

# Increase Your Business with Arecont Vision Megapixel IP Technology

Customer Webinar  
19 December 2012

A large, decorative graphic consisting of numerous thin, red, wavy lines that flow from the left side of the slide towards the right, creating a sense of motion and depth.

megapixel technology...  
**beyond imagination**

The Arecont Vision logo, featuring a stylized 'AV' icon to the left of the company name.

**Arecont Vision**

# Agenda

- Company Update
- Product Updates
- Partner Profile: Genetec
- Tech Tips & Tricks
- Report on Quality
- Close & Q&A

Scott Schafer [Executive Vice President]

Brad Donaldson [Product Manager]

Hisham Ibrahim

Ted Brahms [Director of Field Applications]

Darrel Tisdale [Director of Quality & Tech Support]

# Arecont Vision Update

Scott Schafer  
Executive Vice President

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## Key Initiatives for 4Q12

- Key New Product Releases
- Execute Special Product Programs
- Increased Advertising and Promotion Activity
- Company Expansion Globally

# Now Shipping!

- **MegaDome® 2**
  - **All-in-one Design**
    - 1.3MP, 1080p, 3MP & 5MP Resolutions
    - Integrated 3-9mm or 3.6-9mm Remote Focus, Remote Zoom, Auto-iris Lens
    - Day/Night, IR and Audio Options
    - Adjustable 3-axis Gimbal
    - IP66 & IK10 Vandal Resistant Dome
  - **Total PoE Solution**
    - PoE 802.3 af class 3 to Support Camera, Heater & IR LED ring
  - **Casino Mode, Binned Mode, Privacy Masking**
  - **PSIA & ONVIF Compliant**

## MegaDome®



e.g. 1080p MD2 Models

AV2255AM : Base

AV2255AM-H : w/Heater

AV2255AM-A : w/Audio

AV2255AMIR : IR LED

# Now Shipping!

- **Compact WDR**

- **Dynamic Range up to 100 dB**
- **1080p & 3MP Resolutions**
  - AV2116DNv1
  - AV3116DNv1
- **Color & Day/Night Models**
- **Fastest Frame Rates**
  - 21 fps @ 3MP
  - 32 fps @ 1080p
- **Casino Mode, Binned Mode, Privacy Masking**
- **PSIA & ONVIF Compliant**

**Compact  
WDR**



Now Shipping!

# MegaBall™

1.3MP, 1080p, 3MP & 5MP

- **All in One Indoor Solution**

- 3" spherical metal camera
- Integrated lens options  
3.3-10mm or 4mm
- Integrated 3-axis bracket or dome options

- **Configuration Types:**

- Color or Day/Night
- Vari-focal or fixed focal Lens
- Bracket or Dome
- Dome version, including
  - In-ceiling mount
  - Surface mount
  - Dome cover (bubble)

- **Enclosure:**

- Easy installation
- External lens adjustment
- Compact dimension
- Cable management

- **Features:**

- PoE or external power
  - 12-48V DC or 24VAC
- New Friendly Web Interface
- PSIA & ONVIF Conformant



## Base Model Numbers:

AV11<sup>45</sup>

AV21<sup>45</sup>

AV31<sup>45</sup>

AV51<sup>45</sup>

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# Customer Satisfaction Measurement

- Arecont Vision wants to get feedback on our performance and opportunities for improvement.
- Our first Customer Satisfaction Survey started in August.
- If you are contacted, please take a few minutes to respond. We appreciate your feedback.



## Customer Satisfaction Survey

- Do you feel Arecont Vision is a valued partner to your business?
  - 86%- Yes
- **What is your overall satisfaction with Arecont Vision?**
  - Rating Average: 4 on a 5 point scale

## Customer Survey Next Steps

We are taking the following actions based on the results from the survey:

- Increase communication and promotion of the RMA process and improvements.
- Increase awareness of the Advance Replacement Program through the Tech Support Team, the Web, online hold messaging and through inside sales.

We will be sending out the same survey to a new group of customers each month.

# Returned Merchandise Authorization (RMA) Program

Arecont Vision North America  
Returned Merchandise Authorization (RMA) Program

## HOW TO INITIATE AN RMA REQUEST/ ADVANCE RMA REPLACEMENT FOR IN-WARRANTY CAMERAS

1. If a problem occurs with your Arecont Vision camera, the issue must be documented by opening an RMA ticket. This can be done via the internet at [support.arecontvision.com](http://support.arecontvision.com) or by calling Arecont Vision Technical Support at 818-937-0700 (option 3) to document the issues that are being experienced.
2. When opening the RMA ticket, please be sure to have all pertinent information such as the camera MAC address (found on the back of the camera or on the camera shipping box) as well as the purchase order (PO) information that was used to purchase the camera. Other helpful information may be required such as photos or wire shark logs, if available. The Advance RMA Replacement form must be filled out completely including current billing information. Incomplete information may delay your shipment.
3. Replacement/repair is covered at no additional cost to the owner for in-warranty cameras as long as the warranty has not been voided due to misuse or enhancements to the camera (see Arecont Vision's Limited Warranty for complete details: [www.arecontvision.com/policy/limited-warranty](http://www.arecontvision.com/policy/limited-warranty)).
4. Free Advance RMA Replacement\* service is the fastest option to receive a replacement camera: the replacement camera ships within three (3) business days of RMA approval and the owner is given 30 days to return the RMA camera without incurring expense. If the RMA camera is not returned there will be a charge of 40% off of MSRP for the camera that was not returned. A PO or credit card number will be required in order to approve the Advance RMA Replacement camera.
5. Owners that experience camera issues within the first 90 days of use will receive a new replacement camera. If the camera was purchased from a distributor, the distributor is authorized to provide a new camera if they have the same model in stock.
6. PLEASE MAKE SURE TO KEEP THE REPLACEMENT CAMERA'S PACKAGING. The RMA camera should be packed in the exact same box in which the replacement camera is shipped to the owner.
7. Proper precautions should be taken when shipping the RMA camera. The owner is liable for additional damage that occurs during return shipping due to improper packaging.
8. The warranty period for the Advance RMA Replacement camera will be for the remainder of the original camera warranty period (the warranty period does not restart with the receipt of the replacement camera).
9. If the camera model being returned for replacement/repair has been discontinued, Arecont Vision reserves the right to replace it with a new or refurbished model of the next generation camera.

