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1.	Authors:	M. Dhanalakshmi, Anirban Basu		
	Paper Title:	VM Pipelining Technique for Minimizing Power Consumption and Make Span in Cloud		
	<p><b>Abstract:</b> Cloud computing which provides services “on demand” is gaining increasing popularity. However, one of the most challenging problems in cloud computing is to minimize the power consumption in the data centres. The subject of Green Cloud Computing has emerged with the objective of reducing power consumption. While reducing the power consumption it is important to perform the computation in minimum makespan (that is, when all the jobs or Tasks have finished processing). In this paper we propose a technique to achieve the objective of minimizing the power consumption as well as reducing the makespan. To minimize the power consumption, we schedule the tasks on each node utilizing its resources maximum (100%) such that we can reduce the number of nodes used in the data centre. The makespan is reduced using pipeline technique. A method has been proposed and its effectiveness verified by simulating on CloudSim. Results presented in this paper show the advantages of the proposed technique.</p> <p><b>Keywords:</b> Power Consumption, Virtualization, Green Cloud Computing. VM (Virtual Machine), Make span, Pipeline.</p> <p><b>References:</b></p> <ol style="list-style-type: none"><li>1. Open Cloud Manifesto. [Online]. Available: <a href="http://www.opencloudmanifesto.org/">http://www.opencloudmanifesto.org/</a>.</li><li>2. The green grid consortium,2011.</li><li>3. Ministry of Economy, Trade and Industry establishment of the Japan data centre council, press Release.</li><li>4. Rajkumar Buyya, James Broberg, Andrzej Goscinski. 2011. CLOUD COMPUTING: Principles and Paradigms. A John Wiley &amp; Sons, Inc. Publication.</li><li>5. EMC 2008 Annual overview releasing the power of information, <a href="http://www.emc.com/J_digital_universe">http://www.emc.com/J_digital_universe</a>.</li><li>6. S.Albers.May 2010.Energy efficient Algorithms Communications of the -ACM, Vol.53, no.5, pp.86-96.</li><li>7. Ryan Friese*, Tyler Brinks*, Curt Oliver*, Howard Jay Siegel* and Anthony A. Maciejewski*.2012.Analyzing the Trade-offs Between Minimizing Makespan and Minimizing Energy Consumption in a Heterogeneous Resource Allocation Problem.The Second International Conference Advanced Communications and Computation.</li><li>8. Xin Li a , ZhuZhong Qian a,* , Sanglu Lu a , Jie Wu b Feb 2013.Energy efficient virtual machine placement algorithm with balanced and improved resource utilization in a data centre.</li><li>9. Awada Uchechukwu, Keqiu Li, Yanming Shen. June 2014.Energy Consumption in Cloud Computing Data Centres”, International Journal of Cloud Computing and Services Science.</li><li>10. M Christobel, S. Tamil Selvi and Shajulin Benedict.2015 Efficient Scheduling of Scientific Workflows with Energy Reduction Using Novel Discrete Particle Swarm Optimization and Dynamic Voltage Scaling for Computational Grids. ScientificWorldJournal.</li><li>11. Sobir Bazarbayev and Matti Hiltunen., Kaustubh Joshi,William H. Sanders,Richard Schlichting.2013.Content- Based Scheduling of Virtual Machines(VMs) in the Cloud. 2013 IEEE 33rd International Conference on Distributed Computing Systems.</li><li>12. Anton Beloglazov and Rajkumar Buyya .2010. Energy Efficient Allocation of Virtual Machines in Cloud Data Centre. 10th IEEE/ACM International Conference on Cluster, Cloud and Grid Computing,2010.</li><li>13. K. Kim, A. Beloglazov, and R. Buyya.2011.Power-aware provisioning of virtual machines for real-time Cloud services,” Concurrency and Computation: Practice and Experience, 2011.</li><li>14. <a href="http://opennebula.org/documentation:archives:rel2.0:Schg">http://opennebula.org/documentation:archives:rel2.0:Schg</a> accessed on oct 30 2013.</li><li>15. GWDG escience Group.2012.Virtual Machine allocation in current Cloud Computing Middleware.</li><li>16. R.Buyya. Cloud Simulator cloudsim version 2.1, GRIDS Lab, <a href="http://code.google.com/p/cloudsim">http://code.google.com/p/cloudsim</a>, July 27, 2010.</li></ol>			
