vCloudPoint Sharing Computing

-- Not Just Cost-saving
The vCloudPoint zero client is a game-changing device that overcomes the weaknesses of traditional zero/thin client. Combined with the vMatrix Server Manager, it provides the most powerful yet easiest-to-deploy, use, and manage sharing solution without sacrificing desktop experience and delivers the best TCO.

The vCloudPoint device is a compact, cell-phone size network access device that connects the end user's display, input devices and other USB peripherals to the desktop sessions running on a shared computer and effectively allows multiple users to simultaneously share its untapped resources while still providing users with rich PC experience. The vCloudPoint device is referred to as a zero client because in contrast to thin client and PC, it contains no moving parts but only the necessary hardware & firmware to initialize a conversation with the network, begin network protocol processes, and display desktop output. It centralizes all software, processing and management to just what is running on the host, leaving little more than a keyboard, mouse and monitor at a user's desk. As a result, it requires no endpoint management software, no local driver to install, no patch management, and no local operating system licensing fees or updates. The device consumes very little power and is tamper-resistant and completely incapable of storing any data locally, providing a more secure endpoint.

The vMatrix Server Manager, running on the host computer, enhances the overall functionality and usability of the sharing system by offering flexible OS support, secure desktop roaming, centralized management and broad peripheral support. IT Administrators can configure, monitor and manage the endpoint devices and users centrally and simply at the server side through the front-end console.

The functions performed by vMatrix Server Manager include:
1) Giving the administrator complete visibility into the OS, CPU, memory, storage, networking and other critical elements of the host computer;
2) Creating and managing user accounts & password;
3) Authorizing users to access specific desktop session;
4) Discovering vCloudPoint zero clients and USB peripherals;
5) Monitoring and controlling end user desktops;
6) Configuring user USB, audio, resolution, video, etc;
7) Broadcasting the administrator's desktop to the end users;
8) Controlling privacy and visibility of disk partitions to users;
9) Providing a communication path for administrators & users through the integrated messaging application;
10) Keeping down user and administration behavior;
The vCloudPoint Sharing solution comes from a combination of insight, innovation, and deep knowledge of computing technologies that no other solution can match.

1. Excellent Multimedia Support
Powered by the vCloudPoint's innovative DDP (Dynamic Desktop Protocol), users will experience real PC-quality videos scaled up to 1920x1080 resolution at full frame rates without excessive host-side processing or requiring a thin or zero client with media player and codec support. The video content can be any present and future format and either played through standalone media players or embedded into web pages.

2. Customizable user Experience
vCloudPoint's DDP technology allows administrators to customize user experience to meet requirements in different scenarios. Administrators can use the default “optimum” setting for delivering the richest computing experience to users, and switch to the “balanced” setting for reducing the consumption of host resources while enabling smooth HD video playback, or the “economic” setting for maximizing the number of working users. Administrators can still go down in detail to configure for each vCloudPoint zero client user, such as USB, audio, resolution, video, etc. By transferring only dynamic pixels, vCloudPoint's DDP technology can effectively reduce the consumption of CPU resources and network bandwidth while still offering the best display quality.

3. Powerful yet Simple Management Tools
The vMatrix Server Manager provides the IT administrators a user-friendly interface with increased manageability. Besides the general user and desktop management, IT administrators can broadcast his desktop to the endpoint users, communicate with them through the instant messaging application, provide support through monitoring and control over the endpoint desktop, etc. Though powerful, the front-end management console to the administrator is built to be extremely simple. There is no skilled IT staff or training course is required to manage the system.

4. Secure User Isolation
The vMatrix Server Manager overcomes the privacy weakness of traditional sharing solution by putting each user session into a self-container. Each vCloudPoint user has his/her private workspace which cannot be accessed by other users while the rest disk partitions still can be configured visible or invisible to the users. This brings high security to every user with a self-own workspace as well as increased efficiency with a shared center.
5, Broad USB Peripherals Support

vCloudPoint zero clients use its transparent USB technology that peripherals never require specialized client drivers to work – just a native Windows driver is required. vCloudPoint zero clients support a wide range of USB devices including memory device, headphone, printer (both single and multiple functional), scanner, touch screen, U key, card reader, and USB converters. These USB devices are compatible and reliable with all Windows systems that whenever and however you attach them to the zero clients, they are fully functional.

