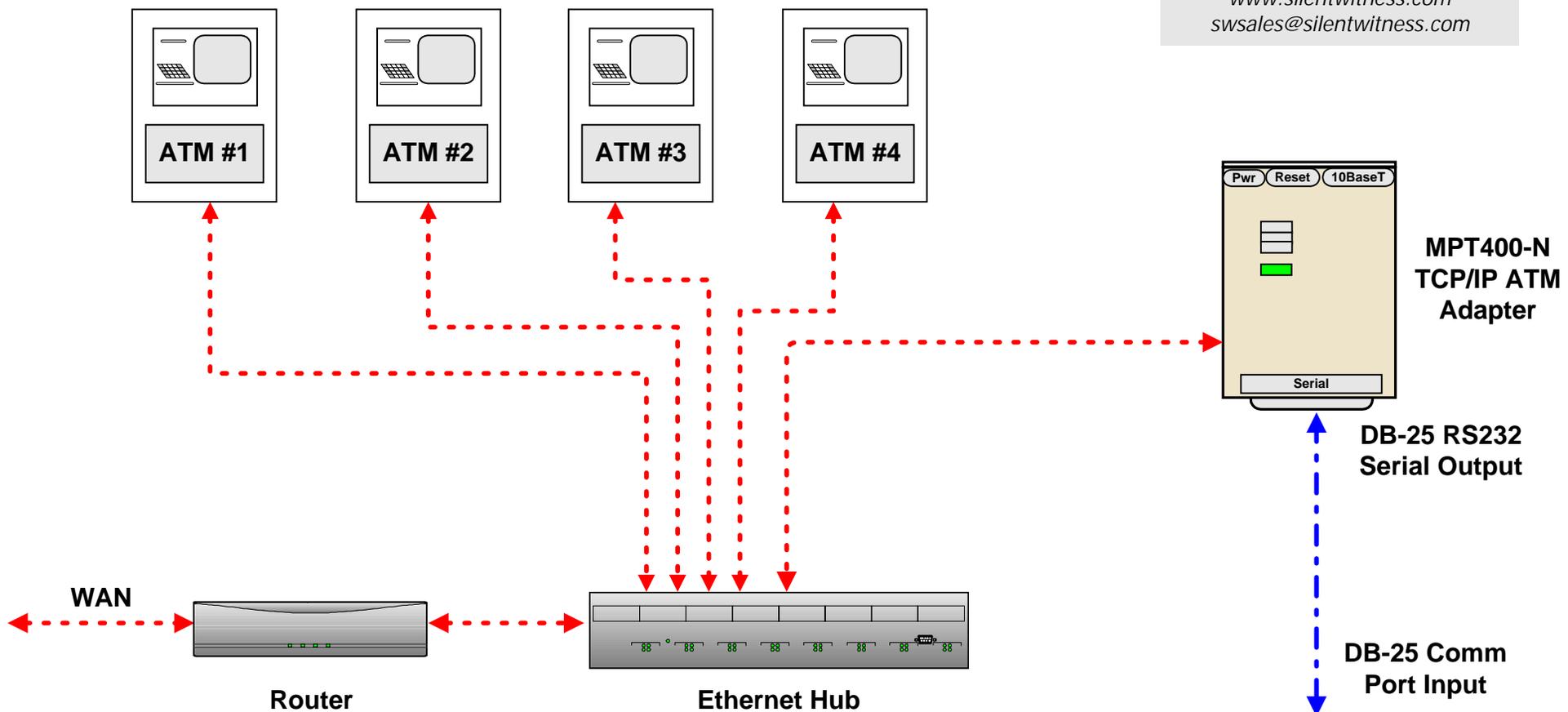# DVMS 1600 with Network ATMs
(TCP/IP Ethernet, Hub based)

SILENT WITNESS®
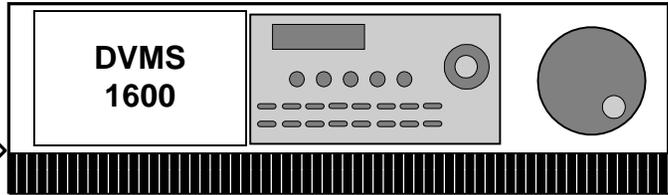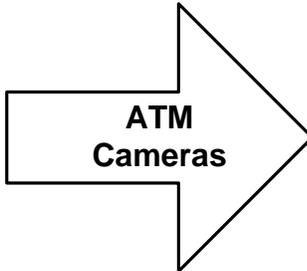
Applications Specialists Group
604-574-1526, 604-574-1523
www.silentwitness.com
swsales@silentwitness.com

ATM #1

ATM #2

ATM #3

ATM #4

Pwr Reset 10BaseT

**MPT400-N
TCP/IP ATM
Adapter**

Serial

**DB-25 RS232
Serial Output**

WAN

Router

Ethernet Hub

**DB-25 Comm
Port Input**

Legend

TCP/IP Ethernet

Async RS232 Filtered

This scenario presumes that the Router and Hub pre-exist. The MPT wires to a spare port on the Hub.

