

Symposium on Cloud Computing (SoCC)

Hintergrundinformationen

SoCC'13

Eckdaten

Papier: jVerbs – Ultra-Low Latency for Data Center Applications

SoCC'13 CFP

Präsentation



■ Symposium on Cloud Computing (SoCC)

- Veranstalter: Association for Computing Machinery (ACM)
- Beiträge aus dem akademischen Bereich und aus der Industrie
- Erste Austragung der Konferenz: 2010 in Indianapolis (Indiana, USA)
- Die SoCC findet jedes Jahr statt; gemeinsam organisiert von
 - „Special Interest Group on Operating Systems“ (SIGOPS)
 - „Special Interest Group on Management of Data“ (SIGMOD)

■ Organisation

- Single-Track
- Konferenzprogramm (3 Tage)
- Postersession(s)

■ Bisher am meisten zitierte SoCC('10)-Papiere

- Benchmarking Cloud Serving Systems with YCSB (537x)
- Virtual Machine Power Metering and Provisioning (222x)
- RACS: A Case for Cloud Storage Diversity (164x)



SoCC'13

■ Termin und Ort

- Termin: 1. bis 3. Oktober 2013
 - keine Workshops
 - Keynotes: Microsoft, Google, Netflix
- Ort: Santa Clara University, Santa Clara (Kalifornien), USA.

■ Sessions

- High Availability in the Data Center
- Scheduling and Resource Management
- **Data Center Networking and Latency**
- Data Replication and Consistency
- Applications in Adverse Conditions
- Map-Reduce and Query Processing
- Semantics of Distributed Applications
- Postersession (zweiteilig)

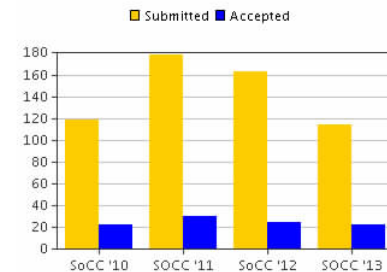


Eckdaten: Akzeptanzquoten SoCC

■ SoCC'13

- Eingereichte Arbeiten: 114
- Angenommene Arbeiten: 23
- Akzeptanzquote: ca. 20 %

■ SoCC-Akzeptanzquoten




Year	Submitted	Accepted	Rate
SoCC '10	119	23	19%
SoCC '11	178	30	17%
SoCC '12	163	25	15%
SoCC '13	114	23	20%
Overall	574	101	18%

Übersicht: SoCC-Akzeptanzquoten der letzten Jahre

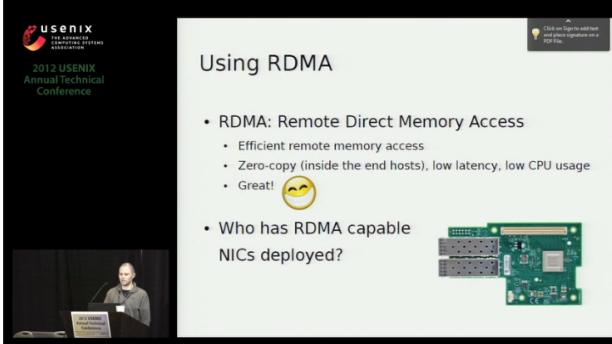
Quelle: <http://dl.acm.org/citation.cfm?id=2523616> (ACM Digital Library)



- SoCC'13 Call for Papers (Auszüge)
 - A submission to the symposium may be one of the following types:
 1. **Research papers** (12 pages)
Original research work in the broad area of cloud computing.
 2. **Industrial papers** (12 pages, shorter papers will also be considered)
Presentations describing experiences with deployed (...) cloud systems.
 3. **Vision papers** (6 pages)
Speculative but well-reasoned, thought-provoking essays.
 - „Reviewing is single-blind: author identities **need not be concealed.**“
→ Single-Blind-Modus
 - „Symbols and axis labels used in graphs **should** be legible as printed, and **not require magnification.**“
-  Patrick Stuedi, Bernard Metzler, and Animesh Trivedi
jVerbs: Ultra-Low Latency for Data Center Applications
Proceedings of the 4th ACM Symposium on Cloud Computing, 2013.
 - Netzwerk-Framework für Java
 - Latenzreduktion durch *direkte* Einbindung von Remote-Direct-Memory-Access (RDMA)




PRESENTATION VIDEO



Using RDMA

- RDMA: Remote Direct Memory Access
 - Efficient remote memory access
 - Zero-copy (inside the end hosts), low latency, low CPU usage
 - Great! 😊
- Who has RDMA capable NICs deployed?

-  Patrick Stuedi, Animesh Trivedi, and Bernard Metzler
Wimpy Nodes with 10GbE: Leveraging One-Sided Operations in Soft-RDMA to Boost Memcached
Proceedings of the 2012 USENIX Annual Technical Conference, 2012.

