

Propalms, Inc. and Toyota Group Joint White Paper

(Phase I)

2008

The purpose of the White Paper is to detail the benefits and process of installing Propalms TSE software in various stages within a major corporation. This document is Phase I of the White Paper.

INTRODUCTION

In April 2007, Toyota Group was in need of an enterprise solution for internal communication and transfer of data within the company. Among the internal system problems Toyota Group was experiencing, the company had to perform multiple desktop refreshes and was concerned about data loss and security issues.

The problem of data loss is a problem that can be avoided by using Propalms TSE. With Propalms TSE, no data is stored locally on a user's desktop; it is stored on secure central servers, which eliminates the threat of a security breach. Propalms uses the group policy setting within the Microsoft Active directory, which provides rights to some users and locks down other users so they cannot get to important data. It also allows users to run new software on old personal computers because all of the applications are run from a central server. With over 400,000 personal computers on a worldwide basis, it is ideal that Toyota Group employees have secure remote access to applications. (To view how TSE runs on a central server, view Diagram 1 on page 6.)

End users want to run their applications wherever and whenever they need to. With Propalms TSE, the IT department can be even more responsive. Users can not even tell that the applications are not running on their PC and there is no time wasted with viruses or updating software.

Toyota Group chose Propalms TSE for a variety of reasons:

- Localized in Japan and has a proven record selling into and supporting Japanese companies.
- Extremely cost effective and reduces the total cost of ownership into large companies.
- Centralizes deployment and management applications, which allows Toyota to run new software applications on old personal computers because all applications are run centrally on the server and not on user desktops.
- Capable of delivering one application or multiple applications seamlessly to users.
- Allows shadowing of an application where a centrally based support team can actual see, in real time, what a user is doing within the application. This means that someone based at offices in Thailand could, through the Propalms TSE Web based console, support someone working from home in the U.S. or train that person on a new application.
- Provides secure remote access to applications, which allows users to access their applications from anywhere at any time without having to be in the office.
- Allows remote printing, which allows users to print to a printer that is located in the office while they are not in the office. It also allows them to automatically pick up settings of new local printers.

Toyota Group also chose Propalms TSE because it is extremely cost effective and dramatically reduces the total cost of ownership into large corporations in a variety of ways:

- Companies no longer have to buy new personal computers because all applications are run centrally on the server and not on user desktops.
- Able to roll out new applications to 1,000 users in minutes.
- Easy to install and manage.
- Reduces help desk costs with session shadowing. Centrally based support team can see, in real time, what a user is doing in an application, which means that the user needs less technical support, thus costing the company less money.
- Built in ability to provide secure remote access for roaming and home workers.

Toyota Group was aware of Propalms due to its reputation for successfully delivering applications into other Japanese companies, including, but not limited to:

- **NTT** (www.ntt.com)
- **Toshiba** (www.toshiba.com)
- **Kyoto Prefecture** (www.pref.kyoto.jp)
- **Nano Group**
- **Nihon Apoch** (<http://www.apoch.co.jp>)
- **Oki** (<http://www.oki.com>)
- **Sanyo Seisakusho** (www.sanyo-ss.co.jp)
- **Local government accounts**

Companies in Japan chose Propalms TSE for a variety of reasons:

- Home workers or external workers need secure remote access
- Easier to manage and deploy desktop applications
- Easier to support end users
- Clients purchase a large back end application that is bandwidth intensive

BACKGROUND:

Toyota Group

Toyota Motor Corporation, or Toyota in short, is a Japanese automaker. It is the world's second largest automaker behind General Motors; however, it ranks first in net worth, revenue and profit. It is also the only car manufacturer to appear in the top 10 of the BrandZ ranking.

Toyota Group consists of two main divisions: Toyota Tsusho Corp. and Machinery and Electronics Division. The best known company is the automotive which sits in the Toyota Tsusho division, which includes brands such as Toyota, Lexus, Daihatsu and Subaru. What most people do not realize is that the automotive division is a small part of the whole group; this division makes up about 13% of the Toyota Tsusho Corp., which has sales in excess of 6,213 Billion (Yen).

