



**MASSIVE**  
**NETWORKS**  
Enterprise-Class Data Transport Solutions

**CASE STUDY**  
MEDAMORPH



Located in the heart of the technology center in Louisville, Colorado, Medamorph is an end-to-end automated solution provider to the medical industry. Their Software-as-a-Service (SaaS) solution has helped hundreds of medical companies automate the patient and EMR documentation process.

## OVERVIEW OF CHALLENGES

### SECURITY RISK & PERFORMANCE ISSUES

Everything transferred through the public Internet places your business at risk. Customize your connection to reduce security risks and improve performance. Massive Networks can switch your business from public to private by adopting a private network line through our One Pipe Multi-Connect infrastructure.

Our client Medamorph had trouble sharing patient and EMR records between sites. Due to latency issues between offices, their Internet performance was slow. Our NOC experts determined that their VPN speed from office-to-office through the public Internet was the direct cause of the high latency times. Additionally, everything that was transferred through the public Internet was a security risk which would dramatically affect HIPAA Compliance regulations and place their critical-business data in jeopardy.

## CONNECTIVITY CHALLENGES: STAFF INSIGHT

John Dougherty, a Senior Enterprise IT Consultant for Medamorph, described that his challenges have been to gain insight into packet flows across the Metro optical Ethernet (MoE), as well as having to incorporate a lack of redundant connectivity rings into the design and implementation. As a result, Dougherty had to utilize an extra WAN connect to fully provide MoE site failover. He also had to take a microscope to their connectivity costs, which led him to identify the value associated with their current infrastructure. Finding that value wanting, he moved to broaden Medamorph's horizons by identifying additional solutions.

## MEDAMORPH KEY CHALLENGES

- Sharing Patient and EMR records through a layer 3 network made abiding by HIPAA compliance difficult; each office was an island unto itself.
- Poor latency issues. Performance was limited to 100MS.
- Utilizing VPN, Medamorph incurred speed overhead with complicated connection issues and expensive bandwidth usage costs.

“Throughout the process, massive networks was extremely responsive and provided optimal information in each stage of the implementation process. This experience has given us the confidence we need to share patient and EMR records securely, making us HIPAA compliant, between offices. Additionally, our bandwidth performance has improved exponentially. All of my expectations were exceeded with our involvement in massive networks.”

- John Dougherty, CIO, Medamorph

## CONNECTIVITY CRITERIA: STAFF EXPECTATIONS

John Dougherty, had two expectations in mind.

1. Facilitating the current interconnectivity and providing existing value were the primary criteria we had in mind.
2. Secondary considerations were the ability to grow, adapt, deploy, and support.

## SOLUTION OVERVIEW

Our team of technical engineers, solved the problem by configuring their business network into a private line solution. Because our Private Network Transport Connect is based on ethernet connections, the configuration eliminates security risk as well as latency issues subsequently improving their performance speed, connectivity, and reliability. Additionally, Medamorph was setup with a new switch from our Massive Denver point of presence POP creating a redundant fiber ring route and VLAN that connects everything together. By connecting their network through our Denver POP, Medamorph gained geographic redundancy from 100meg to 10gig speeds and they no longer pay an exorbitant amount of money to maintain their VPN system.

## SOLUTIONS HIGHLIGHT

- Setup with a new switch from the Denver POP creating a redundant fiber ring route and VLAN that connects everything together.
- Moved backup solutions into secondary data center (Denver POP) so they have geographic redundancy but with 10gig speeds.
- Successfully added a new site that is connected to all of the offices; internal record sharing is no longer at risk.

## SUMMARY OF IMPLEMENTATION

By moving into one of the Massive Data Centers, Medamorph gained backup speeds from 100meg to 10gig and removed their risky exposure to the public Internet.

## NEXT STEPS

Are you ready to expand your services? Contact us to review your network needs. We'll help identify a communication solution strategy that is scalable to your business.

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