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# The Twelfth International Conference on Cloud Computing, GRIDs, and Virtualization CLOUD COMPUTING 2021

April 18 - 21, 2021 - Porto, Portugal

<http://www.aria.org/conferences2021/CLOUDCOMPUTING21.html>

## Important deadlines:

Submission (full paper)	February 8, 2021
Notification	February 28, 2021
Registration	March 11, 2021
Camera ready	March 16, 2021

## Tracks:

### TRENDS: New trends

Fog-computing; Mobile Edge Computing; Cloudlets; Hosted Cloud services (WebRTC, Containers, Cloud micro-services); Cloud computing and SDN/NFV; Cloud computing and 5G; Cloud computing and LTE Pro 4.5; Cloud computing and Big Data; High performance computing (HPC) in the Cloud; Superfluid Clouds; Mobile Apps to the public Clouds; Vehicular Cloud networks; Cloud orchestration features; Converged edge systems; Cloud federation; Micro-cloud provider federation; Open-implementation Cloud infrastructures; Untrusted Cloud environments; Multiple Clouds and data centers; Power Constrained VMs; Cloud Green abstraction layer; Managing applications in the clouds (CloudOps)

### CLOUD: Cloud computing

Cloud economics; Core cloud services; Cloud technologies; Cloud computing; On-demand computing models; Hardware-as-a-service; Software-as-a-service [SaaS applications]; Platform-as-a-service; Storage as a service in cloud; Data-as-a-Service; Service-oriented architecture (SOA); Cloud computing programming and application development; Scalability, discovery of services and data in Cloud computing infrastructures; Trust and clouds; Client-cloud computing challenges; Geographical constraints for deploying clouds

### CLOUD: Challenging features

Privacy, security, ownership and reliability issues; Performance and QoS; Dynamic resource provisioning; Power-efficiency and Cloud computing; Load balancing; Application streaming; Cloud SLAs; Business models and pricing policies; Cloud service subscription models; Cloud standardized SLA; Cloud-related privacy; Cloud-related control; Managing applications in the clouds; Mobile clouds; Roaming services in Clouds; Agent-based cloud computing; Cloud brokering; Cloud contracts (machine readable); Cloud security; Security and assurance properties in cloud environments; Big Data Analytics in clouds; Cloud computing back-end solutions; Cloud applications portability; Cloud-native application design; Security by design for cloud services; Data privacy guarantee at run-time

### CLOUD: Platforms, Infrastructures and Applications

Custom platforms; Large-scale compute infrastructures; Data centers; Processes intra- and inter-clouds; Content and service distribution in Cloud computing infrastructures; Multiple applications can run on one computer (virtualization a la VMWare); Grid computing (multiple computers can be used to run one application); Cloud-computing vendor governance and regulatory compliance; Enterprise clouds; Enterprise-centric cloud computing; Interaction between vertical clouds; Public, Private, and Hybrid clouds; Cloud computing testbeds

### GRID: Grid networks, services and applications

GRID theory, frameworks, methodologies, architecture, ontology; GRID infrastructure and technologies; GRID middleware; GRID protocols and networking; GRID computing, utility computing, autonomic computing, metacomputing; Programmable GRID; Data GRID; Context ontology and management in GRIDs; Distributed decisions in GRID networks; GRID services and applications; Virtualization, modeling, and metadata in GRID; Resource management, scheduling, and scalability in GRID; GRID monitoring, control, and management; Traffic and load balancing in GRID; User profiles and priorities in GRID; Performance and security in GRID systems; Fault tolerance, resilience, survivability, robustness in GRID; QoS/SLA in GRID networks; GRID fora, standards, development, evolution; GRID case studies, validation testbeds, prototypes, and lessons learned

### VIRTUALIZATION: Computing in virtualization-based environments

Principles of virtualization; Virtualization platforms; Thick and thin clients; Data centers and nano-centers; Open virtualization format; Orchestration of virtualization across data centers; Dynamic federation of compute capacity; Dynamic geo-balancing; Instant workload migration; Virtualization-aware storage; Virtualization-aware networking; Virtualization embedded-software-based smart mobile phones; Trusted platforms and embedded supervisors for security; Virtualization management operations /discovery, configuration, provisioning, performance, etc.; Energy optimization and saving for green datacenters; Virtualization supporting cloud computing; Applications as pre-packaged virtual machines; Licensing and support policies