

## CD DVD ROM Anti Piracy Scanning Software for replicators



### Table of contents

Introduction .....	2
CD-DVD ROM Investigation.....	2
Con4m CD-DVD ROM scanning software. ....	3
Scanning .....	3
Investigation: Sampling and recording .....	4
Reporting.....	5
Additional features .....	6

Appendix: first page of a sample report

Con4m  
Dunantstraat 14  
2131 RP Hoofddorp  
The Netherlands  
Tel. and fax: +31 23 56 30189  
Mobile +31 616 558 977  
E-mail [info@con4m.nl](mailto:info@con4m.nl)  
Web page address: [www.con4m.nl](http://www.con4m.nl)



## Introduction.

Replication of copyrighted content requires the consent of the copyright holder. This makes a replication company vulnerable; if a customer makes a mistake, the replication company can be held responsible for violating copyrights. Therefore the replicator should instruct his sales customer support employees to properly inquire after the content that the customer wishes to be replicated.

Generic questions from the sales customer service employee will lead to non satisfactory generic answers by the customer and consequently annoying requests for additional information.

A lot of annoyance can be avoided by designing the right forms that will be send initially to the customer. This will lift the initial discussion to a professional level that will be highly appreciated by the customer, once he understands that the replicator helps to reduce potential mutual liabilities.

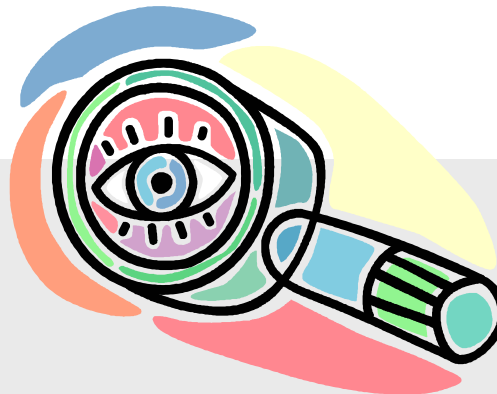
Upon receipt of the source data it must be investigated. At that point in time the replicator must verify whether the initial declaration of the customer matches with all the content of the source. Again, asking the right questions (if any) based on a quick and complete investigation of the source will enhance the level of communication. It is at that point in time that scanning software can be useful

---

## CD-DVD ROM Investigation.

CD-DVD ROM content in many cases is hard to investigate. It is probably more difficult then audio and video content.

Major software content holders are reluctant to list what they distribute, reluctant to provide licensing information. On top of that there are numerous free- and shareware programs each with its own license and distribution conditions. Furthermore not only programs are subject to copyright. Sounds like music, ringer tones etc. pictures, movies, logos and even texts can be the subject of copyrights.



Many source discs hold more than 100 libraries, many more than 1000 files. It is clear that not each and every file can be scrutinized, but a sensible sample must be evaluated to obtain a fair judgment. And more that that. It is wise to record the sampling process in order to be able to prove in retroaction, that a fair judgment was made.

Without support of a software program this can hardly be done frequently in a practical way.



## Con4m CD-DVD ROM scanning software.

The Con4m scanning software is basically a MS Access application. Access proved to be very versatile for the following reasons:

1. Access makes it easy to create reports, menus / interface forms, tables. Access has readily made menu options for sorting and filtering of tables and queries.
2. Access stand alone applications can easily be upgraded to full network applications with SQL server, including existing network user ID's and security.

3. From Access almost all MS Visual Basic functions can be used including functions that interact with MS Windows.
4. Access applications can be run without the need to install the expensive full Access software on each PC or workstation. The free run-time version of Access is sufficient.

Access has one drawback when reports must be saved and shared with for instance the customer. Access produces snapshots that require the use of a snapshot viewer that most people are not familiar with. A practical work around this drawback is to save and communicate snapshots as convenient (free) PDF documents.

---

## Scanning

The Con4m scanning software does not take away the responsibility of the replicator. It is the replicator who decides what categories will be scanned for and which files belong in which category. Speaking in terms of departments this could mean for instance that the "Pre-Mastering" controls the parameters of the application that is used by "Sales Customer Services".

Now how does it work?

