IDIS Solution Suite

Software Manual

Backup Service

Powered by Direct IP™

Before reading this manual

This Operation Manual provides instructions for using IDIS Solution Suite, a network integration solution enabling remote control of network cameras and video servers.

References to IDIS Solution Suite system throughout this Operation Manual mean the computer system on which the IDIS Solution Suite program is running. References to device mean a network camera or a network video server.

Following program is provided in addition to IDIS Solution Suite:

Start > **IDIS Solution Suite** > **Utility** > **ProblemReporter** (contact your IDIS Solution Suite distributor for the **SecretKey**.)

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In-Text

Symbol	Type	Description
	Caution	Important information concerning a specific function.
	Note	Useful information concerning a specific function.

WEEE (Waste Electrical & Electronic Equipment)

Correct Disposal of This Product

(Applicable in the European Union and other European countries with separate collection systems)

This marking shown on the product or its literature, indicates that it should not be disposed with other household wastes at the end of its working life. To prevent possible harm to the environment or human health from uncontrolled waste disposal, please separate this from other types of wastes and recycle it responsibly to promote the sustainable reuse of material resources.

Household users should contact either the retailer where they purchased this product, or their local government office, for details of where and how they can take this item for environmentally safe recycling.

Business users should contact their supplier and check the terms and conditions of the purchase contract. This product should not be mixed with other commercial wastes for disposal.

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Part 1 – Introduction

This document describes installation and operation of IDIS Solution Suite Backup software, which is designed to be used with IDIS Solution Suite Standard software.

The backup service controls backup of recorded video saved in the IDIS Solution Suite recording servers or DVRs and playback of backed-up video saved in the IDIS Solution Suite backup server. The IDIS Solution Suite system performs the backup and playback based on the settings of the administration or federation service. If the backup service is registered on an administration service, the IDIS Solution Suite system only backs up video saved in the recording servers and DVRs which are registered on the administration service. If the backup service is registered on a federation service, the IDIS Solution Suite system backs up video that is saved in the recording servers and DVRs registered on the all administration services that are registered on the federation service.

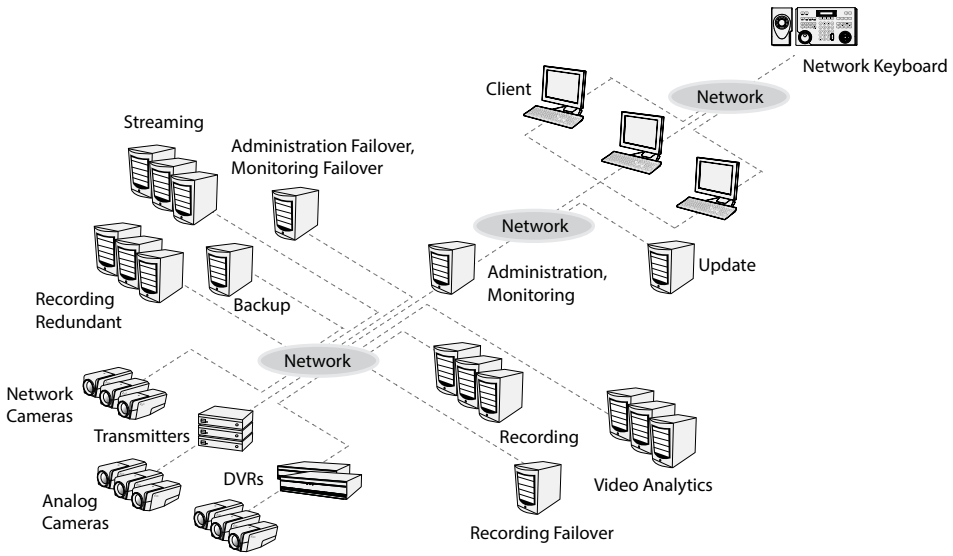
A maximum of 64 backup servers can be used, and a maximum of 64 recording servers and 256 DVRs can be registered on one backup server. The number of channels that can be backed up differs depending on the type and number of WIBU-Keys (maximum 256 channels). Ask your dealer or distributor about the number of channels that can be backed up using your IDIS Solution Suite software.

- Recording speed and backup speed might decrease when video is backed up while recording. It is recommended that you limit the network bandwidth of the backup server properly to minimize the decrease of recording speed. Refer to **Chapter 4 — Recorded Video Backup, 4.2 Setting up Backup Schedule (22 page)** for details about limiting the network bandwidth.
- Backup speed might decrease or some sections of video may not be backed up depending on network conditions or system performance. In this case, it is recommended that you increase the network bandwidth for the IDIS Solution Suite system or upgrade the system specifications.
- It is not supported to back up recorded video saved in DVRs which provide the hour segments timetable and in PC-based DVRs. Audio may be excluded when backing up recorded video saved in DVRs depending on the specifications and version of the DVR.
- This product includes software developed by the OpenSSL Project for use in the OpenSSL Toolkit (http://www.openssl.org/).
- The software included in this product contains some Open Sources. You may obtain the complete corresponding source code from us. See the Open Source Guide on the software CD (OpenSourceGuide\OpenSourceGuide.pdf) or as a printed document included along with this document.

