

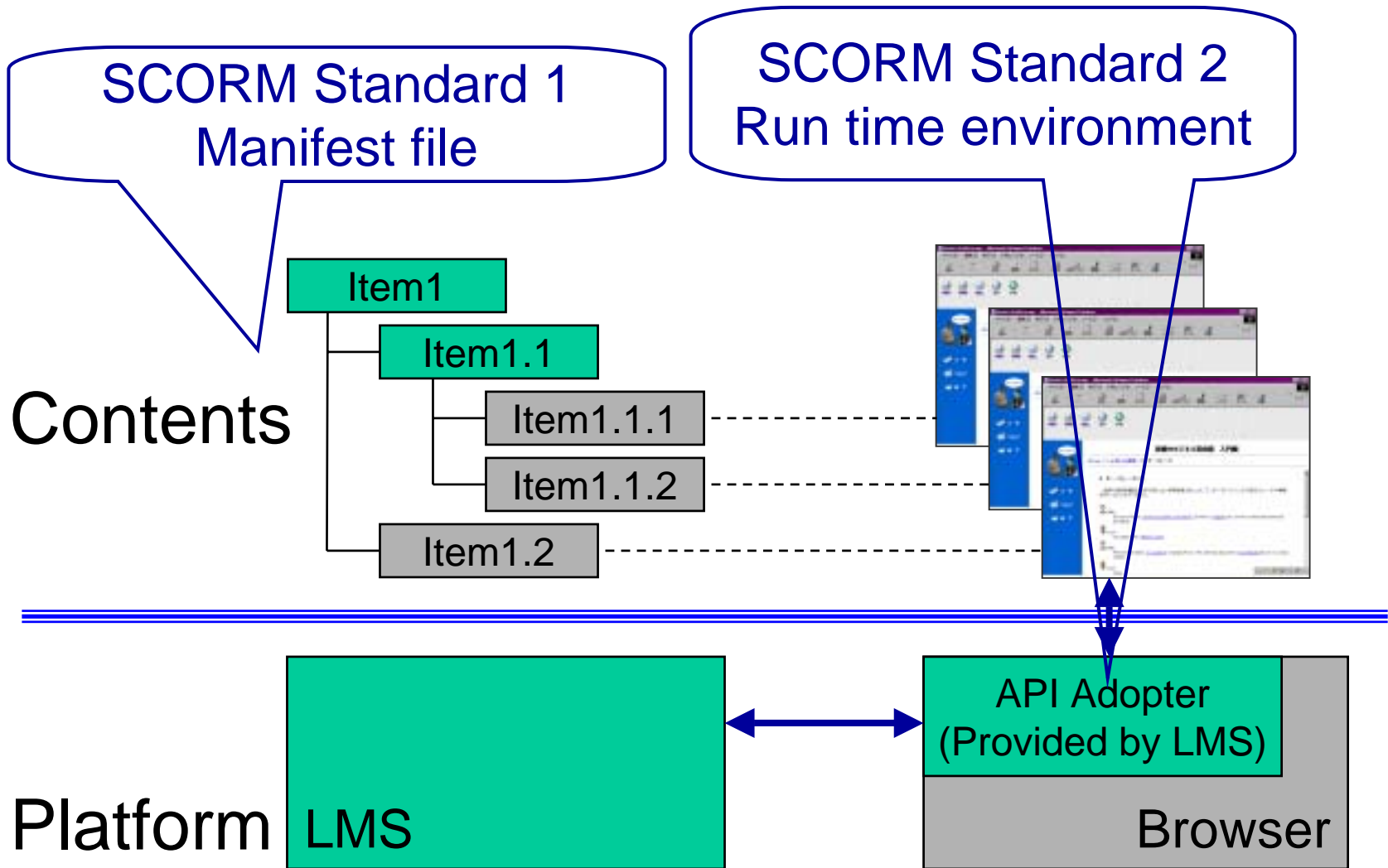


The Experiment Summary

Jan.30, 2004

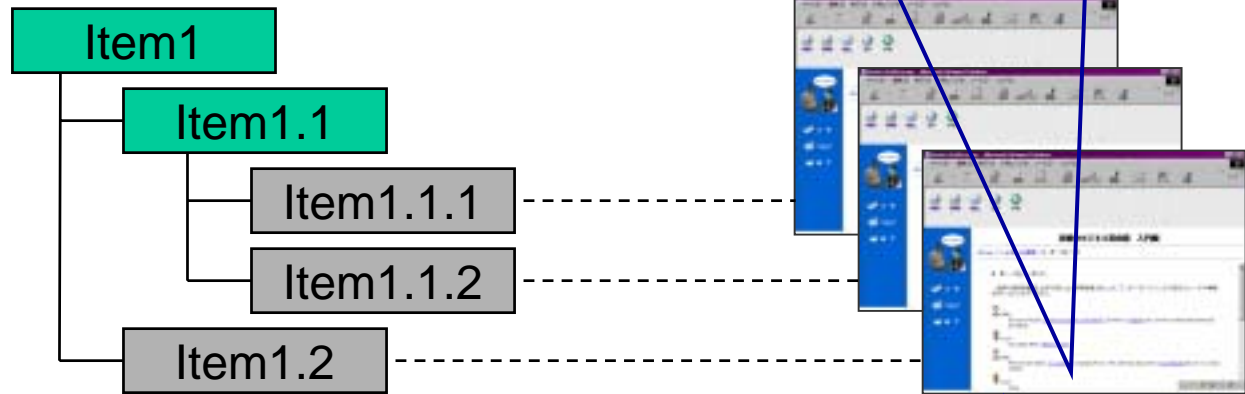
Advanced Learning Infrastructure Consortium/
e-Learning Consortium Japan/

SCORM Standard

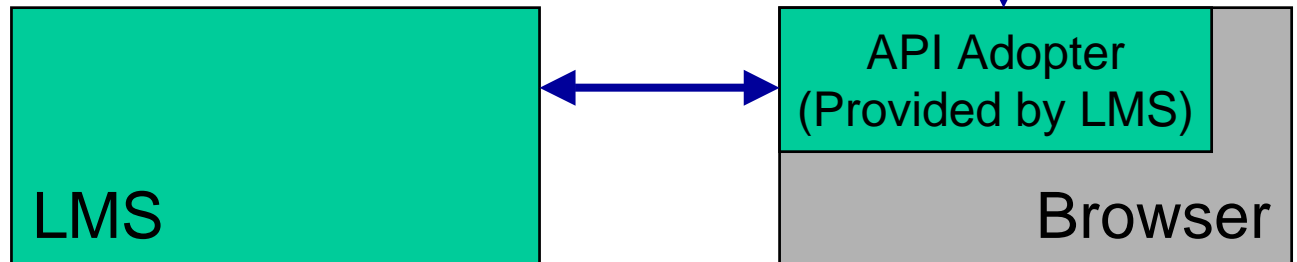


ADL Test Suite (LMS Test)

