



Installing More Than Six Cameras at a Single Location

Summary

In some business and large home applications it is necessary to place more than six cameras at a single location. Today's WiLife Command Center™ software supports a maximum of six cameras on a single PC, but there is no limit to the number of PCs running the Command Center that you can install in a single building, or on a single network.

The WiLife Pro™ system is well suited for these multiple-PC installations, though the standard HomePlug system is also feasible.

In these multiple PC installations there are a few implementation and usage considerations to ensure the best success. This note outlines these considerations.

Skill Level: Advanced

Background

When installing multiple PCs on a single network, each PC operates completely independently of the others and is connected to its own set of up to six cameras. Like standard single PC installations, each Command Center can store its video on a local or networked hard drive and can connect to the same Remote Viewing account or separate accounts.

The areas to which you need to pay careful attention include:

- Video File Locations
- Camera Setup and Assignment
- Remote Viewing Setup
- Remote Viewing Access

Video File Location

If you store video on the local hard drive, there are no special considerations. If you store video on a network drive, then you must ensure that each PC uses a different sub-directory. Sharing the same directory would confuse each Command Center causing it to believe that it was managing the space and video for all the cameras.

When using networked storage, set each PC to use an independent video sub-directory

Installing More Than Six Cameras at a Single Location

Example Network Storage Locations

Computer 1: z:\WiLife Video\East Building
Computer 2: z:\WiLife Video\West Building
Computer 3: z:\WiLife Video\IT Rooms

Camera Setup and Assignment

For WiLife HomePlug Systems, each PC will need to use its own WiLife USB Receiver to connect to its cameras. For WiLife Pro Systems, each PC can be on a common network or you can create a sub-network by placing the cameras and PC behind a router.

To ensure that each system connects to the intended cameras only, each system (of up to six cameras) needs a unique local system password. This ensures that the cameras link to the desired machine. To accomplish this, you need to set up each system one at a time using the following steps.

Reset the cameras to factory defaults using a paperclip before starting, especially if they were previously connected to another machine

Setup Steps

1. **Set up each machine independently, one after the other, by completing these steps:**
2. Ensure the machine meets the WiLife recommended standards, and connect the machine to the Internet if you plan to use Remote Viewing.
3. Install the WiLife Software and Connect the USB Receiver.
4. Plug in all cameras (up to six) near the PC, allowing you to easily make any adjustments.
5. Run the WiLife Command Center, which will start the first run wizard. If you are reconfiguring the system, use Setup...Advanced...Find My Cameras.
6. When prompted, enter your Remote Viewing account information. Select "*Create new remote viewing account*" on the first setup and "*Use existing remote viewing account*" for all others. Set a unique site name for each PC.
7. Complete the camera discovery process.
8. **Set a unique password for the PC by clicking Setup...Advanced...Manage Security.**
9. Move the cameras to their intended location.
10. Repeat the process for each system.

Once you have configured each machine, you can add or move cameras that are set to the factory defaults by using Setup...Advanced...Find My Cameras.

Remote Viewing Setup

Ensure you are using WiLife 2.0 or later. This version includes important enhancements that enable remote access of multiple machines on the same property.

Installing More Than Six Cameras at a Single Location

Once you have connected your WiLife PC to your WiLife Online account, you can begin using remote viewing. By design, the WiLife system will automatically attempt to configure your router for Direct viewing for each machine. If it cannot, it will enable Relay viewing (see <http://online.wilife.com/MyLukWerks/ModePop.aspx>). In most cases, you will not need to do any additional work.

If you want Direct viewing, especially in cases where the WiLife Command Center cannot configure your router, you will need to follow these manual steps.

