



e-Watch®

SiteWatch™ Situational Awareness Software Guide For Vivotek Cameras

SiteWatch Version 5.1

e-Watch Corporation

7800 IH-10 West, Suite 720
San Antonio, TX 78230
USA

www.e-watch.com

tel: 210 349-2000
fax: 210 341-1020

READ THIS NOTICE

THE SPECIFICATIONS AND INFORMATION REGARDING THE PRODUCTS IN THIS MANUAL ARE SUBJECT TO CHANGE WITHOUT NOTICE. ALL STATEMENTS, INFORMATION, AND RECOMMENDATIONS IN THIS MANUAL ARE BELIEVED TO BE ACCURATE BUT ARE PRESENTED WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED. USERS MUST TAKE FULL RESPONSIBILITY FOR THEIR APPLICATION OF ANY PRODUCTS.

THE SOFTWARE LICENSE AND LIMITED WARRANTY FOR THE ACCOMPANYING PRODUCT ARE SET FORTH IN THE INFORMATION PACKET THAT SHIPPED WITH THE PRODUCT AND ARE INCORPORATED HEREIN BY THIS REFERENCE. IF YOU ARE UNABLE TO LOCATE THE SOFTWARE LICENSE OR LIMITED WARRANTY, CONTACT YOUR E-WATCH REPRESENTATIVE FOR A COPY. NOTWITHSTANDING ANY OTHER WARRANTY HEREIN, ALL DOCUMENT FILES AND SOFTWARE OF THESE SUPPLIERS ARE PROVIDED 'AS IS' WITH ALL FAULTS. E-WATCH AND ITS SUPPLIERS DISCLAIM ALL WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING, WITHOUT LIMITATION, THOSE OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT OR ARISING FROM A COURSE OF DEALING, USAGE, OR TRADE PRACTICE.

IN NO EVENT SHALL E-WATCH OR ITS SUPPLIERS BE LIABLE FOR ANY INDIRECT, SPECIAL, CONSEQUENTIAL, OR INCIDENTAL DAMAGES, INCLUDING, WITHOUT LIMITATION, LOST PROFITS OR LOSS OR DAMAGE TO DATA ARISING OUT OF THE USE OR INABILITY TO USE THIS MANUAL, EVEN IF E-WATCH OR ITS SUPPLIERS HAVE BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

UNITED STATES FEDERAL COMMUNICATIONS COMMISSION NOTICE

The following information is for FCC compliance of Class A devices: This equipment has been tested and found to comply with the limits for Class A digital device, pursuant to part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio-frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference, in which case users will be required to correct the interference at their own expense.

You can determine whether your equipment is causing interference by turning it off. If the interference stops, it was probably caused by the e-Watch® equipment or one of its peripheral devices. If the equipment causes interference to radio or television reception, try to correct the interference by using one or more of the following measures:

- Turn the television or radio antenna until the interference stops.
- Move the equipment to one side or the other of the television or radio.
- Move the equipment farther away from the television or radio.
- Plug the equipment into an outlet that is on a different circuit from the television or radio. (That is, make certain the equipment and the television or radio are on circuits controlled by different circuit breakers or fuses.)

Modifications to this product not authorized by E-Watch could void the FCC approval and negate your authority to operate the product.

COPYRIGHT AND TRADEMARK NOTICE

Copyright© 2003-2010 e-Watch Corporation. All rights reserved. e-Watch is a registered trademark of e-Watch Corporation. ViewWatch, DecisionWatch, EventWatch, SiteWatch, MotionWatch, GateWatch, AirWatch, PocketWatch, PeopleWatch, BankWatch, ClassWatch, ObjectWatch, WatchLink, Activity Gated Storage, and Gigapixel are trademarks of e-Watch Corporation. Any other trademarks mentioned in this document are the property of their respective owners.

The use of the word partner does not imply a partnership relationship between e-Watch and any other company.

e-Watch systems do not prevent crimes from being committed, but are intended to be used to monitor and investigate.

e-Watch components are electronic devices and complex commercial software products. As such, they may fail on occasion. Multiple devices with overlapping zones should be used for redundancy.

e-Watch event notification capabilities must be user programmed and activated prior to use. System reliability is dependent on the underlying network infrastructure and associated communications services that may fail on occasion. The user of the e-Watch system is advised to evaluate risk associated with network failures and operator errors. Routine auditing and preventive maintenance of the system is essential to assure optimum performance.

Event analysis and recreation is subject to system configuration, lighting conditions, environmental conditions, lens and housing cleanliness, distance to subject, operator-invoked control settings, and many other factors.

Read and follow all documentation to assure proper performance.

