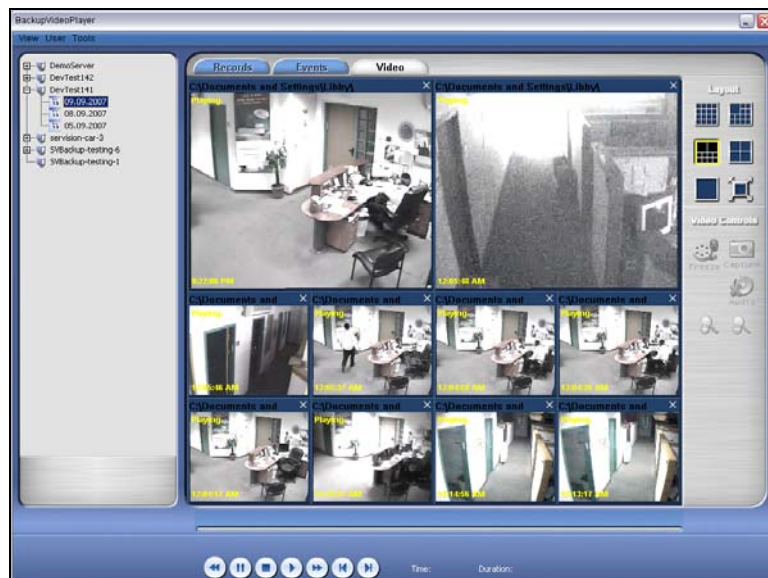




## ➤ Product Overview

# SERVISION SVNVR

**Network Video Recorder /  
Automated Video Backup  
for SerVision Video Gateways**



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## Introduction

SVNVR is a powerful server that provides automated backup, storage, and playback of video recorded by SerVision video gateways. Video from multiple SerVision video gateways can be backed up on a single SVNVR unit, even if the video gateways are located at different sites. SVNVR features:

- Automatic downloading of video from SerVision video gateways to the file system of the SVNVR unit
- Configurable scheduling of video downloads
- Large-capacity hard drive that can store massive amounts of video
- Playback of up to 16 downloaded video streams simultaneously
- Synchronized playback of downloaded video from multiple cameras

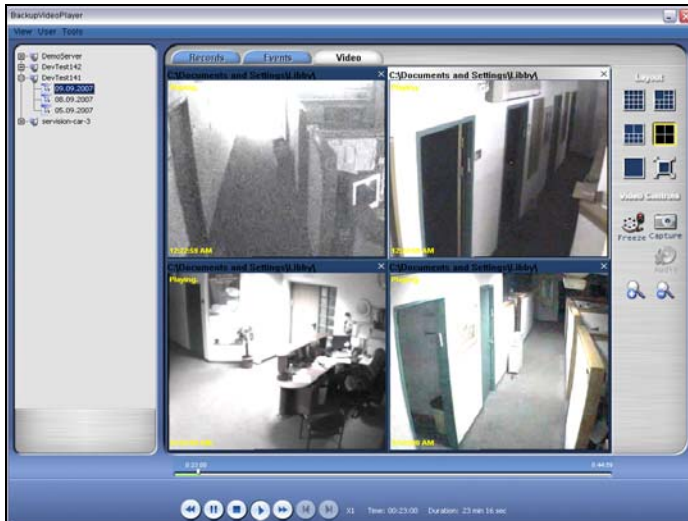
Because of their extensive capabilities, SVNVR units make ideal management centers for SerVision systems. Standard SerVision client software can run on the SVNVR along with the backup and playback applications. When this client software is running, SVNVR units offer complete management services for SerVision systems, including:

- Automatic backup of video recordings (Network Video Recording – NVR)
- Storage of large quantities of video
- Playback of stored video
- Viewing of live video (via standard SerVision client software)
- Real-time control of security devices, including cameras, alarms, and sensors (via standard SerVision client software)

## System Overview

SVNVR servers feature two software applications:

- **SVBackup:** A configurable client application that automatically connects to SerVision video gateways through their IP addresses, downloads recorded video from them, and saves the video in files in the file system of the SVNVR unit.
- **Backup Video Player:** A video player that can play back the recorded video stored on the SVNVR unit. The player can display up to 16 video streams simultaneously. Video from multiple cameras connected to a single video gateway can be played back in synchronized fashion, so that users can view a single event from multiple angles. Playback can be initiated either by selecting a start time or by selecting an event from among those that were detected by the system.



