CachePilot

Smart E-learning Delivery for Schools and Businesses

- Stores, updates and delivers content locally
- Enables pre-caching of course-work
- Uniquely secure method of automatic data updating
- Available with wide choice of pre-loaded content
- Product of choice for LEAs, BECTA-Spec compatible
- Comprehensive Web access controls
- Far more than just a caching appliance

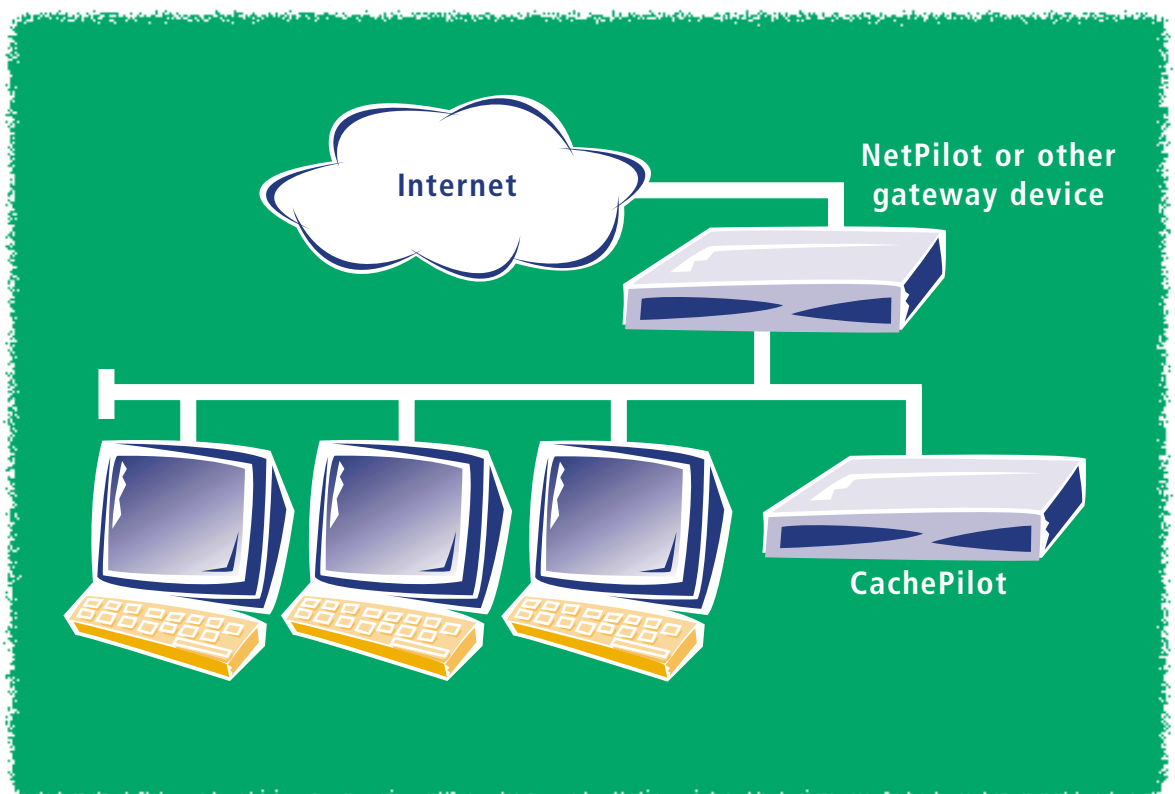**EQUIINET**

INTELLIGENT INTERNET

CachePilot

CachePilot™ is an all-in-one smart content delivery solution for e-learning which is robust enough to handle any e-learning package, no matter the size, content provider or available band-width. CachePilot has been developed to meet the growing demands of the education market. It can store, update and deliver both static and dynamic content locally, enabling simultaneous access by multiple PCs. A smart caching appliance that is far more than just a cache, CachePilot boasts a structured data store for easy retrieval of information, automatic FTP mirroring to pull data, central FTP distribution to push data, web serving, secure automatic updating and comprehensive management statistics and logs. Based on a rugged Linux platform, CachePilot products are beefy enough to handle data content of all shapes and sizes from any provider.

Why Caching Alone Is Not Enough

Caching is the technique of storing previously requested data – usually FTP and HTTP web traffic – geographically closer to those who may require it in the future. By storing frequently visited web pages locally and only updating them when core information changes, caching alleviates the strain on bandwidth by minimizing the number of times information is sourced from the original site. The Internet is rich with caches and they save both time and bandwidth.

However, caches store data sequentially as and when it arrives, rather than in any ordered form, which means sites are interspersed with other sites and web pages on the same caching device. This makes retrieving them in a structured manner a nightmare – indeed, it may be quicker to re-visit a web site in the US than search a 5Gbyte local cache, especially considering the bandwidth available to many users.

A typical e-learning site could be many tens of Gigabytes of data, too big to fit into standard caching products and far too big to be efficiently navigated even if it could be stored. It is also worth considering how updates to content would be made. How would the local cache know when new or modified content has been added to the original source data and that it should be updated?

The Special Requirements of E-Learning

For e-learning material to be effectively delivered to academic establishments – or for lifelong learning purposes in businesses – it must come from a local source that replicates the original data in a structured manner. The local cache must also be capable of automatic content updating as and when required,and capable of delivering its content to many students simultaneously, all of which is beyond the capability of standard caching technologies. CachePilot is ideal for this task because it is far more than just a caching appliance.

Structured Data Store

CachePilot is able to faithfully replicate the directory and file structure of the source content,which enables the speedy retrieval and delivery of the content without wasting time on unnecessary searching.