Preface

- Purpose iii
- Audience iii
- Organization iv
- Related Documentation iv
- Conventions iv
- Obtaining Documentation v
- Documentation Feedback vi
- Obtaining Assistance vi

PART 1

Chapter 1

Chapter 2

Chapter 3

Chapter 4

Administration Guide**INTRODUCTION 1**

- Overview 1
- Procedures 2
- e-Watch Components Required 2
- Customer Supplied Components 2

PREPARING SITEWATCH 4

- Setting The Third Party Admin User Name And Password In SiteWatch 4

PREPARING VIVOTEK CAMERAS 6

- Setting The User Name 6
- Setting The Password 7

CONNECTING VIVOTEK CAMERAS 8

- Connecting Vivotek Cameras Using The e-Watch Camera IP Utility 8
- Connecting Vivotek Cameras Using The e-Watch Camera Configuration Utility 10
- Setting Up Motion Detection And Boot Event 12
 - Using The e-Watch Camera IP Utility 13
 - Using The e-Watch Camera Configuration Utility 14
 - Using The ViewWatch Camera Definition Page 16
- Changing The IP Address Of Vivotek Cameras That Do Not Support Event Configuration 17

PART 2	Appendices
APPENDIX A	List Of Figures 18
INDEX	Index 19

The preface describes the purpose, audience, organization, and conventions of this guide and provides information on how to obtain related documents.

The preface covers these topics:

- Purpose
- Audience
- Organization
- Related Documentation
- Conventions
- Obtaining Documentation
- Documentation Feedback
- Obtaining Assistance

Purpose

This guide provides instructions for using Vivotek Inc. (Vivotek) cameras with the SiteWatch™ Situational Awareness Software. It includes descriptions of procedural tasks to complete when installing and configuring Vivotek cameras as well as diagrams and illustrations. It identifies Graphical User Interface (GUI) buttons, menus, dialog windows, and their configuration.

Audience

The SiteWatch Situational Awareness Software Guide For Vivotek Cameras provides operating instructions for personnel responsible for setting up and maintaining the e-Watch Surveillance System. Some knowledge of Microsoft Windows® and Windows® Web Browsing is preferred. Some knowledge of network protocols and TCP/IP principles is preferred.

It is assumed that the reader of this guide is familiar with the SiteWatch Situational Awareness Software. For information and procedures on how to install and configure the SiteWatch Situational Awareness Software, refer to e-Watch Corporation document URG-9110-002 SiteWatch Situational Awareness Software Administration Guide, available from e-Watch Corporation. For information and procedures on how to operate the ViewWatch™ interface, refer to e-Watch Corporation document URG-9106-002 SiteWatch Situational Awareness Software User Guide, available from e-Watch Corporation.

Technical training from a qualified e-Watch training program is recommended. This guide is designed to supplement such training and is not meant to replace classroom training from a qualified instructor.

Organization

This document is organized as shown in the following table

Table 0-1 Document Organization

Part	Description
Part 1	‘Guide For Vivotek Cameras’ Contains information on installation and configuration of Vivotek cameras for use with SiteWatch.
Part 2	‘Appendices’ Contains lists, glossary and meaning of abbreviations.

Related Documentation

Refer to the following documents for further information about related e-Watch applications and products:

- URG-9106-002—SiteWatch™ Situational Awareness System User Guide
- URG-9110-002—SiteWatch™ Situational Awareness System Administration Guide
- URG-9111-001—e-Watch® Situational Awareness System Quick Start Guide
- URG-9112-001—e-Watch Product Overview

Conventions

This document uses the following conventions:

Table 0-2. Conventions

Convention	Description
Boldface font	Commands and keywords are in boldface .
<i>Italic</i> font	Arguments for which you supply values are in <i>italics</i> .
[]	Elements in square brackets are optional.
{x y z}	Alternate keywords are grouped in brackets and separated by vertical bars.
[x y z]	Optional keywords are grouped in brackets and separated by vertical bars.
String	A non-quoted set of characters. Do not use quotation marks around the string or the string will include the quotation marks.
Screen font	Terminal sessions and information the system displays are in <i>screen font</i> .
Boldface screen font	Information you must enter is in boldface screen font .
<i>Italic screen font</i>	Arguments for which you supply values are in <i>italic screen font</i> .
^	The symbol ^ represents the key labeled Control - for example, the key combination of ^D in a screen display means hold down the Control key while you press the D key.
-->	This pointer highlights an important line of text in an example.
◇	Non-printing characters, such as passwords, are in angle brackets.

Obtaining Documentation

The following sections provide sources for obtaining documentation from e-Watch Corporation.

World Wide Web

e-Watch documents can be found by going to the e-Watch web site

www.e-watch.com

By Mail

e-Watch Corporation.
7800 IH 10 West, Suite 720
San Antonio, Texas 78230
210.349.2000

support@e-watch.com

Documentation Feedback

You can submit technical comments about e-Watch documentation in the following ways:

E-mail your comments to support@e-watch.com

To submit comments by mail, write to the following address:

e-Watch Corporation
7800 IH 10 West, Suite 720
San Antonio, Texas 78230

We appreciate your comments.

Obtaining Assistance

The following sections provide sources for obtaining assistance from e-Watch Corporation.

Customer Support

For technical assistance please send requests to support@e-watch.com or your local e-Watch reseller. You may also call 210-349-2000 and ask for Customer Support.

Sales

For assistance with sales or marketing please call 210-349-2000 and ask for Sales or send requests to sales@e-watch.com.

Introduction

Overview

e-Watch is a comprehensive surveillance and monitoring system adapted for transmitting Motion Picture Experts Group (MPEG) video streams, high resolution Joint Photographic Experts Group (JPEG) images, Motion JPEG (MJPEG), and detected event data over both wired and wireless networks (Local Area Network [LAN] and Wide Area Networks [WAN]). Additional functions, such as access control, environmental monitoring, and biographical database connectivity can be provided within one integrated system.