6, Reliable & High Quality Audio

vCloudPoint zero clients use its specific virtual audio technology which enables reliable audio playing and recording in any Windows systems, without hidden limitations or additional configurations. To further achieve high quality and synchronized audio, vCloudPoint’s virtual audio technology reduces transfer delay to 0.1~0.2 second - 1/20 of that by RDP and uses sample rate at 44.1KHz which is equivalent to CD-quality and 48KHz which is used in professional music production, providing you the best audio experience no matter if you are watching a big movie, providing customer service in a call center, or audio-teaching in a language lab.

7, Simple to Set Up and Use

There is only the server suite software to run on the host computer for setting up the system. The whole installation process is just a few next-and-finish steps plus user creation. Whether it is a 100 or 1000 seats deployment, it can be completed in just a few minutes. The vCloudPoint zero client provides a hands-on working experience to users. Its login interface allows discovery and inventory of in-LAN hosts, and automatic login. Only a click-on, they are ready to work.

8, Continuous Support & Updates

vCloudPoint consistently works on the improvement of the products, offering software and firmware updates for enhanced features at no extra charge or hidden cost. If any technical support needed, the support engineers of vCloudPoint and its partners are responsive and quick in providing support to solve the customer issue.
The vCloudPoint Sharing solution offers a great number of benefits in any aspect over traditional desktop PCs.

**Reducing costs**

- Reducing initial acquisition costs. The initial acquisition costs are saved when replacing PCs with vCloudPoint zero clients which cost less than half the price of entry-level PCs.
- Better leverage of IT budgets. Sharing resources on a centralized PC improves leverage of hardware upgrade budgets and software licensing.
- Minimizing endpoint maintenance. With no failure-prone moving parts, repairs on the zero clients are rare and your maintenance costs are minimized to just on the shared computer.
- Greater energy saving. Compare to the 110 watts or more by a typical PC, the vCloudPoint zero clients consume only 5 watts and produce much less heat, providing at least an 80% savings in energy consumption and air conditioning over PCs.
- Longer desktop refresh cycles. Lack of moving parts improves life spans in harsh environments like restaurants, public spaces, warehousing and manufacturing. The obsolescence-free feature also proves longer desktop refresh cycles, saving both refresh budgets and cutting the time for the refresh from weeks to hours.

**Increasing productivity**

- Easy provisioning. Deploying hundreds of workstations can be a few hours compared to days or weeks with PCs. Install the vMatrix Server Manager on the shared PC, add multiple users, plug in Ethernet cable, mouse, keyboard, and monitor, and users are ready to work. A new workstation can be setup in seconds.
- Centralized management. There is nothing for IT to configure, manage, or update at the endpoint. All installations, patches & updates are done on a single host. One IT staff can handle 5 times as many devices and users compared to PCs.
- Remote technical support. IT and support staff can provide support or fix problems right from their desks through monitoring and controlling over user desktops, eliminating the costs and delays of having to travel to remote user locations.
Enhancing security
-- Eliminating virus infection. With no resident OS or storage capable of running software, the vCloudPoint zero client provides a completely secure endpoint that is immune to viruses and other malware.
-- Security policies and monitoring. vMatrix allows IT staff to apply security policies, monitor, and remotely disable any end user from logging in or lock-down locally connected USB peripherals, preventing users from copying confidential data to removable storage.
-- No risk of data lost. Since the vCloudPoint zero clients cannot store any data locally, users are free of worrying about data loss stemming from hardware failure or laptop/PC theft.

Improving efficiency
-- Reducing unplanned downtime. With no failure-prone parts and desktop-related problems unplanned endpoint downtime is greatly reduced. Even when turn faulty, the vCloudPoint zero client can be placed, helping the user back to work in seconds.
-- Rapid roaming from any client. No time is wasted on moving a heavy laptop or rebooting the system. With a simple log-off and then log-in from any vCloudPoint zero client, the user's back at his desktop with all open applications and files still in place.
-- Enabling file sharing. With some disks configured visible to all, users can share and store files easily on these public disks without the need to copy or transfer between desktops.

