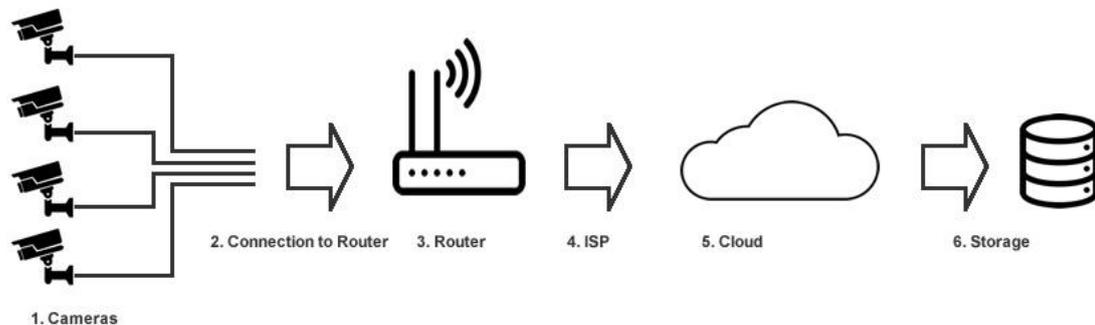


Cloud Storage For CCTV Cameras

The hardest task for offsite storage is trying to find a service provider that can deliver a reliable service. The drawing below illustrates cloud storage concept.



1. HD Or IP Cameras

HD cameras must be connected via DVR to a router whereas IP cameras can be directly connected.

2. Connection To Router

Connection to the router is via a LAN cable. The router can only support IP traffic and thus DVR, NVR and IP Cameras must conform to IP rules.

3. Router

For off-site storage of CCTV footage, a good and reliable broadband service is required. A CCTV system will need to constantly send video footage to the cloud and therefore upload speed is the most important factor of the broadband service.

Upload speed is dependent on number of factors; such as number of cameras, picture quality, compression, frame rate etc.

Here's a simple example on how to calculate the minimum upload speed requirement;

For example, to record 2MP IP camera, you would need approx 3Mb/s upload speed for each camera. For 4 cameras you would need 12Mb/s upload speed. As this is unrealistic, you would have to adjust quality and record at a very low frame rate etc.

4. ISP

Router is connected to Internet Service Provider (ISP); selecting an ISP that can guarantee a good connection is very important. You will need a guaranteed broadband service otherwise you could lose important footage.

5. Cloud

The cloud is a collection of high-end routers that your traffic along with every other internet users traffic has to pass through. This can slow traffic (your service) at different times of the day.

6. Storage

Finding a cloud storage service provider that can offer you the service and storage capacity at reasonable cost is the most difficult part.

Using your own remote site is the most cost effective method of cloud storage i.e using your remote site with recording facility. Again you would need a reliable broadband service with good download speed.

The phrase "Using your remote site" refers to your Personal Computer (PC) as the recording device or an NVR (Network Video Recorder); this would obviously be at another location other than the site you are monitoring.

Summary

For cloud storage to work, End-to-End broadband service is very important. For small systems this could work if you had fibre broadband at both ends and limited amount of traffic.

For large systems, you would need guaranteed service so leased lines would be recommended. Using a commercial cloud storage service can be quite expensive; they usually charge on the amount of storage required and number of cameras; on per month basis.