THIS PROGRAM IS FOR NORTH AMERICA CUSTOMERS EFFECTIVE IMMEDIATELY. WE ARE WORKING ON A SIMILAR PROCESS FOR THE LATIN AMERICA, EMEA AND ASIA PACIFIC REGIONS.

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Case Study

# World Trade Center, New York City

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## World Trade Center, New York City

### Objective

- To view the new WTC Towers 1 and 4 for the reporting of fires to the FDNY.
- The FDNY needed 10MP resolution to capture the overall view and zoom-in and capture details of floors and windows should there be a fire or other emergency.

# World Trade Center, New York City

One AV10115 with a Theia Tech 1.8-3mm lens  
per building.

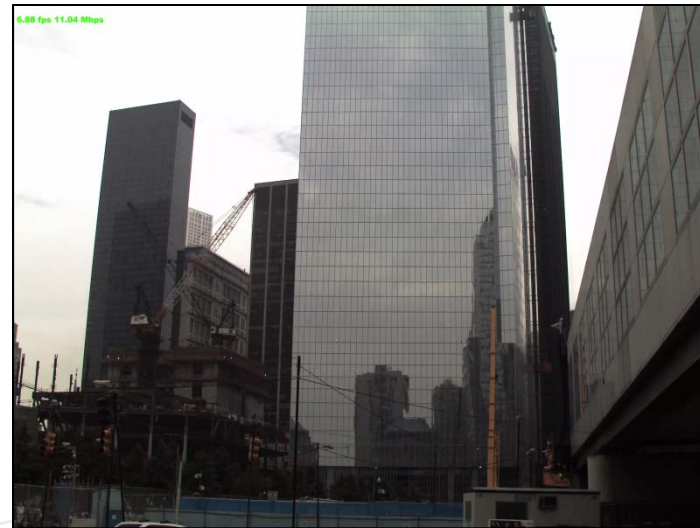


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# World Trade Center, New York City

Two AV10115s with 8mm lenses  
per building.



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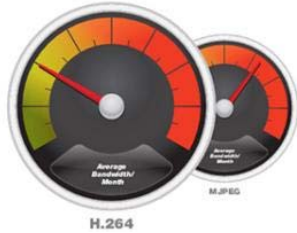
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# Arecont Vision: Leading the Way in Megapixel Video

## 20MP DAY/NIGHT PANORAMIC

The First 20MP H.264 Day/Night  
180 and 360 Degree Panoramic  
Cameras on the Market

Highest Resolutions



Most Efficient  
Compression (H.264)

10x Average Bandwidth and  
Storage Reduction over MJPEG



180° and 360° Panoramic Imaging



Day/Night



Wide Dynamic Range



Casino Mode

## And More...

- Most Integrated
- Image Quality
- Color Accuracy
- Standards-based

(PSIA Compliance and ONVIF Compliance)



