S100 Zero Client with vMatrix Server Manager

User Manual

Rev. Oct-31st-2016

This guide applies to Windows Server 2012 and earlier versions. All screen shots shown were captured from a Windows Server 2012 installation. The installation, configuration and login screens are based on vMatrix Server Manager 2.1.0 and device firmware 2.0.2.7. Actual use may vary depending on the specific software used. Unless specifically noted, the installation screens are generally identical for all systems.

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Important Notices

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vCloudPoint reserves the right to make improvements and/or changes to this User Guide and to the products, programs and/or specifications described herein at anytime without notice. Information contained in this document may have been obtained from internal testing or from a third party. vCloudPoint shall not be liable for any direct, indirect, special, incidental or consequential damages in connection with the use of this material. The latest version of this User Guide is obtainable at the “Download center” under the Support menu of the vCloudPoint website at: www.vcloudpoint.com.

Refer to the Limited Hardware Warranty applicable to your region for information on what is and what is not covered by the warranty, your responsibilities, exclusions, and how to obtain service.

Please refer to the End User License Agreement (EULA) and Terms of Use (TOU) that are presented for your review during the software installation process. The information contained in these documents is very important. The EULA and TOU constitute agreements between you and vCloudPoint and are accepted by you by installing and using the product. It is your responsibility to print a copy of the EULA and TOU directly from the installer in order to keep for your records.

This product gives users shared access to computer resources. It is not a computer, and may not support all software applications, especially 3D applications that are designed to be supported by computers with stand-alone graphic card. Similarly, it may not support all hardware peripherals that are designed to be supported by stand-alone computers.

Refer to your computer operating system and application software vendors license agreements for information on using these products with the vCloudPoint system. Additional software licenses may be required.

The vCloudPoint hardware and software products described in this user manual are protected by numerous granted and pending P.R.C and international patents.

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Safety Information

Refer to the following information to prevent any physical injury or loss of assets caused by damage to the product. A user must read this User Guide carefully before use and properly follow the instructions.

- Make sure that the place of installation is not too hot (above 35°C), too cold (below 0°C), or too wet (above 85% relative humidity).
- Avoid any severe impacts to the product
- Make sure that the product is not exposed to direct sunlight or any hot machinery.
- Please keep the product away from any items which have strong magnetic properties.
- Do not disassemble, repair or rebuild the product.
- Please properly route all cables and power cords to avoid a tripping hazard. An electric shock, fire, damage to the product or physical injury may occur as a result of tripping over the cable.

Regulatory Compliance

FCC Information

This equipment has been tested and found to comply with the limits for a class B digital device, pursuant to part 15 of the FCC Rules.

These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy, and if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try and correct the interference by one or the following measures:

- Reorient or relocate the receiving antenna
- Increase the separation between the equipment and the receiver
- Connect the equipment to a power outlet on a circuit different from which the receiver is connected
- Consult your dealer or an experienced radio TV technician for help

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions:
(1) This device may not cause harmful interference, and
(2) This device must accept any interference received, including interference that may cause undesired operation.

European Community (CE):

The Bureau of Indian Standards (BIS):

IS 13252

R - 41025534

Disposal Information:

This symbol means that according to local laws and regulations your product should be disposed of separately from household waste. The separate recycling of your product will help ensure that it is recycled in a manner that protects human health and the environment.

Chapter 1. Product Overview

1.1 Brief Introduction

vCloudPoint zero clients with vMatrix Server Manager software provide an alternative solution to the traditional one PC per seat solution by powering multiple users with just one PC. vCloudPoint zero client is compact, network access device that contains no moving parts but allows each of its users to share the untapped resources of a single host PC. vMatrix Server Manager performs as the management role on the host side with a number of tools to assist IT administration, such as desktop broadcasting, monitoring and controlling, storage visibility configuration, and user policy setup, etc. vCloudPoint zero clients, combined with vMatrix Server Manager software, provide computing experience that is practically indistinguishable from running on a PC, but offer great advantages over traditional PCs, such as saved costs, enhanced security, reduced maintenance, and simplified deployment and management.

1.2 Package Contents

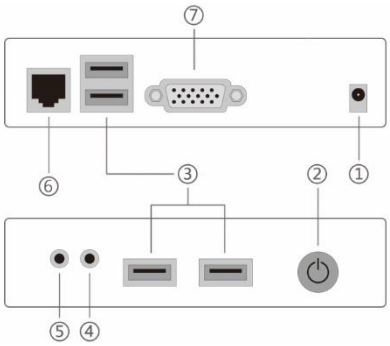
When you unpack your vCloudPoint box, you will find the following items:

- A zero client terminal device
- A base/mounting bracket
- Two screws
- A 5V power adapter
- A quick installation guide

If you find any damage or shortage of any accessories, please contact your local dealer.

Note: Your vCloudPoint zero client purchase was bundled with an entitlement to vMatrix Server Manager software and Premium Support.

1.3 Device Connections



① 5V DC Power Input
② Power/ Reset Button
③ USB2.0 Ports
④ 3.5mm Mic Jack
⑤ 3.5mm Speaker Jack
⑥ RJ45 Ethernet Input
⑦ VGA Display Port

Chapter 2. Planning for Deployment

2.1 Host Configurations & Networking

The preliminary guideline below provides an estimated starting point from which administrators can test and, if needed, adjust the hardware specifications of their chosen host systems. vCloudPoint recommends that you always test your environment in advance of deployment to ensure it meets your expectations.

2.1.1 Configurations by number of users and workloads

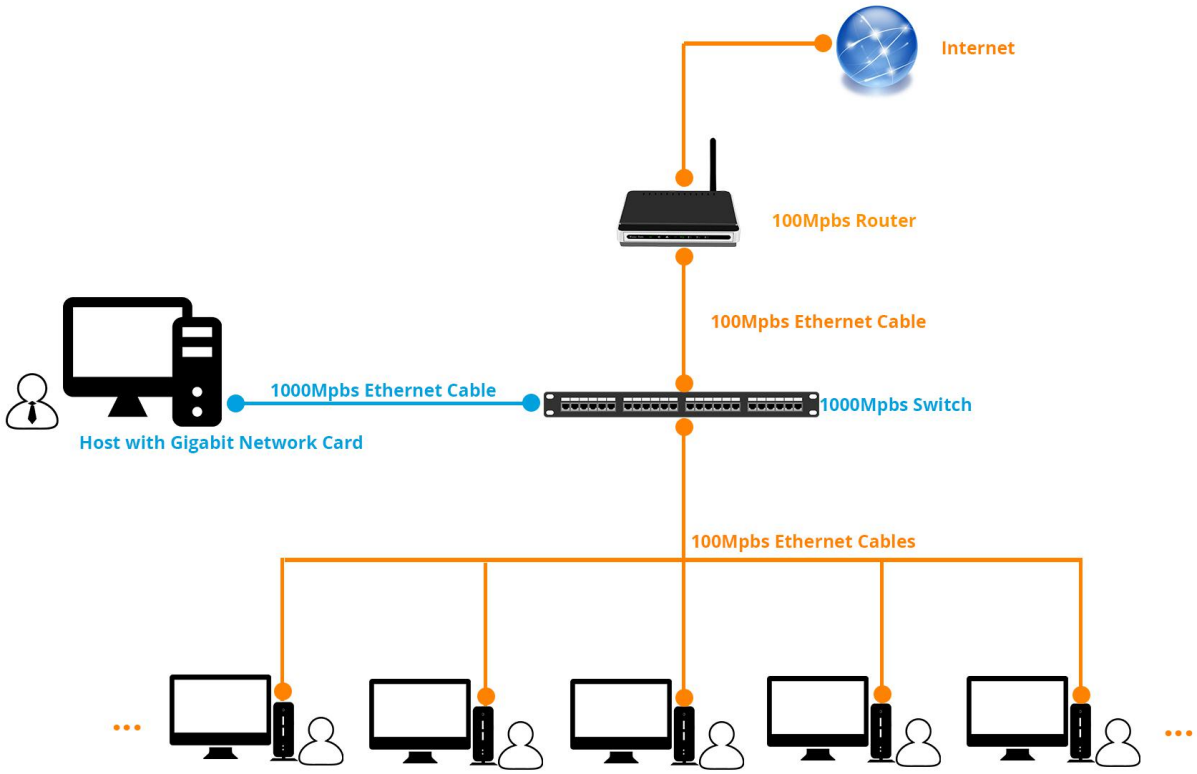
Users	**1~5**	**6~10**	**11~15**	**16~20**	**21~25**	**26~30**
CPU	i5-4460	i5-4690k	i5-6600k	i7-6700	i7-6700k	i7-5820k
Memory	1.5G per Task Users running office, browser, messenger, video on VLC player, etc., additional 2G for the host itself.					
	2G per Power Users running Photoshop, Illustrator, Auto-CAD, etc., additional 2G for the host itself.					
Disk (SSD for System and Programs and HDD for User Data)	HDD	SSD 120G	SSD 120G	SSD 240G	SSD 240G	SSD 240G
	HDD; Storage size to be determined by actual needs.					
Bandwidth	Average 15Mbps per user within LAN					

Note:

1) This recommended configuration is for supporting multiple users simultaneously running the same applications, for environments of running mix applications, please thoroughly evaluate expected workloads of every user and make some adjustments and fine tuning as your deployment progresses.

2) vMatrix Server Manager permits up to 99 users per host. The number of users a customer's installation will support depends upon the host's configuration and performance expectations of the customer.

2.1.2 Networking



Host Network Controller		10/100/1000Mbps Base-T
Switch		10/100/1000Mbps Base-T
Cable	**Connecting zero clients**	10/100Mbps or 10/100/1000Mbps Base-T
	Connecting host to switches	10/100/1000Mbps Base-T

Note:

1) You are recommended to use reliable gigabyte networking devices and CAT-6 Ethernet cables for desirable multi-user experience.

2) Although vCloudPoint zero clients have a WIFI option, you are recommended to use standard Ethernet network as unreliable WIFI network may cause disconnection or experience compromised.

Download and view detailed deployment planning guide at:

www.vcloudpoint.com/wp-content/uploads/vCloudPointZeroClientDeploymentPlanning.pdf

2.2 Software Requirements

2.2.1 vMatrix Server Manager per shared host

The latest version of vMatrix Server Manager is obtainable at

www.vcloudpoint.com/support/downloads/.

2.2.2 Windows Operating System mounted on each shared host

Supported Operation Systems by vMatrix Server Manager:

- Microsoft Windows XP SP3 Pro 32-bit (excluding Home Basic)
- Microsoft Windows 7 32-bit & 64-bit (excluding Home Basic)
- Microsoft Windows 8 32-bit & 64-bit (excluding Starter)
- Microsoft Windows 8.1 32-bit & 64-bit (excluding Starter)
- Microsoft Windows 10 32-bit & 64-bit (excluding Starter & Insider)
- Microsoft Windows Server 2003 32 bits
- Microsoft Windows Server 2008R2
- Microsoft Windows Server 2012
- Microsoft Windows Server 2012R2
- Microsoft Windows Multipoint Server 2011
- Microsoft Windows Multipoint Server 2012

Note: do not use a 32-bit Windows operating system in your real deployment, as it supports only 3.25 GB maximum memory.

2.2.3 Multi-User Application

vMatrix doesn't contain a component or application to allow multiple users to access the host simultaneously. To allow a simultaneous multi-user login, you need to install RDP Wrapper (download and learn more at www.vcloudpoint.com/support/add-ons) or obtain Microsoft RDS CALs. To properly license vCloudPoint zero clients in a Microsoft

environment, you are recommended to obtain Microsoft RDS CALs for each vCloudPoint seat. For more information on licensing with Microsoft operating systems see: Article 02 at www.vCloudPoint.com/support/faq-how-tos/.

For temporary testing vCloudPoint zero clients in the multi-user environment, you can install RDP wrapper on the shared hosts as well. RDP Wrapper is a free open source project to enable Remote Desktop Host support. RDP Wrapper is obtainable at https://github.com/stascorp/rdpwrap/releases or on vCloudPoint official website www.vcloudpoint.com/support/add-ons/.

Note: You are licensed by vCloudPoint to use the vMatrix Server Manager software under the terms of the EULA. You cannot use the vMatrix Server Manager software with Windows Client software (i.e., Windows XP, Windows 7, Windows 8/8.1, Windows 10) unless a single user and no other user accesses the same Windows Client software at any one time, or you are authorized to do so under an applicable license from Microsoft. In all cases, your rights and obligations with respect to the use of vMatrix Server Manager software with Windows Server software and Windows Client software are defined by both the vCloudPoint vMatrix Server Manager software EULA and the applicable Microsoft Software License Agreement or EULA.

2.2.4 VLC Media Player (Optional But Recommended)

VLC is a free and open source cross-platform multimedia player and framework that plays most multimedia files as well as DVDs, Audio CDs, VCDs, and various streaming protocols. Beginning from vMatrix 2.0, vCloudPoint introduced a new feature that allows local videos played on the zero client with VLC player to be rendered locally by the client processor instead of the host cpu. This feature offloads 90% host-side CPU consumption on video playing and can help support more video users per host especially for cases where simultaneous video play is often required. This feature is supported by VLC player of 2.1.5 or newer versions and works automatically after the installation of vMatrix 2.x. Just make sure you are using the correct versions of vMatrix and VLC player and VLC player is selected to play the video, then you are ready to “save”.

VLC player is obtainable at http://www.videolan.org/vlc/ or the official website of vCloudPoint: www.vcloudpoint.com/support/add-ons/.

Note: As the media content is not rendered at the host side, there is a drawback of using this feature: media content within the VLC player cannot be viewed by the administrator through monitoring at the host side.

Chapter 3. Installation & Connection

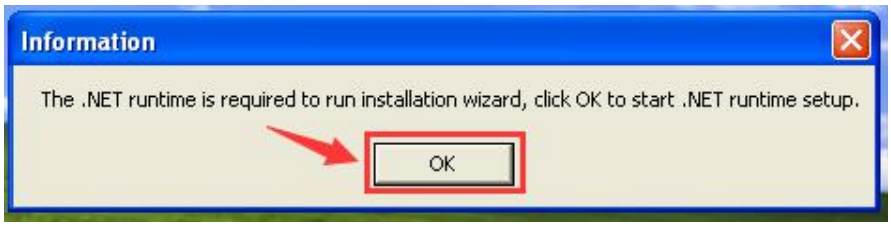
3.1 vMatrix Installation

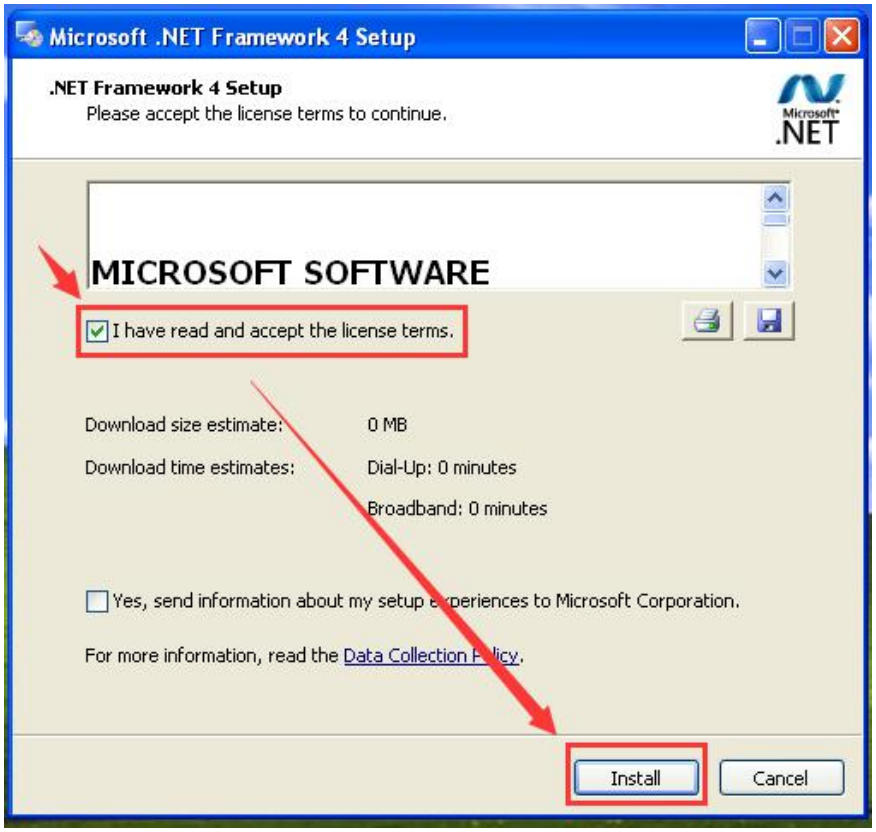
Please make sure to DISABLE any Anti-Virus or Firewall software during the installation of vMatrix Server Manager. After installation has completed, you may re-enable Anti-Virus and Firewall

1) Run vMatrix installer.

2) Click "**Install**" to start installation.

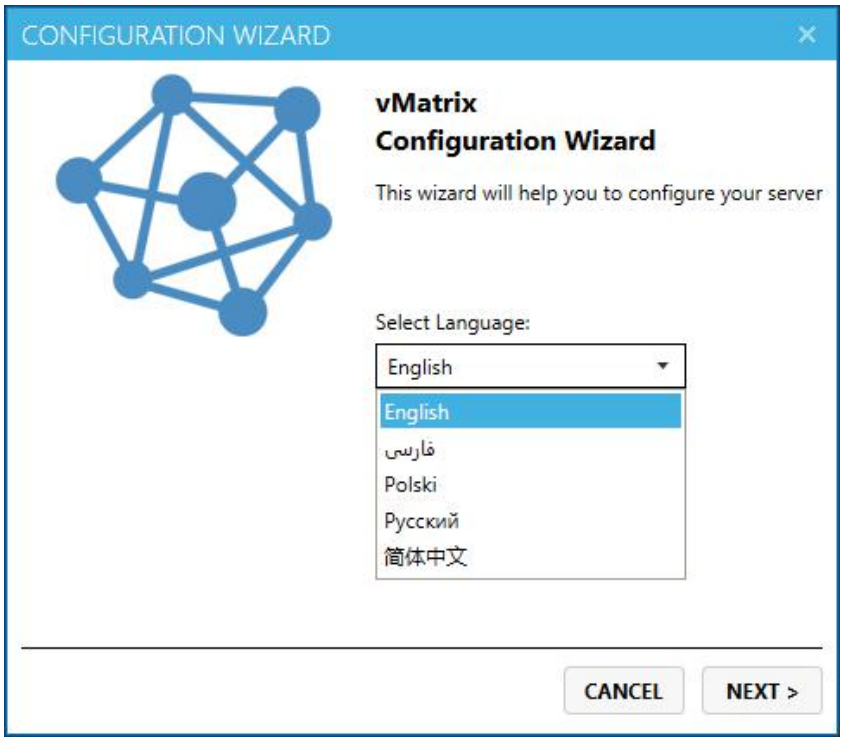
3) On initial installation, vMatrix Installer will detect if some required components are installed on the host. Allow installing required components if it prompts. For the Windows XP operating system, you have to manually install the components as shown below:



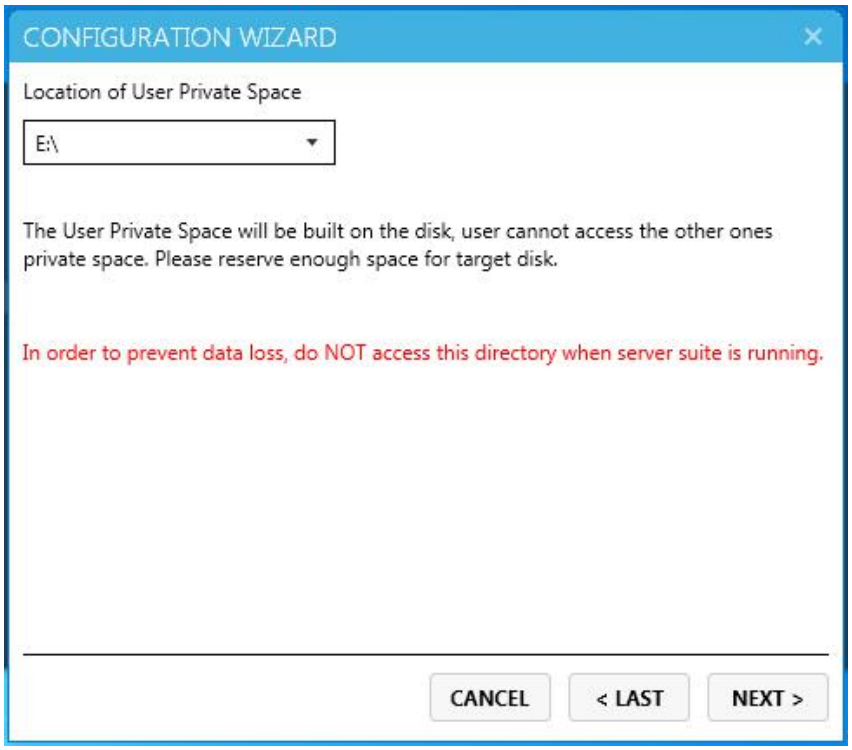


4) During installation, your will be prompted to install drivers, click “Install”.

5) When the progress bar completes, you will be asked to select language of vMatrix Server Manager. Select your language and click “next”. (This language selection window won’t appear on later installations or updates, but you still can change at vMatrix Server Manager.)

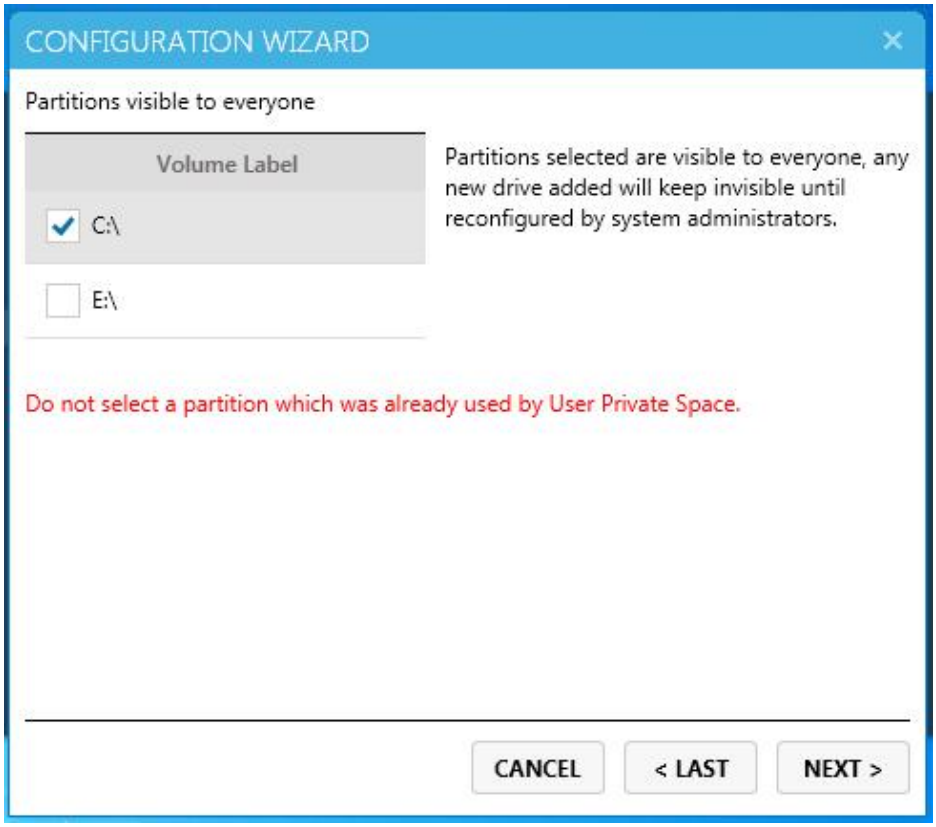


6) Select the disk partition which user files are stored. DO NOT select the partition that system or programs are installed. And then click “Next”. (This configuration window won’t appear on later installations or updates, but you still can change at vMatrix Server Manager after installation.)

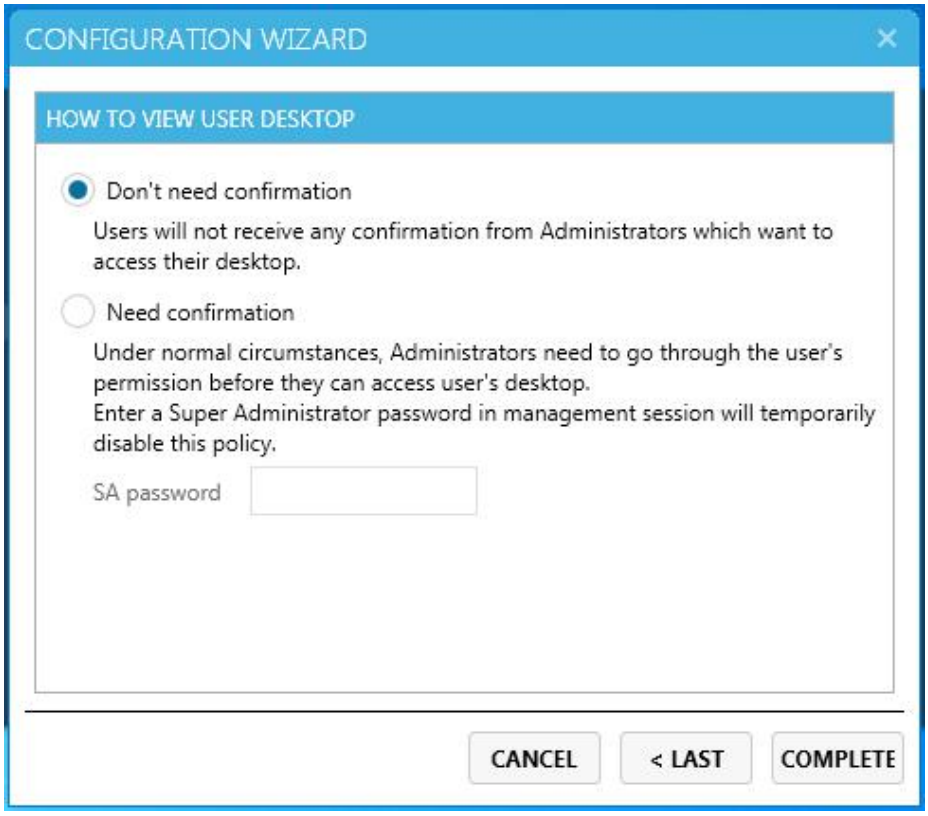


7) Select the partitions which are visible to users. DO NOT select the one which has

already been chosen for storing user files. And then click “Next”. (This configuration window won’t appear on later installations or updates, but you still can change at vMatrix Server Manager after installation.)

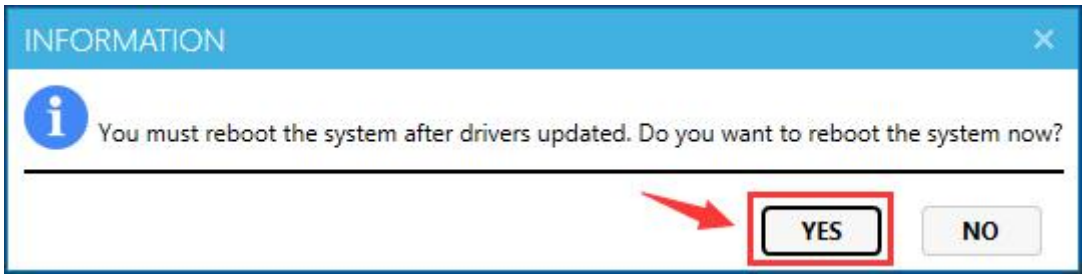


8) Select if the administrator on the host can view user desktops directly or will need to send request or enter password. And then click “Next”. (This configuration window won’t appear on later installations or updates, but you still can change at vMatrix Server Manager.)



9) Click “Completed” and finish installation.

10) You will be asked to reboot the system. Click “yes”.

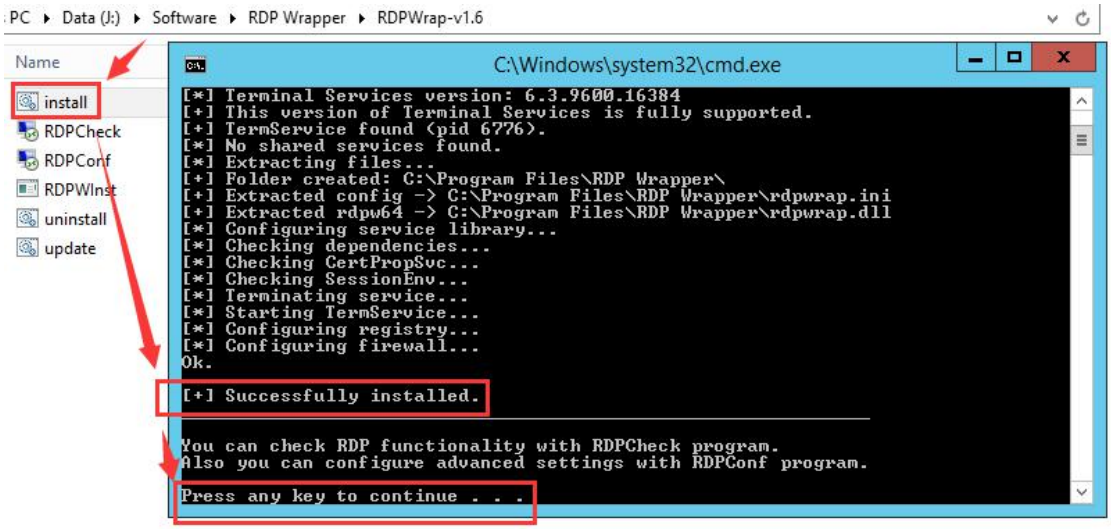


Note: If system instability occurs after installing vMatrix Server Manager, please try removing vMatrix Server Manager and any anti-virus or security software present, and then re-installing vMatrix Server Manager. If the system is stable in this configuration, re-install the anti-virus software. In some cases, this change in install order can improve the interaction between vMatrix Server Manager and anti-virus software. If issues persist, please try configuring your security software to ignore/allow/trust the following ports and executables (refer to chapter 7, Q6 to configure firewall and anti-virus software).

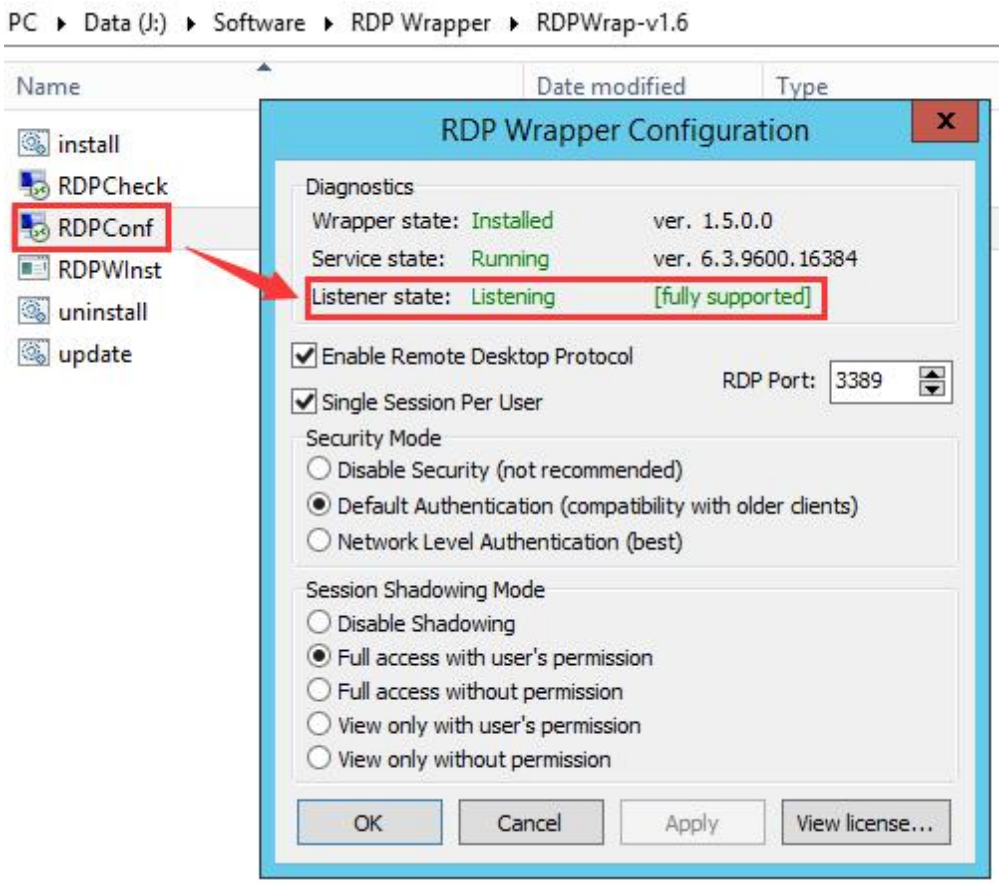
3.2 Multi-user Patch Installation

- **Option 1: installing RDP Wrapper for testing purpose**

1) Download the RDPWrap.zip file and then unzip it. Simply run the insall.bat file and press any key when finished but make sure to disabled anti-virus software during installation.



2) Check if the installation is successful by running “conf.exe”. The “Listener state” should be “Listening” and “[fully supported]” if the RDP Wrapper is successfully installed.



- **Option 2: installing Microsoft RDS CALs for proper licensing**

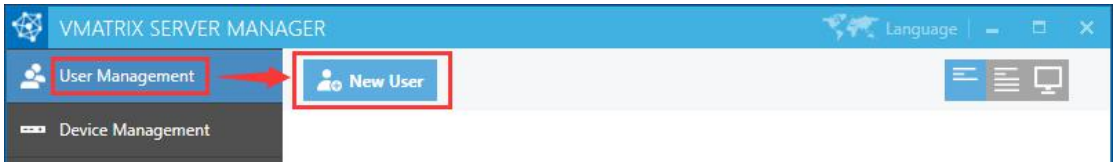
Refer to the following link to install the Microsoft RDS CALs

https://www.microsoft.com/en-us/Licensing/product-licensing/client-access-license.aspx

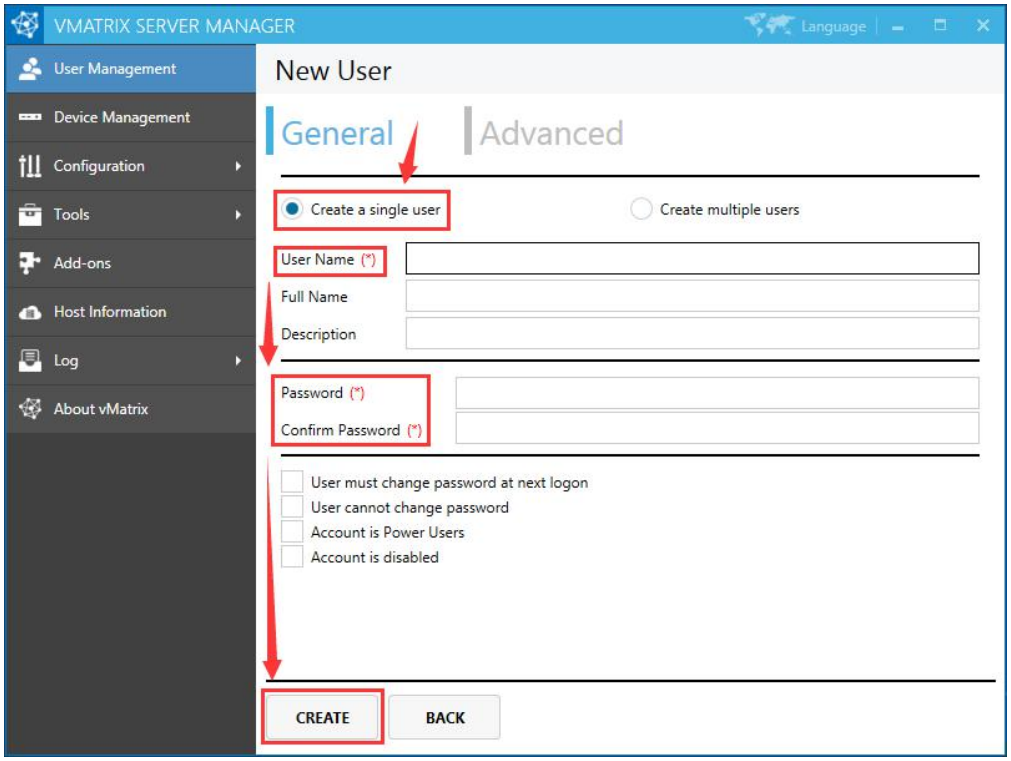
3.3 User Creation

1) After rebooting the system, open vMatrix Server Manager by double clicking the "vMatrix" icon at the right bottom of task bar.

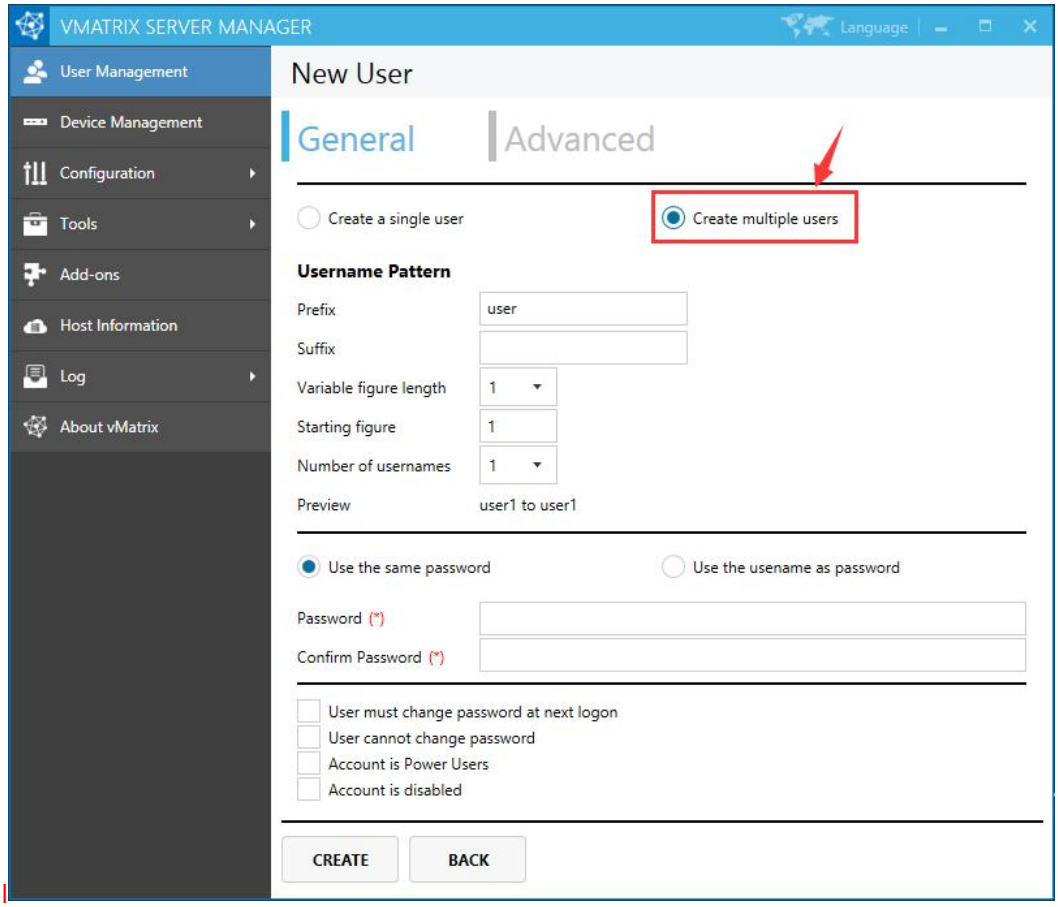
2) Go to "User Management" page, click "New User" to create user accounts.



Enter “User Name” and “Password” and click “Create” at the bottom.



