

Server 1

User's Manual

Version 2.02.06

2014/10/01

About This Manual

Conventions Used in This Manual

The following are typographic conventions used in this manual:

- **Bold**: Bold typeface is used for a keyword, major functions of IVS Server 1, or a title of a section/column.
- *Italic*: Italic typeface is used for a filename or location path.
- Underlined: Underlined typeface is used for a document name or hyperlink.
- “**Bold**”: Bold interface enclosed in double quotation marks indicates the name of a button, a menu or a choice item.

Some notices are placed within the following boxes; each type of the box indicates different purposes or levels of importance for system:

Important Notice

The content within this box is an **important notice**. This notice is important for you to get certain functions to work properly, or to prevent from certain potential problems that may damage your system. Make sure you read this notice and follow the instructions.

Note

The content within this box is a **note**. A note is some necessary information you need to know about the action you are currently taking, like what will happen after you follow or don't follow certain procedure.

Tip

The content within this box is a **tip**. A tip gives you an alternative method to easily or quickly achieve an objective, usually for specific conditions.

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Legal Notice

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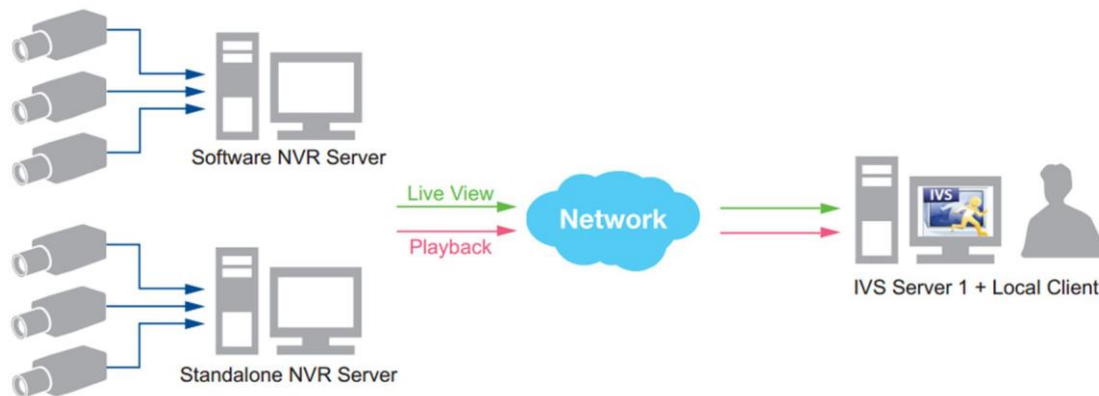
Introduction

Product Overview

IVS Server 1 is a video analytics software tool designed to help you transform your video surveillance network into a smart detection system and a valuable resource for business management. This software uses advanced image processing algorithms to recognize and track movement of everyday objects to determine whether they are suspicious and to provide analytical insights. Once an event of interest is detected, users can browse through them to play back footages or export the footages to use as evidence or future references.

System Architecture

The service architecture is described in the following figure:



PC Hardware Requirements


The performance of live display quality is largely determined by the computer hardware capability and the number of live channels. The table below provides basic guidelines for selecting proper hardware for the computer that installs **IVS Server 1**.

PC Spec	Minimum	Recommended
CPU	Intel Core 2 Quad 2.4 GHz	Intel Core i5 2.4 GHz
RAM	4GB ¹	
Operation System	Windows 7, Windows 8 ²	
Screen Resolution	800x600	
Network	Ethernet 1000 Base-T	

¹ Please use 64-bit system if your computer has more than 4GB RAM. Windows operating system has limits on memory and address space regardless of the real or virtual memory available on a particular computer. Take Windows 7 Professional for example, the maximum physical memory for a 32-bit(X86) system can address is 3.5 GB even though 16 GB of RAM has been installed on this computer. Therefore, if you consider increasing the computer's multi-tasking capability by adding more RAM, you will need a 64-bit version of Windows to take advantage of it all.

Please visit the link below for more memory limitations on various Windows platforms.

http://msdn.microsoft.com/en-us/library/aa366778%28VS.85%29.aspx#physical_memory_limits_windows_7

Besides the limitation mentioned above, you may find the usable memory of your computer displayed here:  → **Computer** → **Properties** is still less than actual installed memory.

