

## Cascade Remote Monitoring – Connection Diagrams

The diagrams on the following pages display connection scenarios known to work for Cascade Remote Monitoring.

Cascade's built-in remote monitoring feature was designed to be used on a Local Area Network (LAN). On a LAN both the Cascade and Remote Reader systems are part of the same network and can communicate with each other using their unique network IP address or computer name. A very simple LAN can be created using a direct Dial-Up connection between the two systems.

A Virtual Private Network (VPN) client can be used to connect one system, located outside the network, to the network the other device is located on, thereby making it seem that both systems are actually on the same network. The VPN client creates a secure 'tunnel' through the Internet and the firewall/router at the network location, thereby allowing the remote system to access the IP addresses of other computers on the network. For obvious security reasons, a router/firewall typically hides the IP addresses of network computers from the internet. Systems that are outside the LAN and do not use a VPN client to join that network may have trouble making a remote monitoring connection.

Once the Cascade and Remote Reader are part of the same network, remote monitoring can be initiated. There are two ways to initiate a remote monitoring session.

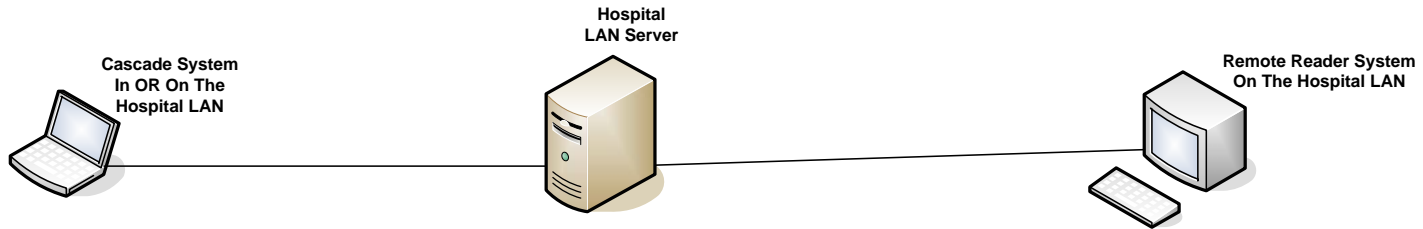
- Remote Reader connects to the Cascade – on the Remote Reader system start the Cascade program and select "Connect to Cascade (server)" from the Remote pull-down menu. Enter the Cascade's IP address or computer name and click OK.
- Cascade connects to the Remote Reader – this option requires software version 1.6.24 or higher. On the Cascade, start a procedure and then select "Connect to Reader (client)" from the Remote pull-down menu. Enter the Reader's IP Address or computer name and click OK. Using this connection option requires additional DCOM configuration settings on the Remote Reader.

Software firewalls, internet security programs, or virus protection software can also block or interfere with Cascade Remote Monitoring connections. Please review the Cascade Remote Monitoring document, in the Documents folder on the Cascade installation CD, for configuration details.

## Ideal Setup

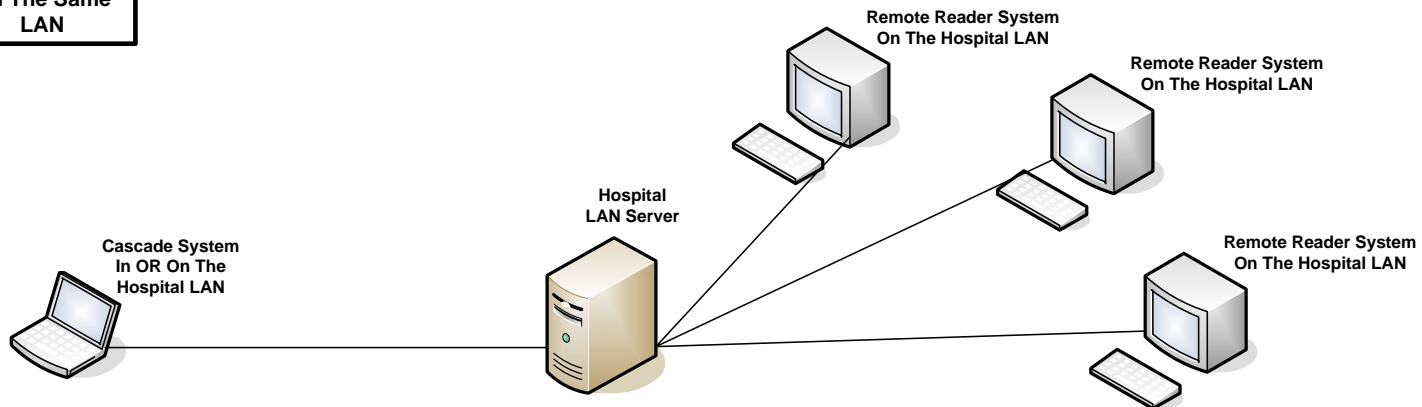
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One Cascade System One Reader system On The Same LAN



