Lecture Contents Creating and Managing System Proposal

ISCommunications Co., Ltd.

Table of Contents

- 1. System Configuration
 - 1-1 System Block Diagram
 - 1-2 System Description
- 2. Detail Description of System Components
 - 2-1 Contents Authoring System U-Pointer, U-Vision, i-Pro
 - 2-2 LCMS System
 - 2-3 Student Study Platform
- 3. Specification of Components
 - 3-1 U-Pointer
 - 3-2 U-Vision
 - 3-3 i-Pro
 - 3-4 LCMS System



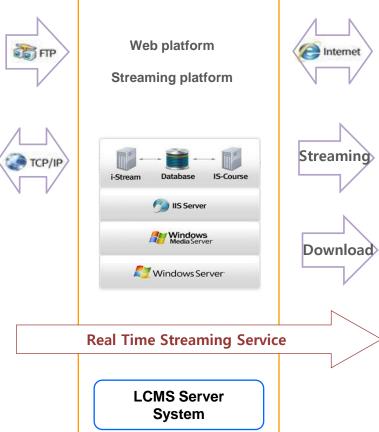


■ I. System Configuration

1-1. System Block Diagram









PC Flatform



Mobile Flatform

Student Study Platform



I. System Configuration

1-2. System Description

1) Definition of System:

LCMS (Learning Contents Management System) is a turn-key system to create lecture contents, to management lecture contents and to serve lecture contents to the students

2) System Configuration

- Contents Authoring System: Lecture contents is recorded with U-Pointer (Interactive Whiteboard) and i-Pro (Annotation S/W)
 and uploaded from the classroom immediately after the class.
- LCMS Server System: Lecture Contents DB management, Streaming service management and Access control.
- Student platform: PC or Mobile platform for the student to access LCMS server and to play lecture contents with i-Pro player.

3) Type of Service

- Streaming/Download Service : Lecture contents are delivered to the student platform with streaming service or download service.
- Real Time Streaming Service: Real time streaming service of Lecture to the number of students. (Optional)
- On-line management: Lecture contents management, Student/Lecturer management, Statistics management and other useful management functions.

4) Application of LCMS System

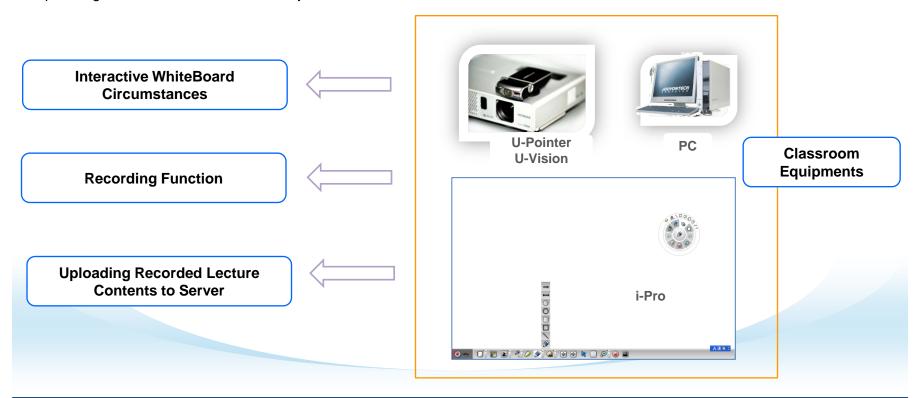
- Education : Chip but powerful solution for creating/delivering Lecture contents for public or private school
- Business: Internal education system of company or Video conferencing system



2-1. Contents Authoring System

1) System Overview

- The Basic components for recording lecture comprises interactive whiteboard, Annotation S/W, i-Pro and PC.
- Video cameras and operators are not necessary, lecturer can record the lecture with easy.
- Recording quality is very high but the recording file size is extremely short (1/10 of video camera method)
- Uploading the recorded lecture contents just after the class in the classroom





2-1. Contents Authoring System – H/W equipment

2) U-Pointer / U-Vision: Interactive Whiteboard / Interactive Projector



- U-Pointer is an Interactive whiteboard device, with Projector, U-Pointer makes the screen as interactive whiteboard.
- Only USB connection between U-Pointer and PC is only connection.
- Any kinds of display can be used with U-Pointer

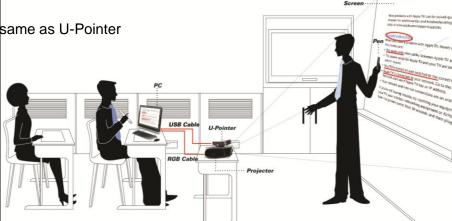


U-Vision

• U-Vision is an interactive whiteboard comprises short throw projector and U-Pointer

module inside the projector

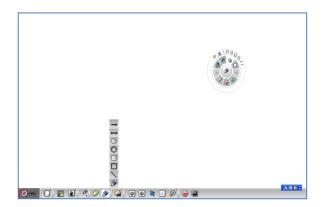
•Interactive function and quality is same as U-Pointer





