System Integration and Solutions Service

In the system integration and solutions service field, Toshiba aims to create new value that offers enhanced security, safety and prosperity for society, the corporate world and the individual. We embrace and analyze customer's management issues or business issues and propose precise and feasible measures for improvement. Moreover we continue to utilize combinations of our various services and products to provide solutions.
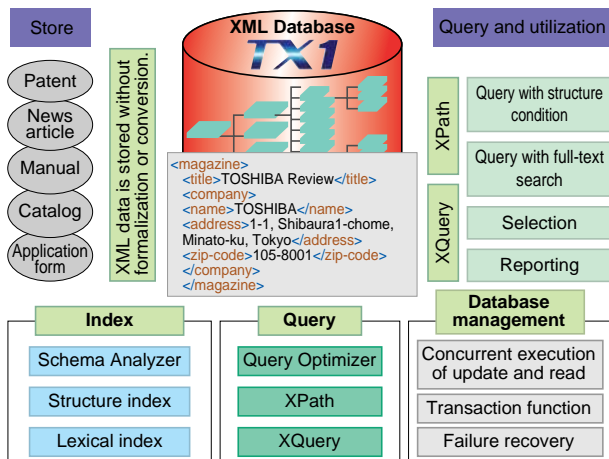
The XML Database TX1 Enabling High-Speed Retrieval of Terabytes of XML Data

Toshiba Solutions Corporation has developed the XML (eXtensible Markup Language) Database TX1 with Schema Analyzer technology and Query Optimizer technology. The TX1 achieves high-speed retrieval of large amounts of XML data in excess of a terabyte.

XML database systems are suitable for efficiently managing semi-structured data, and data for which the format is modified overtime. Conventional XML database systems could not achieve high-speed retrieval of terabytes of XML data.

In addition to the high-speed retrieval of large amounts of XML data, the TX1 has many features, such as transaction management, failure recovery and concurrency control, which are required for a reliable database management system. The TX1 supports the standard XML query language XQuery to improve the productivity of application program development.

The TX1 has been successfully used in many solutions, such as newspaper databases, clinical record management, and manual management.

Outline of the TX1 XML database

S5000 High-Speed OCR Image Scanner with a Built-In Stacker for Six Pockets

Toshiba Solutions Corporation has developed a fixed-type OCR (Optical Character Recognition) image scanner, S5000, with a six-pocket sorter built into the main body.

Since in order to sort a variety of sheets most scanners require the addition of an external sorter unit for use especially in financial institutions, government agencies, the distribution industry, etc., there is a need for reduction of installation space and cost required for these additional units.

The new scanner integrates six stackers in the main body, reducing the need for expansion units. This was made possible by designing a high-density transfer mechanism and a compact, high-efficiency power unit. The scanner also processes sheets quickly, with a reading speed of 200 sheets/min (for A4 horizontal sheets).

The product is also designed to be environment friendly, meeting the criteria for the ENERGY STAR® program.
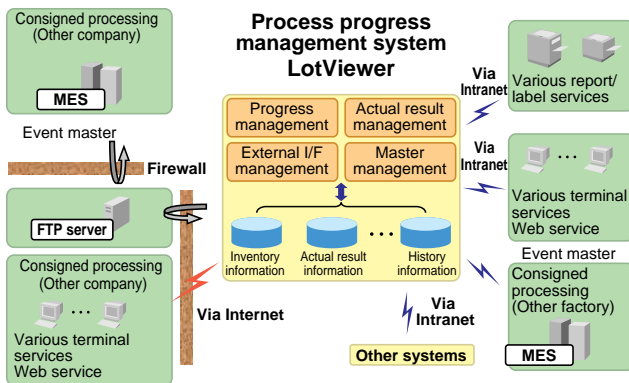

S5000 high-speed OCR image scanner

LotViewer Process Progress Management Solution for Semiconductor and Liquid Crystal Display (LCD) Manufacturing

   Toshiba Solutions Corporation has developed LotViewer, a software package offering the special functionality necessary for low cost and faster system construction. Based on events such as process in/out and process start/completion, LotViewer allows not only real-time management of production status (actual results, inventory and progress information, etc.) in the factory but also management of product inventory status and actual operation results in units of lot, wafer or chip (sheet and cell for LCD), and based on this information, provides various other services such as traceability and operation instructions.
   LotViewer has the following features:
- Inventory information and progress information can be shared even with consigned processing factories and companies, allowing real-time monitoring of production status.
- Lot traceability management can be achieved even with consigned processing locations and other factories.
- The web (Internet/intranet) is used as a standard for customizing screens at each client company; Multi-language (Japanese, English and Chinese) switch function is implemented.
- Multi-platform compatible

