

Created by Dekker, Ltd.



 **Dekker, Ltd.**



**Dekker PMIS™ Internet  
Smart Client  
Configuration: Web  
Enabled**

## Table of Contents:

1	Introduction.....	3
2	Pre Release 7.3: Thick Client Installation .....	4
3	Release 7.3: Internet Smart Client Installation .....	5
4	Conclusion.....	6
5	References.....	8

## 1 Introduction

Project Management applications are typically deployed through a traditional thick client environment. This environment, however, introduces certain limitations, imposing constraints on accessibility, network security configurations, maintenance, upgrades, and feature options.

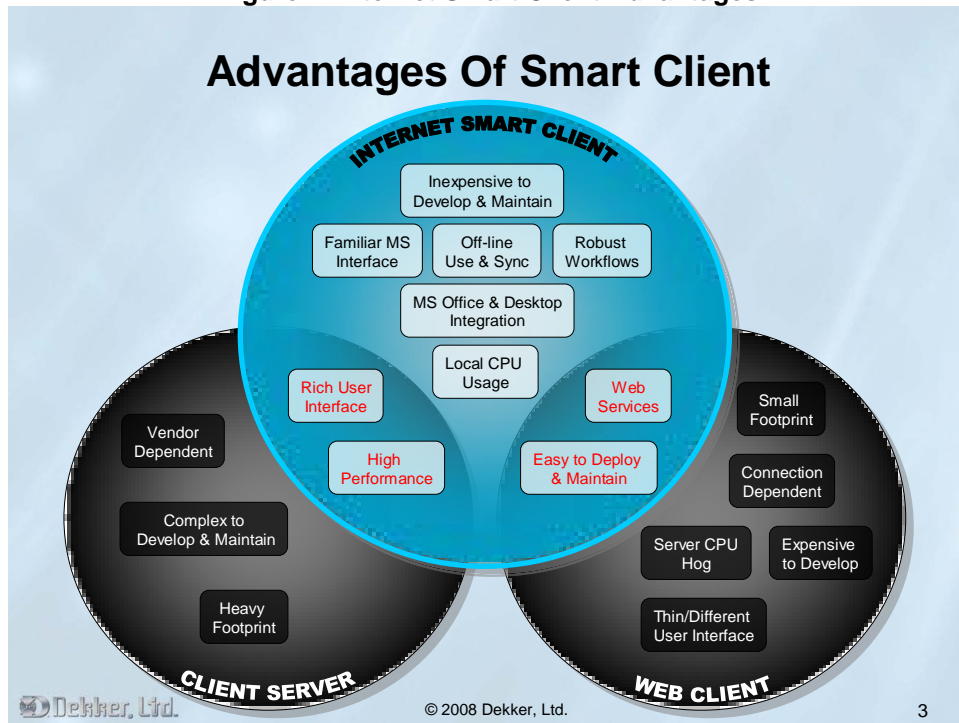
The thick client installation provides the robust functionality expected by the user, in addition to online/offline capabilities, and responsive and flexible usage. The deficiencies seen with this type of installation are found with the 'heavy footprint' associated with thick client software. A heavy footprint is the size of the software components downloaded to the end users machine when installing an application, such as with the Microsoft Office suite of tools. Client configurations are often difficult to update and deploy. This can be encountered when subsequent releases of an application are released and must be loaded to each machine on a user by user basis. The Client Server application requires Information Technology (IT) resources devoted to the maintenance of the applications (PCA, 2008).

Web applications have sought to address the drawbacks created from the thick client but have introduced its own unique set of challenges. Web client installations are easily accessible to the end user through web services. The web application is easily managed, updated, and deployed to the user community; however, as is found with most web applications, users will experience a significant loss of functionality. Web applications are also difficult and costly to develop and require connectivity to be accessed (Hill, 2004).

Dekker, Ltd. (Dekker) recognizes the deficiencies posed by both the thick client and web applications. Understanding these limitations, Dekker has incorporated an Internet Smart Client deployment into the Dekker Project Management Information System (Dekker PMIS<sup>TM</sup>) 7.3. The Internet Smart Client incorporates all of the advantages of both the thick client and web applications, with none of the shortcomings. Dekker has incorporated this configuration into its product line to meet the evolving needs of remotely dispersed organizations. In addition, the Internet Smart Client is supported by Microsoft and other software development vendors (PCA, 2008) (MSDN, 2004).

