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**Information technology — Coding of  
audio-visual objects —**

**Part 5:  
Reference software**

**AMENDMENT 28: Reference software for  
LAsER adaptation tools**

*Technologies de l'information — Codage des objets audiovisuels —  
Partie 5: Logiciel de référence*

*AMENDEMENT 28: Logiciel de référence pour les outils d'adaptation  
LAsER*



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Published in Switzerland

## Foreword

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Amendment 28 to ISO/IEC 14496-5:2001 was prepared by Joint Technical Committee ISO/IEC JTC 1, *Information technology*, Subcommittee SC 29, *Coding of audio, picture, multimedia and hypermedia information*.

This Amendment introduced Reference software for LAsER adaptation tools. This Amendment deals with the reference software of ISO/IEC 14496-20:2008/Amd.2:2010.



# Information technology — Coding of audio-visual objects —

## Part 5: Reference software

### AMENDMENT 28: Reference software for LAsER adaptation tools

*Add the following line at the end of Clause 5:*

Systems/LAsERv2/src	LAsER and SAF parser for adaptation
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*Add the following line at the end of B.3:*

Systems/LAsERv2/LAsERPlayer	LAsER and SAF renderer for adaptation
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*Change Annex E to Annex F.*

*Change Annex F to Annex G.*

*Add Annex E:*

## Annex E (informative)

### Guidance of reference software for LAsER adaptation tools

#### E.1 Introduction

##### E.1.1 General

The reference software consists of the following tools:

- LAsER file parser to manage the scene tree and events from LAsER XML files.
- LAsER player to render and play a LAsER scene.

##### E.1.2 How to compile and run the code

The Reference software for LAsER Adaptation tools is attached to this document.

This program only runs on Windows XP or above. Also this program runs on Microsoft visual studio 2008.

1. Unzip a LAsER\_AMD2\_Ref\_SW.zip
2. Double-click on a LAsEREncoder.sln file in the '\build\VC9' folder
3. Right button click on the LAsERPlayer in the solution explorer.
4. Choose the 'Set as Start Up' menu.
5. Click on the 'solution build' menu.( F7 or ctrl F5)
6. Copy the js32.dll file in the '\lib\js32\_v1.6\_deb' folder
7. Paste the js32.dll file in the '\bin\w32deb' folder
8. Copy the mplayer.exe file in the '\build\VC9' folder
9. Paste the mplayer.exe (execution) file in the 'C:\' root folder.
10. Run the LAsERPlayer.exe or click on the 'start' menu. (ctrl F5)

#### E.2 Demonstration

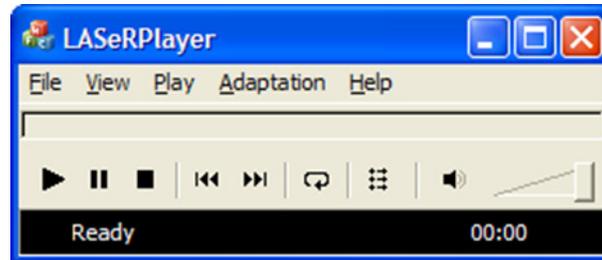
##### E.2.1 Tested Features

The LAsER AMD2 Reference software conforms to following features:

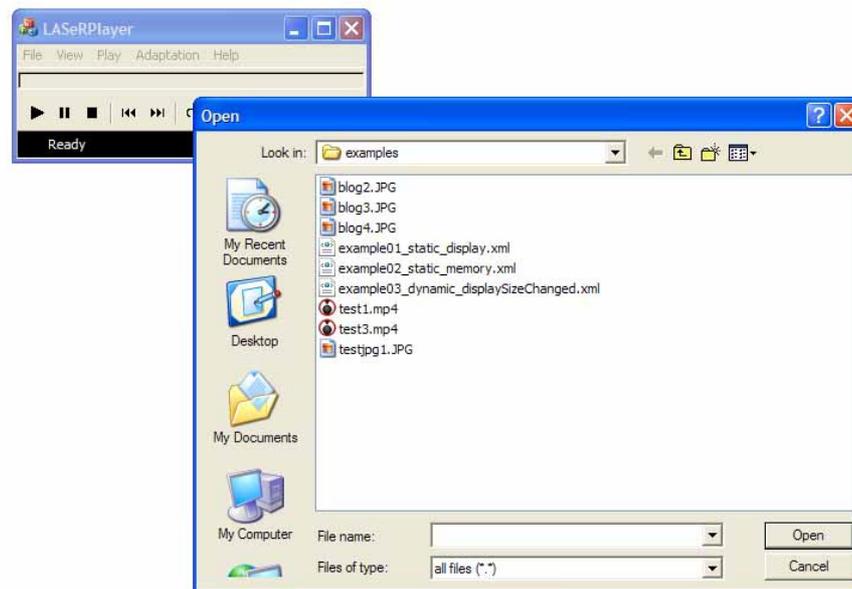
- Static Adaptation  
: A rendered scene has to be adapted to the device capabilities such as display size, memory and so on.
- Dynamic Adaptation  
: A rendered scene has to be adapted to the device capabilities which are changed during a session.