The e-Watch system is based on standard networking and Internet technology. Real-time data, as well as archived data, can be viewed from a monitor station or any authorized Personal Computer (PC) on the LAN, WAN, or the Internet. The archive application tracks and maintains all situational awareness information and provides high-speed access for fast location and display of data related to a specific event.

Automated notification of alarm conditions and other events can be provided to response personnel via dial-up circuits, cellular phones, pagers, e-mail, or via the Internet.

A typical e-Watch system consists of a SiteWatch server and a number of e-Watch digital IP cameras and video encoders.

Cameras and video encoders distributed by Vivotek Inc. (Vivotek) can also be incorporated into an e-Watch system. Adding Vivotek cameras provides an inexpensive way to expand the number of cameras attached to the system. Most of the control and alert features available with e-Watch cameras are also available with Vivotek cameras. These include:

- Viewing real-time video from anywhere on the Internet.
- Reviewing archived high-resolution images.
- Independent configuration of three separate video streams for archiving, low-resolution viewing and high-resolution viewing.
- Activity Gated Storage™, the innovative e-Watch technology for reducing archive storage requirements.
- Motion detection and alerts

For a complete list of supported Vivotek camera models please visit the Downloads page at www.e-watch.com.

IMPORTANT: Vivotek camera support is offered as a separate software module. Contact e-Watch sales for more information.

Procedures

Setting up the e-Watch system to work with Vivotek cameras consists of the following procedures:

1. Prepare the SiteWatch Situational Awareness Software to work with Vivotek cameras
2. Prepare the Vivotek cameras to work with the SiteWatch Situational Awareness Software
3. Connect the Vivotek cameras to the e-Watch system

e-Watch Components Required

The following is a list of components required for installing the e-Watch system.

1. SiteWatch installation CD
2. Hardware security device—USB or parallel key
3. e-Watch serial number
4. e-Watch registration number

Customer Supplied Components

The following is a list of components that are supplied by the customer for installing the e-Watch system and using Vivotek cameras.

1. Server with operating system
2. Tape device (optional)
3. Any necessary third-party software
4. Monitor station with operating system
5. Vivotek cameras

Preparing SiteWatch

Before connecting Vivotek cameras to an e-Watch system, you must set the user name and password that the SiteWatch Situational Awareness Software will use to communicate with Vivotek cameras.

IMPORTANT: The user name and password you set in the SiteWatch Situational Awareness Software must also be set up in each Vivotek camera. See Chapter 3.

IMPORTANT: This user should have administrator privileges for each Vivotek camera.

Setting The Third Party Admin User Name And Password In SiteWatch

Perform the following steps on the SiteWatch server console to set the third party admin user name and password (see Figures 2-1 and 2-2).

1. Open the e-Watch Server App.
2. Click the Registry tab.
3. Scroll down and click on the ThirdPartyAdminUsername key.
4. Enter the user name in the Value box.
5. Click the Set button.
6. Click on the ThirdPartyAdminPassword key.
7. Enter the password in the Value box.
8. Click the Set button.

