Overview

PIXIL Thin Client is a complete software solution available on Dell Optiplex™ PC hardware, allowing thin client access to applications running on Windows servers, UNIX/Linux, and IBM mainframe and midrange systems. Targeting rapidly growing needs in the thin client market, PIXIL delivers a flexible Linux-based architecture that leverages the benefits of server-based computing, provides Windows, IBM, and UNIX/Linux access, and offers powerful PC-like capabilities in a small footprint, low-resource thin client. Businesses are demanding solutions that provide cost-effective ways to deliver and manage information across the enterprise. Advantages of adopting PIXIL Thin Client include centralized application management and maintenance, access to new and existing applications, great interoperability, excellent security, and lower costs.

Gain the Linux Advantage

PIXIL delivers a powerful Linux alternative to the Windows-based thin client. By incorporating advantages of embedded Linux along with the significant benefits of deploying thin clients enterprise-wide, the total cost of ownership, security risks, maintenance and support requirements can be significantly lowered.

Linux-based thin clients offer increased security, greater flexibility, and lowered costs.

PIXIL, by allowing the client to take advantage of local Linux code for browsing and terminal emulation, can ease network congestion by offloading browser and IBM host access tasks directly to the client. Running Linux rather than Windows on the thin client allows combining local Linux applications with desktop Windows access, all in a small footprint.

Centralized Management

Thin appliances that target end user needs and offer centralized management capabilities are allowing organizations to manage larger user bases with less time and effort. PIXIL load images can be booted directly from USB flashkey devices, or centrally managed and booted over the network using a PXE or LTSP compatible boot server. PIXIL Configuration Server, a PXE-compatible boot server is available for Linux and NT servers.

The PIXIL user interface includes a graphical Network Login Manager utility that enables the thin client to access Windows-based applications and support connectivity through Microsoft Terminal Server RDP and Citrix ICA technology. These protocols empower thin clients to access Windows-based servers across a network or the Internet. PIXIL utilizes these protocols to minimize the bandwidth thin clients require by transmitting only changes over the network. Centralized management and deployment of host address and login information is accomplished through the PIXIL configuration management utility.

IBM 3270 and 5250 Host Access

Host access is provided through IBM TN3270E mainframe and IBM TN5250E iSeries midrange terminal emulators, which run in windowed or full-screen modes. Browser-based connectivity is available through the PIXIL Thin Client Browser and features a small footprint adapted version of Mozilla. Advanced internet technologies currently available include: HTML 4.0, JavaScript 1.4, Real Networks, Adobe PDF, and Macromedia Flash. These features run in a 32Mb footprint. For smaller footprint devices, PIXIL Thin Client can be configured to run in 16Mb without local browser or terminal emulator support.

Customized Boot Images

OEMs and IT staff can easily scale and customize the client environment using PIXIL’s flexible architecture. Components can be fine tuned according to the desired end user environment. PIXIL’s Software Development Kit (SDK) offers development tools to streamline the customization process, incorporate essential services, and add enhanced functionality. The SDK provides customers with a framework for accelerated development, offering high performance and rapid deployment of thin client devices.

Powered by PIXIL

Linux Based Operating Environment for Thin Client Terminals

Rapid Deployment of Network Access to Business-Critical Applications
Supported Hardware

Dell™ Optiplex™ GX620, GX520
Dell Optiplex SX270, SX280
Dell Optiplex GX270, GX280
Dell Optiplex GX1, GX60, 170L
Dell D400, D600 Laptops
Celeron® or Pentium® 4 Processors
128-512Mb System Memory
PS/2 or USB Mouse (Regular or Scroll)
PS/2 or USB Keyboard
6 USB Ports
10/100 or Gigabit Ethernet
Intel® Extreme Graphics or VESA™ Graphics or
800x600, 1024x768, 1280x854
AC97™ Compatible Audio
DB25 Parallel Port
RS232 Serial Port

Application Server Support

Citrix ICA® 8 Client, access to Citrix® WinFrame™/MetaFrame™ and nFuse RDP 5 Protocol, access to Microsoft® Windows Terminal Servers, including Windows 2000 and 2003 Server
Local audio support for Citrix and RDP
X11R6 X Window protocol, access to UNIX®/Linux™ applications
IBM TN3270E Terminal Emulation
IBM TN5250E Terminal Emulation
DEC VT220 Terminal Emulation
Graphical Network Login Manager, remotely or locally configured

Browser Support

Mozilla v1.7, HTML 4.0, CSS, JavaScript 1.4, Macromedia® Flash™, Adobe® PDF, Real® Audio/Video
Java Virtual Machine available

Technical Features

Linux 2.6.10 Operating System
TCP/IP, TFTP, DHCP and BOOTP network protocols
USB Flash Device Boot
CD Boot using local or PXE filesystems
PXE Remote Network Boot
LPR/LPD printing
NNTP Time Client w/time zone support
Samba SMB and NFS file system support
Font and RGB server
Local or remote window manager with full XDM Support
Configuration SDK available
Turnkey PXE boot server available

The PIXIL user interface includes a graphical Network Login Manager utility that enables the thin client to access Windows-based applications and support connectivity through Microsoft Terminal Server RDP and Citrix ICA technology.

About PIXIL

PIXIL provides a complete suite of embedded solutions for advanced Internet appliances such as PDAs, WebPAD™ devices, cellular phones, smart handhelds, and thin clients. Developed for multiple form factor flat panel devices with requirements for wireless communications, networking, web browsing, power management and GUIs, PIXIL offers a fully integrated architecture leveraging the open standards of embedded Linux. PIXIL’s modular framework, with fully optimized pre-defined components offers ready-to-use and easily customized applications.

High Speed Video

PIXIL, in combination with Microsoft’s Terminal Server, is capable of delivering very high quality video to the desktop utilizing software that users are already familiar with. PIXIL’s optimized video drivers provide the speed needed to ensure accurate reproduction of the most demanding videos.

In addition, PIXIL will soon be able to stream video using the standard RTSP protocol from the server, ensuring an even higher-quality video experience. Using RTSP, broadcasting video to hundreds of clients is now a possibility, enabling training and other functions previously only accomplished with a standalone PC.

About Century

Century Software, Inc., is a leading developer of core applications technologies for the worldwide embedded Linux applications market. These technologies include: graphical windowing system development and runtime environments; embedded and Internet appliance multimedia technologies, including MP3 audio and MPEG video players and recorders; PDA/WebPAD runtime and development suites, PIM suites, and set-top boxes.

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