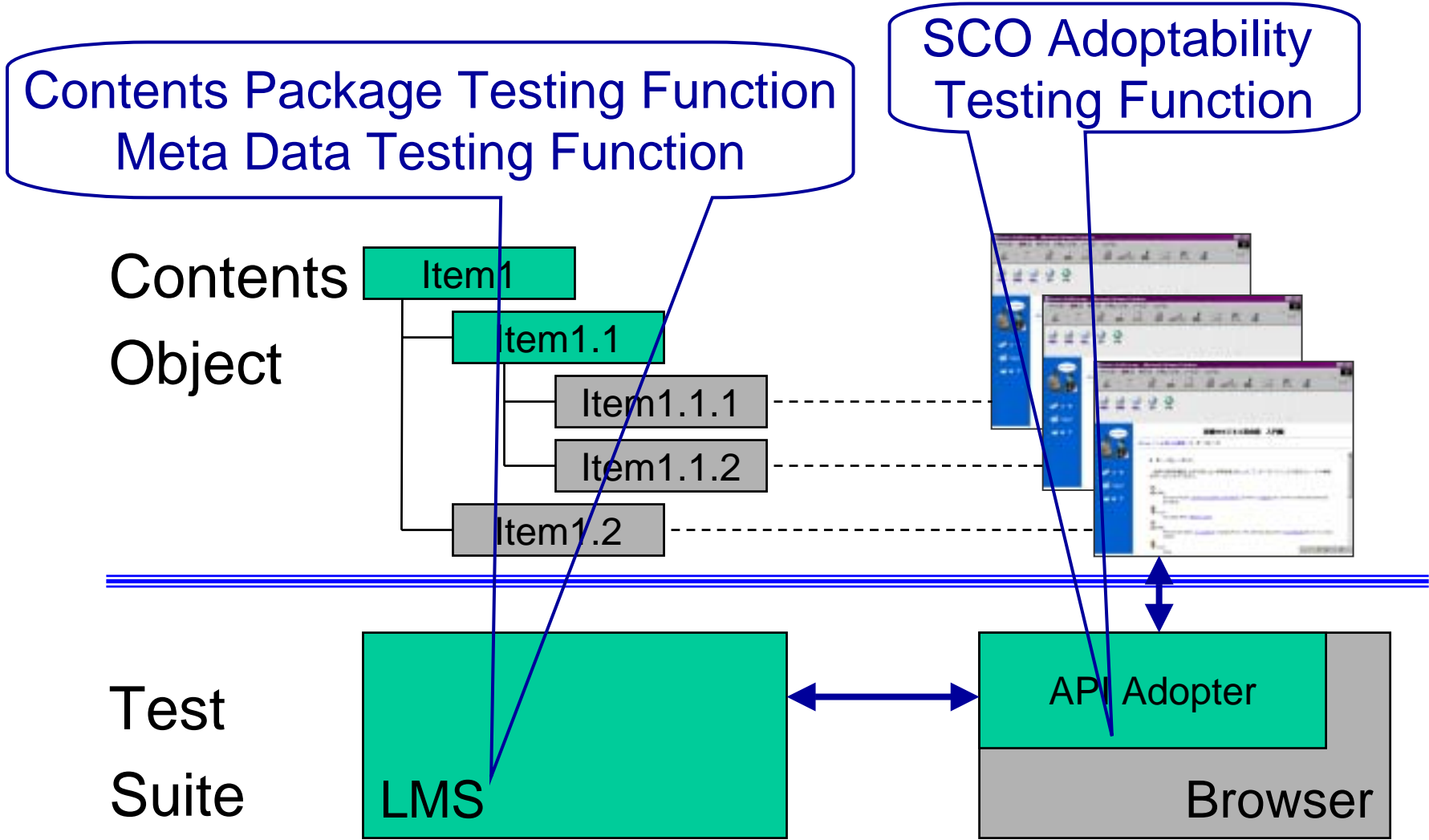
Test Suite



LMS Object

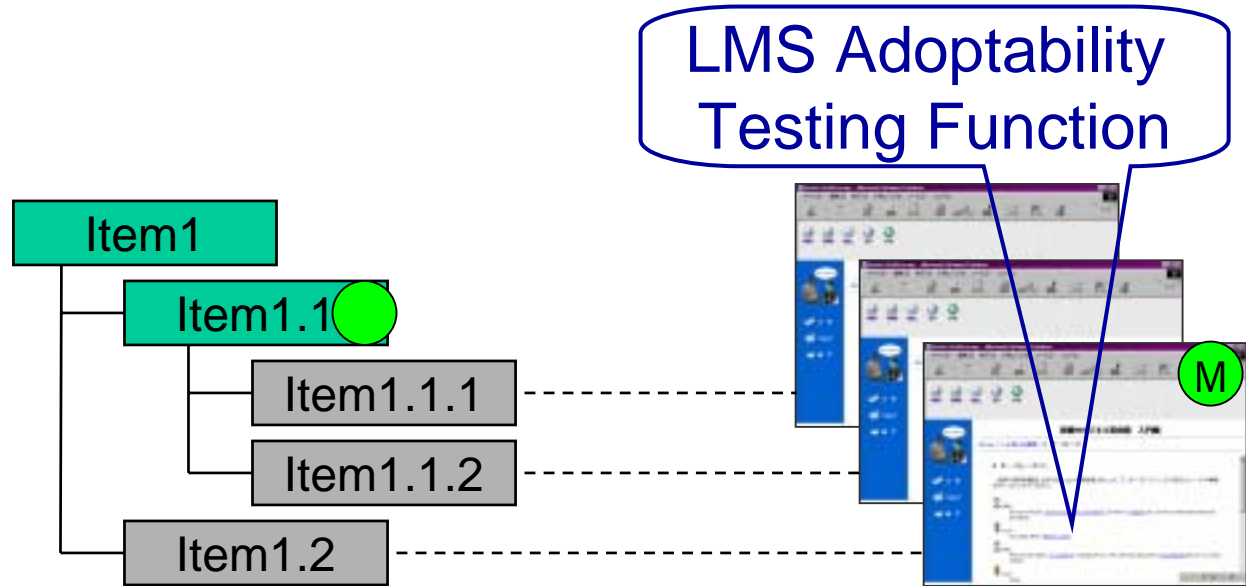


ADL Test Suite (Contents Testing)

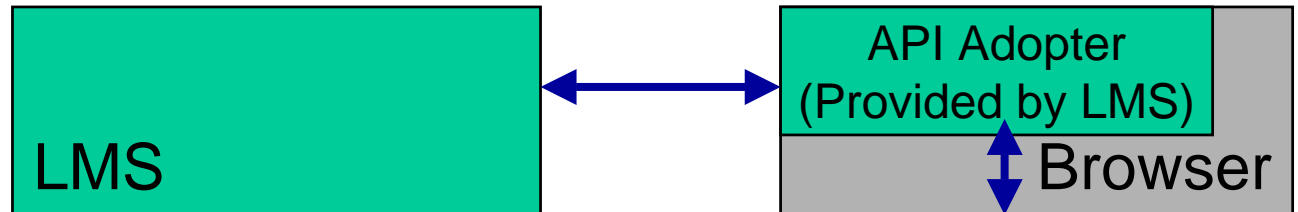


Multilingualization (LMS Testing)

