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Abstract

A conventional round robin is a distinctive approach to the CPU scheduling algorithm. It is somehow related to the First Come First Serve approach with preemption included to give a fair chance to all the processes to execute waiting in the ready queue. A fixed time period known as time quantum is defined. The predominant round robin is an impartial algorithm since each process is given a fair share to complete its execution on its chance. No process is apportioned the CPU for more than one time quantum, so even if a fraction of time is remaining for a process to conclude its execution, the process is directed back to the ready queue and has to wait for its turn. Here, in this paper we have put forth an approach which will vanquish the

challenge which the conventional round robin faces.

Refer

ences

- Ellen L. Hahne, Member, ZEEE, "An effective round robin algorithm using Min-Max dispersion measure", International Journal on Computer Science and Engineering (IJCSE), Vol. 4 No. 01 January 2012.
- H. S Behera, Madhusmita Mishra, Simpi Patel, "Weighted clustering based preemptive scheduling for real time system", International Journal on Computer Science and Engineering (IJCSE), Vol. 4 No. 05 May 2012.
- H. S. Behera, Rakesh Mohanty, Sabyasachi Sahu, Sourav Kumar Bhoi, "Comparative performance analysis of multi-dynamic time quantum round robin (mdtqrr)", Indian Journal of Computer Science and Engineering (IJCSE), Vol. 2 No. 2 Apr-May 2011.
- Debashree Nayak Lecturer Gandhi Institute of Technology And Management, Bhubaneswar, Odisha, India, Sanjeev Kumar Malla Student Gandhi Institute of Technology And Management, Bhubaneswar, Odisha, India, Debashree Debadarshini Student Gandhi Institute of Technology And Management, Bhubaneswar, Odisha, India, "Improved round robin scheduling using dynamic time quantum", International Journal of Computer Applications (0975 – 8887), Volume 38– No. 5, January 2012.
- H. S. Behera Professor Veer Surendra Sai University of Technology, Burla Sambalpur, India, R. Mohanty Professor Veer Surendra Sai University of Technology, Burla Sambalpur, India, Debashree Nayak Research Associate Veer Surendra Sai University of Technology, Burla Sambalpur, India, "A new proposed dynamic quantum with re-adjusted round robin scheduling algorithm and its performance analysis", International Journal of Computer Applications (0975 – 8887), Volume 5– No. 5, August, 2010.
- H. S. Behera Sr. Lecturer Veer Surendra Sai University Of Technology, Burla Sambalpur, India, Simpi Patel Student Veer Surendra Sai University Of Technology, Burla Sambalpur, India, Bijayalakshmi Panda Student Veer Surendra Sai University Of Technology, Burla Sambalpur, India, "A new dynamic round robin and srtn algorithm with variable original time slice and intelligent time slice for soft real time systems", International Journal of Computer Applications (0975 – 8887), Volume 16– No. 1, February 2011.
- Shanmugam Arumugam and Shanthi Govindaswamy, Bannari Amman Institute of Technology and Science, Coimbatore, India: ECE Department, PSG College of Technology, Coimbatore, India, "Performance of the modified round robin scheduling algorithm for input-queued switches under self-similar traffic", The International Arab journal of information Technology, Vol3, No. 2, April 2006.
- Yaashuwanth . C & R. Ramesh Department of Electrical and Electronics Engineering, Anna University Chennai, Chennai 600 025, "Intelligent time slice for round robin in real time operating systems", IJRRAS 2 (2) February 2010.
- Ji-Young Kwak, Ji-Seung Nam, and Doo-Hyun Kim, "A Modified Dynamic Weighted Round robin cell scheduling algorithm", ETRI Journal, Volume 24, Number 5, October 2002.
- Ajit Singh, Priyanka Goyal, Sahil Batra, "An optimized round robin scheduling

algorithm for cpu scheduling"; (IJCSE) International Journal on Computer Science and Engineering Vol. 02, No. 07, 2010, 2383-2385.

- Saroj Hiranwal, Computer Science and Engineering Suresh Gyan Vihar University Jaipur, Rajasthan, India, Dr. K. C. Roy roy.krishna@rediffmail.com, Electronics and communication Engineering Pacific University Udaipur, Rajasthan, India "Adaptive Round Robin Scheduling using Shortest Burst Approach Based on Smart Time Slice";, International Journal of Data Engineering (IJDE), Volume 2, Issue 3.

- H. S. Behera, Brajendra Kumar Swain, Anmol Kumar Parida, Gangadhar Sahu, "A New Proposed Round Robin with Highest Response Ratio Next (RRHRRN) Scheduling Algorithm for Soft Real Time Systems";, International Journal of Engineering and Advanced Technology (IJEAT), ISSN: 2249 – 8958, Volume-1, Issue-3, February 2012.

- Rakesh Kumar Yadav, Abhishek K Mishra, Navin Prakash and Himanshu Sharma, College of Engineering and Technology, IFTM Campus, Lodhipur Rajput, Moradabad, UP, INDIA, "An Improved Round Robin Scheduling Algorithm for CPU scheduling";, Rakesh Kumar Yadav et. al. / (IJCSE) International Journal on Computer Science and Engineering Vol. 02, No. 04, 2010, 1064-1066.

- B. Suresh, Prasad Reddy P. V. G. D, Software Technology Parks of India, Kakinada, India and C. Kalyana Chakravarthy, Department of CSE, M. V. G. R. College of Engineering, Vizianagaram, India, "Variable quantum deficit round robin scheduling for improved fairness in multihop networks"; International Journal of Distributed and Parallel Systems (IJDPS) Vol. 2, No. 1, January 2011.

- Prof. Rakesh Mohanty, Prof. H. S. Behera, Khusbu Patwari, Monisha Dash, M. Lakshmi Prasanna, Department of Computer Science & Engineering, Veer Surendra Sai University of Technology, Burla, Sambalpur, Orissa, India," Priority Based Dynamic Round Robin (PBDRR) Algorithm with Intelligent Time Slice for Soft Real Time Systems";, (IJACSA) International Journal of Advanced Computer Science and Applications, Vol. 2, No. 2, February 2011.

- Abraham Silberschatz, Peter Baer Galvin, Operating System Concepts, Fifth Edition.

- G. Henry,"The Fair Share Scheduler";,AT&T Bell Laboratories Technical Journal,63(8),Oct. 1984,pp. 1845-1857

- T. Helmy and A. Dekdouk,"Burst Round Robin:As A Proportional-Share Sheduling Algorithm,";In Proceedings of The Forth IEEE-GCC Conference on Towards Techno-Industrial Innovations,pp. 424-428,11-14 November 2007,at the Gulf International Convetion Center,Bahrain

Index Terms

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