**ATM
Cameras**

**DVMS
1600**

File:DVMS1600-MPT400Nb.vsd Pg1
SCW   03-02
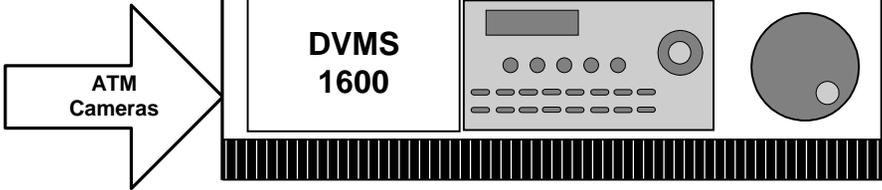
DVMS 1600 with Network ATMs
(TCP/IP Ethernet, Switch based)

SILENT WITNESS®

Applications Specialists Group
604-574-1526, 604-574-1523
www.silentwitness.com
swsales@silentwitness.com

ATM #1

ATM #2

ATM #3

ATM #4

Pwr | Reset | 10BaseT

Serial

**MPT400-N
TCP/IP ATM
Adapter**

**DB-25 RS232
Serial Output**

**Uplink
Port**

WAN

Router

Ethernet Switch

**DB-25 Comm
Port Input**
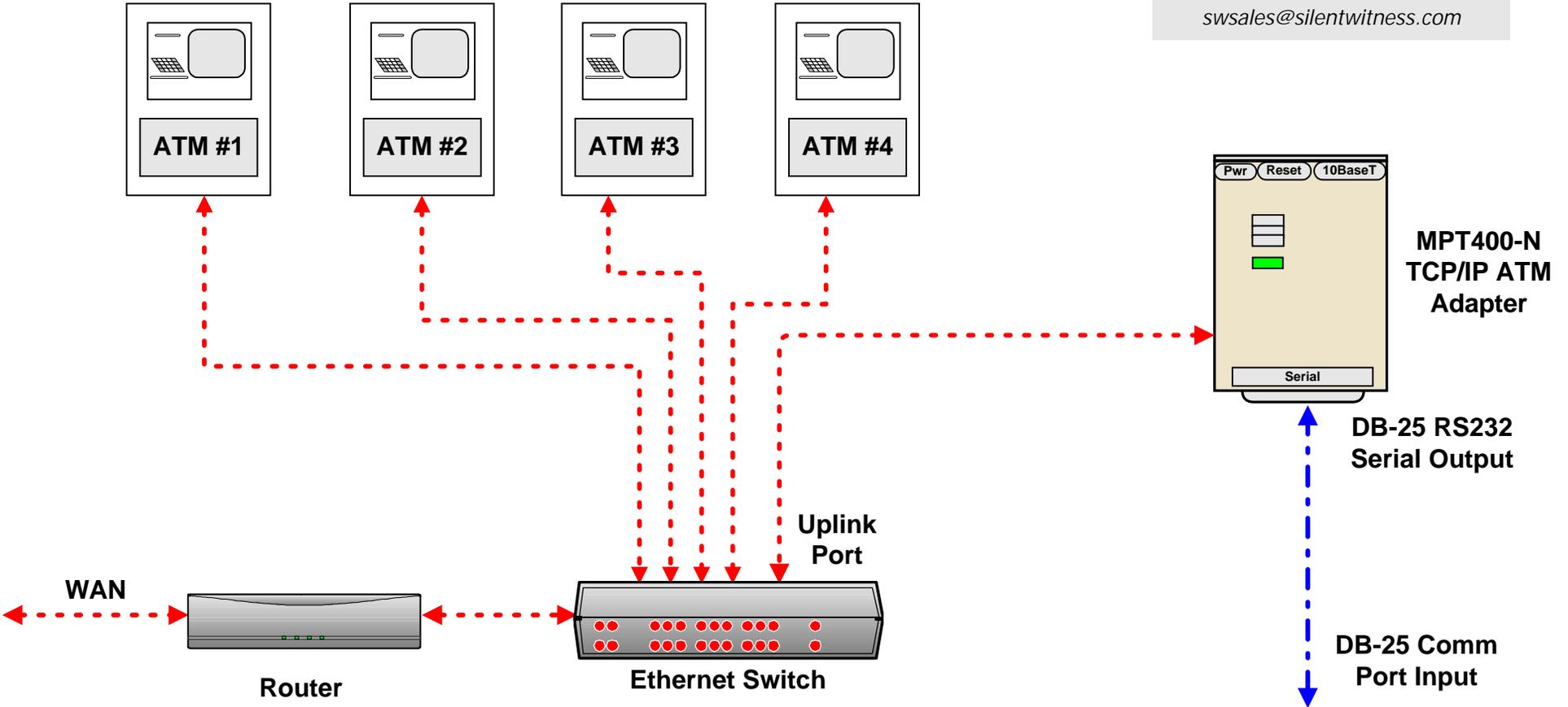
Legend

TCP/IP Ethernet

Async RS232 Filtered

This scenario presumes that the Router and Switch pre-exist. The MPT wires to the Uplink port on the Switch. The MPT cannot wire to a regular spare switch port, because it will not see all network traffic.

**ATM
Cameras**

**DVMS
1600**

**File:DVMS1600-MPT400Nb.vsd Pg2
SCW   03-02**

DVMS 1600 with Network ATMs

Overview:
These diagrams show how multiple TCP/IP ATMs can be connected to the DVMS family products.

Description:
The DVMS 1600 has 4 text inserter ports. Each TI port can directly accept **only** Asyncronous RS232 ASCII based text, from any compatible host device. However, most ATMs communicate to their respective ATM networks in non-Async protocol. In this scenario, the ATMs connect via Ethernet. Therefore, most ATMs cannot directly connect to DVMS without some form of conversion.

Typical Hookups:
Newer bank branches will have multiple ATMs connected to a single Hub or router. In this case, each ATM gets the same mulitplexed network feed, but will only accept transaction information specific to the ATM. The ATM will respond and execute the transaction based on unique address information embedded within the transaction packet. Along with the transaction, there will be extraneous data that is undesirable for display, like PIN codes and other non-essential information.

Solution:
The Multi-Protocol Translater MPT400-N was created to allow DVMS to accept ATM data and properly display transaction information from Ethernet connected ATMs.

Using a conventional CAT 5 Ethernet cable, the MPT400-N will eavesdrop on the communication on the LAN/HUB. The MPT400-N will then process the data in several ways. First, it will intercept packet targeted to specific ATMs, based on assigned IP address, and convert the data from whatever protocol it was to Asyncronous. Then, it will strip away any extraneous data not required during actual text insertion. (This is specified during setup by the installer). Lastly, it will reformat the text string with a header ID (Port 1, Port 2, etc.) and output the data to a single output.

