* fred*** will still fail.

Pqdel

- Modified to partially work around an NDS8 bug where the SDK function NWDSSearch fails to find any objects when the search pattern includes underscores. This was causing a command such as ***pqdel H123_ps fred*** to fail. *Pqdel* now uses NWDSSearch to locate queues only if wild cards are used, so that the example above will now work correctly, but ***pqdel H123_* fred*** will still fail.

Pqdeljob

- Added support for use of an input file containing print queues.
- Added /z to allow the first n jobs in a queue to be deleted e.g. /z=5 would delete the first 5.
- Added /v to allow deleting jobs based on each job entry's description field.

Pqmovjob

- Added /v to allow moving jobs based on each job entry's description field.

Pqreljob

- Added /v to allow releasing jobs based on each job entry's description field.

Pqusers

- Fixed a simple problem where it was not working with an input file. No entries from the file were processed and no errors were reported.

Pradd

- Added support for using a list of printers in a file. The file name must be preceded by '@'.

Prdel

- Added support for using a list of printers in a file. The file name must be preceded by '@'.

Profiles

- Added support for wild cards in a profile name when listing the users of profiles.
- Added /x for use when listing the users of profiles, to search containers below the starting context. Because /r has already been used for another purpose, user /x=r to search the tree from [Root] for profile objects.

Psadd

- Added support for creating printers when using /w on NW 3.x servers. New switches associated with this are:
 - /h Specifies the printer type e.g. COM1 or LPT2.
 - /i Specified the default queue for the printer
 - /n Specifies the printer number. By default the next available number is used.

Note that the above switches can be used to change the current settings for existing printers.

Pwdexp

- Created a graphical version which can also change the user's password on a client NT workstation, and their NDS for NT password if they are a member of a domain.
- Added /a to the graphical version so the user does not have the choice of changing the password on NetWare, NDS for NT or NT.
- Added /c to the graphical version to force each dialog box to be the topmost window.
- Added /t to the graphical version to cause the dialog box warning of impending expiration to close after the specified time in seconds e.g. /t=10.

Salvlist

- Added /b to retain the original ownership of recovered files. By default, the person recovering the file becomes the owner. Changing the ownership back after recovery requires more rights than is needed to recover the file. To change ownership, S rights are required to the volume, or to both the old and new file owners.

Serv_cmd

- Fixed a problem introduced in v6.0 where it could sometimes report "Insufficient privilege" when issuing some commands such as loading an NLM.
- Fixed a problem where it could appear to hang when displaying selected loaded modules e.g. ***serv_cmd sho mod x****. The problem occurred when the server had more than 130 loaded NLMs and no matching NLMs were found in the first 130.
- Now under 'show lsl', *serv_cmd* displays the hardware address of the interface associated with each logical LAN board.
- Added "ADD" as a synonym for "APPEND" when modifying bindery contexts.

Setacl

- Added /v=d to produce output delimited by semicolons
- Added /c to allow restoration of ACLs logged to a file via /v=c or /v=d. /c may have one of two values:
 - c The delimiters in the file are commas
 - d The delimiters in the file are semicolons

Setcx

- When using /u and running under NT, the 32 bit version can now set the environment variable in the parent process i.e. the command box in which it is run.
- Added /s to specify a server to connect to when connecting to another tree.
- Added /n to suppress setting of the default context.
- Added /c to allow storing of the user's context in the environment under DOS, Windows NT and 2000. The default variable name is CX.

Sethome2

- Added provision for an input file also containing paths. Use /o to indicate that the file contains both object names and paths. This allows the contents of home directory attributes to be saved via *getname* and restored via *sethome2* e.g.

```
getname * /a=home_directory /j/ydu/l=homes.log
```

```
sethome2 @homes.log /o/a
```

SetName

- Fixed an issue where objects of different classes could not be used in an input file. All objects were assumed to be of the same class as the first object in the file.

- Added support for the "RADIUS:Enable Dial Access" boolean attribute which behaves the opposite of most boolean attributes in that the absence of the attribute is treated as 'true'.
- Added support for the "APP: Version String" and "APP:Path" attributes. These are of type "Octet String" which *setname* in most cases cannot set because it needs to know the exact structures of the information in the string. However, the above two attributes are simple character strings.

Setowner

- Modified to cope with double quotes surrounding the path when using an input file created by *whodidit*. This overcomes a problem when the path is in the LONG name space and file or directory names incorporate spaces.
- Fixed an issue where it reported the current drive not being a network drive when using an input file and the current drive was a local drive.