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# New Product Update

Brad Donaldson  
Product Manager

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## New Products in November

### MegaBall™

1.3MP & 1080p



### MegaDome® 2

10MP



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## New Products in December

### MegaBall™

3MP & 5MP



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### MegaDome® 2

WDR



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## New Products in Q1 2013

### PanoDynamic™ 12MP WDR SurroundVideo®



**World's 1<sup>st</sup> WDR  
Panoramic Camera**

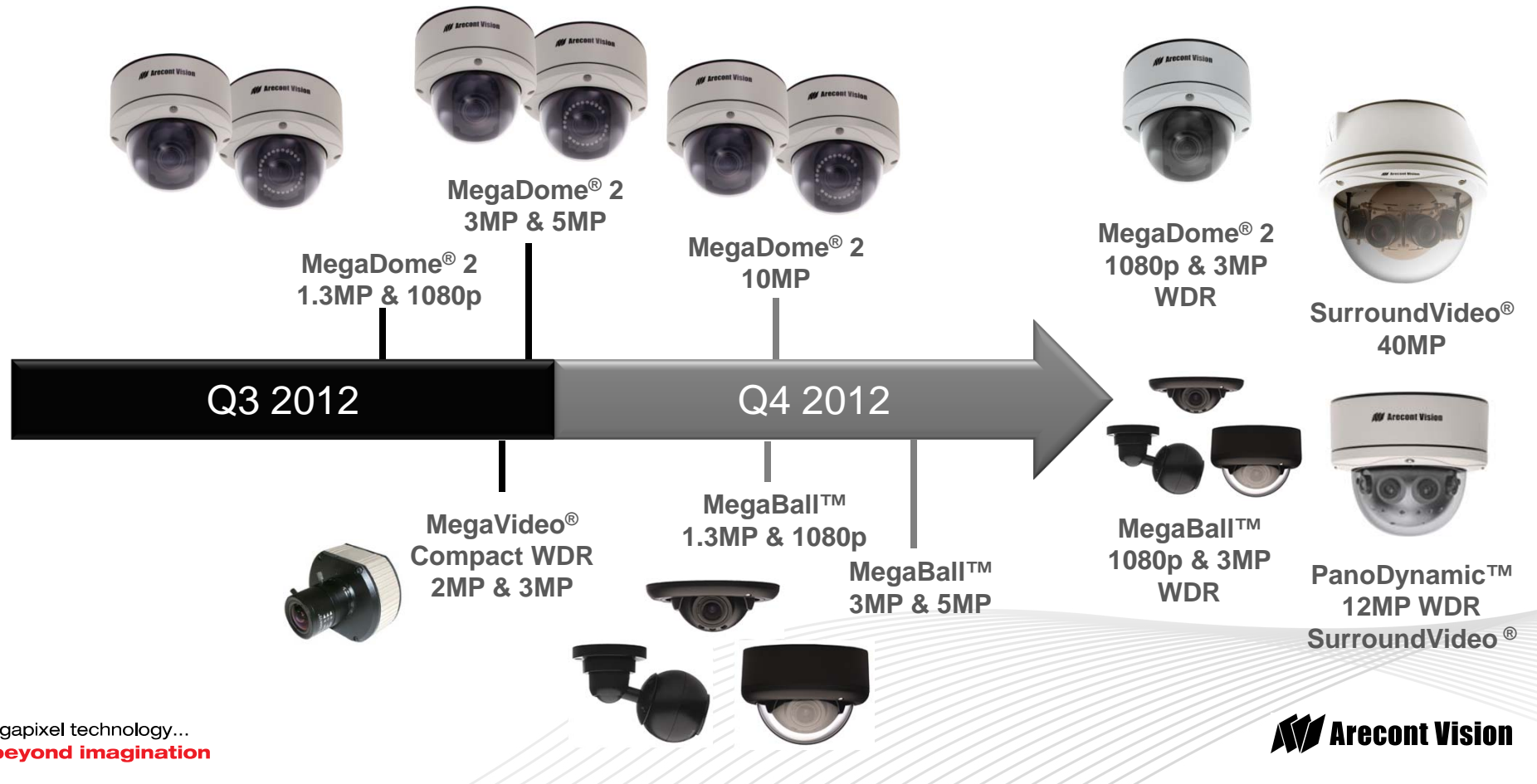
### 40MP Panoramic SurroundVideo®



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# Q3 / Q4 New Product Roadmap



# Genetec

## A Pioneer in IP Security Solutions

**Hisham Ibrahim**

*Western US/Canada Inside Sales Representative*

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# Company Overview



- Founded in 1997 in Montreal (Canada)
- Leading IP security platform developer
- Experts in networked:
  - Video Surveillance
  - Access Control
  - License Plate Recognition
- Significant Growth in last 10 Years
  - 450 employees Worldwide (70% Engineers)
  - Offices in Montreal, US, Paris, UK, Dubai, Singapore
- IMS Ranked Number 1 in VMS (Americas)



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# Security Center 5.1

## Unified Security Platform

### Scalability:

- 250,000 cameras / 1M doors
- 130+ Arecont Vision cameras of varying resolutions at about 50% CPU
- 72,000 alarms/events per day
- 1,000 concurrent client stations
- 100 Patrollers per LPR Manager

### Reliability:

- Built-in failover and redundancy
- Edge recording
- Auxiliary archiving
- Windows clustering
- Virtualization

### Flexibility:

- Distributed architecture
- Multicasting / Multistreaming
- Federation
- Multi-vendor access control support
- Simultaneous fixed and mobile LPR back-end

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**Hisham Ibrahim**

*Inside Sales Representative*

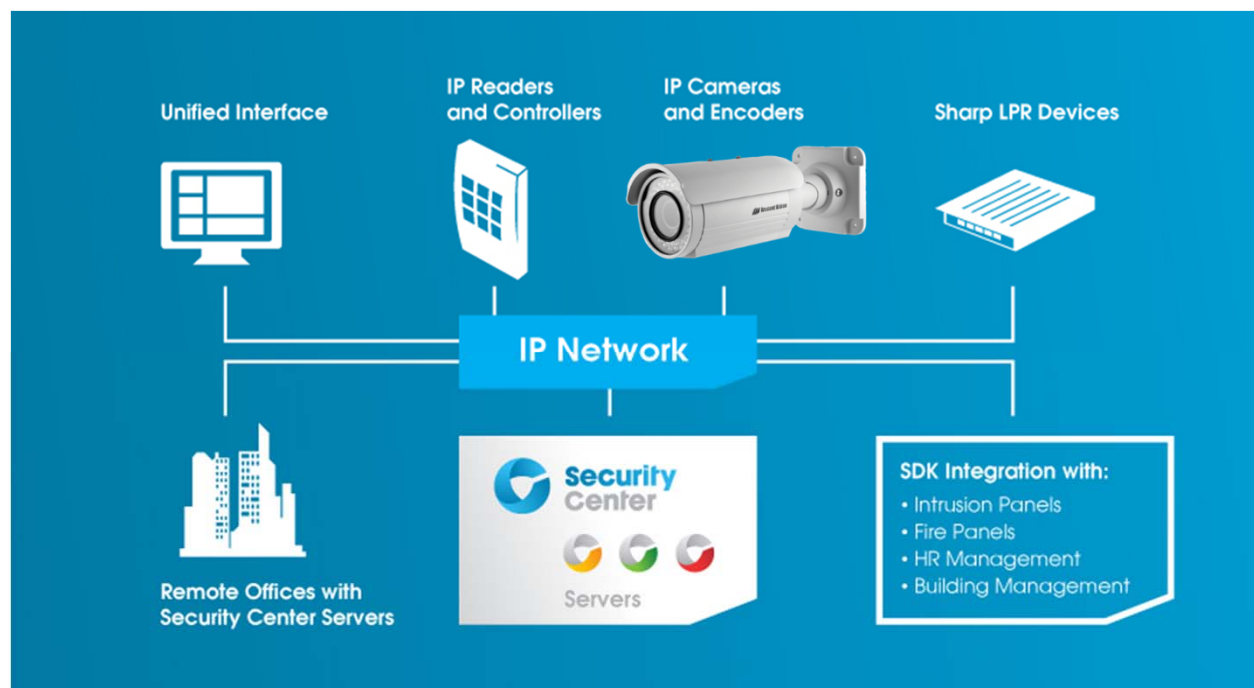
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# Architectural Overview