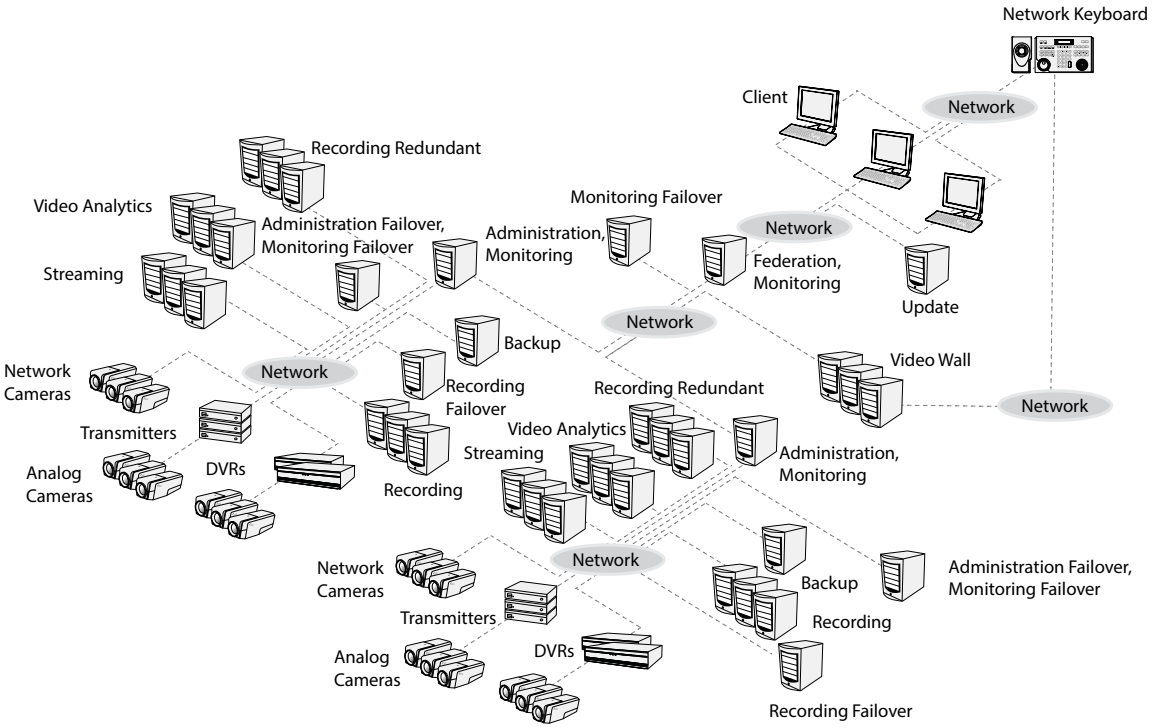
System Diagram

Backup Service Registered on Administration Service

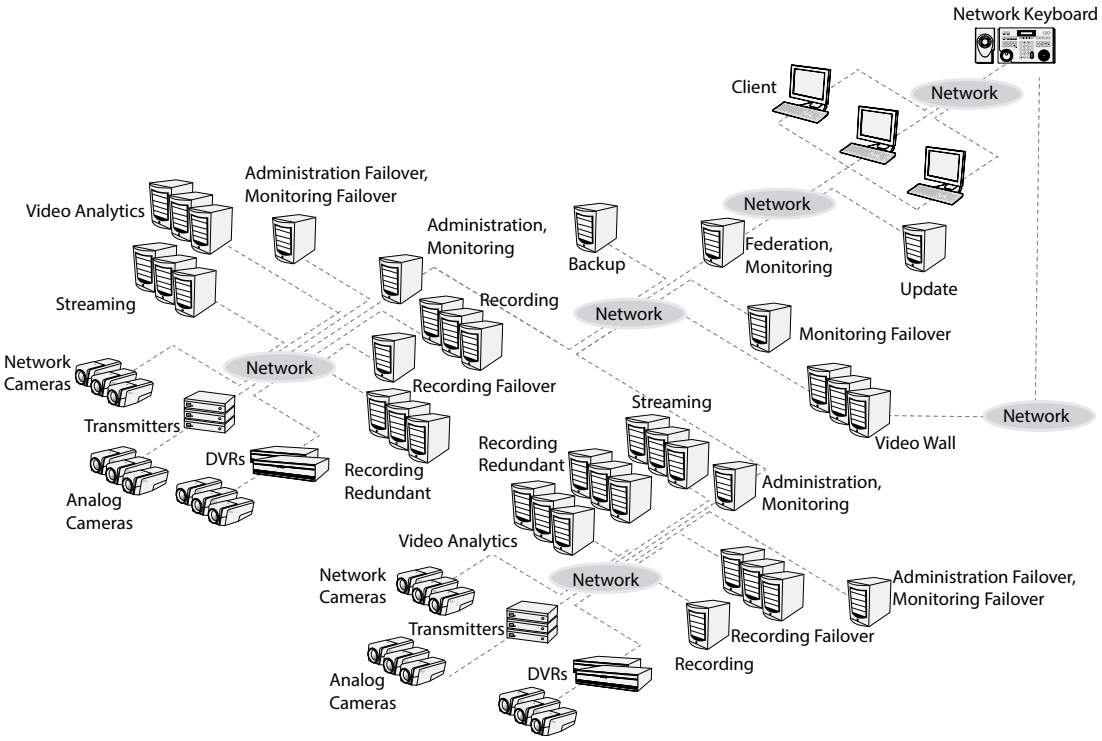
Single-System



Multi-System



Backup Service Registered on Federation Service



Part 2 - Installation

Product Information

Package Contents

- Installation CD
- User's Manual
- WIBU-Key (USB Dongle)

- If a WIBU-Key is removed from a backup server, the backup might not be done properly.
- When you connect or remove a WIBU-Key, stop running the backup service first.

System Requirements

	Recommended
OS	Microsoft® Windows® XP 32-bit/Vista (Home Standard, Business, Ultimate, Enterprise), Microsoft® Windows® 7 (Home Premium, Professional, Ultimate), Microsoft® Windows® 8 (Pro, Enterprise), Microsoft® Windows® Server 2003/2008/2012
CPU	Intel Core II Quad 8200 2.33 GHz/Intel Xeon 3.0 GHz or faster
RAM	2GB or more
VGA	AMD Radeon™ HD 2400 or NVIDIA GeForce FX5500 (AMD recommended) (1024x768, 24bpp or higher)
HDD	2GB or more free space
LAN	Gigabit Ethernet or faster

The IDIS Solution Suite program is a 32-bit application. When you install it on a 64-bit of Microsoft® Windows® Vista or later operating system, it is installed and operates in 32-bit compatibility mode.

Installation

- It is recommended to install the backup service on separate PC from other IDIS Solution Suite services and Client program for better performance of video backup and playback.
- Disable your PC's Windows power saving function: **Start** menu → **Power Options** → set both **Turn off the display** and **Put the computer to sleep** to **Never** (**Power Options** → **Power Schemes** tab → set both **Turn off monitor** and **Turn off hard disks** to **Never** when using the Microsoft® Windows® XP operating system).
- Installing the Client program of IDIS Solution Suite Backup is identical to installing that of IDIS Solution Suite Standard. Refer to the IDIS Solution Suite Standard User's Manual for details.

If an older version of IDIS Solution Suite software is installed on your computer, a screen appears asking you to upgrade the software. In this case, you are required to upgrade the software according to the instructions in the screen.

Server System

1 Insert the software CD in the backup server.

2 Run the **Setup.exe** file of the software CD.

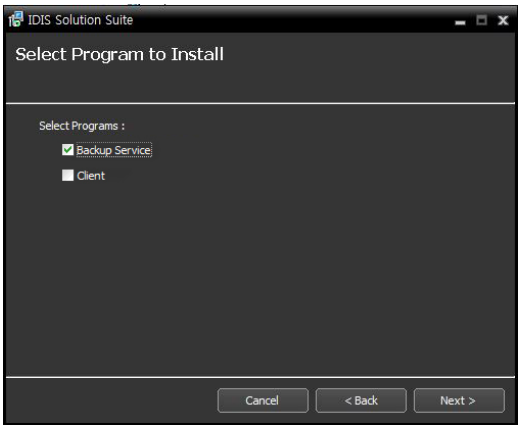
The **User Account Control** window might appear when using the Microsoft® Windows® Vista or later operating system. Click **Allow** and install the software following the instructions.

3 Select the language in which to run the program and then click **OK**.

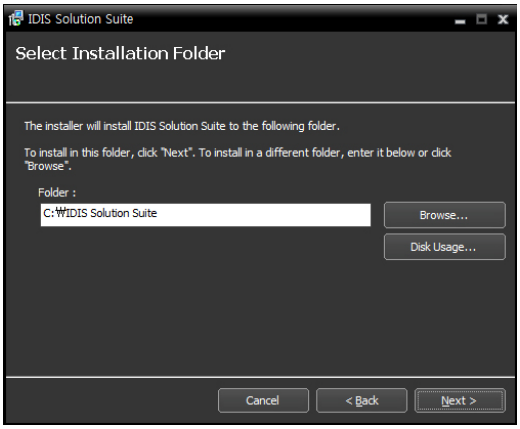
- To properly display the selected language, your PC's operating system should be set to support the selected language.
- To change the IDIS Solution Suite program's language after the software has been installed, select **Language Selector** in the **IDIS Solution Suite** → **Utility** folder of the **Start** menu before running the **IDIS Solution Suite** program.

4 When the following screen appears, select **Install** and click **Next**.

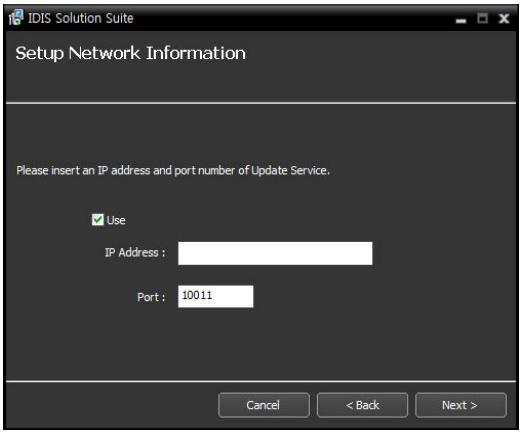
5 Select **Backup Service** and click **Next**.



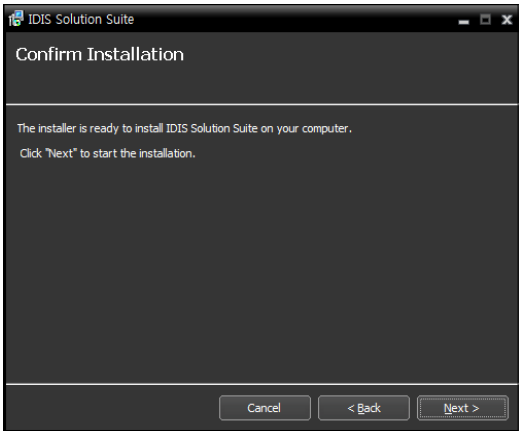
6 Designate the folder path to install the services. Clicking the **Disk Usage…** button shows the available and required disk space for each hard disk drive for the installation. Then click **Next**.