Test Suite



Target LMS



M Equals multi-byte

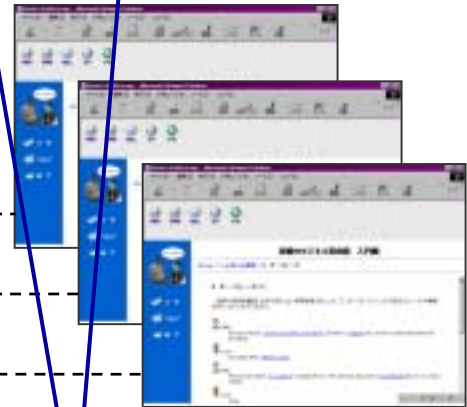
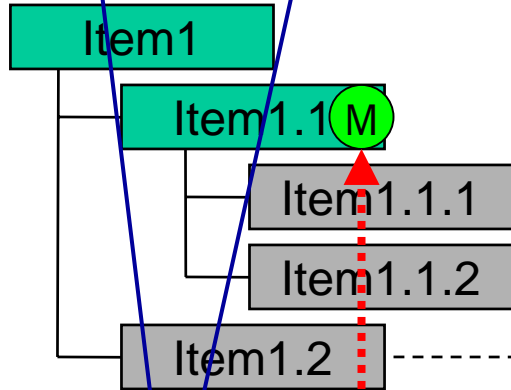
*Developing 5 country' of 6 languages as Japanese, Korean, Thai, Vietnamese, Chinese (Kantai letter and Hantai letter)

Multilingualization (Contents Testing)

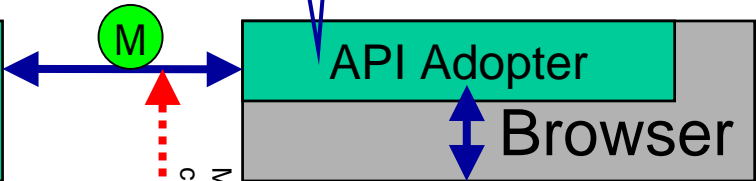
Contents Package and Meta data Testing Function

SCO Adoptability Testing Function

Target Contents



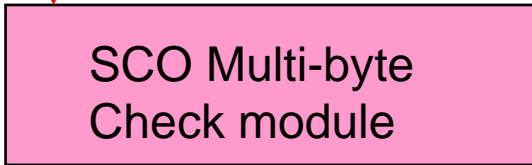
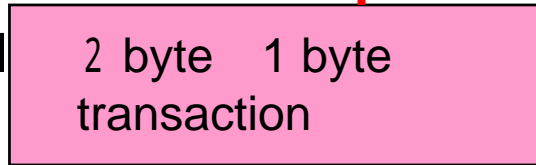
Test Suite



Multi-byte transferring transaction

Multi-byte check

Multilingu

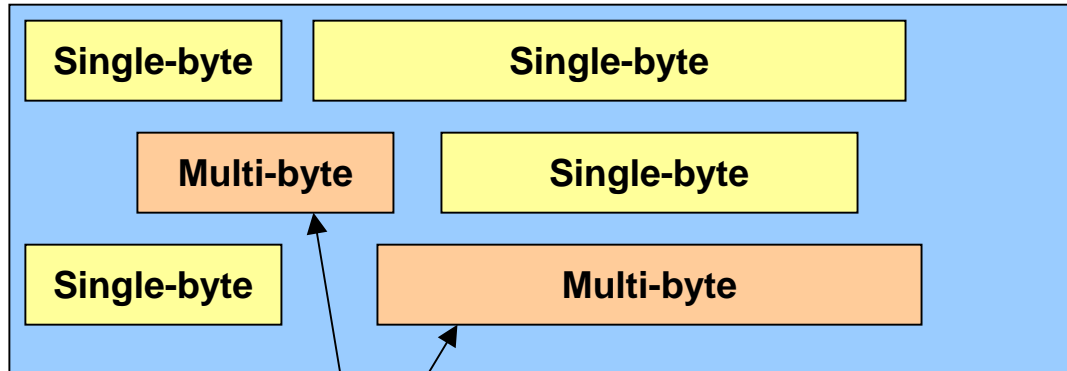


(Experiment Summary C)

(Experiment Summary B)

