

Abstract

Unequal Load Balance Routing for OBS Networks Based on Optical Parameters Dependent Metric

Based on a detailed simulation analysis in optical burst switching (OBS) networks, a proposed new routing protocol metric is driven based on the Burst loss ratio (BLR). It takes into account many optical parameters on its dependency as number of channels, load and link bandwidth. Depending on this new metric, an unequal load balance routing technique is proposed. It is shown that, in some examples, more than 50 % of the rate is avoided when using load balance routing rather than single best path routing.