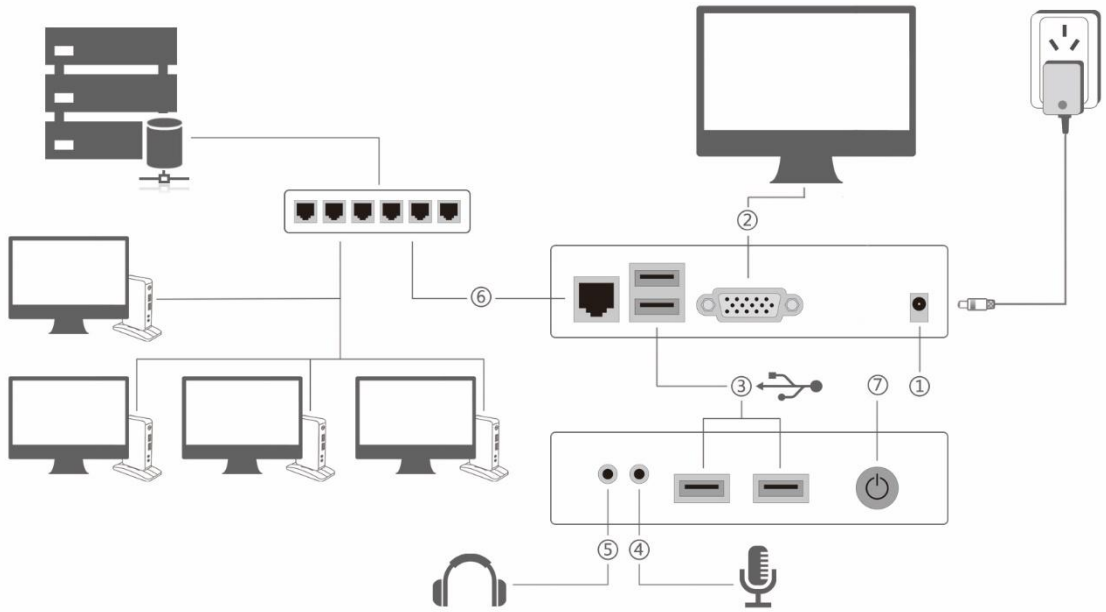
To create multiple users at a time, select “Create multiple users”, and then select the number of users and enter passwords or select to use user name as password for all users.



3.4 Device Connection

Connect the S100 device to other peripherals as show below.

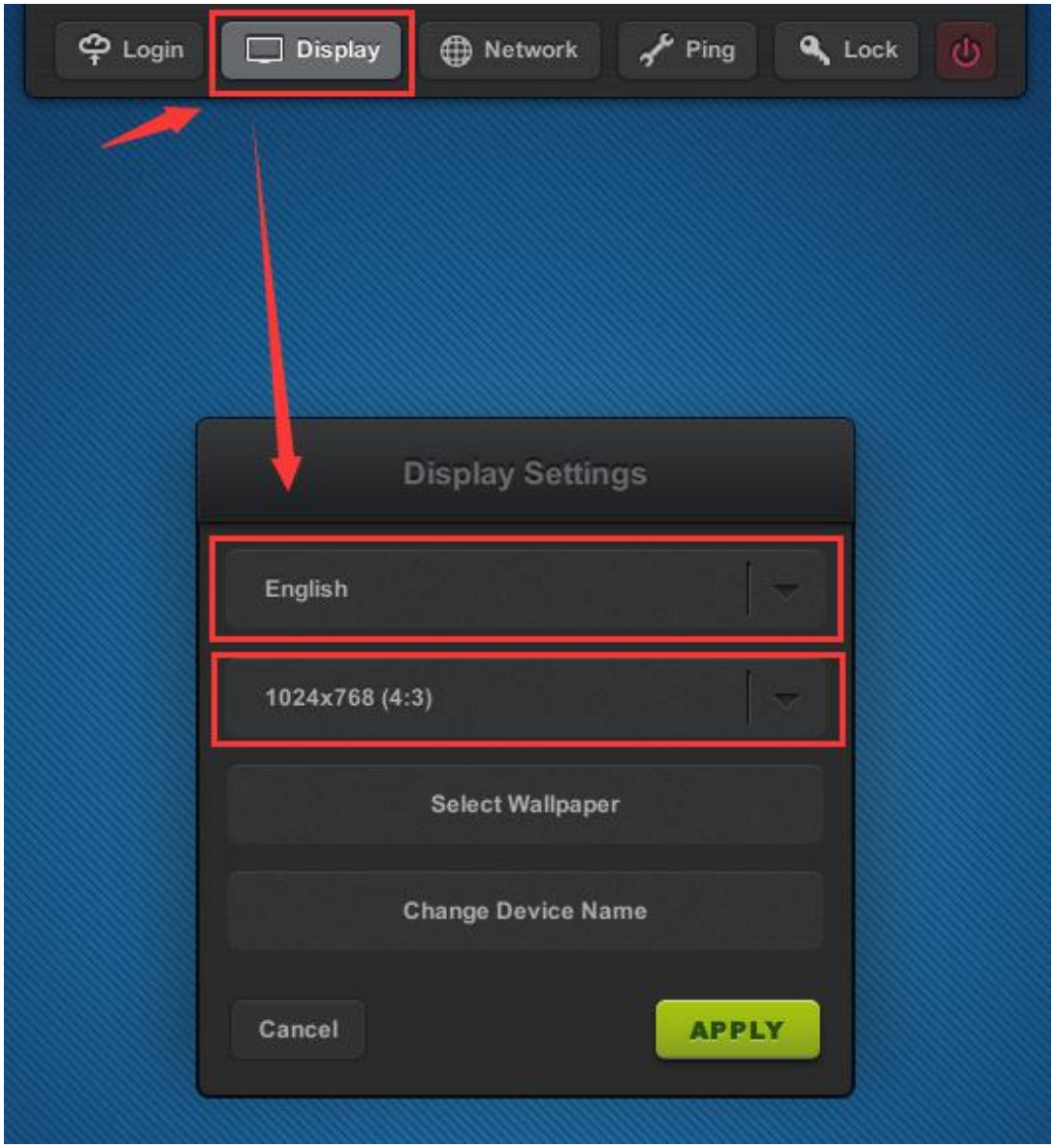
- Connect the S100 zero client to the power adapter of 5V, 2A. Do not use power adapter of other specifications to avoid damage to the zero client.
- Connect the S100 zero client connects to monitor with VGA port.
- Connect the S100 zero client to USB keyboard and mouse and other USB devices if necessary.
- Connect the S100 zero client to Mic and speaker through 3.5mm jacks if necessary (Audio devices through USB ports are also supported).
- Connect the S100 zero client to the network through RJ45 type Ethernet cable to the switch or USB wireless antenna built with RT8188 chipset.



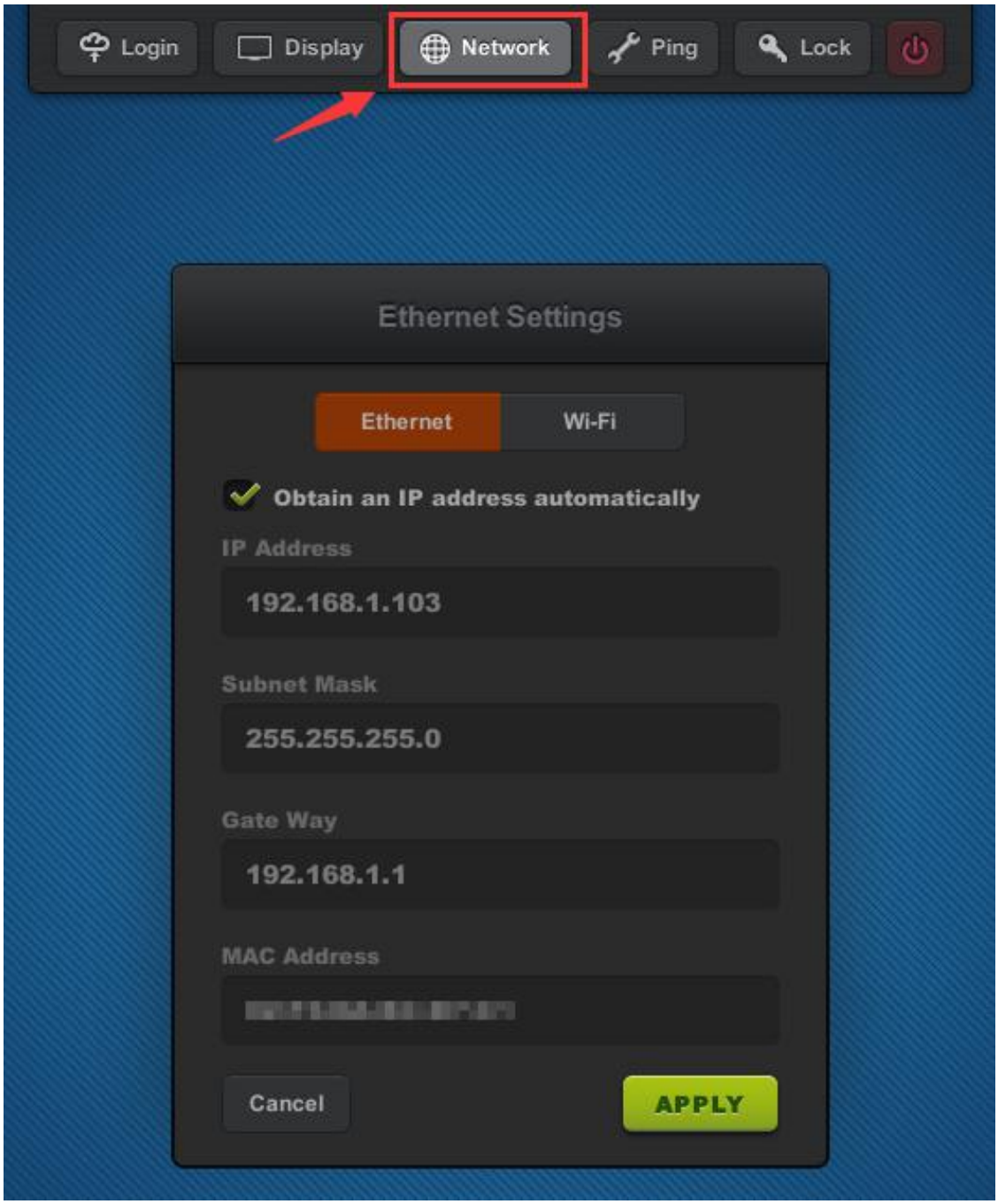
3.5 Device Login

1) After connecting to the peripherals, press the device power button.

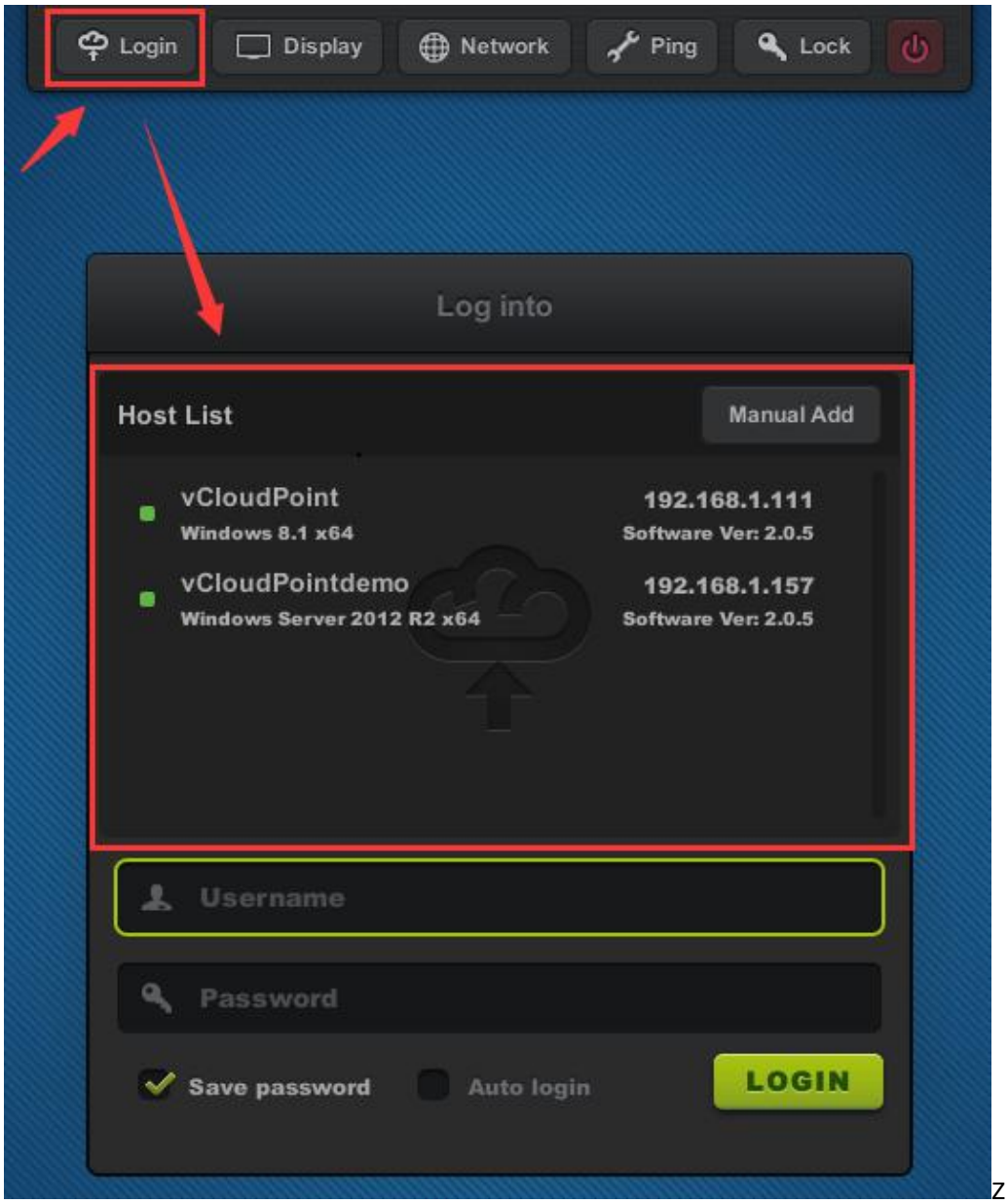
2) After system boot, go the display page, select your correct language and desktop resolution; factory default language is “English” and desktop resolution is “1024x768”.



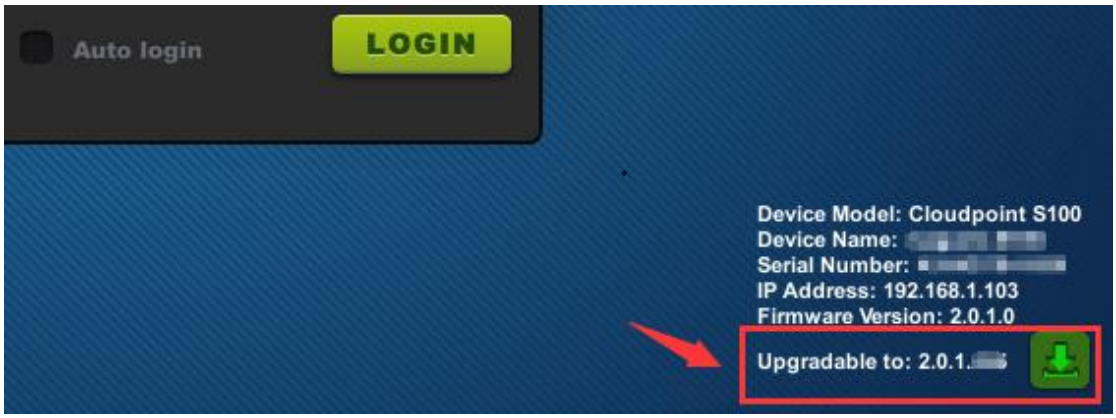
3) Go to “Network” page. If DHCP network service in available in your network, you can just use the default setting to obtain an IP address for this device automatically. Otherwise if you want to allocate an IP address manually, cancel the option and enter an IP address instead. (If you are connecting the zero client to the network through WIFI, refer to section 4.1.3.)



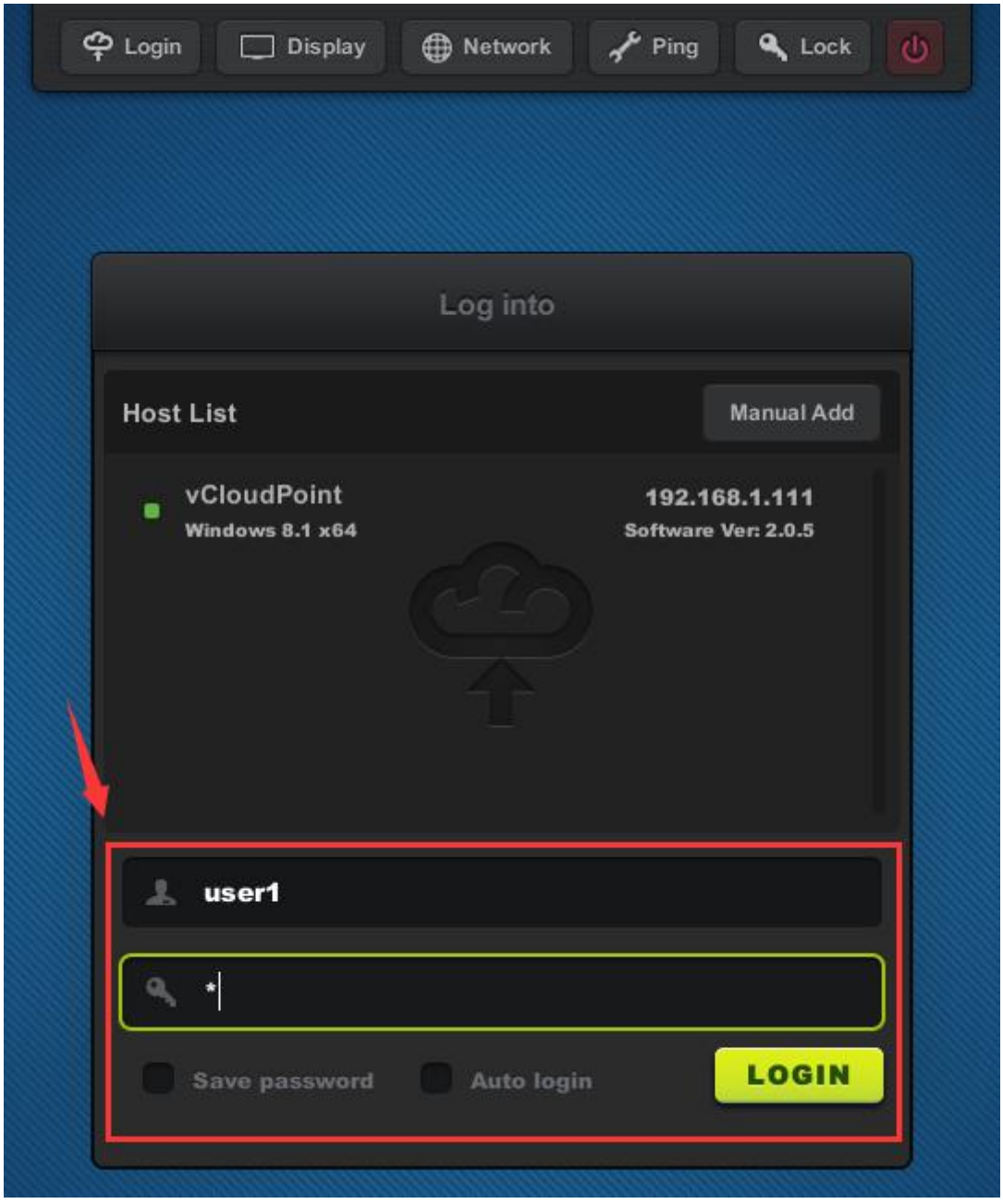
4) Go back to the “Login” page, select the host available in your network for connection.



5) Check for any new firmware to upgrade at the right bottom of the screen. If yes, click to upgrade.



6) Enter your user name and password, then click “Login”. If you use a new created user for initial log-in to the host, you may need to wait a few seconds to minutes for preparing a desktop.



Chapter 4. Using The Zero Client

4.1 Settings Menu

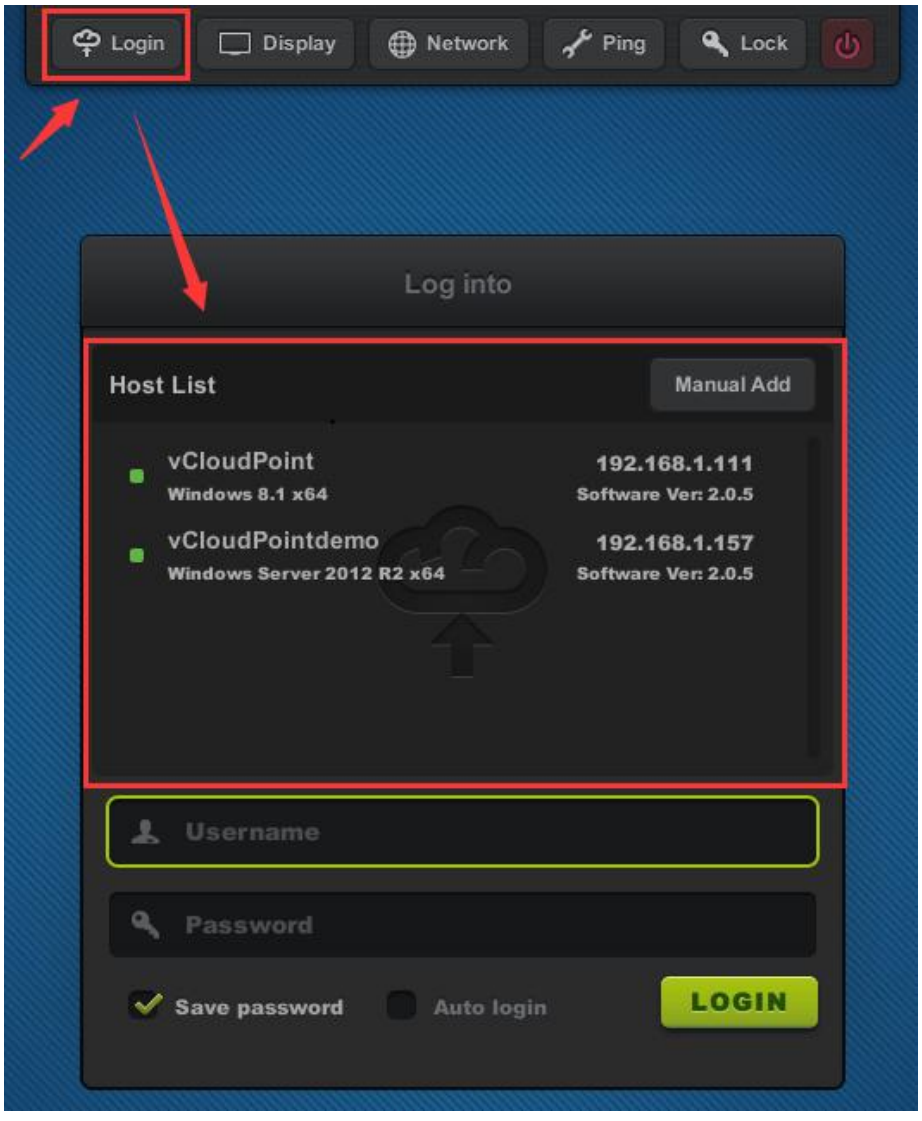
4.1.1 Login

- Host List window shows all available hosts in the network. Host to be shown in the list are:

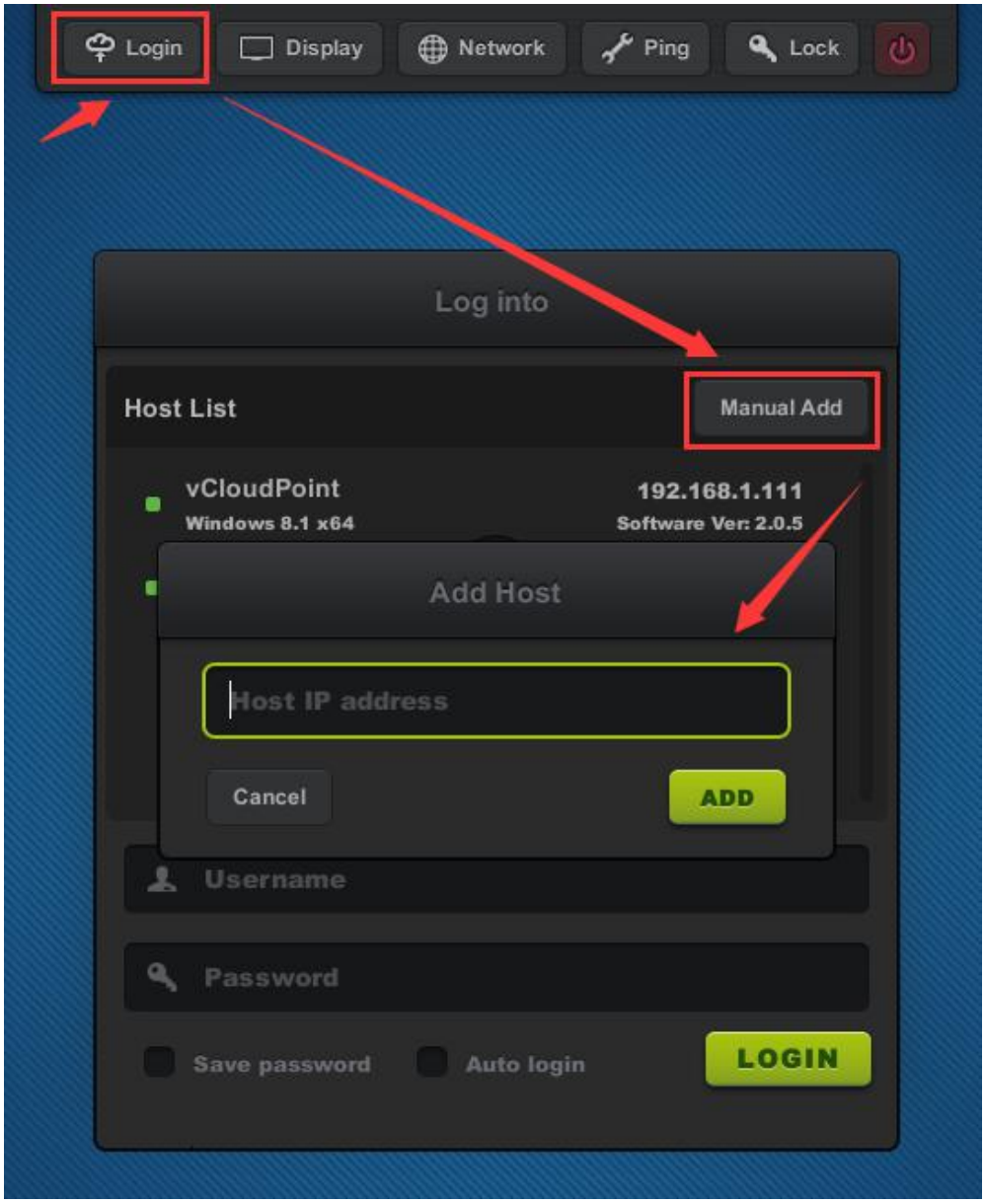
1) hosts with vMatrix Server Manager properly installed and running,

2) hosts in the same network segment as the device,

3) hosts that the device ever connected to even it is not in the same network segment.



- To connect to an available host not shown in the list, you can manually add the host IP through the “Manual Add” button.

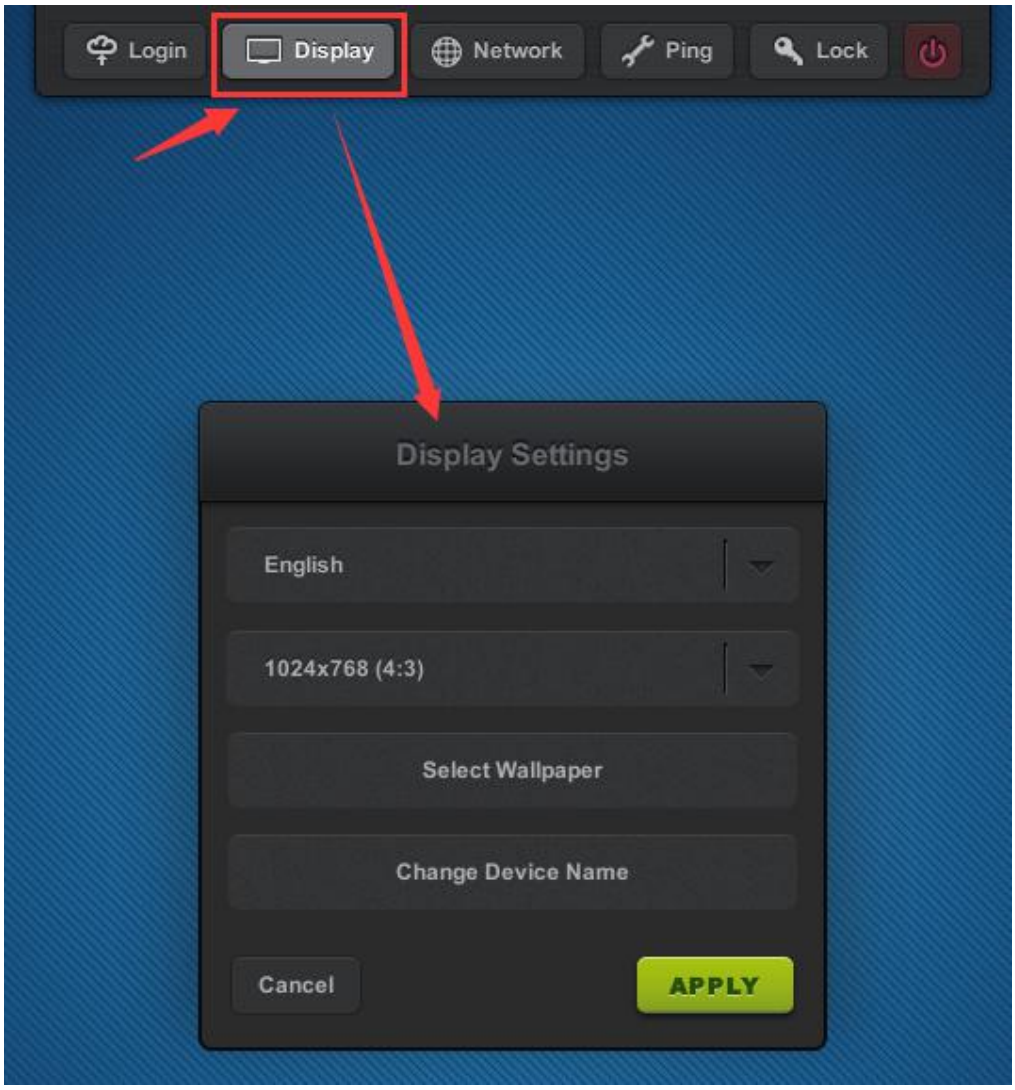


- Password field is case-sensitive while user name field is not.

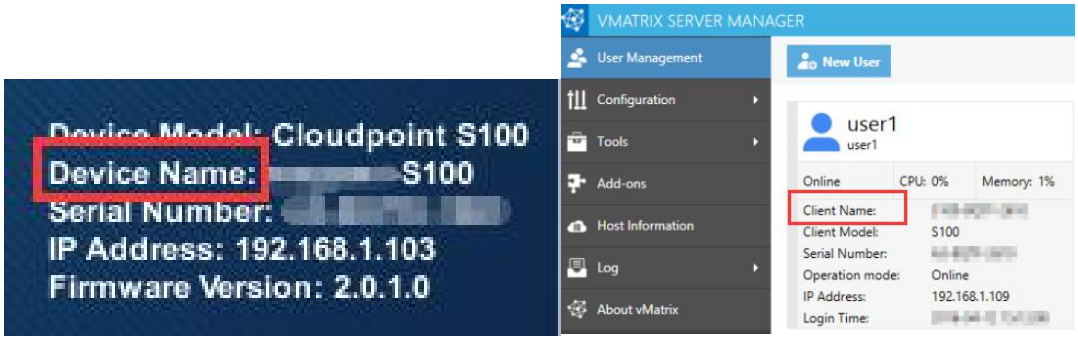
- Save password: to remember the user name and password of this login so you won’t have to enter user name and password again on next login. Changes will take effect on next login.

- Auto login: enabling auto login will skip the device login page and directly enter the system of the last login host with saved user name and password on device boot. Auto login will automatically enable “Save password”. Changes will take effect on next login. To cancel Auto login (go back to the device login page) after entering the host system, disconnect or sign out user session.

4.1.2 Display



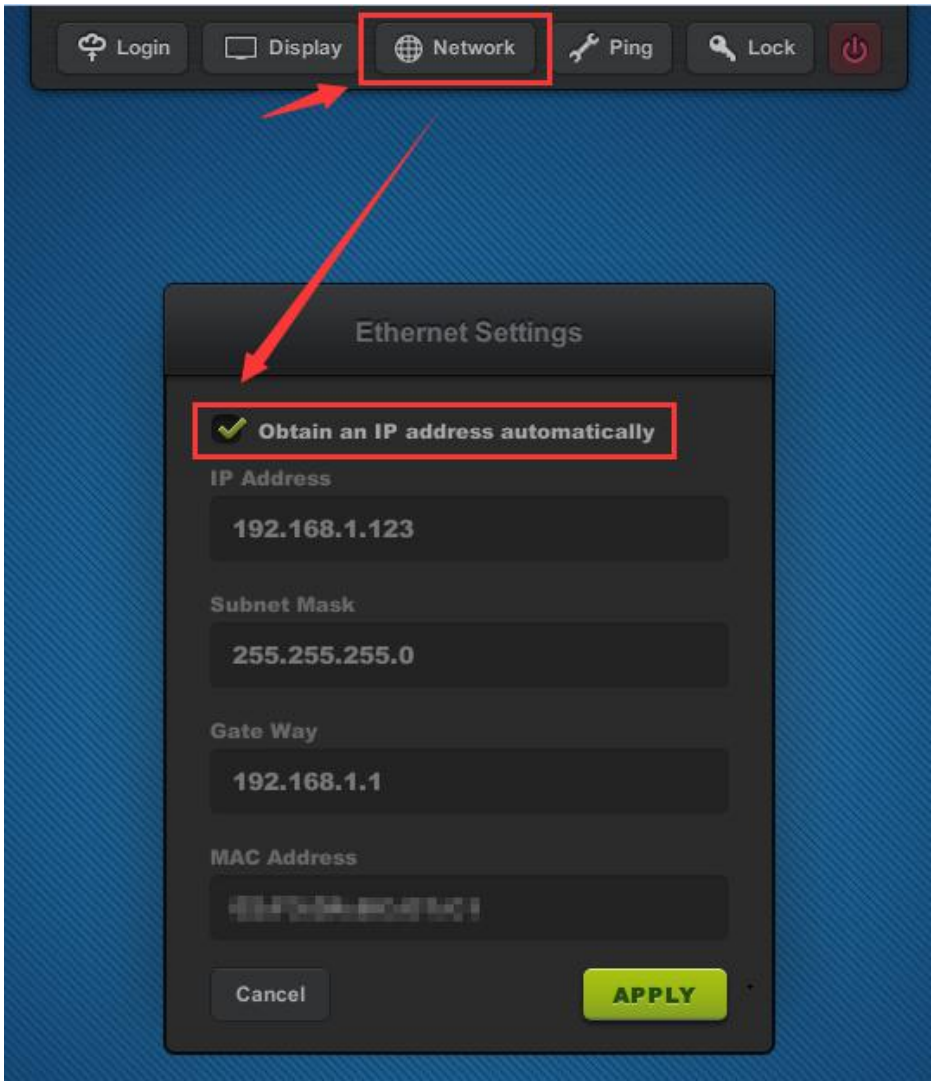
- **Language:** to change the device language; available languages: English Chinese, Russian, default: English.
- **Resolution:** to change the resolution for the device interface and user desktop; default: 1024x768 (4:3), maximum: 1920x1080.
- **Wallpaper:** to change wallpaper for the device interface.
- **Device Name:** to change device name; default: S100- (last 8 serial numbers). Device name is shown at the right bottom of device interface and User Management page on vMatrix Server Manager.



4.1.3 Network

- **Ethernet Settings**

If DHCP network service in available in your network, you can just use the default setting to obtain an IP address for this device automatically. Otherwise if you want to allocate an IP address manually, cancel the option and enter an IP address instead.

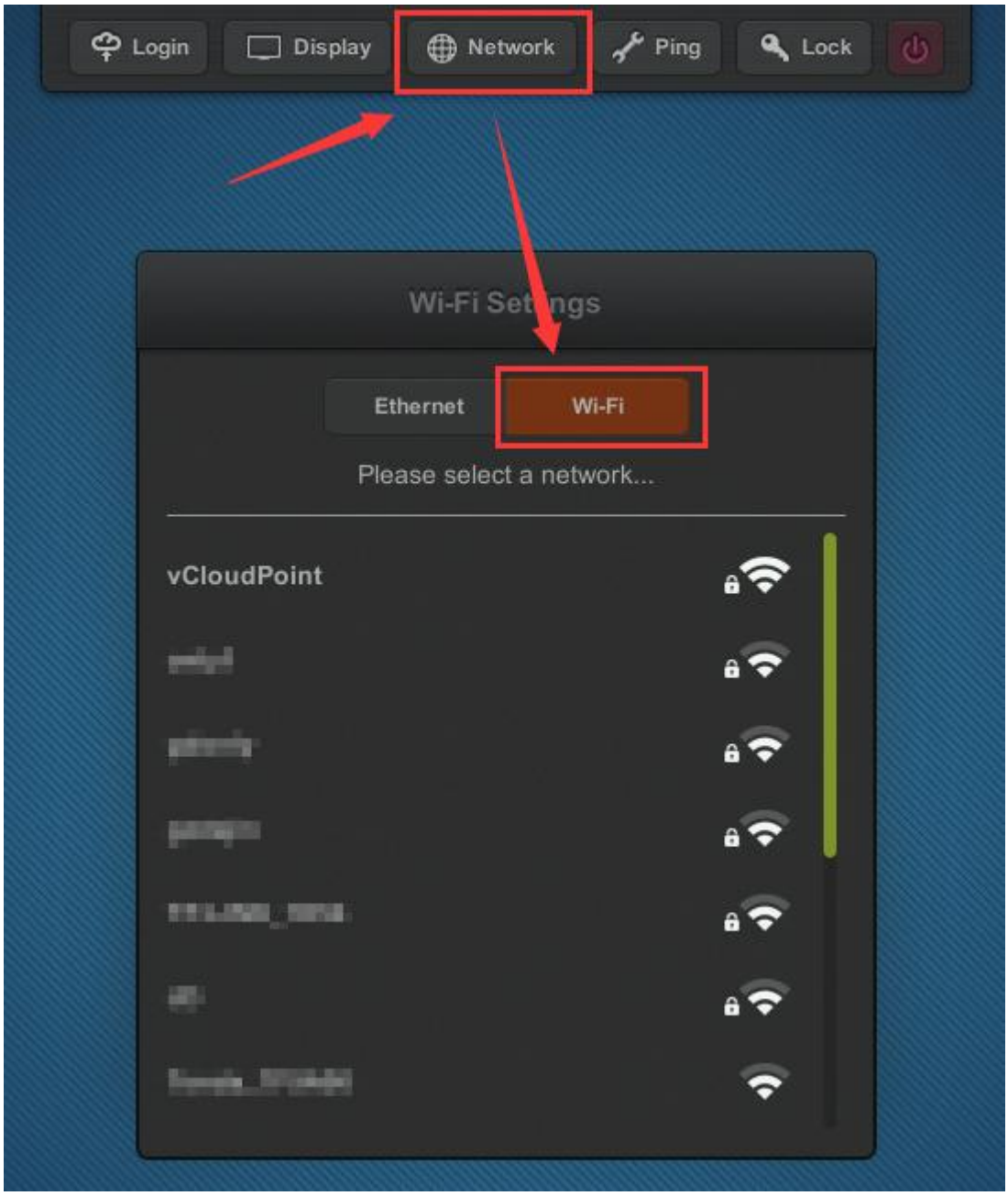


Note: IP address of the device is for communication in LAN with vMatrix Server Manager only, cannot be recognized by other internet software.

- **WIFI Settings**

You will see the WIFI Settings sub-page only when the device is a WIFI model or connected to a supported USB WIFI antenna on device boot.

1) Click the "WIFI" button to enter WIFI Settings page.



2) Double alick the WIFI network you are connecting to, and then enter password.