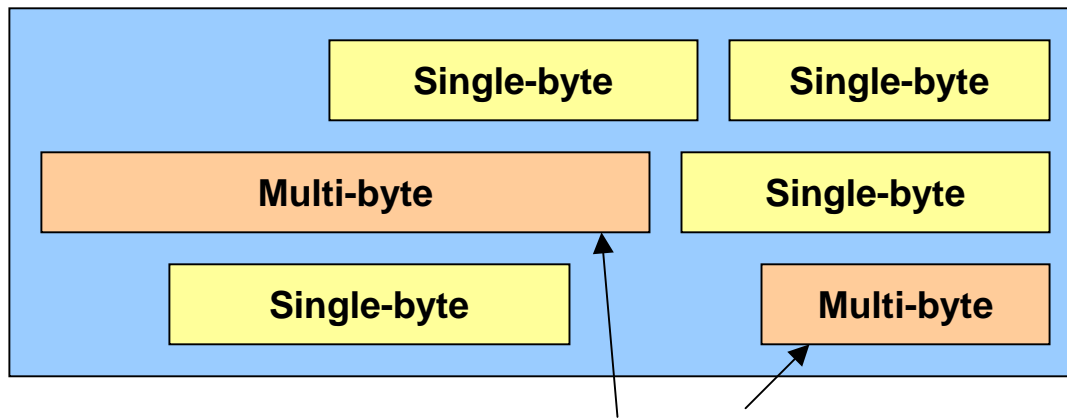
Attributes of Meta data and Manifest

- Meta data . . . Definition of contents (SCO) attribute (name and inventor)



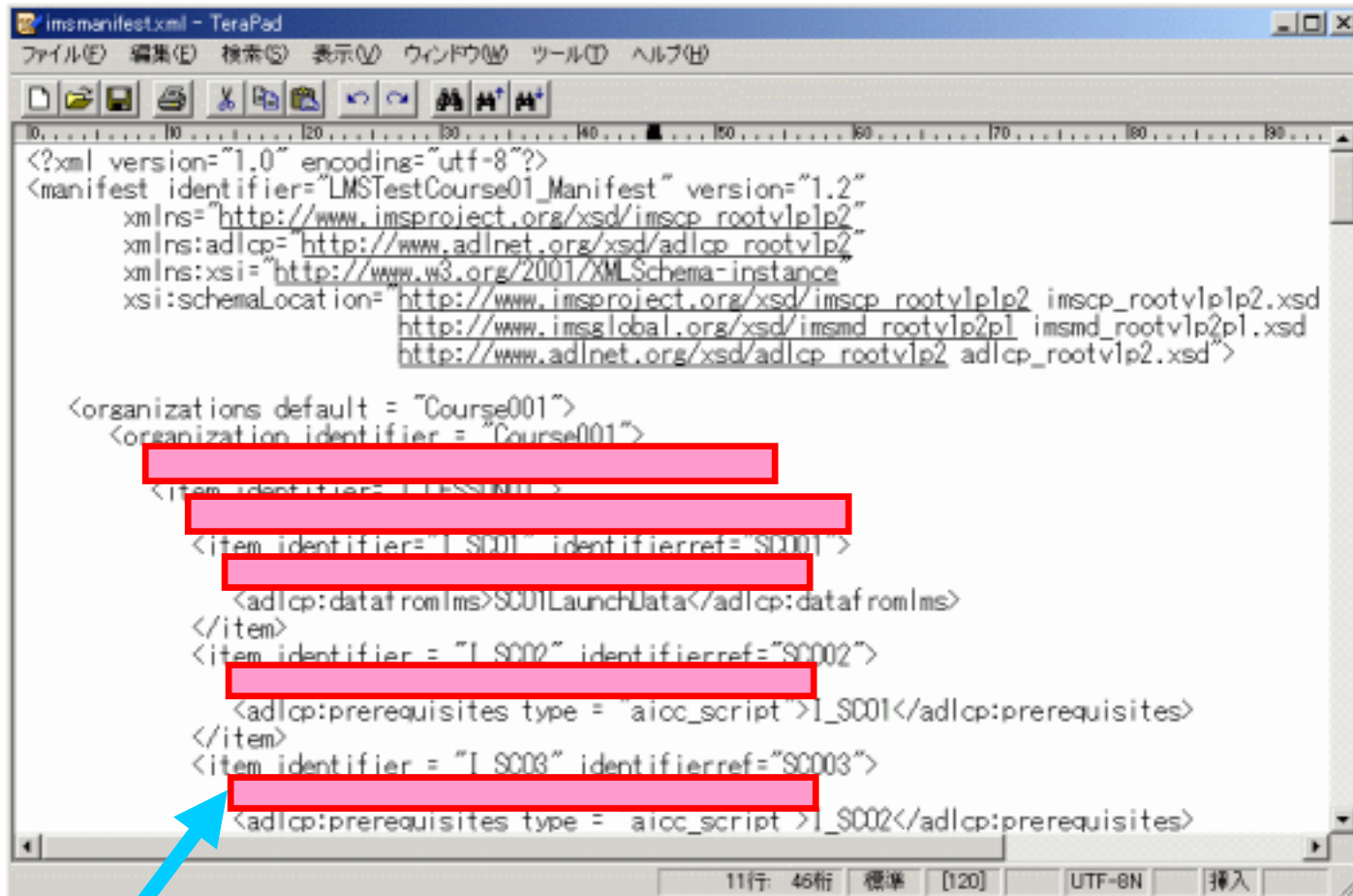
Multi-byte is used for the name of text etc.
(Multi-byte can be used for 19 items out of 86)