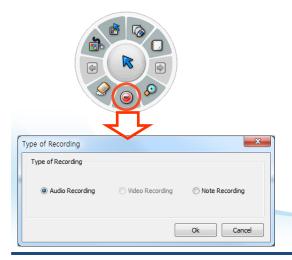
2-1. Contents Authoring System

4) i-Pro: Annotation S/W, Comes with U-Pointer / U-Vision



Easy GUI and Powerful Functions

- Floating menu or fixed menu selection on your preference.
- Powerful functions for lecture or meeting
- · Similar functions are categorized to main menu
- Multi-User (4 persons) at the same time
- Very easy to learn how to use video clip instructions support



Easy & High Resolution Recording

- When click recording button in main menu, then recording type selection menu appears
- Three type of recording on your preference Note recording for Common windows player
- Select Recording type and OK, then, recording begins
- High Definition grade recording but 1/10 of file size



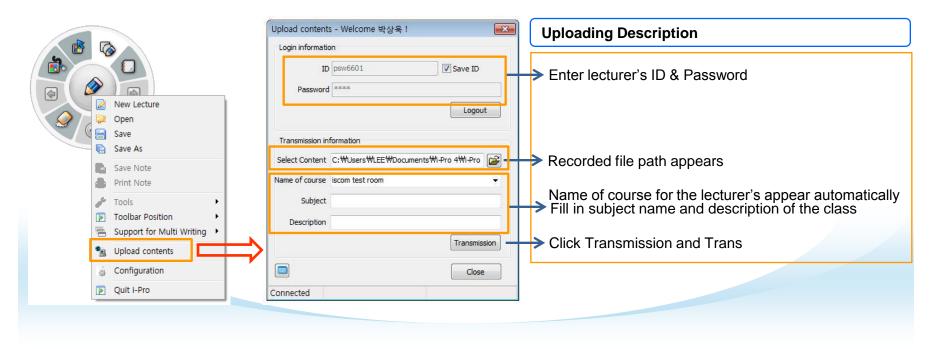


2-1. Contents Authoring System

4) i-Pro: Annotation S/W, Comes with U-Pointer / U-Vision

Easy Uploading to LCMS Server

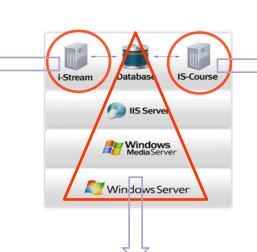
- Select "Upload contents" in the pull down menu and then uploading window appears
- Fill in ID & Password of teacher, select name of subject
- Click "Transmission", then uploading starts





2-2. LCMS System

- LCMS (Learning Contents Management System) is for storing, delivering and managing Lecture contents created with U-Pointer.
- i-StreamTM and IS-CourseTM based on server platform (Server, MS-SQL, MS Windows Server)
- Real time streaming service is optional
- Link lecture contents to the database system of server
- Optimized to U-Pointer based lecture contents
- Compatible with existing web platform



- · Web platform front end
- Supports PC platform and Mobile platform(optional)
- Easy menu for clients and operator
- .

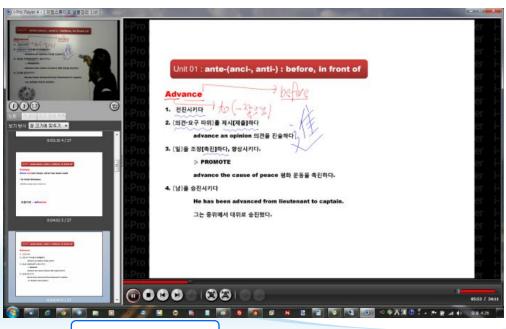
- Server H/W: Quad Core Zeon, Main memory 4G or More
- S/W requirement : MS SQL, MS Windows Server 2003 or higher
- IIS and Windows Media Server





2-3. Student Study Platform : i-Pro Player

- i-Pro Player is a player for playing lecture contents created by U-pointer
- •Three windows: Note, video, Index, and the Video and Note window can be switched or expanded full frame
- Bookmark, interval repeat, etc function is provided for efficiency of study
- Can be run Window OS (default), i-OS, Android (option)





