White Paper

ST7501 Performance
with VIVOTEK 2-Megapixel Cameras

www.vivotek.com

Revision History

Version	Issue date	Author	Comment
1.0	2009/11/12	Peggy Li	First release

Tables of contents

Introduction

VIVOTEK's ST7501 Server program is able to record network video streams on up to 32 channels while ST7501 LiveClient allows for real-time remote monitoring. This report explains the performance of ST7501 when monitoring 32 channels of IP7161 2MP cameras at 1600x1200 video size.

1. Equipment

ST7501
Version 1.2.1.3

PC model x1
CPU: Intel i7 920
Memory: DDR III 3G-1333
VGA card: Geforce 9800GT
Resolution: 1280x1024
Hard disk: SATA 1TB
Ethernet card: 1Gbps

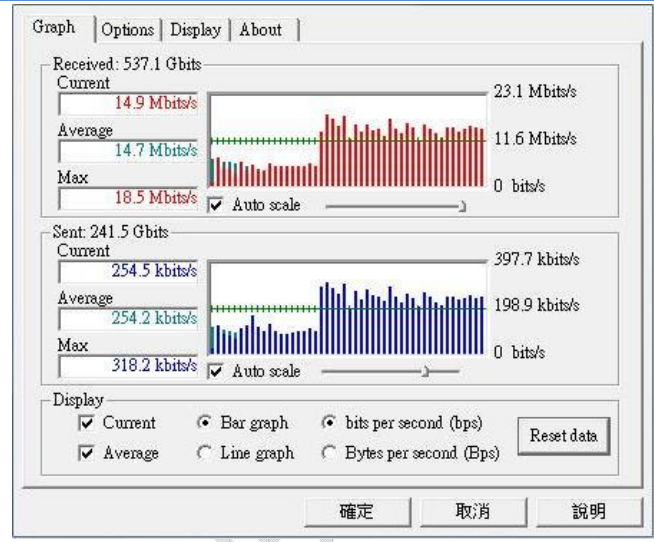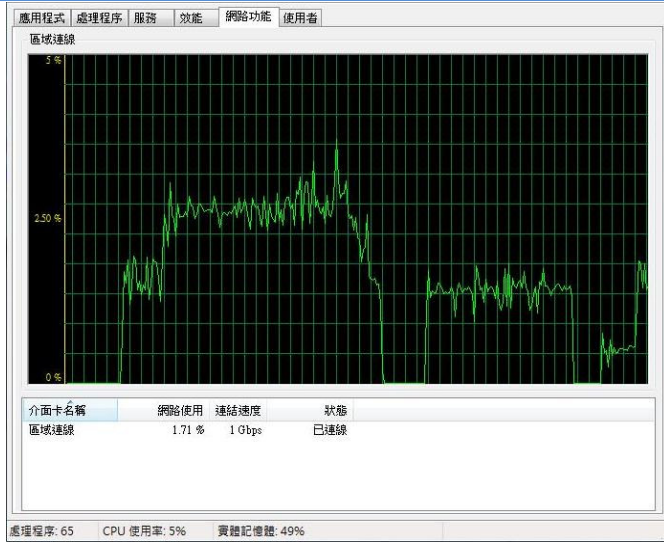| IP7161 x32 |
| --- |
| Camera settings |
| Firmware version: 0101c |
| Video codec: Mpeg-4 |
| Video size: 1600x1200 |
| Maximum frame rate: 15fps |
| Intra frame period: 1s |
| Video quality: Excellent |