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# Solutions For All Businesses

Small and Medium Sized (Video only, ACS only, Unified)

## SV-16 Network Appliance:

- Perfect for Systems up to 16 Cameras
- Small, powerful, and Rugged



## SV-PRO Server:

- Perfect for Systems up to 100 Cameras

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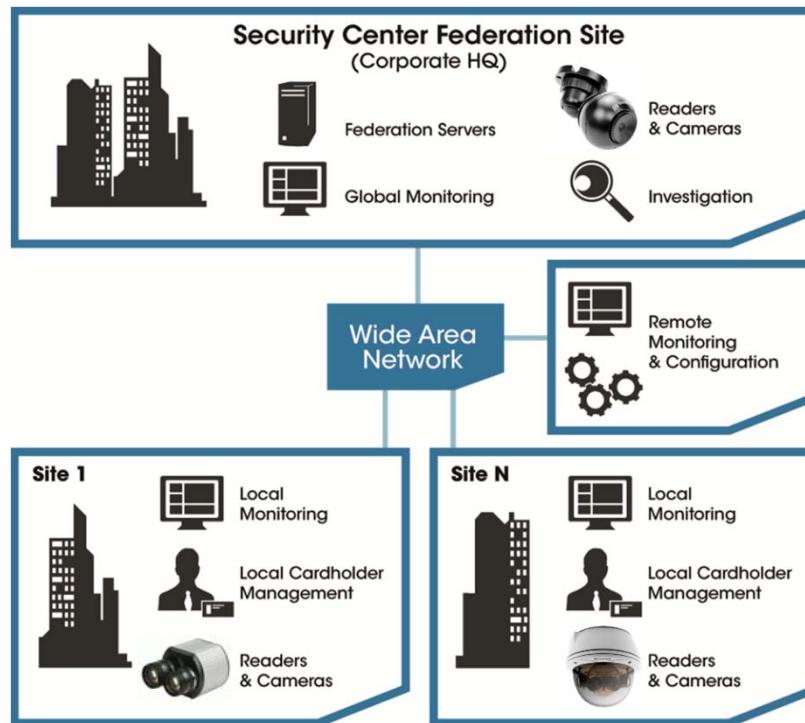
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# Solutions For All Businesses

## Enterprise

### Federation: Global Monitoring



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# Solutions For All Businesses

## Enterprise

Genetec offers built-in failover capabilities:

### Video Recording

- **Failover and Redundant Archiving** protects the video recording and communication with the cameras from hardware or network interruptions
- **Auxiliary Archiving** protects video by doing recording off-site recording with the option of using a different recording quality, schedule and retention period

**Genetec**

**Hisham Ibrahim**

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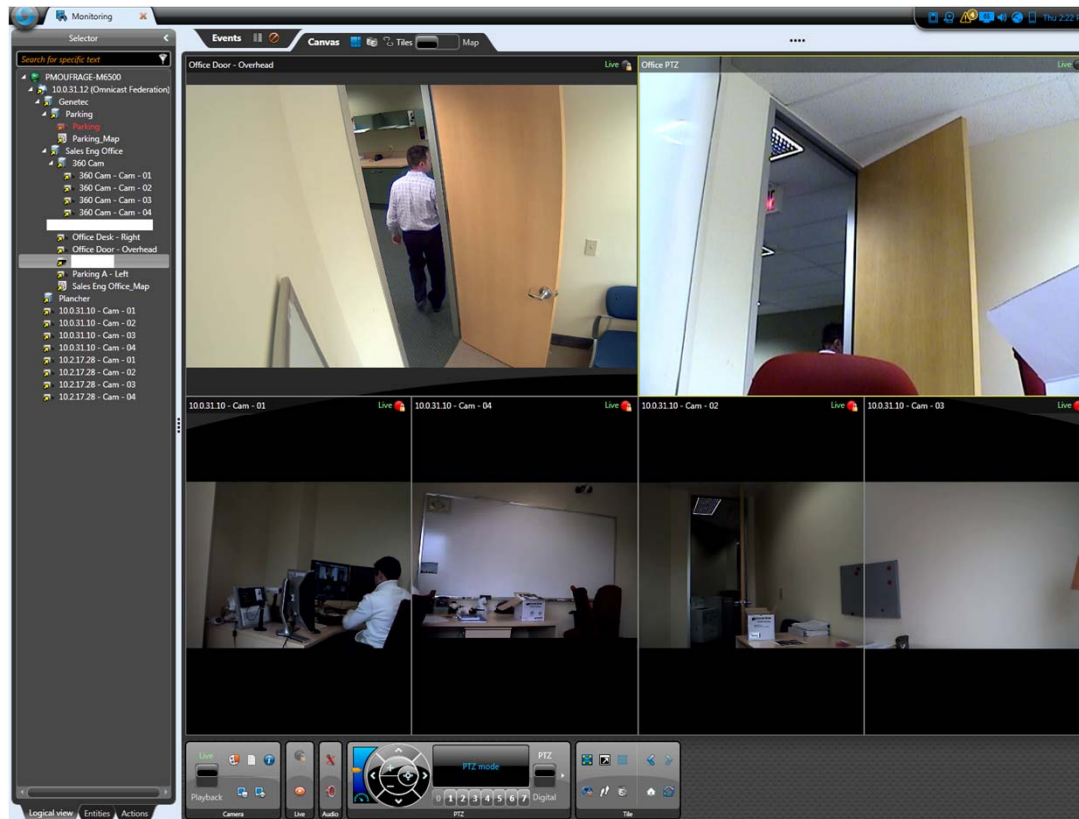
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# Arecont Vision 180-Degree Camera



