# RAD Joins Other Vendors to Demonstrate Interoperable Converged MPLS Services at MPLS World Congress

MFA Forum and EANTC Showcase Largest Carrier-Class MPLS Demo

RAD Data Communications is one of fifteen vendors participating in a live demonstration of interoperability, resiliency, multicast, and Quality of Service (QoS) assured MPLS network services to support emerging triple-play and business applications that is taking place this week at the MPLS World Congress in Paris. The demonstration, which incorporates 30 different devices, was organised by the European Advanced Networking Test Center in Berlin, Germany (EANTC) with support from the University of New Hampshire InterOperability Lab (UNH-IOL) and endorsed by the MFA Forum. Participants, of which four are taking part for the first time, include Agilent Technologies, Alcatel, BATM Advanced Communications, Ciena Corporation, Cisco Systems, Huawei Technologies, Ixia, Lucent Technologies, MRV Communications, Nortel, Riverstone Networks, Spirent Communications, Tellabs, and Tpack, in addition to RAD.  The demonstration showcases the results of a hot-staging event that took place at EANTC labs in Berlin last month and focuses on converged residential and business network services implemented and supported by an MPLS network. The demand for a converged, multi-vendor backbone supporting new and legacy services requires stable protocols that can offer resilience and detection alongside packet prioritisation, bandwidth reservation and guaranteed delivery.  MPLS multi-vendor interoperability remains a strong concern for service providers as converged backbones are being increasingly deployed, said Carsten Rossenhoevel, Managing Director of Research and Manufacturer Testing at EANTC AG and MFA Interoperability Working Group chair. We revisited network protection interoperability and verified QoS-enabled routing, a mandatory precondition for the upcoming RFCs on integrated MPLS quality and differentiated services (DiffServ-TE). The test helped to improve the interoperability readiness of participating vendors substantially. Access is a Major Issue Recent MPLS developments clearly demonstrate that access is a major issue, added Dr. Yuri Gittik, Chief Strategy Officer at RAD Data Communications. To fully utilise benefits of powerful MPLS infrastructure, relevant access solutions should be developed and carefully evaluated, Gittik explained. At the interoperability event, therefore, RAD will be focusing on two novel access solutions - access pseudo-wires and carrier-class Ethernet access.  Access pseudo-wires are used to emulate Layer 1 (TDM) and Layer 2 (ATM) services and form multi-segment pseudo-wires with MPLS-based monitoring and control capabilities. Carrier-class Ethernet access features pre-standard support of ITU-T Y.1731/ IEEE 802.1ag Ethernet OAM (Operation, Administration and Maintenance), which are used for end-to-end control as well as path protection over MPLS core. In addition, the Ethernet access enables TDM support according to MEF 8 (SAToP encapsulation). The public showcase in Paris is also highlighting network services such as BGP-based VPNs, Ethernet, ATM, TDM, and multi-segment pseudo-wires and VPLS (multipoint-to-multipoint Ethernet service).  About the MFA Forum The MFA Forum is an international, industry-wide, nonprofit association of service providers, equipment vendors and enterprise users. The focus of the Forum is to advance the deployment of multi-vendor, multi-service packet-based networks, associated applications, and interworking solutions for telecommunications and networking. The Forum is driving the convergence of ATM, Frame Relay and IP/MPLS technologies in the global telecom industry through interoperability initiatives, implementation agreements, and educational and marketing resources and programs. The Forum currently has more than 60 members. About EANTC The European Advanced Networking Test Center (EANTC) offers vendor-neutral network test facilities for manufacturers, service providers, and enterprise customers. Primary business areas include interoperability, conformance, and performance testing for IP, MPLS, Carrier Ethernet, and Voice over IP-related network technologies and applications. EANTC provides network-related services including consulting and seminars for MPLS and other networking technologies.  About RAD Established in 1981, privately owned RAD Data Communications has achieved international recognition as a major manufacturer of high quality access equipment for data communications and telecommunications applications. These solutions serve the data and voice access requirements of service providers, incumbent and new carriers, and enterprise networks, by reducing infrastructure investment costs while boosting competitiveness and profitability. The company's installed base exceeds 8,000,000 units and includes more than 150 carriers and operators around the world. These customers are supported by 18 RAD offices and more than 200 distributors in 105 countries.  RAD is a member of the RAD Group of companies, a world leader in networking and internetworking product solutions. RAD Data Communications site: www.rad.com.