3) When the WIFI network you selected is displayed above the line divider, the WIFI connection is established.

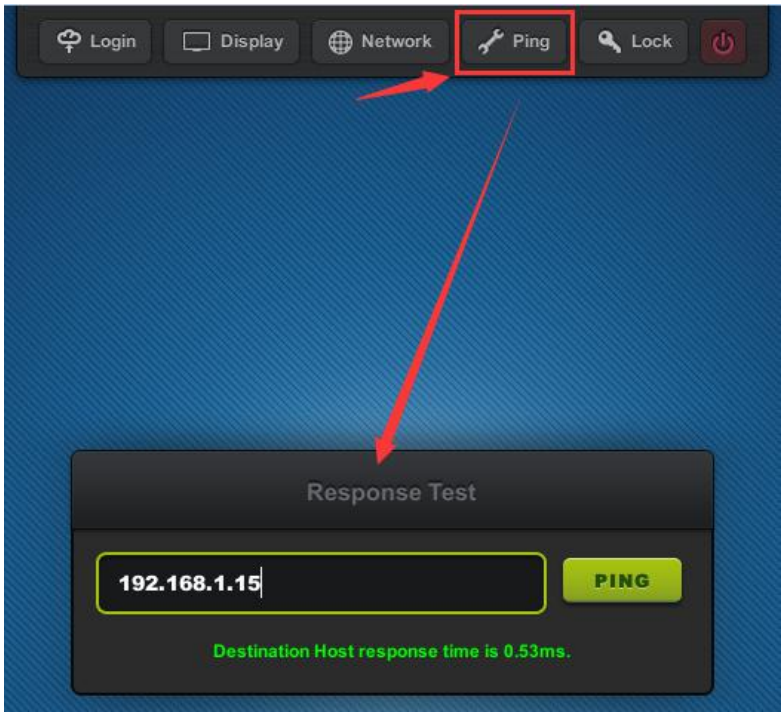
Note:

1) Any antenna that is built with 8TL8188EUS chip and connects with USB 2.0 standard is supported by vCloudPoint devices.

2) Although the vCloudPoint devices are with an WIFI option, for a reliable user experience, you are recommended to connect them through Ethernet cable, as WIFI network may fluctuates and causes unexpected lags and disconnections during operation.

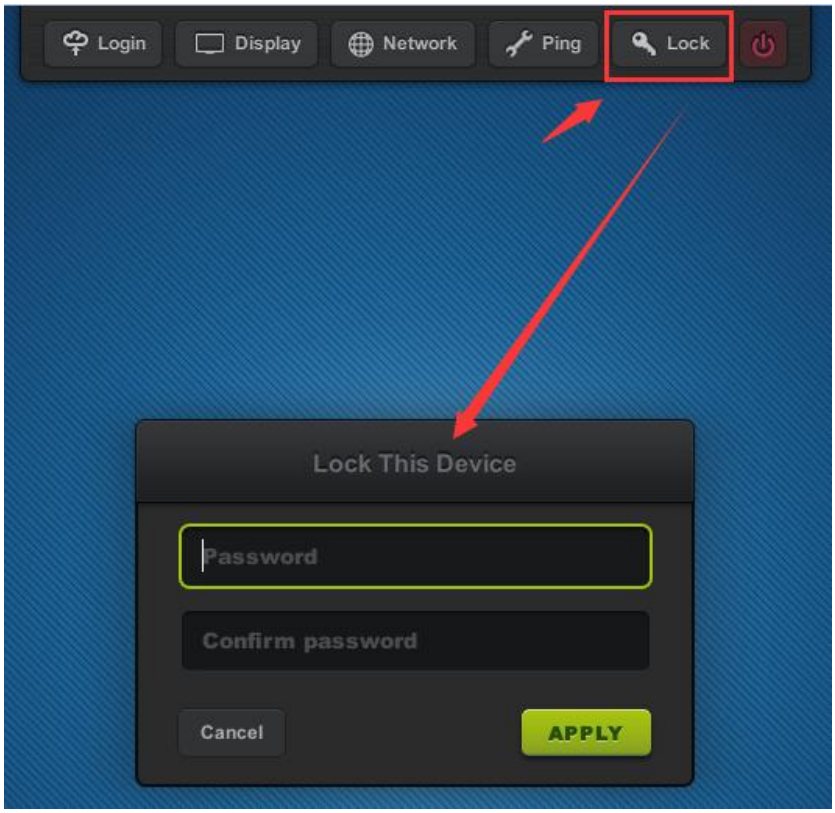
4.1.4 Ping

Ping test is to check the network connectivity between the current device and other device, usually the destination host in the network. Simply enter the IP address of the destination device and click the PING button. If you see a green message saying the response time, the network between these two device is connected fine.



4.1.5 Device Lock

To lock the device is to set up a password on device boot so that the user is required to enter password to use the device.



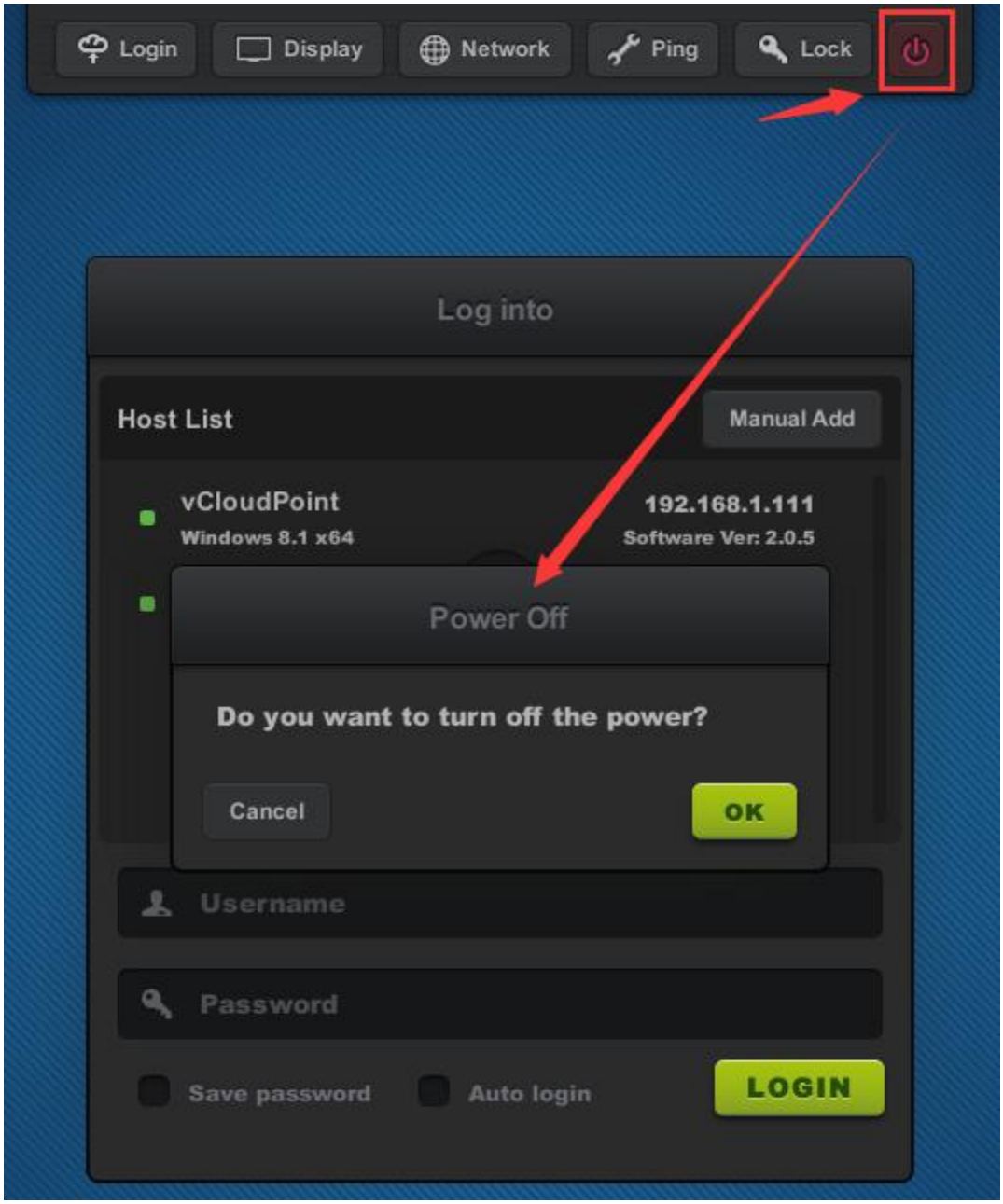
Note:

1) To unlock the device, just clear the password and apply.

2) If you forget the password, you have to reset the firmware to the factory default one. (Refer to section 4.7)

4.1.6 Shutdown Button

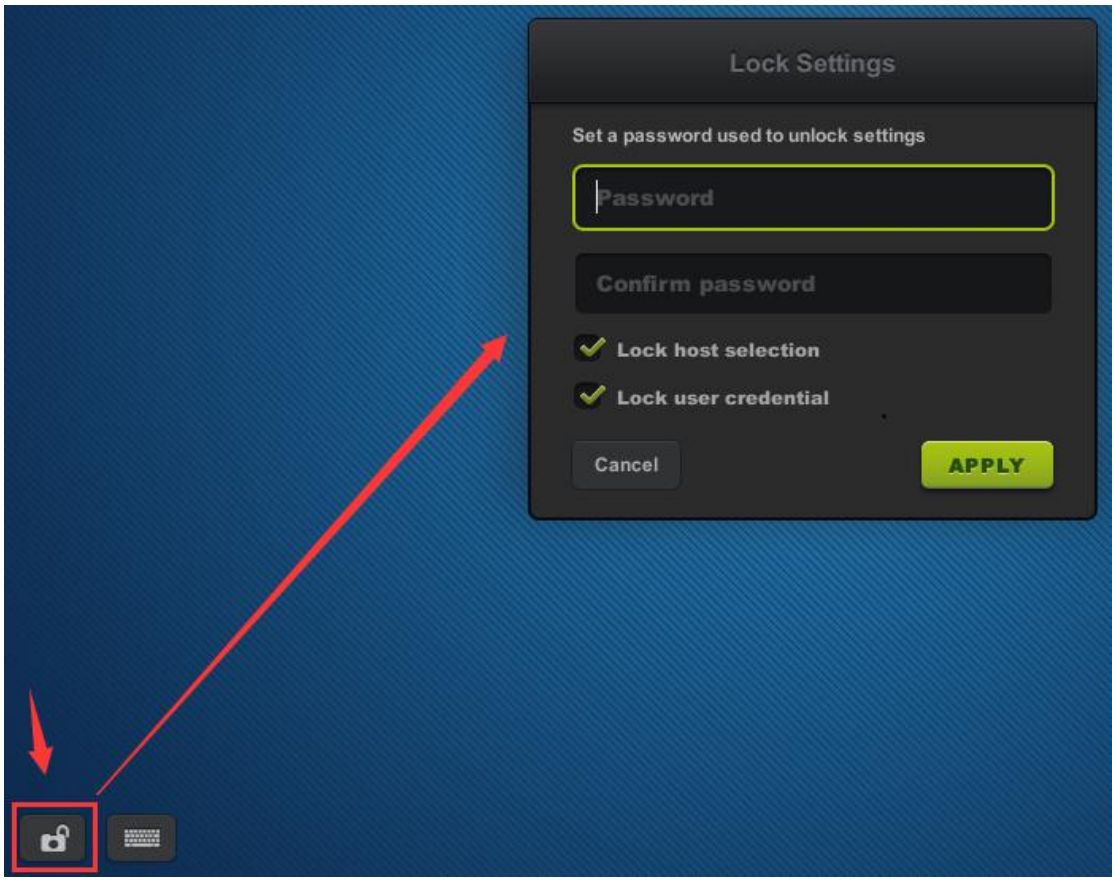
This button allows you to turn off the device without pressing the physical button on the device. This is helpful when the device is mounted at the back of the monitor.



4.2 Settings Lock

To lock settings is to lock down the settings on the Login, Display, Network and Lock menu in order to prevent other users from changing these settings.

- **Lock host selection:** to disable the host selection and force the user to login to the selected host. A host must be selected before this option is selected.
- **Lock user credential:** to disable the user to change user name and password and force the user to login with the saved user name and password. A correct user name and its related password must be saved before this option is selected.



Note:

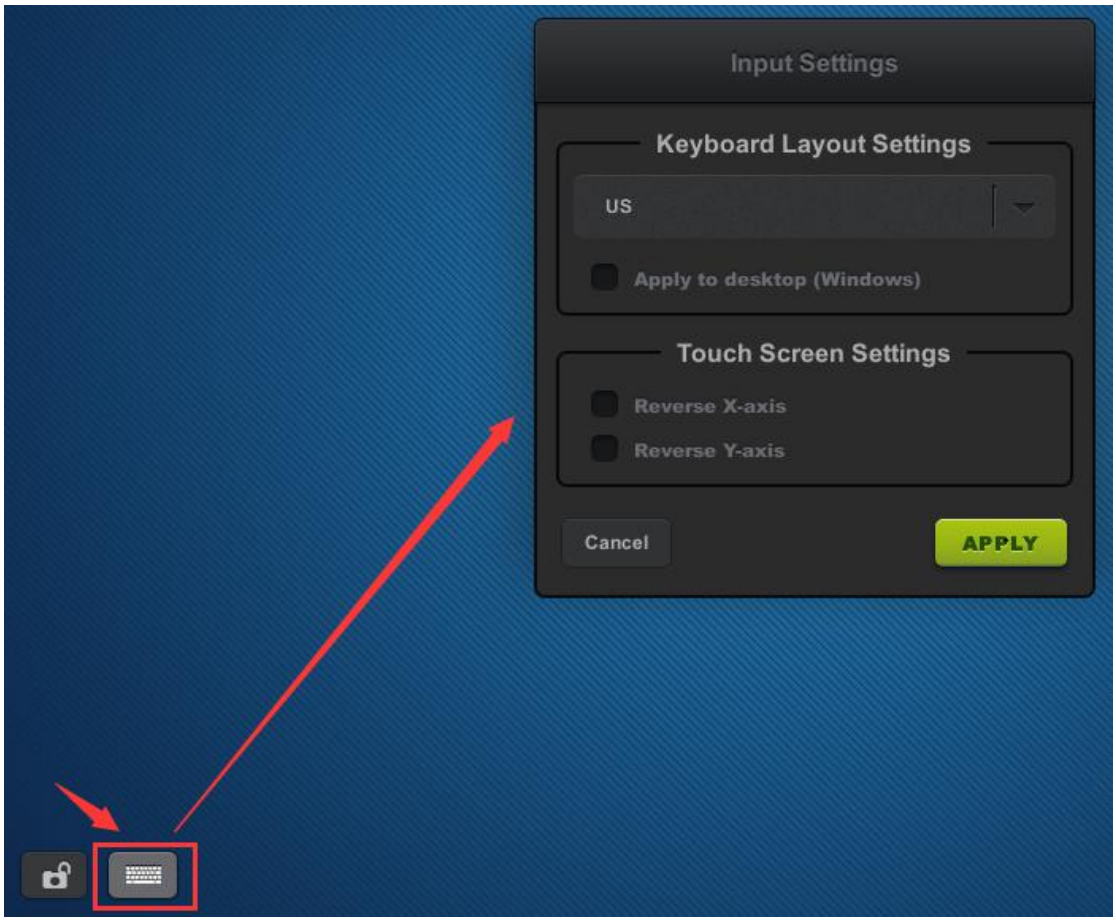
1) To unlock the device, just clear the password and apply.

2) If you forget the password, you have to reset the firmware to the factory default one. (Refer to section 4.7)

4.3 Keyboard Layout Settings

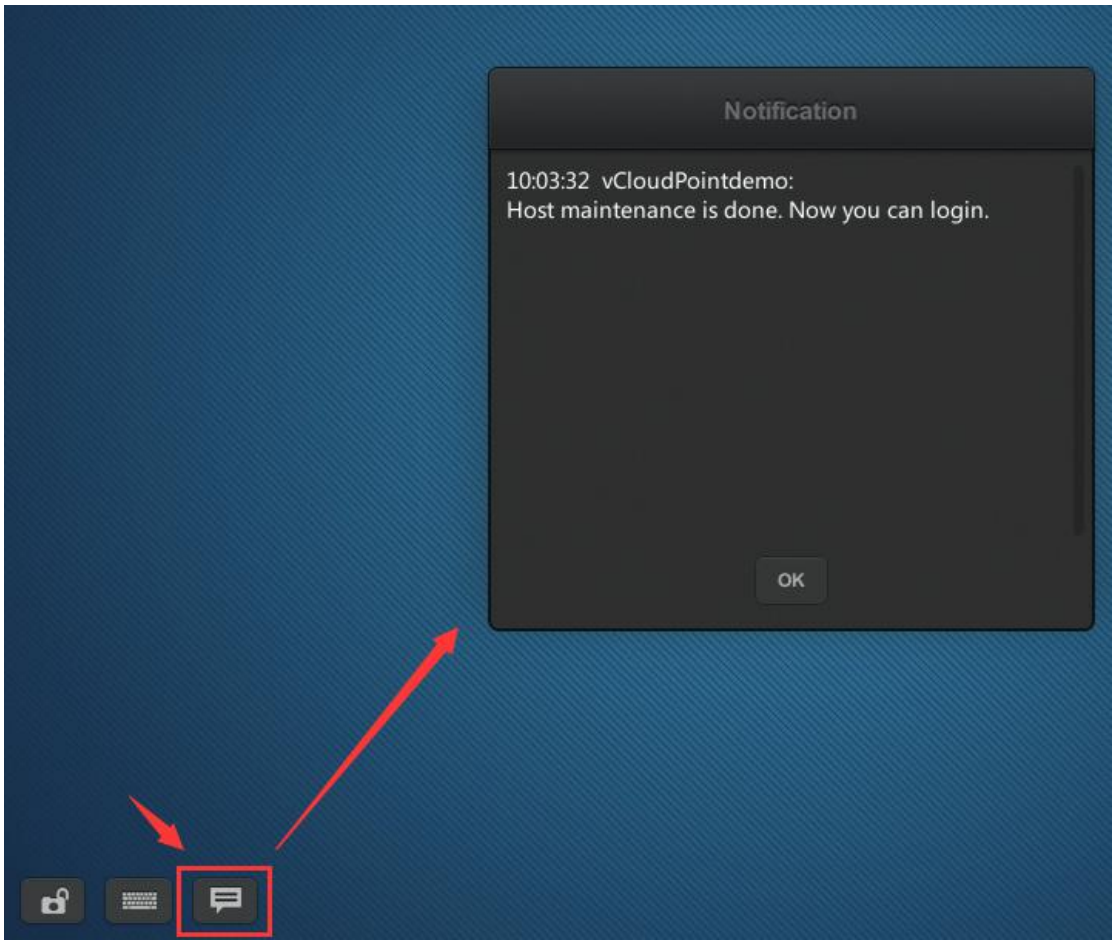
- **Keyboard Layout Settings:** to set up the language of the keyboard input; 111 languages are available, defaulted US; if the option "Apply to desktop (Windows)" is not selected, the setting applies to input on the device interface only.

- **Touch Screen Settings:** to set up the display direction when using touch screen for the device display. "Reverse X-axis" is to change the display direction from left-to-right to right-to-left. "Reverse Y-axis" is to change the display direction from up-to-down to down-to-up.



4.4 Notification Log

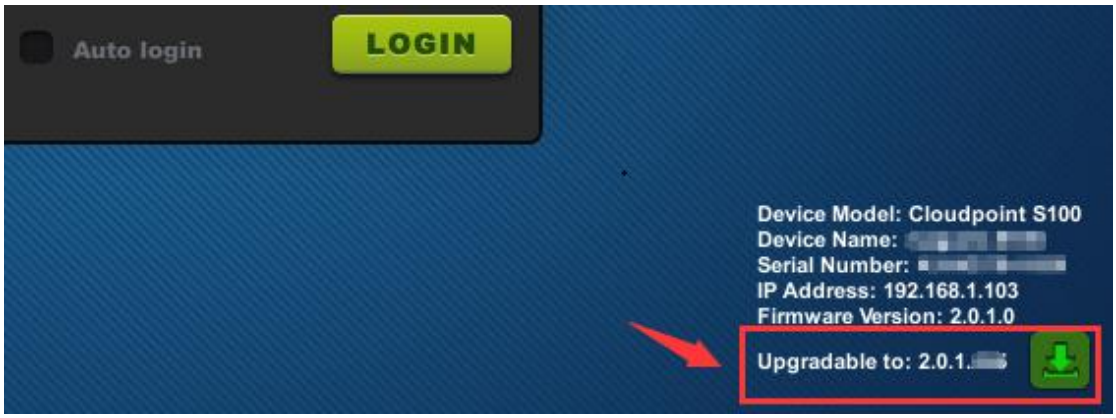
To view notifications send to this device from vMatrix Server Manager on the host side. The notification icon displays only when there is notification sent to this device. Notifications will be cleared on each reboot or shutdown of the device.



4.5 Device Information

At the right bottom screen of the device interface, you can view the device information including:

- **Device Model:** the model of the device, e.g.: vCloudPoint S100;
- **Device Name:** the name of the device; default name is S100 - (last 8 serials number); can be changed at the Display page;
- **Serial Number:** the unique 12 digit numbers for each device;
- **IP Address:** the IP address of the device in the LAN.
- **Firmware Version:** the current device firmware version.
- **Upgradable to:** the latest version of device firmware that is available in the network. Click the download button to update.



4.6 Firmware Update

It is always recommended to use the latest available version of firmware on your vCloudPoint zero client. Each installation of vMatrix Server Manager includes the latest firmware, so no additional downloads are necessary to complete this process. When powered on, the zero client establishes connection with vMatrix Server Manager and checks for update, if there is a new version available. Firmware update is not always required when a new version of vMatrix Server Manager is used. However, some firmware of the device may be incompatible with the vMatrix Server Manager. In this case, firmware update is required for logging to the host.

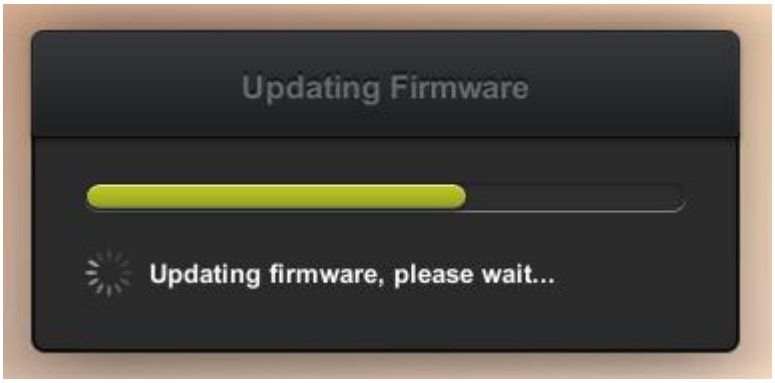
There are two ways for you to update the firmware:

1) Click the download icon at the right bottom screen to update to the latest version available in the network. (Refer to section 4.6)

2) Select a host and enter user name and password. Simply click the “UPDATE” button on the pop-up update window to update to the version included in the vMatrix Server Manager on the host.

Login
Display
Network
Maintenance
Security
Log into vCloudPointdemo
Failed to Log Into Server
Incompatible version
A firmware update [ver 2.0.2.5] is available for your device, do you want to update it now?
Cancel
UPDATE
Server List
LOGIN

Upgrading Firmware...
Verifying device firmware, please wait...
Cancel



Note: please DO NOT pause update and make sure the connection between host and device is reliable during firmware update. If the firmware is damaged, please reset and update again. (Refer to section 4.7 for resetting firmware.)

4.7 Reset

- **Reset Configuration** - press F2 key on device boot.

This is to restore all custom configurations to factory default. This is often used for restoring desktop resolution which is out of range of the monitor to 1027x768. If the Setting Lock is enable, you are required to enter password. (Refer to section 4.2.)

- **Reset Firmware** - long press the switch button until you see the resetting window.

This is to reset the device firmware to the factory installed one. All configurations will be recovered to the factory defaults. This is often used when device system turns faulty or is damaged by improper firmware upgrade.

4.8 Disconnect & Sign off

- **Disconnect:** to disconnect the user session; user session is still running, files and applications are still opened and in place when user connects again. There are two methods for a user to disconnect his session on host:
  - right click on the system's window button, choose "Shutdown or sign out", and then "Disconnect".
  - press the power button of the device.
- **Sign out:** to sign out the user; the user's session is ended; files applications are closed. Right click on the system's window button, choose "Shutdown or sign out", and then "Sign off".

Note: there are only options of "disconnect" and "sign off" for users, but no "power off" option to shut down the host system.

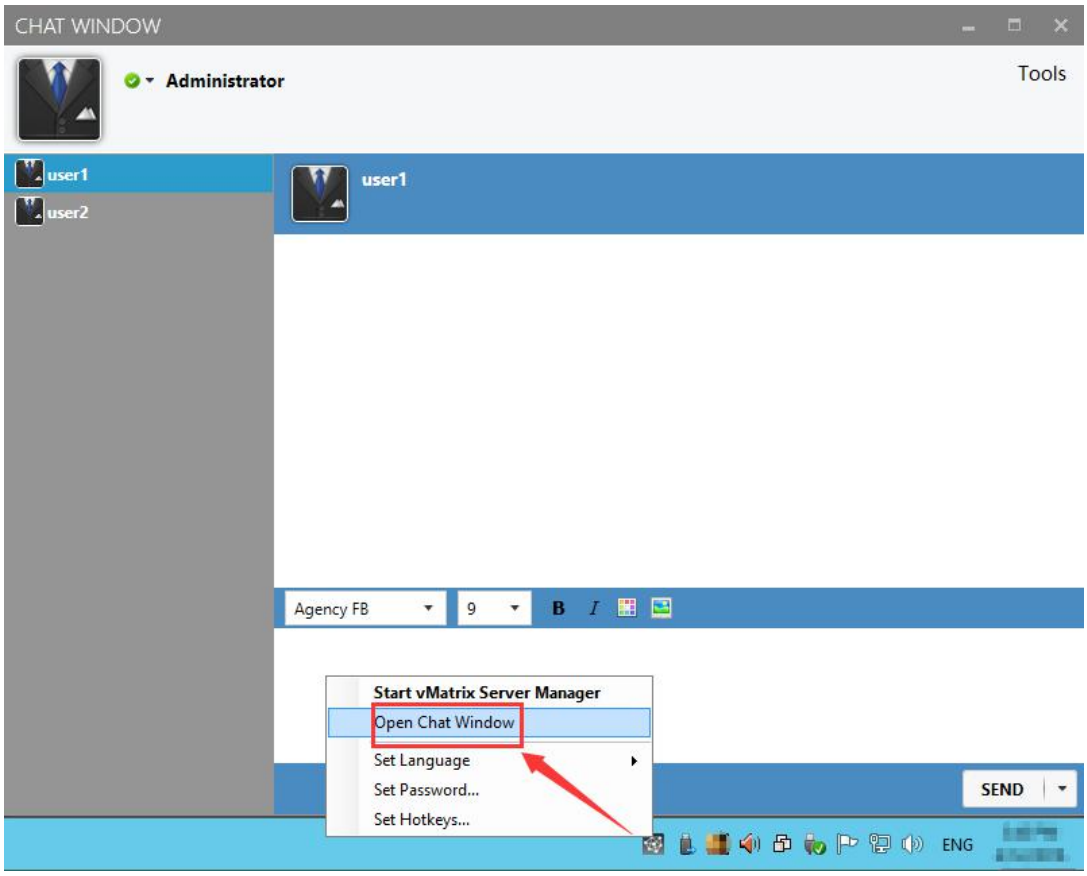
4.9 Use USB Devices

To use supported USB devices of , simply connect them to the USB ports on the device. Some USB devices may require a driver to install on the host by an administrator. There is no client driver needed for the device. To avoid data loss or damage to a memory device plugged into the device, right click on the USB icon at the right task bar to eject the device before unplugging it.

4.10 More Tools & Settings

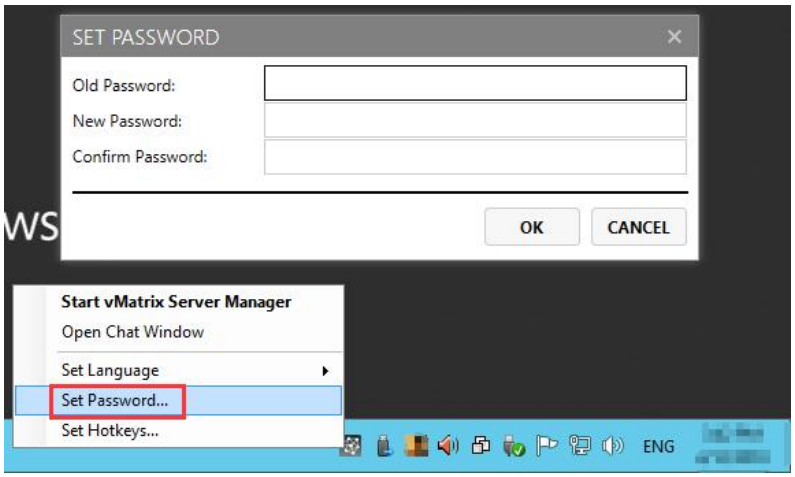
4.10.1 Chat Tool

The Chat Tool allows users to talk with other users connecting to the same host. To run the Chat Tool, right click on the vMatrx icon at the task bar and then click “Open Chat Window”.



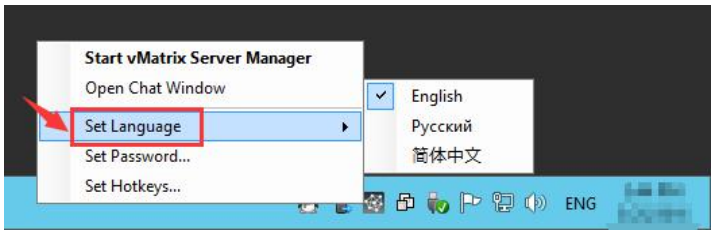
4.10.2 Set Password

This allows the current user to reset his login password without doing at the system control panel. To reset password, right click on the vMatrx icon at the task bar, click on “Set Password …” and then enter passwords on the required fields.



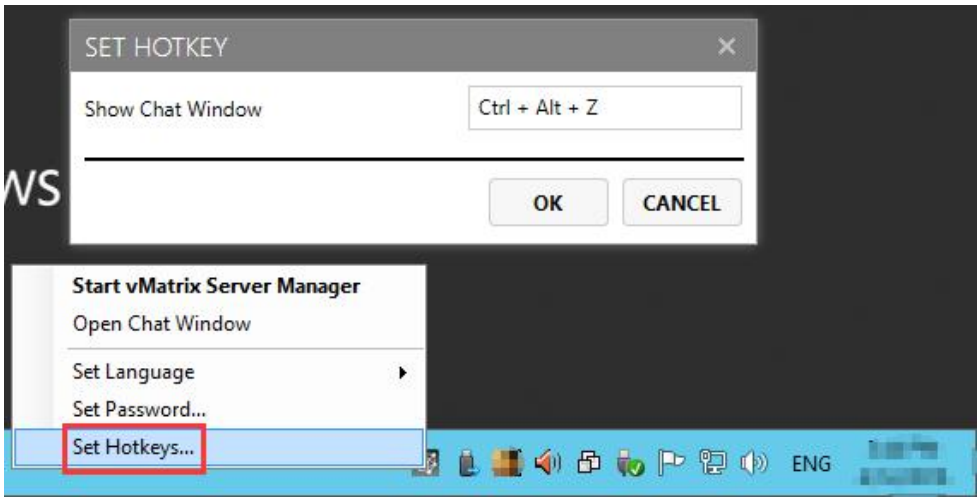
4.10.3 Set Language

This is to set language for displaying messages of the vCloudPoint system. Right click on the vMatrx icon at the task bar, click on “Set Language” and then available languages will be shown on the right.



4.10.4 Set Hotkeys ...

This is to set hotkey to open chat window. To ensure the hotkey works, do not use the same combination of keys for other applications.

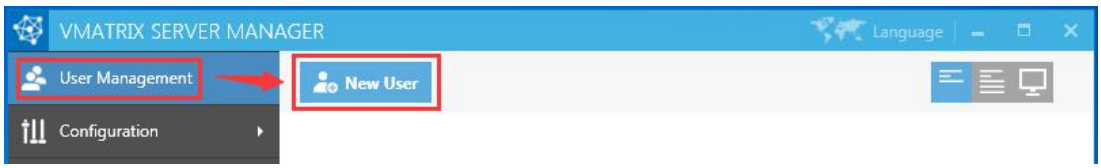


Chapter 5. Using vMatrix Server Manager

5.1 User Management

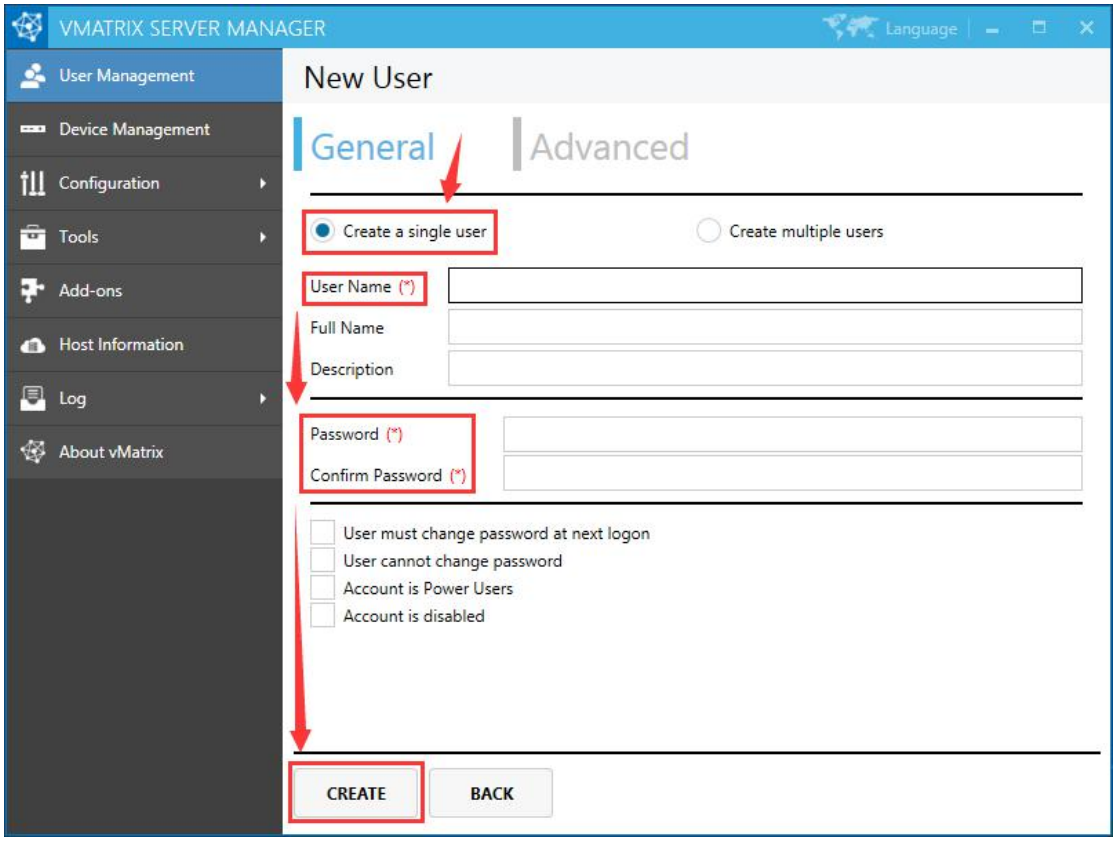
5.1.1 New User Creation

To Create users, open vMatrix Server Manager, on the initial page, click “New User”.



- Single user creation (defaulted)

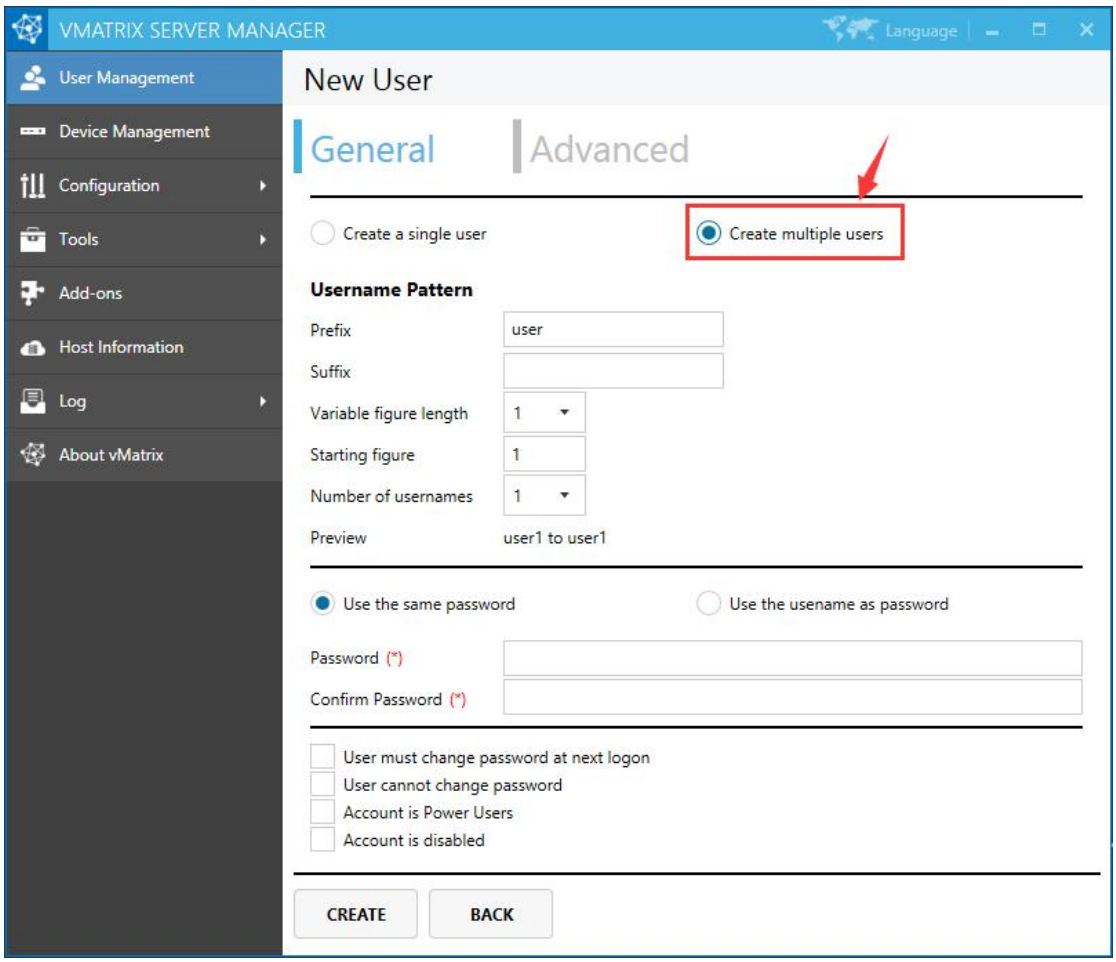
To create a single user each time, you simply enter required user name and password and click “Create” at the bottom.



