



WebMan: Web-based Manufacturing System

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Today Internet influences human's daily life in various ways. It allows us to access and handle many types of information and data easily and conveniently. Furthermore, it is widely used and has low cost.

From these reasons, a WebMan: Web-based Manufacturing System is established at Institute of Field roBOtics (FIBO), King Mongkut's University of Technology Thonburi (KMUTT) to allow users to access this system remotely. The user needs only PC, ISP (Internet Service Provider), and a web browser to login, assign tasks, and controls this system from anywhere in the world. A customer can choose 4 types of product and send command to the remote site through Internet. A manufacturing system at server side consists of a 5-DOF manipulator, a conveyor, and a rotary table. A robot will pick a product according to the customer's order from a storage and put it

in a tray that is transported by an automated conveyor.

For the communication part, a client connects to a server under TCP/IP protocol. GUI-based web page developed by JAVA is designed to interact with user at the client. The server program is developed by C++ to support multiple clients. When the server receives commands from user, it will compute robot's trajectory command and send it to the robot controller and microcontroller that controls rotary table and conveyor. At the same time, user can observe the system's operation from the client site by a live video feedback.

Finally, we strongly believe that we can improve productivity and efficiency of this system to support the real world industrial in nearly future.

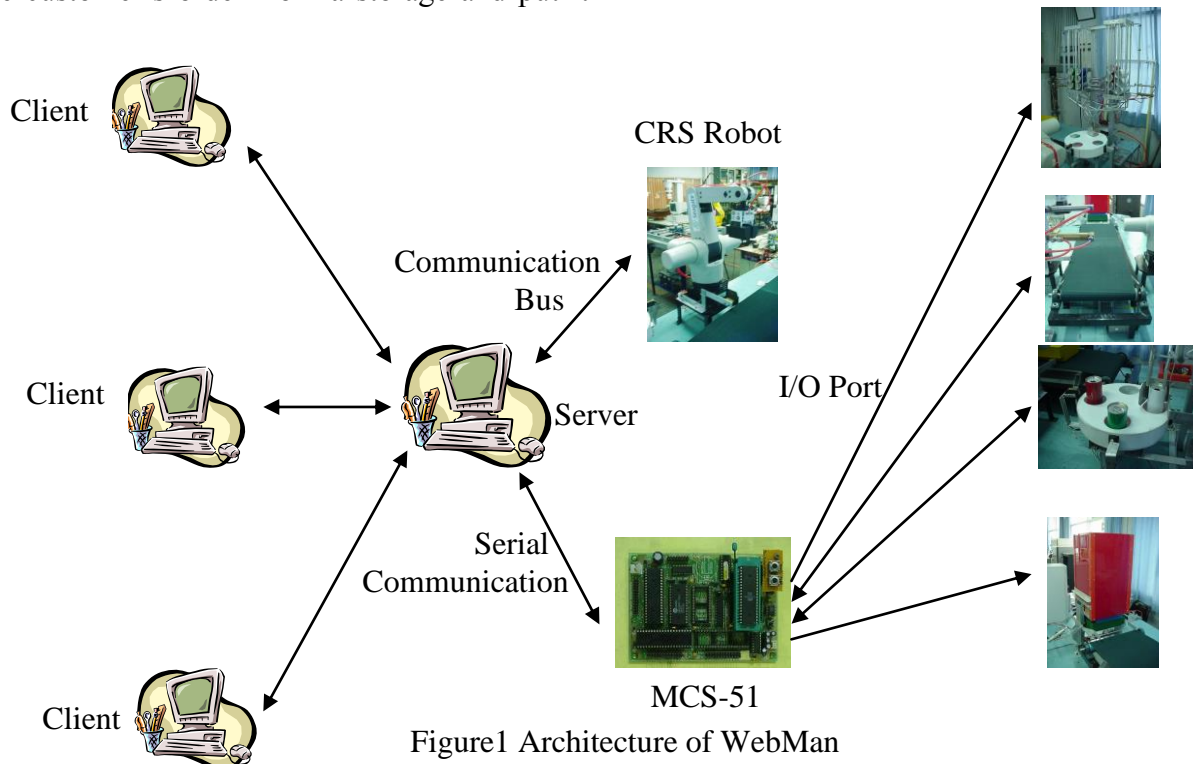


Figure1 Architecture of WebMan