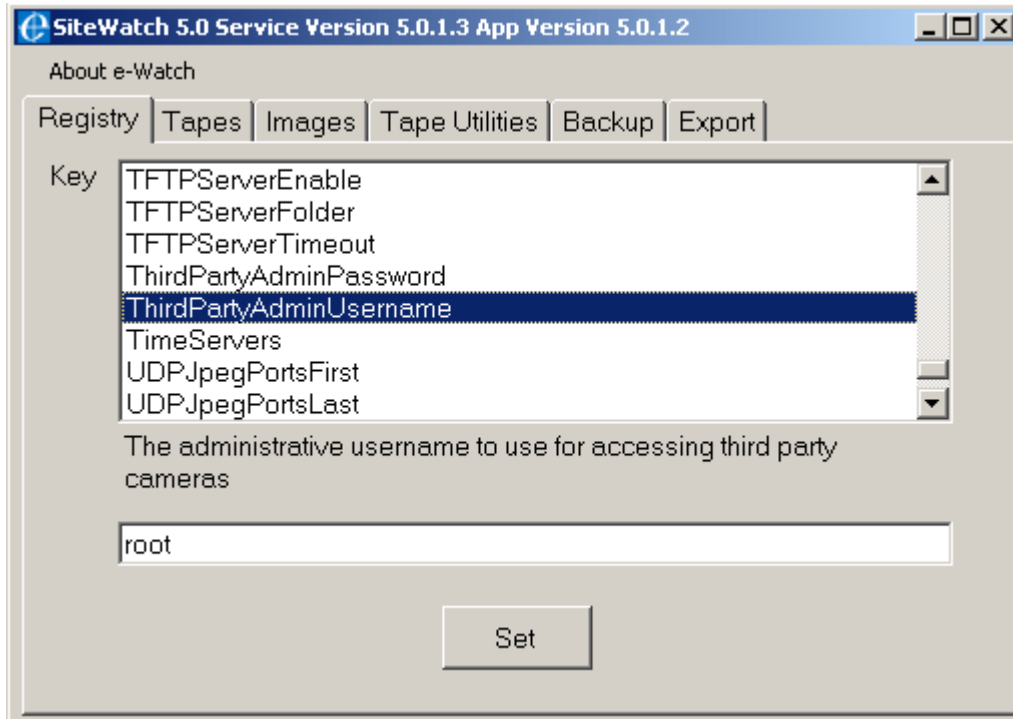


Figure 2-1. Third Party Username

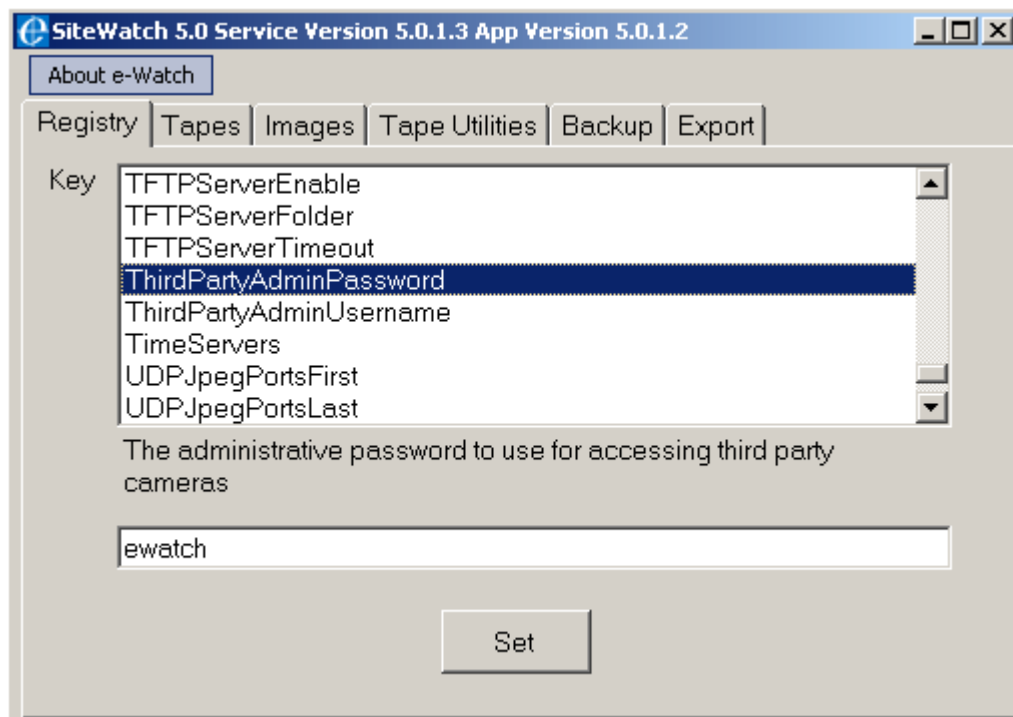


Figure 2-2. Third Party Password

Preparing Vivotek Cameras

Before connecting an Vivotek camera to an e-Watch system you must define the user name and password that the SiteWatch Situation Awareness Software will use to communicate with the camera. The procedures described in this chapter are provided as examples and apply to the Vivotek camera model FD7131. The procedures for other Vivotek camera models may be different. Consult the documentation for your particular Vivotek camera model.

IMPORTANT: The user name must have **Administrator** privilege.

IMPORTANT: The user name and password must match the user name and password set in the SiteWatch Situational Awareness Software. See Chapter 2.

Setting The User Name

Perform the following steps to set the user name (see Figure 3-1). If you plan to use the built-in administrator user name, then you can skip these steps.

1. Open Internet Explorer.
2. Navigate to the URL: **http://<camera ip address>**.
3. Click Maintenance.
4. In the “Add User Account” section, enter the user name and password, and select Administrator privilege.
5. Click the **Add** button.

ADD USER ACCOUNT

User name:

Password:

Confirm password:

Privilege: Administrator
 Normal User
 Guest

Figure 3-1. Setting The Vivotek User Name And Password

Setting The Password

Perform the following steps to modify the password (see Figure 3-2).

1. Open Internet Explorer.
2. Navigate to the URL: **http://<camera ip address>**.
3. Click Maintenance.
4. In the “Manage User” section, enter the password, and select Administrator privilege.
5. Click the **Modify** button.

MANAGE USER

User name:

User password:

Authentication: Administrator
 Normal User
 Guest

Figure 3-2. Modifying the Vivotek Password

Connecting Vivotek Cameras

After you have prepared the SiteWatch Situational Awareness Software and the Vivotek cameras, you must connect the Vivotek cameras to the e-Watch system. You can use either the e-Watch Camera IP utility or the e-Watch Camera Configuration Utility.

Connecting Vivotek Cameras Using The e-Watch Camera IP Utility

You can use the e-Watch Camera IP utility to connect Vivotek cameras. See Figure 4-1.

Perform the following steps.

