

CLOUD COMPUTER

N-SERIES
Solutions for Desktop Virtualisation



FL300 Thin Client

User Manual

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This product gives users shared access to computer resources. It is not a stand alone 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.

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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.

1 Introduction to Terminal

1.1 Brief Introduction

FL300 is the most economical computing solution for small / medium business or educational Institutions that need several computers for their application usage or project development. Users can run any applications which are installed in a server, each by using his own thin client machine.

FL300 is big on features, boots up swiftly and logs in to server securely and operates efficiently with impressive performance, all with enterprise quality with positioning option of Desktop or Display back, consumes just 4 watt and provides the organization quieter and smoother working environment.

FL300 with its powerful ARM Processor design is unique in its category of thin clients and dominates in performance and user satisfaction. Supports both Windows & Linux applications with sound output/input feature.

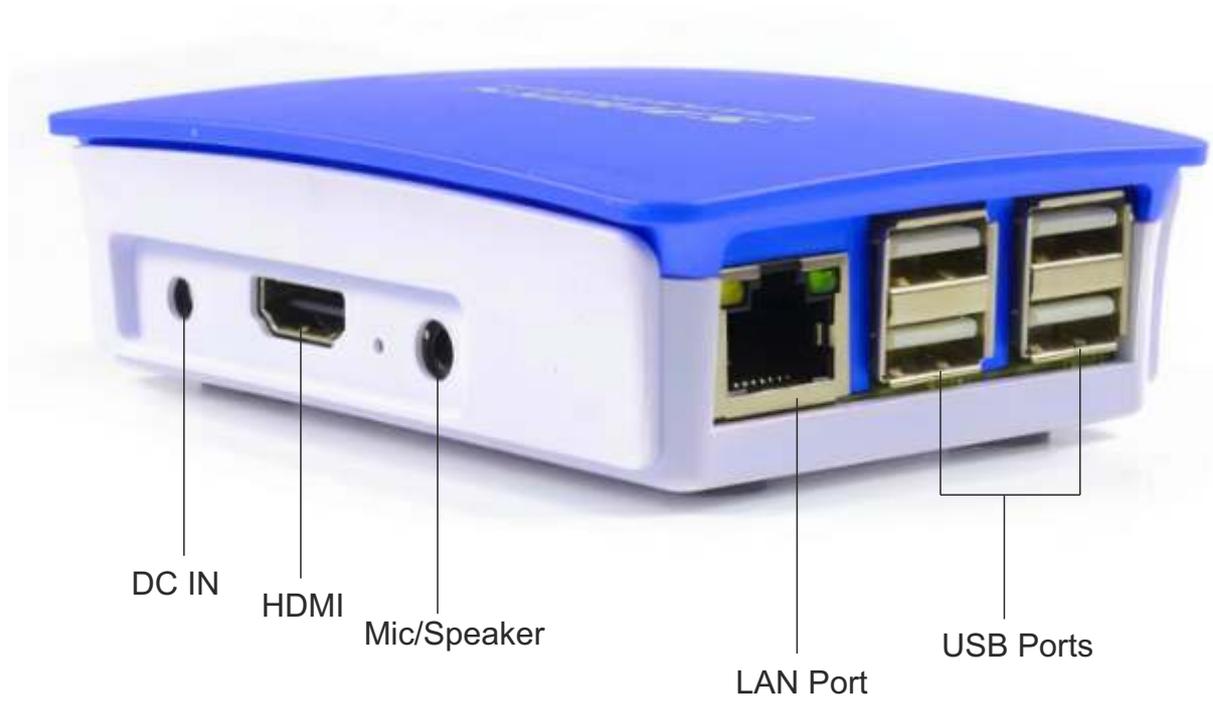
1.2 FL300 Key Features :

- Low total cost of ownership, Energy Saving
- Slim and quiet fanless design
- Simple click and play
- Easy to manage, maintenance free
- Support USB redirection
- RDP8.1 with RemoteFX technology

1.3 Package Contents

1. FL300 Thin Client X 1
2. Power Adapter X 1
3. Mounting Screw Bag X 1

2 FL300 Host interface



3 System Specifications

Product Specifications:		
Processor	CPU	Quad-core Cortex-A53
	Frequency	2.0GHz
	Number of digits	32-bit
Memory	Speci cation	LPDDR3
	Onboard Memory	2GB
Graphics Support	GPU	Mali400 MP2
	Graphics Engine	1080P video encoding
	HDMI	1*HDMI(Max.1920*1080@60Hz)
Network	Network Card Chip	100 Gigabit LAN card
	Network Interface	1*RJ45
I/o Interface	USB	4*USB2.0
	Audio interface	Audio input and output
Storage	Flash	8GB onboard
Operating System	Supported OS	Windows 7/8.0/8.1/10/11 (Pro Only, Home versions are not supported)
		Windows Server 2012/2016/2019/2022 & Linux over RDP
Embedded OS	Embedded OS	Linux Embedded OS Firmware
Power Requirements	Type of Power Supply	DC-IN
	Power Adapter	5V/2A
Physical Characteristics	Housing Material	ABS
	Installation	Support Desktop Placement (Standard Mode)
		Support VESA Pylons
	Size	98.1X71.6X37.8MM
	Color	Blue-White
External Environment	Operating	0°C~40°C (32~104)
	Temperature Relative	90% or less (non-condensing)

4 Recommended Host Configuration

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. We recommend that you always test your environment in advance of deployment to ensure it meets your expectations.