- Manifest . . . Definition of of the contents course



Multi-byte is used for the title of contents etc.
(Multi-byte can be used for 2 items out of 58)

Example A: Making LMS Test Contents Into Each Country's Language (Multilingualization)



```
<?xml version="1.0" encoding="utf-8"?>
<manifest identifier="LMSTestCourse01_Manifest" version="1.2"
  xmlns="http://www.imsproject.org/xsd/ims_cp_rootvlp2"
  xmlns:adlcp="http://www.adlnet.org/xsd/adlcp_rootvlp2"
  xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
  xsi:schemaLocation="http://www.imsproject.org/xsd/ims_cp_rootvlp2_ims_cp_rootvlp2.xsd
    http://www.imsproject.org/xsd/ims_cp_rootvlp2_ims_cp_rootvlp2.xsd
    http://www.adlnet.org/xsd/adlcp_rootvlp2_adlcp_rootvlp2.xsd">

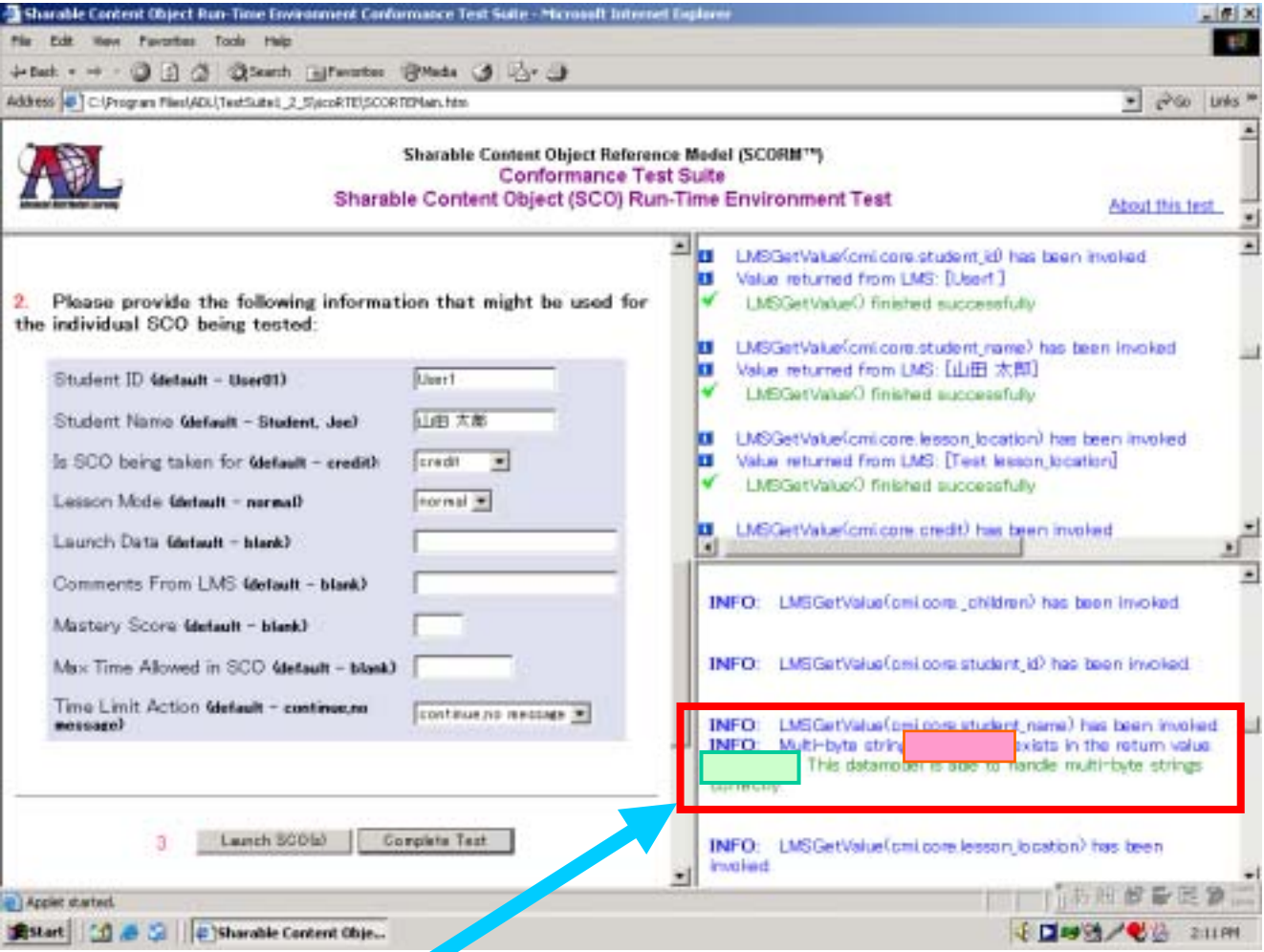
  <organizations default = "Course001">
    <organization identifier = "Course001">
      [REDACTED]
    </organization>
  </organizations>
  <item identifier="I_SC001" identifierref="SC001">
    [REDACTED]
    <adlcp:datafromlms>SC001LaunchData</adlcp:datafromlms>
  </item>
  <item identifier = "I_SC002" identifierref="SC002">
    [REDACTED]
    <adlcp:prerequisites type = "aicc_script" >I_SC001</adlcp:prerequisites>
  </item>
  <item identifier = "I_SC003" identifierref="SC003">
    [REDACTED]
    <adlcp:prerequisites type = aicc_script >I_SC002</adlcp:prerequisites>
  </item>
</manifest>
```

