

Accepted Manuscript

Highly reliable architecture using the 80/20 rule in cloud computing datacenters

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PII: S0167-739X(17)31239-6
DOI: <http://dx.doi.org/10.1016/j.future.2017.06.011>
Reference: FUTURE 3509

To appear in: *Future Generation Computer Systems*

Received date : 30 May 2016
Revised date : 14 May 2017
Accepted date : 13 June 2017

Please cite this article as: M.R. Mesbahi, A.M. Rahmani, M. Hosseinzadeh, Highly reliable architecture using the 80/20 rule in cloud computing datacenters, *Future Generation Computer Systems* (2017), <http://dx.doi.org/10.1016/j.future.2017.06.011>

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Highlights

- A highly reliable cloud datacenter architecture is proposed.
- Cloud clusters are divided into two sub-clusters in terms of the 80/20 rule.
- The Google cluster-usage traces is analyzed for machine and job failures analysis.
- For machine reliability modeling in the Google cluster a Markov model is presented.
- Cloud jobs are divided into two general types in terms of the Pareto principle.

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