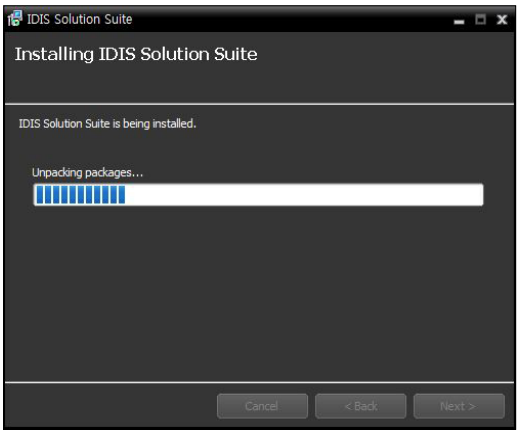


7 Enter the IP address and port number of administration or federation service and click **Next**. You can change the settings in the Service Manager program after completing installation if necessary. When the installation is complete, the backup service is connected to the administration or federation service via the network if both services are operating.

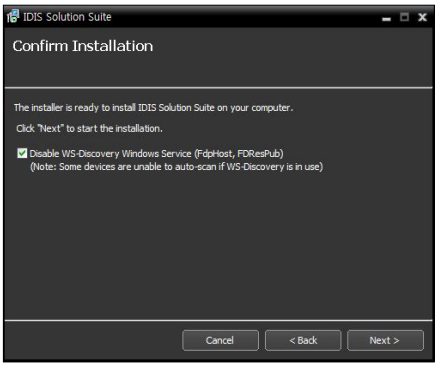


8 When the following screens appear, click **Next**.

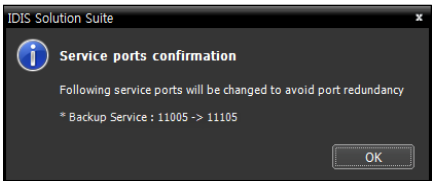




- The following screen appears when using Microsoft® Windows® Vista or later operating systems. It is recommended that you check the **Disable WS-Discovery Windows Service (fdPHost, FDResPub)** box. If you do not check the box, the IDIS Solution Suite program cannot auto-scan devices using ONVIF™ Conformance protocol when scanning devices for device registration.

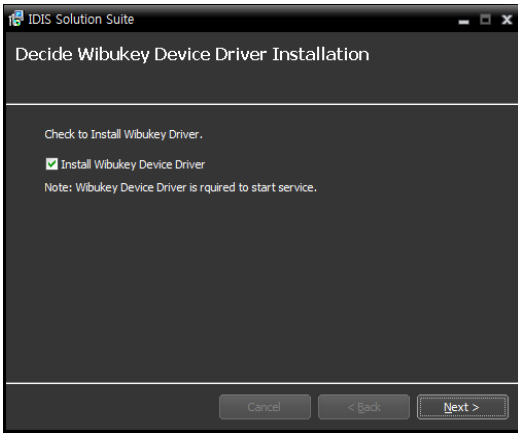


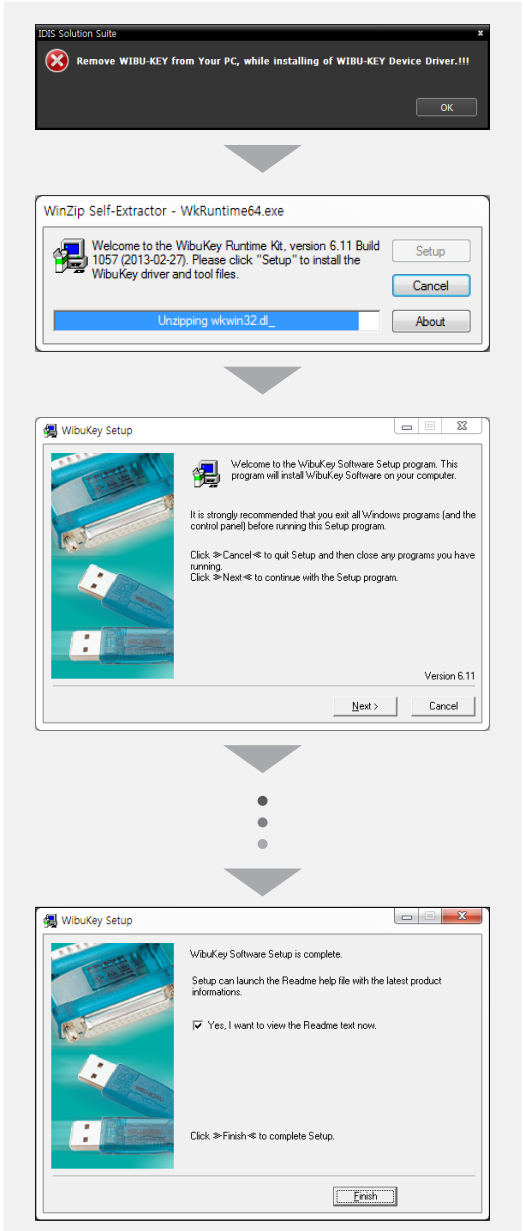
- The following screen appears when the port number of the service being installed is already in use, and the screen displays the port number that will be changed. The changed port number will be applied when the service starts operating after installation.

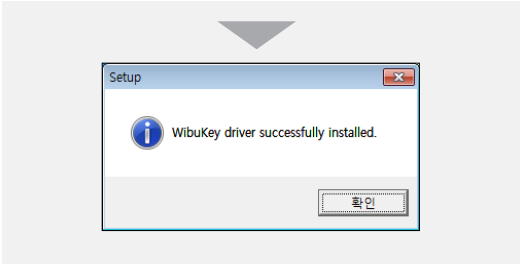


- **.NET Framework** and the **Visual C++ Runtime Libraries** are installed automatically, and it may take some time. This installation step will be skipped if the programs are already installed on your computer.

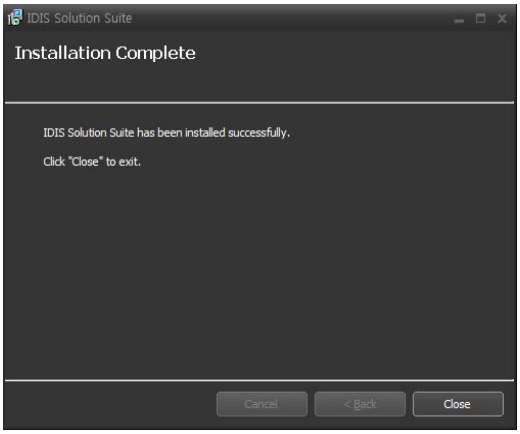
9 Disconnect the WIBU-Key from the server if a WIBU-Key is connected. Then install the WIBU-Key device driver following the instructions.







10 When the following screen appears, click the **Close** button to complete the installation.



After successfully installing the services, the services, Service Manager program (the icon is displayed in the notification area of the task bar) and Setup program run automatically.

11 Connect WIBU-Keys to the backup server.

Uninstall

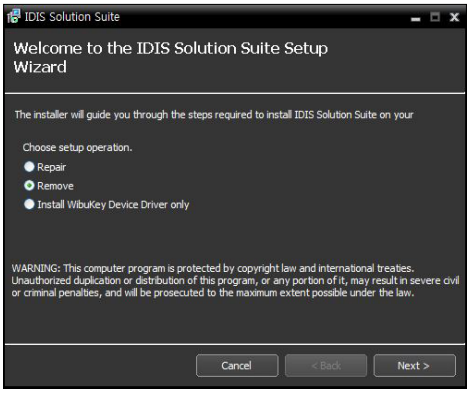
1 Stop running the services and Client program first.

The IDIS Solution Suite software might not be uninstalled correctly if you uninstall it while the services or Client program is running.

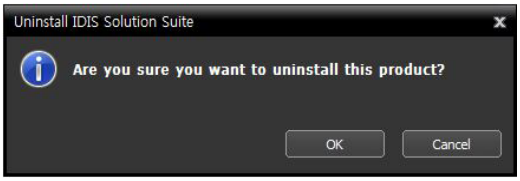
The IDIS Solution Suite software should be uninstalled following the procedures below. If you delete the installation folder manually, the IDIS Solution Suite software cannot be uninstalled or reinstalled.