2. Performance

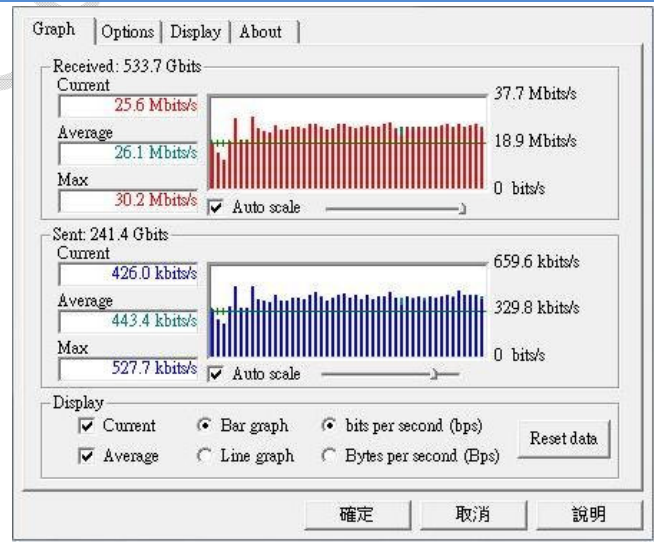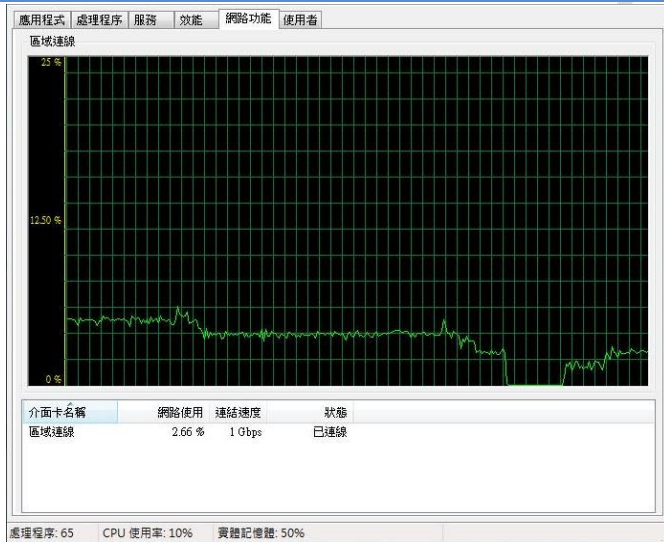