

User Guide for CD-ROM Creation

For approval and authorisation of this document, please refer to the IECC Applications Manual Contents, RT/E/S/10040.

This document is the property of Network Rail. It shall not be reproduced in whole or in part, nor disclosed to a third party, without the written permission of the document owner.

**Published and issued by
Network Rail
40 Melton Street
LONDON
NW1 2EE**

© 2004 Network Rail

This page is intentionally blank

Amendment Record

Issue	Date	Description
1	10/09/2001	Initial issue of document.
2	28/09/2004	CD restricted to data content for one IECC

Author	Approved	Date	Authorised	Date
--------	----------	------	------------	------

Contents

I	Introduction	I
1.1	PURPOSE	I
1.2	ASSUMPTIONS	I
2	Processes on the Build Computer	2
2.1	GENERATE DOWNLOAD FILES	2
2.2	AUDIT LOG	4
2.3	RELEASE	4
3	Processes on the CD-ROM Writer	7
3.1	ALTERING THE CONFIGURATION	7
3.2	LOGGING ON TO THE BUILD COMPUTER	10
3.3	ADDING ADDITIONAL FILES TO THE CD-ROM	14
3.4	COMPLETION	15
3.5	CD-ROM CHECK	15
3.6	PROTECTION AGAINST VIRUSES	16
3.7	PRODUCTION OF MULTIPLE CD-ROM COPIES	16
3.8	PRODUCTION OF CD-ROM LABELS	16
3.9	TESTING THE CD-ROM	18
4	Troubleshooting	19
4.1	THE UNIX BUILD COMPUTER	19
4.2	BUILD PC INSTALLATION	19
4.3	BUILD PC CONFIGURATION	19
4.4	LOGGING ON TO THE UNIX BUILD COMPUTER	20
4.5	WRITING THE FILES TO THE CD-ROM MEDIUM	20
4.6	LABEL PRINTING	21

I Introduction

I.1 PURPOSE

This Technical Guide describes the method to be used for the production of CD-ROMs for use on CD-ROM enabled IECCs.

I.2 ASSUMPTIONS

It is assumed that an appropriate site has been set up on the build computer and that the data has been copied to that site, as normal.

2 Processes on the Build Computer

A site will have been set up on the build computer with an appropriate user name and password and the correct data for that site will be present on the build computer. The process will, like the process for the production of EPROMs, produce s-records. However, for CD-ROM production, the s-records will not be downloaded to a PROM programmer but will be changed to a binary file. The binary files for all the boards in a subsystem will then be concatenated together with a header file to produce a single file for each subsystem. This file contains the operating system (BRX) the application code and the data for all of the boards in a subsystem.

When producing a CD-ROM, you log on and type 'bldmenu' as for the production of EPROMs, but in this case you are presented with the following menu:

IECC BUILD - MAIN MENU

=====

- d: Data Build
- g: Generate Download Files
- c: Release Subsystem Menu
- r: Reports Menu
- v: Produce Version Files
- s: Subsystem Installation (Prepare for First Use)

- q: Quit Menu System

Option :

The options 'Generate Download Files' and 'Release Subsystem Menu' replace 'Generate S-Files' and 'Blow EPROMs' in the EPROM based system respectively.

2.1 GENERATE DOWNLOAD FILES

If you type 'g' at the menu prompt, then a prompt for the subsystems to be generated will be output, after which this part of the process will proceed automatically.

Option : g

Enter Subsystem list to generate S-Files for
(ALL for every subsystem) : ars1

{ ARS is asked for

Processing ars1 board 172-1 bank C
'S-172-1-C.z' is up to date.

{ This first part is identical to the
{ process for EPROMs. In this case
{ a rebuild is not necessary as nothing
{ has changed.

Processing ars1 board 172-2 bank C
'S-172-2-C.z' is up to date.

Processing ars1 board 172-3 bank C
`S-172-3-C.z' is up to date.

{ The '.z' files are compacted s-records
{ For an EPROM based subsystem,
{ would be one record per EPROM. For
{ the CD-ROM, only one record per
{ board is required.

Processing ars1 board 172-M bank C
`S-172-M-C.z' is up to date.

*******Beginning generation of CD file for subsystem: ars1**

P2 - Generating Subsystem CD ROM Audit Report in : /cdrdev/YCDT/ars1/cd_rom/cd_g
{ A typical audit log is shown below.

P3 - Checking Data Exists for subsystems...

P4 - Converting S-Record Files to Binary Blocks...

unpack: /cdrdev/YCDT/ars1/cd_rom/B1/S-172-1-C: unpacked

Comms board converted ok. { Each s-record is changed to binary
{ format

unpack: /cdrdev/YCDT/ars1/cd_rom/B2/S-172-2-C: unpacked

Comms board converted ok.

unpack: /cdrdev/YCDT/ars1/cd_rom/B3/S-172-3-C: unpacked

Comms board converted ok.

unpack: /cdrdev/YCDT/ars1/cd_rom/B14/S-172-M-C: unpacked

Main Board Converted ok

P5 - Creating Board Version File... { Headers containing version
{ information are created for each
{ board.

P6 - Concatenate Board Version & Binary Blocks...

{ The board version information
{ and the binary files are
{ concatenated into one long file.

Adding the 'C' boards in the following order:

File S-172-1-C.bin exists and is being added

File S-172-2-C.bin exists and is being added

File S-172-3-C.bin exists and is being added

File S-172-4-C.bin does not exist { For an ARS there is no board **C4 etc**

File S-172-5-C.bin does not exist

File S-172-6-C.bin does not exist

File S-172-7-C.bin does not exist

File S-172-8-C.bin does not exist

File S-172-9-C.bin does not exist

File S-172-10-C.bin does not exist

File S-172-11-C.bin does not exist

File S-172-12-C.bin does not exist

File S-172-13-C.bin does not exist

File S-172-14-C.bin does not exist

P7 - Tidying Subdirectories and files...

{ Temporary files are removed

*******Successful generation of CD file for subsystem: ars1**

press <return> to continue