Automatic FT Mirroring

CachePilot can automatically check its content against a remote server containing the source data, and copy any new or modified files and directories. This would usually be done on a daily or weekly basis, normally occurring during the night or weekend.

Central FTP Distribution

CachePilot can also receive updates and modifications proactively sent to it from the remote server holding the source content data. This is very useful because many local caching appliances under the control of a single authority are remotely updated by that authority.

Web Serving

E-learning content is almost exclusively web-based, making CachePilot's in-built web server a great way of achieving local delivery without the need for additional hardware. It also adds resilience to the network, as all local PCs point directly to CachePilot's web server, minimizing the chances of network failure.

Web Proxy Server

Internet access may be controlled by a combination of time-based and "block"and "allow" lists. Optional N2H2 URL filtering is also available.

Automatic Updating

The integrity of the e-learning package may be secured by CachePilot's proprietary automatic updating method, which ensures that content has been digitally signed before it is added.Using a unique software upgrading method that Equiinet uses for its award-winning NetPilot range of secure server appliances – and is now making freely available for CachePilot customers - this solution provides peace of mind for providers that rogue content cannot be added to their material without their approval.

CachePilot and CachePilot Enterprise

Available in two differing form factors, CachePilot comes in an attractive enclosure for desktop or mounting on a shelf within a cabinet.CachePilot Enterprise is a 1U high rack-mount device designed to fit in a cabinet. The Enterprise model also benefits from a faster caching engine and twin removable hard drives.

CachePilot – the Smart Content Delivery Solution

E-learning packages are predicted to routinely exceed 30 Gbytes in size within three years, putting an enormous strain on data networks. It is vital that content delivery methods keep pace and CachePilot more than meets the challenge by incorporating a variety of clever techniques to ensure all steps are taken to avoid wasting valuable bandwidth or slowing down networks.

Product highlights:

Makes e-learning content pre-cachable
Allows lecturers to plan their lessons by pre-loading the required sites the night before the material is needed

Uniquely secure automatic update technique
Offers content providers peace of mind that their source data will not suffer unauthorized alterations

Spacious 120 Gbyte hard drive
The power to store and deliver e-learning packages that will routinely exceed 30 Gbytes in size within three years.

Flexibility to work with multiple providers
CachePilot has been specially designed to work alongside any of the ever-growing number of content providers.

Compatible with any transmission technology
Like Equiinet's other appliances, CachePilot is perfectly compatible with a variety of transmission technologies, including ADSL,ISDN, cable and satellite.

The complete e-learning content delivery system
A structured data store, automatic data pull and push techniques, local web serving and detailed management statistics.

Technical Specifications

KEY HARDWARE FEATURES
- High performance Caching Engine
- 1Gbyte RAM
- 120 Gbyte 7,200 RPM disk drive (2 off in Enterprise)
- Local LAN 10/100 Ethernet port
- 10/100 Ethernet port for connection to WAN router
- ISDN for backup or remote administration
- Front panel with LED status indicators
- Office environment quiet shock tolerant disk drive
- Parallel ports
- Serial port
- Internal Power Supply Unit (PSU)

CACHEPILOT INDICATORS AND PHYSICAL
LEDS
- Power
- Disk Activity

PHYSICAL
- Attractive desktop or shelf mount enclosure
- Height   2.3"   58mm
- Width   12.5"   317mm
- Depth   15"   380mm
- Weight   11lbs   5kg

CACHEPILOT ENTERPRISE INDICATORS AND PHYSICAL
LEDS
- Power
- Disk Activity
- LAN Activity
- WAN Activity

LCD
- Programmable backlit display

KEYPAD CONTROLS
- 3 functions buttons
- 4 menu direction buttons

PHYSICAL
- 1U 19" Rackmountable Enclosure
- Height   1.75"   44mm
- Width   19"   475mm
- Depth   18"   450mm
- Weight   21lbs   9.5kg

ALL MODELS

I/O INTERFACES
WAN – Ports:
- 10/100 Mbps Ethernet
- ISDN BRI Basic Rate

Local LAN
- 10/100 Mbps Ethernet

Disk
- Quiet Office environment shock resilient drive (120Gbytes standard)

Parallel Port
- Centronics compatible DB25 female printer port

POWER
Auto self-sensing power supply
- AC 240VAC
- 50-60Hz
- 3.5A Max

ENVIRONMENTAL
- Temperature range: 0 to 35 C
- Humidity range: 20% to 50% non-condensing
- Max Altitude: 3000m

APPROVALS
- CE Mark
- Year 2000 Compliant

ORDERING INFORMATION

Order Code	Description
1030/000002	CachePilot - Desktop or shelf mount
1112/000002	CachePilot Enterprise – 1u Rack mount

WHAT'S INCLUDED
- Unit
- Power Cord
- Ethernet Cable
- ISDN Cable
- Manual
- Getting Started Guide
- EQ-Resources CD

SERVER FUNCTIONS
- Web server
- File server
- FTP server
- DHCP server
- DNS server

OPTIONAL SOFTWARE UPGRADES
- Content Filtering Subscription service

Disclaimer:
All specifications are subject to change at Equiinet's discretion

EQUIINET
INTELLIGENT INTERNET

Equiinet Limited, Edison House, Edison Road, Dorcan, Swindon, Wiltshire, SN3 5JX United Kingdom

Tel: +44 (0)1793 603700

Fax: +44 (0)1793 603701

Email: info@equiinet.com

Website: www.equiinet.com