## LiveClient : IP7161x32
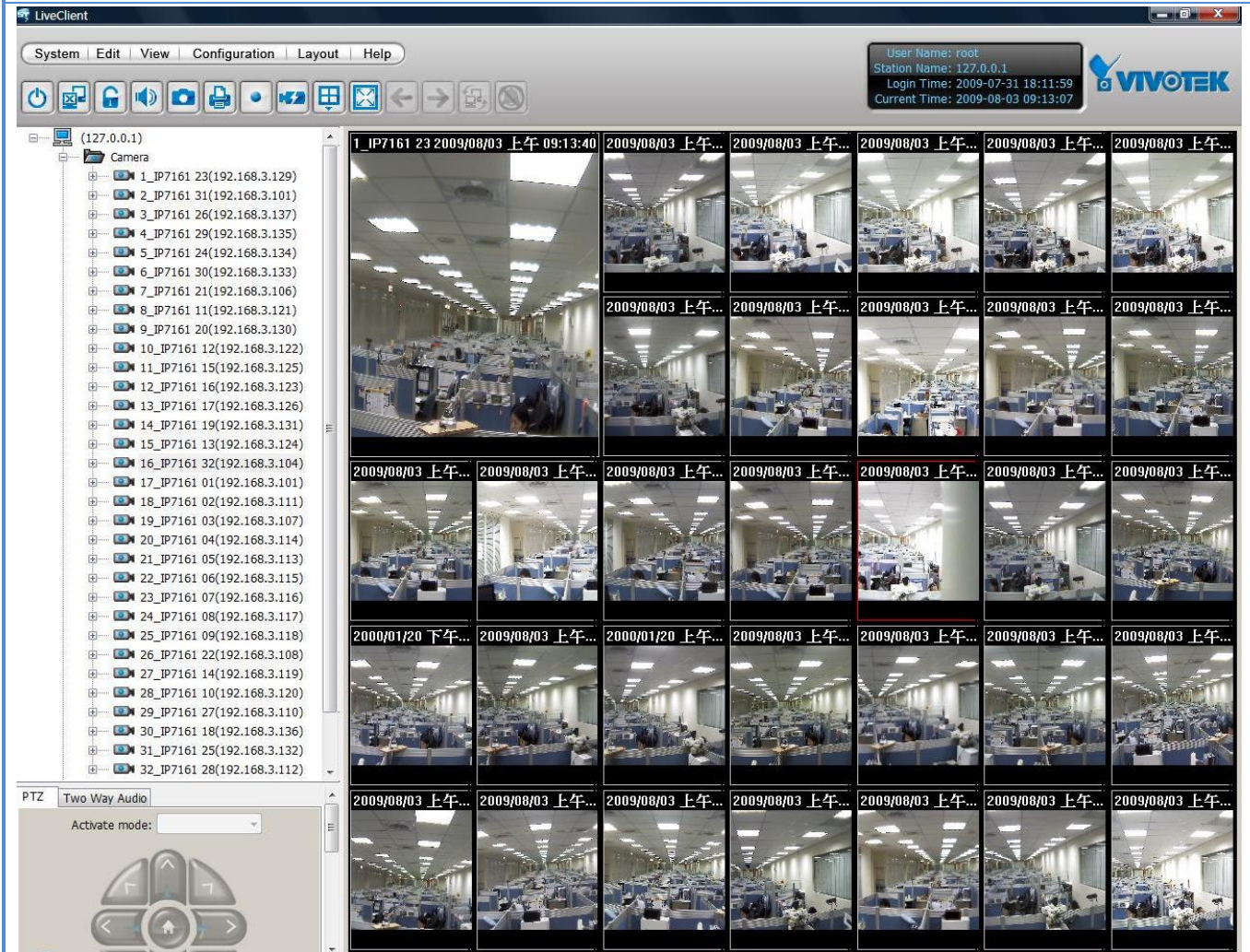
4 cameras

