

RealClass

RealClass System is a distance education (or distance learning) system. Distance education also known as distance learning , is a method of instruction and learning designed to overcome barriers of time and space by allowing students to study in their own homes or at local facilities, often at their own convenience, using materials available electronically or by mail. Contact with the instructor usually occurs via telephone or e-mail. Telecommunication networks and teleconferencing have facilitated distance learning. Libraries are working to support distance learning by providing online catalogs and databases, electronic reserves, electronic reference service, online tutorials, and electronic document delivery. The Real Class System consists of four modules which are the Real Class Center, the Data Transmit Unit, the Teacher Client and the Student Client. Through the combined use of the four modules, it achieves the distance learning function. The four modules' introductions are:

- **Real Class Center** : It is the total control center in the Real Class System.
- **Data Transmit Unit: DTU (Data Transmit Unit)** is transparent to teacher and student clients
- **Teacher Client**: It is the teacher's console, and provides real-time video, audio, text and electronic lesson plans what the teacher is teaching on the screen to students.
- **Student Client: Student client** can join a class and take part in real time communication with the teacher in different network or different place.

RealClass System:

Based on **Linux+NC** platform and open source technology, **RealClass System** uses **IP Network** as platform of transmission. Function of the system:

- **Multimedia Classroom**: synchronously live broadcast and share of teaching scene
- **Real Time Multimedia Interaction**: offer real-time the interaction between teachers and students in the way of text and audio/video stream
- **Scenic On-line Stream Media Courseware Recording**: teacher scenes and contents of the class are recorded and can be used on **VOD** systems

The system can transmits multimedia data adaptively according to condition of network, and has clear, simple interface. **Real Class System** has independent copyright without supporting of the third-party software, and can completely satisfy the request of real time interactive teaching. The final aim is to share the teaching resource.