1. Run the e-Watch Camera IP utility
2. Click the Vivotek Cameras tab
3. Enter the Vivotek admin user name and password
4. Enter the Vivotek camera's IP address
5. Click the **Query Camera** button
6. Type the IP address of the e-Watch Server in the e-Watch Server box
7. Check the Notify Server checkbox
8. Click the Save button

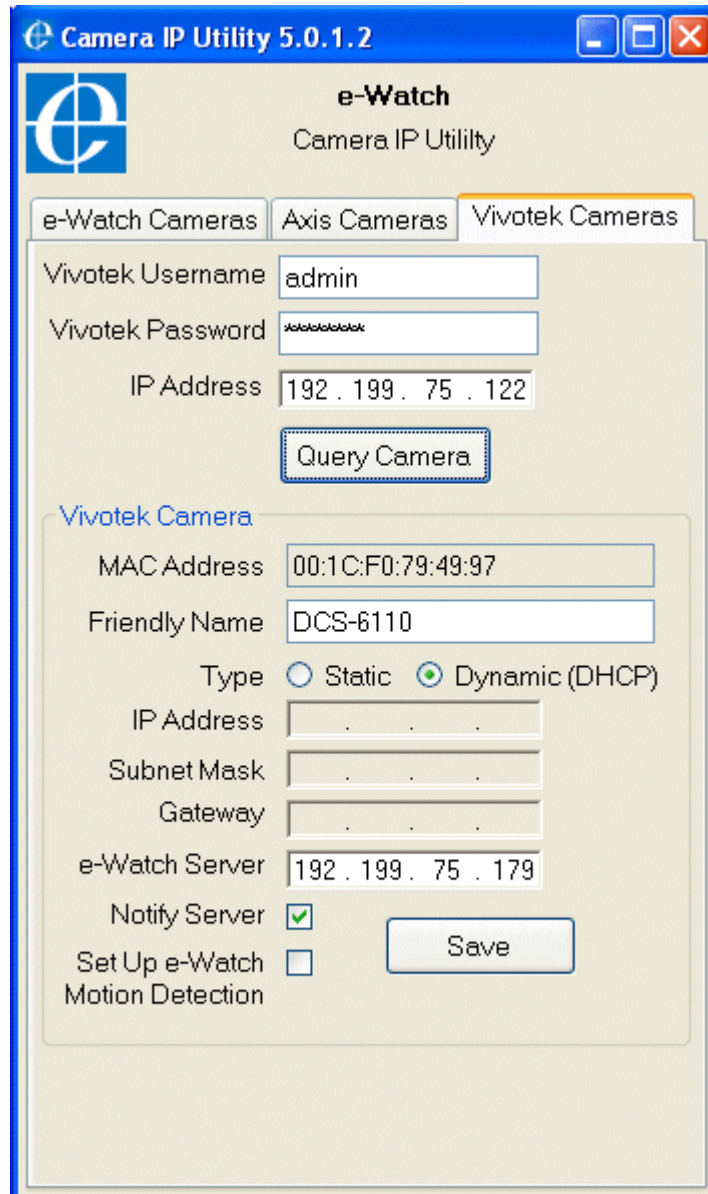


Figure 4-1. Connecting Vivotek Camera Using e-Watch Camera IP Utility

Connecting Vivotek Cameras Using The e-Watch Camera Configuration Utility

You can also accomplish this task using the e-Watch Camera Configuration Utility. See Figure 4-2.

1. Run the e-Watch Camera Configuration utility.
2. In the Camera Connection section, click the IP Address tab
3. Select Vivotek Camera in the Camera Type list
4. Enter the Vivotek user name and password
5. Enter the Vivotek camera's IP address
6. Click the Connect button
7. In the Configuration section, click the IP tab
8. Type the IP address of the e-Watch Server in the e-Watch Server box
9. Check the Notify Server checkbox
10. Click the Apply button