- Multiple user creation

To create multiple users at a time, select “Create multiple users” and then you will be

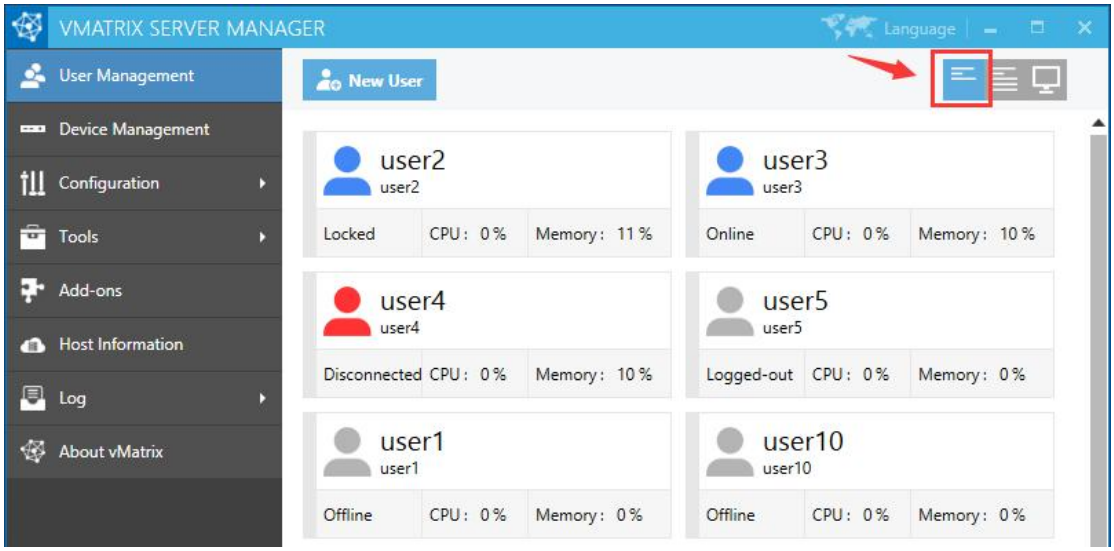
given a few more fields.



- **Prefix:** prefix that all user names start with; defaulted "user"; e.g.: user1, sales1, *student*1, *teacher*1…
- **Suffix:** suffix that all user names end with; defaulted empty; e.g.: user1fl1, user1fl2, user1fl3…
- **Variable figure length:** the number of the variable figure; defaulted "1"; e.g.: user1fl, user01fl1, user001fl1…
- **Starting figure:** the number that the variable figure start with; defaulted "1"; e.g.: user4fl1, user5fl1, user6fl1…
- **Number of usernames:** the number of users to be created; defaulted "1"; e.g.: user1fl1; user1fl1, user2fl1; user1, user2fl1, user3fl1…
- **Use the same password:** all users use the same password; defaulted; e.g.: user1, user1, user1.
- **Use username as password:** all users use their use name as the password; e.g.: user1, user2, user3.

Note: for more user settings, refer to section 5.1.7.

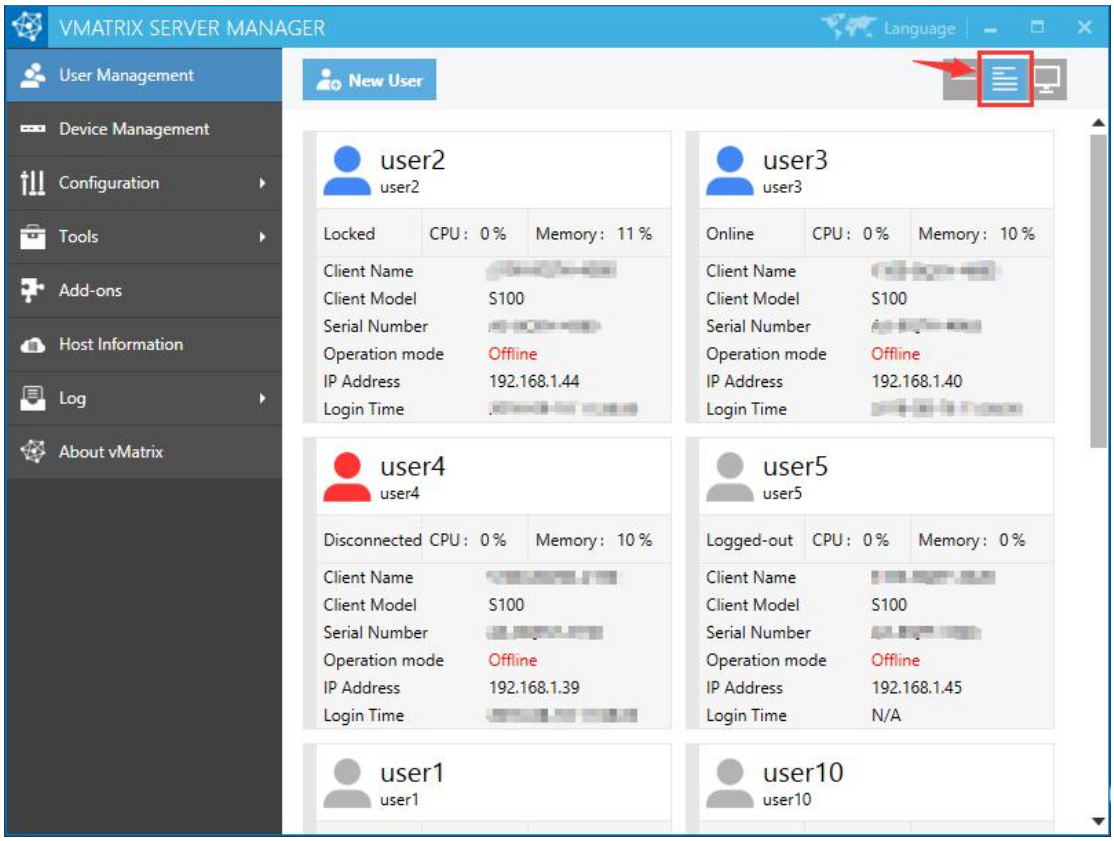
5.1.2 User Status View



On this selection, you can view CPU and Memory consumption for each user and their status including:

- **Offline:** the user has not logged into this host since host boot.
- **Online:** the user has logged in and is connecting to this host.
- **Disconnected:** the user has logged in but is not connecting to this host. User session is till running but screen goes back to device login page.
- **Logged-out:** the user logged into this host but has or has been logged out. User session has been ended and screen goes back to device login page.
- **Locked:** the user has logged into this host but user session has or has been locked. Screen goes to system login page where password is required for re-login.

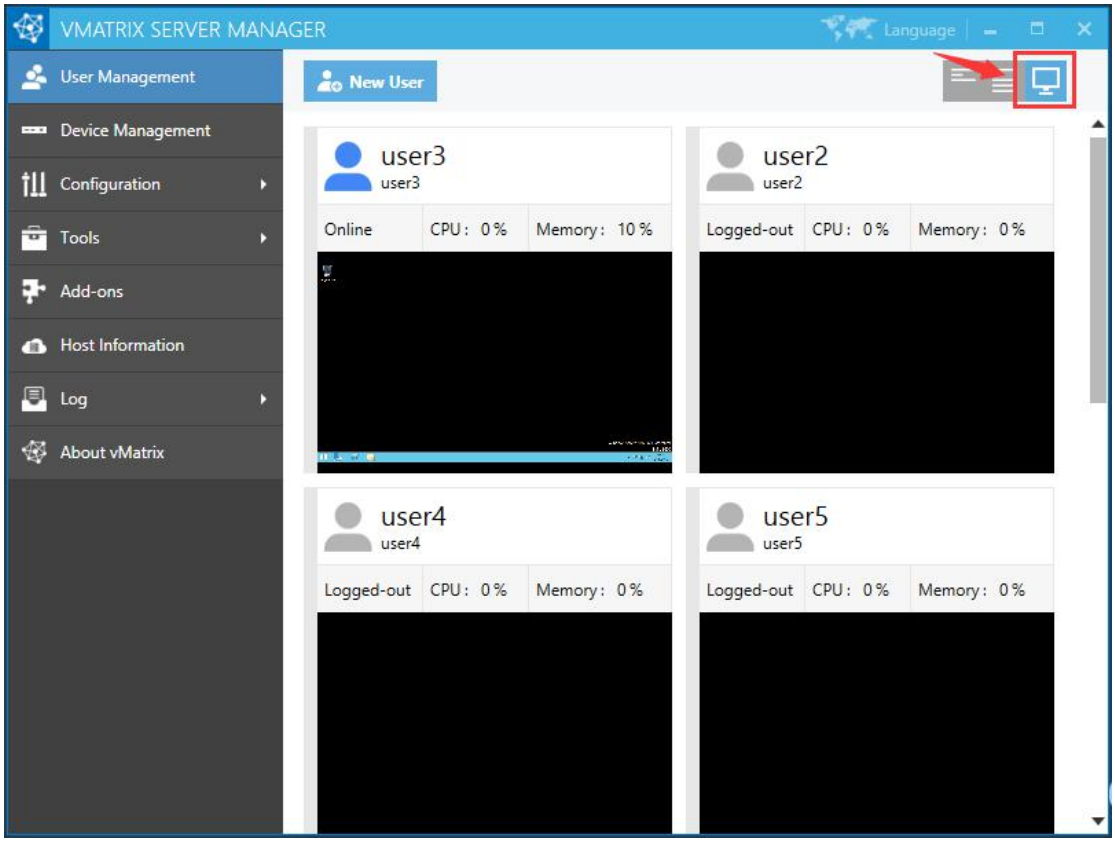
5.1.3 User Information View



On this selection, you can view CPU & Memory consumption and status for each user and their device information including:

- **Client Name:** name of the device.
- **Client Model:** model of the device.
- **Serial Number:** serial number of the device.
- **Operation Mode:** "Online", "Offline" (Refer to section 5.9).
- **IP Address:** the physical IP address of the device.
- **Login Time:** the time when the user logged into this host.

5.1.4 User Desktop View

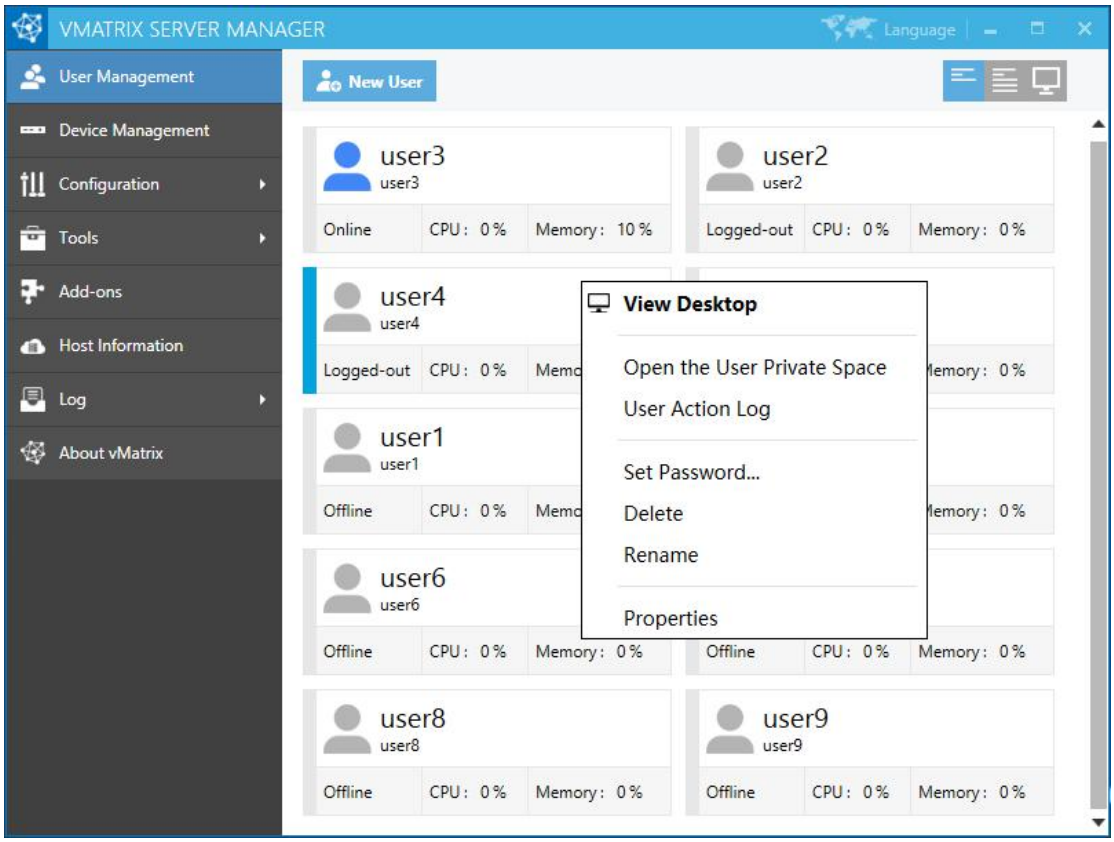


On this selection, you can view user's real time desktops in tiles.

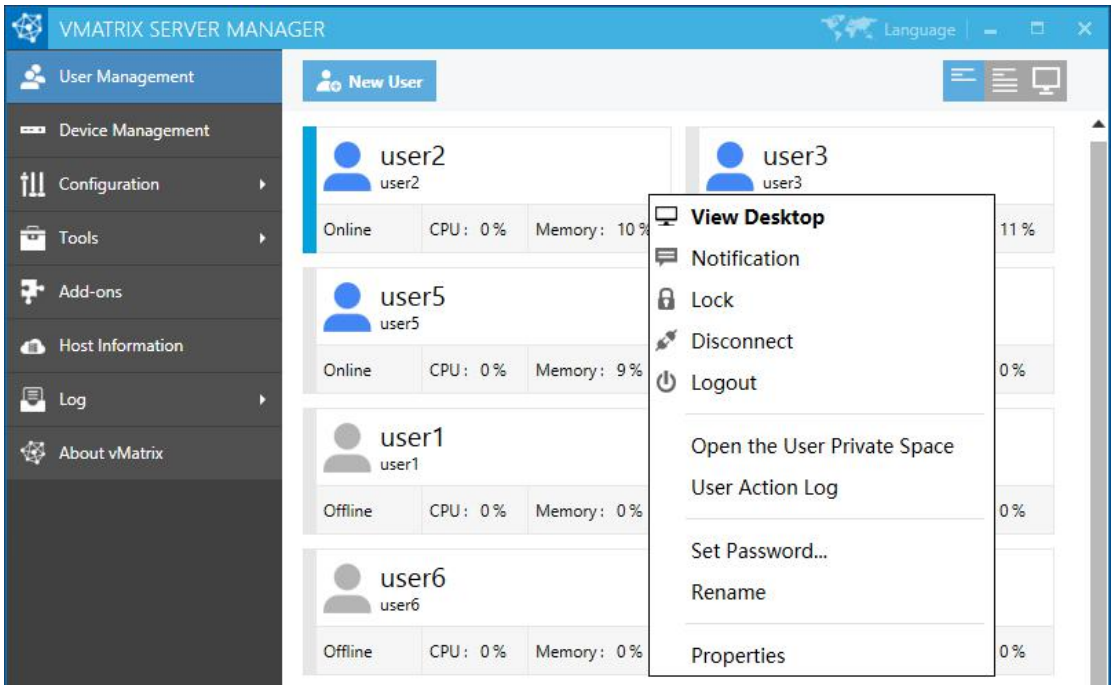
5.1.5 Right Click Menu

Right click on a single/group of offline/online user/users modules to open the user management menu. You can drag the mouse, or use shortcut keys like "shift" or "CTRL" + "A" to select multiple modules at a time.

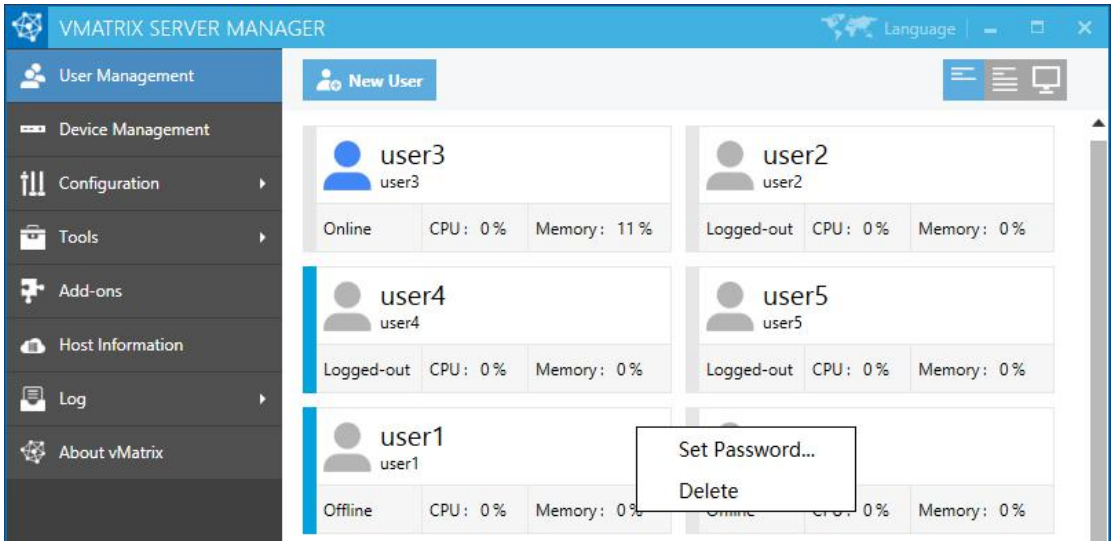
- **On a single offline user:** Open the User Private Space, User Action Log, Set Password..., Delete, Rename, Properties.



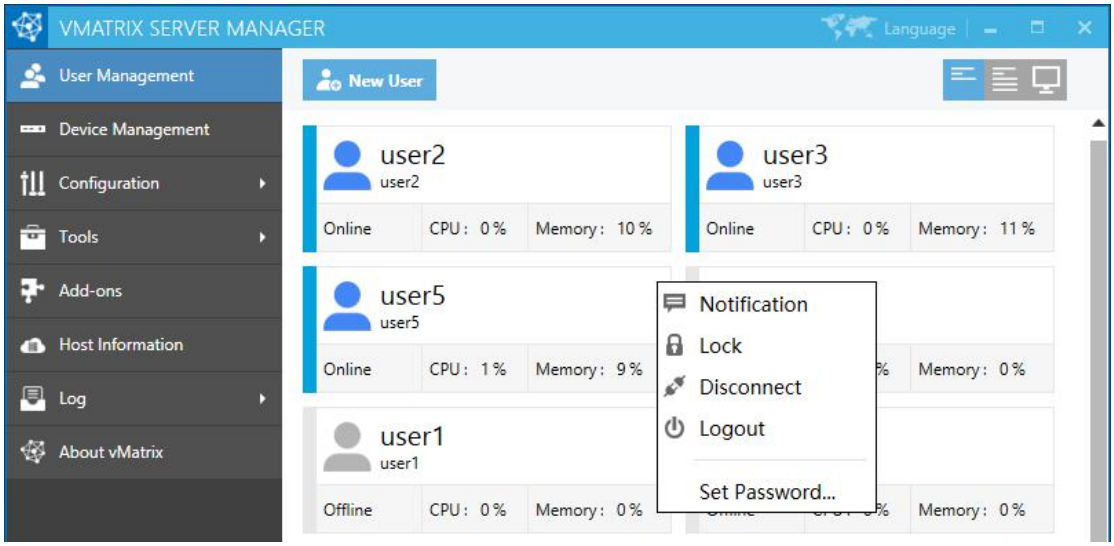
- **On a single online user:** Notification, Lock, Disconnect, Logout, Open the User Private Space, User Action Log, Set Password..., Rename, Properties.



- **On a group of offline users:** Set Password, Delete.



- **On a group of online users:** Notification, Lock, Disconnect, Logout, Set Password...

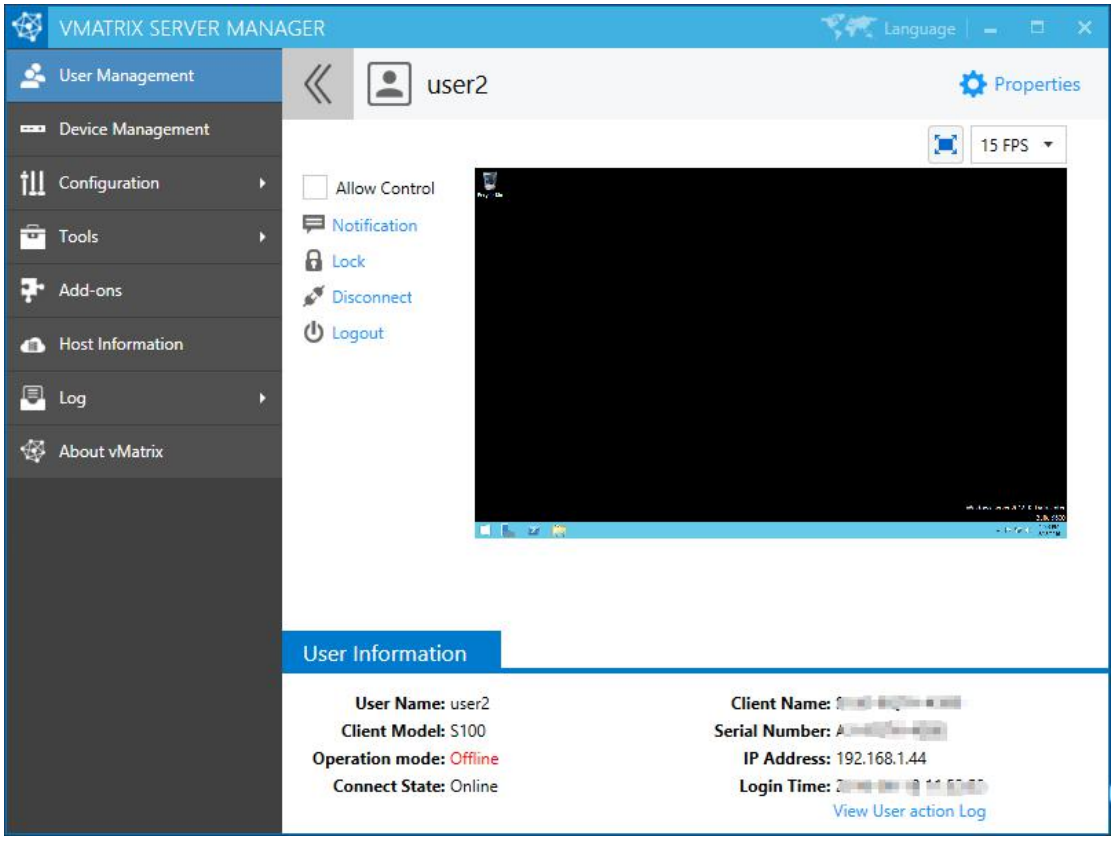


- **Notification:** to send a notification to the selected user in a small pop-up windows.
- **Lock:** to lock the selected user's desktop; the user's screen goes to system login page where password is required for re-login.
- **Disconnect:** to disconnect the selected user's session; the user session is till running but screen goes back to device login page.
- **Logout:** to log selected user's session out; the user's session is ended and screen goes back to device login page.
- **Open the User Private Space:** to open the folder where the selected user' personal files are stored.
- **User Action Log:** to view all action log of the selected users on this host.

- **Set Password…:** to reset password for this user. This will take effect on next login.
- **Rename:** to rename the selected user. This will take effect immediately.
- **Delete:** to delete the selected user. This will take effect immediately.
- **Properties:** to change the selected user's personal settings. (Refer to section 4.1.7)

5.1.6 Personal Monitoring & Controlling

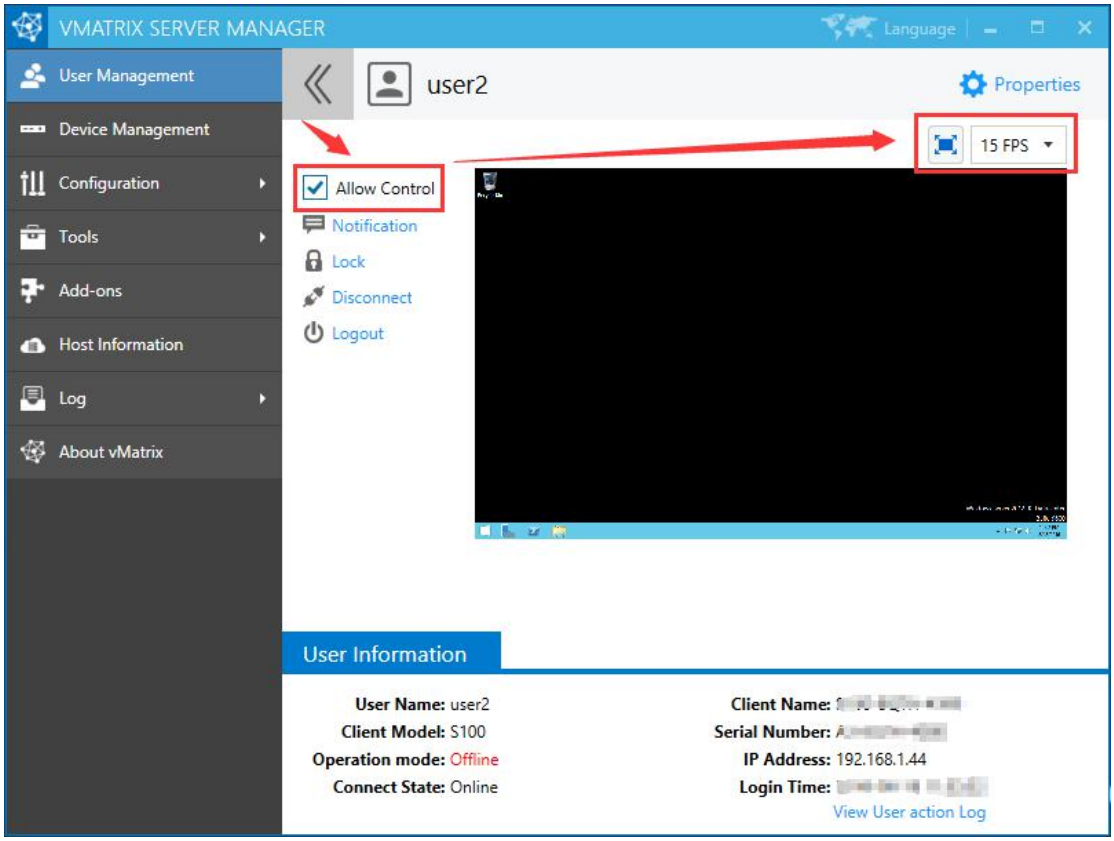
Double click or right click on on a single user module and then select "View Desktop", to enter the user's personal page. This page allows you to monitor and take control over a user desktop.



User Information and commands of "Notification", "Lock", "Disconnect", "Logout" are mentioned in section 5.1.5.

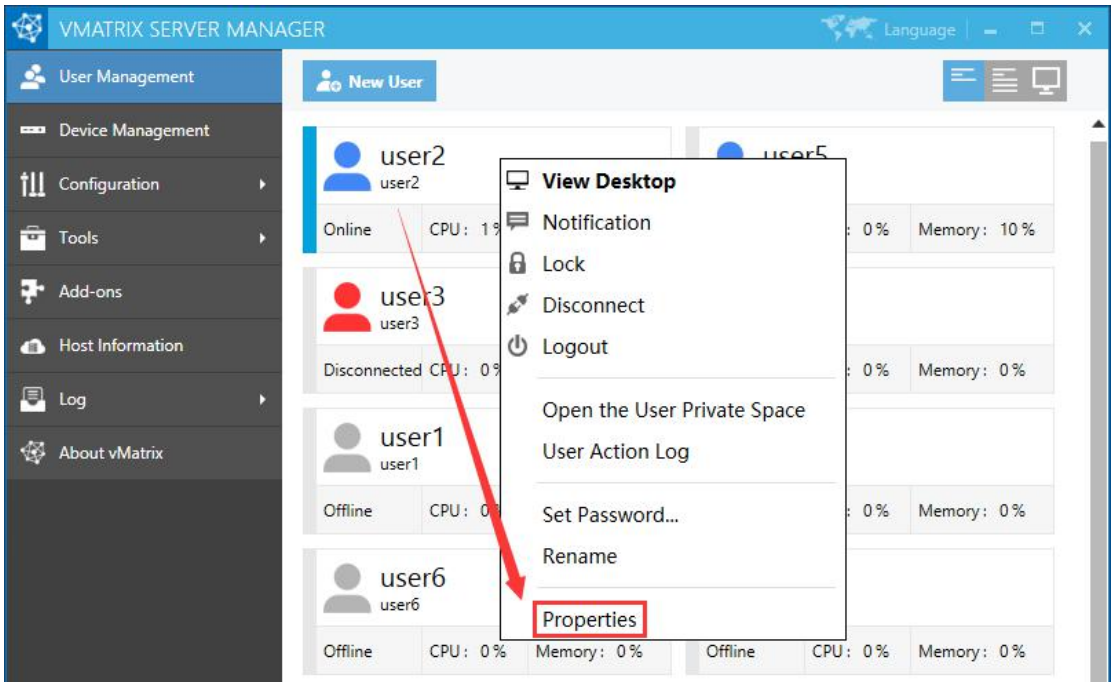
- **Allow Control:** if this option is selected, you can take control over the user's desktop.
- **Extend Icon:** click on this icon to extend the view the user's desktop in full screen. When entering full screen view, you can move the cursor to the right top corner to exit full screen view.

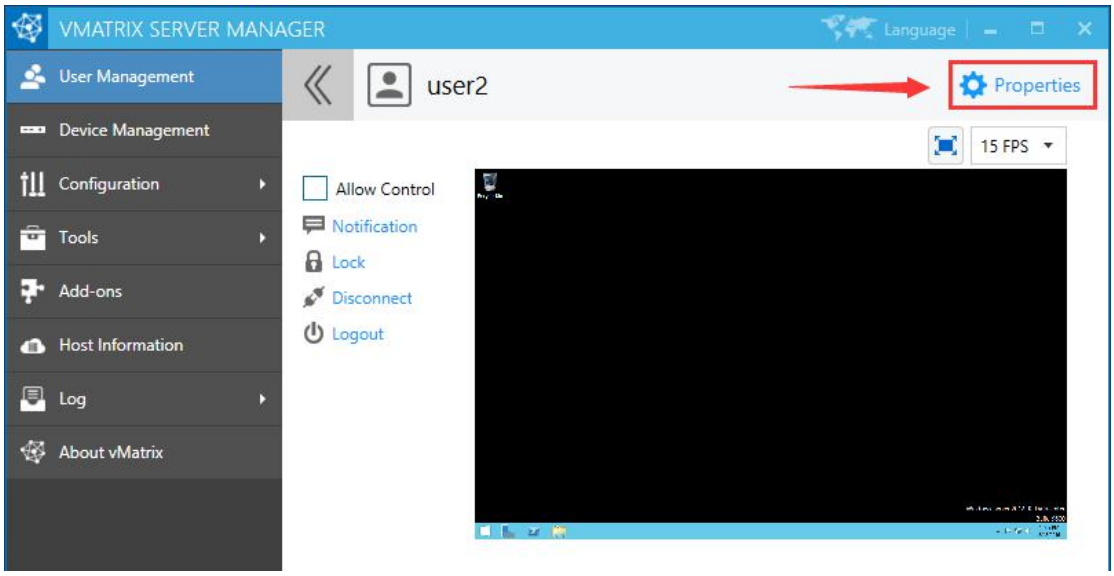
- **15FPS:** select the refresh rate from 5- 30FPS when you are viewing the desktop.
- **Properties:** to change the selected user's personal settings. (Refer to section 5.1.7)



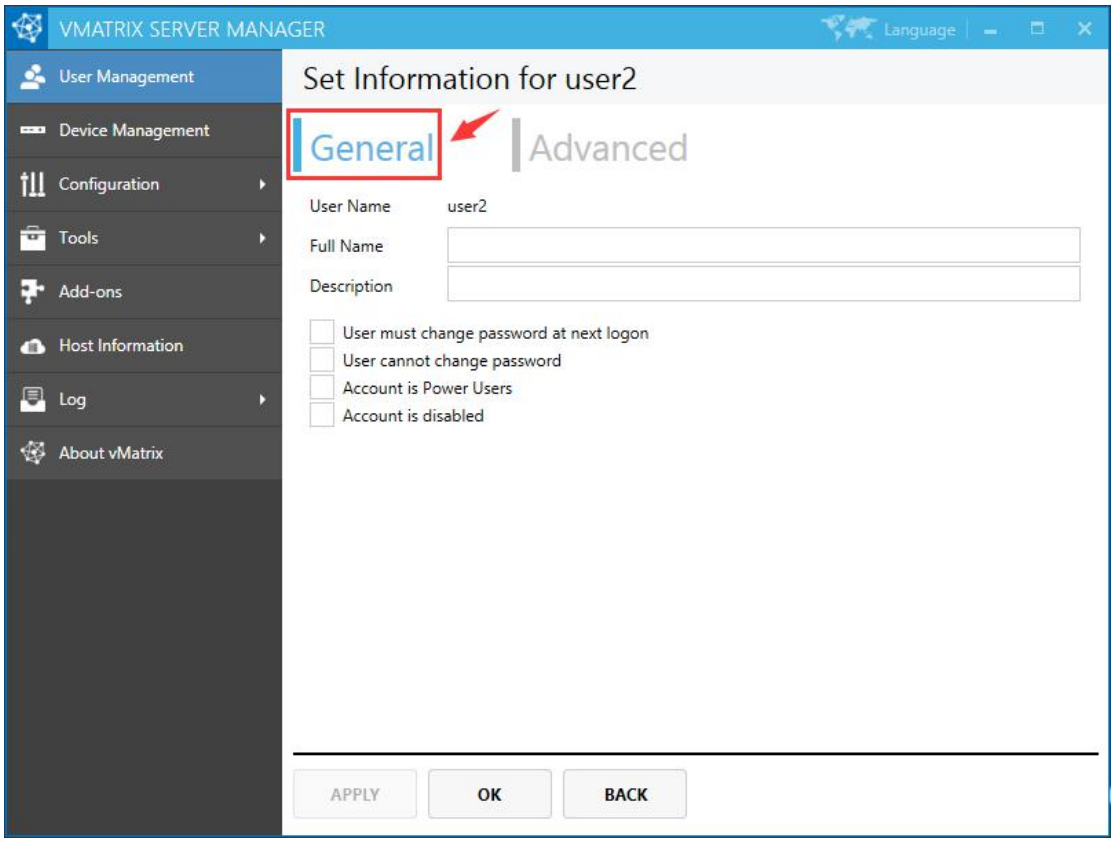
5.1.7 Personal User Settings

To enter the setting page for a selected user, you can right click on the user module on the initial User Management page, or click on the "Properties" option after entering Personal Monitoring & Controlling page.

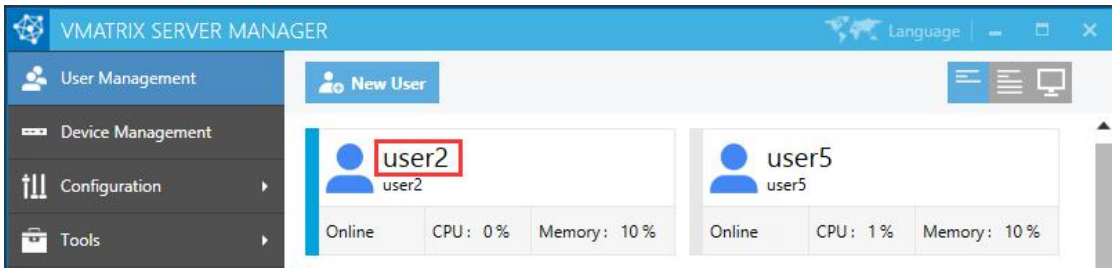




❖ General Settings:



- **User Name:** user name cannot be changed on this page but only by right clicking the user module on initial User Management page.
- **Full Name:** the user's full name is the top one beside the user icon on initial User Management page.

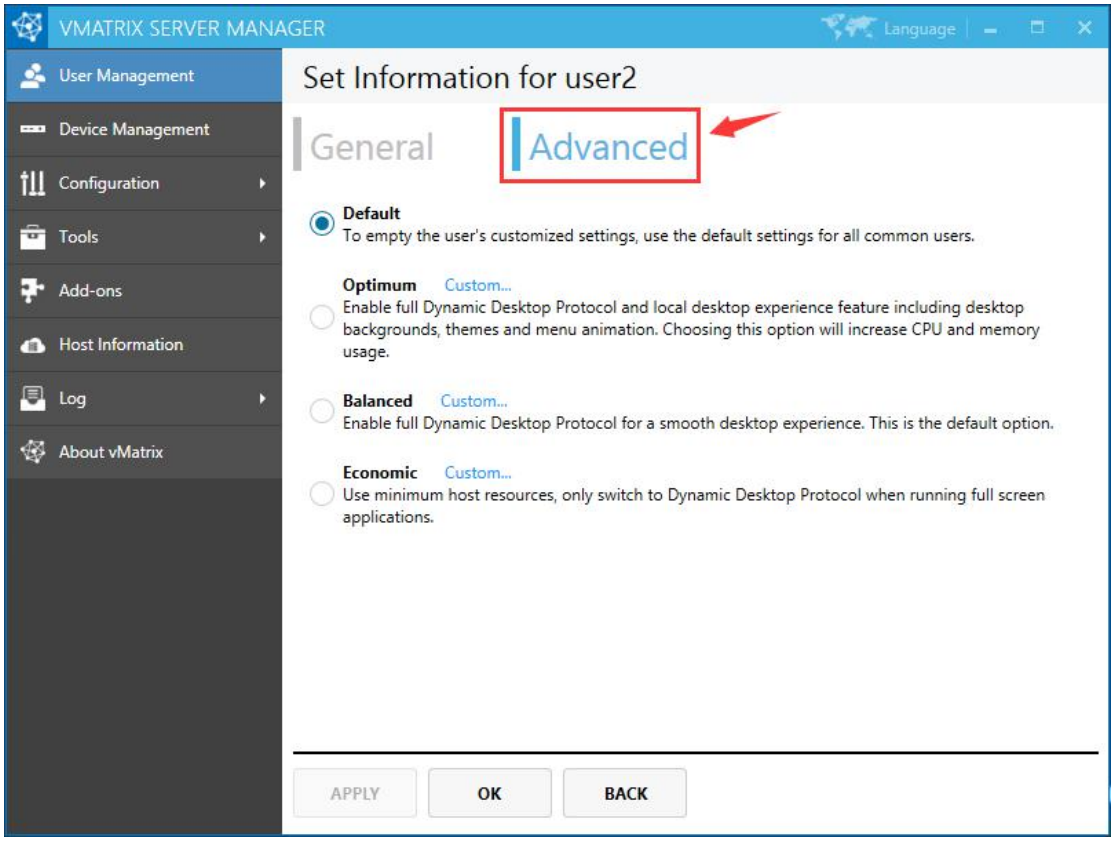


- **Description:** description of the user does not show at any other place.
- **User must change password at next logon:** selecting this option will force the user to change password at next logon.
- **User cannot change password:** selecting this option will disable the user to change password.
- **Account is Power User:** Power User is given more rights to change system settings

than a common user, but less than an Administrator.

- **Account is disabled:** selecting this option will disable the user account. This is often used when you want to disable the user temporarily, saving you trouble to delete and re-create.

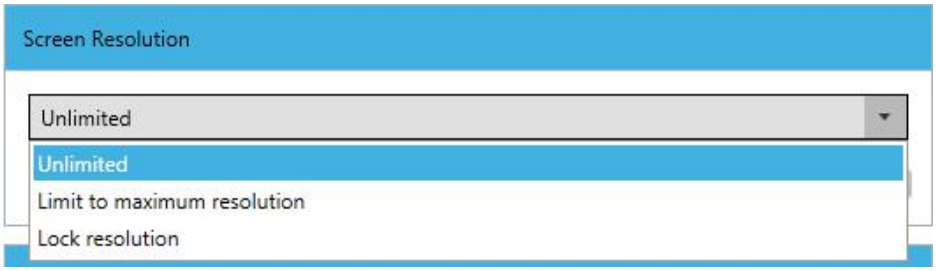
❖ Advanced Settings:



Advanced settings allows you customize user settings. Changes will take effect at user's next login. Advance settings include:

Desktop Resolution:

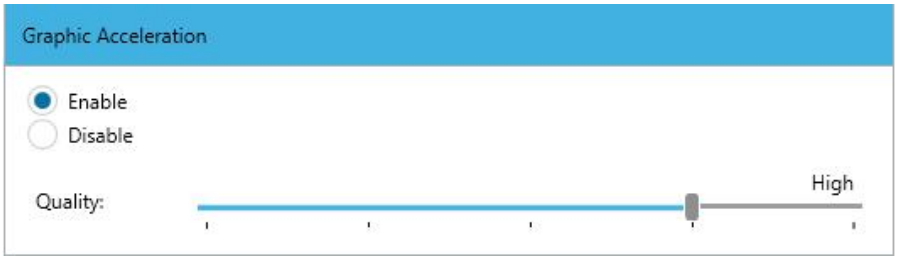
- **Unlimited:** the user can use all device supported resolution.
- **Limit to maximum resolution:** limit user to use a selected resolution or resolutions below.
- **Lock resolution:** lock resolution to the only selected resolution.