### ***Backup Video Player***

In addition, SerVision's MultiClient client application is installed on every SVNVR unit. The MultiClient enables users to view live video and to control cameras and other devices. The combined features of the MultiClient, SVBackup, and the Backup Video Player turn the SVNVR unit into a complete control center for SerVision systems.

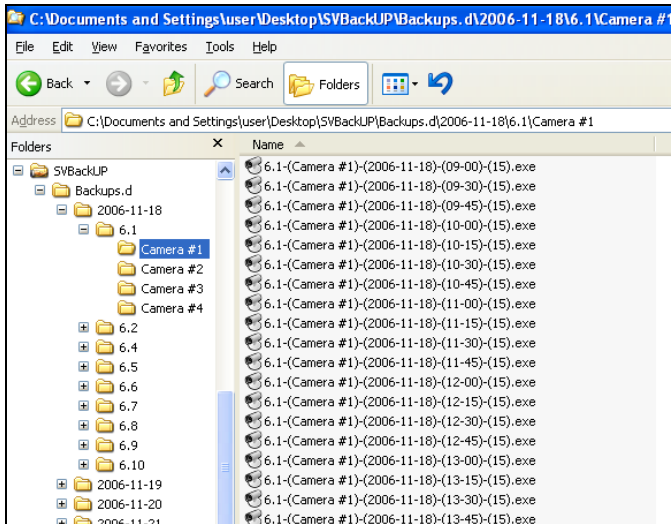


### ***MultiClient***

## **SVBackup**

SVBackup is a download management application that automatically downloads recorded video from SerVision video gateways. Every 15 minutes, it connects to all the video gateways under its management and downloads all the recorded video stored on them that it has not previously downloaded.

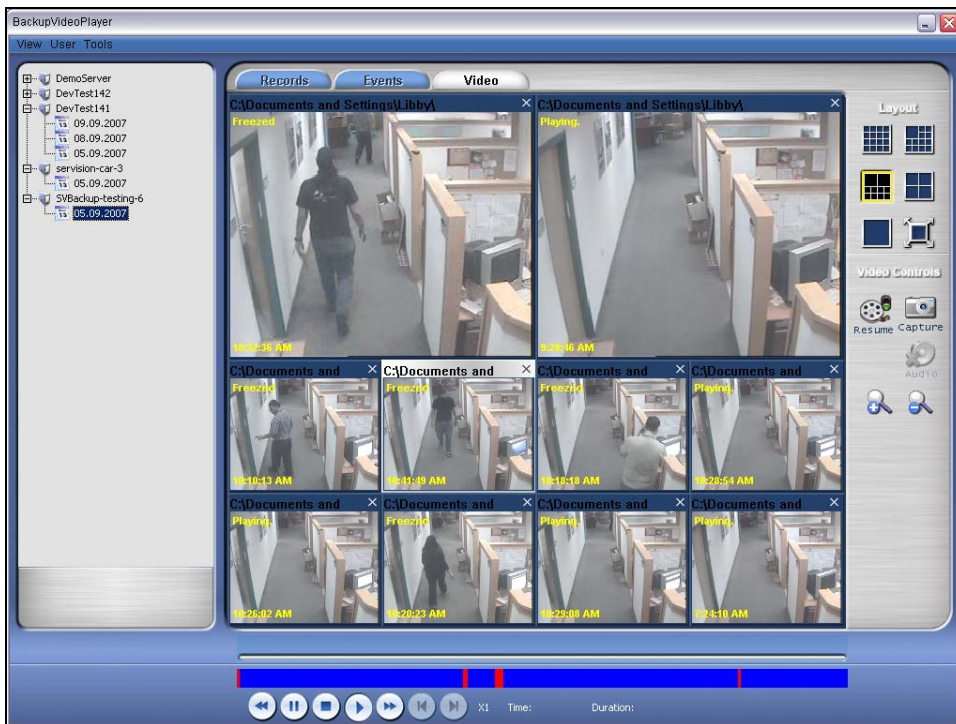
SVBackup converts the video it downloads into self-playable files and stores them in a directory structure organized by date, server, and camera.



