

*The Tachyon platform at Indian Energy Exchange (IEX) utilizes a distributed file system for reliable data sharing, enabling high-performance and fault-tolerant data access. The Tachyon Agents are responsible for executing instructions on client devices, with capabilities for staging and executing content, including integrations with Nomad for stage-and-execute operations. IEX's architecture incorporates a range of technologies for a flexible and scalable trading platform, including a matching engine, various trading interfaces, and real-time data dissemination. [1, 2, 3, 4, 5]*

### **Tachyon Platform and IEX Architecture:**

- **Tachyon:** IEX utilizes a distributed file system called Tachyon for efficient data sharing and access across its system, enabling high-speed data processing and fault-tolerance. [1, 2]
- **Tachyon Agents:** Tachyon Agents are responsible for executing instructions on client devices, including staging content, running commands, and leveraging Nomad for stage-and-execute operations. [2, 3]
- **Trading Platform:** IEX's trading platform is built on a flexible, component-based architecture with a highly trusted matching engine for efficient price discovery. [5]
- **Exchange Technology Platform:** IEX's technology platform is designed to handle increasing user demand and ensure seamless customer experience across all touchpoints. [6]
- **Services:** IEX offers various services, including real-time market data, trade reporting, and secure connectivity options for trading participants. [4, 5]
- **Security and Scalability:** The platform is designed for security and scalability, with a focus on speed, reliability, and availability, ensuring a dependable trading environment. [4, 6]

### **IEX's Technology and Infrastructure:**

- **Data Centers:** IEX hosts its trading platform and applications in a state-of-the-art data center in New Delhi, with a fully replicated disaster recovery site in Mumbai. [4]
- **Network Architecture:** The network architecture is designed for security and reliability, with services segmented into secure zones. [4]
- **Infrastructure:** IEX employs fault-tolerant servers, RAID for data mirroring, database clustering, and real-time data replication. [4]
- **Market Surveillance:** The platform includes market surveillance mechanisms to monitor market activity and maintain integrity. [5]
- **Regulatory Compliance:** IEX adheres to regulatory standards, ensuring compliance with industry regulations. [6]

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