2 Go to the **Start** Menu, and click **IDIS Solution Suite**. Click **Uninstall IDIS Solution Suite**.

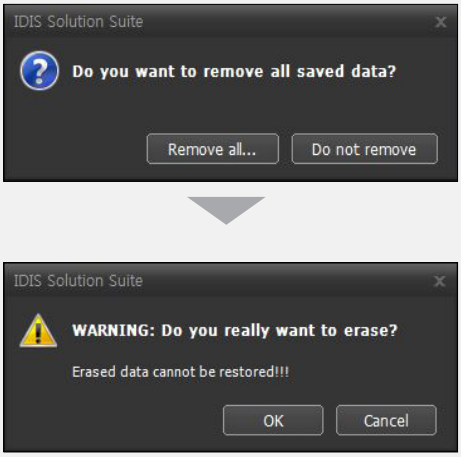
You can uninstall the software by using the software CD. Insert the software CD in the backup server and run the **Setup.exe** file. Select **Remove** and click **Next**.



3 Click **OK** when the following screen appears.



4 Click the **Remove All** or **Do not remove** button when the following screen appears. Clicking the **Remove All** button deletes all saved data including recorded video and previous settings in the system. Clicking the **Do not remove** button uninstalls the software without deleting any saved data in the system and keeps all saved data in the system.



The deleted data cannot be restored once the data is deleted.

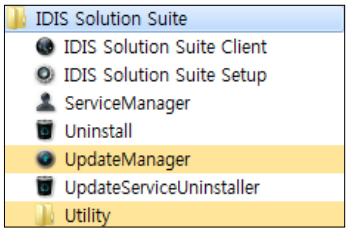
5 Click the **OK** button to complete the uninstall process.

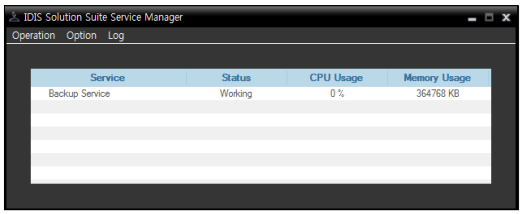
Part 3 - Getting Started

Services should be running on the IDIS Solution Suite servers for the IDIS Solution Suite program to operate.

Running Services

When the services are installed, the services run automatically. You can also start or stop running the services manually. Go to the **Start** Menu → Click **IDIS Solution Suite** → Run the **Service Manager** program.



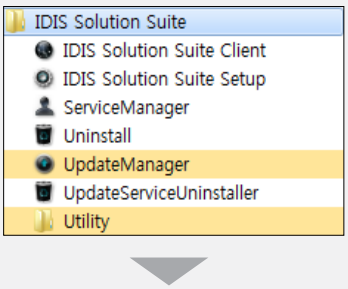


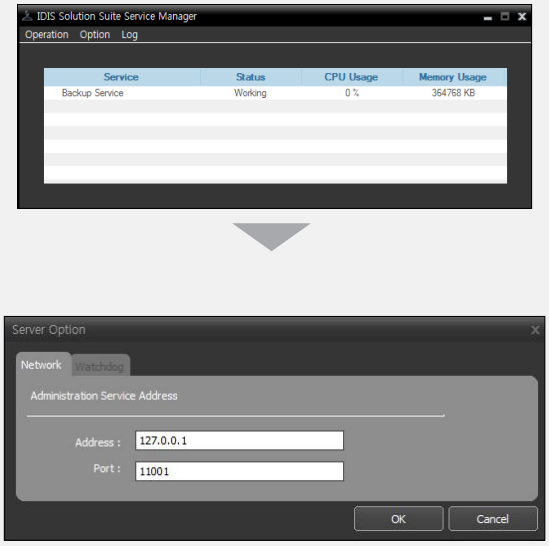
Check the status of services. If any of the services are not listed as **Working** under **Status**, start the services manually. Refer to IDIS Solution Suite Standard User's Manual for details about the **Service Manager** program.

Registering Backup Service

You must register backup services (max. 64) on the administration or federation service. If the IP address and port number of the administration or federation server is entered correctly during the installation, the service is registered on the administration or federation service automatically. Registering the backup service on the administration service allows you to back up video saved in the recording servers and DVRs registered on the administration service. Registering the backup service on the federation service allows you to back up video saved in recording servers and DVRs registered on all administration services that are registered on the federation service.

The backup service should be connected to the administration or federation service via the network connection, on which the backup service is registered. Go to the **Start** Menu and click **IDIS Solution Suite**. Run the **Service Manager** program and click the **Option** → **Server Option** menu.

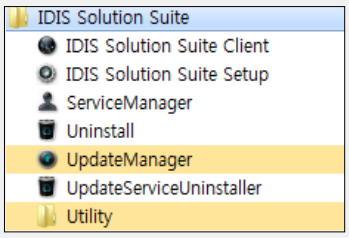




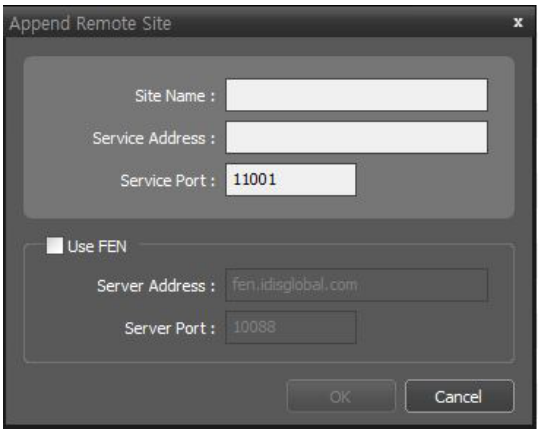
- **Address**, **Port**: Set up the IP address and port number of the administration or federation server for connection to the administration or federation service.

Registering on Administration Service

1 Go to the **Start** Menu → Click **IDIS Solution Suite** → Run the **IDIS Solution Suite Setup** program and enter login information.



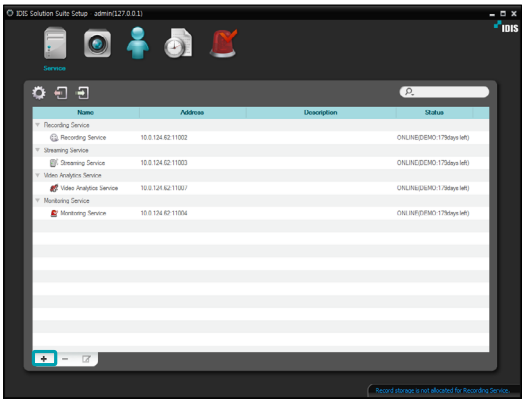
- **Site Name**: Select the administration service to connect to from the list. You can add other administration services to the list or modify information about the administration service in the list by clicking the ⚙ button at the right.



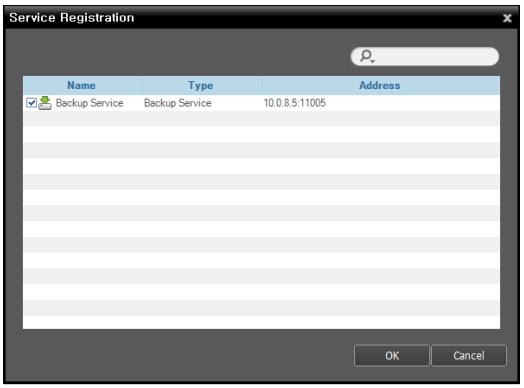
- **Site Name**, **Service Address**, **Service Port**: Designate the name of the administration service and enter the IP address and port number of the administration server to which the backup service is connected (default: 11001).

- **User ID**, **Password**: Enter your user ID and password. The default user ID is **admin** and default password is **12345678**. You can change the user ID and password in the User menu. Refer to IDIS Solution Suite Standard User's Manual for details.
- **Remember my ID on this computer**: Check the box if you want to save your ID for logging on.

