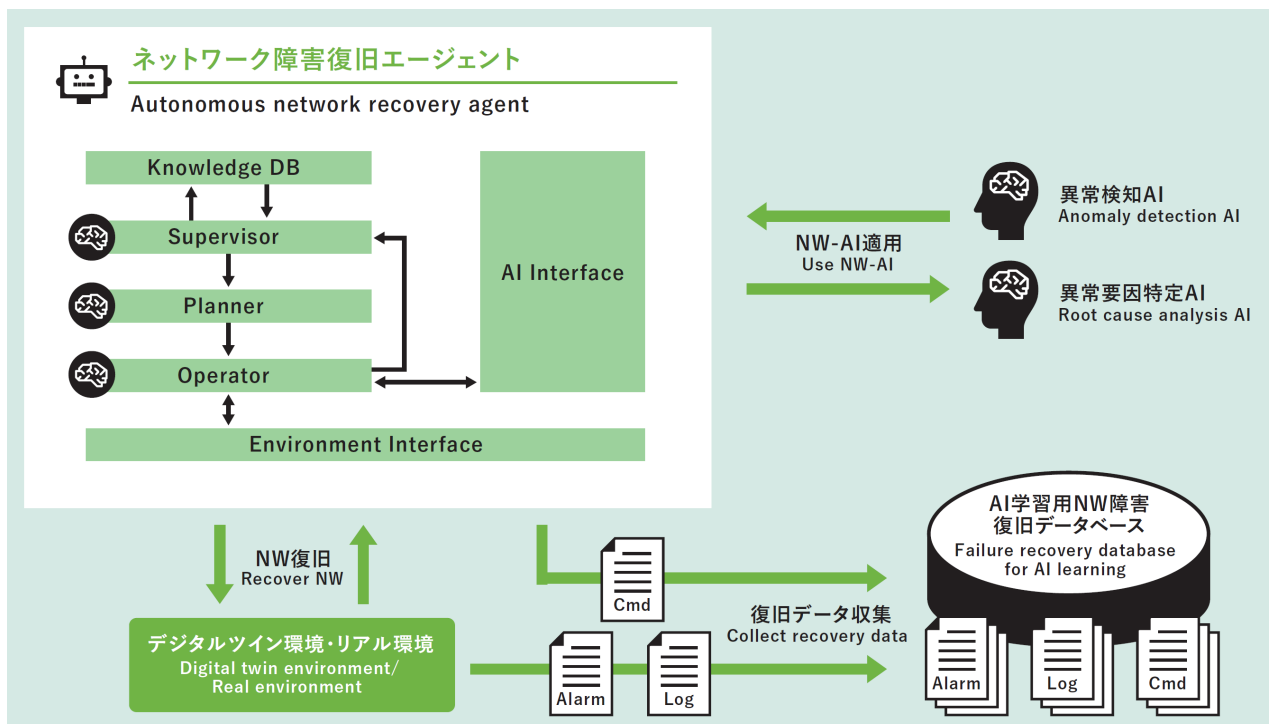


AI autonomously recovers network failures, reducing operational workload and downtime

Autonomous network recovery agent

Background and Technical Challenges

Network failures are becoming increasingly diverse and complex, requiring advanced expertise and quick decisions from identifying the point of failure to choosing the right recovery procedure. When multiple or cascading failures occur, human observation, analysis, and execution take time, during which the impact on services can expand.



R&D Goals and Outcomes

AI agents monitor network conditions in real time and autonomously execute recovery measures using appropriate network AI, aiming for fully automated network operations.

Key Technologies

01 Core Technologies

- Recovery Planning Engine: Real-time failure analysis and automatic generation of optimal recovery steps.
- AI Autonomous Learning Platform: Pre-learns failure patterns in a digital twin and builds a library of countermeasures.

02 Key Differentiators

We have developed a network failure recovery agent capable of directly controlling network devices. On a digital twin equivalent to a commercial environment, we demonstrated full automation from fault detection to recovery without human intervention.

Use Cases Information Technology (IT)

R&D phase Research

Technology Schedule FY25-26

Commercialization Schedule FY27-29

【Exhibitors】

NTT Network Service Systems Laboratories,

【Co-exhibitors】

R&D Center, NTT WEST, Inc.

【Contact】

Communication Traffic, Quality and Operation Research Project

【Related Links】

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