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(57) Abstract :
The present invention discloses a multi-device coordination hub (100) for fault-tolerant system deployment, comprising a central processing unit (104), a multi-protocol communication module (105), a fault detection engine (106), synchronization controller (107), and load redistribution unit (108). It ensures seamless coordination between multiple devices (101–103), detects failures in real-time, and redistributes workloads autonomously. The invention enables consistent operation across heterogeneous networks and minimizes system downtime, making it ideal for critical deployment in industrial, aerospace, and medical environments.

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