

TFG Title and Abstract

Student: Fernando Gros González (NIA: 122146)

TFG Directors: Jaume Barceló (NeTs, UPF), Efraín Foglia (UViC, Guifi.net)

Title: A mobile streaming solution for IEEE 802.11 infrastructure and mesh networks.

Abstract:

The Mobile Node is a platform that is being developed to provide temporary wireless network coverage to events. The Mobile Node uses IEEE 802.11 technology combined with the “quick mesh project” (QMP) firmware and advanced mesh routing protocols (BMX, OLSR). In this thesis we have documented how does this platform work internally and how can be used to improve existing fixed mesh networks. Furthermore, we have developed an audio and video streaming application for android devices. This application can be used in combination with the Mobile Node technology and also on its own by connecting to any IEEE802.11 network. When we combine this platform with the open mesh networks already deployed, we are providing the users with new solutions to continue improving their networks and to run applications over them.