2 Select the Service menu, and then register a backup service on the administration service following the procedures below.



3 Click the + button at the bottom. The **Service Registration** window appears, and a list of available services is displayed with information about each service.

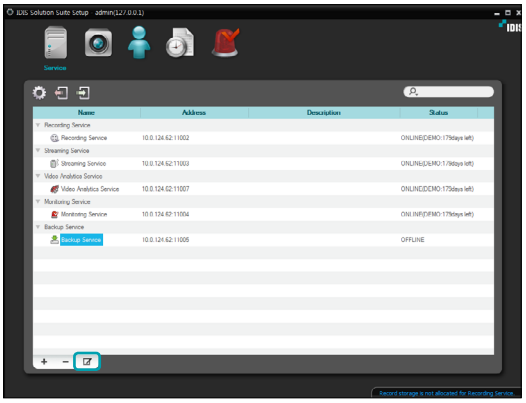


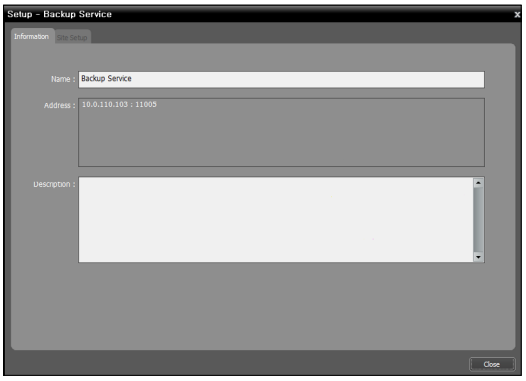
- **Name**: Displays services that are currently connected to the administration service via the network.
- **Type**: Displays the service type.
- **Address**: Display the IP address and port number of each server.

Only the services of which the administration server information (**Service Manager** → **Option** → **Server Option**) matches the currently connected administration server are available.

4 Select backup services to register on the administration service and click the **OK** button.

5 Select a backup service and click the button at the bottom. The **Setup – Backup Service** window appears. Select the **Information** tab.

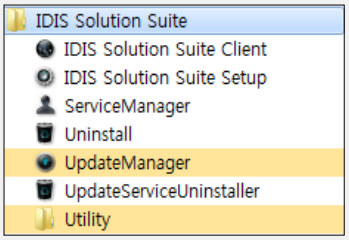


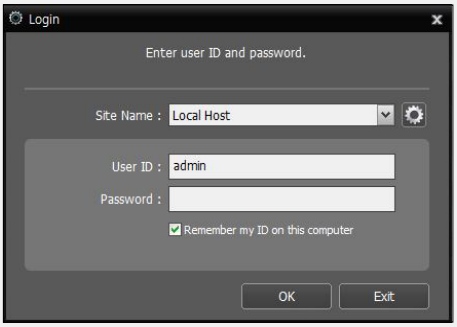


6 Enter the backup service's name and click the **Close** button.

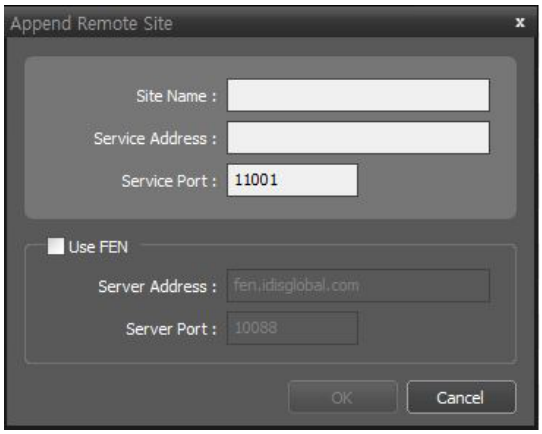
Registering on Federation Service

1 Go to the **Start** Menu → Click **IDIS Solution Suite** → Run the **IDIS Solution Suite Setup** program and enter login information.





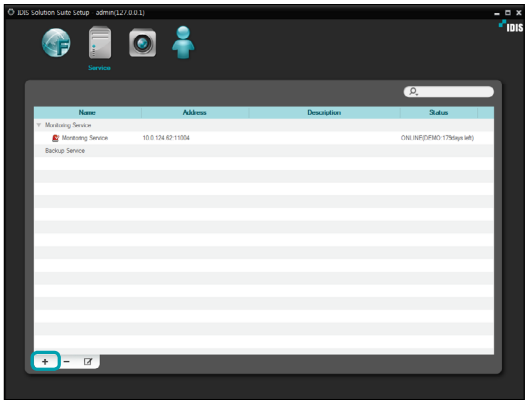
- **Site Name**: Select the federation service to connect to from the list. You can add other federation services to the list or modify information about the federation service in the list by clicking the button at the right.



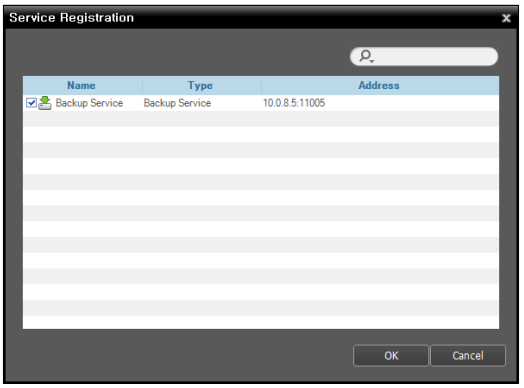
- **Site Name**, **Service Address**, **Service Port**: Designate the name of the federation service and enter the IP address and port number of the federation server to which the backup service is connected (default: 11001).

- **User ID**, **Password**: Enter your user ID and password. The default user ID is **admin** and default password is **12345678**. You can change the user ID and password in the User menu. Refer to IDIS Solution Suite Standard User's Manual for details.
- **Remember my ID on this computer**: Check the box if you want to save your ID for logging on.

2 Select the **Service** menu



3 Click the **Backup Service**, and the + button at the bottom. The **Service Registration** window appears.

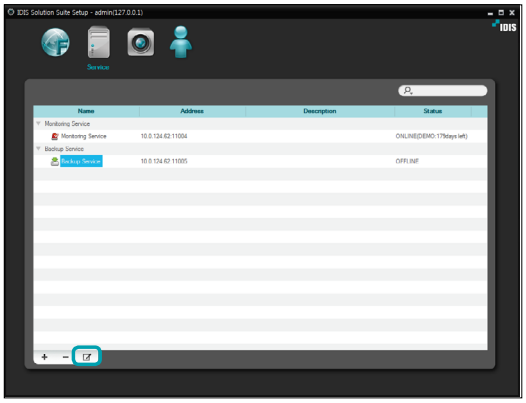


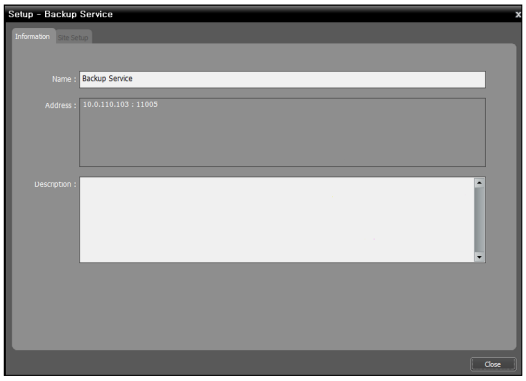
- **Name**: Displays backup services that are currently connected to the federation service via the network.
- **Type**: Displays the service type.
- **Address**: Display the IP address and port number of backup server.

Only the services of which the administration server information (**Service Manager** → **Option** → **Server Option**) matches the currently connected administration server are available.

4 Select backup services to register on the administration service and click the **OK** button.

5 Select a backup service and click the button at the bottom. The **Setup – Backup Service** window appears. Select the **Information** tab.





6 Enter the backup service's name and click the **Close** button.

Part 4 - Recorded Video Backup

You can back up recorded video saved in the recording servers or DVRs.