2.	Authors:	Ahmed A Abdel- Khalek, Berry Abd-El Ghani Sabrah, Yasser Abdel Rhman		
	Paper Title:	Kinetics and Mechanism of Oxidation of Chromium (III) – [2-(Phenyl Amino) Acetohydrazide] by Periodate		
	<p><b>Abstract:</b> Oxidation of [Cr(HL)(H2O)4]3+ (where HL = 2-(phenylamino)acetohydrazide ligand) by periodate was studied spectrophotometrically in aqueous solution over varying ranges of pH, ionic strength ,temperature, complex concentration (2.0 – 6.0)×10-4mol dm-3 and periodate (1.0 - 4.5)×10-2 mol dm-3. The reaction is first order with respect to [H5IO6] and [CrIII]. The rate of reaction increases with increasing of temperature and pH over the study range (1.59-2.62). The rate of the reaction is independent on the complex concentration and decreases with ionic strength. Oxidation of [Cr(HL)(H2O)4]3+ follows the rate law, <math>d[CrVI] / d t = (k_2 + k_3 / [H+]) [H5IO6] [Cr(HL)(H2O)4]^{3+}</math>. Where, <math>k_{obs} = (k_2 + k_3 / [H+]) [H5IO6]</math>. The thermodynamics activation parameters involving ΔH*and ΔS* have been calculated in excited state.</p> <p><b>Keywords:</b> Periodate, oxidation, acetohydrazide.</p> <p><b>References:</b></p> <ol style="list-style-type: none"><li>1. Wagnat Wahba Wardakhan, NAHED NASSER EL-SAYED, and Rafat Milad Mohareb, 'Synthesis and Anti-Tumor Evaluation of Novel Hydrazide-Hydrazone Derivatives', Acta pharmaceutica, 63 (2013), 45-57.</li><li>2. Sevim Rollas, Nehir Gulerman, and Habibe Erdeniz, 'Synthesis and Antimicrobial Activity of Some New Hydrazones of 4-Fluorobenzoic Acid Hydrazide and 3-Acetyl-2, 5-Disubstituted-1, 3, 4-Oxadiazolines', Il Farmaco, 57 (2002), 171-74.</li><li>3. Ş Güniz Küçükgüzel, Sevim Rollas, Ilkay Küçükgüzel, and Muammer Kiraz, 'Synthesis and Antimycobacterial Activity of Some Coupling Products from 4-Aminobenzoic Acid Hydrazones', European journal of medicinal chemistry, 34 (1999), 1093-100.</li><li>4. A Pechova, and L Pavlata, 'Chromium as an Essential Nutrient: A Review', VETERINARNI MEDICINA-PRAHA-, 52 (2007), 1.</li><li>5. Richard A Anderson, 'Nutritional Factors Influencing the Glucose/Insulin System: Chromium', Journal of the American College of Nutrition, 16 (1997), 404-10.</li><li>6. Halina Staniek, Magdalena Kostrzewska-Poczekaj, Magdalena Arndt, Krzysztof Szyfter, and Zbigniew Krejpcio, 'Genotoxicity Assessment of Chromium (Iii) Propionate Complex in the Rat Model Using the Comet Assay', Food and chemical toxicology, 48 (2010), 89-92.</li><li>7. Hassan A Ewais, Faris D Dahman, and Ahmed A Abdel-Khalek, 'Inner-Sphere Oxidation of Ternary Iminodiacetatochromium (Iii) Complexes Involving DI-Valine and L-Arginine as Secondary Ligands. Isokinetic Relationship for the Oxidation of Ternary Iminodiacetatochromium (Iii) Complexes by Periodate', Chemistry Central Journal, 3 (2009), 3.</li><li>8. Hassan A Ewais, Samah A Ahmed, and Ahmed A Abdel-Khalek, 'Kinetics and Mechanism of Oxidation of Chromium (Iii)-Guanosine</li></ol>			

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	<table><tr><td><b>Authors:</b></td><td><b>Sultan, A. M. Imran, M. Arsyad Thaha, dan Muhammad Ramli</b></td></tr><tr><td><b>Paper Title:</b></td><td><b>Influence of Rainfall and Vegetation Against Unconfined Groundwater Potential Withing Coral Sand Layer In Satando Island at Pangkep Regency, South Sulawesi</b></td></tr></table>	<b>Authors:</b>	<b>Sultan, A. M. Imran, M. Arsyad Thaha, dan Muhammad Ramli</b>	<b>Paper Title:</b>	<b>Influence of Rainfall and Vegetation Against Unconfined Groundwater Potential Withing Coral Sand Layer In Satando Island at Pangkep Regency, South Sulawesi</b>	
