

A Development of Thailand e-Science Infrastructure Consortium Project

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After the end of Thai National Grid Project (TNGP) in 2009 and the successful completion of EUAsiaGrid project* in late 2010, there have been local movement to form “Thailand e-Science Infrastructure Consortium” project. The coordinating effort started in early 2010 before the end of EUAsiaGrid.

The project's prime objective is to develop computing infrastructure to serve and sustain scientific computing applications that can benefit from grid computing environment over shared resource. Some of the identified application areas are HEP; climate change; management of water resource, energy and environment; computational science and engineering; and high performance computing research, to begin with. The project is expecting over 50 computational projects to benefit from the utilization of these resources. The project also serves as a part to nurture Thailand's basic research ability and computational resource capacity in related areas toward entering level with CERN experiment.

In perspective, this project is aiming at cumulative 300 cores/200 TB in the start up and growing to 800cores/500 TB at the end of its 5-year plan. G-Lite is planned as main underlining middleware, with Virtual Organization (VO) management mechanism, and utilization of NECTEC GOA CA which conformed and accepted to International Grid Trust Federation (IGTF) standards. It will be managed by consortium management board and its operating principles.

The project currently awaits formal start-up agreement from 6 founding institution members. Thailand National Science and Technology Development Agency (NSTDA) is one of the founding member with NECTEC acting as a coordinating body of the project development.

In this presentation, Thailand e-Science Infrastructure Consortium project development, as well as the review of historical grid activities in Thailand and their current status will be reported.

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