NAME

mxload − Reload from a Multics backup_dump tape into a UNIX system

SYNOPSIS

mxload [−c *control-file(s)***] [−g** *map-file***] [−blnvx]** *dumpfile* **[***Multics-Path UNIX-Path* **...]**

DESCRIPTION

mxload reloads Multics files into a UNIX system. The Multics files are usually read from a tape produced by the Multics backup_dump command, but may also be read from a disk image of the tape, or a file produced using the Multics backup_preattach command. The device (usually tape) or file from which to read is specified by the *dumpfile* argument. This may also specify a disk file that was previously transferred to UNIX with the **dd** command or some other means.

Reload Control Files

Reloading options are specified by one or more control file (each named with a **−c** option). The control files are processed in the order they are specified, and each may contain statements that override built-in **mxload** defaults or options specified in earlier control files. The syntax **−c −** specifies that a control file is to be read from standard input. Details of control file syntax are found in the ***mxload*** *User's Manual*.

Multics subtrees, files, and directories to be reloaded may be specified either by statements in a control file or as pairs of command line arguments (*Multics-Path* and *UNIX-Path*). Something must always be specified for reloading: if there are no Multics object statements in any control files, there must be at least one pair of *Multics-Path* and *UNIX-Path* arguments, and if no *Multics-Path* and *UNIX-Path* arguments are specified, at least one control file must contain a **subtree**, **file**, or **directory** statement. The *Multics-Path* and *UNIX-Path* arguments must always occur in pairs, and the *Multics-Path* argument must always be enclosed in quotes (e.g., **'>udd>ATMOS'**) because it contains greater-than characters.

Reload Operation

mxload includes extensive support for conversion of native Multics data formats to UNIX equivalents. A summary of the default conversions is: Multics text segments, containing no non-ASCII characters (actually, no non-8bit characters; that is, no characters with values greater than 255), are converted (in **8bit** format) directly to UNIX files. Non-ASCII segments may be converted in a bit-oriented (**9bit**) format that translates every eight Multics bytes to nine UNIX bytes; whether this is done varies depending on the segment.

Multics archives containing only ASCII data are automatically unpacked into directories containing a separate file for each archive component. Multics archive segments containing non-ASCII data are, by default, converted in **9bit** format to individual UNIX files for later processing with **mxarc**. Multics mailbox segments are, by default, converted in **9bit** format to individual UNIX files for later processing with **mxmbx**. Multics message segments are, by default, discarded. Multics object segments are, by default, discarded. All other non-ASCII Multics segments are, by default, discarded. These conversions are described in detail in the ***mxload*** *User's Manual*.

Reload Maps and Lists

mxload normally produces a reload map identifying the objects reloaded, and when finished, a list of any objects that were requested but not found on the tape. The map is normally written to standard output, but may be directed to a single file (the **−g** option), written to individual files in each reloaded directory (the **−l** option), or suppressed altogether (the **−n** option). By default, the map identifies the Multics object (by pathname), its new x pathname, how it was converted, and its size, access time, and modification time. The **−v** option adds additional information about Multics attributes that may be important on UNIX. The **−x** option adds additional information about all remaining Multics attributes. The map format is described in detail in the ***mxload*** *User's Manual*.

In addition to the map, **mxload** may be directed to produce (using **list** statements in a control file) files listing all the Multics links (in **mxload.link**), access control lists (in **mxload.acl**), and added names (in **mxload.name**). Like the map, these may be produced either in the working directory or separately in each directory reloaded.

OPTIONS

−c *control-file*
Use *control-file* to specify options or list objects to reload.

−b Brief: suppress warnings about reload object specifications that do not match any names on the tape. This is important for multiple tape reloads, since the object list may specify objects on different tapes.

−g *map-file*
Global map: write the **mxload** reload map to the specified *map-file*. By default, the map is written to standard output. This overrides the **−l** and **−n** options.

−l Local map: write an individual reload map, named **mxload.map**, in each directory reloaded. This overrides the **−g** and **−n** options.

−n No map: do not produce a reload map. This overrides the **−g** and **−g** options.

−v Verbose map: produce additional attribute information for each object reloaded.

−x eXtremely verbose map: list all Multics attribute information for each object reloaded.

FILES

/tmp/mx??????\fP
Temporary files used in conversion

ENVIRONMENT

TMP Directory where temporary files will be placed, default is **/tmp**. Performance is enhanced by setting **TMP** to a directory in the same filesystem as the objects being reloaded, as this permits **mxload** to use **rename**(2) to put objects in their final locations, rather than copying the contents.

SEE ALSO

mxload *User’s Manual*, **mxmap**(1), **mxarc**(1), **mxmbx**(1), **mxforum**, **mxascii**, **dd**(1)