<b>Authors:</b>	<b>Sultan, A. M. Imran, M. Arsyad Thaha, dan Muhammad Ramli</b>					
<b>Paper Title:</b>	<b>Influence of Rainfall and Vegetation Against Unconfined Groundwater Potential Withing Coral Sand Layer In Satando Island at Pangkep Regency, South Sulawesi</b>					
3.	<p><b>Abstract:</b> Population growth in the island will affect water resource potential in island, addition to geological conditions and rainfall. For that reason, this research aimed to see influence of rainfall in the island Satando against potential unconfined groundwater in the coral sand layer in the area of this small island, which will be useful to provide information to local governments and communities of the island on the importance of maximizing rainwater there to sink in and get into the coral sand layer in the area so as to preserve the unconfined groundwater on the island. The research method is done by several approaches include literature and secondary data, field activities of primary data for measuring the condition of the surface of the groundwater in wells resident on the island Satando totaling 20 wells during the rainy season, a season of transition and drought as well as the compilation of all data obtained. Based on data from groundwater level changes are correlated with conditions and intensity of rainfall that occurred on the island, then analyzed influence of rainfall on the unconfined groundwater potential in the coral sand layer Satando island. Total population of 537 inhabitants, require minimal fresh water a year 11767,3M3, potential water on the Satando island a year 10557.7 meter3, so that the deficit needs 1209.6 M3is causing water shortages island residents about 68 days (2 months). Dependence potential of water in wells in coral sand layerwith the intensity of the rainfall conditions that occurred on the Satando island for 33.69% of the intensity of daily rainfall that occurred.The influence of vegetation in particular the effect of very significant breadfruit tree roots where the potential wells are nearby existing vegetation is greater than the breadfruit tree that has no vegetation. Policy management of groundwater on Satando island is to control the use of water and disposal of remnants channeled into absorption wells were created in the yard, arranging the disposal of household waste and toilet, as well as any home maked rainwater tanks. Residents must control and controlling the birth rate and improve the level of education of children of school and also preserve breadfruit tree vegetation with replant and increase the population in the side yard to plant vegetables and other seasonal fruits.</p> <p><b>Keywords:</b> Rainfall intensity, resident dug well, coralsand, unconfined groundwater.</p> <p><b>References:</b></p> <ol style="list-style-type: none"><li>Arenas DA and Simler L, 1991, Hydrology and Water Resources of Small Islands; A Practical Guide, Studies and Report on Hydrology No. 49 UNESCO.</li><li>Cindhy Ade H, LutfiAdhytia, Ratu Rima B, Riandi S., 2012, Groundwater Flow Model, Journal of Soil and Groundwater Pollution, Dept. Civil and Environment, Univ. Indonesia.</li><li>Djoko Tri Yudianto 2006, The management model of groundwater in the aquifer basin to the continuity of the availability of renewable Pasuruan, HATHI Proceedings of XXXIII in Manado.</li><li>Erman M 2006, development of water resources in the outermost small islands border Marore Island, Sangihe, North Sulawesi, Hathi Proceedings of XXXIII in Manado.</li><li>Hantoro WS, Hadiwisastra S, Arsadi EM., Masduki A, Susilohadi, Latif H., Suyatno, Kosasih 2009, Freshwater on small islands and coastal areas in Indonesia: Problems and anticipation of global sea level rise, Research Center. Geotechnology, LIPI, Bandung.</li><li>Kodoatie RJ and Sjarief, R., 2010, Spatial Water, Publisher Andi, Yogyakarta.</li><li>Robert M Delinom and RahmatFajarLubis, 2002, the Groundwater in the Coastal and Small Islands, Journal of Scientific Research Center. LIPI Geotechnology. Bandung West Java.</li></ol>	11-17				



