

Abstract

OPNET IT Guru® Network Planner is equipped with amazing capability to do network planning either for TDM-based network or Softswitch-based NGN (Next Generation Network). This capability has been realized beneficial for many service providers when conducting network planning for their network infrastructure. However, in some cases, service providers require not only the ability to do planning but also for doing migration from TDM-based to Softswitch based NGN. At this moment, OPNET IT Guru® Network Planner facilitates migration by manual way; this is by deleting TDM-based switch *objects* and creating new Softswitch *object*, either on canvas or through the *exported XML file* and then adjusting the link one by one.

Performing migration by manual way is time consuming and vulnerable to error. Therefore, existence of application for automating replacement of TDM-based *objects* by Softswitch *objects* can be very useful. The application basically reads and performs modification on the XML *file* which consists of TDM-based network topology that is *exported* by OPNET IT Guru® Network Planner. The modified version of the XML *file* is then imported into canvas forming the new topology which is now Softswitch-based. This new Softswitch-based topology is now ready to support further processes, such as voice quality, bandwidth requirement, capacity planning and flow analysis.

Keywords: OPNET, TDM, NGN, XML, softswitch, migration