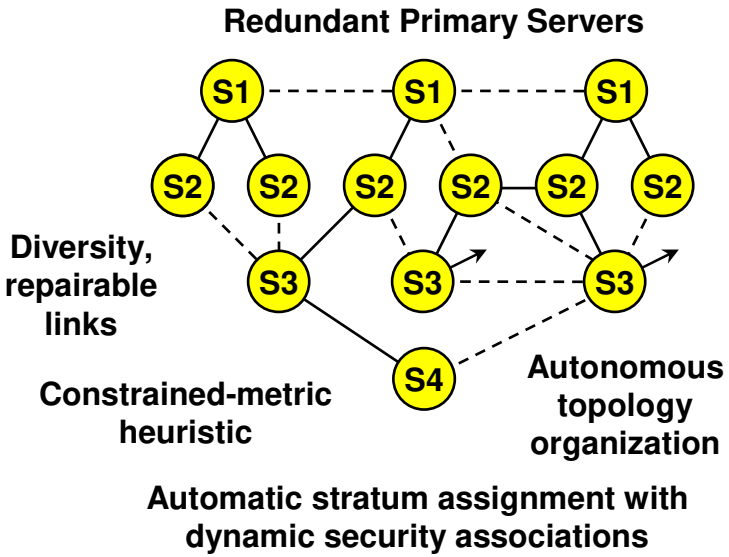
Survivable Real-Time Network Services (J175)



New ideas

Dynamic peer discovery using intelligent multicast algorithms

Self-organizing, multiple server topology for redundancy and diversity

Automatic repair and restoral using adaptive, constrained-metric heuristics

Self-organizing security infrastructure

Impact

Minimize dependence on engineered network configuration data

Avoid intricate case-by-case analysis of failure/fallback/recovery scenarios

Provide automatic reconfiguration in case of network reconfiguration or failure

Schedule (fourth year)

Refine and test Autokey security protocol for ad hoc sensor networks

Refine and test expanding-ring, hop-limited, Autoconfigure manycast algorithms

Document and prosecute on standards track

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