



## DynaTek Media Handles the Rigors via a Realistic and Affordable Solution

### DynaTek Media the digital signage solution

#### About DynaTek Media

DynaTek Media, a full service digital signage company. Digital signage is a new phenomenon offering great potential for point-of-sale advertising, branding, informing, and training.

### FEENEY WIRELESS

#### About Feeney Wireless

Founded in 1999, Feeney Wireless is a full-service systems integrator offering custom wireless solutions, hardware manufacturing, and a wide range of professional services.

Feeney works with industry-leading vendors to create remotely manageable, multi-application systems that give mobile professionals the ability to respond in real time. Feeney's diverse solutions portfolio includes in-vehicle computing systems, IP video systems, and digital signage systems.

*"After a full year of testing multiple applications for the DynaTek Media digital signage system I am happy to say that we have found a reliable and efficient solution for our wireless network in the Feeney 2WG. We look forward to a continued partnership with Feeney Wireless as we continue the expansion of our wireless network throughout the country."*

-Ron Gross,  
Chairman & CEO of DynaTek Media

*"A client's first concern, when considering a digital signage application, is often the security of their internal network. With the 2WG, our network is completely autonomous from a site's internal network, so the customer does not have to worry about the vulnerability of their network."*

-Adam Gross,  
Market Research & Development of  
DynaTek Media

### Summary

Digital signage is a new phenomenon offering great potential for point-of-sale advertising, branding, informing, and training. Digital signage enables companies to communicate information electronically and update messages based on parameters such as time of day or demographic. This allows static posters and signs to be replaced with exciting multimedia displays. Content for these displays can be updated over the Internet, allowing the message to be kept fresh and providing an ever changing display to get the viewer's attention.

### Challenge

DynaTek Media, a full service digital signage company, needed to access their digitalsignage displays remotely to update multimedia content. The traditional way to do this would be to run a wired Internetconnection to each display. This method however created a number of drawbacks. While many customer locations already had an existing wired network, customers often had issues sharing this network with digital signage. There were concerns about security and the effects that transferring large multimedia files would have on network performance.

The alternative was to put in a dedicated broadband connection at the location, however this required coordination and negotiations with multiple ISPs on large rollouts, as well as the costs and time delays in trying to run new cables from the Internet entry point to each digital signage location. DynaTek wanted to find an alternative solution that was just as fast and reliable but without the associated headaches.

DynaTek experimented with using cellular data cards with their multimedia players. By using cellular data cards there were no new wires to drop and they could work with just one ISP, reducing the complexity of multiple installations. Multimedia files could be directly downloaded over the cellular network, and new 3G technologies like EV-DO Rev A provided plenty of bandwidth for multimedia files.

To incorporate cellular capability in their media players, DynaTek used Cardbus cards inserted into their media players. However this solution was sub-optimal. The cards often had difficulty getting a good signal and were not designed for remote management, making it hard to troubleshoot and manage the deployments. Getting support from the card manufacturers was a cumbersome and time consuming process making it difficult for DynaTek to build an enterprise-level relationship with the manufacturers. In addition, the signs were directly connected to the public Internet which made it hard to secure the devices.

### Solution

A realistic and affordable solution came when DynaTek enlisted Feeney Wireless to solve their problems. Feeney Wireless boasts many years of experience in wireless system integration and offers the staff and resources necessary to handle large scale deployments at multiple locations. Feeney suggested the use of their 2WG cellular router.

The Feeney 2WG (powered by ZyXEL) is an ICSA certified firewall and VPN appliance with the ability to support cellular backhaul at 3G speeds. The 2WG has proven itself capable of handling the rigors of always-on communication and ability to process the transfer of large multimedia files without effecting stability. The 2WG also provides NAT functionality, allowing multiple signs to share a single Internet connection and reducing the number of data plans that need to be maintained.

By offloading the cellular Internet connection from the individual media players to the 2WG, DynaTek received a solution that met all of their objectives. The built-in firewall isolates the players from the Internet protecting them from outside attack. The 2WG creates an IPSec VPN tunnel from the customer location back to DynaTek's servers. This allows DynaTek to remotely access their players and transfer multimedia content over the Internet in a secure manner.

