CD9700-Series, CD7700-Series Cloud Desktop Quick Start Guide

CLEARCUBE

Package Contents

- CD9700-series or CD7700-series Cloud Desktop
- Power adapter and cable
- Y-cable adapter for single-link-to-dual-link DVI (× 1 for dual-monitor and × 2 for quad-monitor Cloud Desktops)
- This Quick Start Guide





CD9700-series, CD7700-series Cloud Desktop Overview

(**NOTE:** the terms *Cloud Desktop* and *zero client* are used interchangeably in this document.)

A *Cloud Desktop*, or zero client, is a remote computing device that connects a user's monitors, keyboard, mouse, speakers, and other peripherals to remote ClearCube PC blades (computers) and to virtual desktops (VMs). As shown below, computing resources are typically located in remote data centers. Cloud Desktops enable users to work on a blade or VM as if it is a local PC. The connection between the zero client and the remote device is over PCoIPTM protocol. Inside the remote device, a host card manages the PCoIP session.



Cloud Desktop connected to blade or to VM

Cloud Desktop Features

ClearCube[®] CD9700-series and CD7700-series zero clients connect to supported ClearCube PC blades containing Tera1 or Tera2 host cards and to virtual machines to provide:

- Up to four USB ports (depending on model)
- Support for copper or fiber Ethernet media (depending on model)



• Support for independently-configurable monitors

Dual-Monitor Cloud Desktop	Quad-Monitor Cloud Desktop
2 DVI monitors up to	4 DVI monitors up to
1920 × 1200	1920 × 1200
1 DVI monitor up to	2 DVI monitors up to
2560 × 1600	2560 × 1600
(requires single-link-DVI-to-dual-	(requires single-link-DVI-to-dual-
link-DVI Y-cable adapter, included)	link-DVI Y-cable adapter, included)

- PC–over–IP (PCoIP[™]) Tera2 processors, delivering PC video, audio, and USB over an IP network
- Integrated smart card reader (on supporting models)
- HD audio in and out (front) and HD audio out (rear)

Client and Host Firmware Compatibility

ClearCube recommends using the same Teradici[™] firmware version on PCoIP devices whenever possible.

- CD9700-series and CD7700-series zero clients include Tera2 processors, requiring Teradici firmware 4.0.3 and higher.
- If Tera1 devices (that is, any models other than CD9700series and CD7700-series) in a deployment connect to Tera2 devices, the Tera1 devices *must* use Teradici firmware version 4.0.2.
- Dual-monitor CD9700-series and CD7700-series zero clients do not support connection to Tera1 quad devices.

See *PC-over-IP System User's Guide* and *PCoIP Firmware Support and Compatibility Guide* on the ClearCube Support site for instructions about identifying and updating PCoIP device firmware.

Buttons and Indicators

The list below shows indicators and front panel button operations:

- Power Button Colors
 - Green (solid): device is powered on.

- Green (*blinking*): PCoIP session is sleeping. Press any key on the keyboard to wake the session.
- Orange: device is in low-power state and wake-on-LAN (WoL) or wake-on-USB (WoUSB) is enabled. ClearCube Sentral or third-party utilities can provide WoL and WoUSB features for devices.
- Power Button Operations
 - **Power on:** when *orange*, press briefly (turns *green*)
 - Power off: press and hold for 3 seconds (turns *orange*)

While in session:

- when connected to a PCoIP host card, press to display the Zero Client Control Panel (on monitor) with options to disconnect or power down host device. Press the power button repeatedly to scroll through options or to cancel.
- when connected to a VM, press to disconnect.
- **PCoIP Session Indicator**—shows when a connection, or session, is established between the zero client and a host. The link indicator displays one of the following:
 - **Green**—a session is established between the client and a host.
 - Off—there is no session between the client and a host.
- Smart Card Reader (on supporting models only)
 - Yellow-Green—smart card reader is powered on.
 - **Red**—smart card has been reset. When red light is flashing, the IC Card is reading or writing.

Mandatory Setup and Cooling Requirements

- Ensure at least 4 inches of space around all zero client edges and at least 2 inches of space above the client.
- Ambient operating temperature: 0° to 35° C (32° to 95° F).



- Do not stack any objects on top of the zero client.
- Do not block the zero client's side vents by leaning papers, folders, computer speakers, or any other objects against the sides of the client.
- Adjacent furniture (file drawers, desk supports, chairs) do not block or enclose any sides of the zero client.
- Do not place the zero client in enclosed environments such as on a shelf or inside a drawer.
- Ensure that all connected cables are supported.