Host Configuration based on no. of users

Users	1~5	6~10	11~15	16~20	21~25	26~30
CPU	i3-4th Gen	i5-4th Gen	i5-6th Gen	i5-7th Gen	i7-6th Gen	i7-7th Gen
Memory	1 GB for each user and addition 2 GB for the Host PC					
Disk (SSD for System and Programs and HDD for User Data)	500G HDD	SSD 128G	SSD 128G	SSD 256G	SSD 256G	SSD 256G
	HDD / Storage size as per the actual needs.					

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. FL300 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

5 Hardware Setup

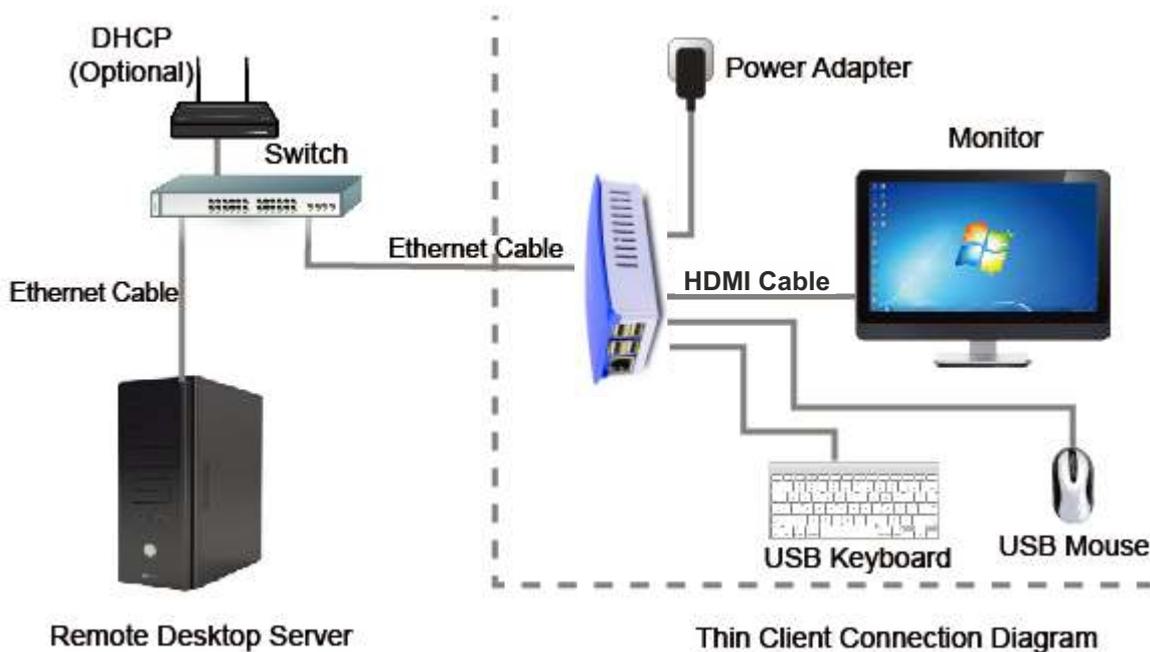


Fig 5-1 Connecting FL300 to a remote desktop server

The FL300 thin client must be connected to the host PC via an Ethernet switch, router, or other network connection. The FL300 has 4 USB ports which can be used to connect mouse, keyboard & other supported USB devices.

The FL300 has HDMI port for Digital Monitors with either HDMI or DVI port (converter required). A DC 5V adapter is supplied with the unit which needs to be connected to the DC-5V socket.

*Use only qualified power adapter; use of improper power adapter can cause irreparable equipment failure.

6 Instructions for use

Please connect all the devices like Monitor, Keyboard, Mouse, Ethernet Cable and Power Adapter as shown in the Fig 5-1 above.

6.1 Boot

After connecting to the peripherals, press the device power button. The boot screen will appear briefly as shown in Fig 6-1 followed by the main interface screen as shown in Fig 6-2A