Protecting Environment
-- Freeing desktop footprint. The vCloudPoint zero client is only a cellphone size and can be mounted on the back of the monitor to save valuable space on the desktop.
-- No Noise on working. Without any storage and fan, the vCloudPoint zero client makes no noise when running.
-- Less heat and e-waste. Consuming much less energy meaning the vCloudPoint zero client produces much less heat and e-waste when compared to standard PCs.
**Power consumption**

Standby: 0.2w; working: 5W (independent of external USB devices)

**Connections**

Front Panel: 2 x USB 2.0 ports, 1 x microphone jack, 1 x speaker jack
Rear Panel: 2 x USB 2.0 ports, 1 x 5V DC in, 1 x VGA monitor, 1 x RJ45 Ethernet, 1 x power/reset switch

**Display resolutions**

Normal display resolutions (32 bits @ 60 Hz):
- 640x480
- 800x600
- 1024x768
- 1280x1024, and 1600x1200

Wide display resolutions (32 bits @ 60 Hz):
- 1360x768
- 1366x768
- 1440x900
- 1600x900, 1680x1050, and 1920x1080

**Audio**

16 bit, 44.1Khz / 48Khz audio input / output via 3.5mm stereo jacks

**Video**

Full HD 1080p for all media formats (Server-side rendering for local and web-embedded videos on most media players; Client-side rendering for local videos on VLC player 2.1.5 or newer versions)

**Networking**

10/100 Mbps Ethernet (RJ45), optional WiFi antenna: 802.11b/g/n (built-in or external)

**Maximum number of users per shared host**

vMatrix Server Manager permits up to 99 users per shared host. Actual number of supported users depends on the host configuration and the type of applications used. View host configuration guide at http://www.vcloudpoint.com/support/faq-how-tos/

**Internal hardware**

All solid-state design. No moving parts, no fans, no local user storage.

**Data security**

No local data storage on device. USB data access controlled by user policy

**Reliability (MTBF)**

>100,000 hours (calculated using Belcore Issue 6 TR-332, Case 2, Part I at 40° C)

**Certifications**

FCC Class B, CE, CCC and RoHS compliant

**Environmental**

0 to 40 degrees Celsius to 85% relative humidity (non-condensing) No moving parts permits use in high dust / particulate / vibration environments.

**Size**

124(W) x 75(D) x 26(H) mm

**Weight**

125g for device, 70g for power supply, 400g for shipping weight

**Kit contents**

Each kit includes an S100 device, power supply, VESA-compliant monitor mounting bracket. vMatrix Server Manager and installation & user guide can be downloaded at vcloudpoint.com/support/downloads; PC, monitor, keyboard, mouse, speakers, microphone, and other peripherals are NOT included and must be purchased separately.

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**Software**

**User Software**

vCloudPoint's vMatrix Server Manager with Dynamic Desktop Protocol (DDP)

**Supported operating system**


**License**

Depends on the operating system, you may require respective Microsoft Remote Desktop Services Client Access (RDS CAL) License for each vCloudPoint user or device.

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* Application software, client access, and OS licenses for the shared PC and S100 (W) may be required by the respective software vendor and must be purchased separately.

** The number of users an individual host will support depends upon the host system capabilities as well as the applications used and performance expectations for those applications. It is recommended that new customers test their application(s) before adding additional users.

*** Please refer to the Microsoft operating system licensing requirements and technical details at www.vcloudpoint.com/support/faq-how-tos/
About Us:

vCloudPoint specializes in providing innovative computing solutions to improve organizations' business/service value. Our focus is helping our customers realize the highest ROI of computing spendings by shifting the traditional computing infrastructure to a new centralized model. Our goal is much simple. We provide proven computing solutions to help customers reduce costs, enhance security and boost productivity so they can concentrate more on their business or service.