During a scan that is initiated from an Access menu, a routine compares each and every file in each and every folder with a set of pre-determined criteria. Furthermore the routine reports any hidden files and it scans through text files for suspicious text strings (not only anti piracy but also anti-non-ethical e.g. CD key, porno, neo nazi etc.).

Investigation Summary:	
Volume name of disc:	Capt Hook
Total folders disc:	58
Total files:	1,328
Total Kbytes of files:	646,878
Used space Kbytes on disc:	649,340
Total hidden files:	3
Total files with suspicious text strings detected:	45



## Investigation: Sampling and recording

During the scan that takes one to a few minutes, the observations of all files are recorded in an Access table: file name, folder name, file size, yes or not hidden, category (text, picture etc.), observed suspected string etc. No data is copied from the source CD to the scanning workstation.

This Access table is the starting point of the actual investigation by the employee. On his screen he can see

which files he can open on his workstation and which are not known (the red highlighted files in the picture below). From the application he can preview pictures, listen to sounds etc. Having done so, he can record his actions and observations using the grey pop-up screen in the picture below. Here he can also mark files that are a reason for rejection of the customer order.

The screenshot shows the 'IRMA CD / DVD ROM check' application. The main window displays a 'Catalogue' with columns for File size, File name, Suspected Text / Hidden, Date, Category, Path, and Owner. A table lists various files, with some highlighted in red. A 'Notes' pop-up window is open, showing 'Catalogue and File details' for the selected file 'Louie Armstrong - A Kiss To Build A Dream On.mp3'. The pop-up includes fields for Customer, Catalogue, Volume, File Name, Content Category, Date, Size, Hidden, Path, and Owner. It also has a section for 'Input of observations' with checkboxes for 'Listed', 'Sampled', and 'Reject', and a text area for 'Observations'.

File size	File name (Double click to open, box is red if Windows has no associated appl.)	Suspected Text / Hidden	Date	Category	Path	Owner as known in Knowledge Base (dblclick for details)	Listed by customer	Sampled	Reject	Notes
3,004,949	MELASS52.EXE		18 Jul 2000	Executable	E:\SOFTWARE\MULTIMED\MIDI\		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Notes
2,945,399	Louie Armstrong - A Kiss		27 Aug 2000	Sound	E:\SOFTWARE\MULTIMED\AUDIO\		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Notes
2,942,757	VISTAW.EXE		12 Jul 2000	Executable	E:\SOFTWARE\WETEN\STAT\		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Notes
2,895,984	zonaim26.exe		27 May 2001	Executable	E:\SOFTWARE\SYSTEM\WIRUSSC\	Zone labs	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Notes
2,872,774	SNAGIT.EXE		12 Jul 2000	Executable	E:\SOFTWARE\BEELD\SCREEN\		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Notes
2,869,209	ADLAB121.ZIP		18 Jul 2000	Compressed	E:\SOFTWARE\WETEN\ELECTRO\		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Notes
2,831,406	DRIMAGE.SIT		25 Jul 2000	Compressed	E:\SOFTWARE\WETEN\STAT\		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Notes
2,804,986	FPASCLIN.TGZ		19 Jul 2000	Compressed	E:\SOFTWARE\DEVELOP\COMPILER\		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Notes
2,776,433	SIMW.ZIP		12 Jul 2000	Compressed	E:\SOFTWARE\WETEN\STAT\		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Notes
2,764,118	LCCWIN32.EXE		25 Jul 2000	Executable	E:\SOFTWARE\DEVELOP\COMPILER\		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Notes
2,746,363	DIASHOW3.EXE		19 Jul 2000	Executable	E:\SOFTWARE\BEELD\BEWERK\		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Notes
2,722,919	UPRE_SE8.HGX		18 Jul 2000	Compressed	E:\SOFTWARE\MULTIMED\AUTHOR\		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Notes
2,695,343	ERS98.EXE		10 May 2000	Executable	E:\SOFTWARE\SYSTEM\BEVEIL\		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Notes
2,676,351	INTERLST.ZIP		12 Jul 2000	Compressed	E:\SOFTWARE\SYSTEM\DOCC\		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Notes
2,670,143	T60811.ZIP		12 Jul 2000	Compressed	E:\SOFTWARE\BEELD\3D\		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Notes
2,631,604	T12000.ZIP		12 Jul 2000	Compressed	E:\SOFTWARE\MULTIMED\MVP3\		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Notes
2,551,964	REPTINST.EXE		12 Jul 2000	Executable	E:\SOFTWARE\BEELD\3D\		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Notes
2,533,241	ITEX13.EXE		12 Jul 2000	Executable	E:\SOFTWARE\BEELD\3D\		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Notes
2,532,091	NAVARAS3.ZIP		12 Jul 2000	Compressed	E:\SOFTWARE\MULTIMED\AUTHOR\		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Notes
2,530,964	TCL831.EXE		12 Jul 2000	Executable	E:\SOFTWARE\DEVELOP\COMPILER\		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Notes
2,482,189	FORES020.ZIP		12 Jul 2000	Compressed	E:\SOFTWARE\BEELD\3D\		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Notes
2,465,976	T12000.SIT		12 Jul 2000	Compressed	E:\SOFTWARE\MULTIMED\MVP3\		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Notes
2,448,977	BPDP301.TGZ		26 May 2000	Compressed	E:\SOFTWARE\ADMIN\SERVER\		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Notes



