

CLOUD COMPUTING

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BACKGROUND AND MOTIVATION

- The cost for companies to maintain servers increasingly became uneconomical as the amount of data consumed increased.
- Cloud computing offers scalable, on-demand solutions.
- Benefits include cost-efficiency, accessibility, and flexibility.

OVERVIEW OF CLOUD COMPUTING AND STORAGE

Cloud Computing: Internet-based delivery of services such as servers, storage, and software.

Cloud Storage: Enables data storage and retrieval without physical infrastructure.

Cloud Deployment Models:

- Public Cloud (e.g., AWS, Azure)
- Private Cloud (exclusive infrastructure)
- Hybrid Cloud (combination of public and private)

Types of Cloud Services:

- Software as a Service (SaaS)
- Platform as a Service (PaaS)
- Infrastructure as a Service (laaS)

MILITARY AND DEFENSE APPLICATION

- Secure data sharing and collaboration across defense networks and organizations. For example, Army 365.
- Scalable computing power for enhanced data analysis.
- Real-time operational intelligence for decision-making.
 For example, CPCE.



REFERENCES

- Cloud Computing in 2 Minutes
 - https://www.youtube.com/watch?v=N0SYCyS2xZA
- History and Evolution of Cloud Computing
 - https://www.youtube.com/watch?v=Bkx8Egjm2mw
- The Military Leader Podcast
 - Beyond Gut Instinct: Data Literacy with Jon Bate, Erik Davis, and Brett Reichert