

Confidence in Transition

GRUCom's Implementation of Media Conversion

About GRUCom

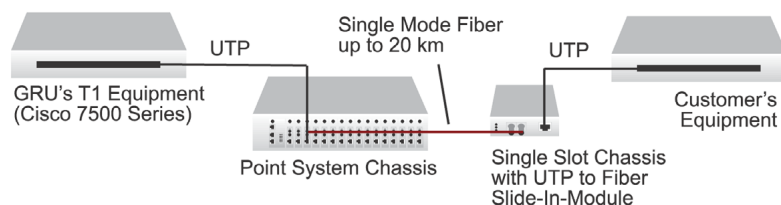
GRUCom is a division of Gainesville Regional Utilities, a community owned utility in North Central Florida that provides electric, natural gas, water, wastewater, and telecommunications services. As a CLEC (Competitive Local Exchange Carrier) certified by the Florida Public Service Commission, GRUCom provides Gainesville and the surrounding areas with an alternative source of telecommunications services. In the short time that GRUCom has been providing telecommunications services to other telecommunications companies, the business community, and the general public, they have expanded their network to include over 170 route miles of fiber optic cable. By using the most advanced telecommunications equipment available, they can provide a level of quality and service usually associated with only the largest metropolitan areas.

Services Provided

GRUCom offers a wide variety of data services including private line services with DS1, DS3, OC3, and OC12. They also offer Ethernet MAN services. GRUCom Ethernet MAN service is sold as a connectionless bridged Ethernet for exclusive use by the customer. They also offer dedicated Internet access through GRUNet. With GRUNet, customers can connect their business to the Internet at Fractional DS1, DS1, 10Mbps and DS3 speeds. GRUNet can also offer Internet access service from 1.5Mbps to 10Mbps, setting the desired rate through the Cisco equipment.

Media Conversion

GRUCom was looking for the most cost-effective method to deliver these services to their customers over fiber. Ed Ingersoll of GRUCom chose Transition's Network's solution due to three benefits. First he discovered that using the T1/E1 media converters in conjunction with his copper-based equipment, provided the lowest cost solution. Secondly, he saw ease of management by using a chassis based platform, which offered the flexibility to mix different protocol-based converters in the same chassis and by using a single slot chassis, he can use the same converters at both the main and the remote locations. Thirdly, he liked the fact he could use his 48 volt power source to power the chassis.



Media converters allow the users to convert disparate media types and extend the distances of the network. GRUCom connects a DS1 (T1) circuit to a media converter UTP port, and then they connect their fiber run to the converter's single-mode fiber optic ports. The signal is driven up to 20km (12 miles) to the customers location. (Note greater distances can

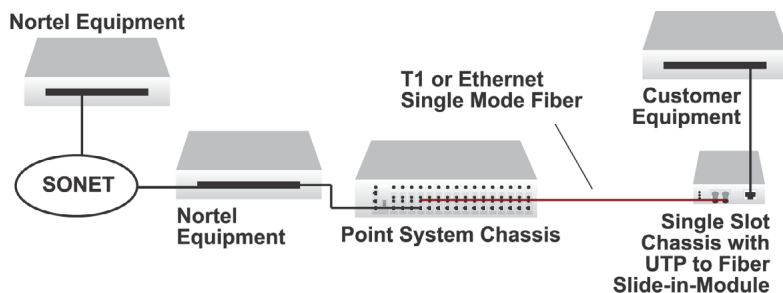
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be achieved with higher-powered optics.) At the customer site the fiber is again connected to a media converter, and a UTP assembly connects to the end-users equipment.

Ethernet Services

GRUCom also utilizes media converters in deploying their Ethernet MAN services. Once again the cost effectiveness of media conversion attracted GRUCom to use it as the means to extend the data services to the customers site. GRUCom utilizes Transition Networks Point System 18-slot chassis that can hold either their T1 or Ethernet cards. At the customers location a single slot chassis and slide in card are used to connect GRUCom's fiber to the customer's equipment. Standalone converters are available, but GRUCom takes advantage of the single slot chassis and slide in card to better manage their inventory.

Last Mile Application



Transition Networks

Transition Networks is the leader in media conversion technology offering a wide array of products including Ethernet, Fast Ethernet (FX and SX), Gigabit Ethernet, 10/100 rate converters, T1/E1, DS3, OC3, OC12, RS485, V.35, Token Ring and more. Our Point System chassis provides users with manageability, reliability, and future proofing. The Point System offers fully SNMP compliant read/write software including web-based management. The chassis also provides for redundant management, redundant power (AC or DC), converters that can be upgraded in the field, and more. Please contact Transition Networks at 800-526-9267 or find us on the web at www.transition.com for more information and how we may be able to help you deliver data services to your customers.



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