Figure 1 represents a Venn Diagram illustrating the relationships between the Client Server (thick), Web Client (thin) and the Smart Client. The figure shows the advantages gained by incorporating of the best attributes of thick and thin clients into the Internet Smart Client configuration (Beal, 2006).

Figure 1: Internet Smart Client Advantages



## 2 Pre Release 7.3: Thick Client Installation

The thick client installation is the typical software configuration seen in most organizations. In a Thick Client configuration, the software application is installed on the client and all processing is done locally on the user's system. The server in this case is used primarily for data storage. The thick client can place additional responsibilities on an IT Department including software maintenance, vendor dependency, and heavy footprint.

Figure 2: Thick Client Installation

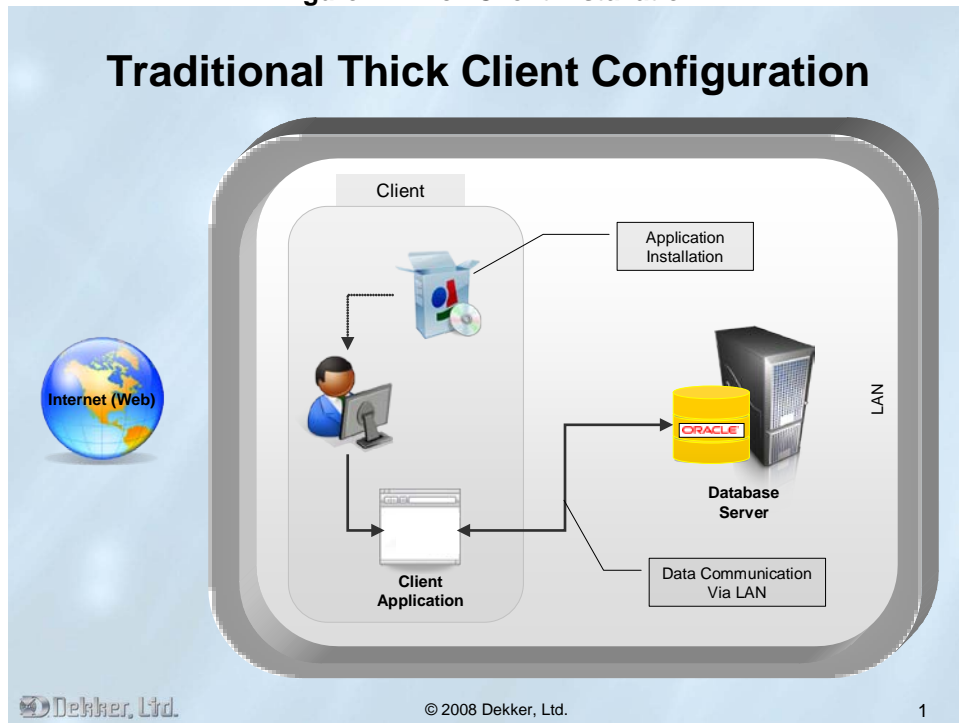


Figure 2 displays the typical configuration of the Thick Client Installation. The application is installed on each client machine, downloading a heavy footprint with each install. The client application then accesses the database through a Local Area Network (LAN) connection. Data is communicated to and from the database through the application. This figure also describes the exclusion of any functionality offered by the internet.

### 3 Release 7.3: Internet Smart Client Installation

The Dekker PMIS™ Internet Smart Client harnesses the advantages of both the thick client and web applications. The Internet Smart Client maintains the complete functionality, look and feel of the thick client while leveraging the remote data access advantages of the internet. The application provides secure access to the server through an HTTPS Secure port. The following table outlines the top advantages of the Dekker PMIS™ Internet Smart Client configuration:

Table 1: Top Advantages of the Internet Smart Client Configuration (MSDN, 2004)

Advantages	Description
IT Deployment	Software installation and upgrades will occur via web services from a centralized location
Internet Access	Remote web access anywhere the Internet is available
Full Application Functionality	All features and functions of the Dekker PMIS™

Advantages	Description
Maintenance and Cost	are available through the Internet Smart Client IT Department resources and costs involved in the installation and maintenance of the software will be minimized and centralized
Local Resource Utilization	Dekker PMIS™ Internet Smart Client will take advantage of local client resources including CPU, Disk Storage, Peripheral Devices, etc.