Default Settings and Fallback IP Address

- DHCP enabled
- SLP discovery enabled
- Session type: direct to host + SLP discovery
- Fallback IP addresses (dual- and quad-monitor)

	Dual-Monitor and Quad-Monitor
Zero Client	192.168.1.100
Host Card	192.168.1.101

By default, zero clients and host cards are configured to receive an IP address from a DHCP server. If a DHCP server does not assign an address within a designated timeout period (120 seconds), the zero client uses a default, fallback IP address. Fallback addresses enable devices to always have a known IP address. See *PC-over-IP System User's Guide* for more information.

NOTE: If you use the fallback addresses and have DHCP enabled, you must wait 120 seconds before you can connect to a host. If you use the direct connect methodology in your environment, ClearCube recommends disabling the client's DHCP setting to eliminate the need to wait 120 seconds before connecting. See *PC-over-IP System User's Guide* at www.clearcube.com/support for more information.

Smart Card Reader Setup (on Supporting Models)



Prevent ESD (electrostatic discharge) damage to smart card readers by always discharging your body and smart card before using a reader (for example, by touching a grounded, unpainted,

metal object). ESD can vary depending on many environmental conditions, including clothing that users wear and how users handle smart cards. ESD damage can potentially cause unsupported card reader behavior including failure. Always perform ESD prevention steps before using the card reader.

To use the smart card reader, you must install a driver for the reader on the blade to which you connect and ensure that the card reader service is running on the blade. Download the driver to install on blades from the blade's Drivers section of ClearCube Support site. The download file contains drivers for all supported operating systems and installation instructions.

Setting up a Cloud Desktop

Perform the following steps to connect peripherals, a network cable, and a power supply to the zero client. These steps assume that the Cloud Desktop and host card are on the same network with a DHCP server.

- **1.** Power on the remote PC blade containing the host card to which you are going to connect.
- **2.** Connect a monitor cable to each port on the zero client and to your monitors. For alternate configurations:
 - To use a single monitor: enable the host driver function on the peer host card and install Teradici Host Driver software. See *Tech Bulletin TB00274: Configuring Dual-Monitor Systems for Single-Monitor Use* on ClearCube Support for information.
 - To use 2560 × 1600 monitors: connect the included dual-link DVI cable adapter (Y-cable) to the zero client and to the monitor(s) as shown below.
- **NOTE:** You must install Teradici PCoIP Host Software, available from Teradici Support, on each host device to support single-monitor use and to support 2560 × 1600 monitors.



Dual-monitor zero clients

Note indicators 1 and 2 on the Y-cable and connect them to the corresponding connectors on the zero client.



Quad-monitor zero clients

Connect as shown below.



- **3.** Connect a network cable to the connector located on the rear of the zero client (fiber or copper, depending on model), and then connect the other end of the cable to the appropriate network infrastructure device (such as a network switch, fiber transceiver, or router).
- **4.** Connect a USB keyboard and a mouse to the USB ports on the front or on the rear of the zero client.

- **5.** Connect the AC power adapter to the power cable (included with the zero client).
- 6. Connect the power adapter to the rear of the client, and then plug the power cable into a power outlet. Ensure that the zero client and the host card are on the same network. See "Buttons and Indicators" for information about powering the zero client on and off.

You can now click **Connect** and select the host card to connect to from the list displayed on the OSD.

Configuration Steps and Additional Information

See *PC-over-IP System User's Guide* and *PCoIP Firmware Support and Compatibility Guide* at <u>www.clearcube.com</u> for information about zero client deployment, configuration, and administration. If you are using ClearCube Sentral in your environment, see *Sentral Administrator's Guide* for information about connection brokering, device administration, and more.

Web site:	www.clearcube.com/support
Email:	support@clearcube.com
Toll-free:	(866) 652-3400
Phone:	(512) 652-3400

WEEE Disposal Guidelines

In the European Union, this electronic product is under European Directive (2002/96/EC) WEEE. When this product reaches the end of its useful life or is no longer used, do not discard it with conventional waste. Recycle this product at an approved, designated recycling or treatment facility. Check with local authorities for proper disposal instructions. For assistance, contact <u>recycle@clearcube.com</u>.