Mobile platform

PC platform





3-1. U-Pointer

HARDWARE				
PEN				
	Dimension	157mm(L) x 14mm(D) or 6.18in x 0.55in		
	Weight	22.9g or 0.05lb (battery not included)		
	Power Demand	1.5v 3A battery x 2		
	Color	Dark Gray		
Main				
	Dimension	131mm(L) x 71mm(W) x 37mm(H) or 5.16in x 2.8in x 1.46in		
	Weight	128.8g or 0.283lbs		
	Power Demand	USB Powered		
	Writing Control Method	VRC Technology		
	Resolution	4000*3000		
	Response Time	0.015 sec		
	Horizontal Installation / Adjusting Angle	360 degree		
	Vertical Installation / Adjusting Angle	+90 ~ -10 degree		
	Maximum Cursor Jittering	+/- 2 pixel		
	Operation Distance from Screen	0.5 to 5 meters (3 models according to distances)		
	Cable Distance Support	Up to 15 meters		
	Connection	USB 2.0		
	Available Display size	40" to 150"		
	Warranty	2 years		



3-2. U-Vision

HARDWARE			
Interactive function	Same as u-Pointer		
	Resolution	Native XGA(1024*768), Max UXGA(1600*1200)	
	Brightness	2,500 / 3,000 Lumens (IP2500/IP3000)	
	Contrast Ratio	2,400 : 1	
	Lens throw ratio	1m@76"	
	Remote Control	Fully Featured IR Remote with Laser Pointer and Mouse	
	Lamp	230W/280W (Life time : 4,000 hours)	
	Aspect ratio	Native (4:3) Compatibility (16:9)	
	PC input terminal	RGB(D-Sub)*2Ea, Composite Video(RCA*1)S-Video(Mini Din), Audio RCA, Audio Mini Jack, HDMI(V1.3)	
	PC compatibility	VGA, VXGA, XGA, SXGA, Machintosh VGA, SVGA, XGA, SXGA,	
0	Video compatibility	EDTV(480p), HDTV(576i/p, 720p, 1080p NTSC,/NTSC4.43, PAL B/G/H/I/M/N 60, SECAM	
	Output terminals	RGB(D-Sub), Audio mini jack	
	Communication Terminals	USB(interactive), RS232C, RJ45	
	Keystone Correction	Vertical (+/- 15 degree)	
	Projection Method	Front, Rear, Table Top and Ceiling Mount	
	Dimension	355 * 102 * 256 (W * H * D , mm)	
	Weight	3.5Kg	
	Power Supply	AC 100 ~ 240V	
	Power Consumption	290W, <1W standard Power / 330W, <1W Standard Power	



3-2. i-Pro: main functions

		\neg
Function	Description	_
Drawing tools	Pen, Brush Pen, Highlight Pen	
Pen Color & Thickness	4 Thickness, 16 Colors	
Eraser	All, Region, Object Eraser	
Note Background	6 Background	
Clipart	Clipart library, Adding User Clipart	
Document importing	Any Type that support print function, Virtual Printer Technology	
Image importing	Gif, png, jpeg, all image format	
Note list	Note delete, note order change	
Previous/next page	Arrow button	
Magnifying	100% ~ 400%, drag window	
Recording	Audio recording, Video Recording, Screen Recording, .ist format & wma	
Windows switching	Normal windows Switching, Inteligent Windows switching	
Screen Expansion	Limitless note expansion	
Save function	Save, Save note	
Print function	Selected note, all notes	
Toolbar	Floating tool bar, Fixed tool bar	
Tools	Virtual keyboard(Letter recognition), Spotlight, Curtain	
Contents uploading	Setting server IP, Instant uploading	
Dual display	Dual display (default)	
Update	Auto upgrading	



3-3. LCMS Specification - 1

- Menu is selected to manage registering and managing classes
- Menu can be added on your request.

Menu	1 st Menu	2 nd Menu	Description
Common menu	Login	Guest	
		Student	
		Lecturer	
		Administrator	
	Campus Introduction	Campus introduction	
	Notice	Notice	
		Q&A	
		FAQ	
	Study Support	Study Support	
		Notice, New, FAQ	
	Managing Individual Information	Login information	
		Changing information	
		Searching member	
Student menu	Registration Control	Registering Course	
		Searching Registered Course	
		Changing Course / Cancel	
		Registering History view	
	Enter Course	Listening Course	



3-3. LCMS Specification - 2

Menu	1 st Menu	2 nd Menu	Description
Lecturer	Course Management	Registering Course	
		Change & Cancel Course	
	Contents Search & Manage	Contents Upload	
		Arranging Contents	
		FAQ Management	
	Student Management	Student Management	
Administrator	Student's Course Management	Student's Course Registration	
		Student's Course Registration Cancel	
	Course Management	Creating Course	
		Course correction, Add, Delete	
	Student Management	Student Management	
	Account Management	Admin Account Management	
		Lecturer Account Management	
Download Menu	Streaming Service Module		
	Download Service Module		