This is a common symptoms of all Windows platforms, please find explanations and solutions in this Windows official support document <http://support.microsoft.com/kb/978610/en-us> and <http://windows.microsoft.com/en-us/windows7/taking-the-mystery-out-of-64-bit-windows>

² Please make sure your operation system is fully patched with the latest service packs.

Getting Started

Pre-requisites


Before installing **IVS Server 1**, please make sure the pre-requisites below are fulfilled:

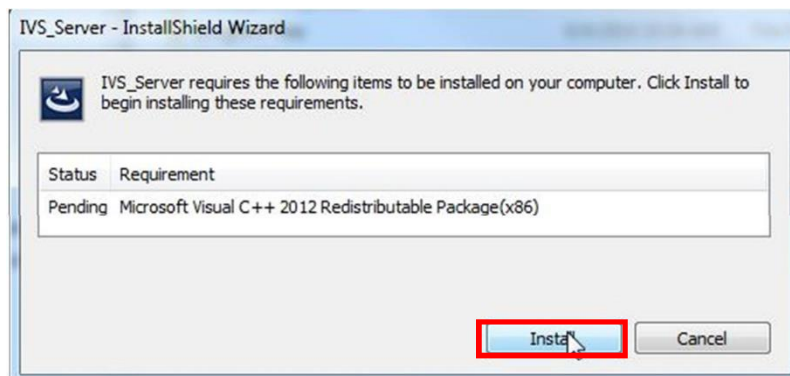
1. Ensure that your computer meets the minimum system requirements.
2. Ensure that your computer has a **C Drive**.
3. Ensure that you have enough storage space on your computer to save video recordings of captured events.

Installing the Program

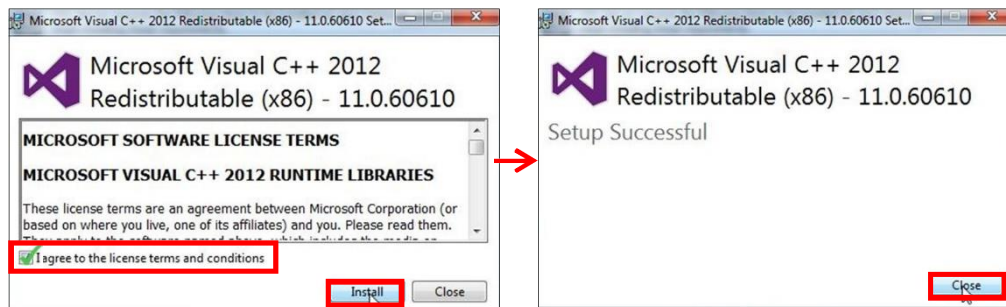
The program installation can be simple and intuitive by following the installation wizard's instructions. The program can be used right after installation is completed, without the need to restart the computer.

To install the software, follow the steps below:

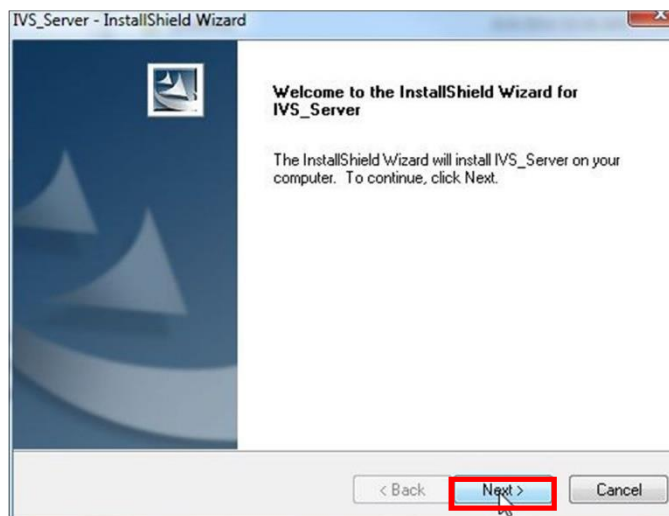
1. Find the IVS Server 1 compressed file that you downloaded and extract it.
2. Execute the install shield application .
3. If prompted by the **InstallShield Wizard** to install **Microsoft Visual C++ 2012 Redistributable Package**, follow the on-screen instructions to do so, as it is crucial for the proper functioning of the program.