Graphic Acceleration:

- **Enable:** (defaulted and recommended) to enable the use of vCloudPoint Dynamic Desktop Protocol (DDP) for a smoother desktop experience. Enabling this option will also allow you to select display quality from lowest, low, medium, high, to highest. Default display quality is high. The higher display quality is selected, the higher CPU and network bandwidth will be consumed.

- **Disable:** to disable the use of DDP and use the system built-in Remote Desktop Protocol (RDP) for image transmission. If this option is selected, the user will be given a less desktop responsive experience and video play in full screen or large window is not watchable.

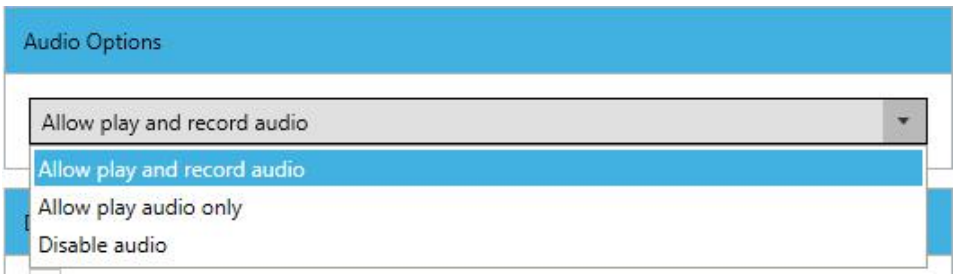


Audio:

- **Allow play and record audio:** to enable the user to play and record audio on the device. (default)

- **Allow play audio only:** to enable the user to play but not record audio on the device.

- **Disable audio:** to disable the user to play or record audio on the device.



Desktop Options:

- **Enable desktop wallpapers:** to enable the user to change background desktop wallpapers.
- **Enable user interface themes:** to enable the user to switch interface themes.
- **Show window contents while dragging:** to enable the user to see contents within window while dragging.
- **Enable menu animations:** to enable the user to see menu animation while opening a menu.

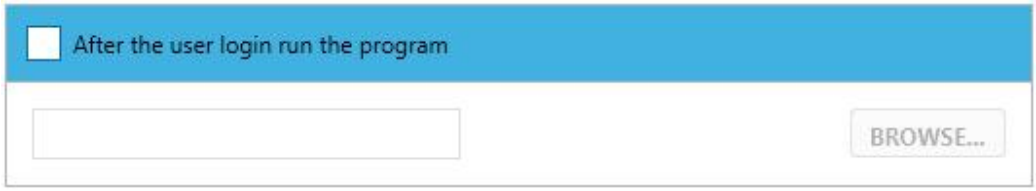
Note: Desktop Options are defaulted disabled. Enabling these options will cause higher CPU and and network bandwidth consumption.

USB Options:

- **Selected:** (defaulted) to allow the user to use all supported pluggable USB devices including printer, scanner, memory device, and touch screen, etc.
- **Unselected:** to allow the user to use USB keyboard, mouse and barcode scanner.

After the user login run the program:

- **Selected:** to enable this user session to auto run a specific installed program after user login without manual operation. This function is often used when the terminal device by this user is configured to be auto login after powered on. To enable this function, tick the option and then enter the directory or click “BROWSE...” to specify an installed program.
- **Unselected:** (defaulted) to go to the default desktop after user login.



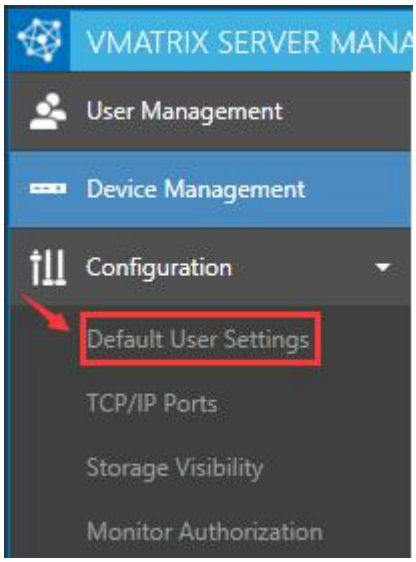
Other Options (Chat Function):

- **Selected:** (defaulted) to enable the user to use the Chat Tool for communication with other login users.
- **Unselected:** to disable the user to use the Chat Tool.

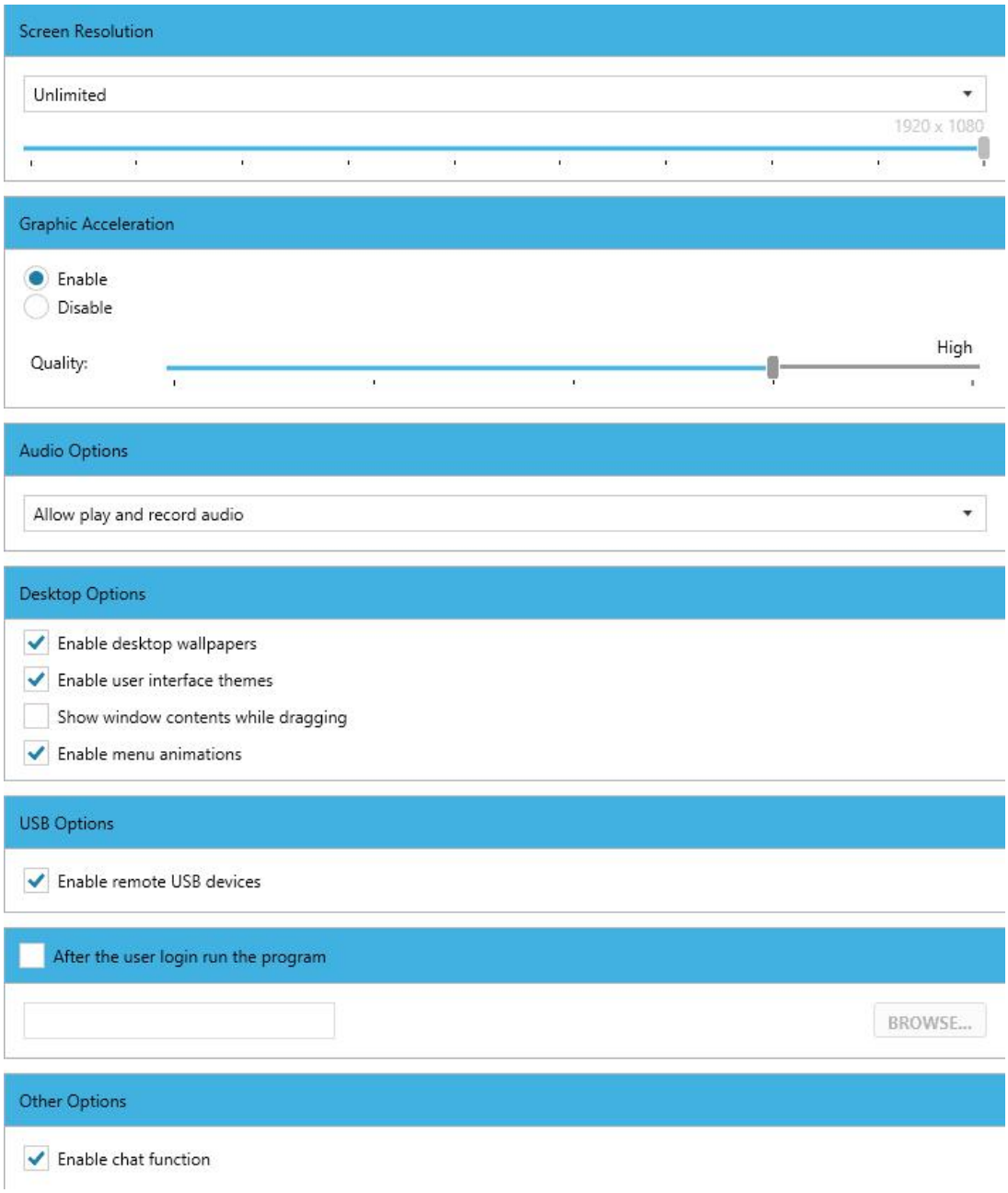
RESET TO DEFAULT SETTINGS: click to reset the current settings to default.

- **Default:**

This option uses the global settings for all users which can be configured at Configuration -> Default User Settings, refer to section 5.3.1)

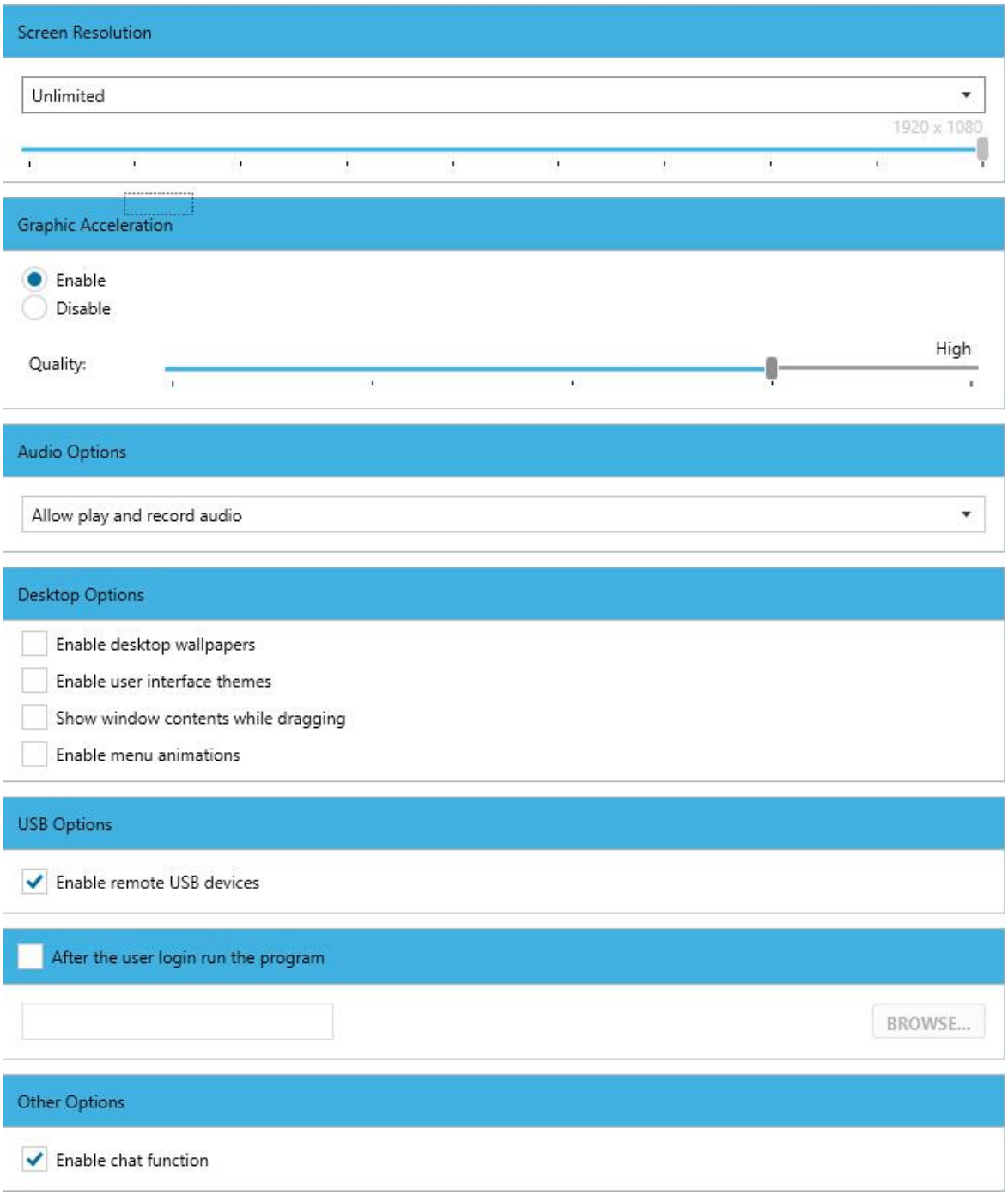


- **Optimum:**
- **Desktop Resolution:** Unlimited
- **Graphic Acceleration:** Enable, High
- **Audio:** Allow play and record audio
- **Desktop Options:** 1st, 2nd and 4th options selected
- **USB Options**: selected
- **After the user login run the program:** unselected
- **Other Options (Chat Function):** selected



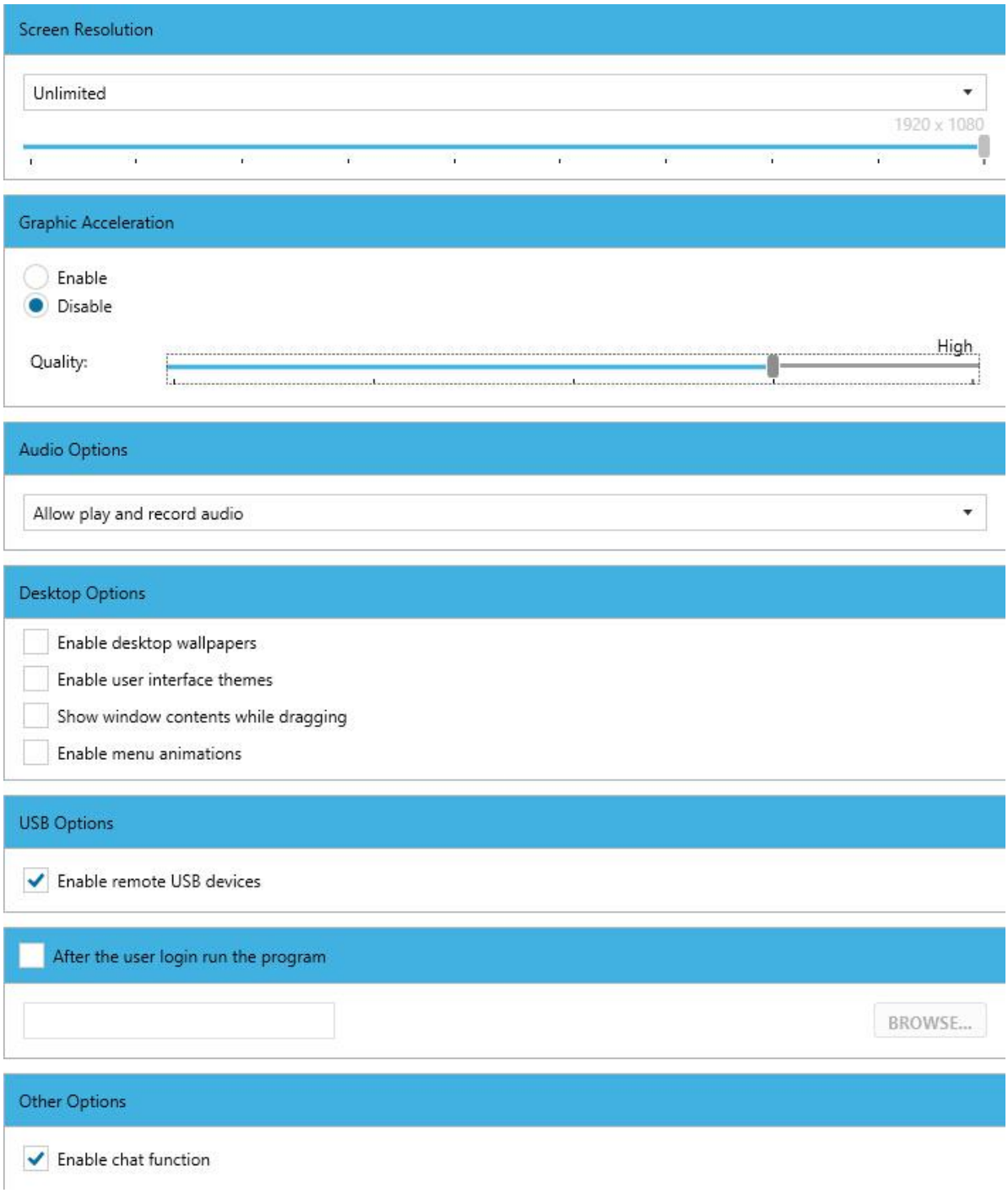
- **Balanced:**
  - **Desktop Resolution:** Unlimited
  - **Graphic Acceleration:** Enable, High
  - **Audio:** Allow play and record audio
  - **Desktop Options:** all options unselected
  - **USB Options:** selected
  - **After the user login run the program:** unselected

- **Other Options (Chat Function):** selected



- **Economic:**
- **Desktop Resolution:** Unlimited
- **Graphic Acceleration:** Disable
- **Audio:** Allow play and record audio
- **Desktop Options:** all options unselected

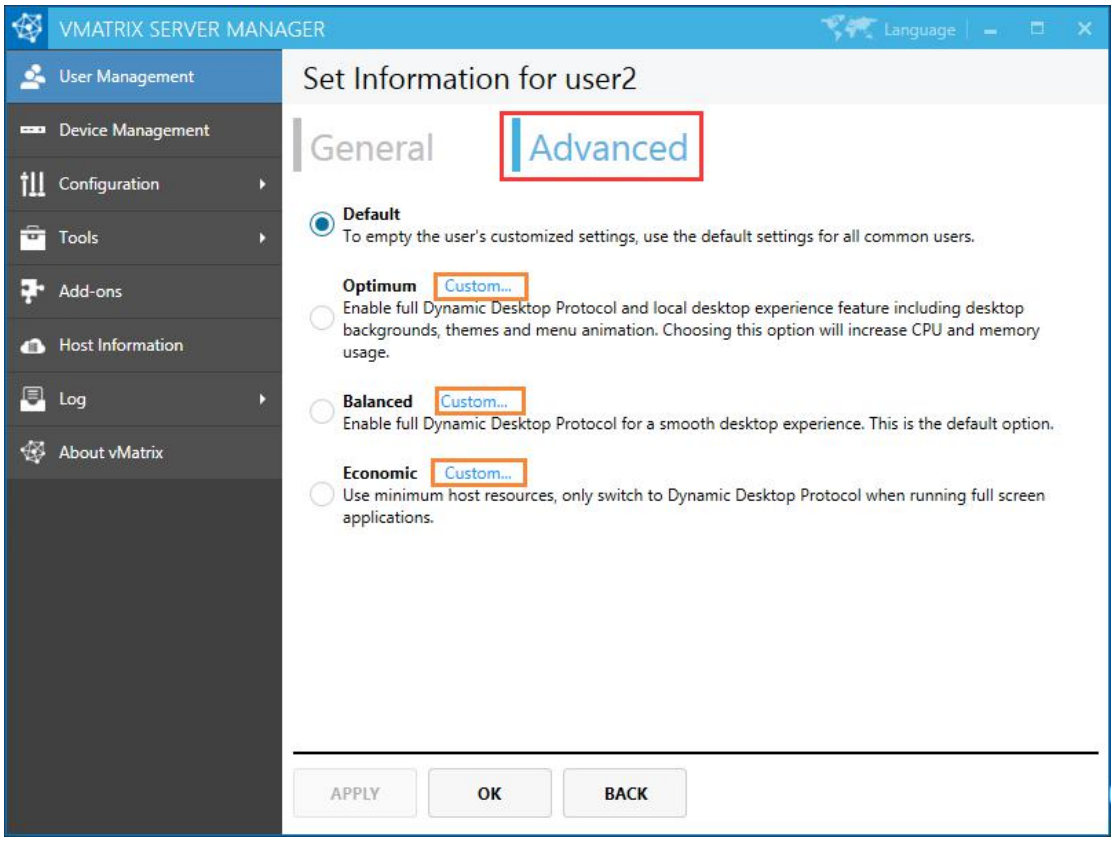
- **USB Options:** selected
- **After the user login run the program:** unselected
- **Other Options (Chat Function):** selected



- **Custom...:**

This option allows you to customize user settings based on the 3 most used types of

Optimum, Balanced, and Economic.



5.2 Device Management

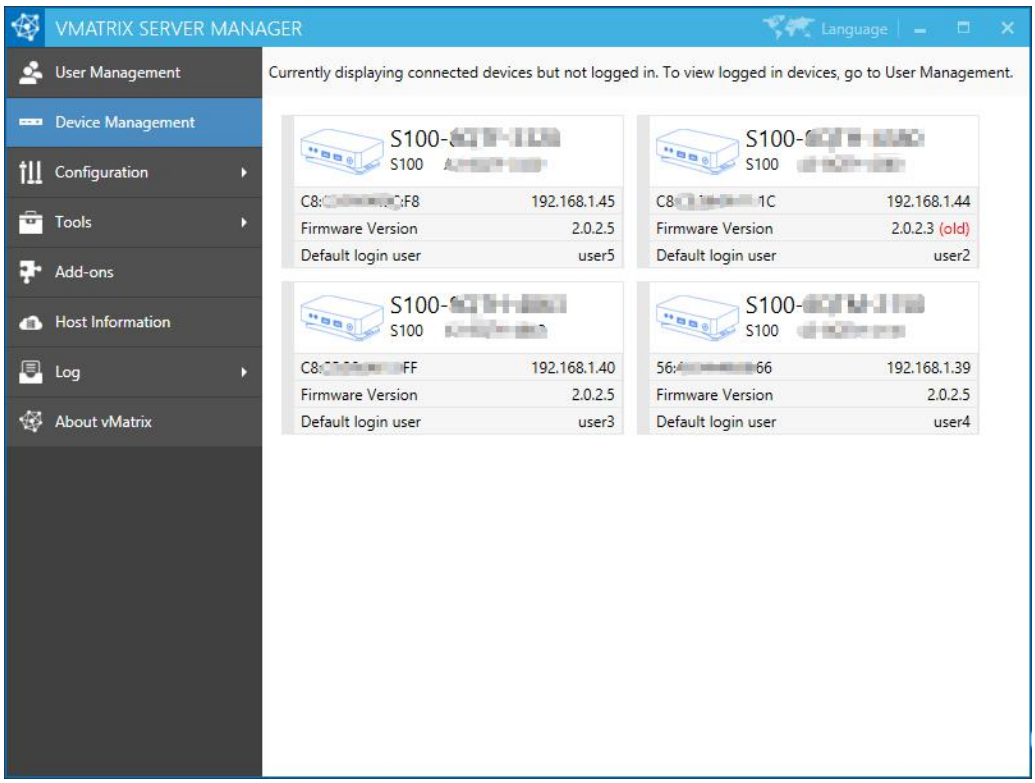
Note: This menu has been added to vMatrix Server Manager since the release of vMatrix Server Manager 2.1.0. Device information view and the right click management menu are available only on devices with firmware version 2.0.2.0 or later, and firmware update from version 2.0.2.0 or any later one to the latest version that is included in vMatrix Server Manager can be done remotely through vMatrix Server Manager. If your device is using a firmware version earlier than 2.0.2.0, you have to manually update the firmware to the new version which is included in the installed vMatrix Server Manager of version 2.1.0 or later.

5.2.1 Device Information View

On this page, you can view device information including:

- Device name: name of the device; defaulted model name + last 8 serial numbers.

- Device model: model of the device.
- Serial number：serial number of the device.
- Mac address: physical Mac address of the device.
- IP address: the IP address of the device in the LAN.
- Firmware version: firmware version that the device is using.
- Default login user: the saved user name for next login; it is the last login user name or the one customized at the Login Settings.

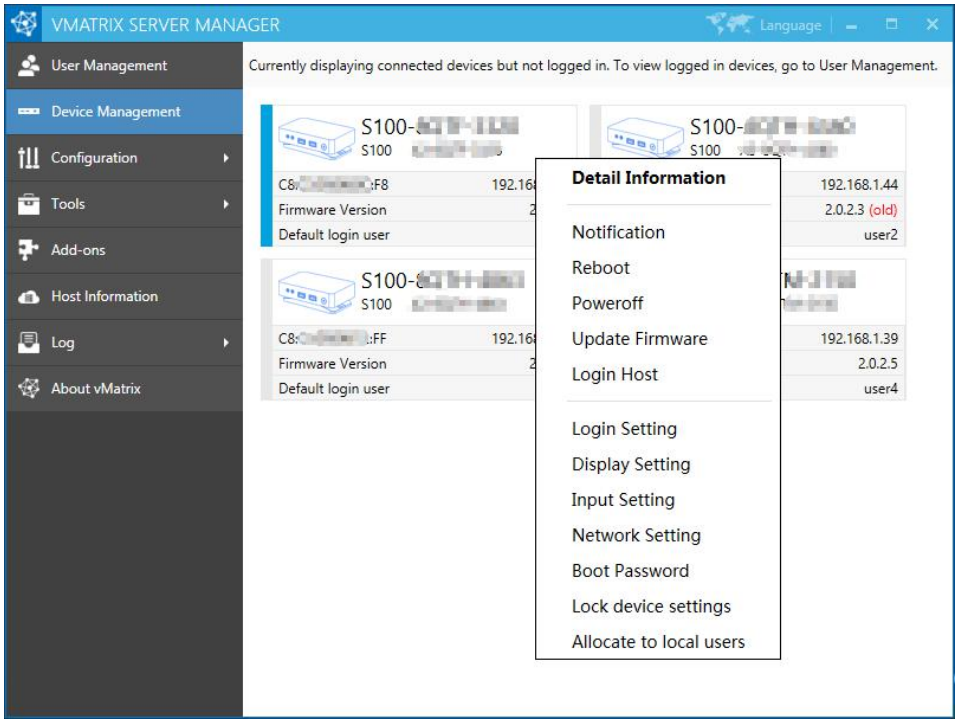


Note: This page displays connected devices (powered on devices in the same LAN as the host or powered on devices that has ever logged into the host) but not logged in. To view logged in devices, go to User Manager.

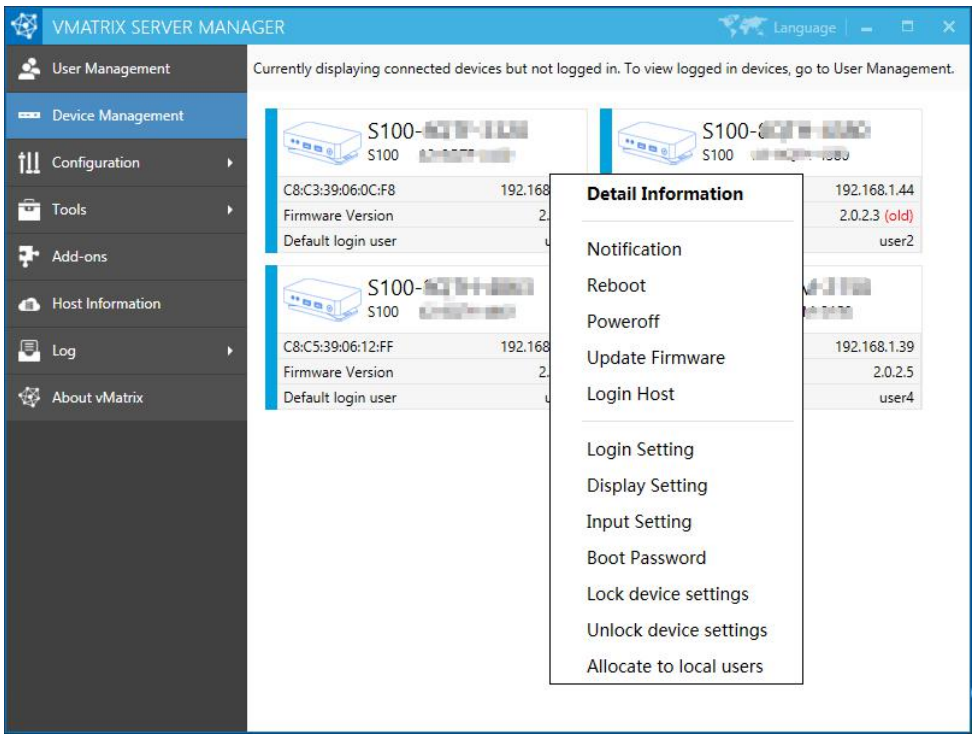
5.2.2 Right Click Menu

Right click on a single or multiple device modules to open the device management menu. Each of displayed options (except Notification) performs a function which can be found on the device interface, allowing administrators to set up or manage the devices centrally and remotely from the host side. You can drag the mouse, or use shortcut keys like “shift” or “CTRL” + “A” to select multiple modules at a time.

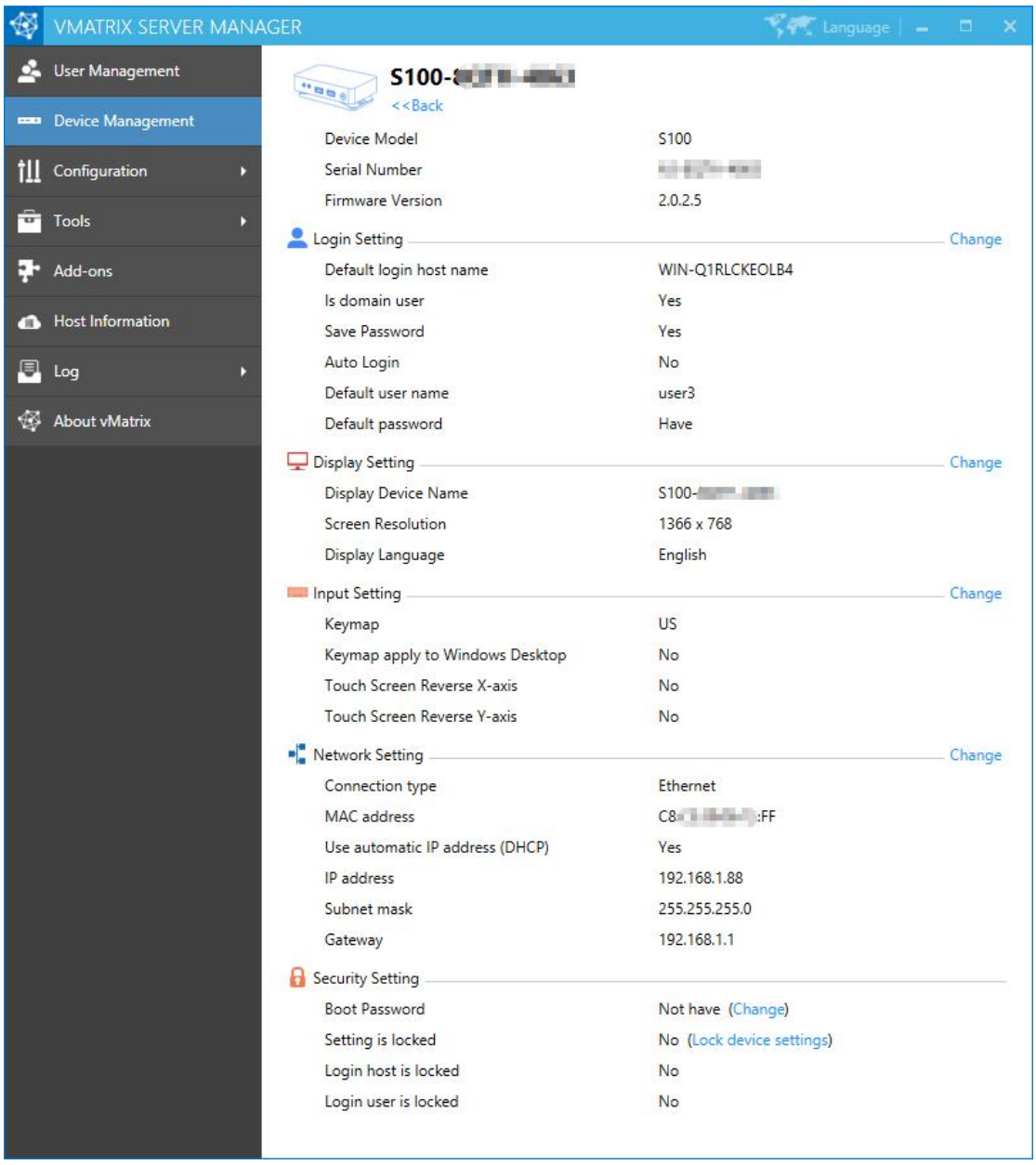
- **On a single device:** Detail Information, Notification, Reboot, Poweroff, Update Firmware, Login Host, Login Setting, Display Setting, Input Setting, Network Setting, Boot Password, Lock Device Settings, Allocate to local users.



- **On multiple devices:** Detail Information, Notification, Reboot, Poweroff, Update Firmware, Login Host, Login Setting, Display Setting, Input Setting, Network Setting, Boot Password, Lock (Unlock) Device Settings, Allocate to local users.

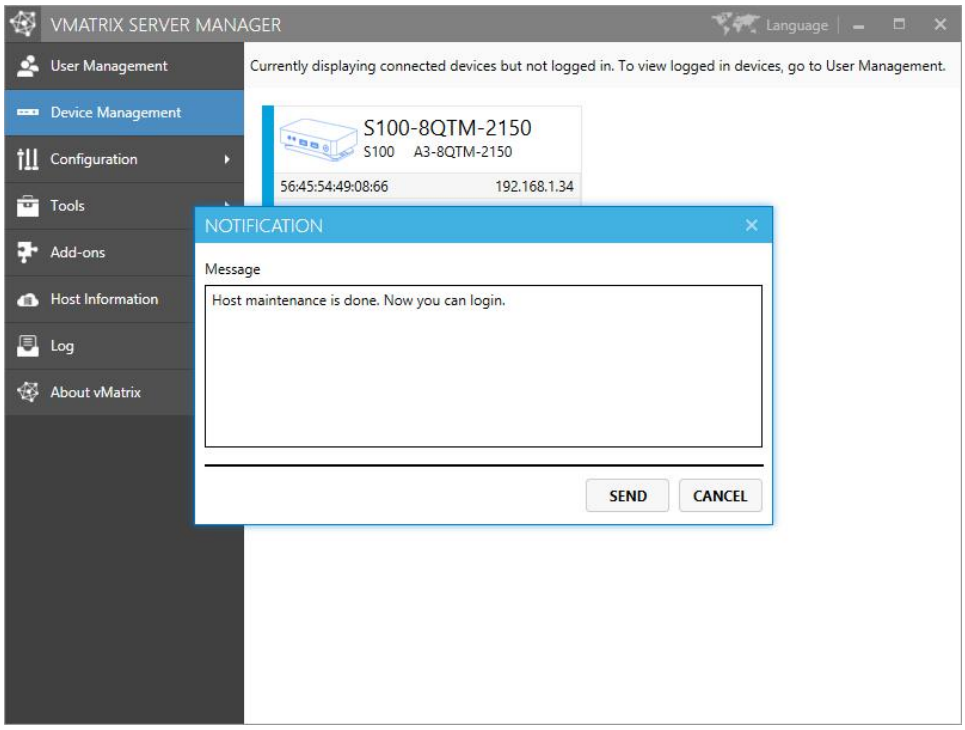


- **Detail Information:** to view the detail information of the selected device. To enter this page, you can either double click the device module or right click to select the option. To change any setting on this page, click "Change".



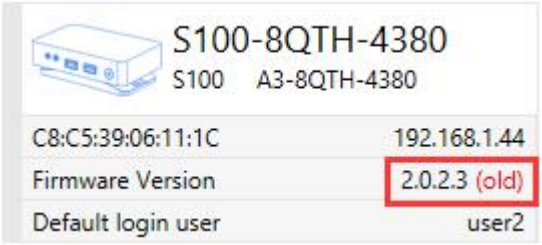
- **Notification:** to send a notification to the selected user.

Notification sent from host:

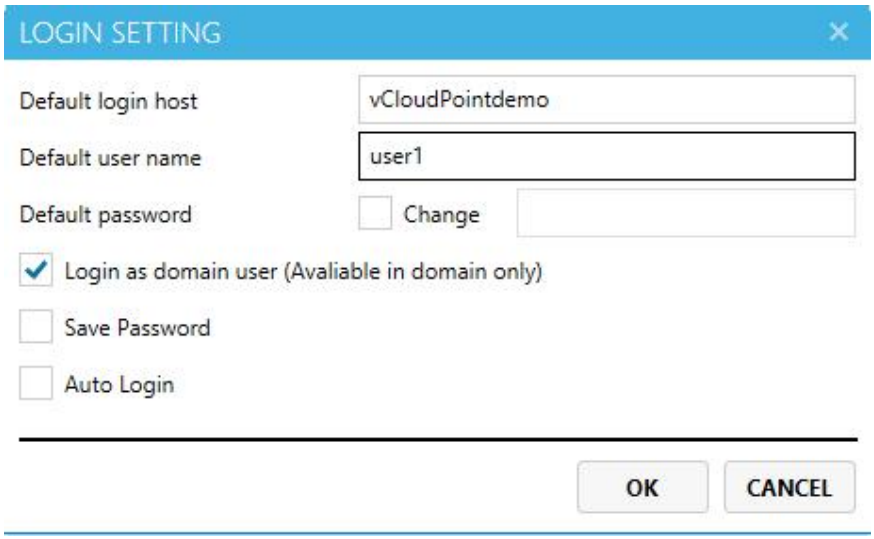


Notification to the device:

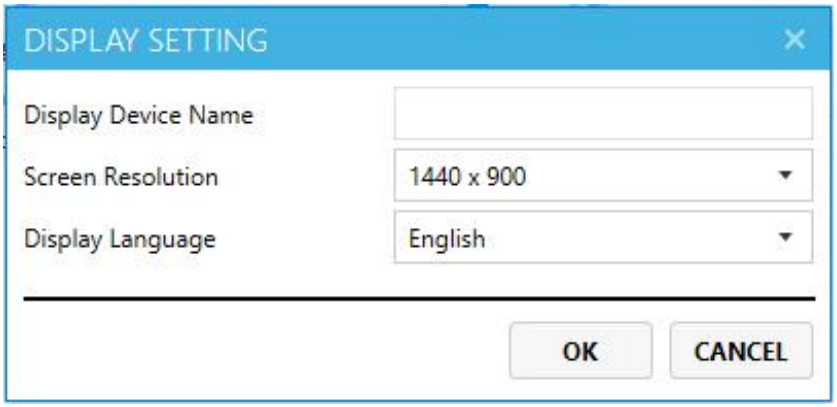
- **Reboot:** to reboot the selected devices.
- **Poweroff：** to shut down the selected devices.
- **Update Firmware:** to update the firmware of the selected devices; only works on devices marked "(old)" in red.



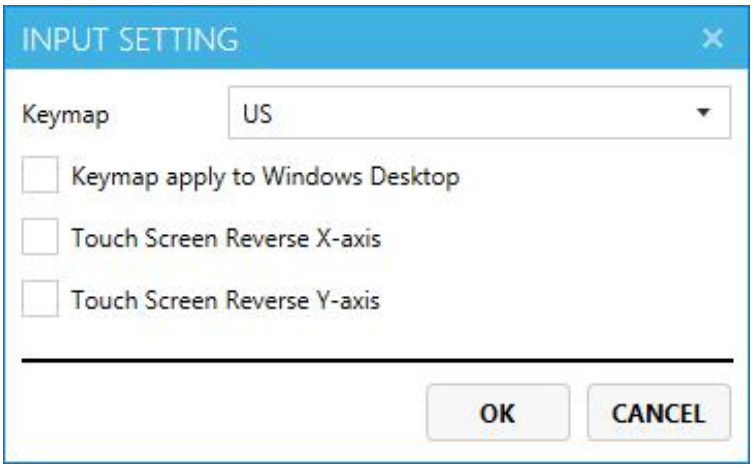
- **Login Host:** to log the selected devices into the designated host; only works on devices with default login settings.
- **Login Setting:** to change the selected devices login settings including default login host, default user name, default password, domain selection, password saving selection and auto login selection which will be used for the devices next login. When multiple devices are selected, the Default User Name field is disabled and password change only works when the same password is used by all users. If the host is in the domain while users are logging into the host as local users (rather than domain), cancel the selection of Login as domain users (Available in domain only).



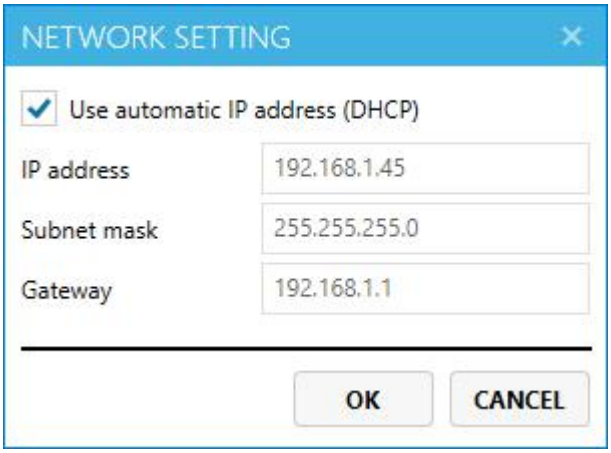
- **Display Setting:** to change the display settings of the selected devices including device name, screen resolution and language; when multiple devices are selected, the Display Device Name field is disabled.