*Directory structure*

## Backup Video Player

The most convenient way to view recorded video on the SVNVR unit is by using the Backup Video Player. The Backup Video Player can simultaneously play up to 16 different video streams.



*Backup Video Player with two medium- sized (SIF) and eight small (QSIF) playback panes*

Backup Video Player is very versatile and provides the following playback options:

- **Playback by time:** Select a start time and one or more cameras. Playback from the specified start time begins simultaneously for all selected cameras. For example, video streams from eight cameras that are installed

at a particular site can be played back together, so that users can easily view a single event from a variety of angles.

- **Playback by event:** Select one or more events from a list of all the events detected by sensors connected to a video gateway on a specified day. Playback of all selected events begins simultaneously. For example, if an alarm was set off a number of times on a particular evening, all the events can be played back at the same time.
- **Synchronized playback controls:** Control playback of multiple streams at the same time. For example, video streams from 8 cameras can be fast-forwarded together; when they are, the video displayed for all streams will always show what was recorded by the cameras at the same time. Playback controls can be applied to multiple video streams, as long as the streams have the same start and end times.
- **Express playback:** Play back video at up to 16 times the speed at which it was recorded. For example, if cameras are installed in a fleet of buses, and the day's records are automatically downloaded each night to the SVNVR, the station manager can routinely review the video from the entire fleet each morning, speeding through them all simultaneously at double or triple the speed at which the events occurred to make sure nothing problematic took place.
- **Digital zoom:** During playback, zoom in on a particular scene to view more details.
- **Resize video display panes:** Select the size of playback panes. Playback panes can range in size from 1/16 of the playback area (QSIF) to full-screen.
- **Frame capture:** Save a frame as a jpeg image.

## Playback on Standard PCs

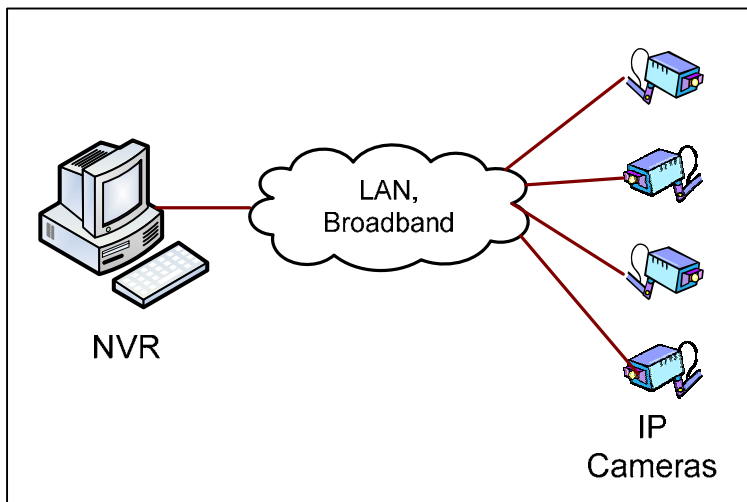
Recorded video that is stored on the SVNVR unit can be viewed on the unit or on any PC without using the Backup Video Player. This is possible because all backed-up video is automatically stored in self-playable files. This means that users can play them simply by opening the files; when the files are opened, the SerVision Player automatically opens and plays the video. Thus, the video files can, for example, be transferred to law enforcement agents or provided as evidence in legal proceedings.