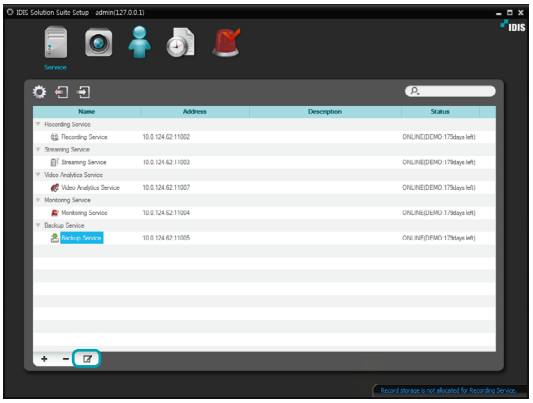
First, check the following and run the Setup program.

- Services should be running on the system. Refer to the IDIS Solution Suite Standard User's Manual for details.
- There should be recorded data in a recording server or DVR. Refer to the IDIS Solution Suite Standard User's Manual for details about recording.
- The backup service should be registered on the administration or federation service. Refer to **Registering Backup Service (14 page)** for details about registering a backup service.

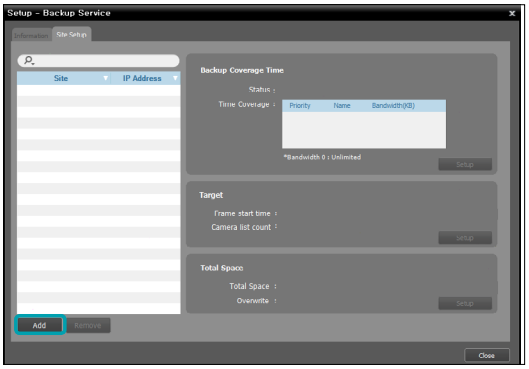
Adding Backup Sites

Adding to Administration Service

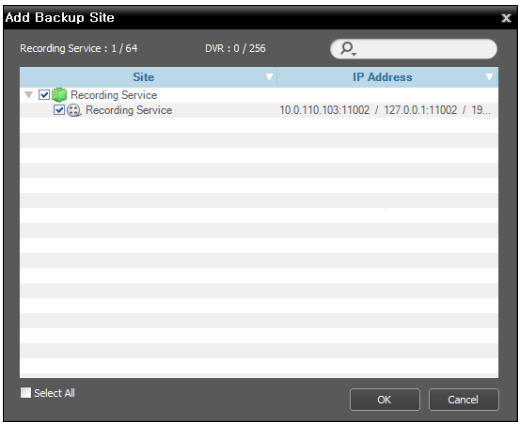
1 Go to the **Start** menu > Click **IDIS Solution Suite** > Run the **IDIS Solution Suite Setup** program and enter login information.



2 Select a backup service and click the ☑ button at the bottom in the Service menu. The **Setup – Backup Service** window appears. Select the **Site Setup** tab.



3 Click the **Add** button at the bottom. The **Add Backup Site** window appears, and a list of available recording services and DVRs is displayed.



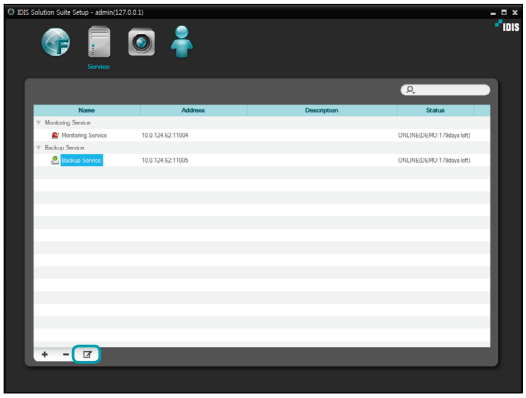
- **Site**: Displays recording services and DVRs that are currently connected to the administration service via the network.

Only the services of which the administration server information (**Service Manager** → **Option** → **Server Option**) matches the currently connected administration server are available.

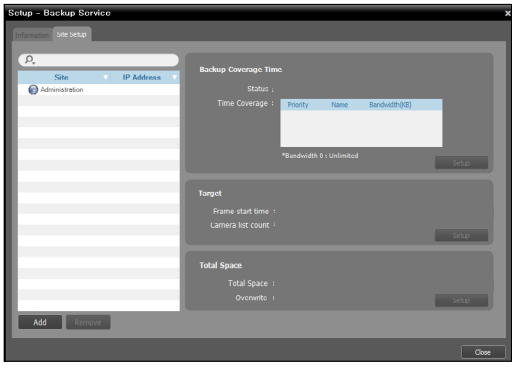
4 Select recording services and DVRs to back up and click the **OK** button.

Adding to Federation Service

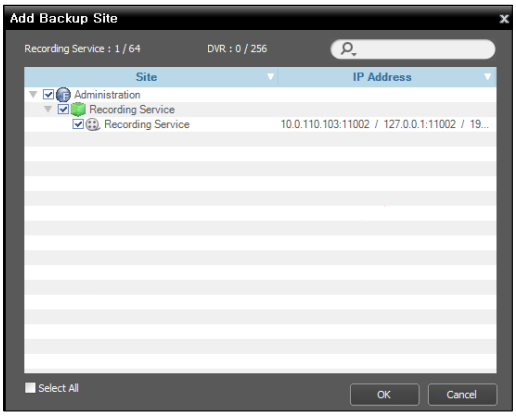
1 Go to the **Start** menu > Click **IDIS Solution Suite** > Run the **IDIS Solution Suite Setup** program and enter login information.



2 Select a backup service and click the ☑ button at the bottom in the Service menu. The **Setup – Backup Service** window appears. Select the **Site Setup** tab.



3 Click the **Add** button at the bottom. The **Add Backup Site** window appears, and a list of available recording services and DVRs is displayed.



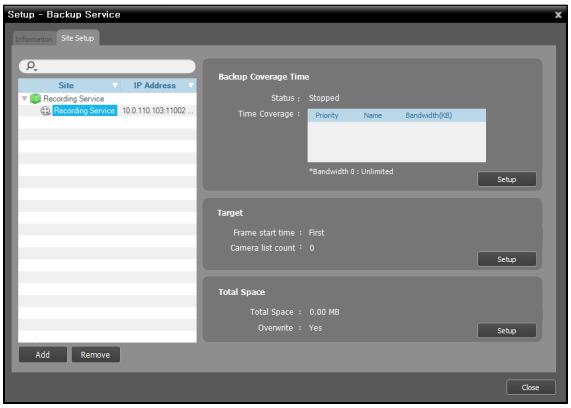
- **Site**: Displays recording services and DVRs that are currently connected to the federation service via the network.

Only the services of which the administration server information (**Service Manager** → **Option** → **Server Option**) matches the currently connected administration server are available.

4 Select recording services and DVRs to back up and click the **OK** button.

5 Set up a backup schedule and allocate storage.

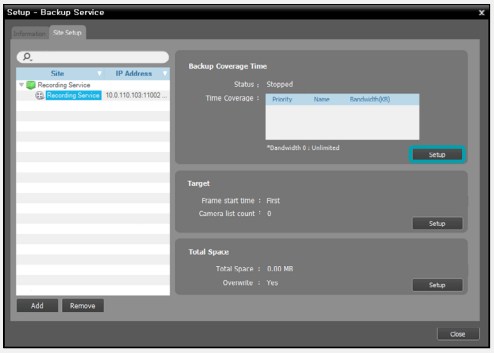
Setting up Backup Schedule

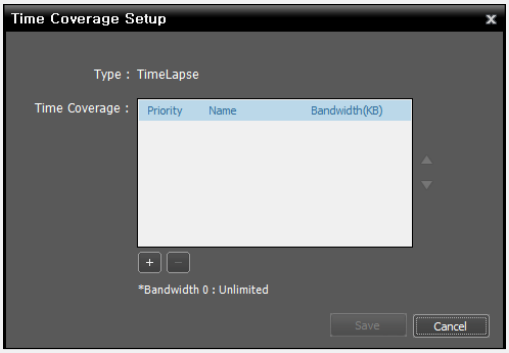


Select a recording service or DVR from the Site list after adding backup sites. You must set up a backup schedule separately for each recording service and DVR.

