1. Studying CISCO test beds with OPNET

La Salle University became a CCNA and CCNP academy of Cisco Networking Academy Program two years ago. This program offers curriculums of basic networking content, that teach skills associated with the Cisco Certified Network Associate (CCNA) exam. It also offers curriculums of enhanced networking, related with the Cisco Certified Networking Professional (CCNP) exam. The main goal of this Cisco Networking Academy Program is to teach students in how to design, build and maintain networks, prepare them for their real world jobs, so being a valuable e-learning system. Nowadays, University La Salle is a part of the CNAP in different areas:

- “CCNA Local Academy”: Academy where students take a basic certification from CISCO (CCNA).
- “CCNA Regional Academy”: Academy which supports several “CCNA Local Academies” and teaches instructors from these local academies.
- “CCNP Local Academy”: Academy where students take an enhanced certification from CISCO (CCNP).

These programs apply to different teaching areas that take place in University La Salle: Enginyeria Tècnica en Telecomunicacions, Enginyeria Tècnica en Telemàtica, Master en Xarxes i Serveis de Telecomunicacions and Master en Seguretat de les Tecnologies de la Informació.
With aim of increasing and complementing the learning of our students, La Salle University is developing a program for our students. This program includes OPNET Modeler as a complementary tool of the CNAP. With OPNET Modeler we can improve the understanding of networking concepts studied in the CNAP. In order to achieve this goal, we want to build and simulate different scenarios configured with CISCO equipment models, routing protocols, switching methods and remote access technologies. These scenarios can give the possibility to implement virtual scenarios to evaluate the performance and the impact of different routing protocols.

We would like to use MVI (Multi Vendor Import) to implement these scenarios, import the configuration files of CISCO routers to create a more accurate modeling, and then, reflex this in the real scenario with real equipments in our labs. Unfortunately, it has not been possible to work with MVI, as we didn’t have the license. So this report continues to be a further work.