Fig 6-1 Boot Screen

6.2 Main Interface

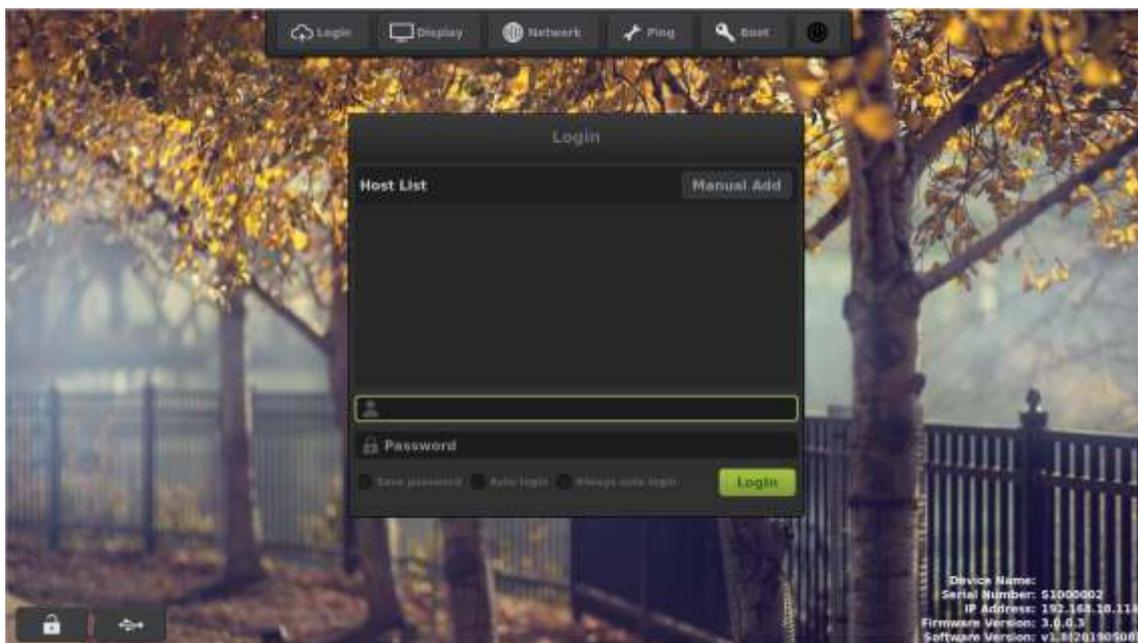


Fig 6-2A The main interface of FL 300

Terminal Settings Area

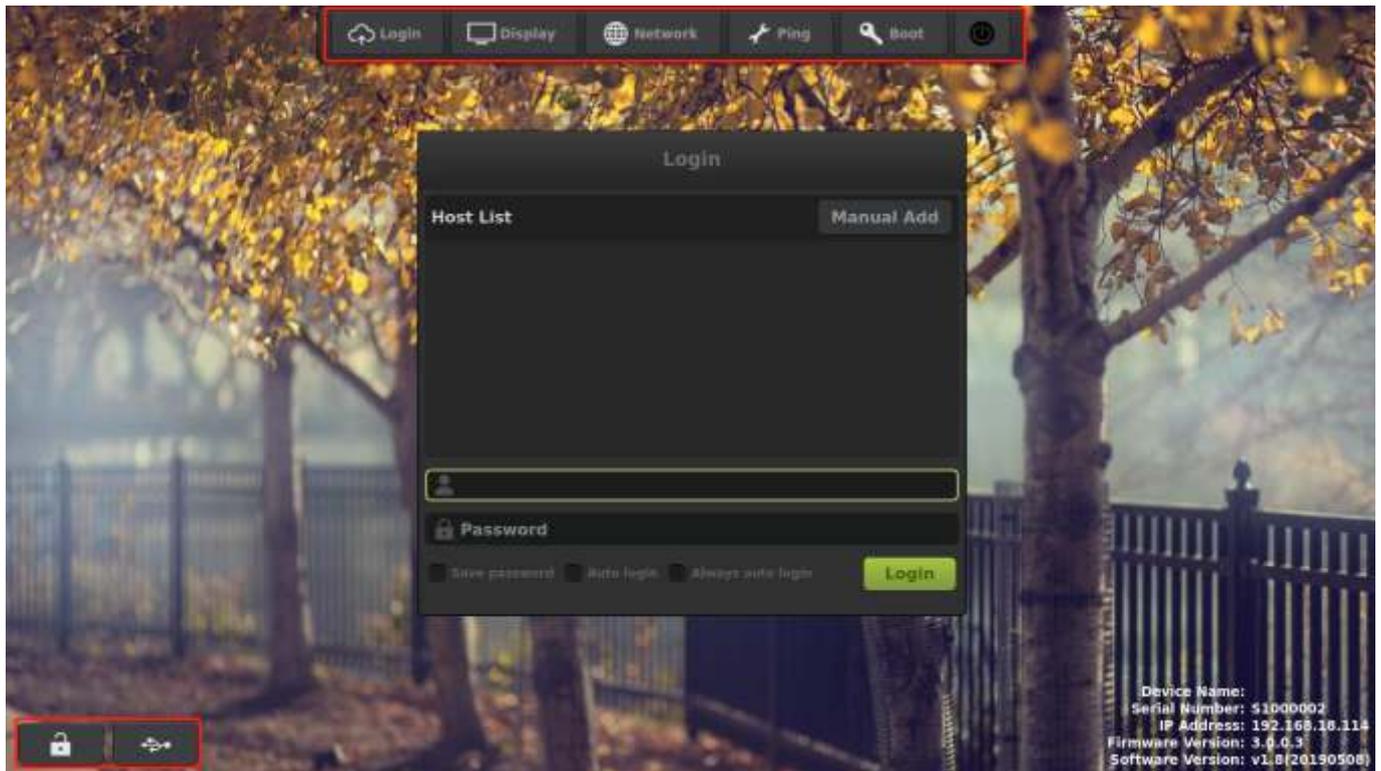
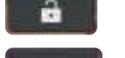
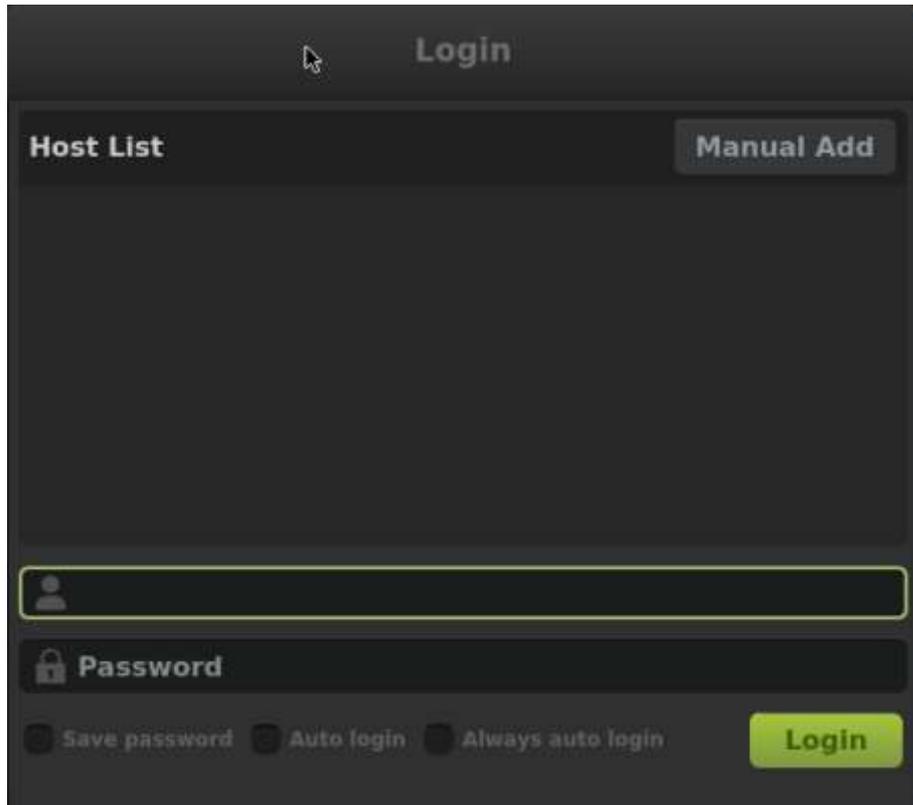


