

Hengtian Developing Detection and Maintenance System for Fortune 500 Electronic Manufacturing Company

Overview of the Client

The client is a Fortune 500 company and a world-class innovator and global high technology product leader with over 200 major subsidiaries and affiliates worldwide. This client is a diversified electric/electronic manufacturer and provides a wide range of products and services in some domains: Energy & Infrastructure, Community Solutions, Healthcare Systems & Services, Electronic Devices & Components, and Lifestyle Products & Services.

Services Provided

Hengtian has established cooperation with the client since 2007 and been providing the client with software development and software quality assurance services. Hengtian's superior technology capabilities received high recognition from the client. Now more than 100 professionals from Hengtian are supporting the client with their solid expertise. Since September, 2014, Hengtian has started working with the client on designing and developing its Detection and Maintenance system. The technicians can use this system to quickly solve laptops' hardware problems with different types of testing tools, thus increasing the satisfaction of laptop users as well as decreasing frequency of repeated repairing and recording information, which offers more convenient after-sale services to end users.

Highlights of the Hengtian Solution

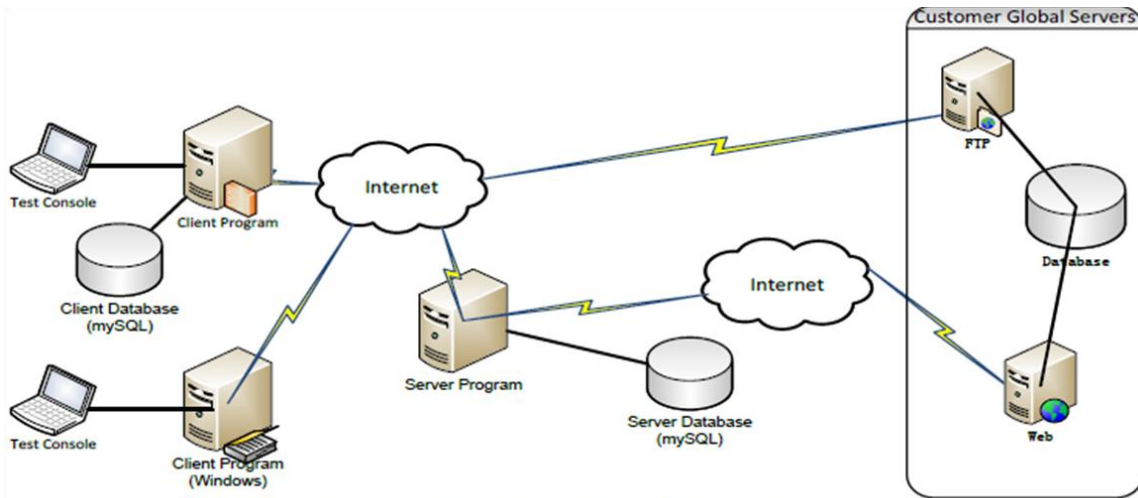


Figure One: Overview of the System

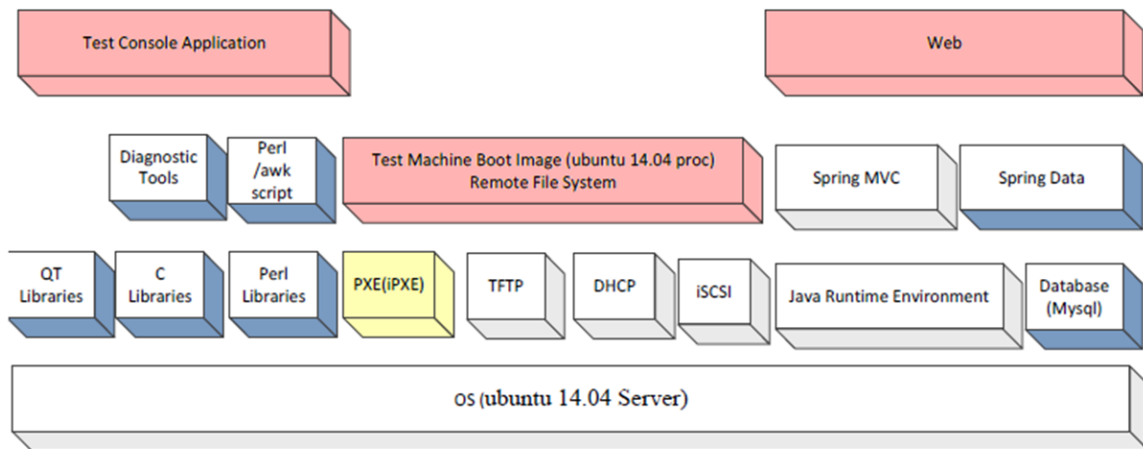


Figure Two: The Architecture of the System

- The system allows the testing machines to communicate with client terminals through DHCP and to download the PXE boot image. Through remote operation system, drivers and diagnostic tools are automatically downloaded. Meanwhile, the driver program will be installed and testing control desk will automatically operate when the operation system starts.

- The diagnostic tools originate from third-party business software, third-party open-source software and self-developed software. The diagnostic tools are developed based on C, C++ , script for diagnosing hardware problems of testing machine.
- The testing control panel is developed based on cross-platform C++ graphical user interface. The main functions include information collection and testing results display.
- Web system is built on with Spring MVC /Spring Data framework.
- JQuery UI framework is utilized to build front-end pages of the Web system. Communication between client and service terminal is based on Https, and data transmission format is XML.
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Voice of the Client

“The services provided by Hengtian are very punctual, efficient and reliable. Hengtian’ s team is equipped with solid expertise. We are very glad to work with Hengtian.” —Director of the Client’ s Software Design Department

—Client’ s Assistant Vice President