Making a part of LMS Test Contents into Multi-byte

(Above is Manifest file of test course 1)

Developing targets are 5 country' of 6 languages as Japanese, Korean, Thai, Vietnamese, Chinese (Kantai letter and Hantai letter)

Example B: Multi-byte Existing Check of SCO Communication Data that is not Standard



It checks if the points allow multi-byte. It indicates 'PASSED', when it is correct, and 'ERROR', when it is not.

Example C-1: 2 byte 1 byte Transferring

Sharable Content Object Reference Model (SCORM™)
Conformance Test Suite
Meta-data Test

Advanced Distributed Learning

Meta-data Document Name:
Meta-data Document Version/Release Number:
Meta-data Vendor/Developer:

Continue

Step	Instructions
1 of 2 ✓	Enter the type of the Meta-data XML document to be tested: <input type="radio"/> Asset <input checked="" type="radio"/> Sharable Content Object (SCO) <input type="radio"/> Content Aggregation <input type="radio"/> Package Continue
2 of 2	Enter the name of the Meta-data XML Document is to be tested

Test Identification Information:
Date: Sunday, January 25, 2004 5:42:34 PM
Meta-data Product: 1
Meta-data Version: 1
Meta-data Vendor/Developer: 1

Starting Self Test

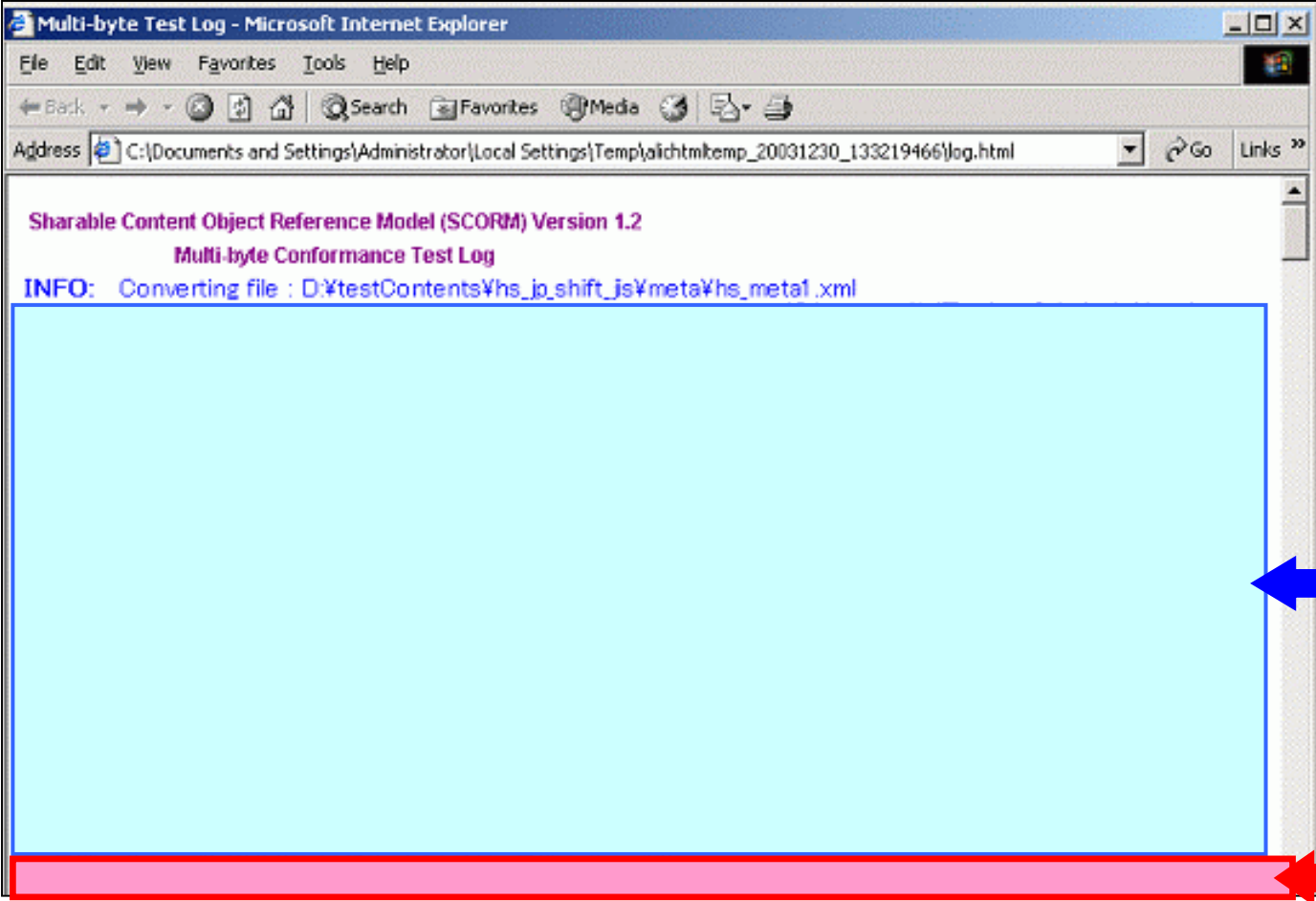
Processing Meta-data: C:\VADL-TEST\testfiles\input\hs_ip_euc\meta\hs_metaf.xml
[Click here to view complete meta-data test log](#)

Checking Meta-data for Minimum Conformance
Checking Meta-data for well-formedness..

Test can not be accomplished when there is multi-byte in metadata and it becomes error.

2 byte should be transferred to 1 byte with multilingualizing module.

Example C-2 Log of 2 byte 1 byte Transferring



2 byte letter before transferring

1 byte letter after transferring

Object and Contents of the Experiment

Object of the Experiment

Verify effectivity of multilingualization through practice of SCORM adaptability proving experiment of multilingualizing that suite in each Asian countries use multi-byte letter code as Japan, Korea, Thailand, Vietnam, and China.

