



Network Clock Skew Estimation and Calibration

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Summary

The University of North Dakota has patented a method for estimating relative clock skew and/or a relative clock offset in packet-based communication networks. The method includes estimating a ratio of clock skew between the source node and the sink node as a function of the one-way sink packet inter-arrival time and the one-way source packet inter-arrival time. A calibration action in the network is performed as a function of the ratio of clock skew between nodes.

Advantages

- Low-overhead clock synchronization in a wide range of network environments
- Hard-coded onto network cards or in embedded systems
- Equally applicable to synchronize clocks in sensor / actuator networks

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