

Open Data Integration (ODIN): An Open Source, Low-Latency Data Integration & Visualization Framework for the NASA System Wide Safety Project's Disaster Response Safety Demonstration Series.

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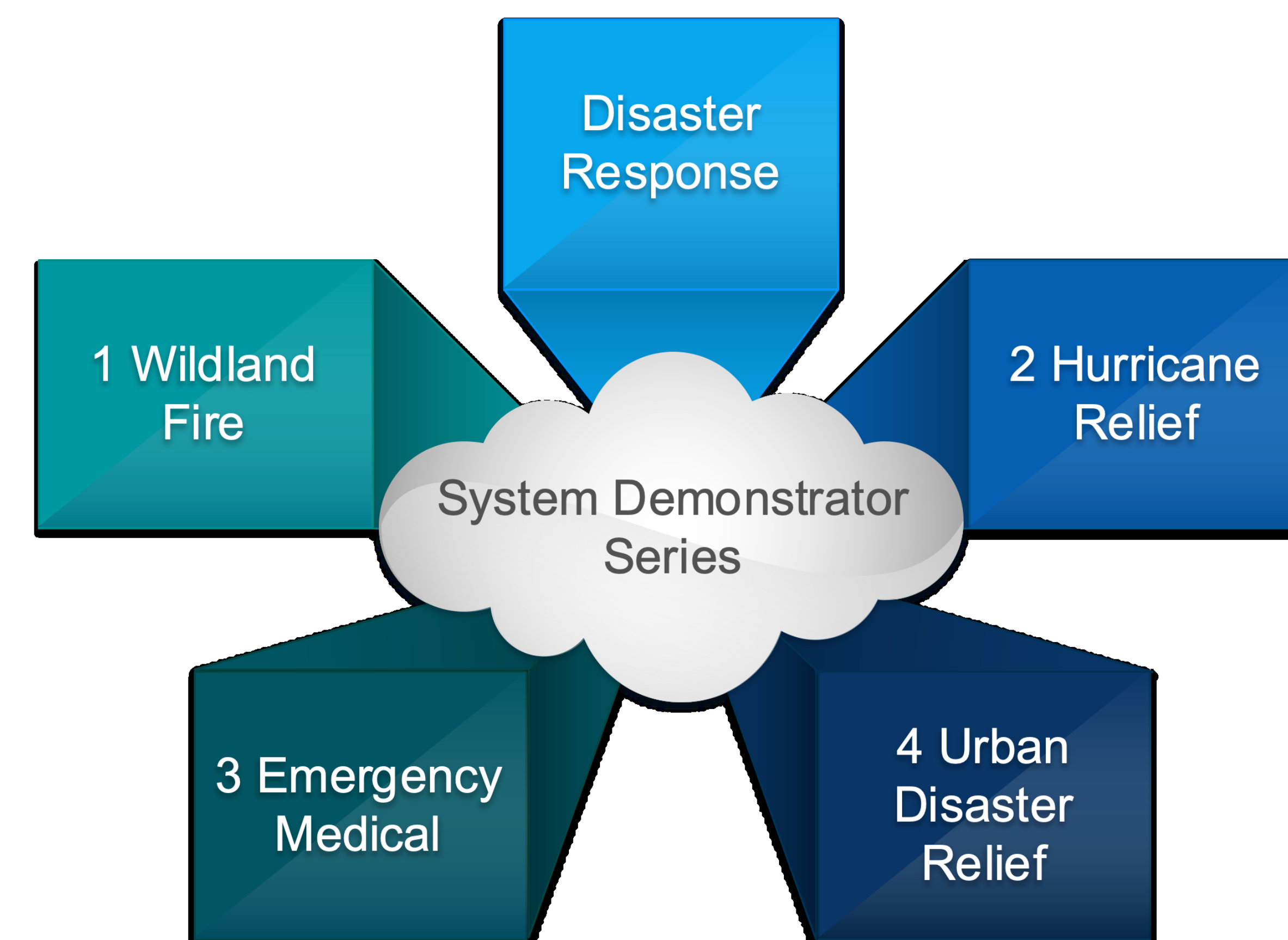


Challenge

Improve airspace safety while increasing the quantity and diversity of air systems (UAS).