Contents of experiment

1. Products used for the experiment

a. ADL Test Suite 1.2.5

- LMS Adoptability Test
- SCO Adoptability Test
- Meta data Adoptability Test
- Contents package Adoptability Test

b. Multilingualizing Module

- Making LMS Contents test contents to each countries' language
- Multi-byte Existing Check of SCO Communication Data that is not Standard
- 2 byte 1 byte transferring

c. Test Suite testing items

d. Multilingualizing testing items

e. Test Suite operating instruction

f. Multilingualizing operation instruction

2. Numbers of test items

Name of Test Suite	Number of test items (Large it		
	ADL Test Suite	Multilingu	Total
LMS Adaptability Test	11	7	18
SCO Adaptability Test	9	5	14
Meta data Adaptability Test	14	19	33
Contents Package Adaptability Tes	14	3	17
Total	48	34	72

Table of Participating Groups and Products Used for Experiment

Participating Country	Name of organization	Product Name Used for Experiment	LMS	Contents		Contents Used Language	Experiment Participating Condition
				1	2		Experiment Participation
Japan	IPA	Standard WBT				Japanese	
	Company A	LMS Product				Japanese	
	Company B	Contents Product A				Japanese	
	Company C	Contents Product B				Japanese	
	Company D	Contents Product C				Japanese	
Korea	Alex IT	NetCampus21				Korean	
	AltEd	LCMS1.2				korean	
Thailand	Ministry of Information and Communication Technology	Course Management Tool				Thai	× *1
Vietnam	Library & Information Network(Centre) - LINC	Trainware				Japanese *2	
Malaysia	CMED.Multimedia University	Multimedia Learning System				English	*3

*1 Did not participate the experiment since product is operated with Linux that does not correspond to the operation of the Test Suite and SCORM

*2 Japanese contents was used due to the contents developing environment is English and Japanese

*3 Experiment as reference due to single-byte