Fig 6-2B Terminal Settings Area

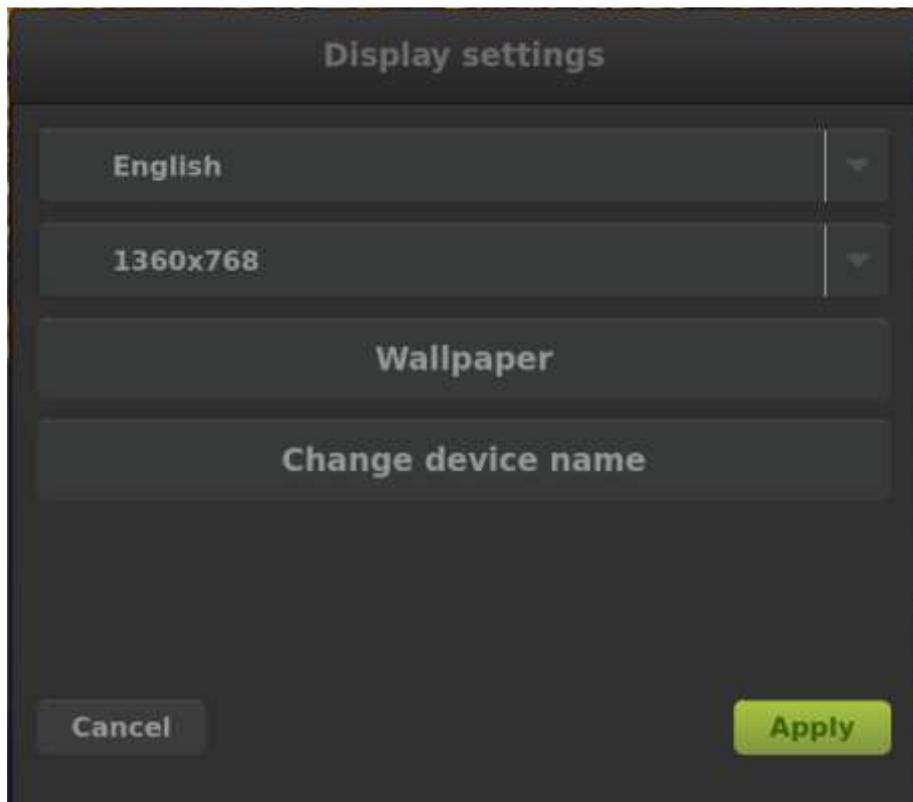
Figure 6-2B shows the terminal settings area. It has eight functional buttons.

- | | |
|---|--|
|  | Add, Delete and Connect the server |
|  | Display Language, Resolution, Wallpaper etc. |
|  | Configure Network IP Address |
|  | Test Network Ping |
|  | Lock the device |
|  | Shutdown |
|  | Setup Password to access settings |
|  | Setup USB device redirection |