## Reporting

Upon termination of the investigation the investigator saves the Access table. Saving the table makes it possible to reproduce the investigation in case some questions may rise later; it can be reproduced why a customer catalogue was accepted or rejected.

May be the investigator needs to communicate his observations, be it on paper or by e-mail attachment. For that purpose a variety of reports is available with different selections and sequences.

Start, review and save investigation

**CD / DVD ROM Investigation**  
Yellow Book data only  
(before using this tool check disc for other operating systems then MS)

Start with input of Catalogue:

The catalogue needs to be unique and will be the key for filing the investigation report, both on paper and on the hard disc.

Next select customer from list:   
 Reference to the customer who ordered replication

Customers can be added through "Input / update of starting points", next "Input / update customer details".  
The customer name will appear on the reports and will be linked to the Catalogue.

Management version

**Start, review and save investigation**

- Start investigation
- Files investigated
- Investigation report (Size sequence)
- Investigation report (Folder sequence)
- Investigation report (File name sequence)
- Observations / requirements report
- Save this catalogue investigation to file
- Back to main menu

Designed by and © Con4m, July 2001

(HDCON4M) C:\Program Files\CD ROM\Develop of CD\_ROM.mdb / User: Nico Rombouts



Below you see a sample of what such a report will look like. Please note the following:

1. The Con4m logo in the left upper corner will be replaced by your company logo.
2. The report header contains accumulated information of the source disc. At the end of each category (compressed, sounds, pictures etc.) subtotals are reported.
3. The footer of the report always identifies when, who and on which workstation the report was generated.

This actual report page makes the appendix of this brochure.

The screenshot shows a software window titled "Result of investigation in sequence of file name". The window contains a report header with the Con4m logo, customer information (RepliComp), and various statistics. Below the header is a table listing files with columns for Size, File Name, Suspected/Hidden status, Date, Folder, and Owner in Knowledge Base. The table lists various file types like ZIP, HQX, and BIN files with their respective sizes and dates. At the bottom of the window, there is a footer with the date of the report (12 Jan 2003), the user's name (Mico Embrechts), and the page number (Page 1 of 44).

## Additional features

The scanning software provides the possibility to generate a knowledge database. Especially free- and share ware are numerous and many have individual licensing conditions. Once conditions have been determined files and file details can be stored in a separate table for future reference use by all employees.

Hoofddorp, The Netherlands,  
January 17, 2003.



Customer

RepliComp

Number of reasons for reject

0

(Run observations / rejections report for details if not 0)

Folders on disc

58

Space used of disk

649,340

Files on disc

1,328

KBytes of all files

646,878

Hidden files on disc

3



Filename Sequence

# Investigation Report

Catalogue Capt.Hook

Disc Label

Capt Hook

Size      FileName      Suspected / Hidden      Owner in Knowledge Base      Sampled

text / Date Folder      Listed by Cust.  Cat. Reject

Category      Compressed      Checked for: ace; ace; arc; arj; bin; cab; gz; gzip; hqx; jar; lha; lzh; pak; rar; sit; tar; tgz; uue; xxe; zip; zoo