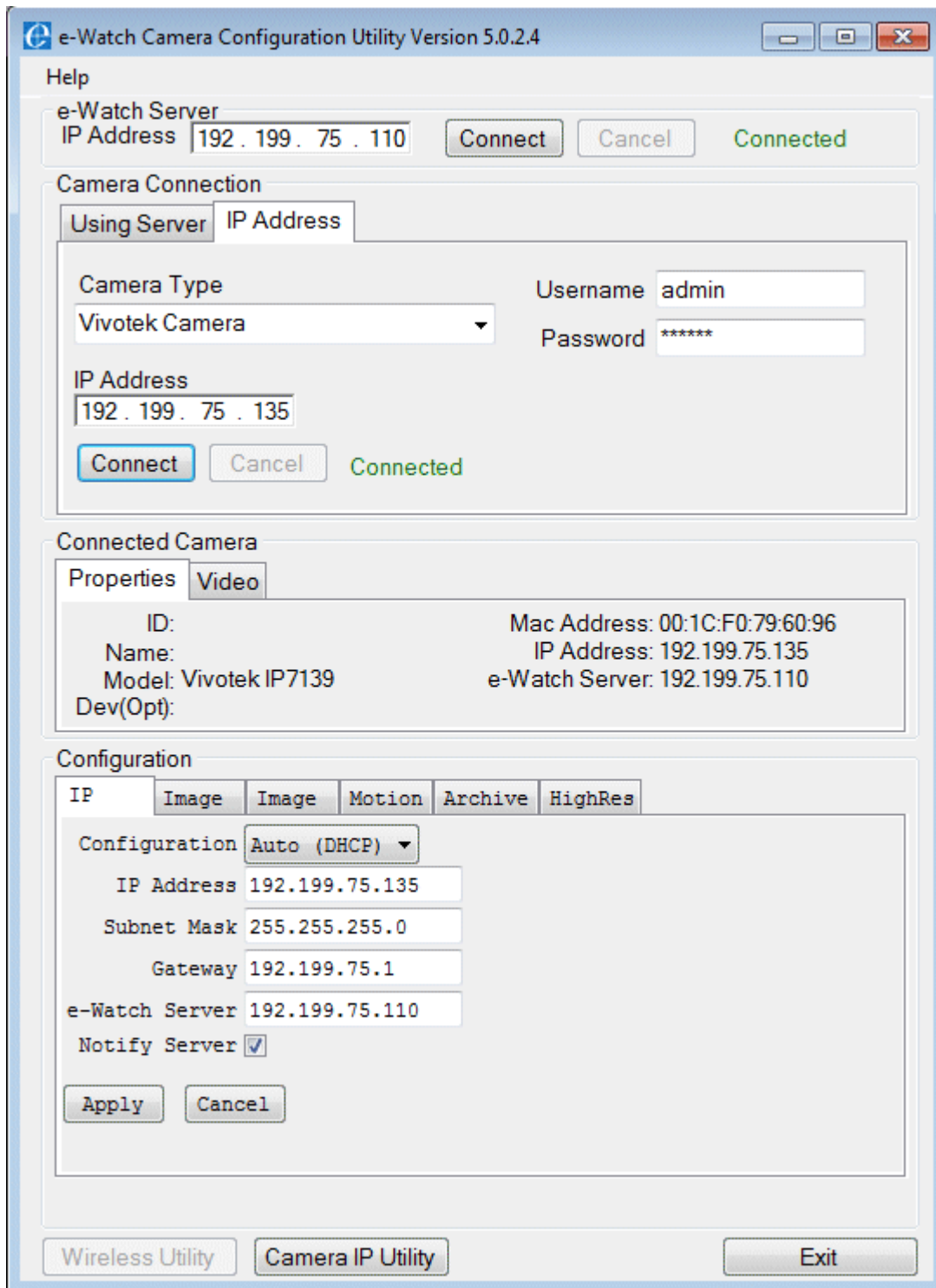


Figure 4-2. Connecting Vivotek Camera Using e-Watch Camera Configuration Utility

Setting Up Motion Detection And Boot Event

Vivotek cameras that support Motion Detection and Event Configuration can participate in e-Watch Activity Gated Storage. Activity Gated Storage greatly reduces the amount of storage required for archived images.

When you set up motion detection for an Vivotek camera, e-Watch will also create a boot event that will automatically notify the e-Watch system in the event that the camera's IP address is changed.

Using The e-Watch Camera IP Utility

You can set up motion detection using the e-Watch Camera IP Utility. See Figure 4-3.

1. Run the e-Watch Camera IP utility.
2. Click the Vivotek Cameras tab
3. Enter the Vivotek admin user name and password
4. Enter the Vivotek camera's IP address
5. Click the **Query Camera** button
6. Check the Setup e-Watch Motion Detection checkbox
7. Click the Save button

Camera IP Utility 3.1.0.1

e-Watch
Camera IP Utility

e-Watch Cameras Axis Cameras

Axis Username root

Axis Password ewatch Search

Select an Axis camera or enter an IP address

Axis Dome

Axis 206 Camera

Axis Dome

MAC Address 00:40:8C:75:AC:80

Friendly Name Axis Dome

Type Static Dynamic (DHCP)

IP Address . . .

Subnet Mask . . .

Gateway . . .

e-Watch Server 192.199.75.143

Notify Server

Set Up e-Watch Motion Detection Save

Figure 4-3. Motion Detection Using The Camera IP Utility

Using The e-Watch Camera Configuration Utility

You can set up motion detection using the e-Watch Camera Configuration Utility. See Figure 4-4.

1. Run the e-Watch Camera IP utility.
2. In the Camera Connection section, click the Using Server tab
3. Select the Vivotek camera in the Old Cameras list
4. Click the Connect button
5. Click the Setup Motion Detection button