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4.	<b>Authors:</b>	<b>Lantu, D. A. Suriamihardja, A. M .Imran, Tri Harianto</b>
	<b>Paper Title:</b>	<b>Relationship Model Between Electrical and Elastic Properties of The Surface Rocks</b>
	<p><b>Abstract:</b> A mathematical model has been developed to obtain the relationship between two parameters of electrical resistivity and mechanical elasticity of subsurface rocks of the hydrothermal area of Panggo-Killing in Sinjai Regency. The model was developed using data exploration concerning of both methods from the area under consideration. Constructed model is able to relate a time travel of seismic waves propagation that stands for mechanical elasticity to electrical resistivity in the area. The characteristic properties of the relation show a close connection to the parameter of porosity of the subsurface rocks. Comparing the results derived from the modeling with that of obtained from measurement gives suitable approximation with error level of less than 20%. The study concludes that the model is able to predict mechanical elasticity by using geo-electric method, or electric resistivity by using seismic refraction method.</p> <p><b>Keywords:</b> Geo-electric, seismic refraction and modeling.</p> <p><b>References:</b></p> <ol style="list-style-type: none"> <li>1. Akintorinwa, O.J and Adeusi, F.A 2009 "Integration of Geophysical and Geotechnical Investigation for Proposed Lecture Room Complex at Federal University of Technology, Akure, SW Nigeria" <i>Journal of Applied Sciences</i> 2(3) , 2009 pp 241-254, ISSN 1943-2429</li> <li>2. Archie, G.E 1942, The Electrical Resistivity Log as an Aid in Determining Some Reservoir Characteristics, <i>Transaction AIME</i> vol 146 : 54-62</li> <li>3. Carcione, J. M and Ursin, B 2007, Seismic Velocity Electrical Conductivity A. Relation, <i>International</i></li> <li>4. Coulouma, G, 2011, Combining Seismic and Electrical Methods for Predicting Bedrock Depth Along Mediterranean Soil Toposequence, <i>American Journal Experts Editorial Certification (AJE) Geoderma</i> 170(2): 39-47</li> <li>5. Dvorking, J and A. Nur 2001, time average equation revisited, <i>Geophysics</i> , SEG 63(2) : 460- 464</li> <li>6. Egbai, J.C 2011, A Combination of Electric Resistivity and Seismic Refraction Surveys for Ground Water Exploration in Basement Region of Ifon, Ondo State, Nigeria. <i>Australian Journal of Basic and Applied Sciences</i>, 5(5): 1007- 1016,</li> <li>7. Egwuonwu, G.N and I.B and Sule, P.O 2012, Geophysical Investigation Failure of Leaning Superstructure in Zaria Area, Northern Nigeria. <i>Research Journal in Engineering and Applied Sciences</i> 1(2) : 110-116</li> <li>8. Fatoba, J. O., Alo, J. O., &amp; Fakeye, A. A., 2010, Geo-electric Imaging for Foundation Failure Investigation at Olabisi Onabanjo University (O.O.U.) Minicampus, Ago Iwoye, Southwestern Nigeria, Department of Earth Sciences, Olabisi Onabanjo University, Ogun State.</li> <li>9. Lantu, D.A. Suriamihardja, A.M. Imran, Tri Harianto 2015 "Identification of hydrothermal aquifer zone using geo-electrical method in Kaoling district, Sinjai" <i>Indonesian journal of applied physics</i> .vol . 2 pp. 42 -48</li> <li>10. Lantu, D.A. Suriamihardja, A.M. Imran, Tri Harianto 2015 "Relationship Between Electrical and Mechanical Properties of Tuff Rock On Sub Surface At The Sporting Center Hasanuddin " <i>ARPN Journal of Engineering and Applied Science</i> Vol.10, No.20 pp 9345-9532,</li> <li>11. Lantu, D.A. Suriamihardja, A.M. Imran, Tri Harianto 2014 "Relationship Between Electrical and Mechanical Properties of Subsurface Under the Ground" <i>Proceeding In The 4th International Conference On Theoretical And Applied Physics (ICTAP-2014)</i> 16-17 October 2014, Denpasar-Bali, Indonesia</li> </ol>	18-22