### E.2.1.1 Static Adaptation for display size

1. Run the LAsERPlayer.exe



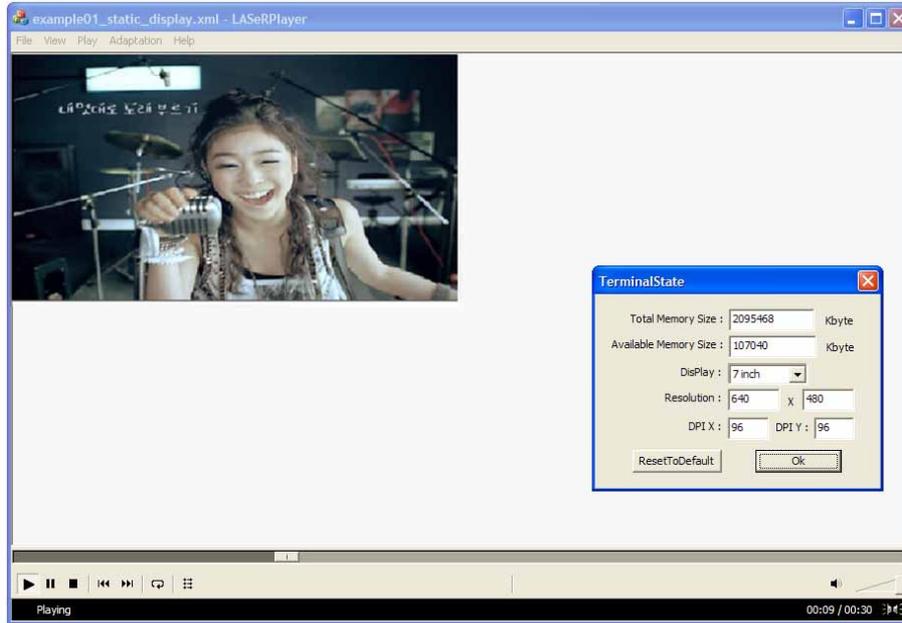
2. Select the menu (File->Open) and go to the example directory already attached.



3. Select the example01\_static\_display.xml file.

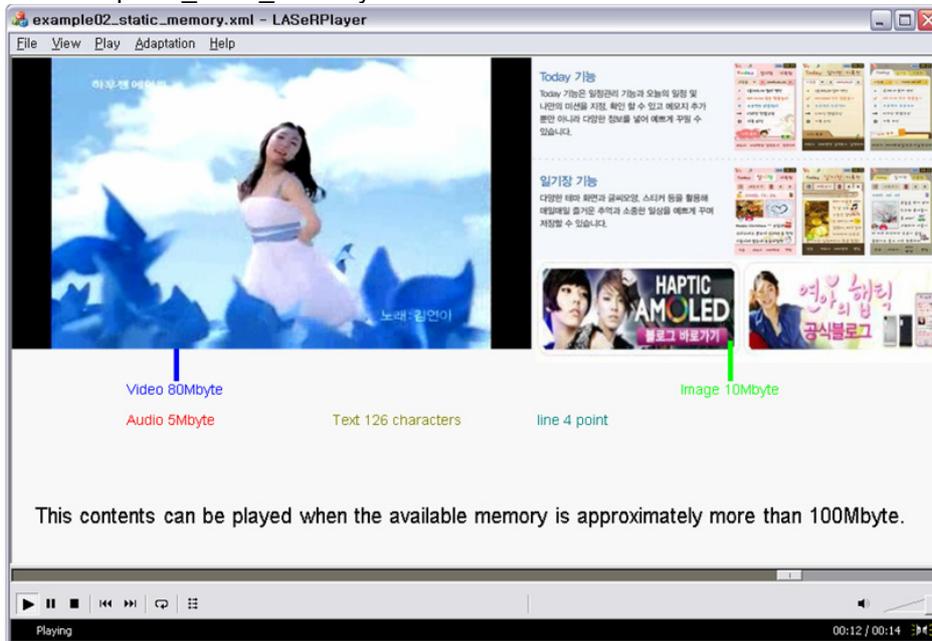


4. Playing is over, choose the 'adaptation' menu and change the display size (e.g. 7 inch, 640x480), then press the button "OK".
5. Go to the menu (File->Open) and Select the example01\_static\_display.xml file Again.