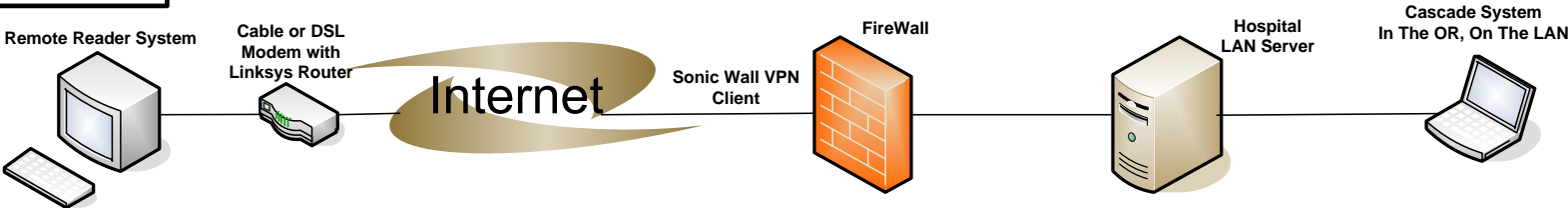
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One Cascade System Three Reader systems On The Same LAN

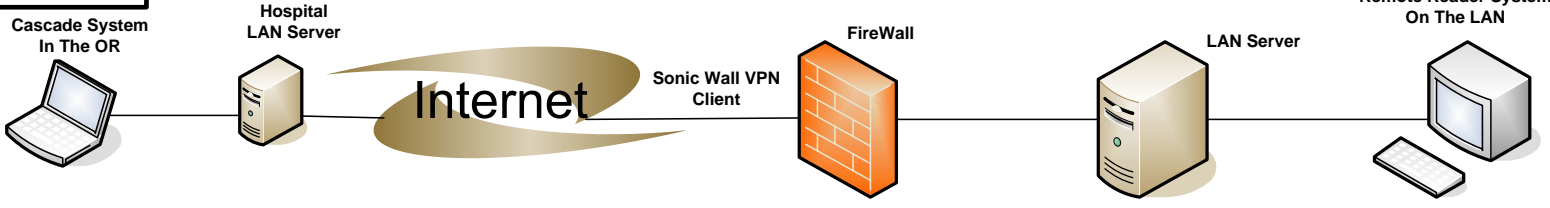


# Single VPN

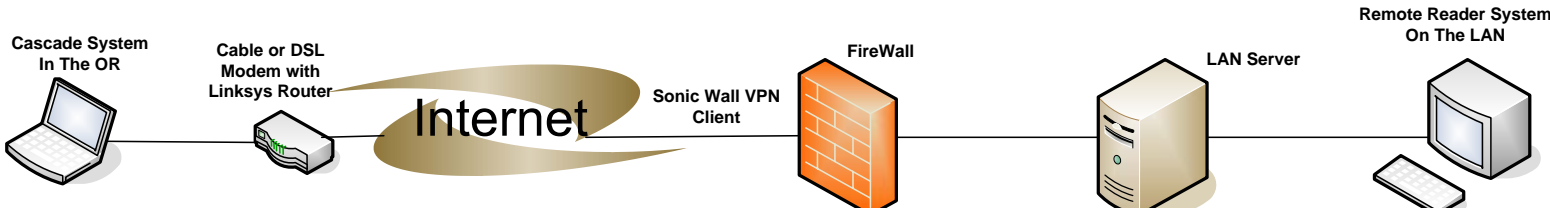
Cable or DSL Modem & Router Through VPN



