Session 3 :

Cloud Operational Resiliency: Industry Best Practices

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Presentations

☞ DevOps Practices @Myntra for Resiliency on the Cloud

    Anurodh Kanchan, Myntra, India

☞ Dependability on Hybrid Clouds: Practitioner Insights

    Sreekrishnan Venkiteswaran, IBM, India

DevOps Practices for Resiliency on the Cloud

☞ DevOps at Myntra

- Continuous integration & delivery, rapid feedback

- Aim: Implement a successful monitoring strategy

    & increase operational efficiencies

- Automate everything, treat everything as a code

☞ Needs and challenges

☞ High business demands with peak traffic and burst windows

☞ Bottlenecks for scaling
   (Storage, networking, application deployment, load balancers..)

☞ Scaling on demand (Bare Metal → only solution = cloud)

DevOps Practices for Resiliency on the Cloud

☞ Solution

   ☞ Containerization: Docker Containers

      ☞ OS level virtualization of the application

      ☞ Lightweight and immutable images

   ☞ Orchestration (application life cycle & infrastructure)

      ☞ Kubernetes and Docker Swarm - Open Source

      ☞ Terraform - Infrastructure as Code

   ☞ Distributed Load balancer

      ☞ Discovery of service delivery

Dependability on Hybrid Clouds: Practitioner Insights

☞ Three categories of cloud systems

- Private

- Public

- Managed multitenant / Shared private

☞ SLA and SLO levels

$\Rightarrow$ High / low / intermediate

☞ Tailor-made solutions

Dependability on Hybrid Clouds: Practitioner Insights

☞ Private cloud

⇒ Improvement of existing solutions/systems

⇒ Fault tolerance

⇒ Mathematical proof → dependability models

⇒ Availability improvement

☞ Over-engineering / under-engineering