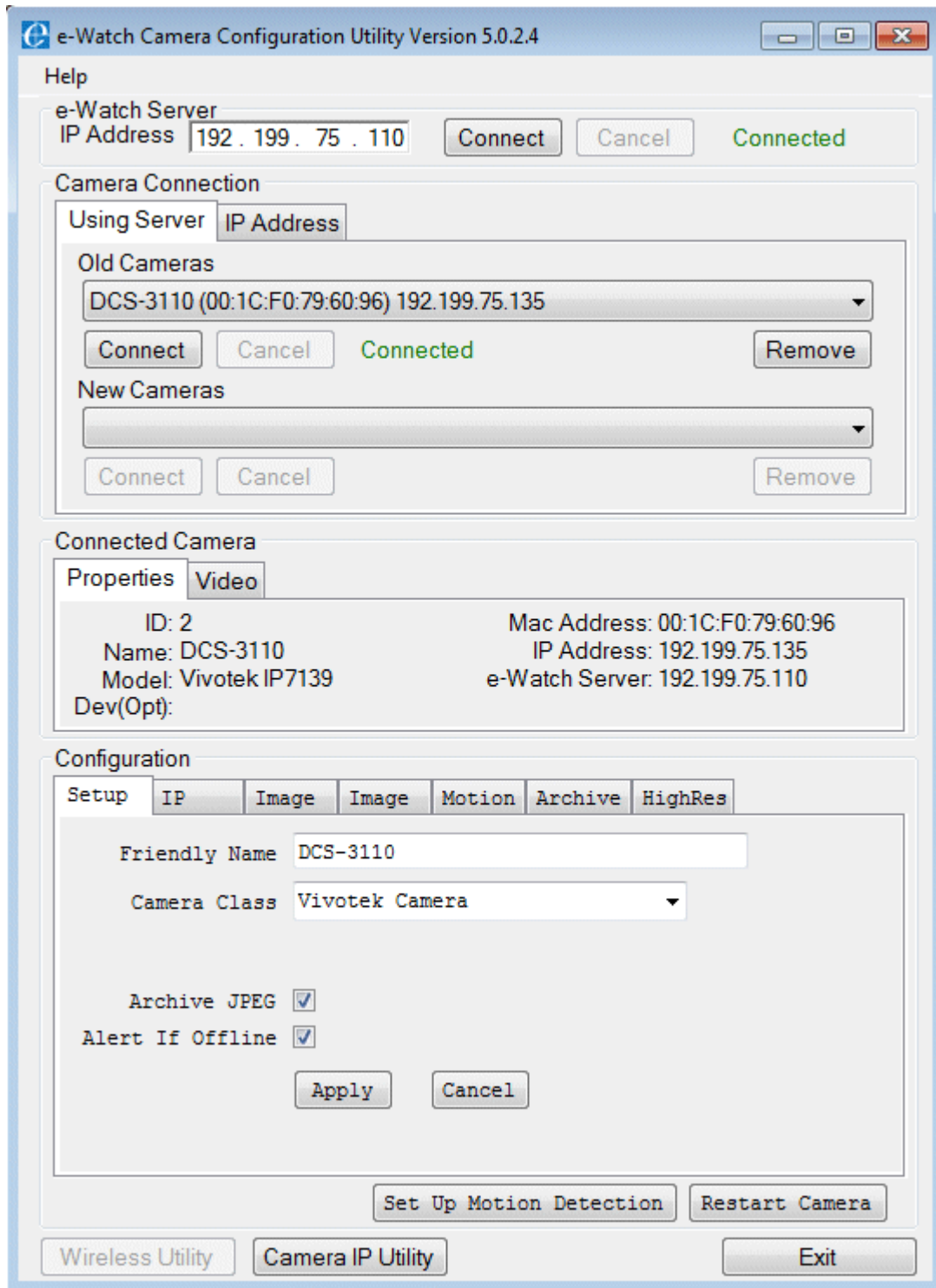
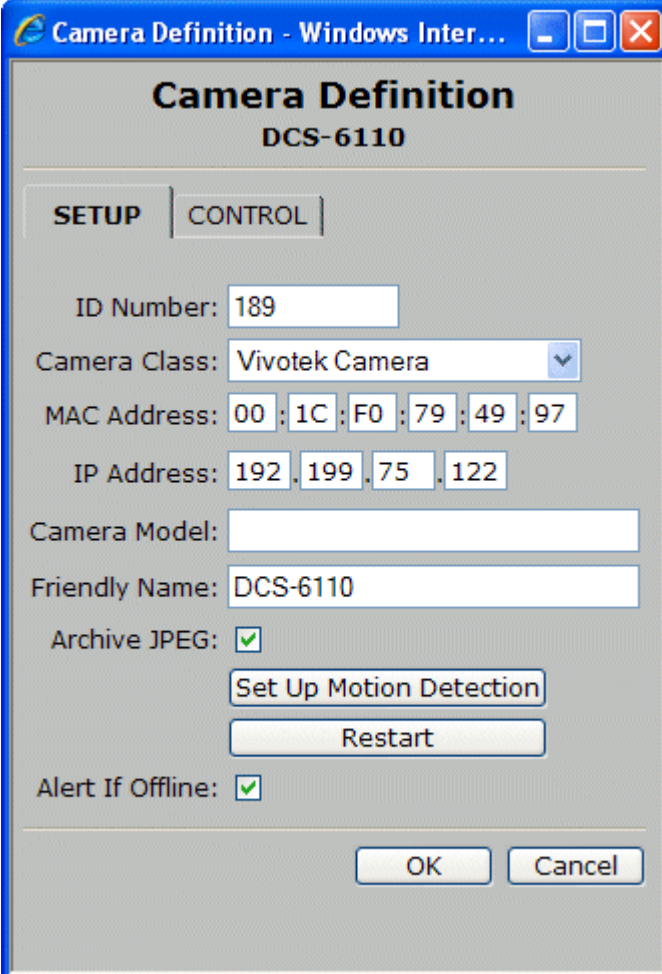


Figure 4-4. Motion Detection Using The Camera Configuration Utility

Using The ViewWatch Camera Definition Page

You can set up motion detection using the ViewWatch Camera Definition Page. See Figure 4-5.

1. Start ViewWatch and log on as an administrator.
2. Click **Define Cameras** in the ViewWatch Define Menu.
3. Click the camera in the cameras list.
4. Click the Edit button.
5. Click the Setup tab.
6. Click the Setup Motion Detection button.