CPU usage: 5%

Network Utilzation: 1.71%

Physical memory: 49%
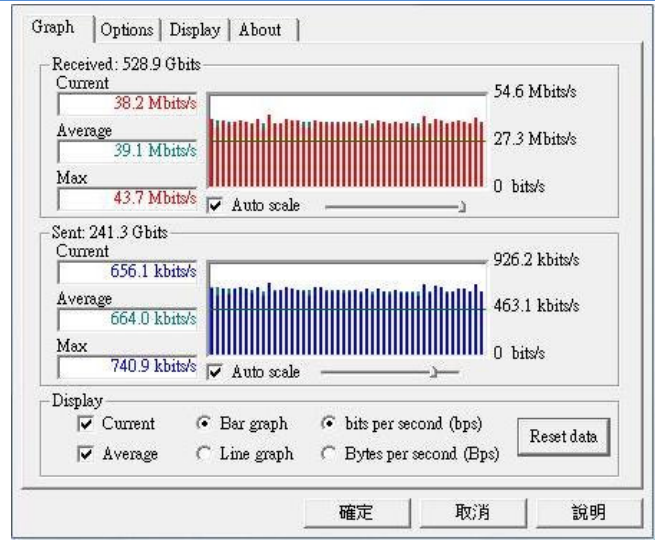
8 cameras

CPU usage: 10%

Network Utilzation: 2.66%
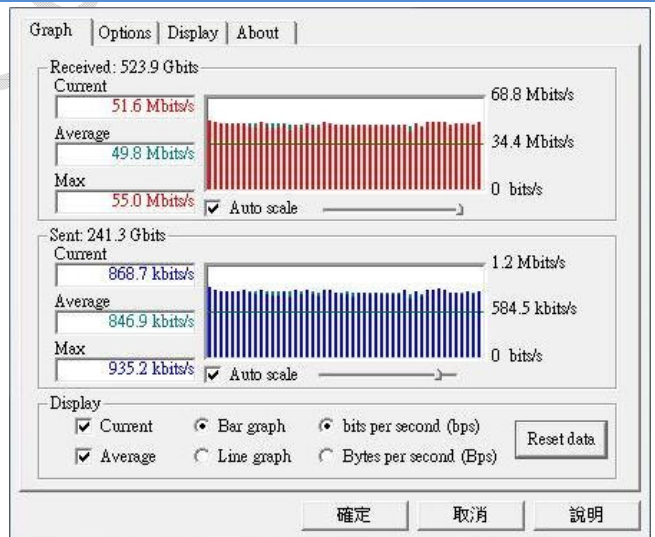
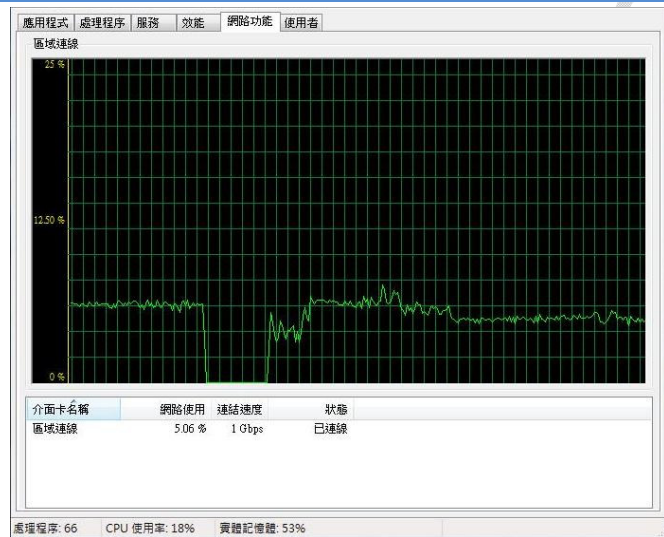Physical memory: 50%