Manually Configuring Direct Viewing

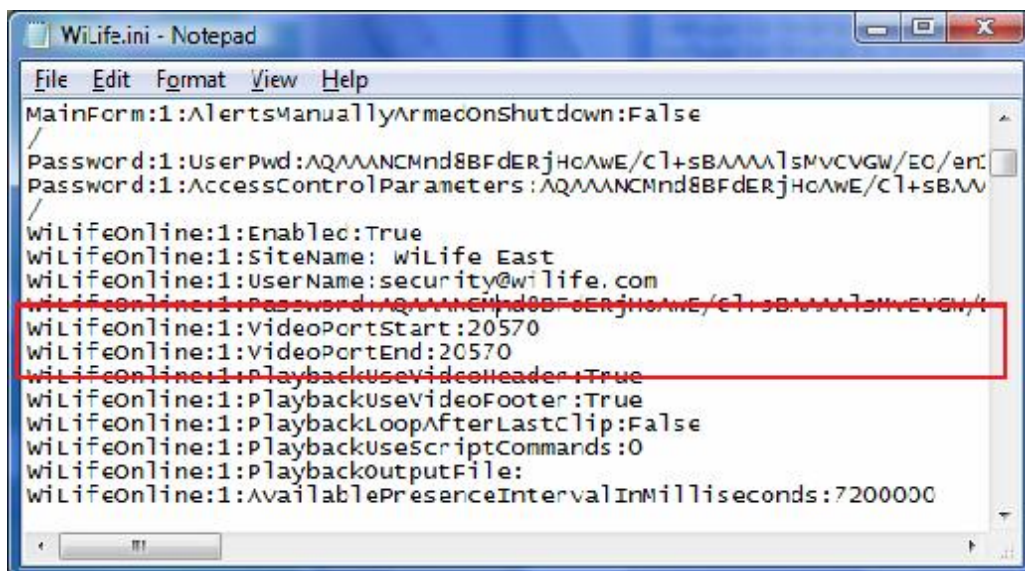
To complete the manual configuration, you will need to map a single port on your router to each WiLife PC. You also need to manually configure each PC to identify which port is mapped to the machine.

Every router uses different interfaces to control its internal settings, you need to become familiar with your router and use the instructions below as an aid. We will show screen shots for the retail DLink router for example:

1. Use this table to plan which router port address you will assign to each machine. You need to select a port between 20570 and 20576. You can either let your network automatically assign your PC an IP address using DHCP, but assigning fixed IP addresses will deliver a more reliable setup. (NOTE: You can identify your WiLife PC's IP address by running *ipconfig* in a command window.)

	Machine A	Machine B	Machine C
Machine IP Address	192.168.1.200	192.168.1.201	192.168.1.202
Machine Name	WiLife East	WiLife West	WiLife IT
Mapped Port	20570	20571	20572

2. After closing the Command Center on each PC, open the WiLife.ini file using Notepad and change the VideoStartPort: and VideoEndPort: options to use the port number you assigned.



```
WiLife.ini - Notepad
File Edit Format View Help
MainForm:1:AlertsManuallyArmedOnShutdown:False
/
Password:1:UserPwd:AQMAANCMnd8BFdERjHcAwE/C1+sBAAAA1sMVCVGW/EO/en:
Password:1:AccessControlParameters:AQMAANCMnd8BFdERjHcAwE/C1+sBAA
/
wiLifeOnline:1:Enabled:True
wiLifeOnline:1:SiteName: wiLife East
wiLifeOnline:1:UserName:security@wilife.com
wiLifeOnline:1:Password:AQMAANCMnd8BFdERjHcAwE/C1+sBAAAA1sMVCVGW/EO/en:
wiLifeOnline:1:VideoPortStart:20570
wiLifeOnline:1:VideoPortEnd:20570
wiLifeOnline:1:PlaybackUseVideoHeader:True
wiLifeOnline:1:PlaybackUseVideoFooter:True
wiLifeOnline:1:PlaybackLoopAfterLastClip:False
wiLifeOnline:1:PlaybackUsescriptCommands:0
wiLifeOnline:1:PlaybackOutputFile:
wiLifeOnline:1:AvailablePresenceIntervalInMilliseconds:7200000
```

Installing More Than Six Cameras at a Single Location

Find the WiLife.ini file at the following locations:

XP: c:\Documents and Settings\All Users\Application Data\WiLife\Command Center\WiLife.ini
Vista: c:\ProgramData\WiLife\Command Center\WiLife.ini

You will need to enable “show hidden files” on XP to find the directory.

- Open your routers configuration page and map the assigned port to each machine. In the case of the DLink router, we reached the configuration page at <http://192.168.0.1>, but this will differ from router to router.