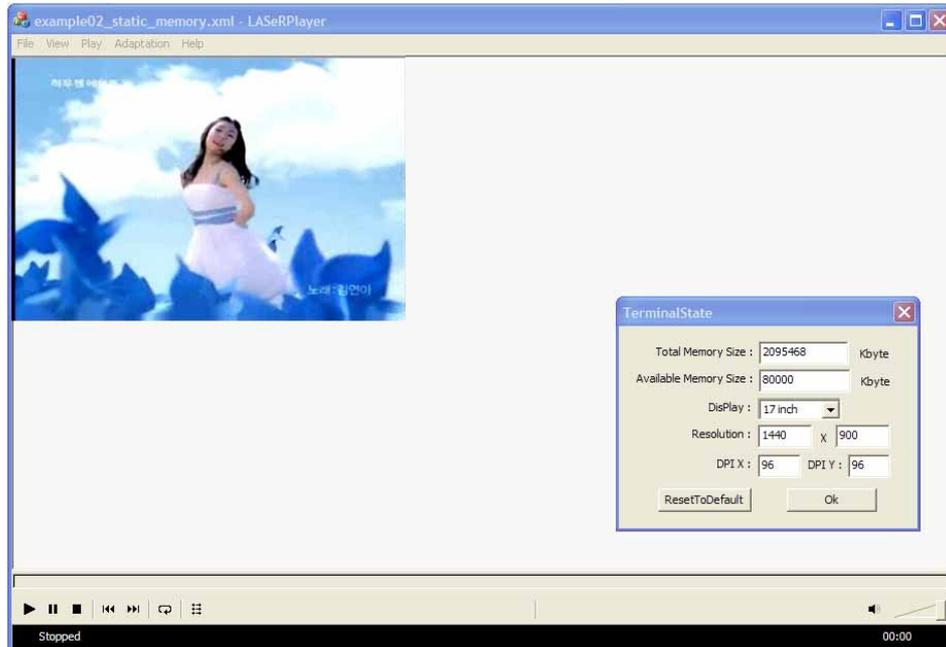


### E.2.1.2 Static Adaptation for memory size

1. Select the example02\_static\_memory.xml file

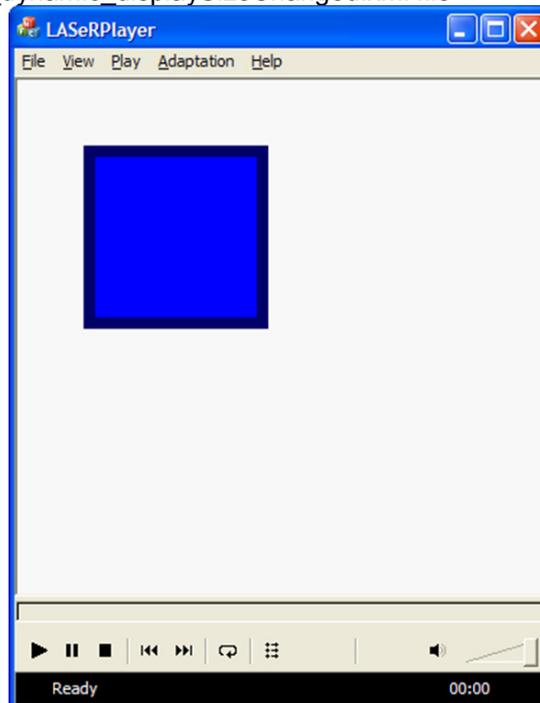


2. Playing is over, choose the 'adaptation' menu and change the available memory size (e.g. 80000 Kbyte), then "OK"
3. Go to the menu (File->Open) and Select the example02\_static\_memory.xml file Again



### E.2.1.3 Dynamic Adaptation

1. Select the example03\_dynamic\_displaySizeChanged.xml file



2. Changed the windows size using your mouse.