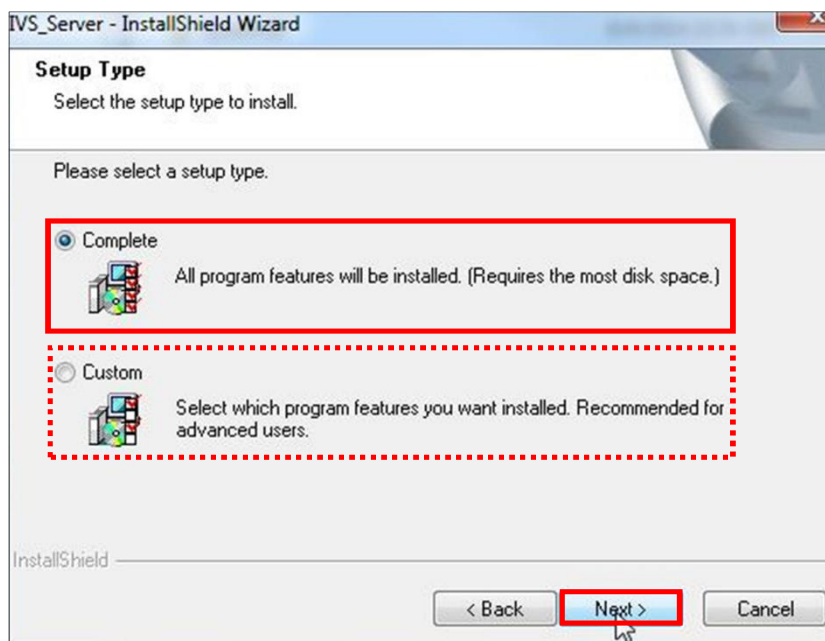
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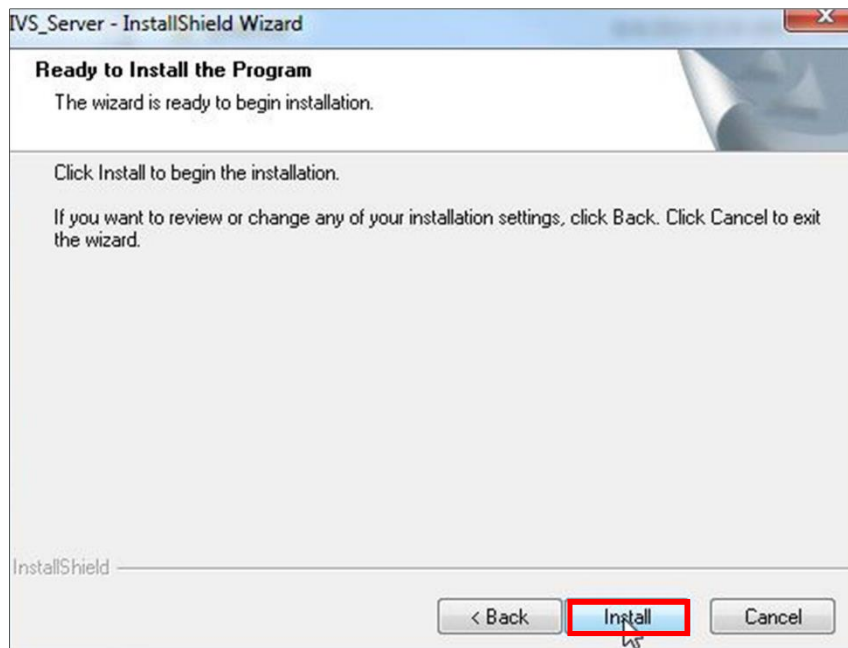
4. Proceed by following the on-screen instructions of the **InstallShield Wizard**.