3,649,769	2020S.ZIP	<input type="checkbox"/> <input type="checkbox"/>	12-Jul-00 E:\SOFTWARE\BEELD\SCREEN\	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
1,672,974	3DAUD12A.ZIP	<input type="checkbox"/> <input type="checkbox"/>	12-Jul-00 E:\SOFTWARE\MULTIMED\SOUND\	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2,394,453	ACDC_MAC.HQX	<input type="checkbox"/> <input type="checkbox"/>	18-Jul-00 E:\SOFTWARE\BEELD\DATA\	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
1,443,115	ACDPLGIN.ZIP	<input type="checkbox"/> <input type="checkbox"/>	18-Jul-00 E:\SOFTWARE\BEELD\DATA\	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2,869,209	ADLAB121.ZIP	<input type="checkbox"/> <input type="checkbox"/>	18-Jul-00 E:\SOFTWARE\WETEN\ELECTRO\	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
622,034	ADVREG12.ZIP	<input type="checkbox"/> <input type="checkbox"/>	18-Jul-00 E:\SOFTWARE\SYSTEM\HARDTOOL\	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
725,239	ALMFRE30.HQX	<input type="checkbox"/> <input type="checkbox"/>	18-Jul-00 E:\SOFTWARE\DEVELOP\TOOLS\	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3,413,663	ALP72SIT.HQX	<input type="checkbox"/> <input type="checkbox"/>	18-Jul-00 E:\SOFTWARE\DEVELOP\EDIT\	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
439,013	ALW203.ZIP	<input type="checkbox"/> <input type="checkbox"/>	11-Jul-00 E:\SOFTWARE\WETEN\ASTRO\	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
1,656,576	AMPRA167.BIN	<input type="checkbox"/> <input type="checkbox"/>	18-Jul-00 E:\SOFTWARE\MULTIMED\MIDI\	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
28,086	AP2SE22A.ZIP	<input type="checkbox"/> <input type="checkbox"/>	18-Jul-00 E:\SOFTWARE\ADMIN\SERVER\	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
841,131	APT13PPC.ZIP	<input type="checkbox"/> <input type="checkbox"/>	19-Jul-00 E:\SOFTWARE\BEELD\TEKEN\	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
1,397,875	APT13X86.ZIP	<input type="checkbox"/> <input type="checkbox"/>	19-Jul-00 E:\SOFTWARE\BEELD\TEKEN\	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2,317,672	ARVAL101.ZIP	<input type="checkbox"/> <input type="checkbox"/>	18-Jul-00 E:\SOFTWARE\ADMIN\EDITORS\	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
261,871	AVI2MPEG.ZIP	<input type="checkbox"/> <input type="checkbox"/>	18-Jul-00 E:\SOFTWARE\MULTIMED\VIDEO\	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7,555,581	B501PEUP.ZIP	<input type="checkbox"/> <input type="checkbox"/>	18-Jul-00 E:\SOFTWARE\UPDATE\UPDATE\	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
17,911,992	B5DEVTLS.ZIP	<input type="checkbox"/> <input type="checkbox"/>	18-Jul-00 E:\SOFTWARE\DEVELOP\COMPILER\	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
415,484	BB107ANT.ZIP	<input type="checkbox"/> <input type="checkbox"/>	18-Jul-00 E:\SOFTWARE\ADMIN\NETTOOL\	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
331,805	BB14H2UN.TGZ	<input type="checkbox"/> <input type="checkbox"/>	18-Jul-00 E:\SOFTWARE\ADMIN\NETTOOL\	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4,426,164	BEH09TAR.TGZ	<input type="checkbox"/> <input type="checkbox"/>	11-Jul-00 E:\SOFTWARE\BEELD\3D\	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4,754,458	BEHE0900.ZIP	<input type="checkbox"/> <input type="checkbox"/>	11-Jul-00 E:\SOFTWARE\BEELD\3D\	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2,074,538	BEHEM090.SIT	<input type="checkbox"/> <input type="checkbox"/>	11-Jul-00 E:\SOFTWARE\BEELD\3D\	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
26,603	BMP2AVI.ZIP	<input type="checkbox"/> <input type="checkbox"/>	11-Jul-00 E:\SOFTWARE\MULTIMED\VIDEO\	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
1,411,185	BOOT.GZ	<input type="checkbox"/> <input type="checkbox"/>	20-Jul-00 E:\SOFTWARE\ADMIN\NETTOOL\	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>