ROYAL UNIVERSITY OF PHNOM PENH

Master of Science in Information Technology Engineering

Network Engineering

GREEN COMPUTING FOR DATA CENTER

Advisors: Prof. Kong Marry, Mr. CHUOB Sok
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Abstract

Scalable computing involves using computer systems with an objective to adapt to new computing hardware, software and methodologies, while keeping the performance. Scalability is one of the most important desirable qualities for a computing system including hardware, software, network, process, website, or business model.

Green Computing or Green IT refers to environmentally sustainable computing or IT systems and activities. The main duty of Green Computing is to design, manufacture, use, and dispose of computing systems and accessories in environment respective way. In the context of TCSC, the technical area of Green Computing aims to carry on the research to design, develop and implement environment-respect algorithms, hardware/software and computing systems.

References

[1] Green IT for Dummies
http://www.hp.com/hpinfo/globalcitizenship/environment/productdesign/GreenITforDummiesSpecialEdition.pdf

[2] Wikipedia: Green Computing.

- *http://en.wikipedia.org/wiki/Green_computing*

[3] The Architecture Journal: Green Computing

- *http://research.microsoft.com/pubs/78813/AJ18_EN.pdf*

[4] IEEE Green Technologies, Bachour, N. Chasteen, L. LSMRC, SKEMA Bus. Sch., France; Optimizing the Value of Green IT Projects within Organizations, 2010.

[5] IEEE System Sciences (HICSS)Wati, Y. Chulmo Koo;An Introduction to the Green IT Balanced Scorecard as a Strategic IT Management System, 2011.