- **Input Setting:** to change the input settings of the selected devices including keymap and touch screen X & Y axis.



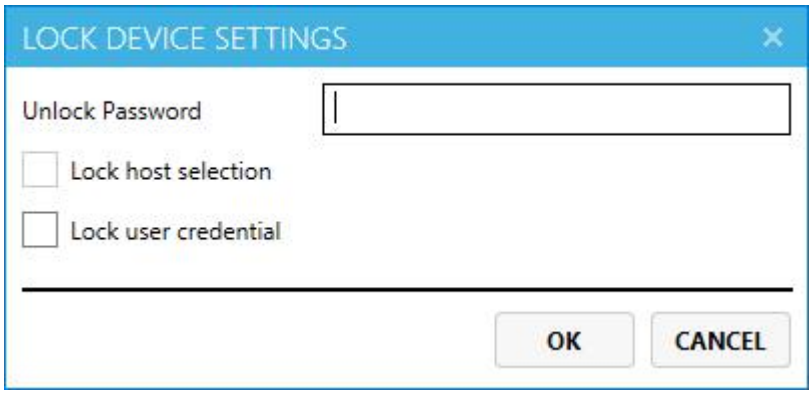
- **Network Setting:** to change the network settings of the selected device to using DHCP automatic or customized IP address; this option is available only when a single device is selected and WIFI setting is not available on remote control through network.



- **Boot Password:** to set up a password on device boot so that the user is required to enter password to use the device.

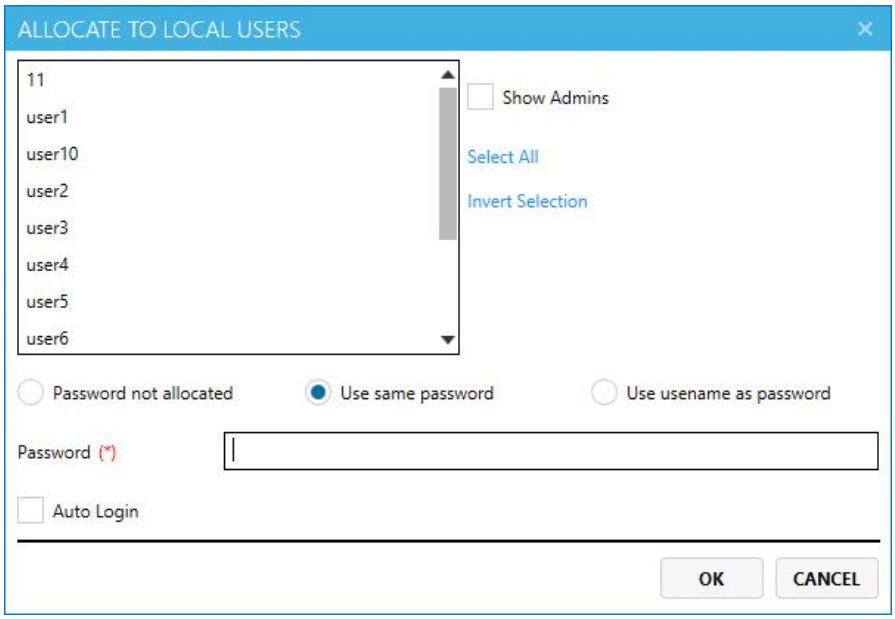
=

- **Lock Device Settings:** to lock down the settings on the Login, Display, Network and Lock menu in order to prevent other users from changing these settings. Lock host selection is to disable the host selection and restrict the user to login to the selected host. A host must be selected before this option is selected. Lock user credential is to disable the user to change user name and password and restrict the user to login with the saved user name and password. A correct user name and its related password must be saved before this option is selected. After you set up a password for the device, this option will be replaced by “Unlock Device Settings” on its right click menu.



- **Unlock Device Settings：** To unlock the device settings. The lock-down password will be clear on clicking this option will immediately clear the earlier lock password without the need to enter the password. After you unlock the settings for the device, this option will be replaced by “Lock Device Settings” on its right click menu.

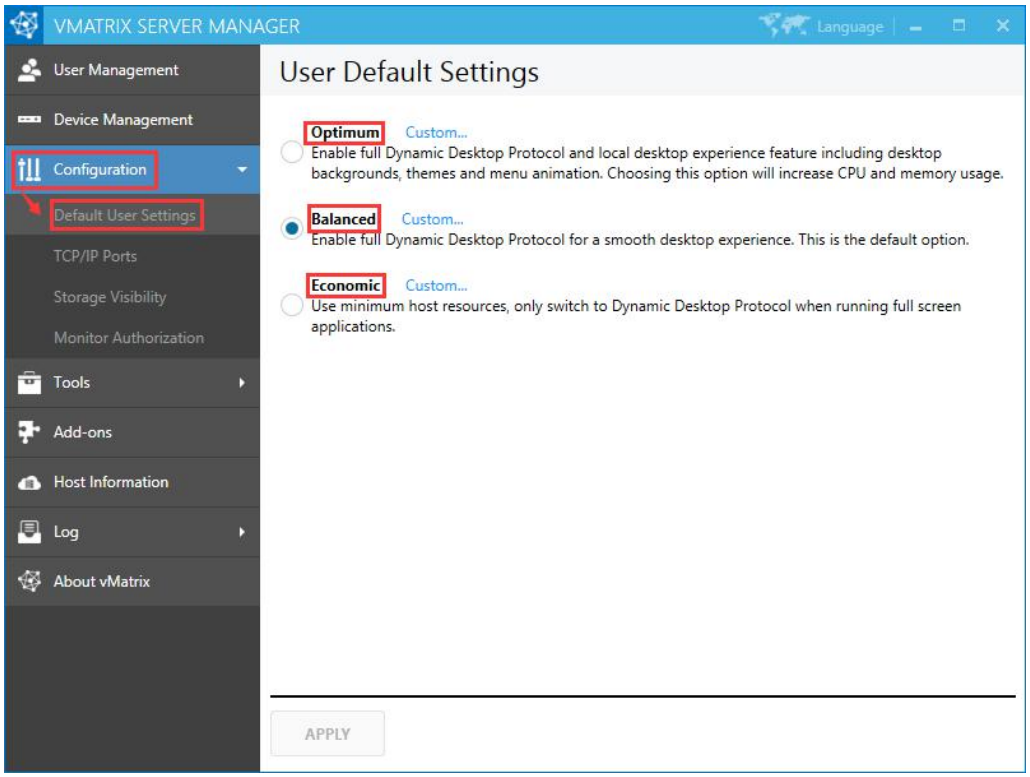
- **Allocate to local users:** randomly allocate the selected devices to local users. Note: if the number of devices exceeds the number of existing user, some devices will not be collocated. If password is not allocated, auto login cannot be selected.



5.3 Configuration

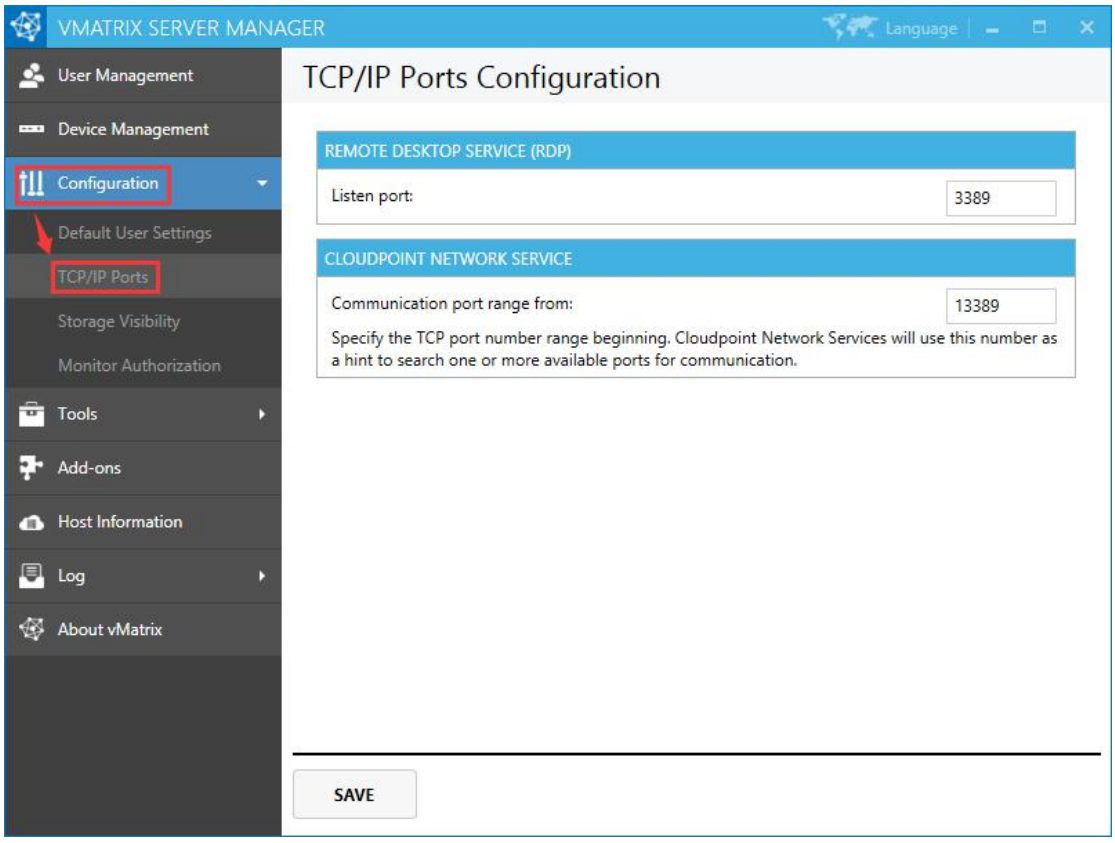
5.3.1 Default User Settings

Default settings will apply for those users using "Default" as their advance settings. Changes will take effect at user's next login. (Refer to section 5.1.7)

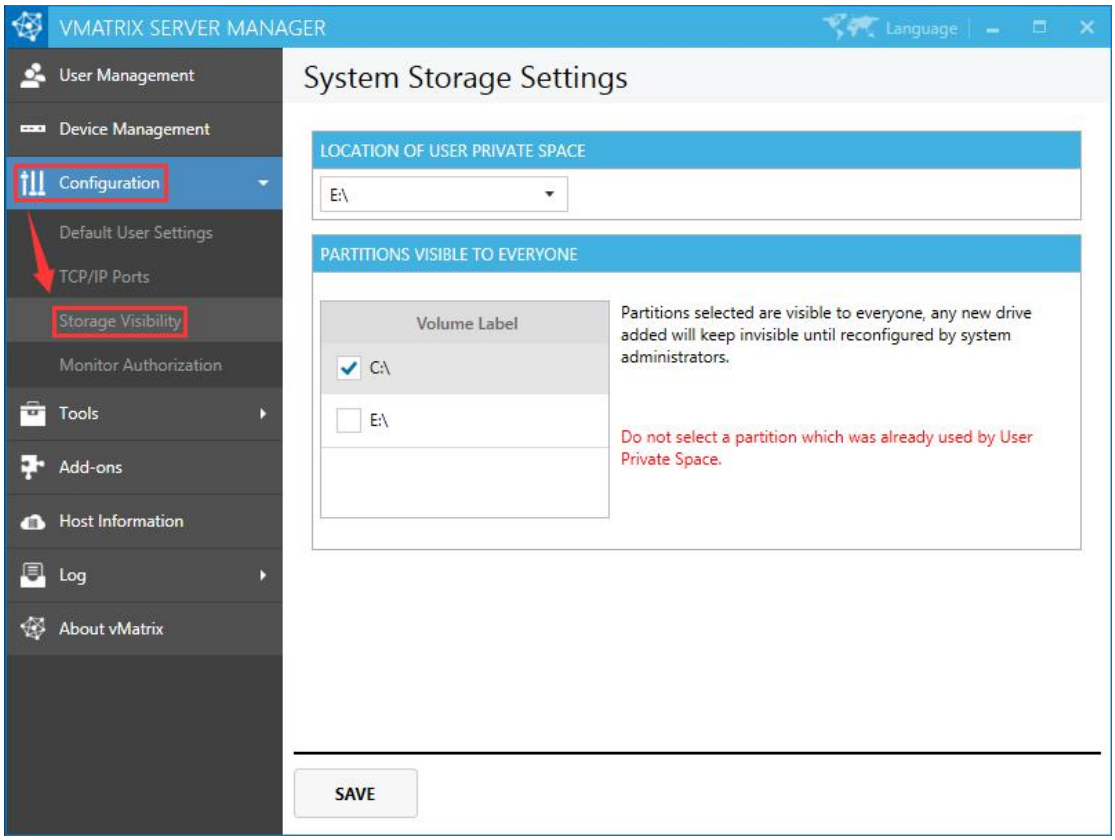


5.3.2 TCP/IP Ports

During the operation of your vCloudPoint system, some of your network ports are utilized by vMatrix Server Manager and the zero clients. The vMatrix Network Service uses both TCP and UDP ports. The broadcast port is fixed using UDP 13389, and the listen port begins with TCP 13389 and extends to at least 3 extra plus 3 for each user. For example, if there are 10 users needing to connect remotely, you need to at least add ports of UDP 13389-13389, TCP 13389-13422 (13422 is the minimum and reserve more if possible). The listen port for Remote Desktop Service itself also should be open. It uses TCP 3389. The default settings are recommended to be used but you can still customize the ports if needed. When customizing these ports, your zero clients will be disconnected.



5.3.3 Storage Visibility



- **LOCATION OF USER PRIVATE SPACE:**

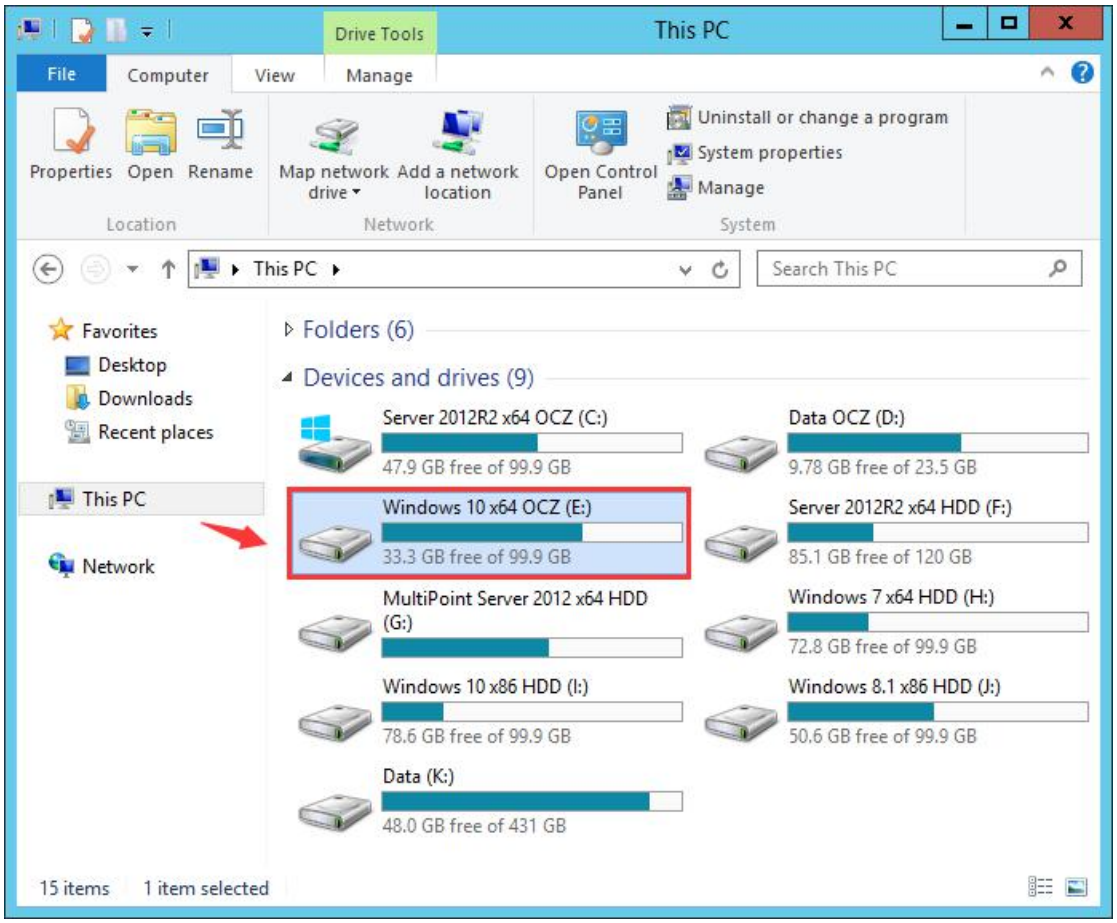
The disk partition which user files are stored. DO NOT select the partition that system or programs are installed.

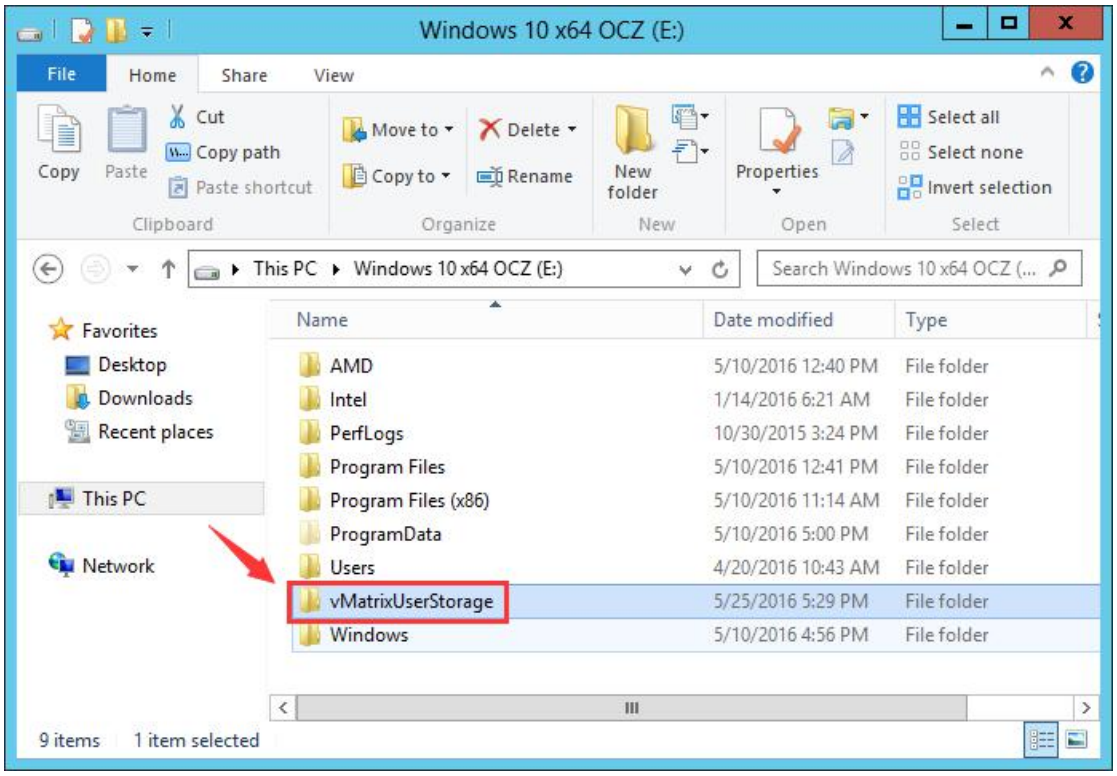
- **PATRTITIONS VISIBLE TO EVERYONE:**

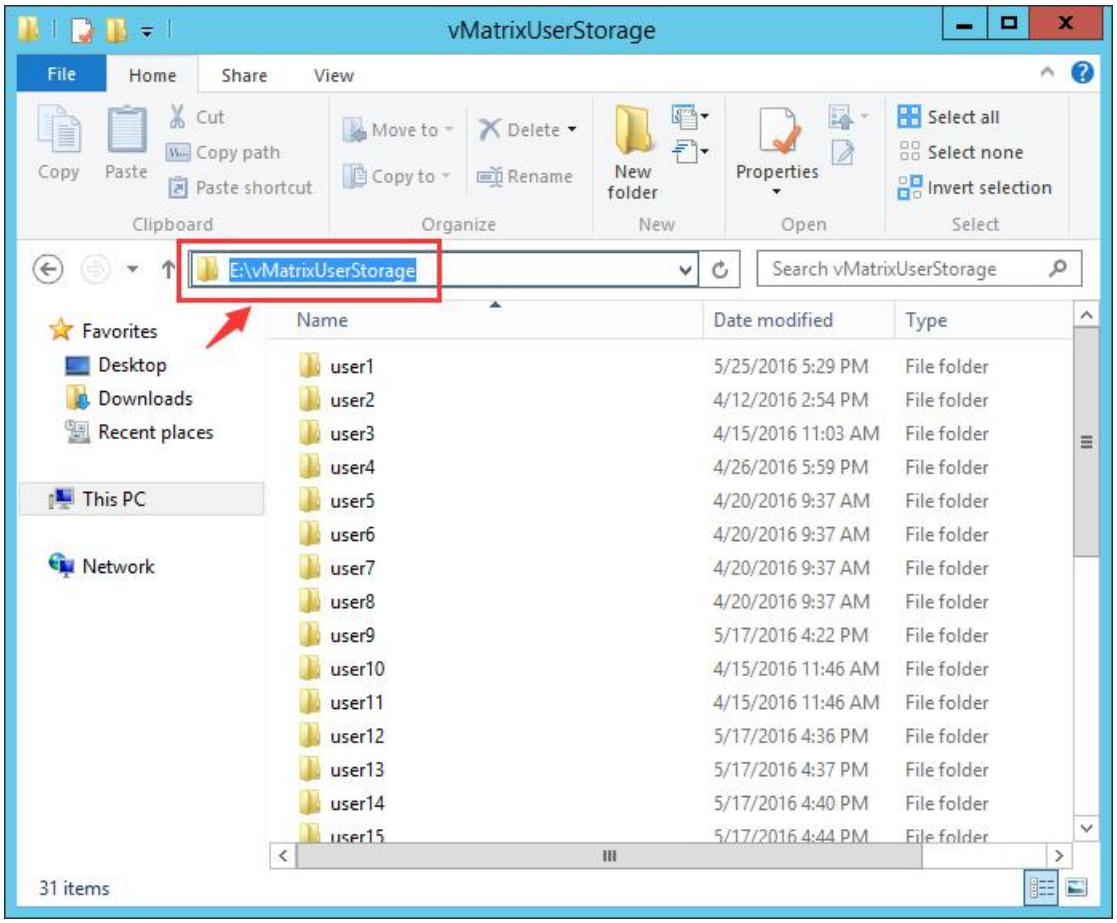
The partitions which are visible to all users. DO NOT select the one which has already been chosen for storing user files.

Note: disk partitions viewed by common users will be different from those by administrators.

Administrator's view:

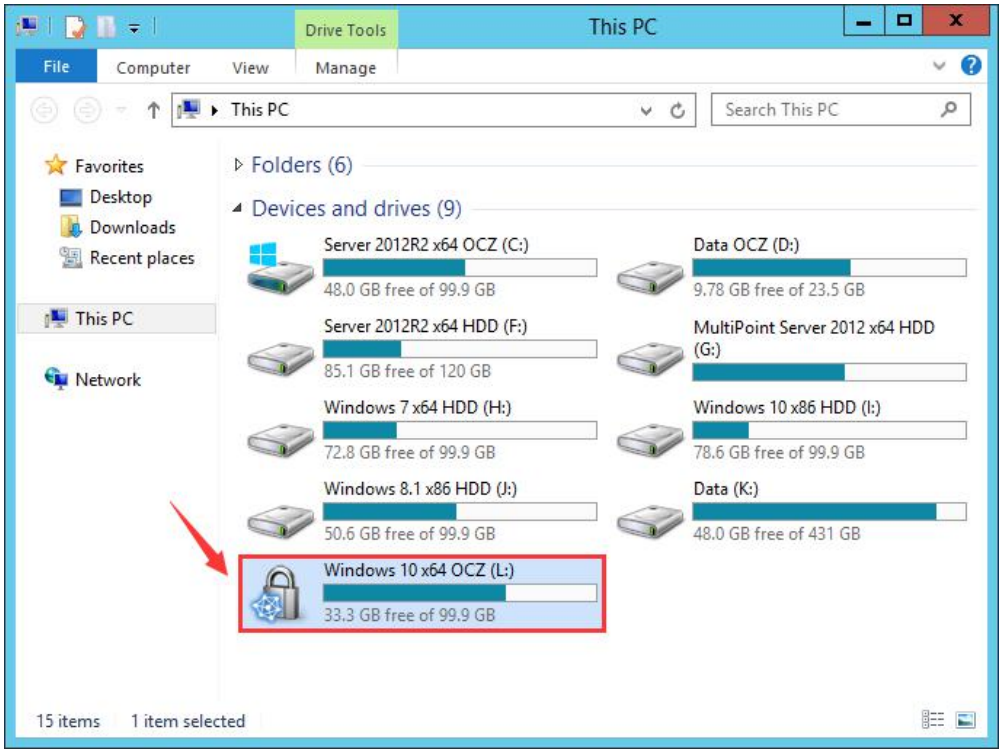

This PC
Drive Tools
File
Computer
View
Manage
Properties
Open
Rename
Map network drive
Add a network location
Open Control Panel
Uninstall or change a program
System properties
Manage
Location
Network
System
This PC
Search This PC
Favorites
Desktop
Downloads
Recent places
This PC
Network
Folders (6)
Devices and drives (9)
Server 2012R2 x64 OCZ (C:)
47.9 GB free of 99.9 GB
Data OCZ (D:)
9.78 GB free of 23.5 GB
Windows 10 x64 OCZ (E:)
33.3 GB free of 99.9 GB
Server 2012R2 x64 HDD (F:)
85.1 GB free of 120 GB
MultiPoint Server 2012 x64 HDD (G:)
Windows 7 x64 HDD (H:)
72.8 GB free of 99.9 GB
Windows 10 x86 HDD (I:)
78.6 GB free of 99.9 GB
Windows 8.1 x86 HDD (J:)
50.6 GB free of 99.9 GB
Data (K:)
48.0 GB free of 431 GB
15 items
1 item selected

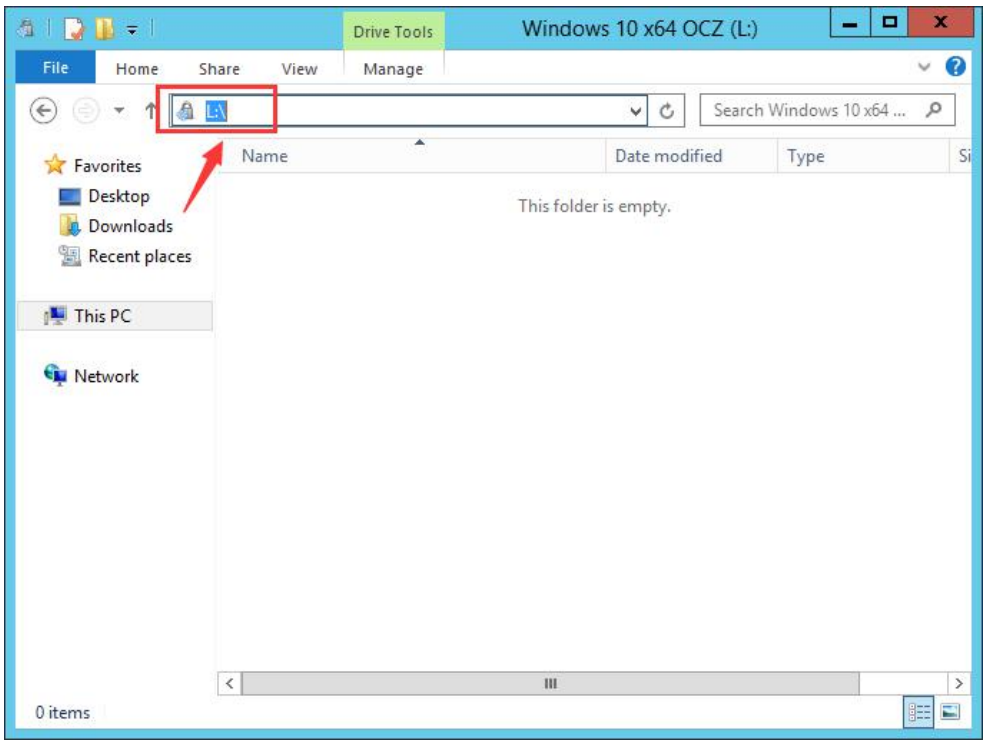

Windows 10 x64 OCZ (E:)
File
Home
Share
View
Copy
Paste
Cut
Copy path
Paste shortcut
Clipboard
Move to
Copy to
Delete
Rename
Organize
New folder
New
Properties
Open
Select all
Select none
Invert selection
Select
This PC
Windows 10 x64 OCZ (E:)
Search Windows 10 x64 OCZ (...
Favorites
Desktop
Downloads
Recent places
This PC
Network
Name
Date modified
Type
AMD
5/10/2016 12:40 PM
File folder
Intel
1/14/2016 6:21 AM
File folder
PerfLogs
10/30/2015 3:24 PM
File folder
Program Files
5/10/2016 12:41 PM
File folder
Program Files (x86)
5/10/2016 11:14 AM
File folder
ProgramData
5/10/2016 5:00 PM
File folder
Users
4/20/2016 10:43 AM
File folder
vMatrixUserStorage
5/25/2016 5:29 PM
File folder
Windows
5/10/2016 4:56 PM
File folder
9 items
1 item selected



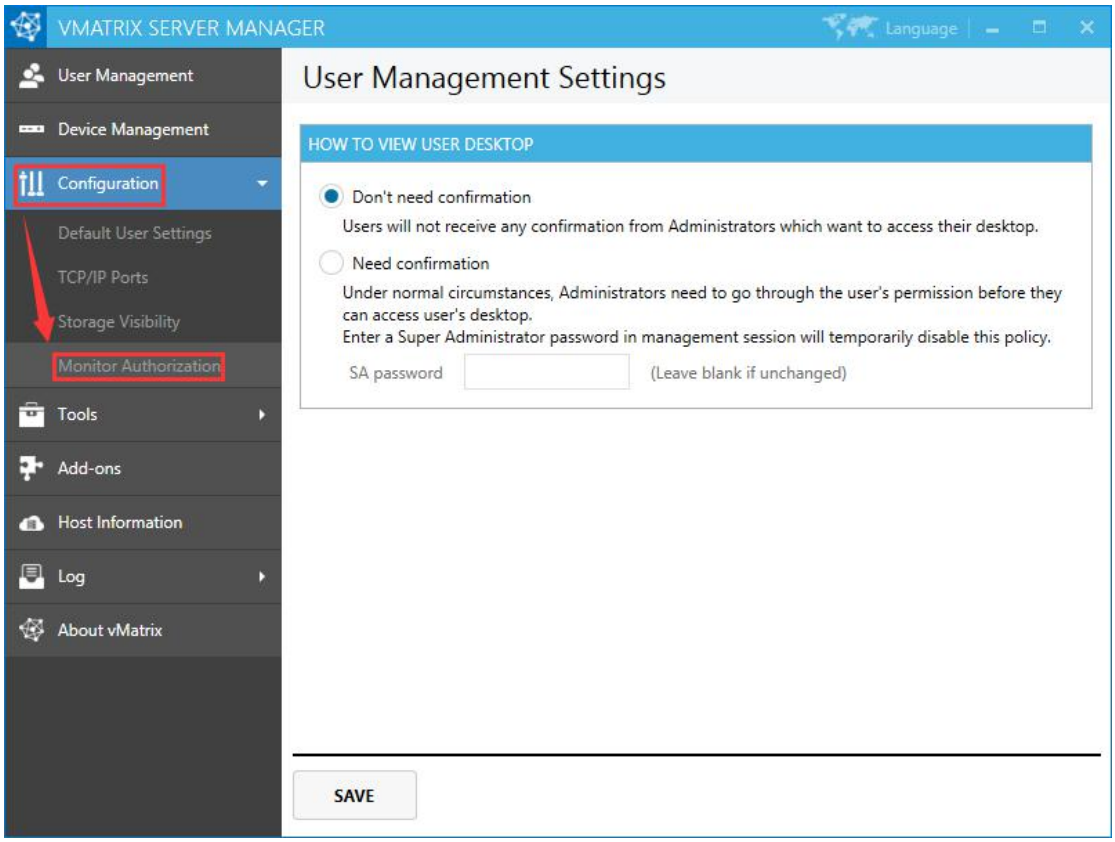
User's view:

The root folder of the User Private Space viewed by common users is the third-level subfolder beneath the root folder viewed by administrators (Root-> Folder: vMatrixUserStroage -> Folder: %name of the user%). The partition letter of the User Private Space falls to a latter letter of that viewed by administrators.


Drive Tools
This PC
File
Computer
View
Manage
This PC
Search This PC
Favorites
Desktop
Downloads
Recent places
This PC
Network
Folders (6)
Devices and drives (9)
Server 2012R2 x64 OCZ (C:)
48.0 GB free of 99.9 GB
Data OCZ (D:)
9.78 GB free of 23.5 GB
Server 2012R2 x64 HDD (F:)
85.1 GB free of 120 GB
MultiPoint Server 2012 x64 HDD (G:)
Windows 7 x64 HDD (H:)
72.8 GB free of 99.9 GB
Windows 10 x86 HDD (I:)
78.6 GB free of 99.9 GB
Windows 8.1 x86 HDD (J:)
50.6 GB free of 99.9 GB
Data (K:)
48.0 GB free of 431 GB
Windows 10 x64 OCZ (L:)
33.3 GB free of 99.9 GB
15 items
1 item selected

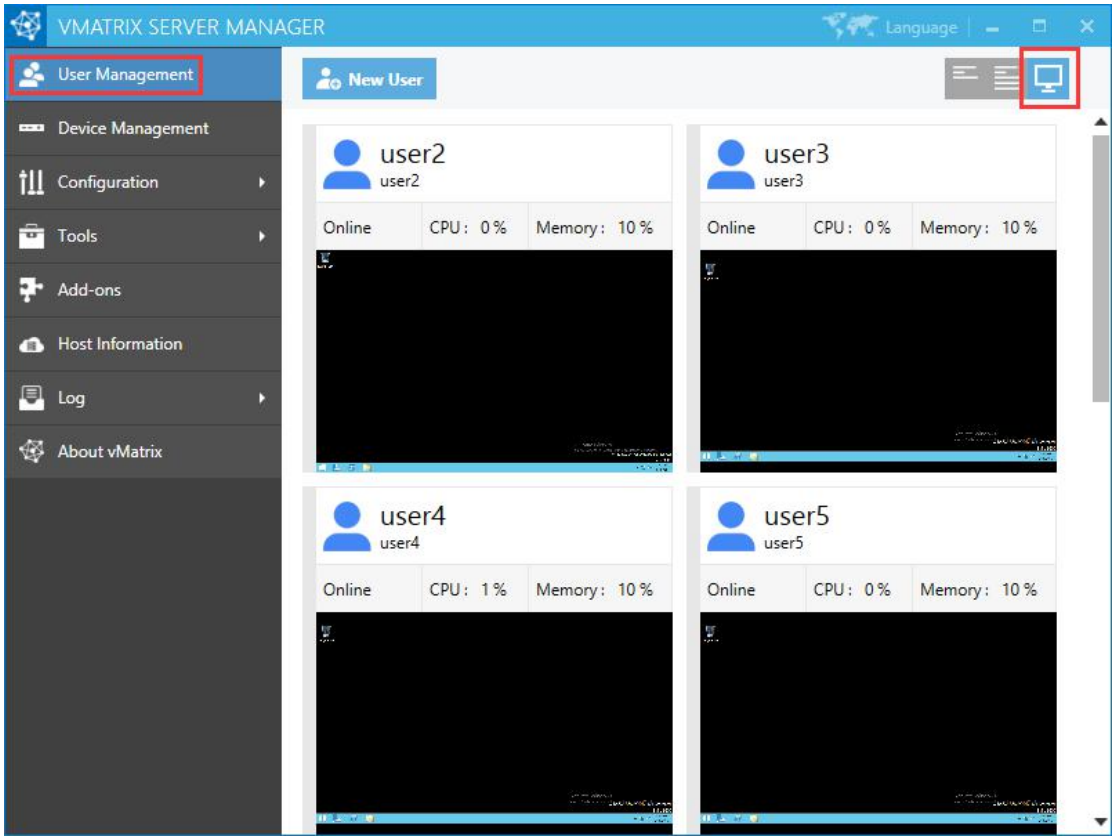

Drive Tools
Windows 10 x64 OCZ (L:)
File
Home
Share
View
Manage
Search Windows 10 x64 ...
Favorites
Desktop
Downloads
Recent places
This PC
Network
Name
Date modified
Type
This folder is empty.
0 items

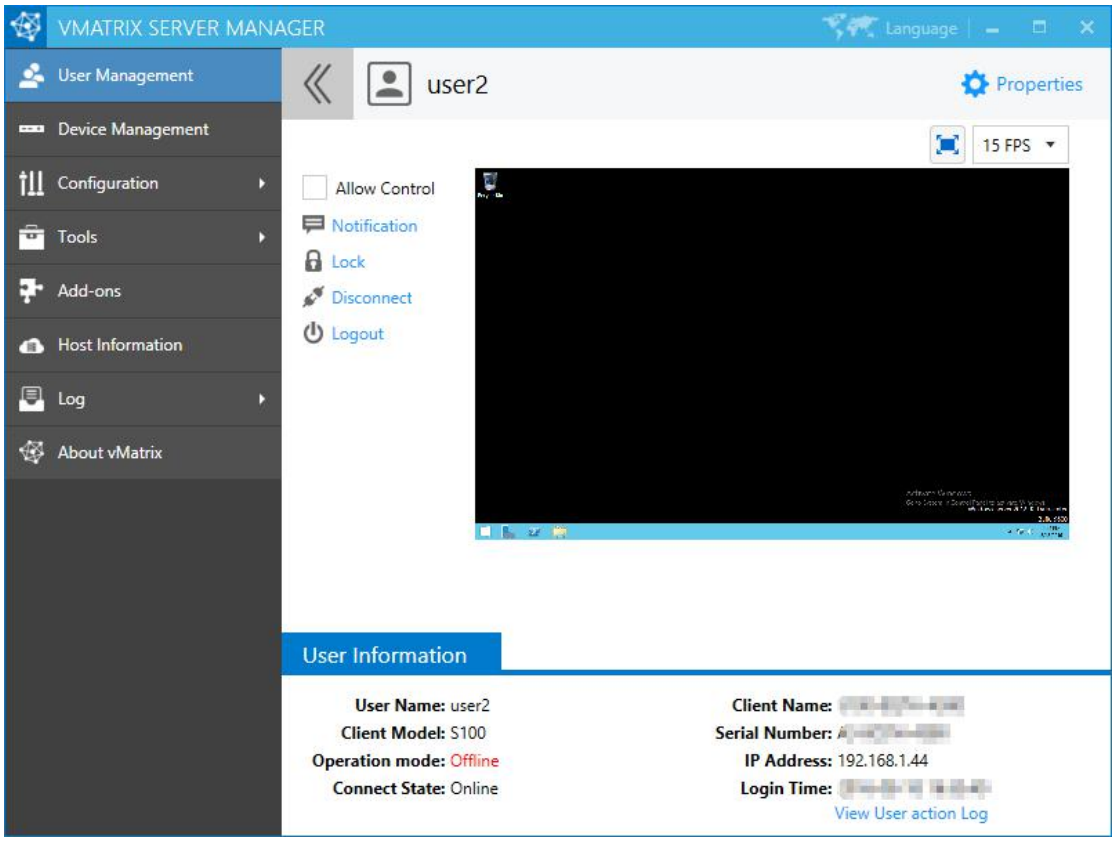
5.3.4 Monitor Authorization



- **Don’t need confirmation:**

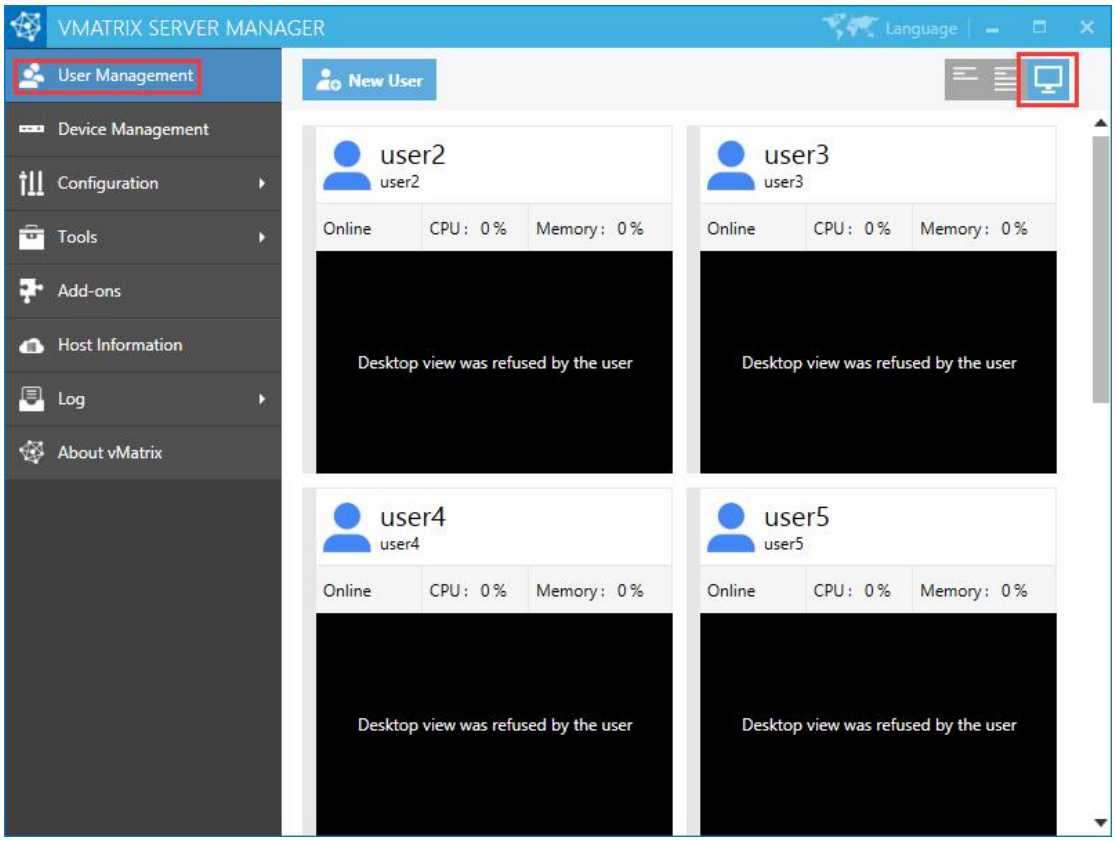
administrators can monitor user desktops without requiring confirmation from the monitored users.