5.	<b>Authors:</b>	<b>Haerany Sirajuddin, D.A. Suriamihardja, A. M. Imran, M. Arsyad Thaha</b>
	<b>Paper Title:</b>	<b>Coastal Vulnerability Zonation of Pinrang District and Parepare City Area Based on Morphodynamic Review</b>
	<p><b>Abstract:</b> The understanding and analysis of morphodynamic are essential to explain coastal vulnerability. This paper aims to present a morphodynamic review by assessing validity of the Wright and Short method, and then make zonation map. The research method using the conceptual beach classification based on relationships between the characteristic of different types of beaches consisting of wave condition, sediment size, shoreline change and field observations that indicating the occurrence of coastal erosion. The classification presented by Wright and Short known as a function of the dimensionless fall velocity parameter (<math>\Omega</math>) or Dean's number. In this research, observations are presented from 15 beaches around the west coast of Sulawesi Island and their divided into six zones. Morphodynamic state of Lapakaka and Lanrisang – Ujung Tape beaches are reflective (<math>\Omega = 0.179 - 0.801</math>), coarse grain with a D50 of 0.31 – 1.52. Maroneng and Ujung Lero beaches are intermediate (<math>\Omega = 1.842 - 2.389</math>), fine – coarse grain sediment and D50 of 0.16 – 0.53. Kappe – Data and Sibobeaches are dissipative (<math>\Omega = 1.842 - 14.089</math>), fine grain sediment and D50 of 0.22 – 0.29. The interpretation result of Landsat 5 (1995) and Landsat 8 (2015), showed significant shoreline change by erosion process in the Lapakaka beach reached about 26040.62 m<sup>2</sup> and Lanrisang – Ujung Tape of 166727.64 m<sup>2</sup>. Based on morphodynamic review and field study, showed that Lapakaka and Lanrisang – Ujung Tape beaches are susceptible, Maroneng and Ujung Lero beaches are intermediate and Kappe – Data and Sibobeaches are resilience.</p> <p><b>Keywords:</b> Morphodynamic, erosion, vulnerability, zonation.</p> <p><b>References:</b></p> <ol style="list-style-type: none"> <li>1. Mukhopadhyay, A., Dasgupta, R., Hazra, S., and Mitra, D., (2012, January). Coastal Hazards and Vulnerability : A Review [Online]. <i>International Journal of Geology, Earth and Environmental Sciences</i>. 2(1), pp. 57 – 69. Available: <a href="http://www.cibtech.org/jgee.htm">http://www.cibtech.org/jgee.htm</a></li> <li>2. IPCC (Intergovernmental Panel on Climate Change), <i>Climate Change 2001 : Impact, Adaptation and Vulnerability</i>, Cambridge University Press, 2001</li> <li>3. Bryant, E., <i>Natural Hazards</i>, 2nd edition Cambridge University Press, 2005</li> <li>4. The Ministry of Maritime and Fisheries, <i>The Maritime and Fisheries in Number</i>, Working Group of Alignment The Maritime and Fisheries Data, Statistic and Information Data Center, Jakarta, 2001</li> <li>5. The General Directorate of Water Resources and Public Works Ministry, <i>Coastal Safety Guidelines</i>, Jakarta, 2007</li> <li>6. Short, A.D., <i>Coastal Process and Beaches</i>, Nature Education Knowledge, 2012, 3(10):15.</li> <li>7. Abanades, J., Greaves, D., Iglesias, G., (2015), Wave Farm Impact on Beach Modal State, (Online), <i>Marine Geology Journal</i> 361, 0025-3227/2015 Elsevier B.V, p.126-135. Available: At Marine Geology, Science Direct, <a href="http://www.elevier.com/locate/margio">http://www.elevier.com/locate/margio</a></li> </ol>	23-26

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