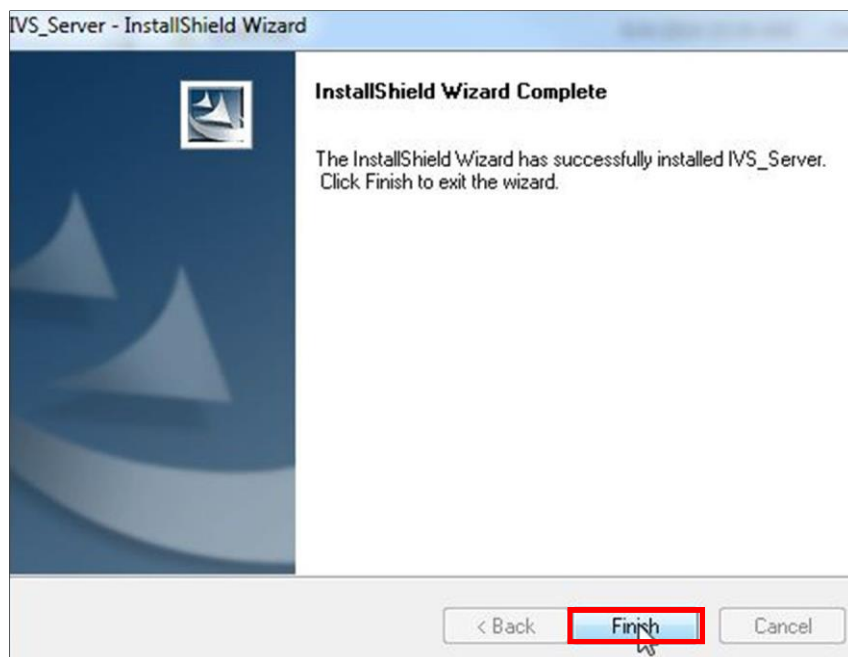
When selecting **Setup Type**, the default “**Complete**” option will have the program installed in the default **C drive** (C:\Program Files). You can select “**Custom**” to choose another program location.




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5. The installation process is done. Click **“Finish”**.



6. Open the file by clicking on the IVSmartSearchV2  shortcut on your desktop. If you can't find a shortcut on your desktop, create your own shortcut by finding the lvs2.0 file under C:\Program Files\IVS_Server\IVS2.0, **right click**, select **“Send To”**, and select **“Desktop (create shortcut)”**.

License and Activation

In IVS Server 1 system, your required number of channels should be licensed and activated before connecting. License activation is the process of unlocking the channels on IVS Server with the received **License Key**. **License Key** is a serial number delivered as a printed card or an E-mail after the purchase is carried out. After the license activation, the channels on IVS server will automatically become available.

During license activation, your **License Key** is matched against the MAC address of the Network Interface Card (NIC) on NVR server computer. Once this license key is used by the computer with given MAC, it cannot be activated with another MAC. This matching record will be stored on the license data server. If your computer has more than one network cards, NVR server will detect them and provide you a dropdown list to select from.

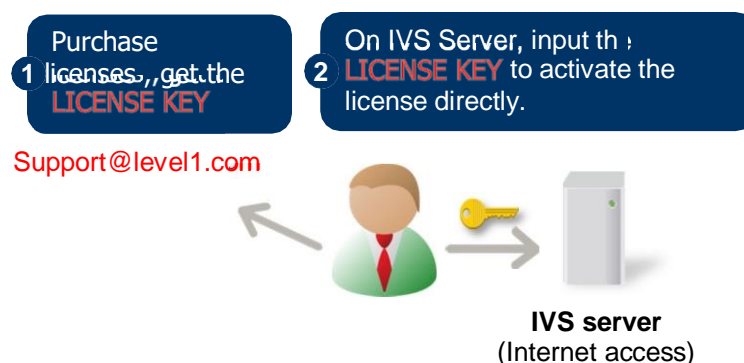
Please note:

- The license is cumulative and perpetual.
- The license is not version-specific, upgrading software version will not influence the existing license(s) you have.
- The maximum number of channels that can be managed by IVS Server 1 is **9**.

There are two ways to activate the licenses depending on your NVR server network condition: **Online Activation** and **Offline Activation**.