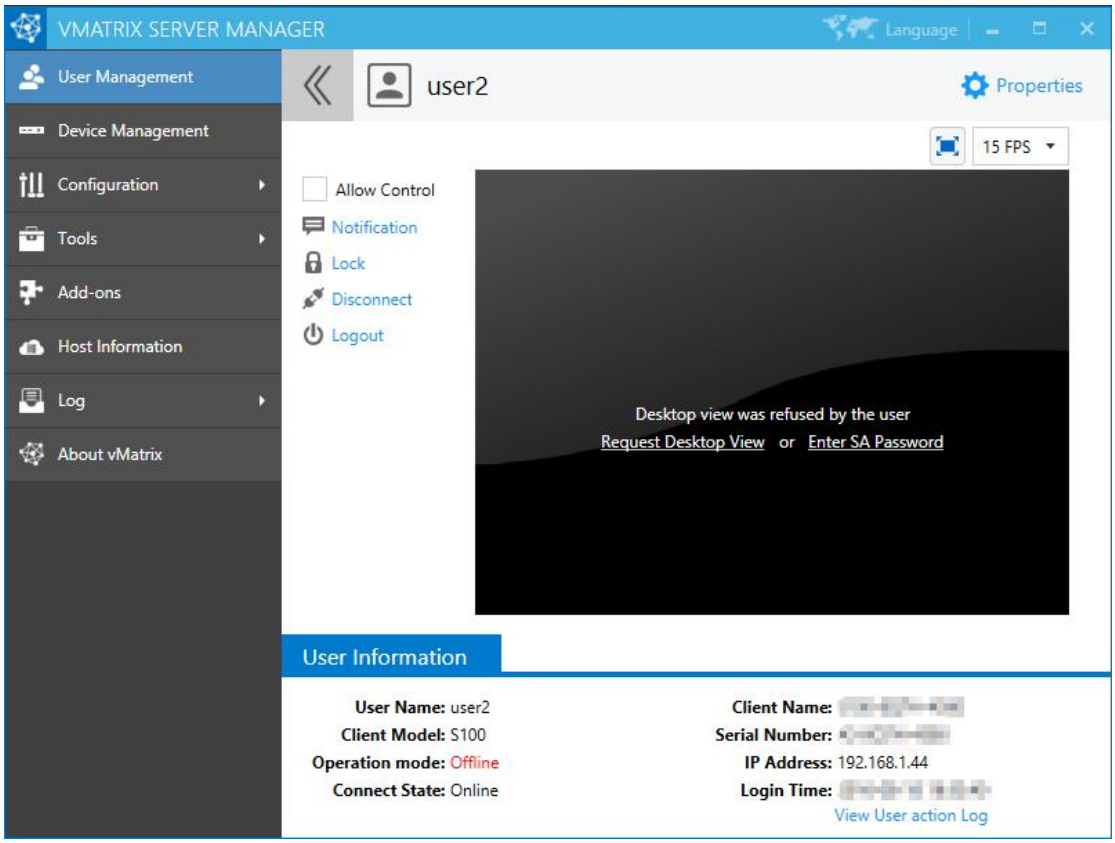




- **Need confirmation:**

you are required to setup a Super Administrator (SA) password when this option is selected. By selecting this option, administrators need to send request to the user or enter SA password in order to get approval to monitor the user desktop. (Note: as local system administrators have the highest privileges, there is no effective way to prevent local system administrators from changing the settings, administrators can simply cancel monitor authorization by simply changing the setting to “Don’t need confirmation” or changing the SA password, however, this option allows organization owners to track management logs which is available to view through “Log” -> “Management Log” of this software. Refer to section 5.7.2.)

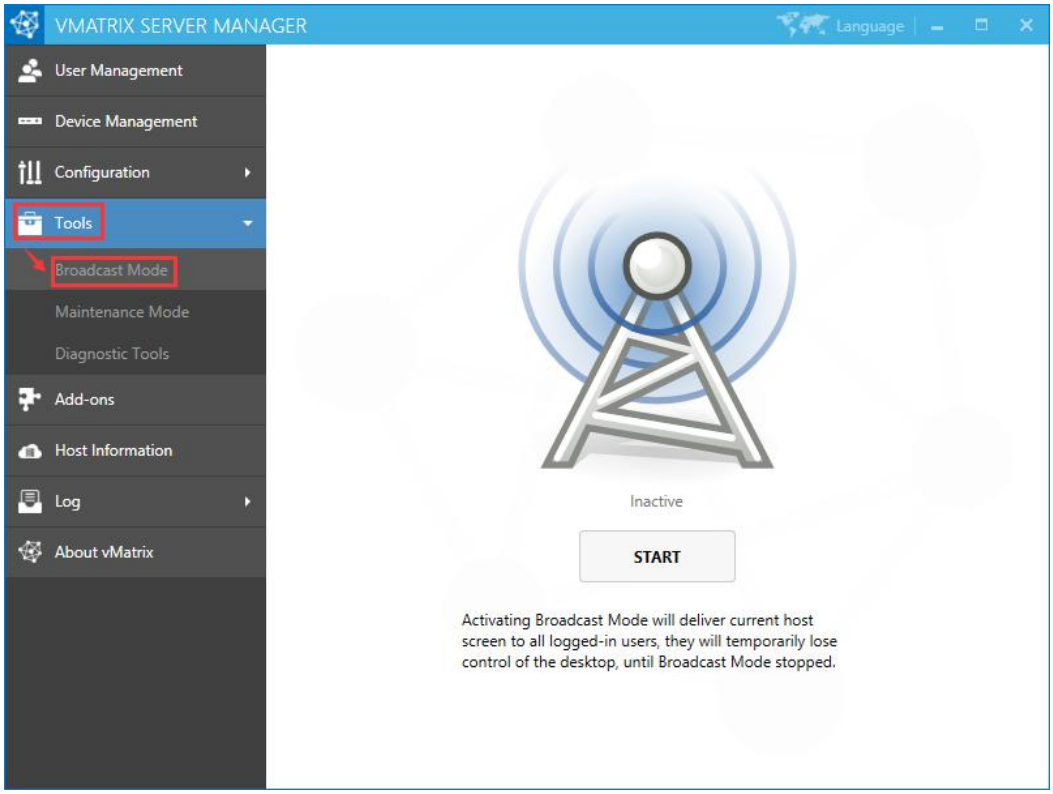




5.4 Tools

5.4.1 Broadcast Mode

Activating this mode will display the entire host screen to the users who are currently connecting to the host. All users will lose control of their desktops when Broadcast Mode is on.



Note:

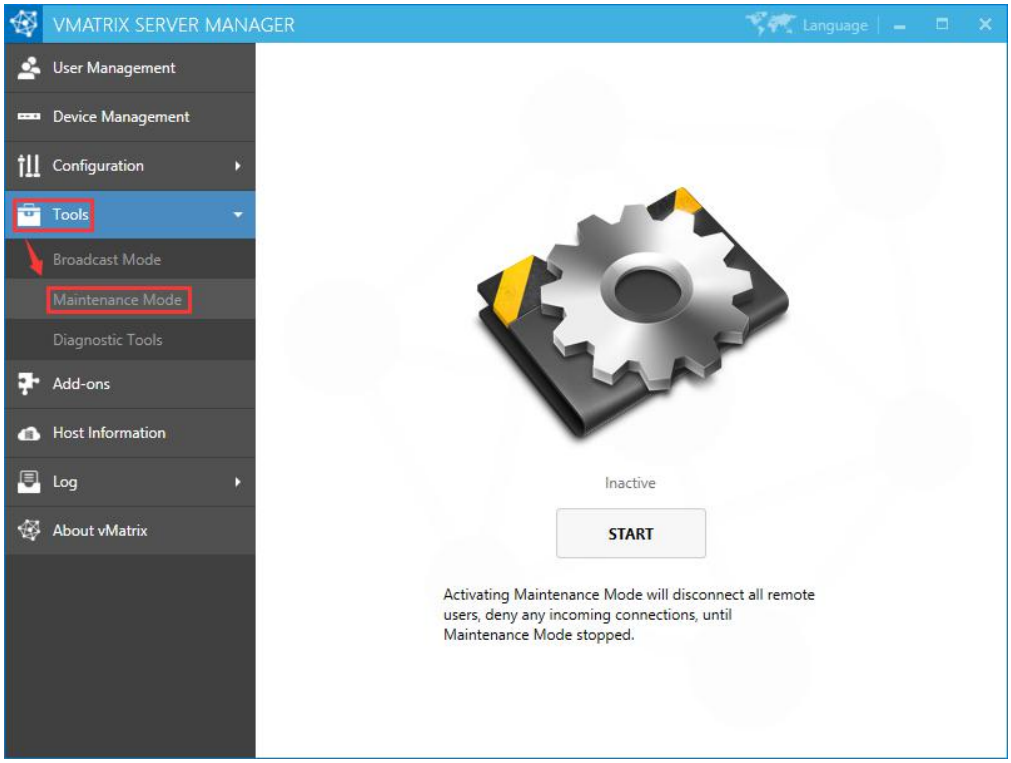
1) Users who latter connect to the host after Broadcast Mode activation will also lose control of their desktops and be given the host screen at the moment they enter their sessions.

2) Broadcast Mode is not effective on users who have logged in but are disconnected (back to the device Login page).

3) When Broadcast Mode is on, desktop resolution of the effected users will be changed to that of the host. Therefore, make sure the host desktop resolution is supported by the effected users' monitor, otherwise, the user monitor will go blank due to desktop resolution out of range.

5.4.2 Maintenance Mode

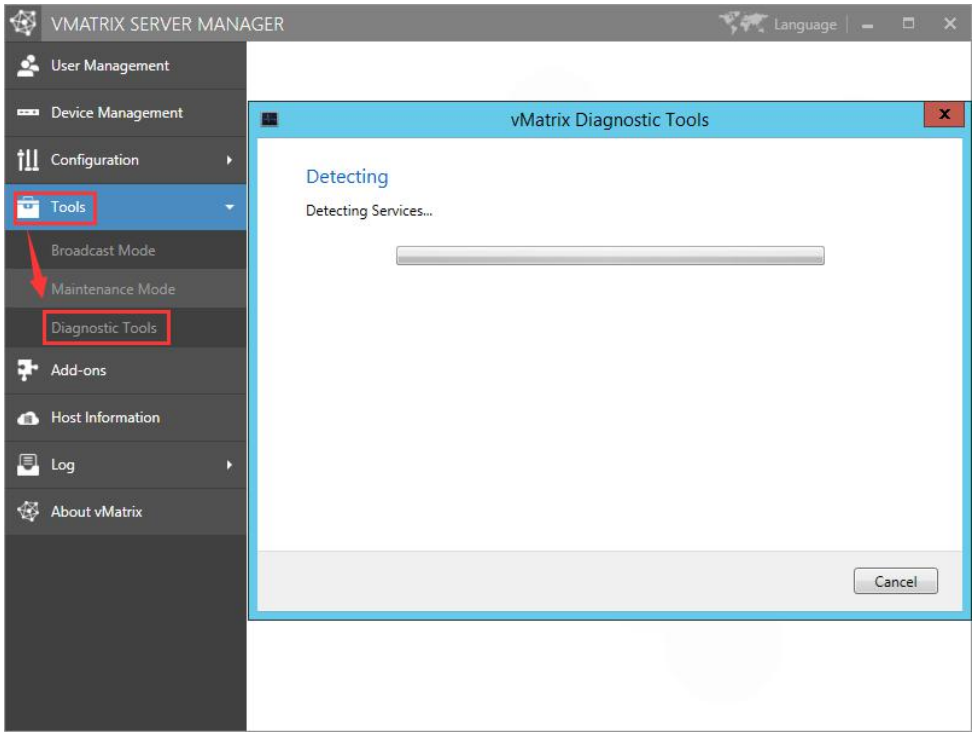
Activating Maintenance Mode will disconnect all connecting users and also deny any incoming connection request from users. This is often used when the host is under maintenance.



Note: Activating Broadcast Mode just disconnects user sessions, but not logged them out. Users will find their files & applications still in place when Maintenance Mode is off.

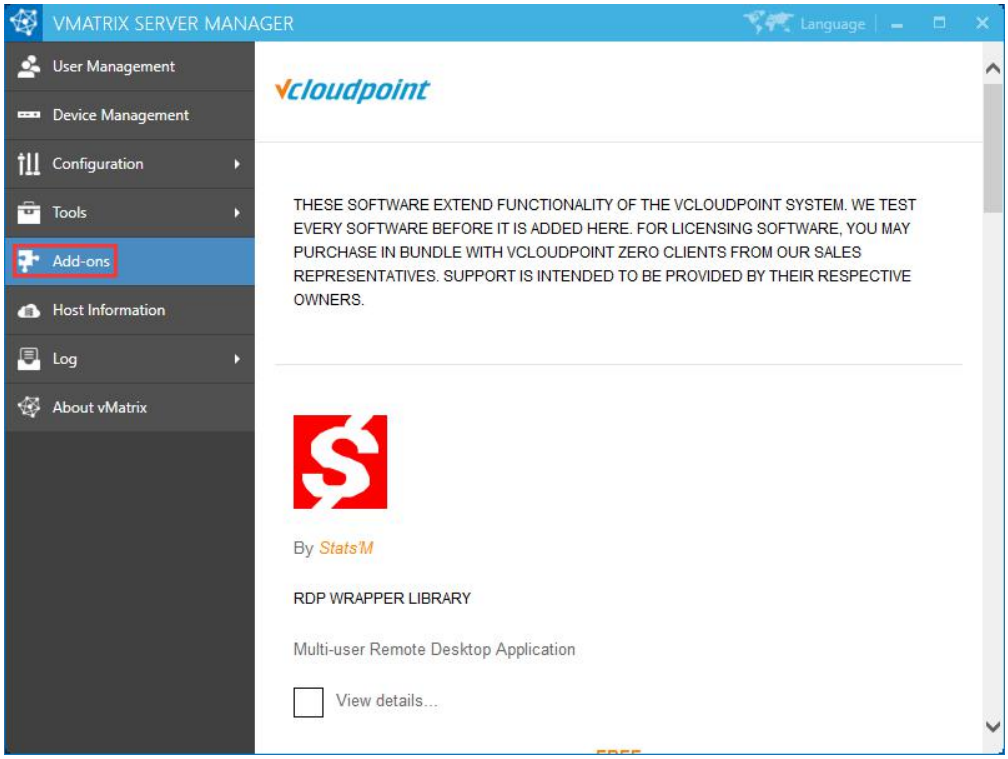
5.4.3 Diagnostic Tools

Running Diagnostic Tools will initiate a check on vMatrix Server Manager and prompts you to fix accordingly if any problem is detected. You can also launch the Diagnostic Tools at Programs and Features if vMatrix Server Manager cannot be opened.



5.5 Add-ons

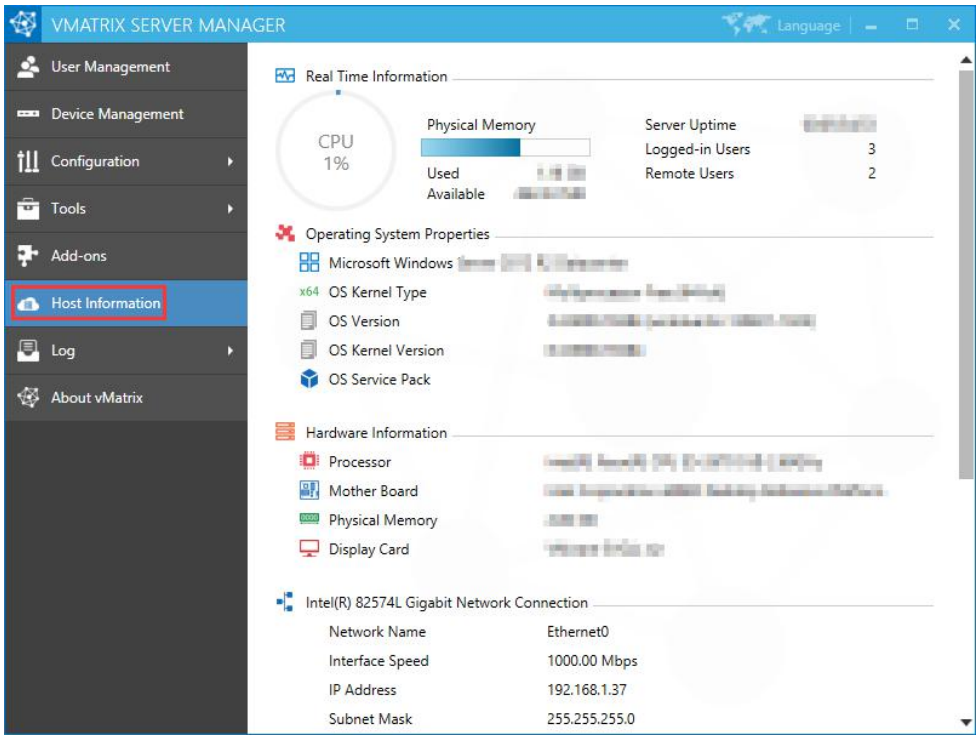
This page contains recommended software that may extend functionality of the vCloudPoint System or are frequently used with vCloudPoint products. The software has been tested compatible with the vCloudPoint system.



Note: this page connects to web page on vCloudPoint website through a web viewer window, thus it requires time when loading contents. If you do not provide internet connection to the host, the page contents will not show.

5.6 Host Information

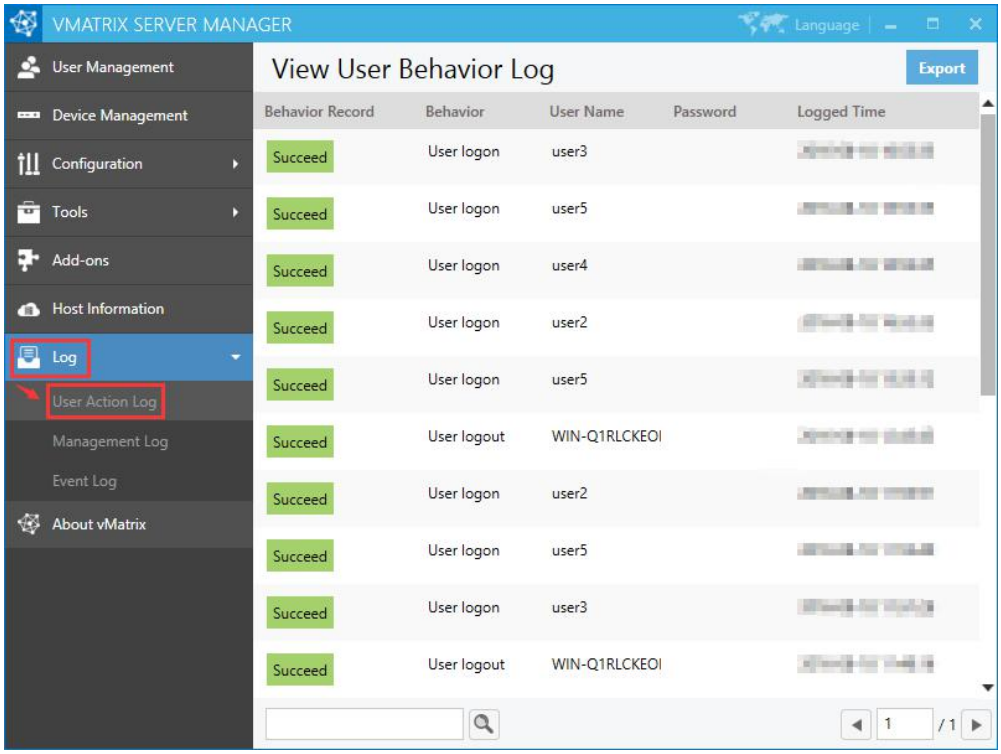
This page provides an overview of the host information including real time resources consumption, operating system, hardware and network.



5.7 Log

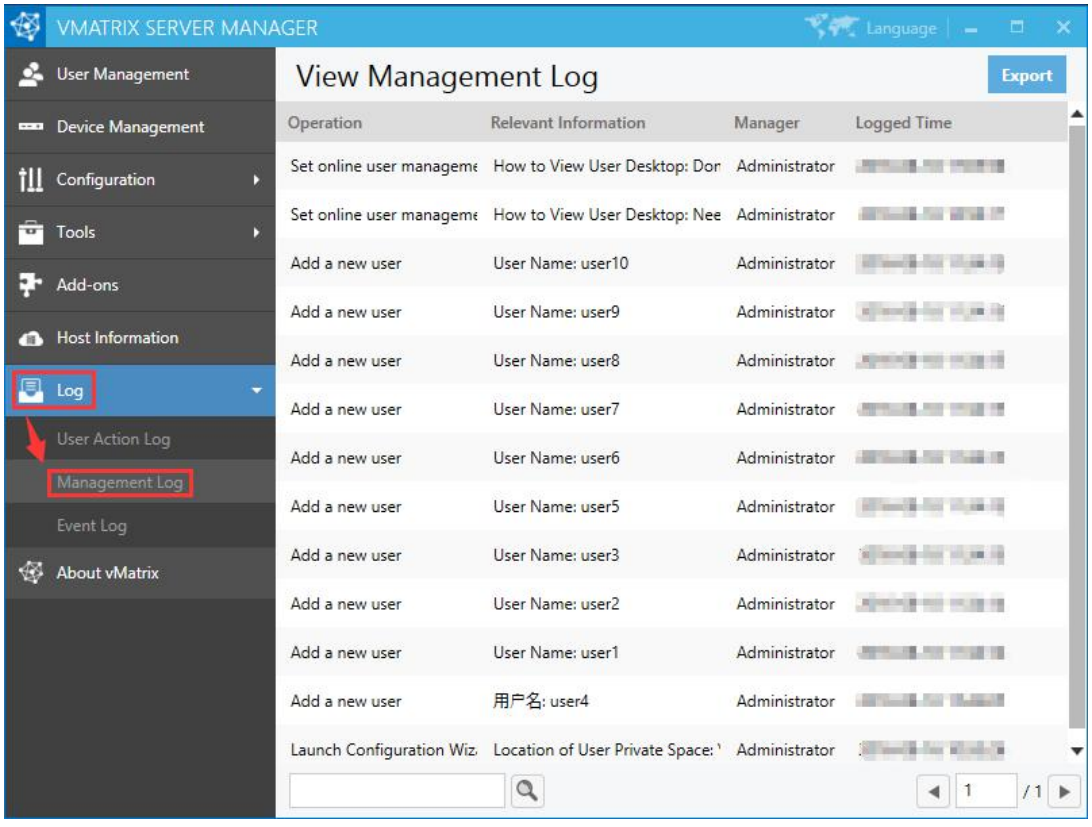
5.7.1 User Action Log

You can view all user actions since the installation of vMatrix Server Manager.



5.7.2 Management Action Log

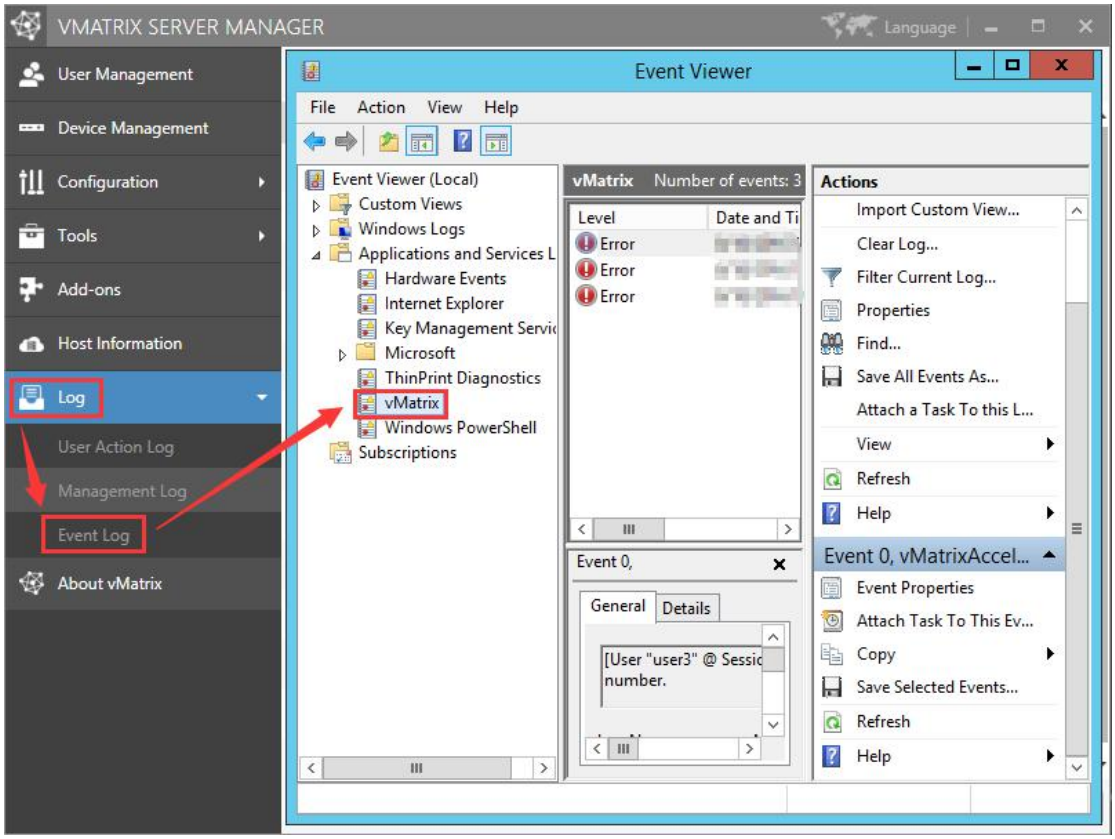
You can view all management actions since the installation of vMatrix Server Manager.



Note: This is where you can view the setting history of Monitor Authorization to avoid administrators overuse of monitoring over user desktops.

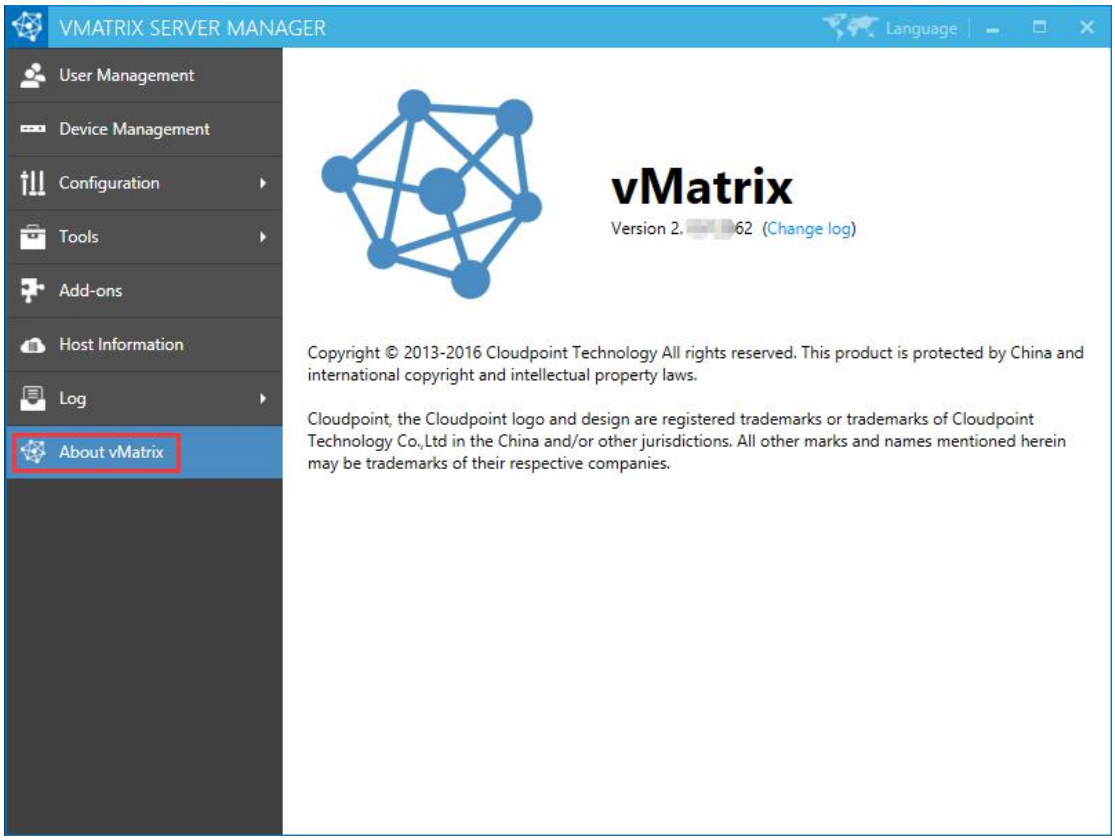
5.7.3 Event Log

Clicking on this menu will open the Windows Event Viewer and locate to the log of vMatrix. When vMatrix Server Manager encounters a problem, the vMatrix error log is helpful for our technical team to analyze and fix problems. As a result, please export and send the vMatrix error log to vCloudPoint technical team when you are reporting a problem. (It requires a few seconds to open the Event Viewer. Besides vMatrix Server Manager, Event Viewer also can be opened through Windows Start Menu.)



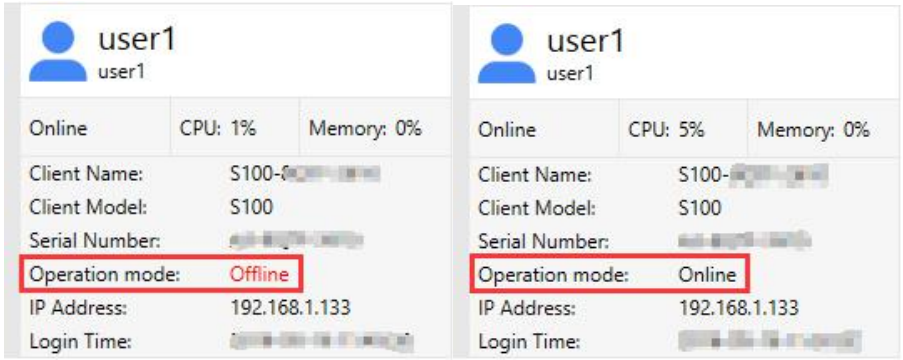
5.8 About vMatrix

This page displays the current version of vMatrix Server Manger and contains a change log describing main changes over the past versions. It also describes the ownership of the software.



5.9 Offline Usage

By factory default, vCloudPoint zero clients and vMatrix Server Manager software are configured to be used in an internet connected environment (WAN). If your host is provided with internet, no additional configuration is required to be done. The Operation Mode displayed on the User Management page of any device connecting to the host will automatically change from “Offline” in red to “Online” in black, meaning the device is properly working in an internet provided environment.



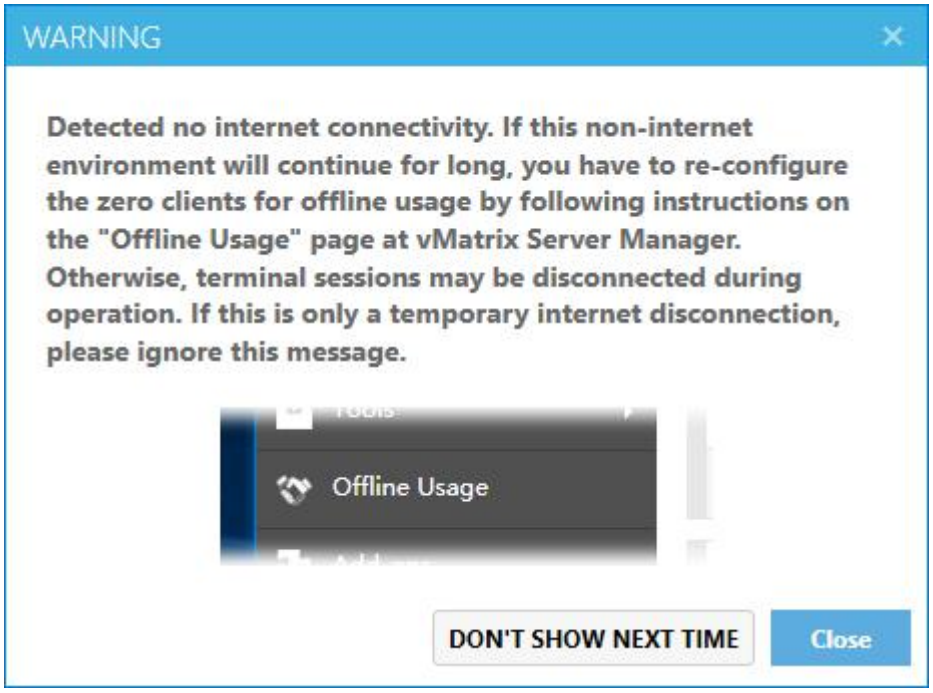
However, if the Operation Mode of the devices connecting to the host stays “Offline” in red all the time, you have to re-configure the devices for offline usage, otherwise the

devices may be disconnected in every few minutes during operation. Use cases where you may encounter this problem and need to apply for “Offline Usage” normally includes the followings:

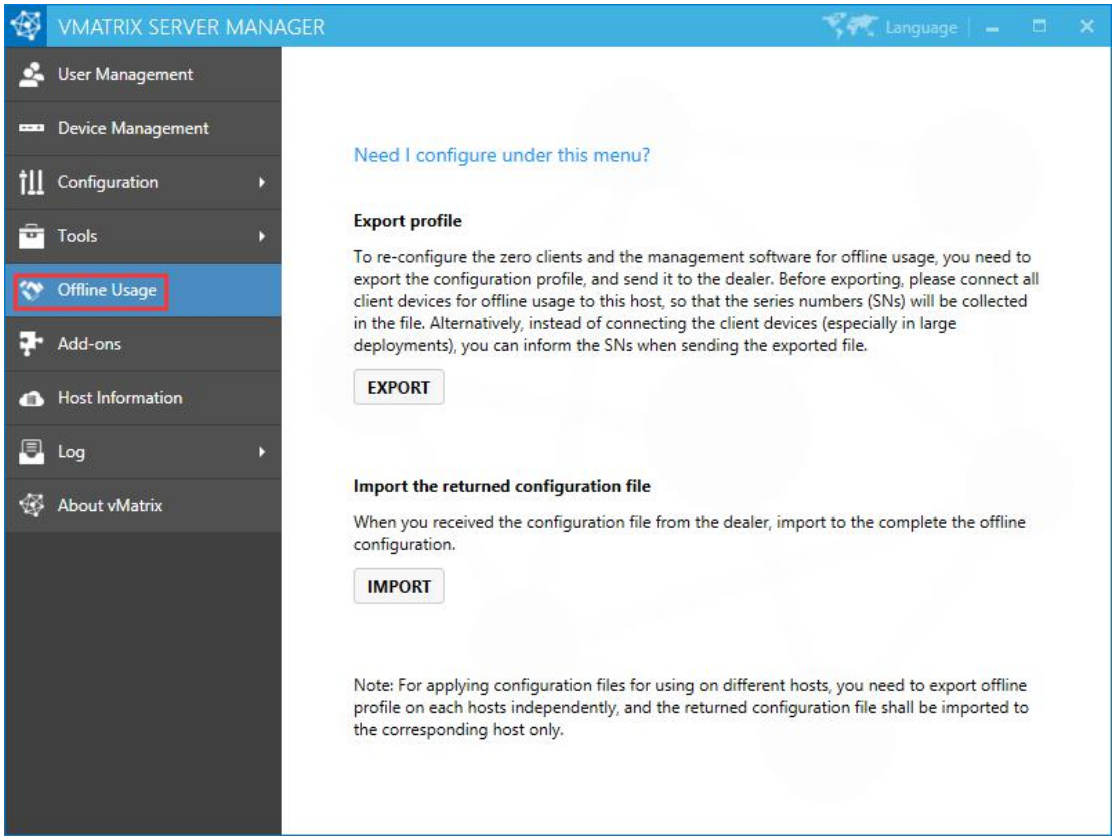
- you do not provide internet connection (WAN) to the host or the internet connection is extremely unreliable;
- you use proxy or VPN or internet control software that the host cannot access our configuration server: api.cpterm.com.

How to re-configure the devices for offline usage:

1) In a non-internet connection environment, vMatrix Server Manager will prompt a message window for offline usage configuration within 5 minutes after host boot.



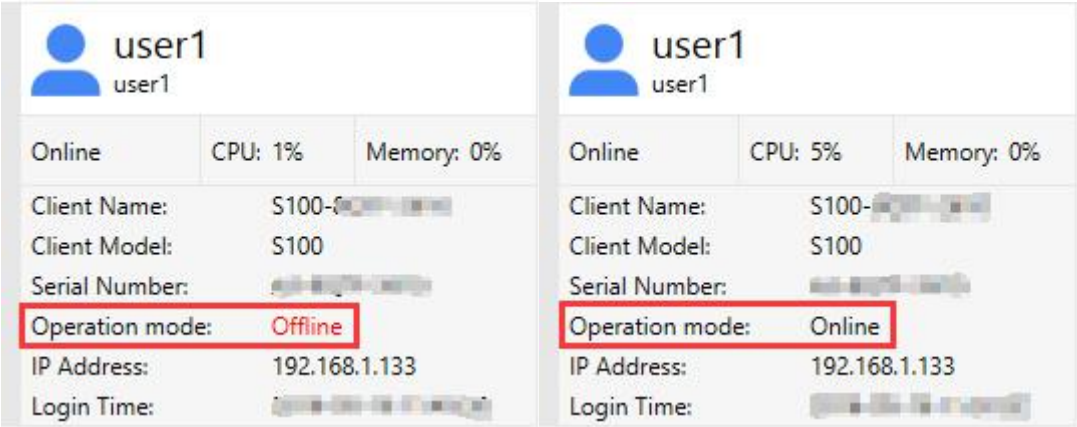
2) Open vMatrix Server Manager, go to Offline Usage page (this page only appears when the host is not provided with internet connection on system boot).