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Thank You!

## **Hisham Ibrahim**

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A series of light gray, curved lines that sweep across the bottom right of the slide, creating a sense of motion and flow.

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# Tech Tips and Tricks

Ted Brahms  
Director of Field Applications

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Planning and Implementing Large Projects

# Considerations and Best Practices for Success



## Planning a Large Megapixel Project

- Large megapixel surveillance projects can involve hundreds of megapixel cameras on a single campus or distributed across several locations.
- The size and complexity of these projects requires attention in planning and implementation in order to be successful.

## Reduce and Simplify

- Know what the key areas of interest are and what the application requires.
- Know the dimensions of the site and leverage the resolution of megapixel to reduce cameras in your design.

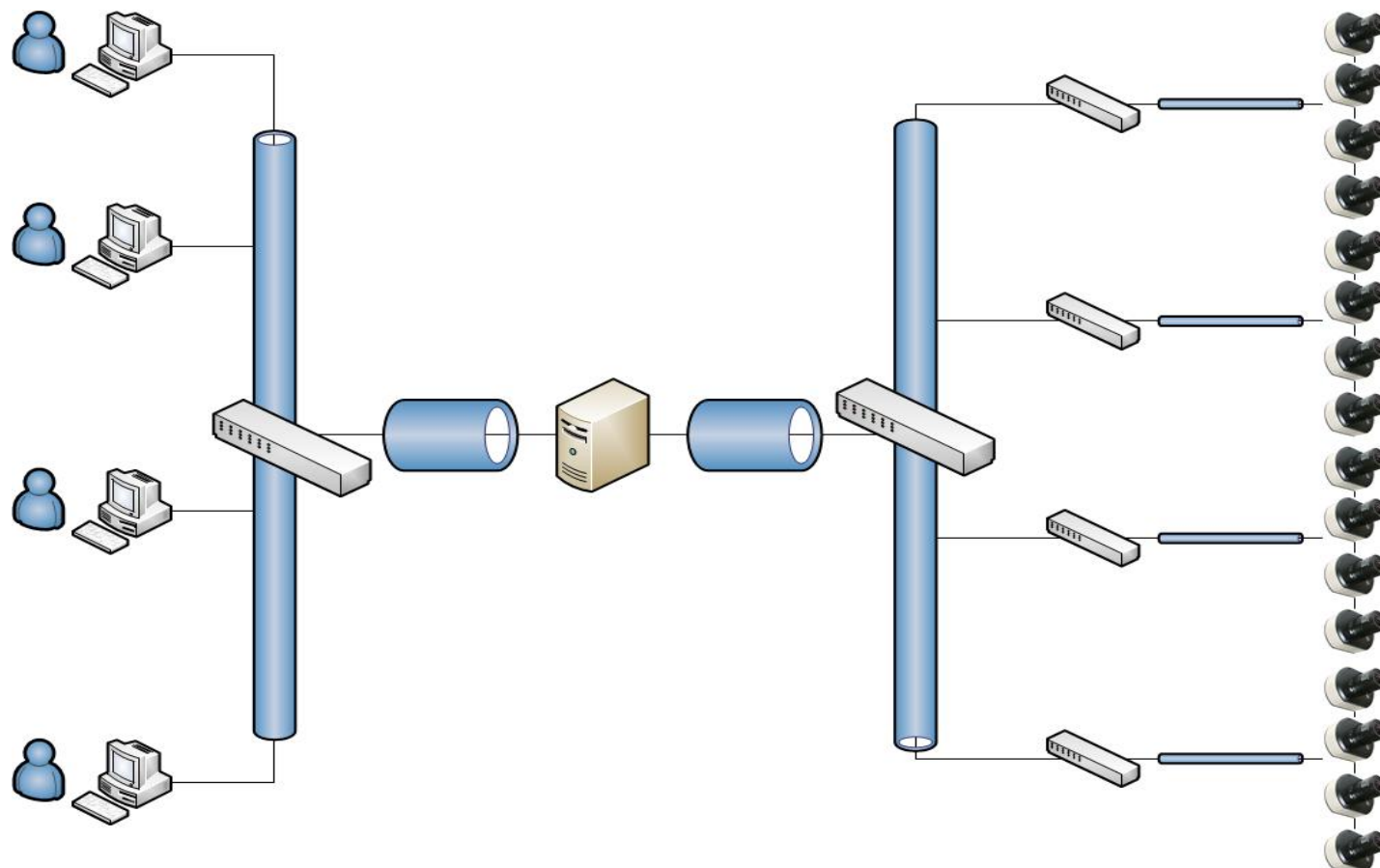
## It's All About the Network

- While it may seem obvious, bandwidth and network latency are the most common causes of issues in megapixel projects.
- Bandwidth calculation follows coverage and camera placement in design.