*Playback of a self-playable video recording in a SerVision Player window*

## Advantages over Standard NVR

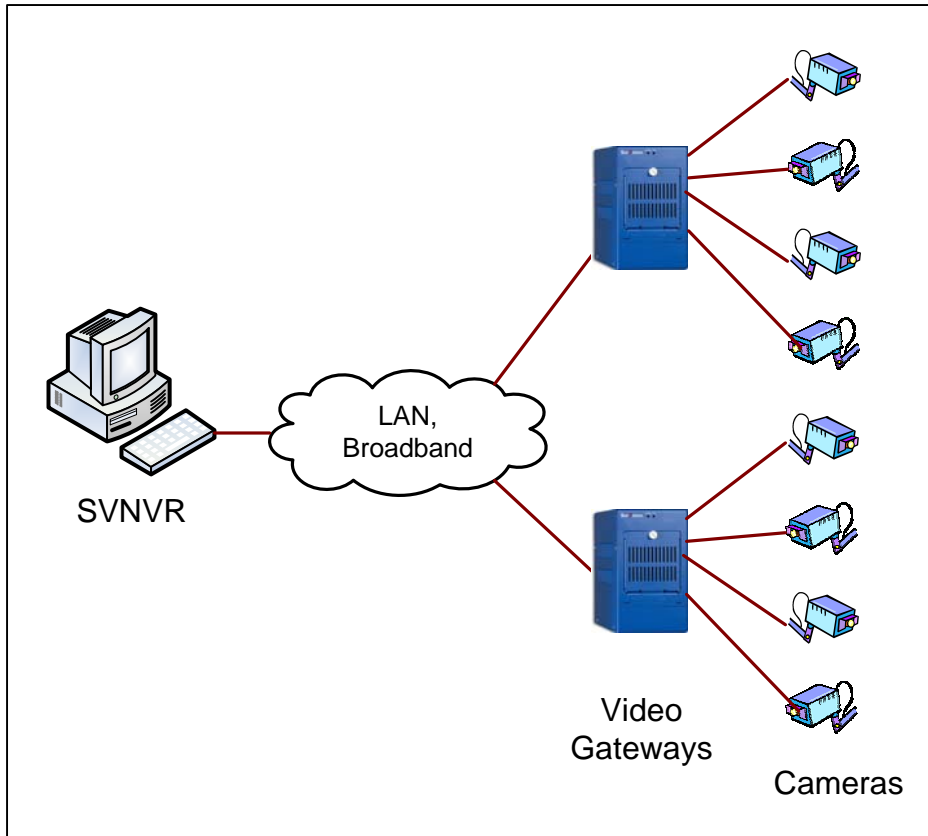
Standard network video recording (NVR) systems automatically download video from cameras to a central server as the video is captured by the cameras. This sort of arrangement is vulnerable to connection problems between the cameras and the server. Whenever communication between a camera and a server is cut off, the video captured is not recorded at all, and is therefore permanently lost.



*Standard NVR operation*

SerVision's combined video gateway/SVNVR systems ensure that video is recorded even when the connection to the SVNVR unit is temporarily not available. Video gateways on site record the video from the cameras regardless of

whether a connection to the SVNVR unit is available or not; the recorded video remains on the gateway so that it is available for upload to the SVNVR unit when the unit succeeds in connecting to it. This means that important footage is not lost because of the types of communication glitches that are still fairly common in internet-based communications.



*SVNVR system operation*

## Specifications

### Software

Downloading:

- Configurable scheduling
- Multiple video gateways
- Storage as self-playable files

Playback:

- Up to 16 simultaneous streams
- Playback by time
- Playback by event
- Synchronized playback

- Express playback (fast-forward and rewind)
- QSIF, SIF, or VGA
- Digital zoom
- Frame capture
- Optional limitation of access via user authentication and user permissions

## Hardware

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CPU: Intel Core2DUO (2 cores) 2.00Ghz

RAM: DIMM 1GB (2x512MB) DDR400

Storage: Variable, 500GB to 3TB