Backup Coverage Time

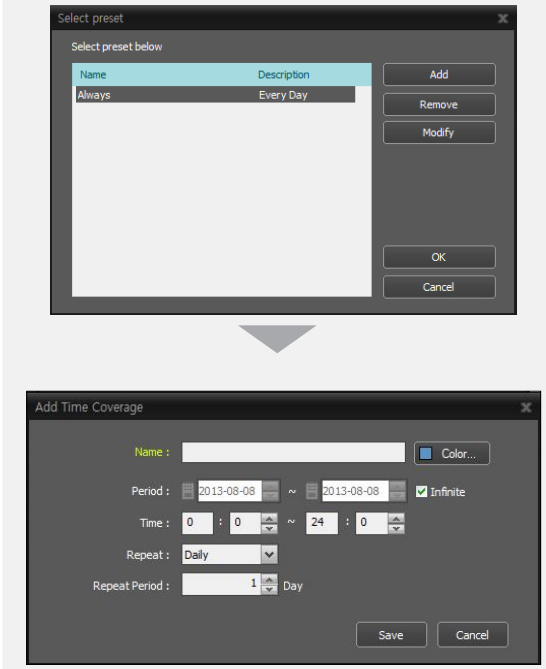
Click the **Backup Coverage Time – Setup** button and add a backup period Preset by clicking the + button





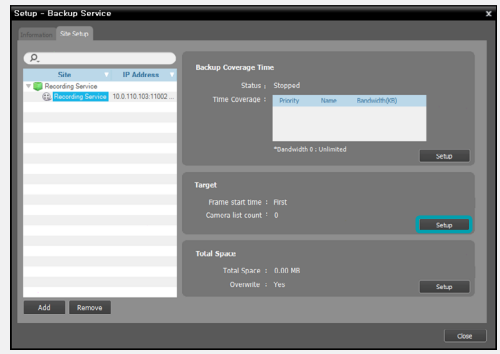
- **Priority**: Displays the priority of backup period Preset. You can change the priority by using the ▲ or ▼ button.
- **Name**: Displays the name of backup period Preset.
- **Bandwidth**: Sets up the maximum bandwidth. You can control the network bandwidth by limiting the network bandwidth depending on the network traffic. The proper bandwidth limit setting can minimize the decrease of recording speed when video is backed up while recording. However, if you limit the network bandwidth, backup speed might decrease.

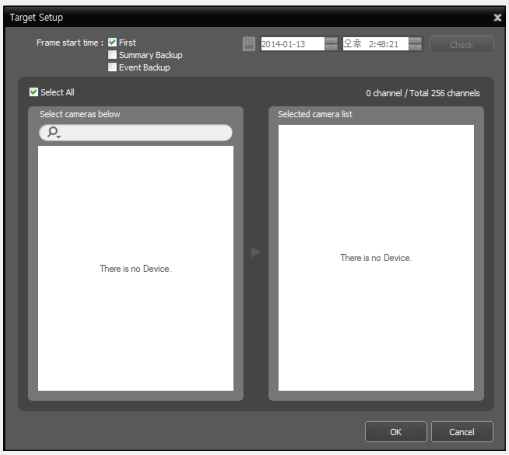
You can add a new Preset or edit a saved Preset by clicking the **Add** or **Modify** button. Setting up the time span Preset for backup is identical to setting it up for recording. Refer to the IDIS Solution Suite Standard User's Manual for details.



Target

Click the **Target – Setup** button and select cameras to back up video.

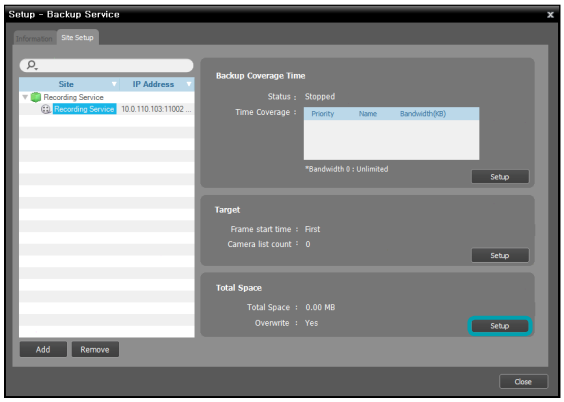




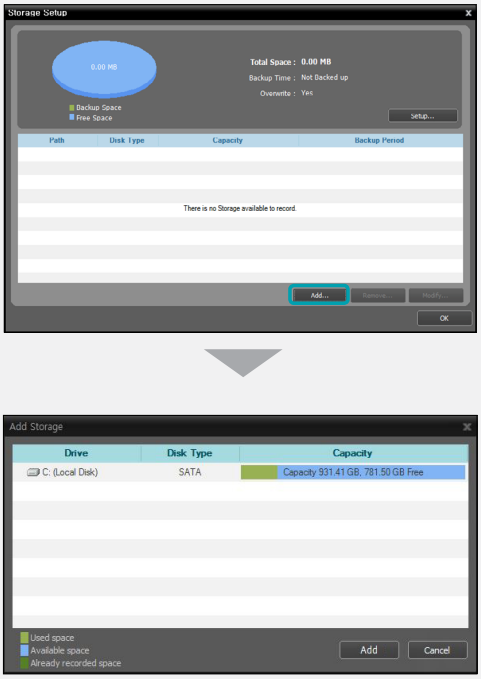
- **Frame start time**: Set up the time of the first frame of the recorded video to start backup, and click the Check button. You are required to select a segment if the administration server's time and date has been reset to a time that is earlier than previously recorded video and there is more than one video segment in the same time range. Selecting **First** starts backup from the first recorded video.
- **Summary Backup**: Backs up only key frames of recorded video. It allows backing up recorded data of longer period and makes the backup speed faster, but movements might not be smooth when playing back backed-up video. The key frame frequency is different depending on the encoding, and the higher the recording speed, the higher the frequency.
- **Event Backup**: Backs up only event-based recorded video.
- **Select cameras below**: Displays a list of cameras that have recorded video, which can be backed-up.
- **Selected camera list**: Displays the list of cameras to be backed up.

Allocating Storage

- USB hard disks, network hard disks and hard disks set to **Dynamic** cannot be allocated storage.
- It is recommended to add a new unformatted hard disk drive to ensure stable recording. If you are setting up a hard disk drive which contains data, however, you are to delete partition(s) and the file system in advance after formatting. Refer to the PC/server's user manual or consult with the PC/server manufacturer for details about how to format or delete the partition(s) and file system.
- When removing a hard disk drive that contains recorded video from a recording server and installing it in another recording server, you cannot search or play back the video recorded on the original recording server.
- The total amount of storage for one hard disk drive cannot exceed 50,000 GB.

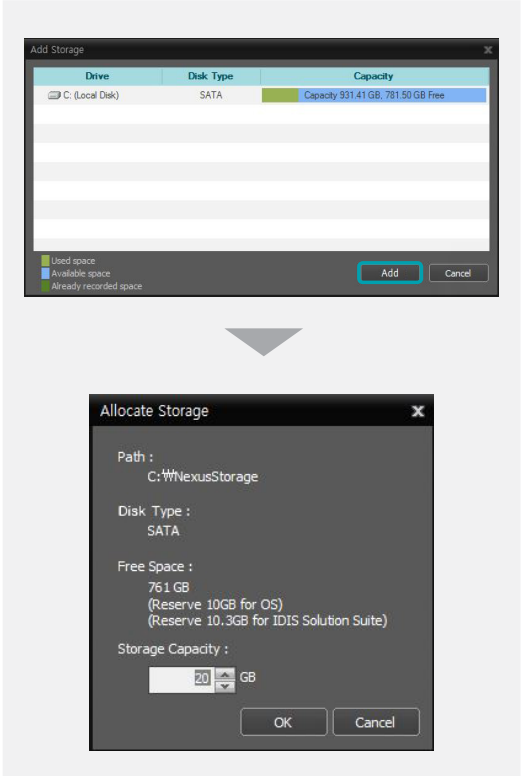


1 Click the **Total Space – Setup** button after adding backup sites and the **Storage Setup** window appears. Click the **Add** button at the bottom. The **Add Storage** window appears, and a list of available hard disk drives is displayed with information about each drive.



