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Company Profile

Universal Shell Programming Laboratory, Ltd.



USP Laboratories Mission

Through research, education and promulgation of the “Unicage Development Method” and by advancing the development of a highly information-based society in the spirit of “Chisoku”—learning the meaning of living through diverse life experience—we strive to contribute to the realization of a generous “human society” rich in both mind and body.

Research

Intense development of the Unicage Development Method

- Development of Unicage commands and shell scripts that support high development productivity
- Research shell and OS that can deliver high processing efficiency
- Research enterprise systems for each industry and sector.
- Research project management Methods

Education

Training engineers who will lead the next generation and improving the IT literacy of enterprises.

- We hold seminars to train engineers to have advanced skill and strong sense of humanity
- We hold study sessions and lectures to disseminate IT knowledge to enterprises and government agencies

Promulgation

Promoting the understanding and activities beyond the bounds of industry

- Promulgating ideas and technologies through publishing books and magazines
- Offering assistance with development and implementation of systems using the Unicage Development Method
- Creating online communities for enterprises, engineers and researchers

The Unicage Development Method



The Unicage Development Method was created in Japan to enable information systems to be architected cheaply, quickly and flexibly.



The Unicage Development Method has won the 2008 Software Product of the Year award sponsored by the IPA (Information Technology Promotion Agency).

■ Advantages of the Unicage Development Method

① Inexpensive	Reduce Development Costs by $\frac{1}{4}$	<ul style="list-style-type: none"> • Use inexpensive PC servers and OS (Linux) • Data is plain text, programming is shell scripting, no middleware required • No need for system upgrades (software and data remain the same even if hardware or OS changes)
② Fast	$\frac{1}{4}$ the development time 10 times the processing power	<ul style="list-style-type: none"> • Programs are very short (1/50th the source code size) • One engineer can design, develop and maintain a system • By removing unneeded commands, we maximize the hardware performance
③ Flexible	Can improve applications at a pace of one per week*	<ul style="list-style-type: none"> • Program is simple and easy to customize • Software features have no mutual dependencies so can be changed easily • Creates data required for the application from organized data

*Actual results of a development project for Muji

■ Features

OS:	Makes full use of Linux (UNIX) features
Application:	Written in a shell script using Unicage Commands (usp Tukubai)
Data Storage:	Does not use an RDB; organizes data in a text file
Order of Development:	First create a system that organizes the data, then develop the applications
Server Architecture:	System can be made up of task-specific servers that share data files
Security:	Maximum flexibility within the system while strictly guarding external interactions
Documentation:	Little documentation required for development; plenty of examples to enable quick understanding

Unicage Development Method Customers



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■ Logistics and Retail



Ryohin Keikaku

Internal development of merchandising system and retail outlet communication system.



World Co.

Core systems such as CRM, sales management and auditing system



Lawson

System to calculate hourly sales results for 10,000 retail shops nationwide



Hanshoku

Downsizing of core systems



Seijo Marui Supermarket

Sales management system, wholesale/retail integrated inventory management system.



Tokyu Hands

Web product catalog and promotion management, POS information system



The Body Shop

Business intelligence tool



Trial Company

Replacement of core systems



Yoshizuya

Real-time sales support system utilizing POS sales detail records



Takayanagi

Hourly sales trend analysis tool for fresh produce



Sanseido Books

Purchasing trend analysis system for members of "Club Sanseido"



Space TANAKA

Migration of information systems



ANA Trading Co., Ltd.

Migration of sales analytics for retail outlets in airports nationwide



CO-OP Net

Data verification and processing for large amounts of product collection data within a unified logistics system.



■ Wholesalers



Nihon Shurui Hanbai

Migration of open COBOL batch processing

■ Manufacturers



KAO

Flexibly customizable ASP-based reservations system for reserving training facilities.

■ Newspapers & Publishers



Japan Agricultural News

Designed and implemented a full text search system for 160,000 news articles from the past five years. Created a market information service system.

■ Food Service & Other Services



Lotteria

Downsizing of core systems.
(Inventory management, cost analysis, sales management, logistics, accounting and POS master system, etc.)



Kitamura Camera

Database engine for work scheduling software system.



Newton

(Karaoke center "Pasela", etc.)
System to link each outlet's data with headquarters.



- Together with Professor Hayato Yamana of Waseda University School of Science and Engineering, we conducted joint research into efficiency of running environments by porting the data and software of a large logistics company (with their cooperation) onto a Sun Microsystems T2000 (latest multicore machine).

The research was published in the *Journal of Information Processing, Vol. 2007, No. 17, pp233-238, Hokke 2007 (2007.3.12)*, “Method for Accelerating Shell Scripts on a Multicore Processor”. We showed that the Unicage Development Method makes it simple to process data at high speed on a multicore processor.