The screenshot shows a Windows-style dialog box titled "Camera Definition - Windows Inter...". The main title is "Camera Definition" and the model is "DCS-6110". There are two tabs: "SETUP" (selected) and "CONTROL". The "SETUP" tab contains the following fields and controls:

- ID Number: 189
- Camera Class: Vivotek Camera (dropdown menu)
- MAC Address: 00 : 1C : F0 : 79 : 49 : 97
- IP Address: 192 . 199 . 75 . 122
- Camera Model: (empty text box)
- Friendly Name: DCS-6110
- Archive JPEG:
- Set Up Motion Detection (button)
- Restart (button)
- Alert If Offline:
- OK (button)
- Cancel (button)

Figure 4-5. Motion Detection Using The Camera Definition Page

Changing The IP Address Of Vivotek Cameras That Do Not Support Event Configuration

If you have set up Motion Detection as described above, e-Watch will have created a boot event that will notify the e-Watch system in the event that the camera's IP address is changed. However, some Vivotek cameras do not support Event Configuration and e-Watch cannot set up a boot event for these cameras.

If you change the IP address of an Vivotek camera that does not support Event Configuration, follow these steps to manually update the camera's IP address in the e-Watch system. See Figure 4-6.

1. Start ViewWatch and log on as an administrator.
2. Click **Define Cameras** in the ViewWatch Define Menu.
3. Click the camera in the cameras list.
4. Click the Edit button.
5. Click the Control tab.
6. Click the IP tab.
7. Enter the camera's new IP configuration.
8. Click the Save button.

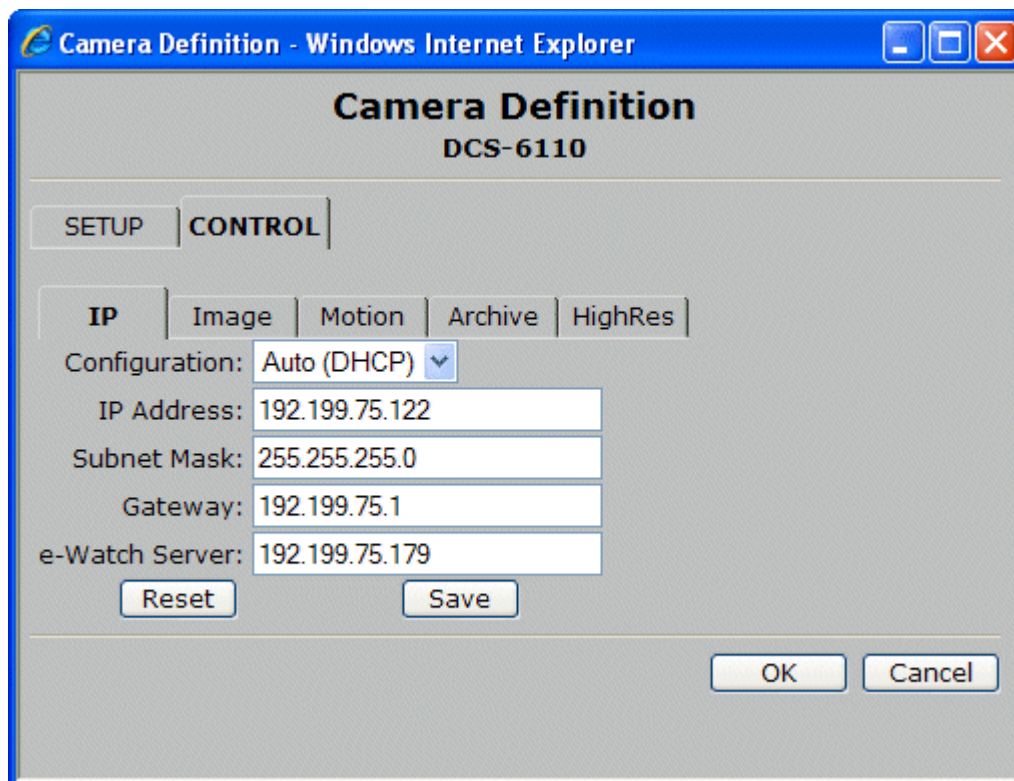


Figure 4-6. Manually Updating The Camera's IP Address

List Of Figures

- Figure 2-1. Third Party Username 5
- Figure 2-2. Third Party Password 5
- Figure 3-1. Setting The Vivotek User Name And Password 7
- Figure 3-2. Modifying the Vivotek Password 7
- Figure 4-1. Connecting Vivotek Camera Using e-Watch Camera IP Utility 9
- Figure 4-2. Connecting Vivotek Camera Using e-Watch Camera Configuration Utility 11
- Figure 4-3. Motion Detection Using The Camera IP Utility 13
- Figure 4-4. Motion Detection Using The Camera Configuration Utility 15
- Figure 4-5. Motion Detection Using The Camera Definition Page 16
- Figure 4-6. Manually Updating The Camera's IP Address 17

I N D E X

A
Activity Gated Storage 2, 12
B
Boot Event 12, 17
E
Event Configuration 12
M
Motion Detection 2, 12, 13, 14, 16
MPEG 1
N
Notify Server 8, 10

P
Password 4, 6, 7
R
Registry 4
 ThirdPartyAdminPassword 4
 ThirdPartyAdminUsername 4
S
Setup Motion Detection 13, 14, 16
U
User Name 4, 6