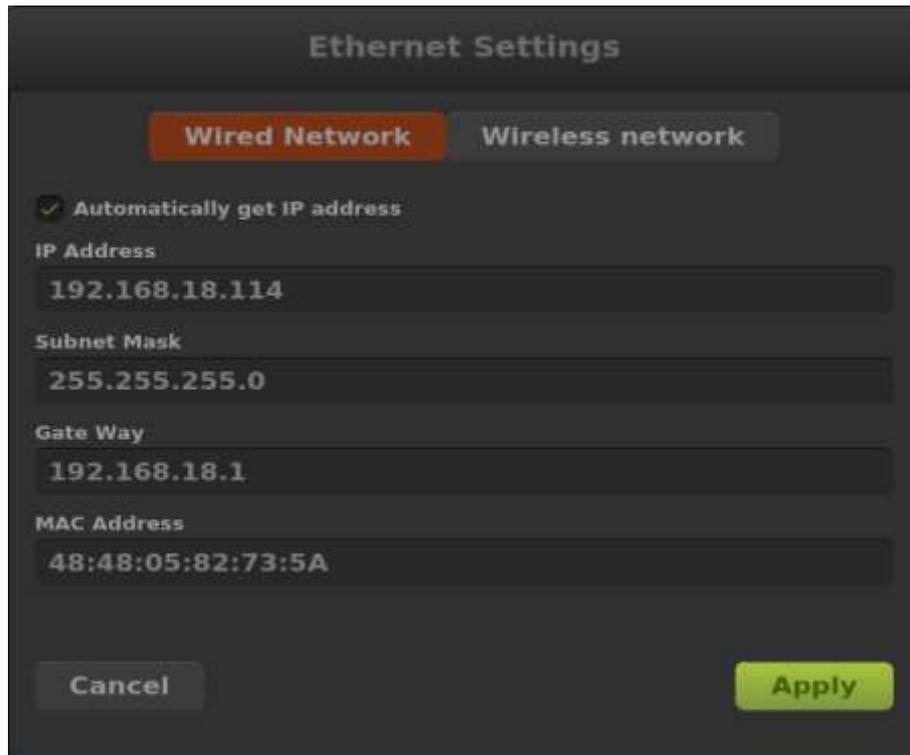
- ◆ **Login** : Add, Delete and Connect the server (Details on Page 14)



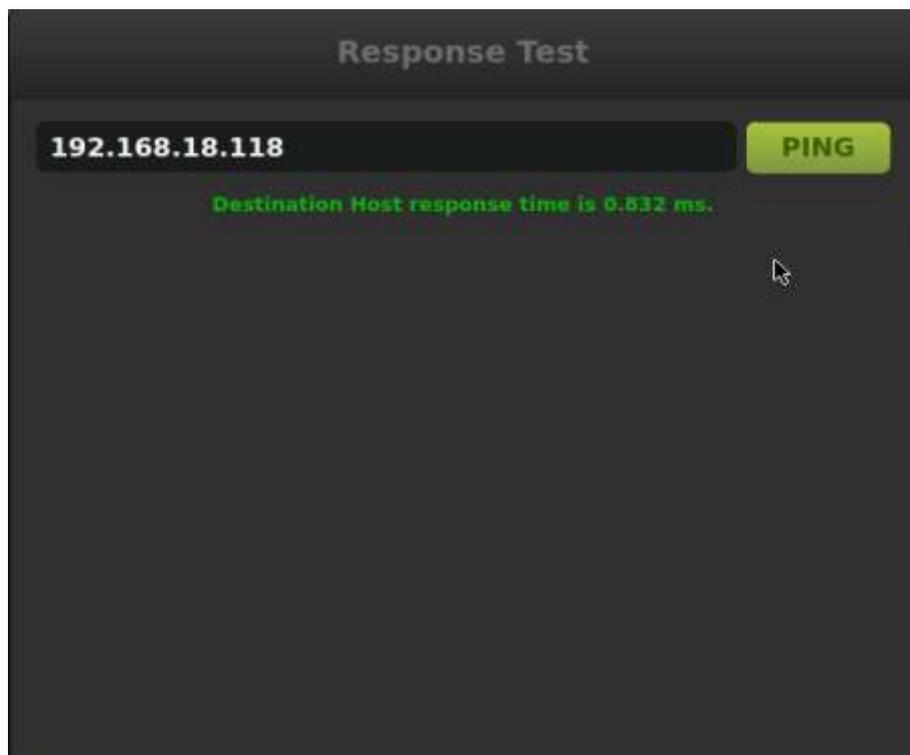
- ◆ **Display** : Change the display language, resolutions, wallpaper and device name