MES: Manufacturing Execution System
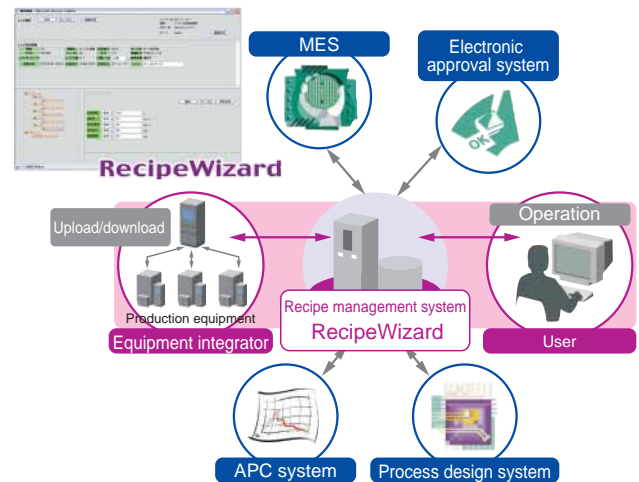FTP: File Transfer Protocol
I/F: Interface

Example of system configuration with LotViewer

RecipeWizard Semiconductor and LCD Production Management Solution

   Toshiba Solutions Corporation has developed RecipeWizard, a recipe management system software package for centralized management of production equipment on semiconductor and LCD production lines.
   RecipeWizard converts different data structures from various production equipment into a common general purpose database for all equipment allowing centralized management of units. Data structure conversion is achieved by use of master definitions and scripts, and program development is unnecessary for general production equipment.
   Integration with equipment online system is presupposed because recipes are sent and received from equipment via online transmission.
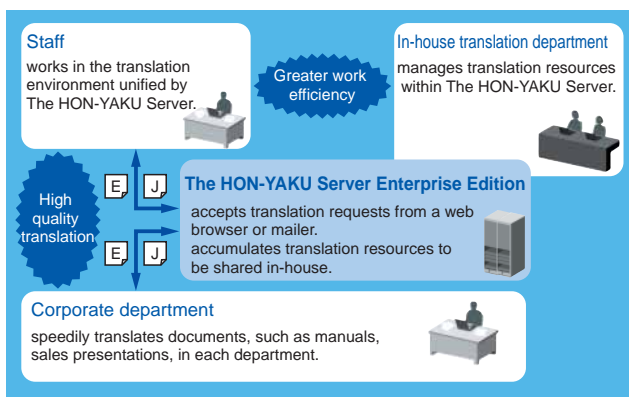

APC: Advanced Process Control

Concept of RecipeWizard for recipe management

The HON-YAKU Server Enterprise Edition

Toshiba Solutions Corporation has developed "The HON-YAKU(*) Server Enterprise Edition", a server-based English-to-Japanese and Japanese-to-English machine translation system.

The latest version of The HON-YAKU Server stores and accumulates translation resources, including translation dictionaries, results of past translations, and specific terms, for sharing by people within the same department and thereby increases the efficiency of in-house translation. The translation memory function is particularly effective in ensuring uniformity of terms within the same department as well as in reusing past translations. The system provides high translation quality using a highly efficient engine characterized by robust syntactic analysis, along with a standard dictionary with over 950,000 English-Japanese entries and 910,000 Japanese-English entries and technical term dictionaries with over 4,600,000 entries. The system's translation quality can be further improved by creating customized dictionaries for each department.

In addition, The HON-YAKU Server even offers API (Application Program Interface) that can be embedded in each user's system.

Effects of introducing The HON-YAKU Server

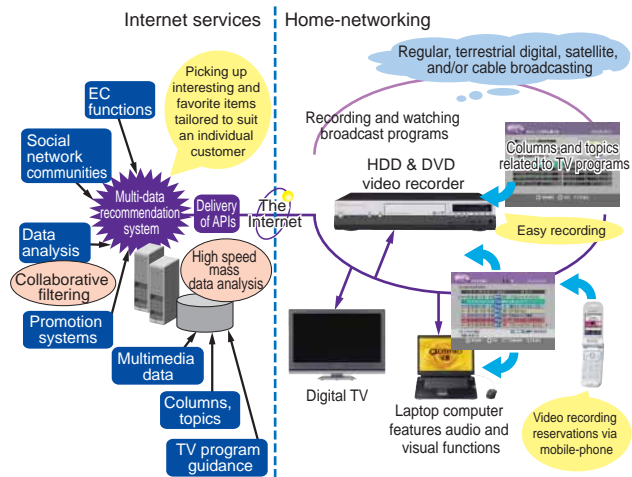(∗) The word HON-YAKU means translation in Japanese.

Digital Consumer Electronics Harmonized with Network Services

Toshiba has started unique services that provide new usability of equipment and life style for consumers by adding unique function of network services for digital appliances.

This service enhances the original enjoyment of using an appliance by not only enabling the browsing of web sites from digital appliances but also indicating program recording schedules over the network and providing rankings calculated from the usage results of program recording bookings real-time to users appliances over the Internet and connecting this information to the recording booking function. This is the most notable feature of this service.

Toshiba will continue providing additional value fused with "Surprise" through new functionality in appliances and non-stop "Excitement" using net services.

We won an Outstanding Award in the Net KADEN Grand Prix sponsored by the Ministry of Economy, Trade and Industry.

EC: Electronic Commerce

Overview of digital consumer electronics harmonized with network services