## It's All About the Network

- How the network is connected is as important as the speed of the equipment being connected.
- Care should be taken to reduce load across any one switch or bottlenecks at any one uplink.
- Remember that in large video networks the load compounds with each hop closer to the server as more and more streams run parallel.

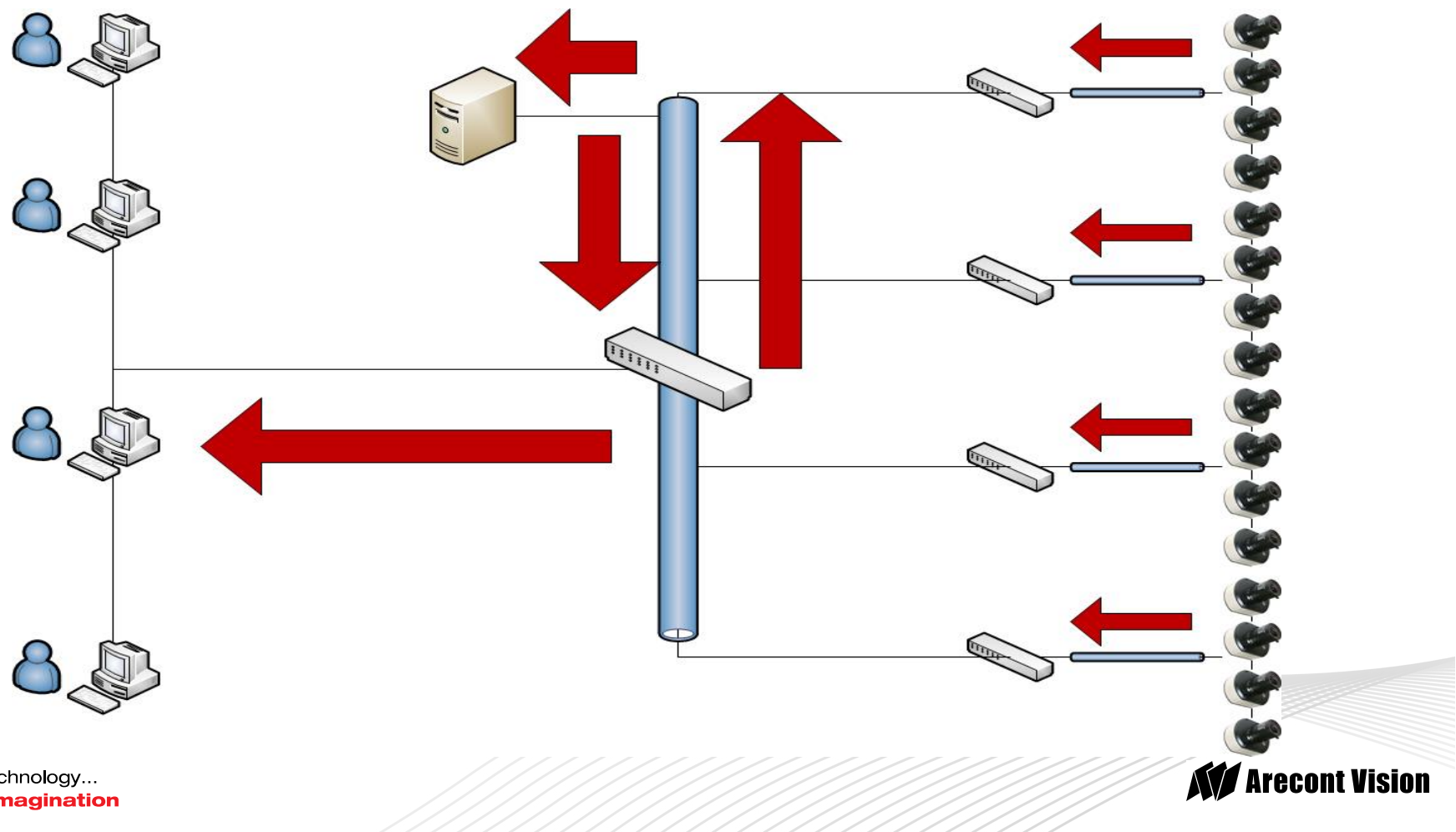
# Keeping the Flow Flowing



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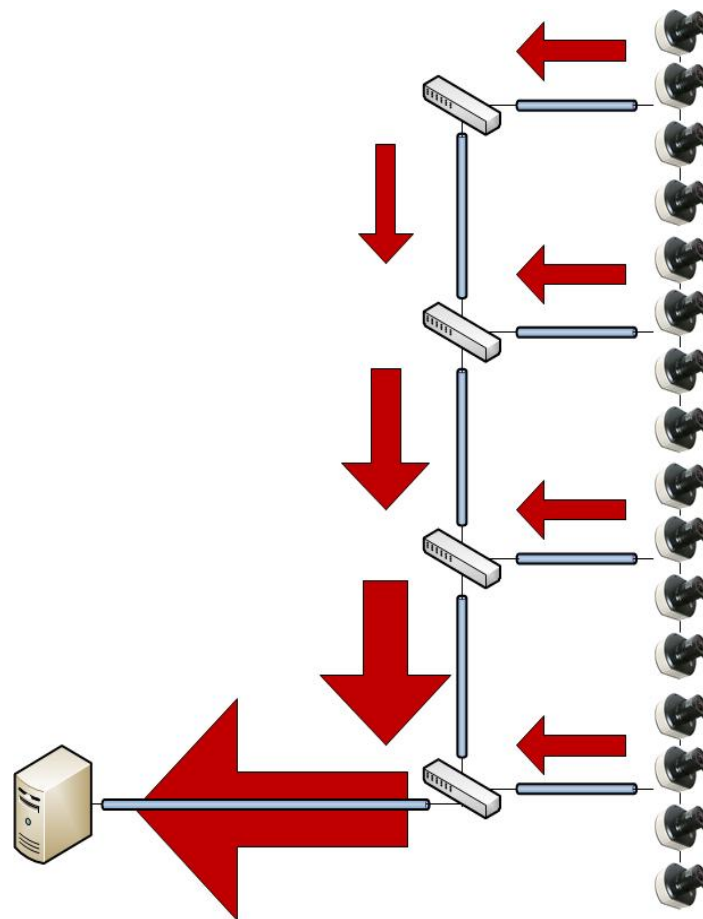
# Common Mistakes