Figure 3: Dekker PMIS Internet Smart Client

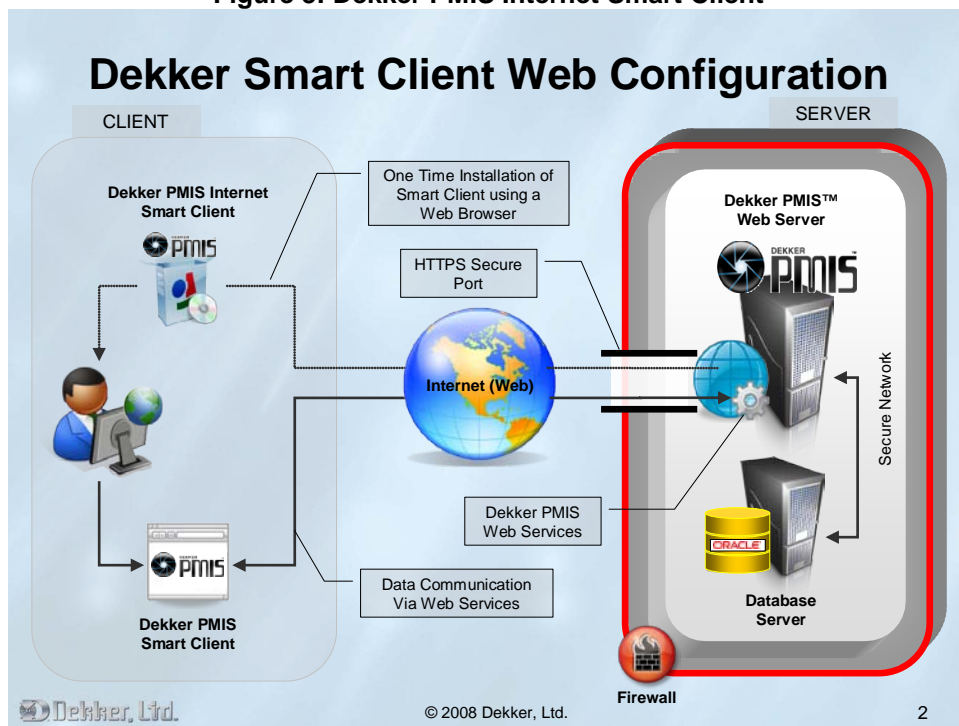


Figure 3 describes the Internet Smart Client configuration of Dekker PMIS™. The application installs a one time, small to medium client component on the user machine from the server through the web browser. Through a HTTPS Secure Port, the user can then access the Dekker PMIS™ Web Services machine within the secure organizational network. Project management data can be loaded/updated via Web Services into the organizational database.

## 4 Conclusion

No robust project management/EVM application on the market today offers a zero footprint capability. By introducing the Internet Smart Client into the PMIS™, Dekker brings its feature rich project management application to the web. The Dekker PMIS™ Internet Smart Client utilizes the same technology and maintains a smaller footprint than can be seen in any Microsoft Office Applications. Dekker

PMIS™ is the first Project Management/EVM application to incorporate the Internet Smart Client as part of its software offering.

## 5 References

- Beal, V. (2006) *The differences between thick, thin & smart: An overview of client applications*. Retrieved November 17, 2008 from the world wide web:  
[http://www.webopedia.com/DidYouKnow/Hardware\\_Software/2006/thin\\_client\\_applications.asp](http://www.webopedia.com/DidYouKnow/Hardware_Software/2006/thin_client_applications.asp)
- Diws (2004). *Building smart client using .NET*. Retrieved November 17, 2008 from the world wide web:  
<http://www.codeproject.com/KB/dotnet/DotNetBuildSmClnts.aspx>
- Hill, D. (2004). *What is a smart client anyway?* Retrieved November 17, 2008, from the world wide web: <http://blogs.msdn.com/dphill/articles/66300.aspx>
- Microsoft Development Network (MSDN) (2004) *Smart Client Architecture and Design Guide*. Retrieved November 17, 2008 from the world wide web:  
<http://msdn.microsoft.com/en-us/library/ms998506.aspx>
- PCA, Inc (PCA) (2008) *Smart client application platform*. Retrieved November 17, 2008 from the world wide web: <http://www.pcapps.com/application-services/smart-client/overview.aspx>