e-FISCAL 3rd Workshop, Prague, Czech Republic 21st September 2012

http://bit.ly/TxkE5U

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The e-FISCAL project arranged an open working meeting on 21st September during the Prague EGI-Technical Forum to discuss the results of the Samos workshop and other developments. With relatively short notice, the event brought together almost 30 finance and e-Infrastructure experts into stimulating and fruitful discussions.

The event was started with presentations of the latest project results, covering both the cost assessment survey status and the latest benchmarking results. Some of the notable issues highlighted in these opening presentations were:

- The high proportion of operational costs (OPEX), especially ones related to personnel
- The core hour costs could be compared with Cloud instance prices, with the per core hour cost of the dedicated e-Infrastructure lying slightly below the on-demand Cloud pricing (despite additional services provided)
- Both capital expenditure (CAPEX) and OPEX show a decreasing trend on per core hour basis
- However, the economies of scale effects are not universally visible
- There seems to be a moderate performance penalty with Cloud use (when comparing similar configurations) with both HPC and HTC use, but the costs related to adapting applications to different environments may be an even more important consideration.

When discussing the IaaS cost assessment approaches, the networking and storage costs were seen as an important additional question to consider – especially when comparing the costs of the dedicated services with Cloud prices. Studies related to costs of dedicated e-Infrastructures were discussed, with conclusion that the results fall into the same range as the e-FISCAL results.

Having consistent cost estimates was seen as crucial issue for the long-term future of the e-Infrastructure, despite the challenges involved. The challenges were seen as arising from the general difficulty in data gathering and processing, as well as from inherent uncertainties involved in all of the methodologies. Hence the initial goal should be developing and maintaining a rough consensus estimate of the typical cost ranges across different centres, infrastructures and continents. This kind of estimate would be useful planning and budgeting tool when planning new services.

In addition to networking and storage costs, several more complex issues that would warrant further study were identified. The personnel costs and their relation to the services provided beyond the basic IaaS level were seen as an interesting question in general, and also in the context of specific issues of porting software to and from the cloud, and maintaining "residual ICT results" after the teams that developed them have disbanded. Whether the absolute performance or near-immediate access to resources were a priority was seen as a question that would need analysis of the use cases in close collaboration with the users. This would also help estimating the impact of performance variations, including the question whether in some cases it would be

possible to use inexpensive resources that wouldn't provide any level of service guarantees (such as so called "spot instances" from Amazon).

The follow-up actions were also discussed briefly, both in the context of the project (finalising the survey, final workshop) as well as in the long term (handing some of the activities to EGI, to be continued as part of the compendium effort). Setting up an online community to continue discussion was also seen as a possible way to maintain some of the project activities.

For more information, please get in touch with the project at
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