Tracing and Monitoring Framework Impact Prediction

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Summary

- Introduction
- State of the art
- Proposal
- References
- Conclusions

Introduction

- Large multi-core distributed systems

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- Production environment

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- Impact

State of the art

- Resource consumption aware [1]
  - Video on Demand
  - Client / Server
  - Guarantee QoS for streams
  - Admission control
    - Network and memory

State of the art

- QoS Prediction [2]
  - Real time systems
  - Guarantee QoS for messages
  - Best node
  - Resource monitoring
    - CPU and memory

Proposal

- Impact Prediction
  - Monitor and Predict the tracing

Proposal

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  - Monitor and Predict the tracing
  - Measuring resources (CPU, mem, net, disk)

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  - Measuring resources (CPU, mem, net, disk)
  - Estimation model
  - QoS

References

[1] D. Seo, J. Lee, Y. Kim, C. Choi, M. Kim, I. Jung, *Resource consumption-aware QoS in cluster-based VOD servers*, Journal of Systems Architecture: the EUROMICRO Journal, New York, USA, 2007

[2] E. Huh, L. Welch, B. Shirazi, B. Tjaden, C. Cavanaugh, *Accommodating QoS Prediction in an Adaptive Resource Management Framework*, Proceedings of the 15 IPDPS 2000 Workshops on Parallel and Distributed Processing, London, UK, 2000

Conclusions

Questions