Update on OSJ-EWG Activities

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Current Issues OSJ-EWG

- Software compatibility testing
  - Step 1: ISO 9660
  - Step 2: UDF
- OSJ-EWG guidelines
  - 5 documents will be available upon request.

OSJ-EWG Members

OSJ-EWG Members (15 companies)
Aplix
B.H.A.
Funai Electric Co., Ltd.
Victor Company of Japan, Ltd.
Matsushita Kotobuki Electronics Ind., Ltd.
Mitsumi Electronic Co., Ltd.
NEC Home Electronics, Ltd.
Philips Japan, Ltd.
Pioneer Electronic Corp.
Ricoh Co. Ltd.
Sanyo Electronic Co., Ltd.
Shinano Kenshi Co. Ltd.
Sony Corporation
Teac Corporation
Yamaha Corporation

Writer Software Application Compatibility Studies

- Check compatibility of writer application from the view point of end-users.
  - Step 1:   ISO 9660 formatter
  - Step 2:   UDF formatter

ISO 9660 software test: Test Conditions

- **Platforms**
  - Windows 95
  - Macintosh
- **Software packages**
  - 6 packages for Windows 95
  - 3 packages for Macintosh
- **Writing Mode**
  - DAO/TAO

ISO 9660 software test: Test Configuration

- Windows 95 version Japanese 4.00.950 B
  - machine   Gateway2000
  - OS level   OSR 2
  - SCSI card   Adaptec AHA2940
- MACINTOSH
  - machine   Power Macintosh 8600
  - OS level   OS8.0 Japanese
- CD drive used
  - YAMAHA   CDR400 FW version 1.0j

Data recording test: -Windows

- Multi-session writing
- The 1st session was written on the disc under default setting with each software, and then the 2nd session with another Software.
- Data is compared after writing.
- If software is designed for English OS, only English files was written on the disc .

Data recording test: -Macintosh

- Multi-session writing
- 1. The 1st session was written on the disc under ISO 9660 with Apple extension, and then the 2nd session with another software.
- 2. The 1st session was written on the disc under HFS, and the the 2nd session with another software.
- Data was compared after writing.

Evaluated points

- 1. Writing
  - Completed writing operation?
- 2. File compare
  - Compare after writing each session

Reference Test Disc Contents

- File Contents
  - Files with Japanese file names and Files with English file names are separated at the top level directory.
  - Long File name
  - The content of file is not "0" data.
  - "deeper hierarchy" (one file in the 9th level).
  - one directory including a lot of files in the same directory. (1,000 file of several kilo byte)

        Root
        +---- Japanese
        +---- "fukai kaiso"(Japanese)
        +----English
        +----Deep Hierarchy(English)

Test 1:Multi-session recording test (1)

✈ 1. Testing in Windows 95 environment

1st 2nd	A	B	C	D	E	F
A	---					
B		---				
C			---			
D				---		
E					---	
F						---

✈ 2. Testing in Macintosh environment

1st 2nd	A	B	C
A	---		
B		---	
C			---

Test 1:Multi-session recording test (2)

✈ 1st session:

```
Root
+---- Japanese1
+---- "fukai kaiso"(Japanese)1
+----English1
+----Deep Hierarchy(English)1
+----Session2 (empty directory)
```

✈ 2nd session:

```
Root
+---- Japanese2
+---- "fukai kaiso"(Japanese)2
+----English2
+----Deep Hierarchy(English)2
|
+----Session2--------------------
+---- Japanese1
+---- "fukai kaiso"(Japanese)1
+----English1
+----Deep Hierarchy(English)1
```

Appended Data

```
+Japanese2
+"fukai kaiso"(Japanese)2
+English2
+Deep Hierarchy(English)2
```

Test 2: Audio recording test

- 1. Audio recording as multi-session
  - Examine whether it is possible to record audio session on the 2nd session or not.
- 2. Edit and record a CD from several CD's
  - Record DA tracks on a CD-R from several CD's and confirm the tracks
- 3. Recording data session in addition to audio session
  - Read data on the 2nd session and compare
  - Play back audio tracks on the 1st session

Test 3: Interchange test between Win and Mac

- Readability in different OS environment using discs written by Test 1.
  - ISO 9660 with Apple extension disc
    --> Confirm readability in Windows 95.
  - Windows ISO disc
    --> Confirm readability in MAC OS.

Implementation Guidelines

- As results from compatibility studies in OSJ-EWG, the following guidelines will be published from OSJ.
    - 1. The Guideline to understand CD-R/RW Command Set
    - 2. Usage of OPC Area within its Limitation
        - Its contents will be incorporated into Orange Book part 2 version 3.0.
    - 3. Guide Line to Automatic Error Recover Process
    - 4. Read Test Reference to Packet Written Media
    - 5. Overviews of Orange Book
        - Documents will be soon available from OSJ by paper or electronic form (e-mail reflector under construction).

Distribution

- OSJ-EWG documents are available upon request.
- If you would like these documents, please contact:
  tak@shinyoko.ricoh.co.jp