Toyota Tsusho Corporation, based in Nagoya Japan and Tokyo Japan, is the trading company for the Toyota Group. It is one of the largest trading companies in Japan, 7th largest in the world. Toyota Tsusho has a worldwide presence through its many subsidiaries and operating divisions. Its main business is supporting Toyota Motor's automobile business and other Toyota Group companies. In actuality, Toyota Tsusho's business is very diverse, spanning the industrial, commercial, and consumer sectors. Business areas run the gamut from industrial raw materials, agriculture, to high-technology.

Toyota Tsusho's Machinery & Electronics Division not only procures products from domestic and international sources, but also provides total support across the diverse industrial fields related to machinery and equipment, information and electronics, and overseas production parts. This includes consultation and planning, technology development, quality control, and efficient logistics that contribute towards the establishment of local production systems.

In machinery related fields, Toyota handles equipment for every industry, offering a comprehensive engineering service that covers planning to post-operation follow-up, consultation on the optimum selection and integration of equipment and factory layout, installation, adjustments and maintenance.

In the field of electronics, Toyota Tsusho develops superior technologies in semiconductors, communications, and data processing and proposes applications of such technologies, in addition to quality control and delivery management. Further, we are conducting our system integration business that supports the establishment of communications network mainly for Japanese-affiliated firms overseas.

For assembly parts designated for overseas automobile production, Toyota has placed logistics bases in several countries to establish a "Supply Chain Management System," which promotes a mutual complement of procurement and delivery of parts in 8 countries including Japan, USA, Asian and South American countries.

PROPALMS TSE

The complete management solution for the server based computing environment. Propalms has analyzed the cost effectiveness of TSE licensing costs versus Citrix®, which is approximately 40 percent more cost effective. (View the Product Comparison Chart on page 7.)

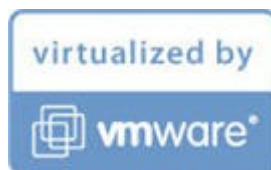
Benefits:

- Significantly more cost effective than Citrix®
- Simplifies deployment and administration of applications with no specialists required
- Secure remote access to applications via SSL Gateway
- Seamlessly extends Terminal Services in Windows® Server 2003 and 2000
- Fully Universal Print management solution
- Reduce software license costs
- Portal-based access to applications for remote sites, home users, contractors and partners
- Remote control for training and support purposes
- Extend the lifecycle of desktop hardware
- Reduced support costs

Propalms TSE adds indispensable management capabilities to any size business deployments. TSE scales to accommodate growing numbers of users, applications and servers within any client business structure, securely, reliably, and cost-effectively.

Propalms TSE allows IT Managers to do more with what they have. With intelligent reporting, they finally have the data to lower software license costs, enabling clients to manage tight budgets and spend more on strategic projects. Employees are often scattered geographically. Propalms TSE speeds the deployment of applications everywhere to better support local and remote offices.

Propalms' Partnerships:



- Microsoft Certified Partner
- VMware Technology Alliance Partner
- HP Solution and Developer Partner

PRODUCT COMPARISON MATRIX

Propalms Terminal Services Edition version 5, Windows 2003 Terminal Services & Citrix Presentation Server 4 feature comparison.

General Features	Propalms TSE 5.0	Windows 2003 Terminal Services	Citrix Presentation Server 4
Min. Terminal Server version required	2000	n/a	2000
Protocol	RDP	RDP	ICA
License Type	Concurrent	Device/User	Concurrent
General Features	Propalms	Windows 2003	Citrix
Application Publishing	♦		♦
Seamless Windows	♦		♦
Load Balancing	♦		Advanced Loition
Web-Based Application Access	♦		♦
Content Publishing	♦		♦
File Association based application launch	♦		♦
Print driver mapping	♦	♦	♦
Full Universal Printing solution for all client types ¹	♦		
Session Shadowing	♦	♦	♦
Client Features	Propalms	Windows 2003	Citrix
Web-based client install	♦	♦	♦
Auto client update	♦		♦
Client Drive Mapping	♦	♦	♦
Client Printer Access	♦	♦	♦
Local / Remote Clipboard Mapping	♦	♦	♦
Client COM/LPT Port Access	♦	♦	♦
Audio Redirection	♦	♦	♦
Dynamic Shortcut creation	♦		♦
Application Favourites	♦		
Disconnected session view	♦		
24-bit colour	♦	♦	♦
Client Platforms	Propalms	Windows 2003	Citrix
32-bit Windows	♦	♦	♦
16-bit Windows		♦	♦
DOS			♦
Macintosh	♦	♦	♦
Linux/Unix	♦		♦
Java	♦ ²		♦
Windows CE / PocketPC	♦	♦	♦
Security Features	Propalms	Windows 2003	Citrix
SSL Encryption	♦	♦	♦
Proxy Support	♦	♦	♦
SSL Gateway	♦		♦
Pass-through authentication	♦		♦
Management Features	Propalms	Windows 2003	Citrix
Delegated administration	♦	♦	♦
Single Click Server Install	♦		
Client policies	♦	♦	♦
Fully functional Web Management Console	♦		
Clone Server	♦		
System Monitoring	♦	♦	Enterprise Loition
Detailed Usage Reporting	♦		Enterprise Loition
Publish to Organisational Unit	♦		
View Published apps via OU / Group of User	♦		

