Uses of Green Computing and Energy Consumption

Irshad Hasan and Aftab Chougle
Students, Department of MCA
Late Bhausaheb Hiray S. S. Trust's Hiray Institute of Computer Application, Mumbai, India
shaikhirshad507@gmail.com

Abstract: *Green computing in a broader way is the practices and procedures of designing, manufacturing, using of computing resources in an environment friendly way while maintaining overall computing performance and finally disposing in a way that reduces their environmental impact. This means reduction in use of hazardous materials, maximizing output from the product during its lifetime while minimizing energy consumption and also reusability or recyclability and biodegradability of used products and wastes. Many corporate organizations are taking initiatives to reduce the harmful impact of their operations on the environment. United Nations Framework Convention on Climate Change (UNFCC) is an international environment treaty whose objective is to stabilize the emission of green house gases in the atmosphere at a level that would prevent dangerous anthropogenic interference with the eco system. Sustainable development means developing without damaging the requirements of the future generations. That is meeting human development goals while preserving natural resources and ecosystems on which the society depends. This paper is a survey of several important current researches related to the field of green computing which emphasises the importance of green computing for sustainable development*

Keywords: Sustainable development, Green Computing, Data Centre, Energy efficiency

REFERENCES

[1] Sushil Kumar Soni, Ravi Kant Kapoor, 'Enhanced Live Migration of Virtual Machine Using Comparison of Modified and Unmodified Pages', IJCSMC, Vol. 3, Issue. 2, February 2014, pg.779 – 787 , RESEARCH ARTICLE

[2] AnkitaAtrey, Nikita Jain and IyengarN.Ch.S.N, "A Study on Green Cloud Computing", International Journal of Grid and Distributed Computing Vol.6, No.6 (2013), pp.93-10

[3] P. GetziJebaLeelipushpam, Dr. J Sharmila, 'Live Vm Migration techniques in cloud environment-A Survey', Proceedings of 2013 IEEE Conference on Information and Communication Technologies (ICT 2013).

[4] DivyaKapil ,Emmanual S. Pilli and Ramesh C. Joshi , 'Live Virtual Machine Migration Techniques: Survey and research Challenges' ,Third IEEE International Advance Computing Conference(IACC), 2013.

[5] Anja Strunk, 'Costs of virtual Machine Live Migration:A Survey'. IEEE Eighth World Congress on Services, 2012.

[6] Beik, Rasoul, 'Green Cloud Computing: An Energy-Aware Layer in Software Architecture', Engineering and Technology (S-CET), 2012 Spring Congress, IEEE, 2012.

[7] Cavdar, Derya, and FatihAlagoz, 'A survey of research on greening data centers', Global Communications Conference (GLOBECOM), 2012 IEEE, pp. 3237-3242, IEEE, 2012.

[8] Ms.V. Srimathi, Ms. D. Hemalatha, Mr. R. Balachander, 'Green Cloud Environmental Infrastructure', International Journal Of Engineering And Computer Science ISSN:2319-7242 Volume1 Issue 3 Dec 2012 Page No. 168-177

[9] Er. NavdeepKochhar, Er. Arun Garg, 'Eco-Friendly Computing: Green Computing', International Journal of Computing and Business Research, ISSN (Online) : 2229-6166 Volume 2 Issue 2 May 2011.

[10] L. Liu, H. Wang, X. Liu, X. Jin, W. B. He, Q. B. Wang, and Y. Chen, 'Greencloud: a new architecture for green data center', in ICAC-INDST '09: Proceedings of the 6th international conference industry session on Autonomic computing and communications industry session. New York, NY, USA: ACM, 2009, pp. 29–38.

[11] R. Bolla, R. Bruschi, A. Ranieri, 'Green Support for PCbased Software Router: Performance Evaluation and Modeling', Proc. 2009 IEEE International Conference on Communications (ICC 2009), Dresden, Germany, June 2009, to appear.

[12] Michael R. Hines,KartikG.andUmesh D., 'Post-Copy Live Migration Of Vm', ACM International Conference on Virtual Execution Environments, March 2009.