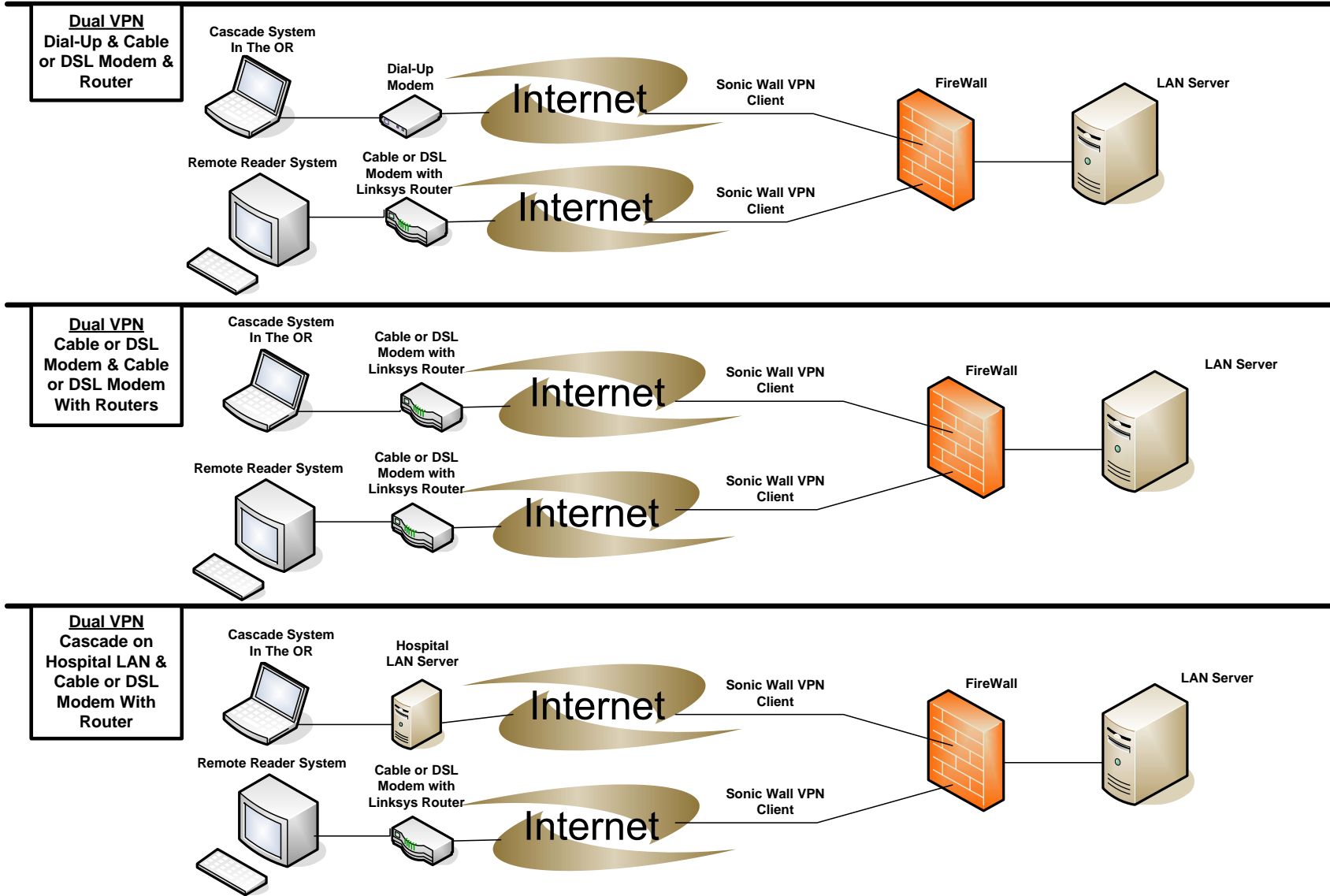
Cable or DSL Modem & Router Through VPN



Cable or DSL Modem & Router Through VPN

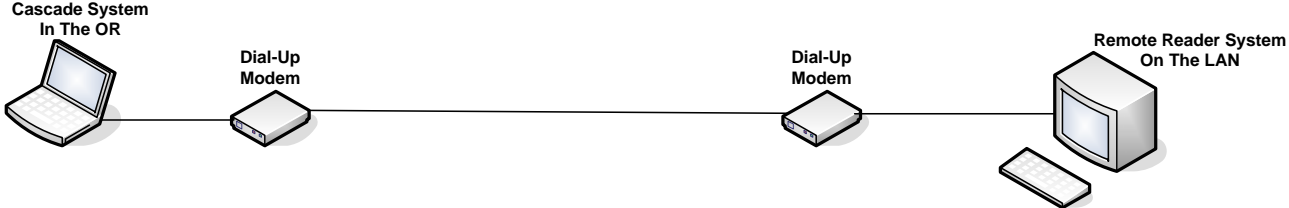


# Dual VPN

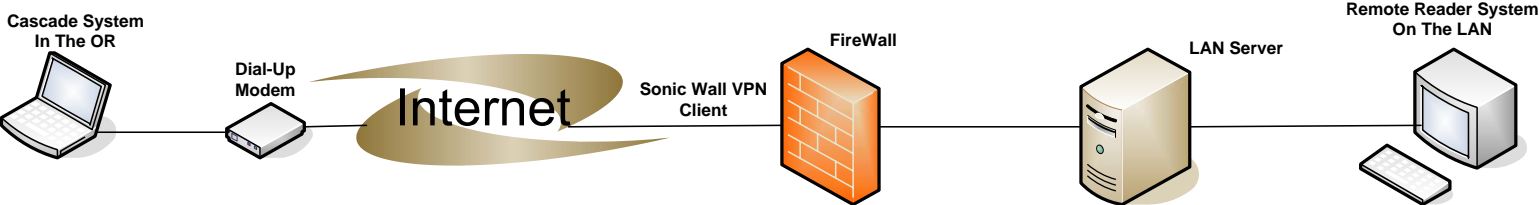


# Dial-Up

## Direct Dial-Up



## Dial-Up Through VPN



## Dual VPN Dial-Up & Dial Up Modems

