

# GUJARAT TECHNOLOGICAL UNIVERSITY

## SCHOOL OF ENGINEERING AND TECHNOLOGY

### A Brief Report of Session on Cloud Computing & Data Centres under the aegis of BIS

<b>Topic:</b>	Cloud Computing & Data Centres
<b>Date:</b>	01.10.2024
<b>Time:</b>	11:00 AM to 01:00 PM
<b>Coordinator:</b>	Dr. P. S. Mann, Associate Professor-CS
<b>Expert:</b>	Er. S.K. Kanojia, Scientist F (Senior Director), Bureau of Indian Standards (BIS), New Delhi.
<b>Convener:</b>	Prof. (Dr.) Jignesh Amin, Professor, GTU-SET.

#### Event Summary:

The session began with a traditional **Saraswati Vandana**, followed by a warm welcome delivered by **Dr. P.S. Mann**, Associate Professor and Program Head-CS, who introduced the expert speaker for the session, **Er. S.K. Kanojia**, Senior Director and Scientist F at the Bureau of Indian Standards (BIS). Dr. Mann expressed his gratitude for the presence of the distinguished speaker and set the tone for an insightful discussion on cloud computing and data centers.



**Topics covered:**

- **Introduction to Cloud Computing Standards:**
  - Er. S.D. Kansfiya provided an introduction to the role of standards in cloud computing (CC), multi-cloud environments, and data centers. He emphasized the importance of aligning with international standards like ISO/IEC to ensure quality and security in these fields.
- **BIS Standards for Cloud Computing:**
  - Er. Kanojia highlighted the clauses related to cloud computing and data centers that have been incorporated into the BIS framework. Specific clauses, such as clause 6.5 (Different Types of Clouds) and clause 5.3 (Edge Computing), were discussed in detail.
  - These clauses define key characteristics of cloud systems, including the taxonomy of cloud computing models and the landscape of cloud environments, ensuring consistency and interoperability.
- **Benefits of Cloud Computing and Data Centers:**
  - The expert highlighted various benefits of cloud computing, including scalability, cost-efficiency, and enhanced data management.
  - The importance of having data centers compliant with BIS standards was also discussed for ensuring better service delivery.
- **Structure and Taxonomy of Cloud Computing:**
  - The session covered the key definitions and structures of cloud computing, with an explanation of its taxonomy.
  - Key characteristics of cloud computing were discussed, such as virtualization, scalability, and security.
- **Cloud Computing Models:**
  - The differences between IaaS (Infrastructure as a Service), PaaS (Platform as a Service), and SaaS (Software as a Service) were explained.
  - Er. Kanojia discussed the technology and techniques used in each of these models and their relevance in real-world applications.
- **Edge Computing and Cloud Policies:**
  - The discussion moved towards edge computing and how it complements cloud services, allowing for efficient data processing closer to the data source.
  - Clause 6.3, related to cloud computing policies, was explained, emphasizing how BIS recommendations shape the cloud landscape and its regulations.

## Facilitation and Vote of Thanks:

The guest, **Er. S.K. Kanojia**, was facilitated by **Prof. J.A. Amin Sir**, followed by a heartfelt vote of thanks to the speaker and the organizing team for their efforts and insights, expressing gratitude on behalf of the faculty and students.

## Participants Statistics:

- Faculty 10
- Students 92

## Glimpses of the Event:



**Conclusion:**

Er. Kanojia concluded the session with remarks on how standardized emerging technologies in cloud computing ensure improved data center operations, security, and scalability. He also shed light on future trends and the growing importance of cloud standards in India.

The session ended with an active Q&A session, where faculty and students engaged with the expert, making the discussion highly interactive and informative.

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