Online Activation

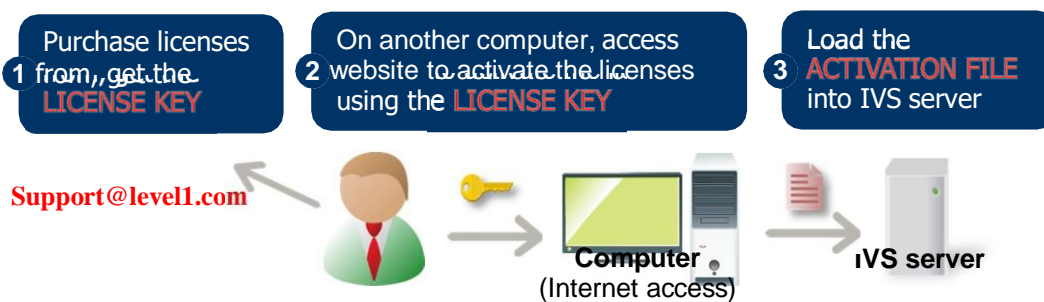
If your IVS Server 1 computer has available Internet access, choose online activation.



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Offline Activation

Offline activation does not require Internet access for IVS server. It is used when IVS is located in a network not connected to public Internet (e.g. in a military base). You will need to get an activation file from another computer and transfer it to the IVS server computer.



The screenshot shows the IVS Server V2.01.03 software interface. The "Offline Registration" tab is selected. A red box highlights the registration fields:

- MAC Address: DB-D3-85-14-CB-6E
- License Key: RPDPA-APTAE-ATEPA-AGHBA-PADAP-PAAQL
- Account: useraccount@email.com
- Password: *****

Below the registration fields is an "Apply" button. At the bottom of the window, a "License" table is displayed:

License Key	Number of License	MAC Address
RPDPA-APTAE-ATEPA-AGHBA-PADAP-PAAQL	4	DB-D3-85-14-CB-6E

The total number of channels is 4.

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Verify Your License

Once your license is successfully activated, the license information will be shown on **License** page.

License Key	Number of License	MAC Address
RPDPA-APTAE-ATEPA-AGHBA-PADAP-PAAQL	4	D8-D3-85-14-CB-6E
CAUJAA-PABPT-PEEAP-PUWQP-AASPA-APPBU	1	D8-D3-85-14-CB-6E

License and Activation

Tip

How to find MAC Address

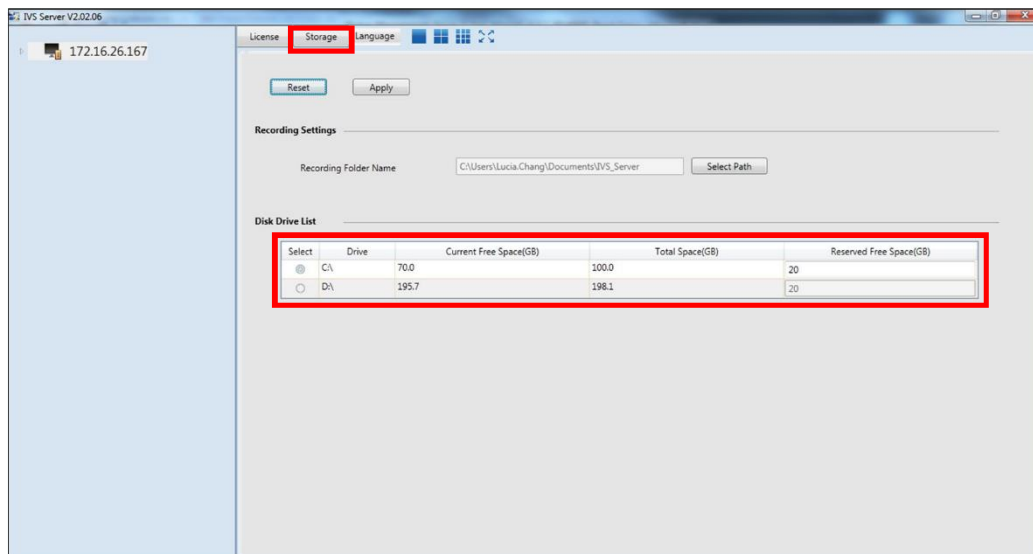
1. Click **Windows Start**, in the run box on **Start** menu, input "**cmd**".
2. Execute the **cmd** program, and input the command "**ipconfig /all**" or "**getmac**".
3. The MAC address will be referred to as the **Physical Address**, made up of 12 characters
e.g. **00-1E-65-FE-8E-98**

Whenever an analysis rule set up by the user is met, the IVS server can record the event according to the user's settings and provide recordings for future reference. These recordings will be saved in a disk drive of the computer you are using. Storage management allows you to properly handle and manage the location of where the recordings will be saved, as well as how much space will be allocated for these recordings.