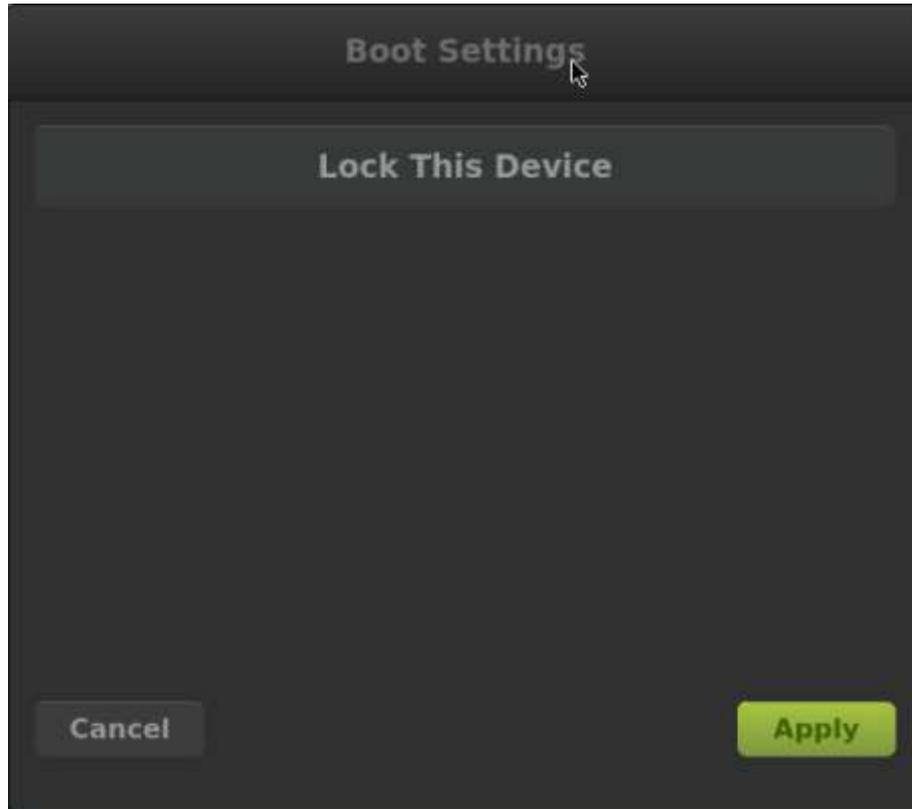
◆ **Network:** Configure the network IP address. If the network consists of a router then you can select "Automatically get IP address" otherwise manual configuration for IP address is required.



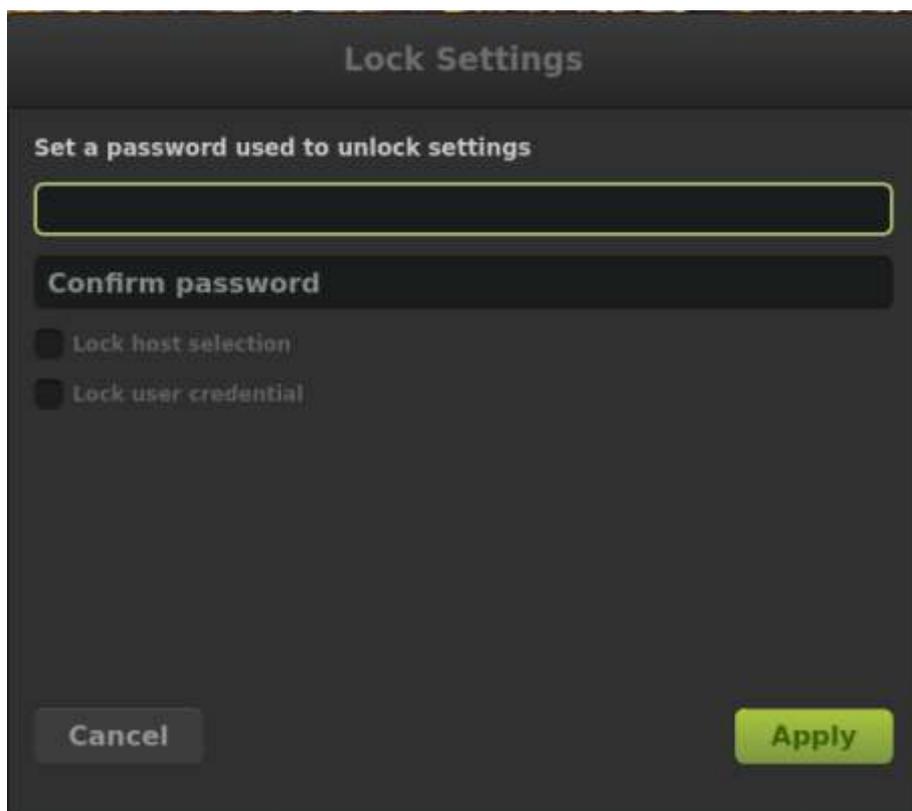
◆ **Ping:** To test the network connectivity between host pc and thin client. Enter the host pc/server IP address and click PING to check the response time



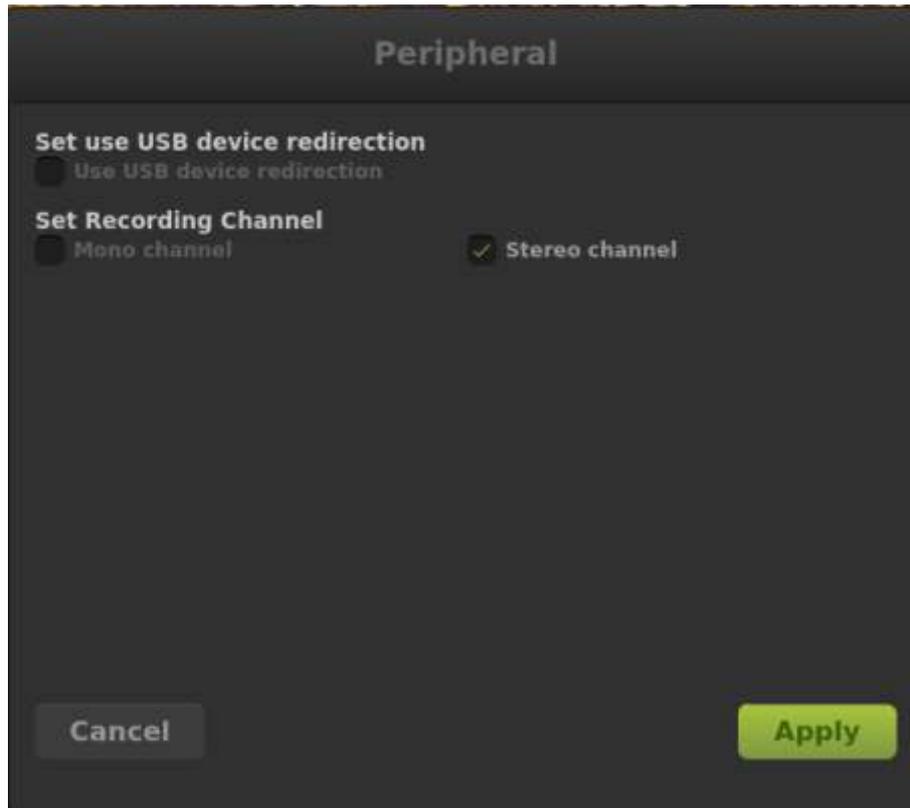
- ◆ **Boot:** Can be used to Lock the device



