# 1

## Introduction

### **Table of Contents**

1.1	SDS <sup>TM</sup> Advantages	<b>-3</b>
1.2	Overview of CSAN®	<b>-4</b>
1.3	Overview of SDS <sup>TM</sup>	-6

#### 1.1 SDS<sup>TM</sup> Advantages

#### To Provide a Layered System Application Environment (Multiple Image Modes)

In a standard Client and server environment, SDS<sup>™</sup> provides 16 virtual images on a server hard drive to be shared or designated to the client computers that with or without DASD (Direct Attached Storage Device). System suppliers can provide not only software preinstalled systems but also a grouped or layered system application environment.

#### To Improve System Security and Integrity (Write Protect, Roll back)

Safeguarding intellectual properties or software licenses, eliminate illegal software copies, easing and automating backup management or turning on auto roll back services the centralized disk images enables and simplifies system security and integrity tasks.

#### Mobile Uses (Profile Roaming)

User's configuration, application or preference settings can be seamlessly shared between different machines. Profile Roaming provides users with a consistent working environment from machine to machine.

#### Web Based Management Console

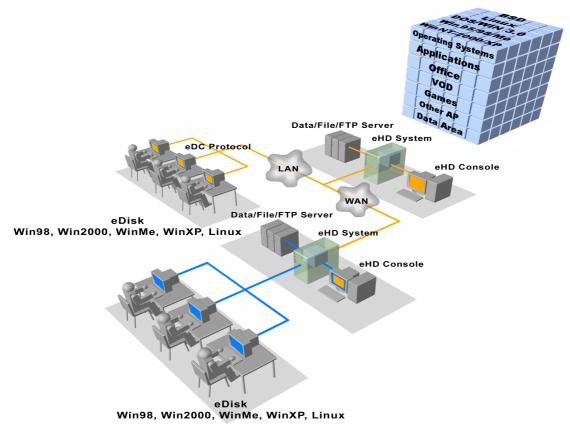
The servers' image sharing, grouping, changes and clients' configuration, reconfiguration, preset, roll back, and recovery can all be done from any one point with an internet connection. And a system event log provides history track records of any system changes.

#### To Perform a Fast System Service Provisioning (Batch Set)

A batch set to configure clients with similar system environment and the multiple layered images of Operating System and Application software need only one time installation on server side to instantly deploy or install hundreds of computer systems.

#### 1.2 Overview of CSAN®

CSAN® (Client Storage Area Network) is defined as a network infrastructure designed to deliver and manage client PC services using technology derived from Storage Area Networks (SAN).



Client Storage Area Network (CSAN®)

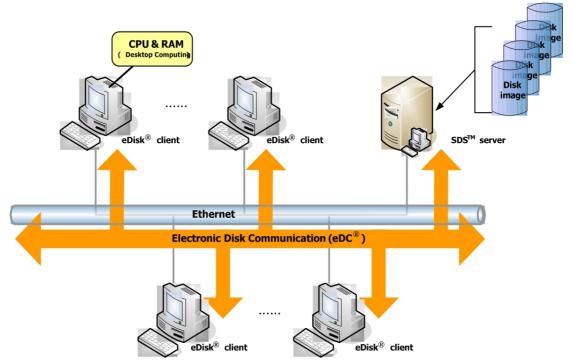
CSAN® creates a shift in the desktop computing paradigm. By managing the client PC's Operating System (OS)/Application (AP) services through centralized management of their OS disk image, CSAN® is able to provision the delivery of OS/AP services to the client PC. With a well-planned implementation, this technology can maintain an extremely high level of client service availability. With SDS<sup>TM</sup>, client PC's boot disk resides across an Ethernet network and it's protected by the SDS<sup>TM</sup> Server. In CSAN® sterms, the client boot disk (eDisk®) is the fundamental media of service delivery,

#### **Disk (Block Device) = Service Delivery Media**

To master the task of managing client PCs, Fine Appliance developed and patented a network block device access protocol known as Electronic Disk Communication or eDC protocol. This protocol operates at Layer 2 of the OSI stack and is highly efficient at moving data at the block level. By managing only the program binaries

sent to the client PC for distributed execution, CSAN® allows customers to deploy full power client PCs. In this era of commodity priced PCs, it offers the advantage of centralized server-based client management and the flexibility of upgrading the computing resource (i.e. CPU and RAM) as PC hardware price falls. In the figure below, the SDS<sup>TM</sup> model moves the boot disk image to the SDS<sup>TM</sup> server while leaving full compute resource at the client PC.

 $CSAN^{\text{®}}$  moves boot disk image to  $SDS^{\text{TM}}$  server, however client PCs have full computing power.



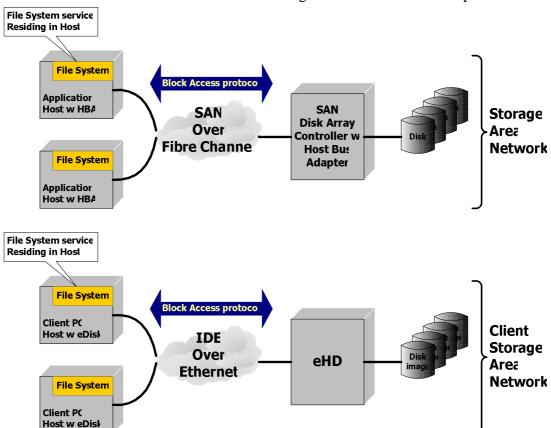
CSAN® allows desktop clients using standard hardware to have full computing power while centralizing the boot and application

disk image at the SDSTM server

#### 1.3 Overview of SDS<sup>TM</sup>

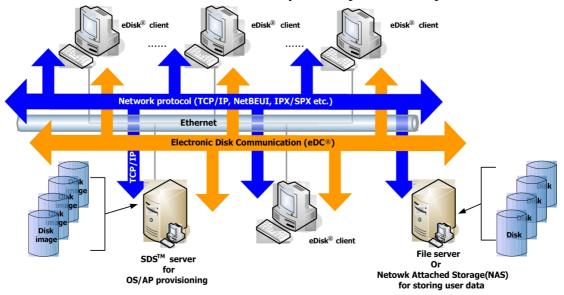
A full suite of management functions within the SDS<sup>TM</sup> Net System software brings advanced SAN-like technology to the client PC. Features such as storage virtualization (Disk image managed and accessed over network), disk image snapshots, multiple copies of disk image, block level access control and full disk backup/restore; improves the manageability the client PC.

The diagram below illustrates the similarities in the network storage technology used in SDS<sup>TM</sup> and SAN. SDS<sup>TM</sup> offers the advantage of SAN to each desktop client.



Similarities in network accessed storage between SAN and SDS $^{\mathrm{TM}}$ 

Figure below shows a typical SDS<sup>TM</sup> implementation where desktop client services are provisioned by the SDS<sup>TM</sup> server and all the clients' data is stored in a file server. SDS<sup>TM</sup> allows the enforcement of a strict information asset protection policy by preventing storage of any critical data at the client PC. All the corporate data has to be stored on the file server where access can be monitored and protected. File Server or Network Attached Storage (NAS) coupled with SDS<sup>TM</sup> offers a complete management solution of client service and data availability in a corporate desktop environment.



Clear segmentation of data and OS/AP service