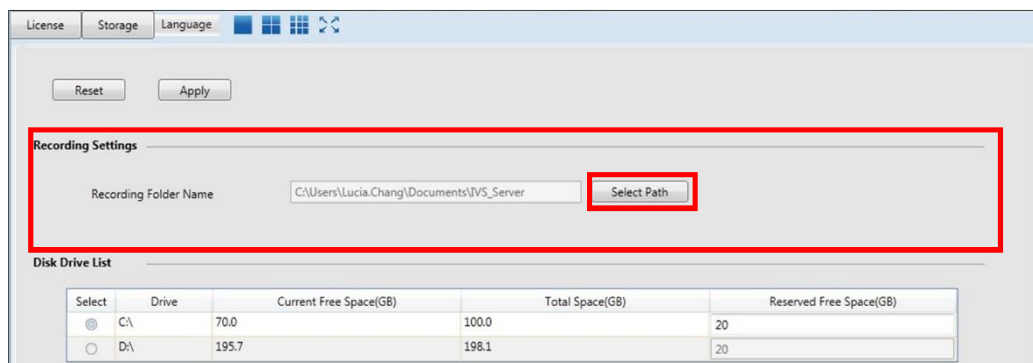
To set up the location and allocation of space for your recordings, follow the steps below:

1. Access the IVS 1's **Storage Management** page by clicking on the "**Storage**" tab. All the hard disks available to your server computer will be detected and displayed.

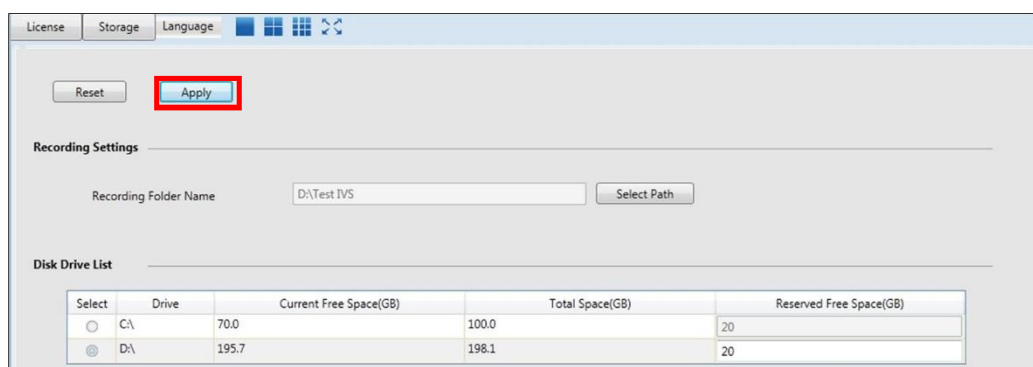
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2. Under **“Recording Settings”**, make sure the folder in which you would like to save your recordings is selected. If you would like to change the location, click on **“Select Path”** to choose a new location.



3. After you have selected the location you wish to save your recordings, click **“Apply”**. The disk drive that of the file path that you have chosen to save your recordings will be selected.



4. For the disk drive that has been selected, type in how much space you would like to

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allocate for video recordings created by IVS Server 1. The minimum amount of storage space. The recommended amount of storage space to be allocated is 20GB. Once the free disk space in the selected Hard Drive is less than the Reserved Free Space, Queue Management Server will remove existing recordings in the hard drive, starting with the oldest recording.

License Storage Language

Reset Apply

Recording Settings

Recording Folder Name: D:\Test IVS Select Path

Disk Drive List

Select	Drive	Current Free Space(GB)	Total Space(GB)	Reserved Free Space(GB)
<input type="radio"/>	C:\	70.0	100.0	20
<input checked="" type="radio"/>	D:\	195.7	198.1	20

5. Click **“Apply”** to save your settings or **“Reset”** to revert to the original settings.

License Storage Language

Reset Apply

Recording Settings

Recording Folder Name: D:\Test IVS Select Path

Disk Drive List

Select	Drive	Current Free Space(GB)	Total Space(GB)	Reserved Free Space(GB)
<input type="radio"/>	C:\	70.0	100.0	20
<input checked="" type="radio"/>	D\	195.7	198.1	20

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