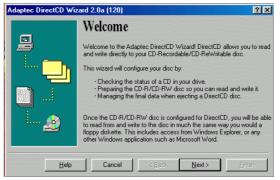# Making ISO 9660 Level 3 Compliant CD's
with Adaptec Direct CD®
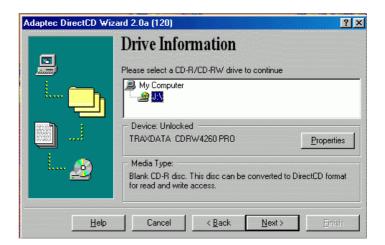
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The StorPoint CD-ROM Server supports packet written[i] CD's using ISO 9660 level 3[ii] headers. Starting with software version 4.25, there are however, a couple of things you have to consider to make your packet written CD fully ISO 9660 compliant. The following guide is aimed to help you in this process.
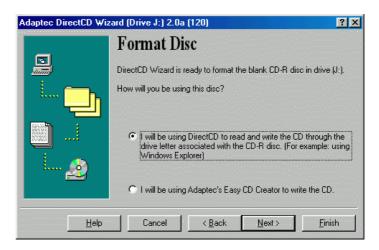
When you insert a CD-R in your CD writer and click on the direct CD icon the Direct CD Wizard will start guiding you through the process of preparing your new CD-R. The following dialogues will be displayed:
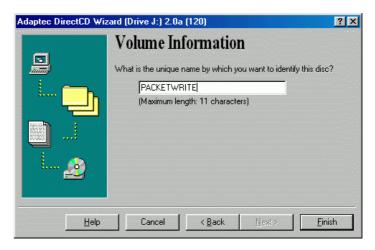

You are given the option to choose the correct CD-recording unit.

Using this option Adaptec Direct CD will format your CD-R with UDF 1.5. This is a file system for use with packet writing and other recordable optical disc technologies, such as DVD.

Before formatting, you have to give your CD-R a label, note that the maximum length of this label are 11 characters. The StorPoint will use the first 8 of these characters when displaying the volume name when you access the CD with a network client.

The wizard will start formatting the disc; the process will be brief, as the amount of needed information is quite limited.

Your disc is now ready for Writing with Direct CD.

The disc is locked to prevent you from ejecting it during the write process. Note that if you eject the disc without using the eject command from Direct CD, the CD will not comply with the ISO9660 standard and you will not be able to read it in the StorPoint.

A description of the ejection process follows.

Ejecting a CD making it fully ISO9669 Level 3 compliant

Right click on the Direct CD icon 🖼 again, the wizard will reappear.
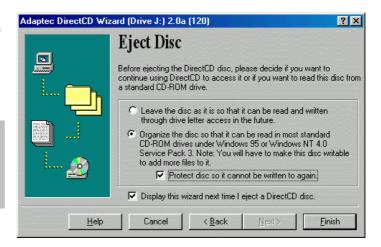
Choose the correct CD-recording unit.

This is the most important dialogue in the Wizard. If you make the wrong choices here the CD will only be accessible mounted in PC:s running Adaptec UDF reader or similar software.

> **IMPORTANT!**
>
> **Choose to organize the disc so that it can be read in a standard CD-ROM drive.**

Click on the finish button to prepare your CD for ejection. The ISO9660 information will be written during this process.

If you follow the procedure described above you should have no problems accessing the CD-R when it's mounted in your StorPoint based CD-ROM tower.

More information in this area is available at:

http://www.adaptec.com/tools/compatibility/dcdread.html
http://www.adaptec.com/tools/glossary/cdrec.html#ISO_Interchange

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[i] **Packet writing:** A method of writing data on a CD in small increments. Packets can be of fixed or variable length. Adaptec's DirectCD software supports packet writing.

[ii] **ISO 9660 Format**: An international standard specifying the logical format for files and directories on a CD-ROM.

ISO 9660 Interchange Levels
These are three methods of recording and naming files on disc under the ISO 9660 standard.

In **Level 1** (the lowest common denominator, developed with DOS file naming limitations in mind):

- Each file must be written on disc as a single, continuous stream of bytes -- files may not be fragmented or interleaved.
- A filename may not contain more than eight d-characters.
- A Filename Extension may not contain more than three d-characters.
- A directory name may not contain more than eight d-characters.

In **Level 2**, again, each file must be written on disc as a single, continuous stream of bytes, but there are no restrictions on filenames.

In **Level 3** there are no restrictions. This allows for writing files in multiple extents, so it is used for packet writing.