FUTURE INTERNET TESTBEDS
EXPERIMENTATION BETWEEN
BRAZIL AND EUROPE

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Conselho Nacional de Desenvolvimento Científico e Tecnológico

COOPERATION

Porting OFELIA CF to Multiple Linux Environments

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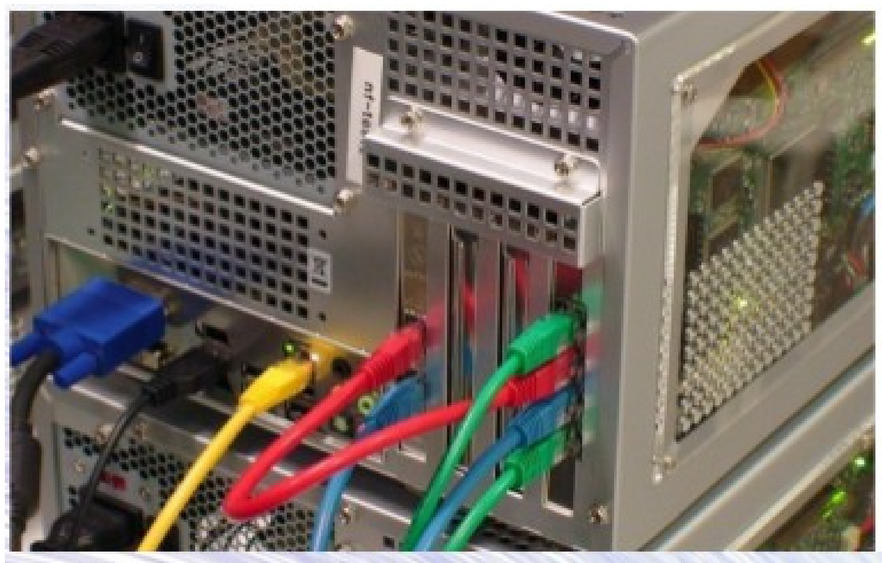
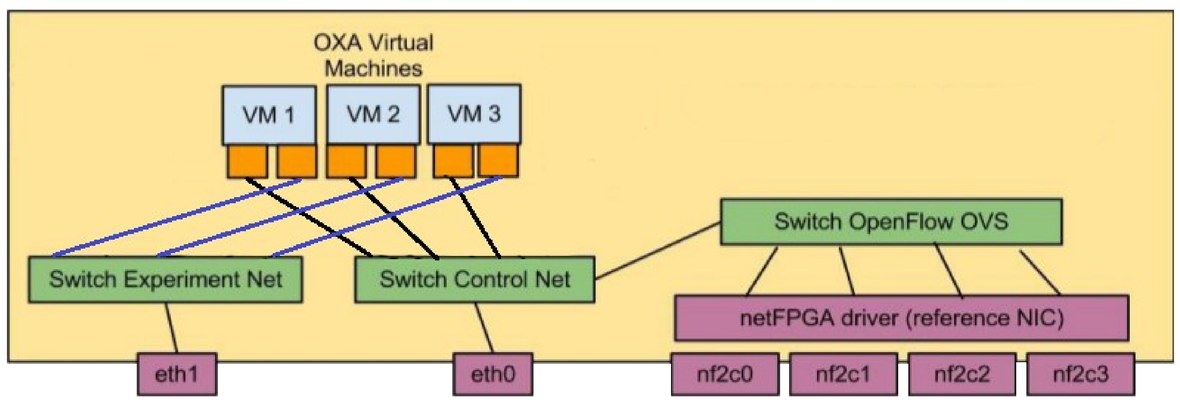
OBJECTIVES

1. **Contribute** to the OFELIA Control Framework, by providing the necessary infrastructure to **install** and **run** it on **different environments**
2. **Modify** the installation scripts (ofver) for added **modularity** and **portability**
3. **Enable** the implementation of the proposed architecture for NetFPGA servers in Brazilian islands, using **CentOS** as the base OS
4. Encourage **research** and **development** of different **tools** that currently run on non-supported environments





Proposed architecture for NetFPGA servers in the Brazilian islands

OXA & CentOS

Debian and **Redhat** based distributions differ in many aspects:

1. **Similar,** but **conflicting** configuration files and initialization hierarchy (under /etc)
2. Incompatible package managers and **naming conventions**
3. The concept of "**stability**" may vary; as seen on package **versions** (e.g. Python, XEN, libvirt)

CONTRIBUTIONS

1. Analised the dependencies of each OFELIA component and correlated equivalent packages in different distributions
2. Added scripts to **ofver** for detection of distributions and selection of correct dependencies in OXA
   - https://github.com/rdfg/ocf (will submit an upstream pull request once improved)
3. CentOS 5.x **repository** for use with OFELIA CF
   - http://www2.comp.ufscar.br/~ricardofg/centos5/

FUTURE WORK

1. Further **improvement** of the ofver added scripts
2. **Proposal and development** of a KVM compatible virtualization module to (im)prove OFELIA's portability and versability
3. **Provision** of **more** repositories for unsupported distributions, and addition of support in ofver for the above mentioned distributions

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