- Conducted joint research on system culture with Professor Tamai of Tokyo University Graduate School of Arts and Sciences



- Conducted joint research on programming in the Japanese language with Professor Ohiwa of Keio University School of Environmental Information Studies.



- Currently conducting research into “Applications of high speed information processing technology using the Unicage Development Method on a Pipeline Computer together with NEDO (New Energy and Industrial Technology Development Organization).



- Cooperating with Professor Nobuo Kawaguchi of the Nagoya University Graduate School of Engineering in his research and development of an application to collect data during natural disasters.



- Unicage Development Method Training Seminars:
<http://www.usp-lab.com/LECTURE/CGI/LECTURE.CGI>
We conduct periodic seminars to train engineers in the Unicage Development Method.
- Remedial Lectures on Required Knowledge
 - Introduction to UNIX for Unicage
 - Introduction to Web programming for Unicage
- Lectures on Unicage Development Method Basic Techniques
 - Learning the Commands
 - Learning Shell Scripting (Batch Processing)
 - Learning Shell Scripting (Web Application Processing)
 - Understanding the Unicage Architecture
 - How to Set Up the Unicage Development Environment
 - System Operations and Management
 - Project Management and Training/Development of Engineers
- Unicage Development Method – Certification Testing
<http://www.usp-lab.com/exam.html>
 - This test evaluates the engineer's knowledge base and problem solving skills
 - Class 3: The engineer has the ability to maintain a system developed in Unicage
 - Class 2: The engineer has the ability to write a data processing program as a member of a development project
 - Class 1: The engineer has the ability to develop a web application as a member of a development project
 - Top Class: The engineer can architect an entire system on his own

• User Communities

- “Friends of USP”– we support a user community of fans of shell scripting
 - <http://usptomonokai.jp>
- TechLion: We invite famous engineers for a new type of live discussion
 - <http://techlion.jp>
- System Initiative Forum: A forum where we support and promote the proactive utilization of information technology within our enterprise users
 - <http://system-initiative.com/>
- US.Peace FARM: We sponsor “Farm Experience Days”, “Produce Trading Days” and “Chef’s Tables” together with the organic farmers of Saitama Prefecture, Ogawamachi Town.
 - <http://www.uspeace.com>

• Publishing Activities

- USP Publishing
 - We reprint famous books about shell script programming and software development; we publish new books about the Unicage Development Method.

• Speaking Activities

- June 2012: Spoke at the Information Processing Society of Japan’s Seminar Series
- April 2011: Gave keynote address at Agile Japan 2011
- November 2010: Spoke at Google Tech Talks
- April 2007: Gave keynote address at the Japan Software Engineer’s Association



A Reprint of “The AWK Programming Language”



The first essay collection on the Unicage Development Method: “Fundamentals of Unicage”

Company Overview and Management



• Company Overview

Company Name: Universal Shell Programming Laboratory, Ltd.
Headquarters Address: SS Building, 3rd Floor, 3-4-2 Nishi Shinbashi, Minato-ku, Tokyo, Japan
Telephone Number: +81 3 3432-1174
Home Page: <http://www.usp-lab.com>
Established: April 2005
Directors: CEO and Representative Director - Nobuaki Tounaka
Business Activities: Sale of Unicage licenses, education, publishing systems integration

• Introduction to our Management

CEO and Representative Director: Nobuaki Tounaka

History: Born in 1966 in Hyogo Prefecture. In 1992, left the Ph.D. program in Information Engineering at Tokyo University in 1992 to work for Daiei, Inc. In 1996, won the President's Award for system improvements. From 2000 to 2002 was a visiting professor at the University of Marketing and Distribution Sciences where I led activities subsidized by the Information Technology Promotion Agency. Founded USP Labs in 2005 as CEO. From 2009 to 2011 was a lecturer at Cornell University Retail Management Program of Japan.

Publications: Numerous articles in logistics journals *Revolution in Retailing*, *Food Retailing* and *Journal of Retailing*. Numerous articles in IT journals *Software Design* and *Nikkei Linux*.

© Derivation of the USP Labs Logo



Our logo mark uses as its motif the "Sonkyo Stone" at Ryoanji Temple in Kyoto. It is said that this was a gift to the temple by Mito Komon Tokugawa Mitsukuni and contains the phrase "Ware tada taru wo shiru" which means "I only know fulfillment."

At USP Labs, we believe in the Zen teaching "The one who knows fulfillment may be poor but his heart is rich; the one who doesn't know fulfillment may be called rich but is poor." In this spirit we hope to contribute to the proper development of the information society.

