CloudDesktop Management

The CloudDesktop Manager is designed to work with the ClearCube CloudDesktop OS for desktop repurposing, thin clients, and the Zero Plus clients.

The CloudDesktop Manager software is packaged in 3 different ways.
1. A virtual appliance in an OVA file for VMware ESX
2. A virtual appliance in a VHD file for Microsoft Hyper-V
3. A Windows 10 Installer

The advantage of the virtual appliance is that it is a self-contained environment as well as it includes a PXE server for remote building of the systems.

The Windows 10 Installer is great for non-virtual environments.

Accessing CloudDesktop Manager

If using ClearCube Virtual Appliance
Start your web browser and point it to the ClearCube Virtual Appliance. Click on "Management" to access the CloudDesktop Manager Control screen. Click on "Log in to CloudDesktop Manager"

You can of course bookmark https://my-va/easyadmin to go directly to CloudDesktop Manager.

If using a standalone Windows-based installation
Start your web browser and direct it to the Windows host where CloudDesktop Manager has been installed, by using port number 8080 (HTTP) or 8443 (HTTPS). For instance, type in http://tcmgr.mycompany.com:8080/ into your browser's address bar. In case you are working locally on the Windows machine where CloudDesktop Manager is running, you can also use http://localhost:8080/.
CloudDesktop Manager Login

The CloudDesktop Manager Login screen will appear immediately after connecting to the correct URL:

CloudDesktop Manager maintains its own user accounts table: just use the predefined user account "admin" and the default password "admin" to log in (without the quotes).

Dashboard and screen overview

CloudDesktop Manager will present the dashboard directly after successful login. On your first visit this page will be quite empty, but don't worry, when using CloudDesktop Manager this changes fast.
The CloudDesktop Manager screen is composed of several sections:

- **Main Menu.** Located in the upper left region, it provides access to the productive functions
  - Manage groups and clients
  - Service Center to manage images, licenses, updates, support, runtime information, etc.
  - Reports to print nice-looking reports
  - Inventory for keeping track of peripherals

- **Settings.** Located in the upper right region, these icons allow access to NTC’s own configuration
  - CloudDesktop Manager Settings (the yellow gears-type icon)
  - Log (activity history and error messages)
  - User administration (meaning users that are allowed to use the NTC)

- **Client/Groups bar on the left**
  - Quick search field
  - Tools to interact with client devices: Search for client devices, Filter
  - Identify to provide a fast and efficient way to find out on which machine somebody works
  - Tree view of groups and clients

- "Dashboard", the largest part of the screen; the content of this changes upon context
Client administration

The main purpose of CloudDesktop Manager is to centrally manage client devices. To change configuration values of your client devices first decide if you want to change clients individually or - much preferred - on group level. The actual editing is very simple:

Click on the main menu item "Manage", choose the group or client in the tree view on the left and then choose the setting to change (note the categories above the parameter list). Change as desired, and afterwards click on Execute in the lower portion of the screen to save the values. At first your changes will be saved to the database, and as soon as contact is established with the affected device(s) - usually a background task, done asynchronously -, they will pull the new configuration. If you don't want to wait for that to happen, you can force clients to immediately fetch the new configuration: Announce.

Adding connections to servers is easy: Create, configure and distribute the sessions as described herein. Furthermore, CloudDesktop Manager manages client firmware images ("firmware" refers to the client operating system, such as NoTouch OS) in a very elegant way: Within the client base settings, you specify the firmware image to use; CloudDesktop Manager will then decide what to do and update/change if necessary.
Inheritance

One of the pillars of our solution is CloudDesktop Manager's inheritance. You already have noticed that clients are ordered hierarchically in a tree-like structure. Clients inherit from groups, groups inherit from higher groups, and the topmost groups inherit from the system default values. You can - at any level - set your own value; that will have an effect on the current level and all levels below.

The small checkbox on the left next to the parameter values is significant: If checked, the value was set at this level; whatever comes from above, it will be ignored, the value set is the one to be used. If unchecked, the value shown is the one inherited and used; if the same parameter is changed in higher-level groups in our inheritance tree, the value will change instantly.

Said in other words, activating the checkbox cuts off the inheritance tree. This relatively simple but powerful paradigm allows to manage large numbers of client devices. Best practice is to group clients in a logical way that suits your configuration well, the more general settings are, set them as high as possible in your tree, and move the more specific, the more seldom used values down.

To illustrate, if all your users share a certain terminal server connection, then this certainly belongs into a top-level group. If you have 5% of users who work with Spanish keyboard layout instead of US English for instance, create a group named "Spanish keyboard clients" as a subgroup of the top-level group, and only (!) set the keyboard layout to Spanish - do not set the terminal server values again. So, if in say one year you migrate your terminal server, you only need to change it at the top group, and all client devices (including those with Spanish keyboard) will get the new configuration without additional work for you.
Connect clients and CloudDesktop Manager

To actually manage clients via CloudDesktop Manager, you need to connect them to your CloudDesktop Manager. No worries, this is simple and can be done in a fully automated way! **Before you start however, please make sure your URL Prefix value is set up correctly - please see here: URL Prefix**

Communication is done via HTTPS or HTTP. Thus, it all boils down to making CloudDesktop Manager’s service URL available to the clients. This can happen in multiple ways:

- **The tcmgr host name.** This works really well in corporate networks, no matter if small or big. Basically you create a DNS A or CNAME record pointing to your CloudDesktop Manager installation. Any factory-new client or fresh installation will always try to contact "tcmgr". More on that here: tcmgr
- **E-mail based management server lookup.** If you intend to manage machines in the Internet, such as with home office workers, this is great. It allows end users to simply type in their corporate email address and the management URL will be found via DNS SRV records.
- **Workgroup deployment.** New NoTouch Clients will try to find a ClearCube Virtual Appliance in the same subnet via ZeroConf/Bonjour/Avahi. This feature is intended mainly for very small deployments and test labs when you are not (yet) willing or able to modify their DNS
- **Search for client devices.** CloudDesktop Manager can search for clients using a proprietary UDP-based discovery protocol.
- **Manual entry in First-Time Wizard.** see here: NoTouch OS QuickStart#Central Management
- **Manual entry in the configuration.** Log in to a client's Configuration, navigate to Services -> CloudDesktop Manager and set the "Management URL" parameter.

The mere connecting of client and CloudDesktop Manager does not have an effect on clients’ configuration. There is no need to worry that this will change the client's behavior. Directly after connecting clients to CloudDesktop Manager, it will place the client among the "Unassigned" clients, which means no configuration is done. However, adding clients to a group changes the situation: If you decide to add a client to a group, the client will immediately inherit the group configuration and all configuration settings done on the client will be overwritten.

Thus, only clients explicitly (by human action or Autoassign) placed into a group will be configured. Clients configured by CloudDesktop Manager are configured only by CloudDesktop Manager and any local administrator changes are overwritten. However, clients are never placed incidentally into a group: you decide if and how you want to do this: manually or automatically, but it is always your decision.

That said, the tcmgr and workgroup deployment methods together with Autoassign allow for a fully automated rollout without even seeing the First Time Wizard.