Setpwd

- Added support for setting NDS for NT passwords. This is controlled via /m which can have one of three values:

b	Set both NDS and NDS for NT passwords (this is the default)
m	Set NDS for NT passwords
n	Set NDS passwords
- NDS passwords are converted to uppercase, NDS for NT passwords are set in the case in which they are given.

Setquota

- Fixed an issue setting quotas greater than 16 GB. Although the quota was set correctly, *setquota* displayed an incorrect value due to integer overflow.

Setrest

- Added /o to allow the NDS object class to be specified. Possible values, are 'user', 'group' and 'template'. This is primarily to provide a means of using wild cards for templates.
- Modified so that when resetting "Account locked" under NDS, *setrest* also resets the bad login count and intruder next reset date and time. Previously, these had to be done in separate runs of *setrest*.
- Added support for setting NW 3.x server intruder lockout values. New restriction values are:

il	Intruder lockout enabled
ila	Intruder lockout attempts
ilt	Intruder lockout time in minutes

irt Intruder reset time in minutes

For example, **setrest yogi/ 10** sets the number of intruder lockout attempts to 10 on server yogi.

- Fixed a problem with using /t to replace station restrictions under NDS. This option was working correctly in bindery mode.
- Added support for the GroupWise attributes "NGW: Visibility" and "NGW: Mailbox Expiration Time".

Settrust

- Added /b allowing *settrust* to process files of 'rights', 'grant' or 'remove' commands created by *trstlist*. /b may have one of three values:
 - g the file contains 'grant' commands
 - m the file contains 'remove' commands
 - r the file contains 'rights' commands (the default)
- Added /x to allow searching for objects not only in the specified context, or in the current context if no context is given as part of [object], but in contexts below the starting point. Use /x=r to search from [Root]. This is inconsistent with other programs where /r is used to search from [Root] but /r is already allocated to another task in *settrust*.

Trstlist

- Added new value 's' for /b and /m to force prefixing paths with the server name in the 'rights', 'grant' or 'remove' commands produced. This is for use when processing volumes on multiple servers in a single command.
- Added /w=e for use with /a so that the name of the original object can be displayed. When using /w=o with /a, the name of the security equivalent object is displayed, so using /w=eobr with /a would display the name of the original object, the name of the security equivalent object granted the rights, the directory/file and the rights. When /a is not used, /w=o and /w=e both display the same object name.

Usergrps

- Added /i to limit the list of groups belonged to, to those specified. Wild cards may be used allowing, for example, the output to be limited to those groups in a specified container.
- Added support for wild cards in group names specified via /z.
- Fixed a problem where /n=cw did not work as expected, it was functioning as per /n=w.
- Added /n=t to display only the number of groups belonged to.

Users

- Fixed a problem with filtering on IP networks via /n where a network given in the form 138.75 was not being expanded to 138.75.*.* allowing the filter to work correctly.
- Added support for the location database file location.srt containing both IP and IPX addresses together. Previously it could contain one or the other, but not both.

Vol_info

- Modified to display the volume creation date and time in the detailed summary of volume information.
- Fixed an issue where a list of server names was being truncated to 47 characters. The list may now be up to 128 characters in length for 16 bit versions, 2048 characters for 32 bit versions.
- Changed the default output to the volume attribute summary.
- Added /m to display the detailed summary of volume information. This means that the detailed summary can now be output as well as other summaries.
- Added /t=s to produce totals for the volumes on each server in addition to the grand total.

Whodidit

- Modified to automatically set /r (prefix the path with the server name) when using /b.
- Modified to enclose the path in double quotes when using /b and the path is output in the LONG name space. This overcomes problems when file or directory names incorporate spaces.
- Added support for paths in an input file being enclosed in double quotes. The double quotes are needed when the path is in the LONG name space and the names incorporate spaces.
- Added support for displaying the length of each path (/o=g) and for filtering on the path length.
- Fixed an issue where it was displaying 0 for quotas and the logical size of a directory when the value exceeded 4.3 GB.
- Added support for displaying the server name (/o=h), the volume name (/o=k) and the path without the volume name (/o=m). Note that /o=m previously displayed the mode which is no longer available.
- Modified to allow filtering on directory names as well as on file names.
- Modified /a so that a character can be specified to use as a delimiter instead of a space e.g. /a=;.