

strategies management platforms
network test-beds technology partnerships
research advanced networking delivery



Internet Service Delivery and Testbed Framework (TEMPO)

Delivering services across distributed systems such as home gateways or TV set-top boxes incurs a high energy cost. NICTA is investigating schemes that will minimise this cost and reduce the environmental footprint of these systems. Evaluating these schemes requires experiments involving realistic prototypes and environments. The challenge lies in reproducing experiments in the networking field. The TEMPO team is also developing a framework (OMF) to control, measure and manage groups of networking experimental platforms or 'testbeds' to increase scientific rigour in the networking community and facilitate future Internet research.



The Features

- A new energy-efficient distributed architecture for delivering content and services
- A framework to control, manage and measure a grouping of experimental platforms.

Who is helped?

Designers and operators of service delivery platforms, for example multimedia set-top-boxes, will use TEMPO's energy-efficient content distribution schemes to lower their operational energy cost and meet energy related regulatory policies.

Researchers in the area of networking will use TEMPO's control and management framework to describe, execute and harvest the results of their experiments on multiple platforms, therefore increasing accuracy and scientific rigour in the networking field.

This framework can be extended to control and manage large scale distributed systems, such as service platforms.

The NICTA Approach

TEMPO has important partnerships with key international initiatives for research in the next generation Internet and networking technologies. It is a partner in the ORBIT project funded by the GENI initiative of the National Science Foundation, in the United States of America. It is also a partner in two European projects funded by the 7th Framework Programme. TEMPO is one of the earliest research initiatives looking at the issue of energy consumption of large-scale distributed service delivery platforms.

Contact Details

Project Leader
Dr Thierry Rakotoarivelo
Email: Thierry.Rakotoarivelo@nicta.com.au

Group Research Manager
Dr Max Ott
Email: Max.Ott@nicta.com.au

www.nicta.com.au/tempo



Networked Systems



From imagination to Impact