CTNDCI: Identifying the Challenges Towards a distributed Nano Data Center Infrastructure

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In this paper we identify the challenges currently preventing nano data centers from becoming the dominant form of content provision on the internet. With the global increase in IP traffic the question of how to provide and deliver data is becoming increasingly important. Monolithic data centers, as they are used today, pose several problems, such as high energy consumption and lack of scalability. An alternative solution mitigating the problems of monolithic data centers has been proposed in the form of a distributed nano data center infrastructure. Research has shown this to be a superior solution. However, no widespread solution based on a nano data center infrastructure has been implemented as of yet. By identifying the main challenges nano data centers are facing steps can be taken to overcome these challenges in a more focused way, leading to a more economic data distribution.

CCS Concepts: • **Computer systems organization** → **Embedded systems**; *Redundancy*; Robotics; • **Networks** → Network reliability;

Additional Key Words and Phrases: Green IT; Nano data center; Energy consumption; Security; Availability; Scalability; Data distribution

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4 EVALUATION/RESULTS

includes research results and interview results etc.

5 ACHIEVEMENTS (?)

6 FUTURE WORK

7 CONCLUSION

A QUESTIONNAIRE

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