¹ Citrix technology provides support for Linux, UNIX and Macintosh as well as Windows clients

² Currently in development

Pilot Projects:

Toyota Group currently has six pilots in different companies within the group. The companies are:

- **Toyota Motor Asia Pacific Engineering and Manufacturing Co., Ltd. (TMAP-EM)**
- **TTNI-A**
- **Digital Contents**
- **Denso**
- **TTNI-T**

- **TTNI (China Pilot)**

Propalms TSE Pilot Phase - Common Objectives of Toyota Group's Companies:

Server sizing:

Server sizing is where a customer tests an application on a server to see how much of the server's resources it takes up. Once you have an understanding of how much memory and processor time each session will take you can then see how many users you can get onto each server. If you can only get 10 users on a server you would need to build a server team of 10 if you had 100 users.

Application testing:

Application testing is where individual applications are tested on TSE to see if they will run in a server-based computing environment. Not all applications will run or they will run but take up too much of the server's resources for it to be commercially viable. The types of applications that do not perform well tend to be heavy graphical applications, such as CAD type applications.

Stress testing:

Stress testing is where customers would load a server with users to see how many users it can get onto an individual server before it degrades the performance to the users.

User acceptance testing:

Running applications in thin client mode can be a different experience for users so it is important when you are running larger projects to get the buy in of the users involved.

Conclusion:

Toyota Group is currently testing their myriad of applications on the TSE platform and is running performance statistics from them. After Toyota Group is satisfied with Propalms TSE and it is seen as a robust solution, Toyota will roll it out to approximately 70 percent of its personal computer base. They intend this roll out to start in April 2008. Once the roll out is completed, Phase II of the White Paper will be written.

PROPALMS, INC. OVERVIEW

Propalms, Inc. (OTCPK: PRPM) was established in the UK in October of 2001 and on July 12, 2005, the company purchased a license and purchase option agreement from Tarantella, Inc. for its worldwide intellectual property rights. This included the entire customer base and ongoing maintenance revenues of a software product called TSE, a complete management system for server based computing systems operating in the Microsoft environment. Currently, Propalms is working to becoming a Certified Gold ISV Partner.

TOYOTA GROUP OVERVIEW

Toyota Group was founded in 1937 by Kiichiro Toyoda as a spinoff from his father's, Sakichi Toyoda, company Toyota Industries to create automobiles. In 1934, while still a department of Toyota Industries, it created its first product Type A engine and its first passenger car, the Toyota AA in 1936. It is headquartered in Toyota, Aichi and Bunkyo Tokyo, Japan. It also provides financial services through its division Toyota Financial Services and also creates robots besides automobiles. The company along with the original Toyota Industries forms the bulk of the Toyota Group.

Toyota owns and operates Toyota, Lexus and Scion, has a majority shareholding in Daihatsu Motors, and has minority shareholdings in Fuji Heavy Industries, Isuzu Motors, and the engine, motor cycle and marine craft manufacturer Yamaha Motors. The company includes 522 subsidiaries. Toyota plans to produce 9.4 million vehicles in 2007. It plans to sell 10.4 million automobiles in 2008, which would be the first time an automaker has sold more than 10 million vehicles in a year. By January 8, 2008, the company will drop "Motor" from its corporate name and call itself simply "Toyota Corporation."