- ◆ **Lock :** Set a password to lock the device, host selection or the user credentials.



- ◆ **Peripheral** : Setup USB device redirection and the recording channel.



6.3 Configure

Please click the login button to show the Host List as shown below.

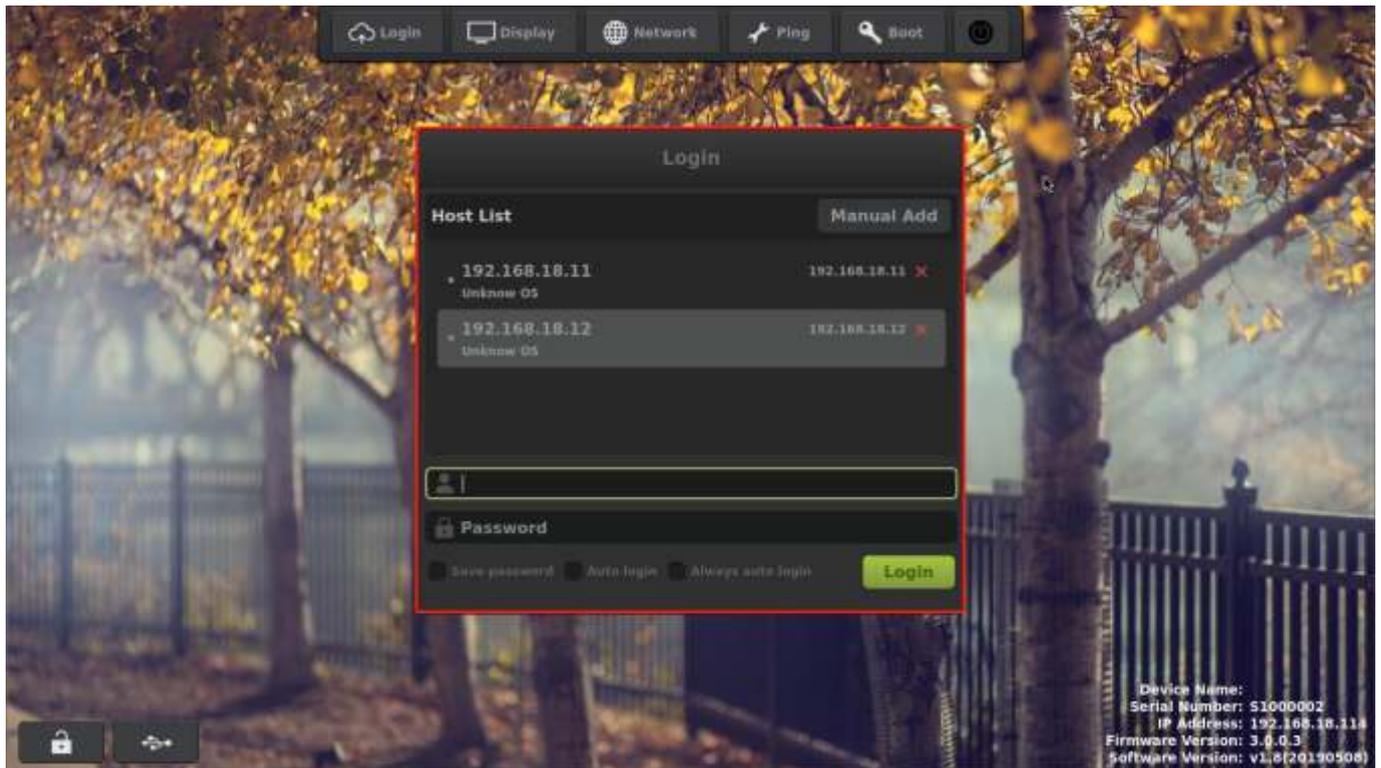
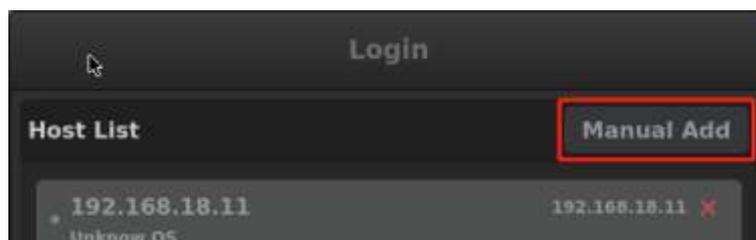
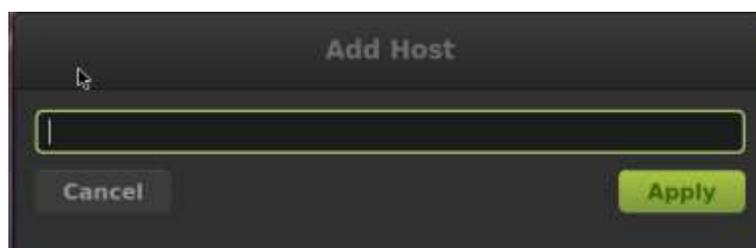