	Name	IP Address	Port	Traffic Type
<input checked="" type="checkbox"/>	WiLife East	192.168.1.200	Start: 20570 End: 20570	Any
<input checked="" type="checkbox"/>	WiLife West	192.168.1.201	Start: 20571 End: 20571	Any
<input checked="" type="checkbox"/>	WiLife IT	192.168.1.202	Start: 20572 End: 20572	Any

- Restart the Command Center on each machine.
- Test your remote connection to each machine using your WiLife Online Account.

As always, you must keep each machine running to enable remote viewing. Using a UPS on your PC ensures your machine will survive minor power interruptions.

Remote Viewing Access

Once remote viewing is set up, either automatically or manually as described above, you can view the cameras from any Internet-connected PC or Windows Mobile phone by logging in to your online.wilife.com account. When connected, you can see a list of all your cameras and all your sites. A standard limitation is that you can only view one site (PC) at a time – but there is an easy workaround, which we will describe below.

Installing More Than Six Cameras at a Single Location



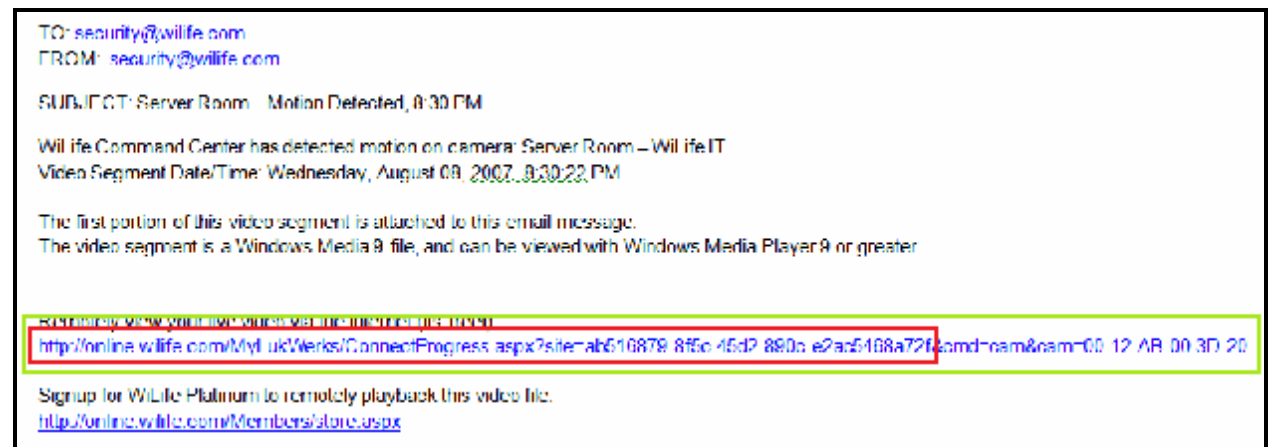
Standard List of Sites on an online.wilife.com Account

Live Remote Viewing of Multi-Sites

Despite the standard limitation of viewing one site at a time, there is one trick that allows you to view as many as possible – limited by your bandwidth.

Each live viewing site has a static URL, which allows you to view your cameras without using the My Cameras page. The way to find the URL is easy:

1. Set up and trigger a motion alert email from one (or more of your cameras)
2. Copy the site path. Use the site path – shown in red – to view all cameras and the camera path – shown in green – to view just the specific camera.
3. Save this path to a shortcut or file



Installing More Than Six Cameras at a Single Location

For example, the path <http://online.wilife.com/MyLukWerks/ConnectProgress.aspx?site=ab516879-8f5c-45d2-890c-e2ac5468a72f> will show all cameras.

And, the path <http://online.wilife.com/MyLukWerks/ConnectProgress.aspx?site=ab516879-8f5c-45d2-890c-e2ac5468a72f&cmd=cam&cam=00-12-AB-00-3D-20> will show only the single camera that triggered the alert.

It is an easy matter to collect the paths of your different sites and cameras to build shortcuts to the video. Using these links, you can open many remote viewing pages at once. Bandwidth is your primary limitation on the number of sites you can view at once.

Send feedback regarding this Technical Note to support@wilife.com and reference the technical note number WL1001 R1 in the subject.