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# Common Mistakes



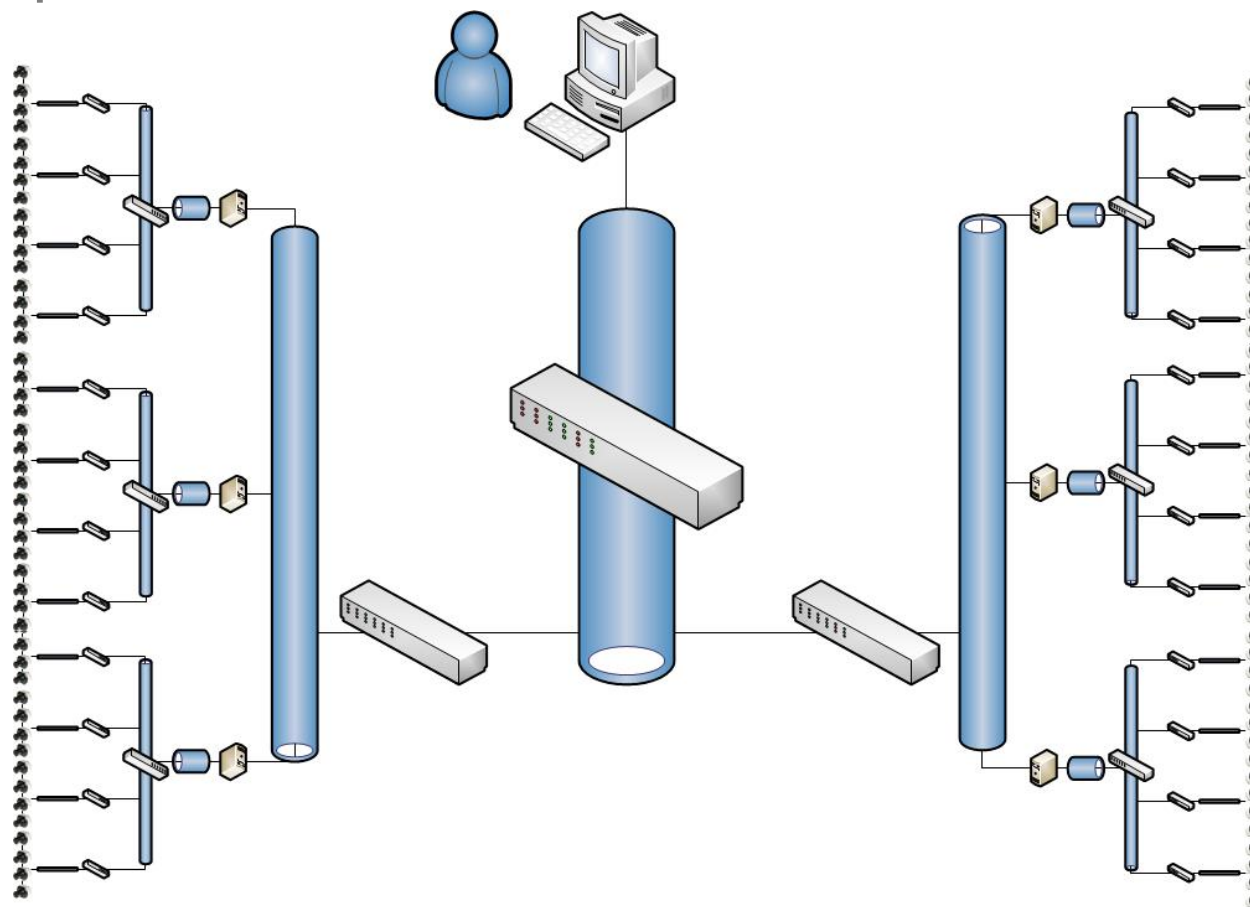
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## Balancing the Load

- Network Traffic:
  - Peak performance  $\leq 50\%$
  - Collisions begin @  $+50\%$
  - Packet loss begins @  $+80\%$
- Design your video network at 50%.
- H.264 offers reduction in average bitrate but is subject to fluctuation with high activity.
- Planning overhead in the design can accommodate occasional spikes in bandwidth usage.



