



CDMaker

iSeries CD-ROM Premastering Utility

Version 2 Release 0

June, 2022

CDMaker – the Navan iSeries CD-ROM premastering utility

Welcome to **CDMaker**, the Navan utility that enables you to create iSeries CD-ROM disks for distributing your applications to other iSeries machines.

Hardware and Software Pre-Requisites

The CDMaker software will create the *saved image* files necessary for you to distribute your applications on CD-ROM disks, but there are additional things you need to have in order to complete the process of making your CD-ROM distribution disk. These are:

- A CD-R writer, attached to a PC
- Suitable PC software (e.g. UltraISO, Roxio Easy Media Creator, Nero, Easy CD Pro or similar) that allows you to write to CD-ROM disks. This software is usually supplied with your CD-R writer drive.
- A file transfer program that can transfer files from the iSeries to a PC (e.g. an FTP client, IBM iSeries Access, Netsoft, Rumba or similar).
- i5/OS Version 5R4 or later

The work involved in creating a CD-ROM is not much more complicated than preparing a tape to distribute your software. In fact you actually go through the normal process of creating a tape in order to build your CD-ROM *saved image* data.

Product Limitations

CDMaker works well with most requirements for distributing your user applications and data. Some limitations do exist, however, when it comes to the distribution of the iSeries operating system, or iSeries licensed programs.

CDMaker supports the SAVLICPGM command, although you need to make sure you specify the correct 'work file naming method' on the NENDCDM command. Refer to the appropriate topic in the user manual for further details.

CDMaker does not support the SAVSYS command, the SAVSTG command, or the 'create a distribution tape' option on the GO LICPGM menu.

CD-ROM Premastering

Premastering on the iSeries is the process of creating a work tape that can be used as input to generate a CD-ROM. The tape contains the specially formatted data, which can later be used to create a CD-ROM image that can be read on a CD-ROM drive. There are three main stages in premastering:

- Start your mastering session.

The NSTRCDM command puts your job in a premastering state. When the job is in this state, all save operations (SAVOBJ, SAVLIB, SAVLICPGM, SAV, SAVDLO, SAVSYS, and so on) result in information being stored about the sizes of these tape files. Also, while in this state the *SAVRST (save/restore) format of the data written to tape is changed slightly to allow it to be restored from the CD-ROM.

- Perform the required save operations

Once the premastering session is started you can then perform the save commands you normally use to build your software distribution tape.

- End your mastering session.

The NENDCDM command takes your job out of a premastering state. Once that is done it will then re-read your work tape to build the *save image* files that will be used to create the CD-ROM. These files are then transferred (as binary image files) to your PC so that, finally, the PC files are then written to the CD-ROM disk using your CD-R writer and its accompanying software.

Starting your premastering session

The NSTRCDM command puts your job in a premastering state. When the job is in this state, all save operations (SAVOBJ, SAVLIB, SAVLICPGM, SAV, SAVDLO, SAVSYS, and so on) result in information being stored about the sizes of these tape files.

Working in the premastering state

Once the job is in the premastering state, all save operations (SAVOBJ, SAVLIB, SAVLICPGM, SAV, SAVDLO, SAVSYS, SAVS36F and so on) to the designated tape drive are intercepted internally and information is stored away about the tape files that are written to the work tape. This internally stored data is later used by the NENDCDM command to build a *distribution set mapping file* which informs the iSeries of the contents of the CD-ROM when it is later being used to install your iSeries applications.

While in this state, the format of the data written to tape is changed slightly to allow it to be restored from the CD-ROM. As such, the contents of the tape will be unusable after the premastering session ends.

Because of file transfer limitations, you must observe the following on all save operations performed within the premastering session:

- You must ensure that there is no data compaction or compression performed to tape. This means the save commands you use must have parameter DTACPR (data compression) set to *NO and COMPACT (data compaction) set to *NO.
- The default block size must be used by the save commands. The USEOPTBLK (use optimum blocking) parameter must also be set to *NO.

You should also note the following:

Whilst your job is in the premastering state, any tape-write error protection you may have is turned off during the save operations

If you use the SAVSYS command from within the premastering session, there will be additional files automatically written to the tape that are required for a CD-ROM copy of the SAVSYS data. These additional files will be reported in the list that is printed when you end the premastering session.

Ending your premastering session

The premastering state of your job is ended when one of two things happen:

- You use the NENDCDM command to end your premastering session
- You end your job. By default this ends the premastering session and destroys the internally stored data about the premastering session.

If you specify NENDCDM with the OPTION parameter set to *BUILD the following will then happen:

- Your job will be taken out of a premastering state
- The work area (library name or IFS path name) you specify (on the NENDCDM command) will be created
- The internally stored data (relating to the save functions that were performed to your work tape) will be converted into a *distribution set map* file. This file is named QDSETMAP and will be created in the work area. The contents of this file are not readable on the iSeries.
- The tape will then rewind and each tape file label will then be read and the contents of each tape file converted into a database *saved image* file in the work area (one file per tape label). The contents of these *saved image* files are not readable on the iSeries.
- A report will be printed showing you a list of the files that must be transferred to your PC. It also shows whether the file should be renamed (on the PC) before being written to the CD-ROM disk.
- The tape will then be re-initialised to remove the work contents of the tape

If you specify NENDCDM with the option parameter set to *CLOSE, the following will happen:

- Your job will be taken out of a premastering state
 - The internally stored data (relating to the save functions that were performed to your work tape) will be destroyed.
 - The tape will then be re-initialised to remove the work contents of the tape
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Transferring the files in the work library to your PC

Using the 'premastering information' list created from the NENDCDM command you must now transfer all of the *saved image* files plus the QDSETMAP file, as listed in the report, to the work library.

The method of transfer is not important, but you must ensure that your transfer program does not alter it in any way. No translation or conversion of the file is allowed. If you are using FTP to transfer the file you must specify a BIN (binary) mode transfer.

Once all of the listed files have been transferred to the PC you can now start-up your PC software that is used to write CD-ROM disks. Write all of the files to the CD, using the *PC file name* that is shown on the report produced by the NENDCDM command. You must not alter the name of the file to anything else. You must not add any extension to the file name. When writing the CD-R the sequence of the files on the CD is not important.

The name of the CD-R volume is important; you must use the one shown on the report produced by the NENDCDM command. If you are creating a multi-volume set of CD's you must use a correctly sequenced volume ID number when naming your CD-ROM disk set, for example CDR001, CDR002, CDR003... and so on.

Where you have saved a lot of data, the report may show that you need to create more than one CD to hold your files. If so you will see a number higher than 1 in the sequence field of the report. You must save the files to the correct sequence CD-ROM in a multi-volume set, as shown on the report. If you do not do this as shown on the report the iSeries CD-ROM drive will not be able to find the file.

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