12 cameras

CPU usage : 12%

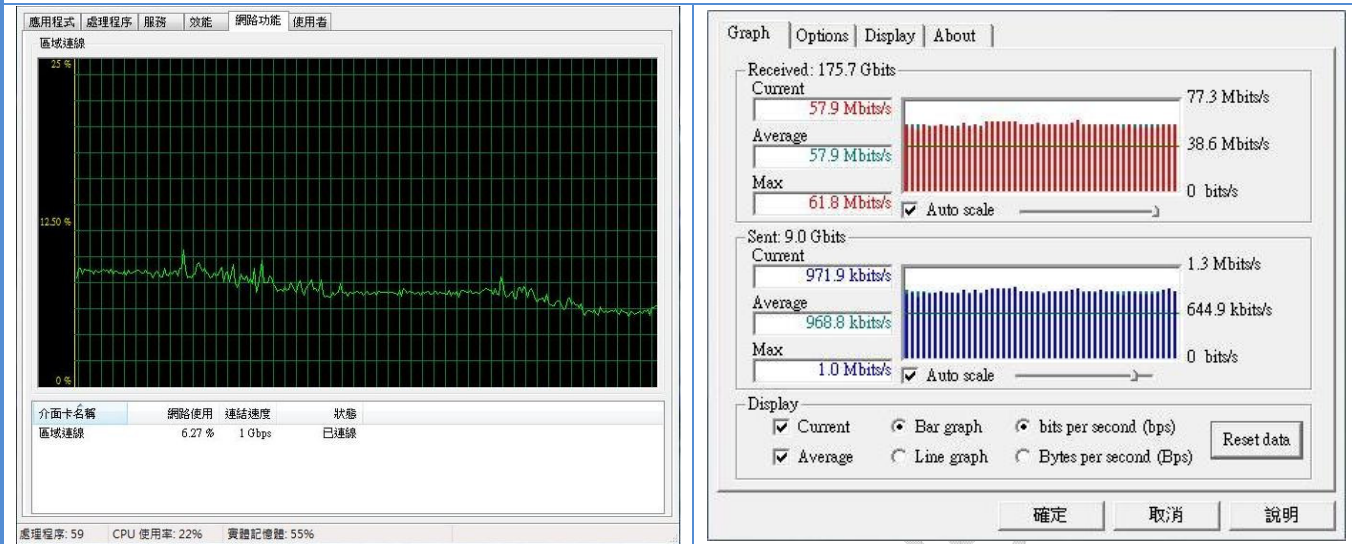Network Utilzation: 4.12%

Physical memory : 52%

16 cameras

CPU usage : 18%

Network Utilzation: 5.06%
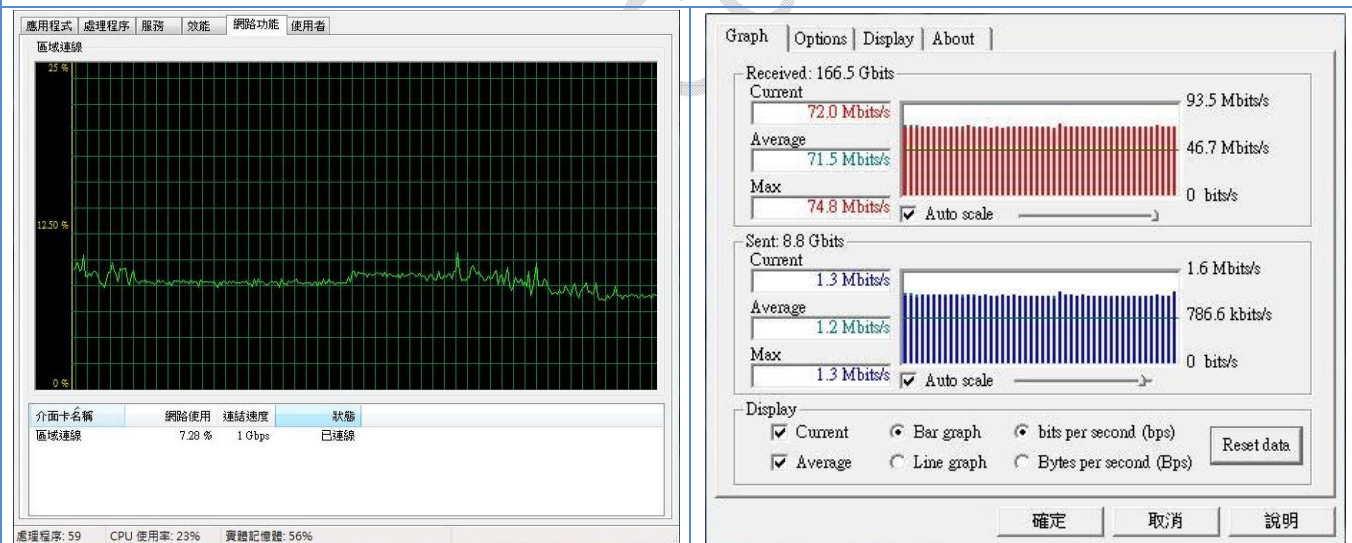
Physical memory : 53%