# Scaling it Up



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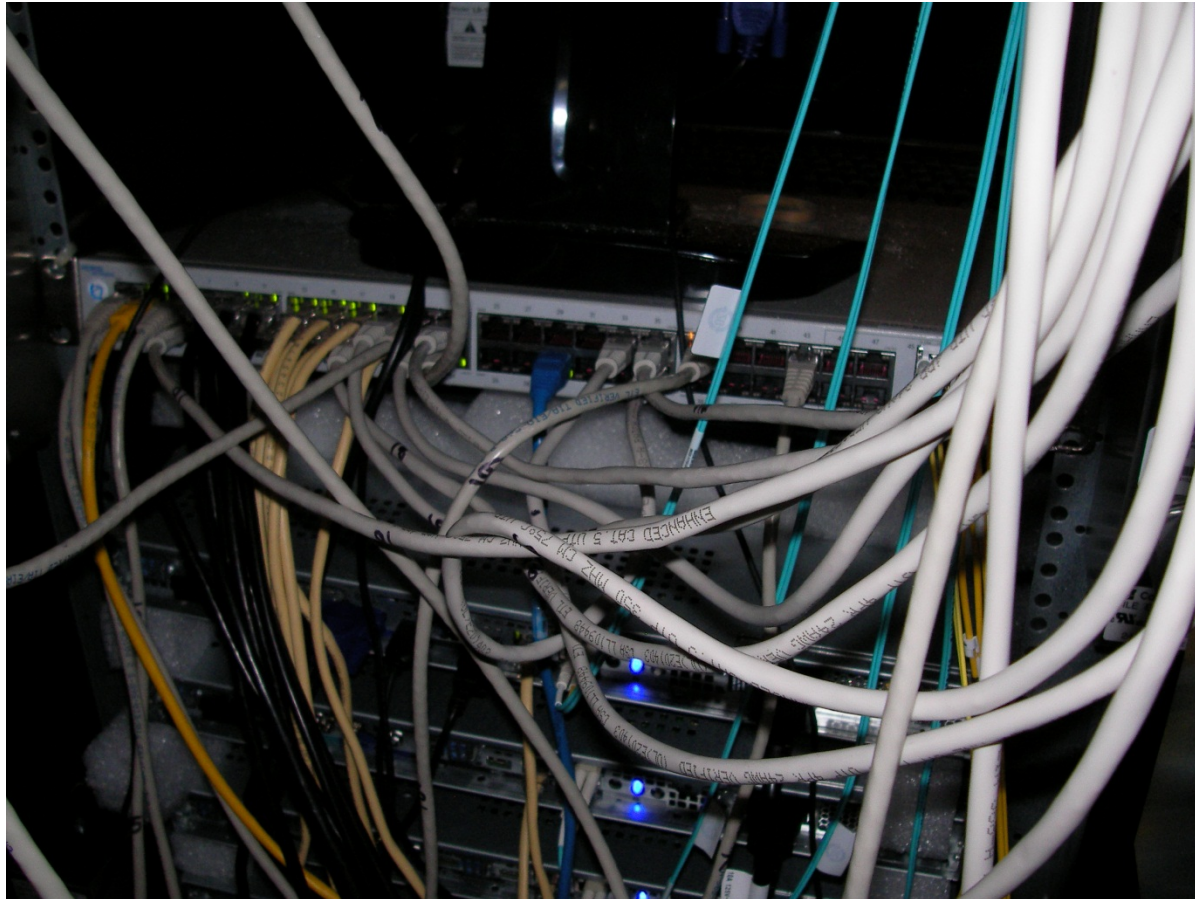
## Test and Confirm

- Confirm the cameras selected are integrated in the VMS platform chosen for the project and that all components play well together.
- Testing and pre-addressing cameras, switches and server hardware before bringing them onsite saves time and eliminates surprises.
- Make sure all cables and connections are certified before plugging in and powering on.

## More Best Practices

- If you need advice in selecting network hardware, your best source of advice will be the equipment manufacturer.
- Plan bandwidth requirements for the maximum usage possible, not the average.
- Practice proper wire management:
  - Map and label ports and termination blocks to reduce maintenance time and cost.
  - Use track runs, conduit, and rack wiring systems to prevent wire strain, damaged insulation and possible shorts or EMI issues.

# Poor Wire Management



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# Good Wire Management



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Is that All?

- Actually, no. There is a lot more to talk about than we have time for in this segment.
- Protocol used, who owns the network and what other traffic is on it are also important considerations when planning a large video network.

Thanks. That's all for now.

Next Month's Topic:  
Lens Quality Effect on Megapixel Images

# Preventing Technical Difficulties in Large Installations

Darrel Tisdale

Director of Quality and Technical Support

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## Feedback from Technical Support issues

- Difficulty finding and installing cameras.
- Cameras disappear from master router table.
- Video is jerky.
- VMS reports video loss.

## Difficulty Finding and Installing Cameras

- Many different reasons.
- Best Practices
  - Open every camera at your office.
  - Set the IP address, subnet and gateway information, then save to flash.
  - Label each camera with location and IP information.

## Cameras Disappear from Master Router Table

- Primary Reason
  - Subnet mask and gateway information missing.
- Solution
  - Pre-set the subnet mask and gateway prior to installation.
  - Verify each camera after installation.

## Video is Jerky / Smearing

- Busy or poor network environment.
- Frame rate set too low.
- Multiple streams being pulled.
- UDP protocol with packet loss.

## VMS Reports Video Loss

- Power issues.
- Busy / congested networks.
- Wireless network buffering.
- QoS settings.
- VMS settings.
- System resource issues.
  - Processor, RAM, Virtual Machine environment.

## Best Practices

- Proper planning is key.
- Identify and document camera locations.
- Pre-check all equipment.
- Pre-focus if possible.
- Setup server and VMS prior to install.
- Install all cameras in VMS prior to install.

Thank you!

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A series of thin, grey, wavy lines that sweep across the bottom of the slide, creating a sense of motion and depth.

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