Question

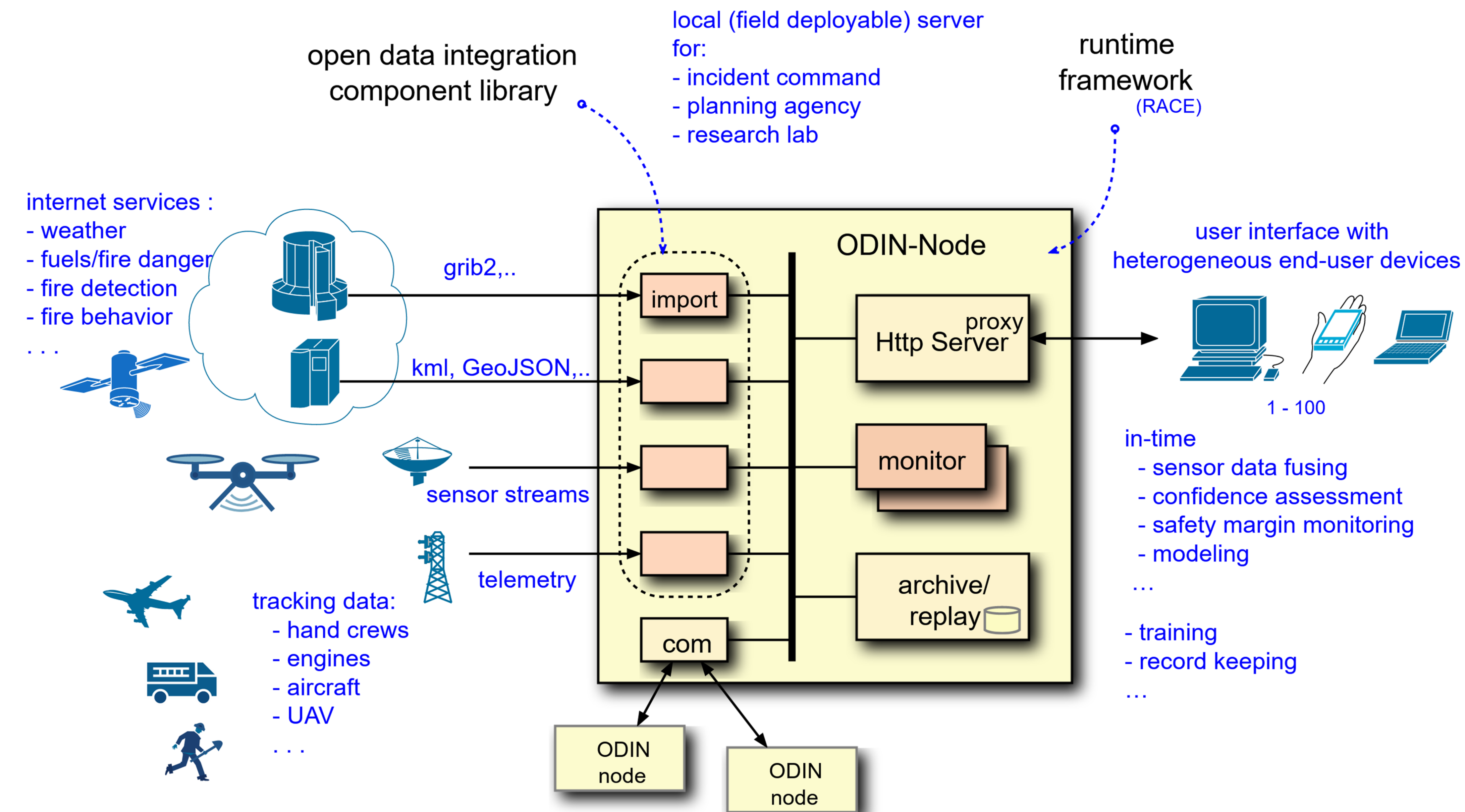
Can airspace safety management improvements be accomplished by developing new Services, Functions, and Capabilities (SFCs) that dramatically increase responsiveness ("In-Time")?



Safety Demonstrator Series: The Operational demonstration of and recommendations for requirements and standards necessary to monitor, assess, and mitigate risks to assure safety in disaster oriented operations.

Approach

Monitor SFC performance with a low-latency data integration system that can fuse, visualize, record and playback geospatial information and integrates earth science data from distributed sources.



Impact:

Delphire, a small company developing powerline sensors, incorporated ODIN to both network and integrate their commercial fire detection sensors feeds for situational awareness and monitoring.

The ODIN effort is transitioning from Wildfire Response to Hurricane Response and Relief

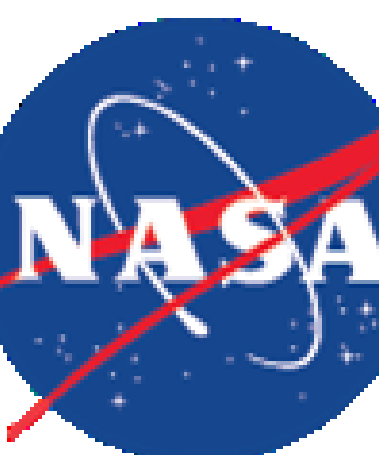


Customizable API And End User Software Framework (NASA's ODIN-Fire).



System-Wide Safety

National Aeronautics and Space Administration



System Wide Safety

ODIN source code