Fig 6-3a Host Server List

- Add a new host server address
 - 1 Click the **Manual Add** button



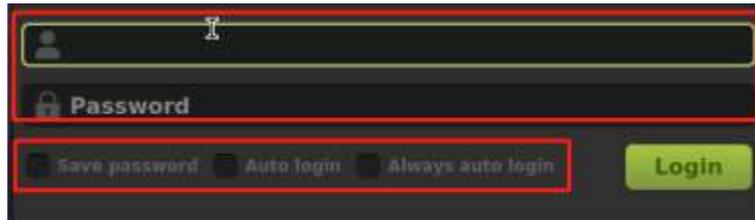
- 2 Enter the IP address of your server(Main PC)



- 3 Enter the username & password you created in your server
- 4 Select the appropriate options as required.

3 Enter the username & password you created in your server

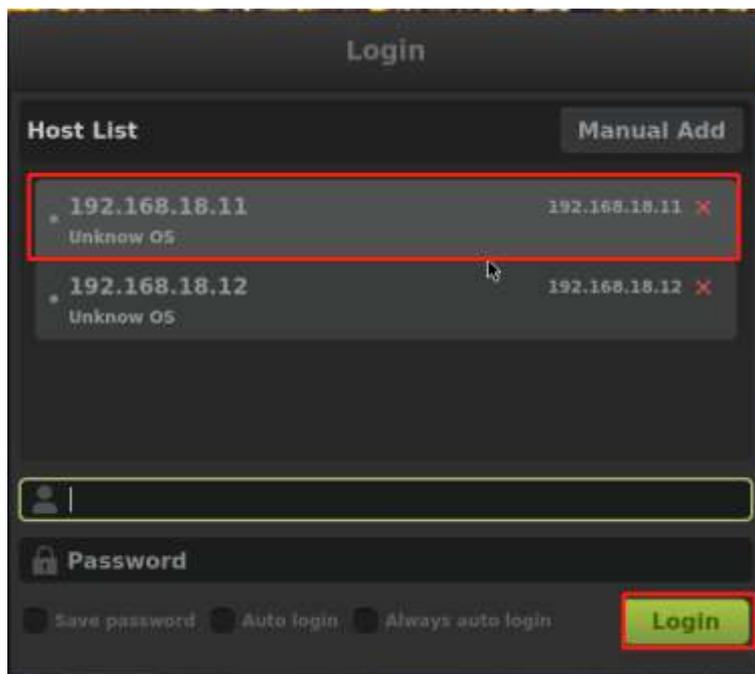
4 Select the appropriate options as required.



■ Connect to the server (main pc)

1 Select the host server which you want to connect to

2 Click **Login** Button as shown below

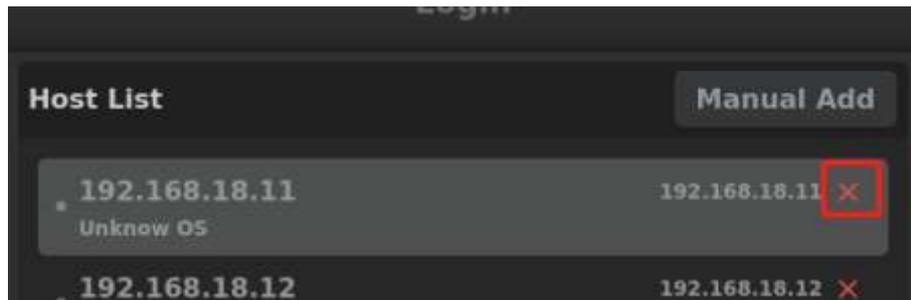


■ Delete the server

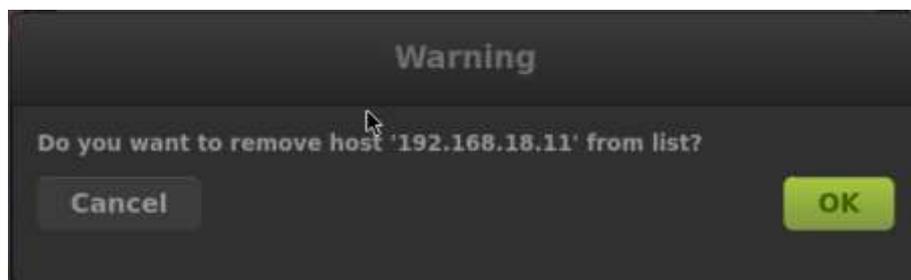
1 Select the server that you want to delete

■ Delete the server

1 Select the server that you want to delete



2 Click  Icon



Note: support Microsoft RemoteFX technology

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Solutions for Desktop Virtualisation