20 cameras

CPU usage: 22%

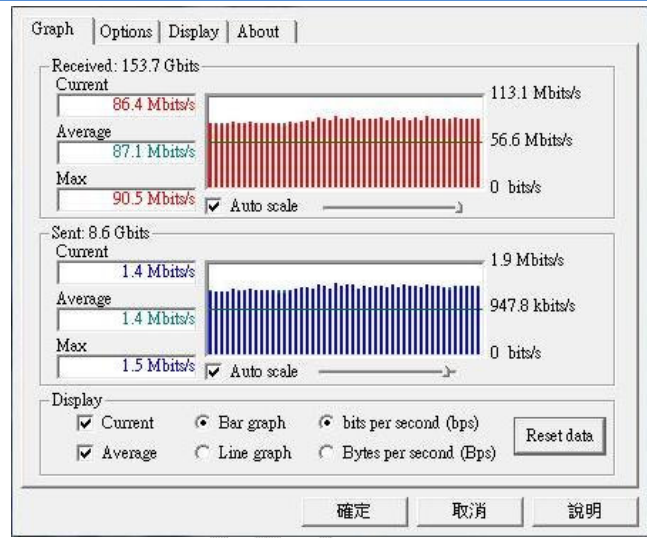Network Utilzation: 6.27%
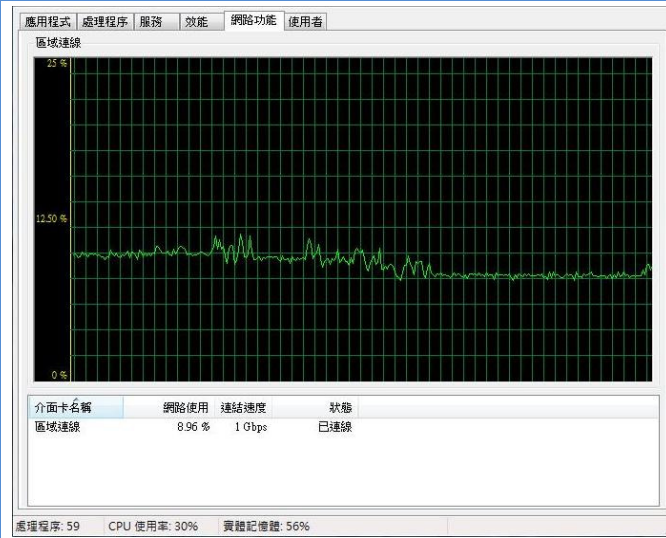
Physical memory: 55%

24 cameras

CPU usage: 23%

Network Utilzation: 7.28%
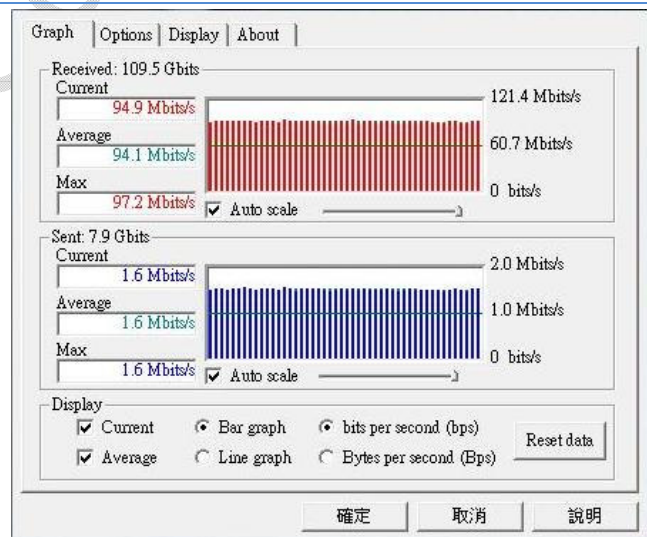
Physical memory: 56%

28 cameras

CPU usage: 30%

Network Utilzation: 8.96%
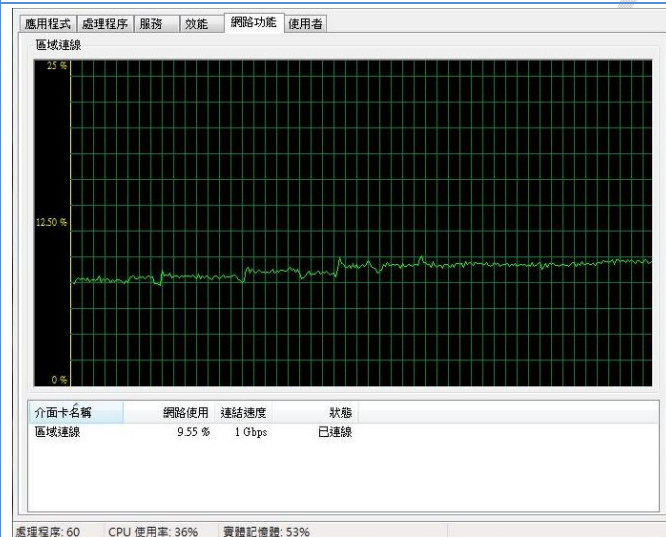
Physical memory: 56%

32 cameras

CPU usage: 36%

Network Utilzation: 9.55%

Physical memory: 53%