- **Drive**: Displays the drive name and volume label. If a file system has not been created on a hard disk drive, '**PHYSICALDRIVE** No.' will be displayed instead of the drive name and volume label. The IDIS Solution Suite program considers any hard disk drive that does not use Windows file system (FAT32, NTFS) as if no file system has been created.
- **Disk Type**: Displays the type of hard disk drive.
- **Capacity**: Displays the total storage capacity and available storage capacity.

2 Select a hard disk drive to allocate storage and click the **Add** button at the bottom. The **Allocate Storage** window appears.



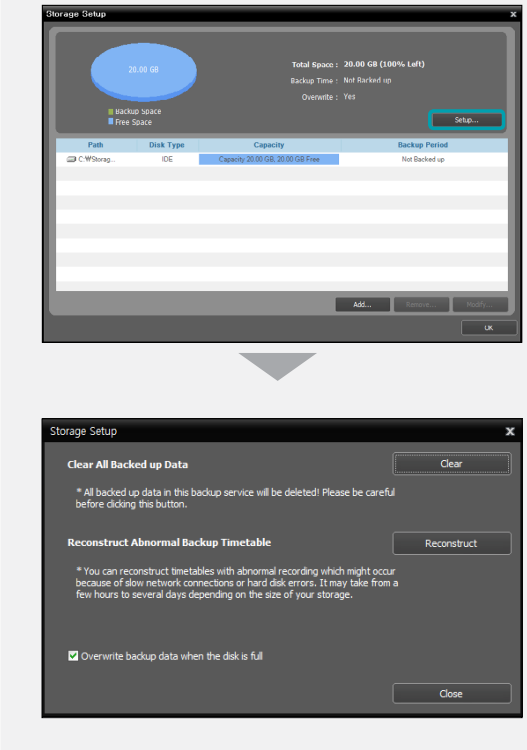
- **Path**: Displays the storage folder path.
- **Disk Type**: Displays the type of hard disk drive.
- **Free Space**: Displays the available stora ge capacity.
- **Storage Capacity**: Sets up the storage capacity to be allocated to the hard disk drive (Min. 20GB). If the Windows operating system is installed on the hard disk drive, you must reserve more than 10GB of free hard disk space for proper system operation. If no file system has been created on the hard disk drive, the recording server automatically creates a proprietary video database file system when storage is allocated to ensure more stable recording and allocates storage to the entire hard disk drive automatically.

Managing Storage

You can manage storage of all hard disk drives used in the current recording server or of a specific hard disk.

Storage of All Hard Disk Drives

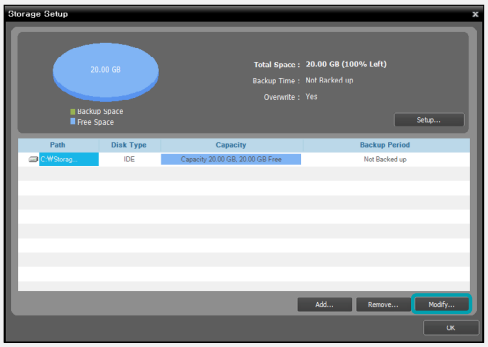
Click the **Setup** button. The Storage Setup window appears.

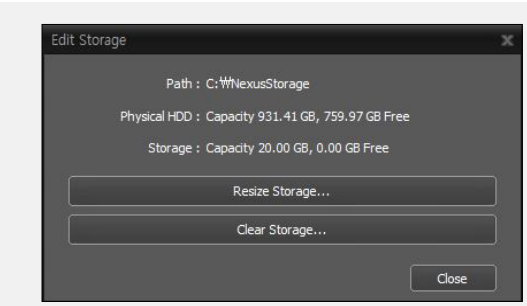


- **Clear All Backed up Data**: Deletes all recorded data on all hard disk drives used in the current recording server.
- **Reconstruct Abnormal Backup Timetable**: When the network connection between the recording server and the devices is too slow or a hard disk drive in the recording server is damaged, the recorded data and the timetable information of the recorded data might not match and the timetable in the Client program might display incorrect information. In this situation, clicking the button reconstructs the timetable to display recorded data correctly on the timetable in the Client program.
- **Overwrite backup data when the disk is full**: Checking the box records over the oldest video data once all available storage space has been used.

Storage of a Specific Hard Disk Drive

Click the storage to edit in the storage list, and then the **Modify** button at the bottom. The **Edit Storage** window appears.





- **Resize Storage**: Allows you to increase the storage capacity.
- **Clear Storage**: Allows you to delete all data recorded in the selected storage.

Search or playback of backed-up data will be stopped when storage is resized or cleared.

Clearing storage deletes all data backed-up in the storage and the deleted data cannot be restored.

Part 5 - Backed-up Video Playback & Exportation

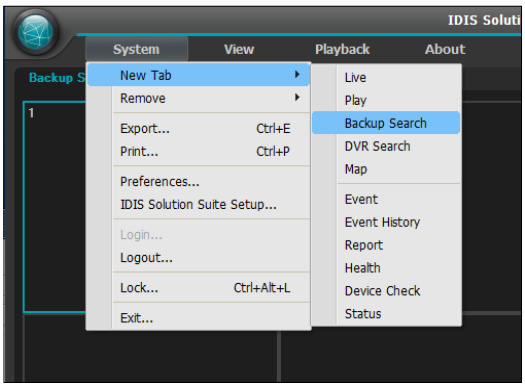
You can play back backed-up video or export backed-up video to USB devices.

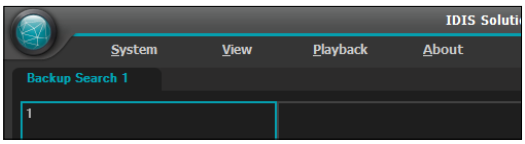
First, check the following and run the Client program.

- Services should be running on the system. Refer to IDIS Solution Suite Standard User's Manual for details.
- Devices should be added to a device group. Refer to IDIS Solution Suite Standard User's Manual for details.
- There should be backed-up data in the backup server. Refer to **Part 4 - Recorded Video Backup (20 page)** for details.

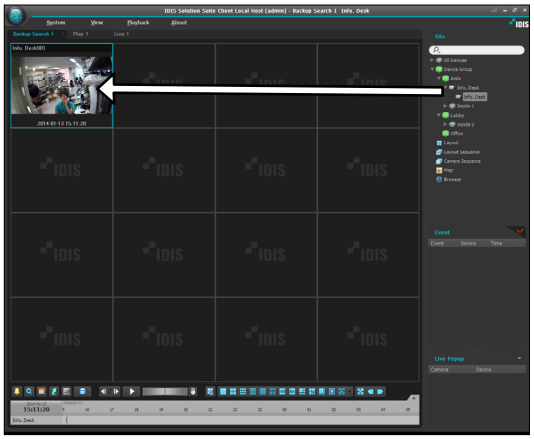
Playing back Backed-up Video

1 Search and playback of backed-up video in a backup server are supported in the Backup Search panel (maximum 4). If the Backup Search tab is not on the tab panel, go to the **System** menu, click **New Tab** and then **Backup Search**





2 Click the Backup Search tab on the tab panel → Select a device or a camera to connect to from the **Site** list and drag and drop it on the Backup Search screen. Backed-up video from the selected device or a camera is displayed on the screen. You can move a camera screen to the desired location on the Backup Search screen without stopping the current playback while playing back video. Select a camera screen and drag and drop it on the desired location.



If a layout is registered on the administration service, you can play video in the layout format by selecting a desired layout from the **Layout** list and dragging and dropping it on the Backup Search screen.

The Client system performance might seriously deteriorate when simultaneously monitoring or playing back video with 1280x720 or higher resolution on more than one camera screen.

3 A panel toolbar, a timetable, a control toolbar and a screen menu are provided for playing back backed-up video. The way to play back backed-up video is identical to the way to play back recorded video. Refer to the IDIS Solution Suite Standard User's Manual for details.

Exporting Backed-up Video

You can export recorded video to USB devices. Exporting backed-up video is identical to exporting recorded video. Refer to the IDIS Solution Suite Standard User's Manual for details.

IDIS Co., Ltd.

For more information, please visit at
www.idisglobal.com