Note that the MPT-400N has a default IP address of 192.168.8.215. Most branch installation will require you to obtain a spare IP, which would be issued by the System Administrator. You then reprogram the MPT400N with the new IP address.

Serving 4 TCP/IP ATMs:
As each ATM will have a unique IP address, you must register those addresses to the MPT-400N. The programming is accomplished using a simple Windows program included w/ the MPT.

Once the IP address is registered, the MPT400-N will reformat the text line with the appropriate header. This unique header allows DVMS to route the specific text to a particular camera. During a transaction, a line of text is intercepted and reformatted with a "Port 1" or "Port 2" (etc.) header that precedes the data string.

The formatted output of the MPT-400N gets to the DVMS via a special DB25 cable. This cable takes the single output of the MPT-400N and connects all 4 Text inputs of the DVMS, in parallel. The DVMS can associate specific text lines to a specific camera via "Text Triggering".

For example DVMS Text Port 1 is set to trigger on any text preceded by a "Port 1" header. Likewise, DVMS Text Port 2 will trigger on text preceded by a "Port 2" header.

Hub vs. Switch based:
A simple network Hub mirrors all network traffic to all connected devices. This makes it easy for the MPT-400N to eavesdrop on all ATM communications, and service up to 4 ATMs. A Network Switch routes traffic more efficiently, by forwarding only the information targeted to a specific IP. However, this prevents the MPT-400N from connecting to a single Switch port and seeing all ATM transactions. If there's an unused Uplink port on the Switch, connect the MPT-400N to it. The Uplink port will pass along all network traffic. If there's no free Uplink port available, consult with the Branch System Administrator.

Benefit:
By using the MPT400-N, DVMS will accept ATM transaction information directly as a data file associated with the corresponding video of the transaction. Since the transaction information is not permanently "burned" into the video image, the user can conveniently toggle the text on or off during review. The greatest benefit is that DVMS can perform advanced text-based searches. A report can easily be created that looks for specific text strings, such as TRANSACTION # or AMOUNT. Simple arithmetic operations can be used to allow convenient searches for "All Withdrawal Transactions over $300.00". These benefits can be realized locally or during remote connection using DVMS RAS software.