3) Export the configuration profile, and send it to the dealer. Before exporting, please connect all client devices for offline usage to the host, so that the serials numbers (SNs) will be collected in the file. Alternatively, instead of connecting the client devices (es pecially in large deployments), you can inform the SNs when sending the exported file.

4) The dealer will return you with a configuration file based on your last exported profile. Import the returned file to complete.

5) If your configuration for offline usage is successfully accomplished, the Operation Mode changes from “Offline” in red to “Online” in black.

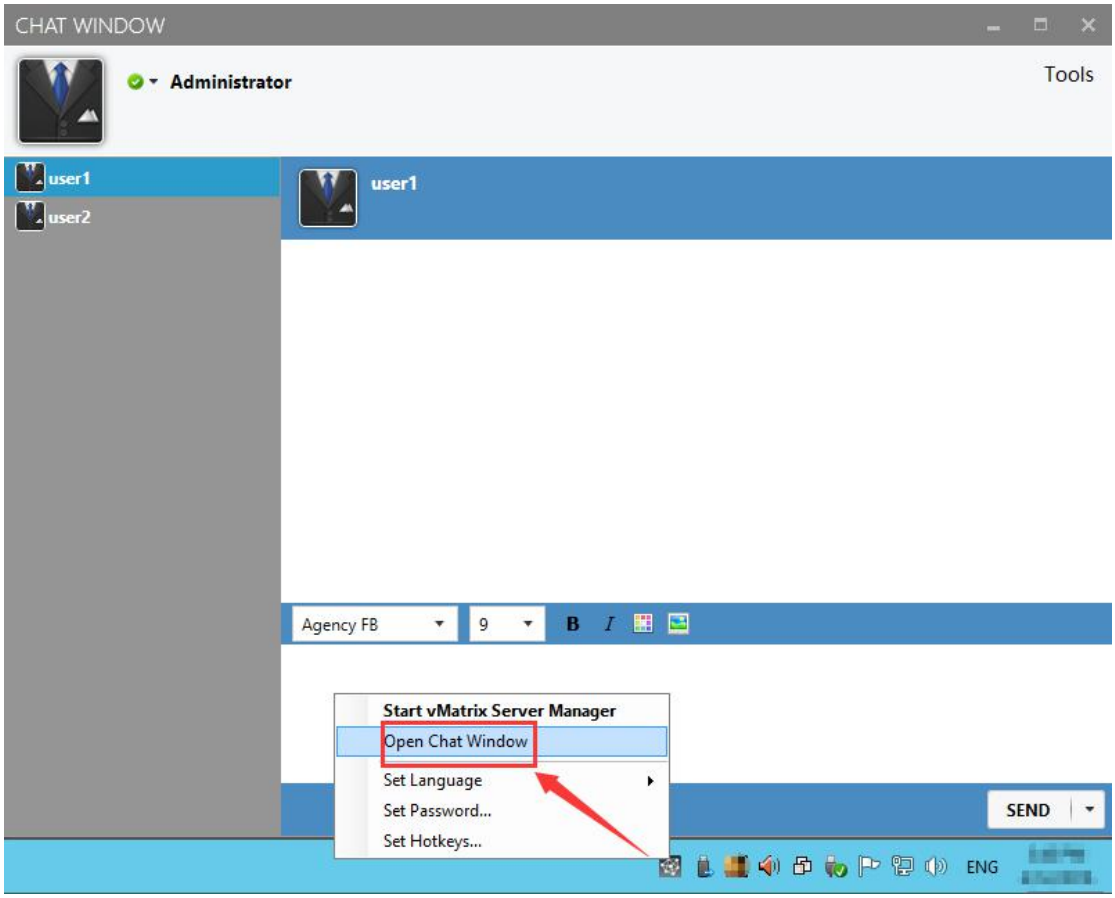


Note: Offline usage configuration on vMatrix Server Manager was introduced in the release of vMatirx Server Manager 2.0.2 version, if you are planning to use the vCloudPoint zero clients in a non-internet or unstable internet environment, please use 2.0.2 or a later version of vMatrix Server Manager, and follow the instructions on “Offline Usage” page to process.

5.10 More Tools & Settings

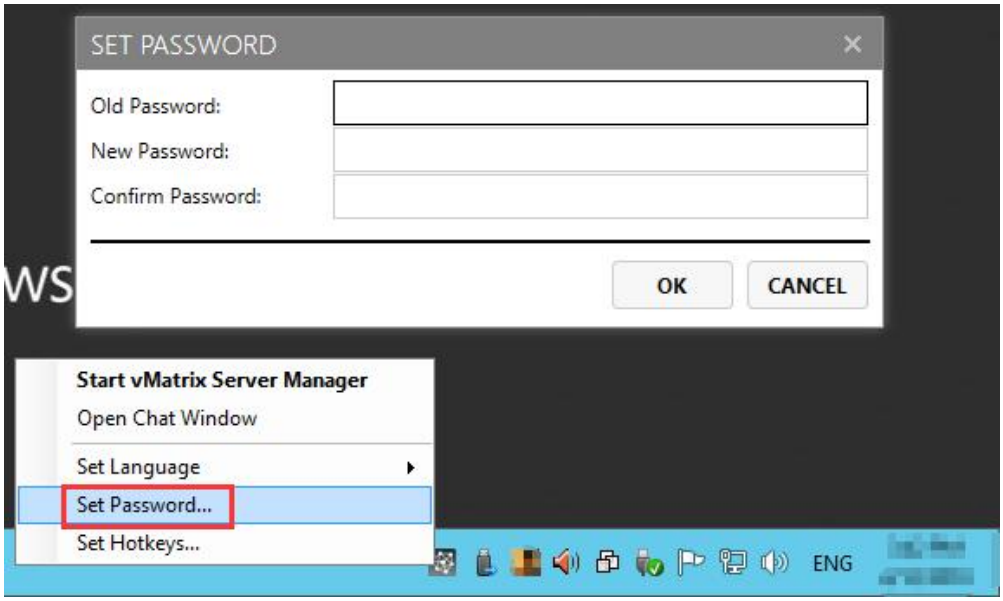
5.10.1 Chat Tool

The Chat Tool allows users to talk with other users connecting to the same host. To run the Chat Tool, right click on the vMatrx icon at the task bar and then click “Open Chat Window”.



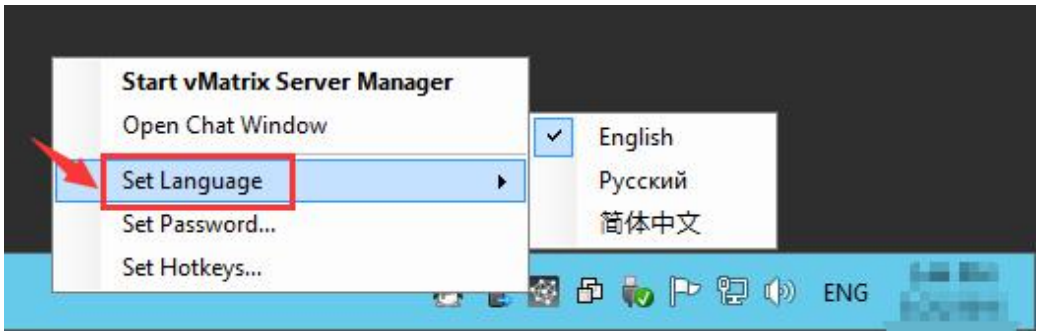
5.10.2 Set Password

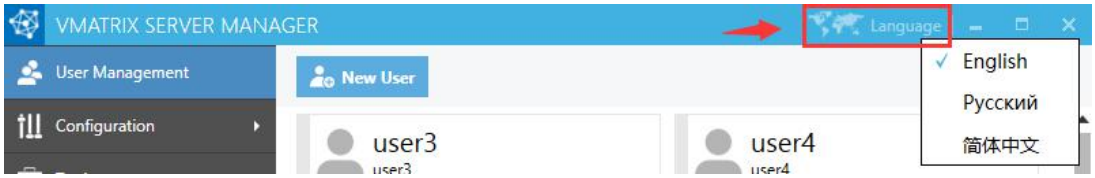
This allows the current user to reset their login password without doing it at the system control panel. To reset password, right click on the vMatrx icon at the task bar, click on “Set Password …” and then enter passwords in the required fields.



5.10.3 Set Language

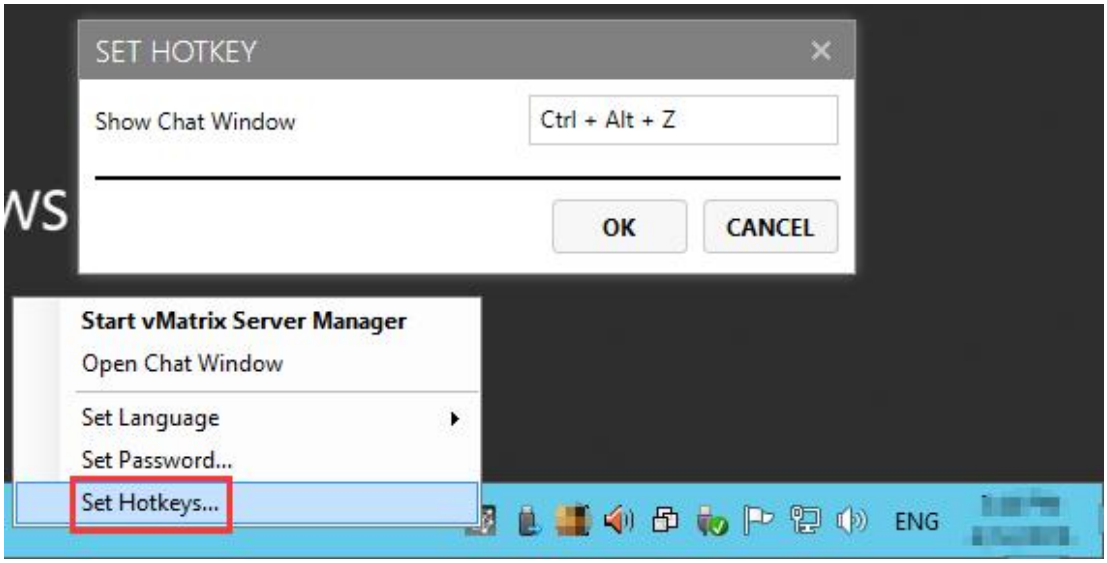
This is to set language used by vMatrix Server Manager. Right click on the vMatrx icon at the task bar, click on “Set Language” and then available languages will be shown on the right. You can also change language at the right top bar on vMatrix Server Manager.





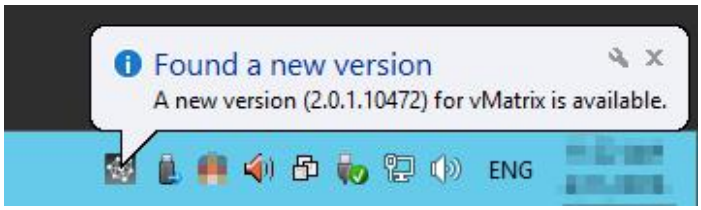
5.10.4 Set Hotkeys ...

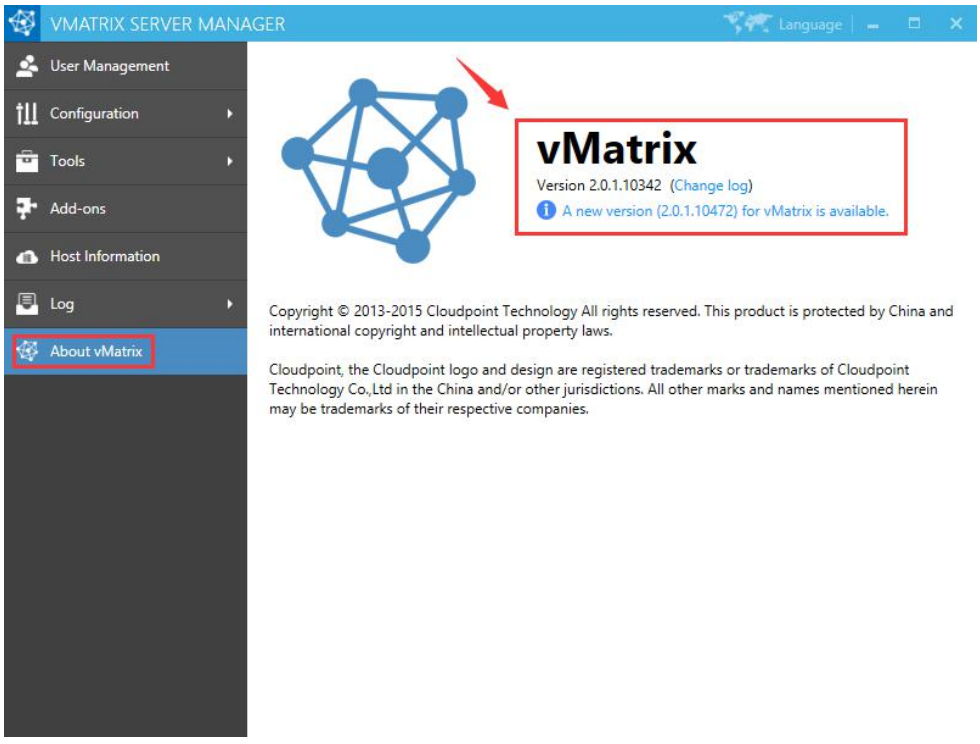
This is to set hotkey to open chat window. To ensure the hotkey works, do not use the same combination of keys for other applications.



5.11 vMatrix Update

When a new version of vMatrix Server Manager is available, an update message will pop up from the vMatrix icon at the task bar. You will also see the same message with link to download on the About vMatrix page on vMatrix Server Manager.





Download the new version by opening the link or visit download center at vCloudPoint website: www.vcloudpoint.com/support/downloads/.

After downloading, follow the steps below to update:

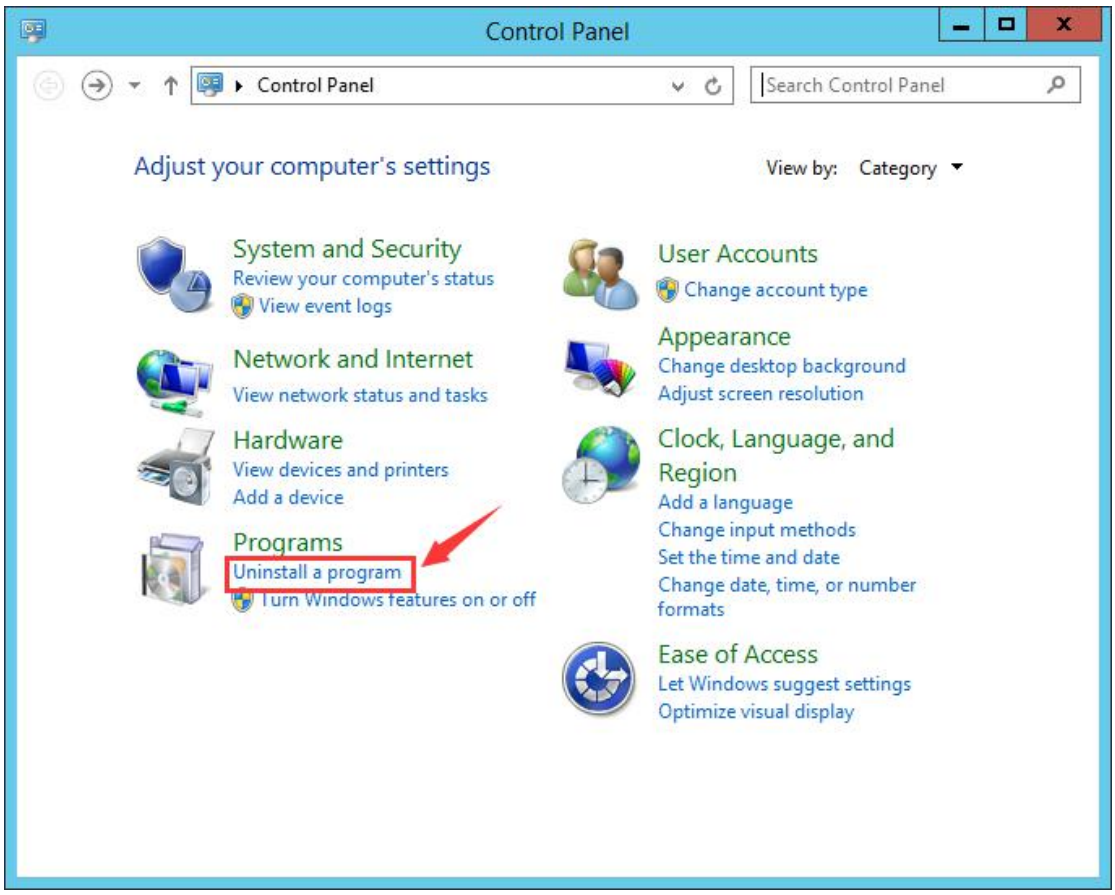
1) Log out all users and disable security software to avoid mistaken report on vMatrix Installation files.

2) Run the installer and process as it is done on initial installation.

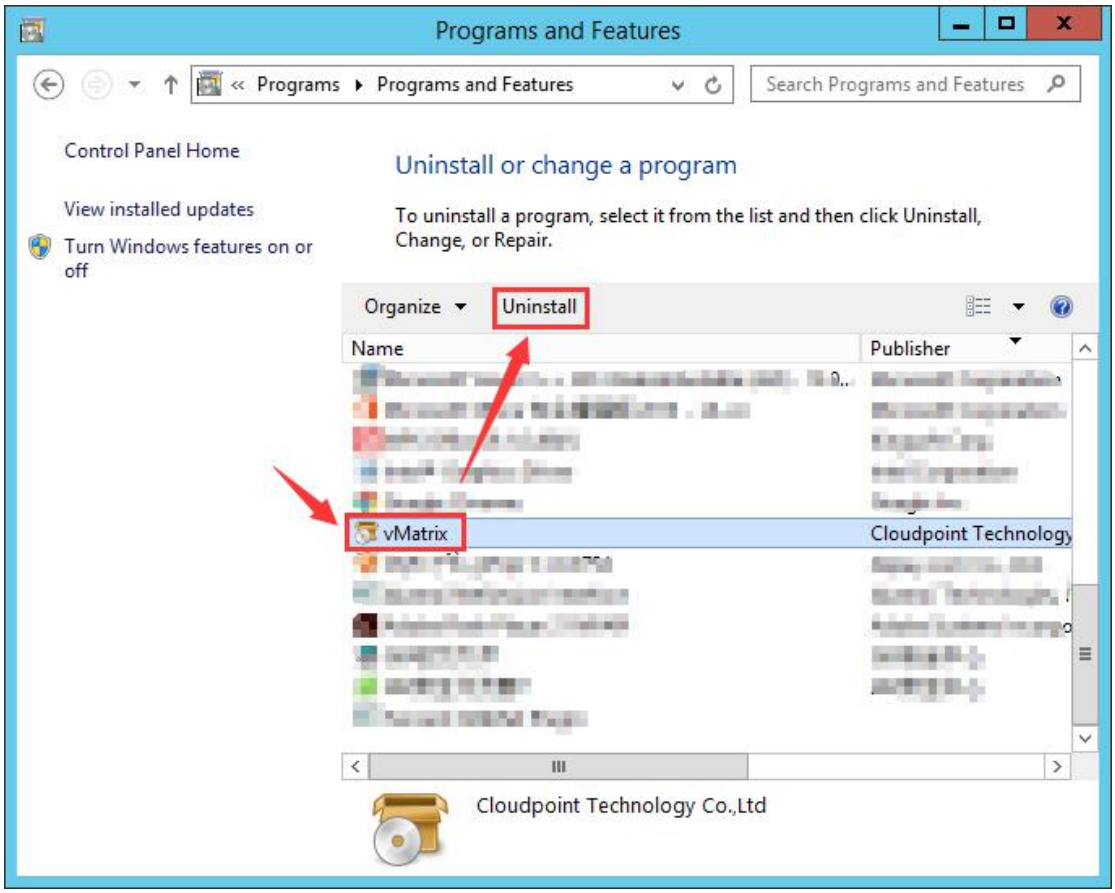
3) Reboot system after installation completes.

5.12 vMatrix Uninstall

1) Open system control panel, click uninstall a program,

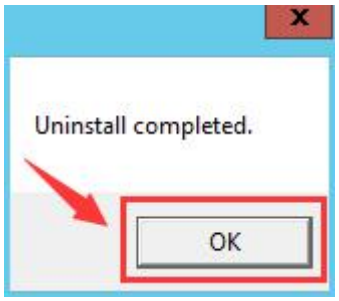


2) Select “vMatrix”, and then click to uninstall.



3) Click “Yes” when it prompts if you want to uninstall.

4) Click “OK” when uninstall completes.



Chapter 6. FAQs & Trouble-shootings

6.1 Trouble-shootings

P1, My zero clients get disconnected every a few minutes.

By factory default, the vCloudPoint zero clients and the management software are configured to be used in an internet connected environment (WAN). If you are using them in a non-internet environment, you have to re-configure the zero clients and management software by simply following the guides at the Offline Usage menu on vMatrix Server Manager, otherwise, sessions will time out (disconnected) during operation. (Refer to section 5.9)

Offline configuration is required if your actual use case meets any of the following conditions:

- you do not provide internet connection (WAN) to the host or the internet connection is extremely unreliable;
- you use proxy or VPN or internet control software that the host cannot access our configuration server: api.cpterm.com.

P2, The host is not shown in host list.

1) The vMatrix Server Manager software is not installed on the host or not working properly.

Solution: Install or re-install vMatrix Server Manager.

2) There is network problem between the host and the zero client.

Solution: Ping the host to see if the host responds to the zero client. If not, check the network connection of the zero client and the host.

3) The zero client is with a new firmware version while the vMatrix Server Manager version on the host is out of date.

Solution: Upgrade the vMatrix Server Manager.

4) IP Addresses in the DHCP pool have been used up so that new connected zero clients cannot find hosts in the LAN while the old connected zero clients do not have the problem.

Solution: Go to the DHCP setting page and enable more IP addresses or shorten the time of IP address tenancy.

P3, Cannot log into the selected host.

1) A pop-up window says that the device's serial number is invalid.

Solution: Contact our technical support team with the device's serial number.

2) Unstable Local Area Network (LAN).

Solution: Examine cable and switch and make sure the zero clients are connected to the host in the same LAN.

3) IP address pool is full that new devices cannot login.

Solution: Lease more IP addresses, and recommend shorten IP address tenancy time in case there is a plenty of mobile devices connecting to the same network.

4) IP address conflict that the sign-in of one user may log the other out.

Solution: Make sure all devices use different IP address from the others in the same LAN. Recommend using default DHCP instead static IP addresses.

P4, USB devices do not work, there is no sound or there are lags on scrolling or playing a video.

If you have one or all of the above problems, you may probably see "cpaccel.exe" (Cloudpoint Multimedia Accelerator) error message from Windows or by running vMatrix Diagnostic Tool. This is due to some file missing of vMatrix Server Manager, mainly caused by mistaken removal or block of fire-wall or anti-virus software. The best and quickest way to fix this problem is to re-install vMatrix Server Manager (make sure you have disabled security software before installation). If you still have this problem in use, you may have to add vMatrix files or ports to exception list of security software. Also refer to How to Configure Firewall and Antivirus software for vCloudPoint Products on this page.

P5, Forget the password for device lock.

Press F2 on device boot to clear device configurations. Refer to section 4.7.

P6, Forget the password for settings lock.

Long press the switch button until you see the resetting window. Refer to section 4.7.

P7, Monitor displays “out of range” message or turns blank when connecting to a zero client or the user session entering Broadcast Mode.

1) the zero client is preset a desktop resolution (e.g.: 1920x1080) that is not supported by the monitor (e.g.: maximum resolution support of the monitor is 1440x900).

Solution: press F2 on device boot to restore desktop resolution to default 1027x768. Refer to section 4.7.

2) the desktop resolution on the host is not supported by the monitor connecting to the zero client. (When entering Broadcast Mode, the user session will switch the desktop resolution to that used by the host.)

Solution: lower desktop resolution used by the host to the one supported by the monitor connecting to the zero client.

6.2 Frequent Asked Questions

Q1, How to use vCloudPoint system in a domain environment?

1) Your domain system should include at least one Domain Controller and one sharing host that has joined the domain system.

2) Install the vMatrix Server Manager on the sharing host(s).

3) Create users on the Domain Controller.
(Note: as the users are not created through vMatrix Server Manager, you have to manually add the created non-administrator users to the Remote Desktop Users group.)

4) Log into the host with vCloudPoint zero clients. Hosts will automatically be recognized if they have joined the domain. The picture below shows two login options: the first domain name “CLOUDPOINT” is chosen for domain login; the second one “Local Account” is for local account login. If users choose local account login, they are logging on the host rather than the domain.

5) Select a domain, and then enter your user name and password.

IMPORTANT NOTE:

- You cannot log in a domain administrator account from a zero client. This will cause unavailability of the whole vMatrix and zero client system. If you mistakenly do this, remove administrators from vMatirxServerRemoteUsers group on the shared hosts thought Computer Management –> Local users & groups –> groups–> vMatirxServerRemoteUsers group

- Doman NTLM is not supported.

- By default, only users in the Administrator Group can log into the remote Domain Controller, users in the Remote Desktop User Group cannot login here.

- If you are using vMatrix Server Manager 1.6.0.4 or earlier, you have to install the vMatrix Server Manager both on the Domain Controller and Hosts. If you do not want to install vMatrix Server Manger on Domain Controller, please upgrade vMatrix Server Manager to 1.6.0.5 or later.

Q2, How to configure firewall and anti-virus software?

Anti-virus, firewall, and other types of security software can sometimes interfere with the initial configuration or continued operation of vCloudPoint's vMatrix Server Manager software. This document gives basic information on applications, services, and network communication within vMatrix Server Manager, which can be used to configure security software and help ensure compatibility and stable, continued operation.

vMatrix Server Manager Installation

Please make sure to DISABLE any Anti-Virus or Firewall software during the installation of vMatrix Server Manager. Software of this type has been tested and known to interfere with the installation of our product. After installation has completed, you may re-enable Anti-Virus and Firewall software.

If system instability occurs after installing vMatrix Server Manager, please try removing vMatrix and any anti virus or security software present, and then re-installing vMatrix. If the system is stable in this configuration, re-install the anti-virus software. In some cases, this change in install order can improve the interaction between vMatrix and anti-virus software. If issues persist, please try configuring your security software to ignore/allow/trust the following ports and executables:

Exceptions

1) Port Exceptions

- Remote Desktop Services: TCP 3389
- vMatrix Network Services: TCP 13389-13342 plus 3 per user
- UDP 13389

These ports are default settings on vMatrix's installation but can be customized at vMatrix -> Configuration ->IP/TCP ports.

2) File Access Exceptions

- **On Firewall:**

C:\Program Files\Cloudpoint\vMatrix\CpDaemon.exe

C:\Program Files\Cloudpoint\vMatrix\Driver\CpAccel.exe

- **On Anti-virus:**

- **By specific files:**

— For vMatrix functionality

C:\Program Files\Cloudpoint\vMatrix\CpDaemon.exe

C:\Program Files\Cloudpoint\vMatrix\Driver\CpAccel.exe

— For vMatrix tray icon and User functionality

C:\Program Files\Cloudpoint\vMatrix\CpDeploy.exe

— For vMatrix Admin manager

C:\Program Files\Cloudpoint\vMatrix\CpManager.exe

— For vMatrix Diagnostic tools

C:\Program Files\Cloudpoint\vMatrix\DiagnosticTools.exe

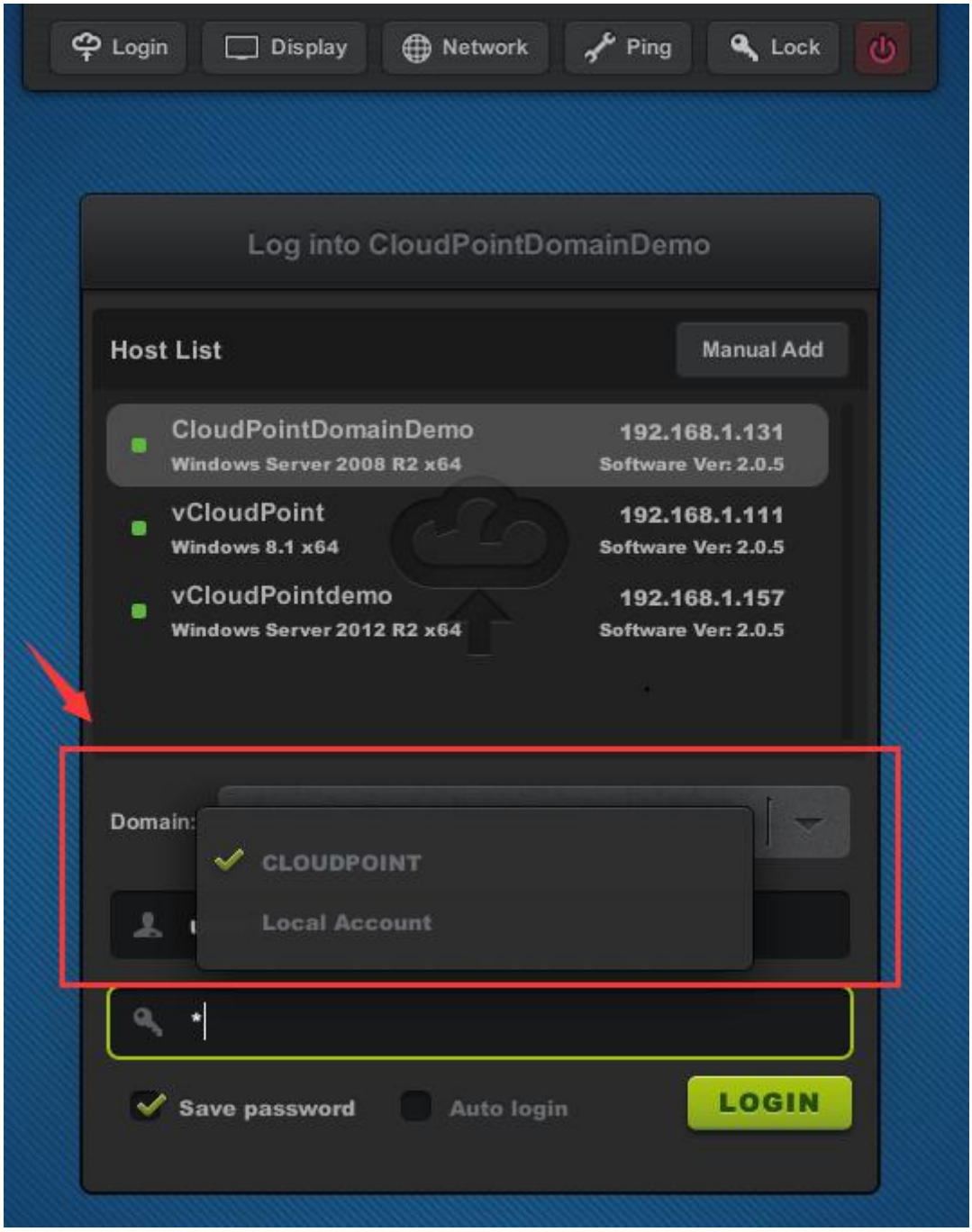
— For vMatrix Install and Update deploy tools

C:\Program Files\Cloudpoint\vMatrix\InstallDeployTools.exe

- **By folder:**

— For all vMatrix functionality

C:\Program Files\Cloudpoint\vMatrix



Q3, How to install USB and audio drives in Windows10, 8.1, 8 & 7 Operating Systems without internet connection?

In Windows 10, 8.1, 8, & 7 Operating Systems, all drivers and programs must be digitally signed (verified) in order to be installed. If you do not have internet connection for your first time of vMatrix Server software installation, you have to disable Windows

Driver Signature Enforcement. Otherwise the USB and audio drivers cannot be executed for failure of getting signature verification.

Please follow these steps to disable Driver Signature Enforcement in Windows 10, Windows 8.1, Windows 8, Windows 7, Windows Server 2008 R2 once.

Step 1. Enter in Advanced Options menu.

To enter in Advanced Options menu in Windows 8 & 8.1 OS:

1. Press “Windows” + “R” keys to load the Run dialog box.

2. Type “shutdown /r /o” and press Enter.

3. Windows informs you that you are about to be signed off. Press “Close”.

4. When Windows restarts, press “Troubleshoot” .

5. In the “Troubleshoot options” screen, choose “Advanced options”.

6. In the “Advanced Options ”window, choose “Startup Settings”.

7. In “Startup Settings” screen, click “Restart”.

8. After restart in “Startup Settings” windows, press the “F7” (or the “7”) key on your keyboard to “Disable driver signature enforcement”.

Your computer will restart again.

9. After the restart, proceed to install your unsigned driver. During the installation procedure, Windows will inform you that can’t verify the publisher of this driver software. At this point, ignore the warning message and choose “Install this driver software anyway” to complete the installation.

Q4, How to configure LAN ports when using zero clients across internet (remote access to host from WAN)?

For remote connection with vCloudPoint zero clients over WAN, setting DMZ host is the easiest way but unsafe, therefore, you can add these ports in your router instead.

The vMatrix Network Service uses both TCP and UDP ports. The broadcast port is fixed using UDP 13389, and the listen port begins with TCP 13389 and extends to at least 3 extra plus 3 for each user. For example, if there are 10 users need to connect remotely,

you need to at least add ports of UDP 13389-13389, TCP 13389-13422 (13422 is the minimum and reserve more if possible).

The listen port for Remote Desktop Service itself also should be open. It uses TCP 3389.

These ports are default settings on vMatrix installation but able to be customized at vMatrix -> Configuration ->IP/TCP ports.

Q5, How to enable theme and wallpaper customization for terminal users?

By default, theme and wallpaper customization is disabled for terminal users through remote desktop connections. Administrators can enable this option for terminal users through a few simple steps. But enabling this option will increase large resources consumption on the host.

Here are steps to enable theme and wallpaper customization on Windows:

1) for hosts running Windows Client Systems like XP, 7, 8, 8.1, 10 (Desktop Experience features of client systems are pre-installed on system installation).

- Open vMatrix Server Manager, on the initial User Management page, right click on the user module and then select “Property” to enter the user’s personal settings. (If you are configuring for all users at a time, go to “Configurations” -> “Default User Settings”.)
- Click on “Advanced” tag and then select “optimum” to enable all desktop experience options including wallpapers, themes, menu animations, and window content on dragging. To only enable a single desktop experience option like wallpapers or themes, you can click on a “custom” button for further customization.
- Scroll down to “Desktop Options”, select the options which you like to enable, and apply.
- The change will take effect on the user’s next login.

2) for hosts running Windows Server Systems like Server 2008R2, 2012, 2012R2, 2016 and Multipoint Server 2011, 2012 (Desktop Experience features for server systems are not installed on system installation).

For server systems, you have to install the Desktop Experience features before configuring at vMatrix Server Manager.

- Open Windows Server Manager;
- Click “Add roles and features”;
- Search for Features –> Desktop Experience;
- Confirm to install Desktop Experience features;

When completed, restart the system and then open vMatrix Server Manager to enable the Desktop Experience options as the same to configure for Windows Client Systems mentioned above.

Q6, How to add WIFI option to the zero clients with external USB WIFI antenna?

If you purchased a non-WIFI model of vCloudPoint zero clients, but later you want to work in the wireless environment, you can turn the zero client into a WIFi supported one by simply attaching a compatible external USB antenna to the vCloudPoint zero client. There are two ways for you to get the external USB antenna.

1, You can purchase the external USB antenna from your local vCloudPoint dealer.

2, Any antenna that is built with RTL8188EUS chip and connects with USB 2.0 standard is supported by vCloudPoint zero clients.

Steps to configure external WIFI:

1, attach the USB antenna to the zero client;

2, reboot the zero client;

3, go to the “Network” page and you will see the WIFI option coming.

Q7, What applications can be run at the terminal with a vCloudPoint zero client?

1, Most popular Windows applications can be run with vCloudPoint zero clients such as Office Applications, Skype, Outlook, Chrome, Firefox, IE, Edge, Teamviewer, Adobe Photoshop, Adobe Illustrator, Adobe After Effects, Adobe Indesign, AutoDesk CAD, and Camtasia, etc.

2, 3D games are not supported. 3D design applications like 3D Max can be run but

rendering takes long time. Other 3D applications may not be supported as graphic card is not utilized by the zero clients. When the host and network is well configured, the performance of the zero client is just like that of the host without a discrete graphic card.

3, A few applications cannot be run in the multi-user environment.

These Known applications include Microsoft Visual Studio, Adobe Premiere and Foxmail. To know if your desired applications can be run in the multi-user environment without vCloudPoint zero clients, you can try running the applications in remote desktop sessions with PCs (run “mstsc”).

Trouble-shooting some applications that are supposed to by supported but still cannot be run with vCloudPoint zero clients:

1, The disk partition where the applications are installed must be set to be visible to terminal users. To configure visible disk partitions, open vMatrix Server Manager, click Configuration, and then Storage Visibility, tick the partition where your applications are installed.

2, Try disabling Windows UAC.

3, Change installation directory to non-user based. Default installation directory of some applications like Kingsoft WPS are user based, like “C:\Users\Administrator”. When installing, you must change the directory to non-user based one, such as “C:\Program files\” otherwise users except the installer are not able to run these applications.

Q8, How to fix an issue or report it to vCloudPoint Support Team?

1) Before you report an issue to vCloudPoint Support Team, please run the **vMatrix Diagnostic Tool** or follow the **FAQ guides**. Also, if possible, you can take the following solutions to fix or localize the issue.

- reboot host system
- disable security software and re-install vMatrix
- install a previous or new version of vMatrix
- reset client device firmware
- use another host system
- use another host
- use another zero client

- replace the Ethernet cable
- try with a PC through Windows Remote Desktop Connection
- ...

2) If you cannot fix the issue by running the vMatrix Diagnostic Tool or following the FAQ guides but need to report to vCloudPoint support team for help, please describe the issue as detailed as possible and provide sufficient information. If possible attach screen shots or videos when reporting the issue. Visual information can better help our support team analysis the issue.

Issue Description:

- the issue subject.
- detailed operations you did when having the issue.
- error message(s) from vMatrix Server Manager, zero client or Diagnostic Tool.
- any solutions you take.
- if the vCloudPoint system was working fine before, and changes done lately.
- if it is a possible issue or can be triggered anytime; the procedure for vCloudPoint Support Team to trigger the issue in vCloudPoint Lab.

Required Information:

Provided on most cases:

- host operating system, 32 bit or 64 bit and build number if it is the latest system, e.g.: Windows 10.
- vMatrix version and device firmware version: x.x.x.xxxxx.
- vMatrix error log; export the vMatrix log at Windows Event Viewer which can be opened at vMatrix Server Manager -> Log -> Event Log or Windows Start menu; vMatrix log often can be found under Applications and Services, but in some cases, there is also vMatrix logs under Windows Logs-> Application; Export and send us both vMatrix Logs if there are.

Provided if there is:

- Error message when running vMatrix Diagnostic Tool

Provided on specific issues:

- when the client device prompts “invalid serial number” or client devices got disconnected every a few minutes -- serial number(s) of the client device(s).
- when there is login issue after a Windows update: the version information of the RDP files under system32 folder; rdpdd.dll (win7, XP), rdpudd.dll (win8 or above). if you don’t know how to see version information, send us a copy of this file.
- When the issue is about audio: the version information of the audio files under system32 folder; audiosrv.dll; if you don’t know how to see version information, send us a copy of this file.
- when the issue is about RDP Wrapper: send us the screen shot of the RdpConf.exe file running.