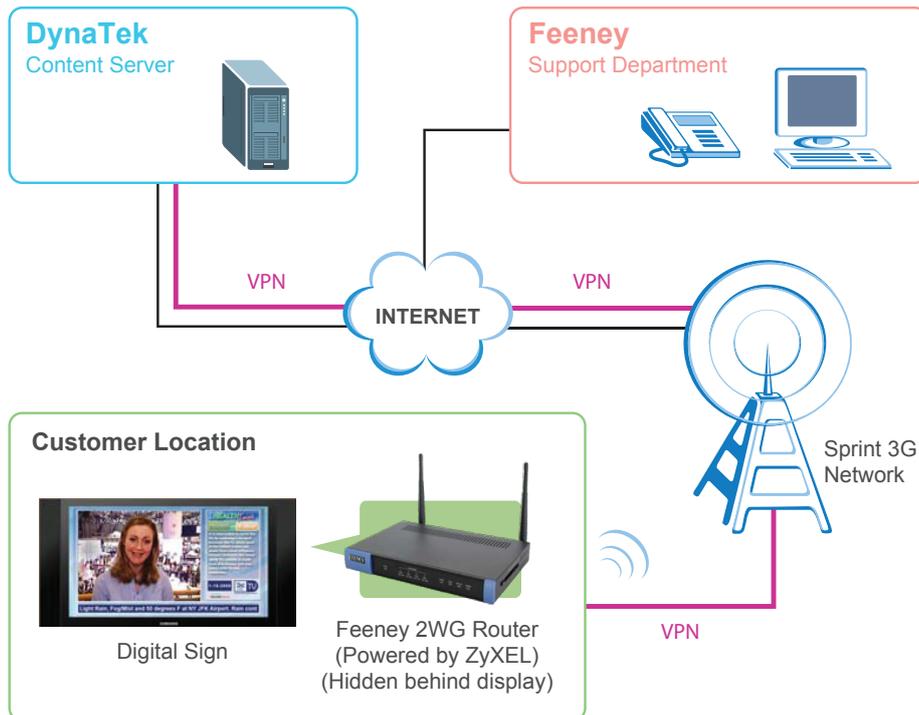
The 2WG provides a completely wireless connection for DynaTek's digital signage systems, eliminating the need to install expensive data lines and retaining the ability to move and expand installations. Using the 2WG, DynaTek can install a system in less than an hour with no assistance from site personnel and only standard AC power.

The 2WG's built-in antennas and keep-alive functionality solved the connection issues DynaTek faced when using cellular data cards inserted directly into their media players. In cases where cellular coverage was poor at the customer location, Feeney Wireless provided a number of antenna, cable, and signal booster solutions to enhance the performance of the 2WG's cellular support. With extensive built-in remote management features such as real-time alerts, remote firmware updates, and logging capabilities, the 2WG allows DynaTek to easily upload and manage content for its entire 2WG deployment. In addition, the 2WG's remote management capabilities allow Feeney Wireless and DynaTek to troubleshoot remotely, reducing the need for on-site visits and decreasing downtime.

### Conclusion

The combination of Feeney's mobile technology background, great support services, and inventory staging and management resources, combined with the reliability and ease of use of the 2WG have provided DynaTek with a solution that is affordable and can be depended on to handle the rigors of digital signage.

### ZyXEL Solution



### ZyXEL Product Used



#### Feeney 2WG router (powered by ZyXEL)

##### Mobile 3G Cellular Firewall VPN Appliance with Wireless

- Dual-band, tri-mode access point with wireless 802.11 a/b/g
- Remote management and monitoring
- Multiple simultaneous data streams
- ICSA-certified SPI Firewall and IPsec VPN Protection

### About ZyXEL Communications

ZyXEL Communications Corp. (TSE: 2391), headquartered in Hsinchu, Taiwan, is the world's leading residential gateway provider and was recently ranked as Taiwan's First "Green Enterprise," and the second best "Green" Company in Asia (2007 CG watch, Asian Corporate Governance Association). ZyXEL's comprehensive Internet Protocol-based (IP) networking solutions include access multiplexers, customer premise equipment, Internet security and Wireless LAN equipment, enabling high-performance network services for SOHO, small to mid-sized businesses and service providers. ZyXEL works closely with worldwide network equipment vendors, telecommunications companies, ISPs, and other major businesses. For more information, visit the company's website at <http://www.zyxel.com>.