

CARPATHIAN J. MATH.  
21 (2005), No. 1 - 2, 51 - 59

## **Modern routing techniques for future QoS enabled networks**

SANDA DRAGOŞ and RADU DRAGOŞ

**ABSTRACT.** Modern technologies such as *mobile agents* are “intelligent” solutions that can be used to achieve efficient QoS routing in the Internet. We present in this article the key architectural features of this paradigm from the routing perspective. The evolution of a mobile agent population dispatched to find optimal routes is also analyzed. Our experimental results show that a high performance level could be achieved with the cost of generating too much control traffic. We present a solution that overcomes this scalability issue while still providing optimal results.

SWITCHING AND SYSTEMS LABORATORY  
SCHOOL OF ELECTRONIC ENGINEERING  
DUBLIN CITY UNIVERSITY  
GLASNEVIN, DUBLIN 9, IRELAND  
*E-mail address:* dragoss@eeng.dcu.ie  
*E-mail address:* dragosr@eeng.dcu.ie