1. Background and Objective

With the development of network communication technology in recent years, there have been many successful examples of architectural design education using the Web based support system. Authors have developed the information exchange and sharing system, and make an improvement on it through the collaborative design studio. This paper describes the new function for collaborative design team.

2. New Functions for a Presentation or Critique

We can recognize two axes in the state of communications. One is axis of time and another is axis of space. There are same space and distribution in the condition of space, also synchronous and a-synchronous in the condition of time. We understood that the same space and synchronous is the most important of the communication state in consequence of the examples of collaborative design studio.

We developed the following new functions for presentation or critique that is performed at same space and same time.
2.1. DUAL SCREEN PRESENTATION ENVIRONMENT

In a presentation or critique, students explain their document of the design. Usually screen which is projected is one. But if two screens be used, we can receive and accept many informations and easiness of understanding. We developed the dual screen function mode for presentation.

Students frequently wish to present different documents juxtaposed on a display or on a screen. It is also common to present a juxtaposed overall view of presentation documents and their zoomed up image. The latest version has a utility to display two different documents in a juxtaposed position. The authors normally use a dual display PC that has dual PC projector output.

2.2. IMPROVEMENT OF IMAGE-VIEWING

There are utilities to zoom in and out at the ratio selected in the pull-down menu at the upper left corner of image in the early version. They are not so convenient to support the discussion that the image viewing function has been improved. This has very intuitive, excellent operativeness. The design images can be in real time moved according to mouse's movement. And, it can be zoomed in and be zoomed out with mouse's scroll button.

2.3. ADDITIONAL MARKUP FUNCTION ON IMAGES

The author tested two different mark-up utilities in a team design clinic. These were software that has a mark-up utility for a PC mouse, and a utility furnished in a PDP display device. However, it is difficult to use these utilities with our system. The latest version has a utility that allows a user to place markup on a transparent window at the same resolution as the displayed image data. Markup functions are following. As this window is overlaid on a designated window of the Web-based communication system, the user can easily zoom in to discuss detail and zoom out to discuss the total image.
3. Conclusions

The authors developed the presentation tools for the Web-base communication system. We performed the pre-experiment using their tools. After the main experiment we will describe the result of experiment and assessment of effect of their tools.

References