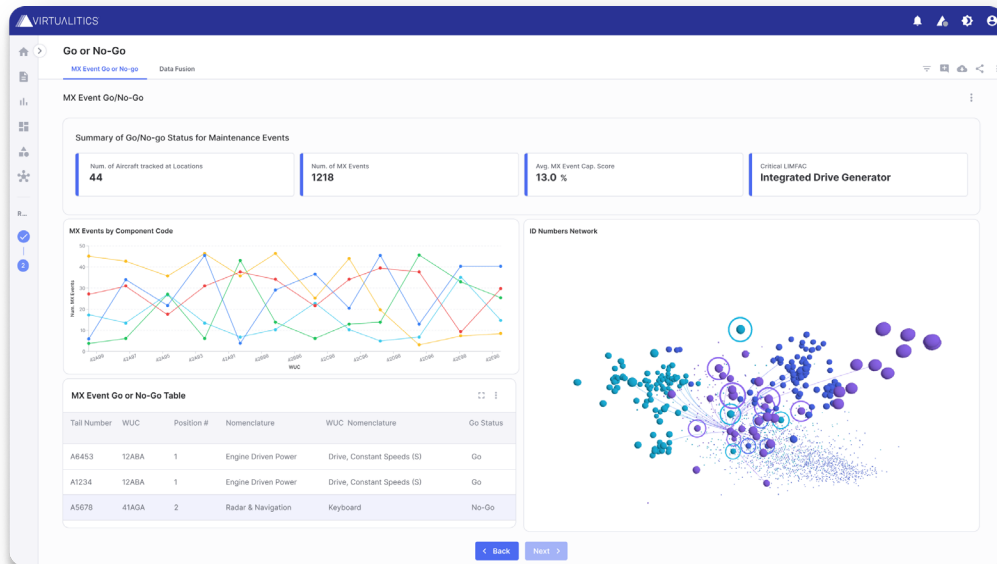


# Integrated Readiness Optimization

Exceptional mission readiness demands holistic strategies



Disconnected data systems leave teams without answers and put your mission at risk. Virtualitics transforms data into impact with AI-powered Integrated Readiness Optimization (IRO) applications to improve availability and meet objectives.

## AI Makes Integrated Resource Optimization Applications Possible

Powerful AI methodologies fuel each IRO application, synchronizing data across sources to provide an unparalleled view of what is impacting your mission.



**IRO Maintenance**



**IRO Cognition**



**IRO Materiel**



**IRO Cyber**

## Informed Decision-Making Leads to Strategic Wins

IRO Applications guide teams to take impactful action and deliver significant value by combining the science of AI with the knowledge of subject matter experts.

- ▶ Enhanced Coordination
- ▶ Synergized Resource Allocation
- ▶ Effective Risk Mitigation
- ▶ Reduced Unplanned Downtime
- ▶ Increased Productivity
- ▶ Maximized Mission Readiness

# IRO Maintenance

Avoid Operational Downtime and Maximize Mission Readiness

Maintenance operations leaders often face siloed technology and manual data aggregation in their efforts to answer mission-critical questions.

IRO Maintenance empowers teams to maintain peak operational readiness by considering inventory, manning, and repair equipment constraints simultaneously.

## IRO Maintenance shows:

### What is about to fail?

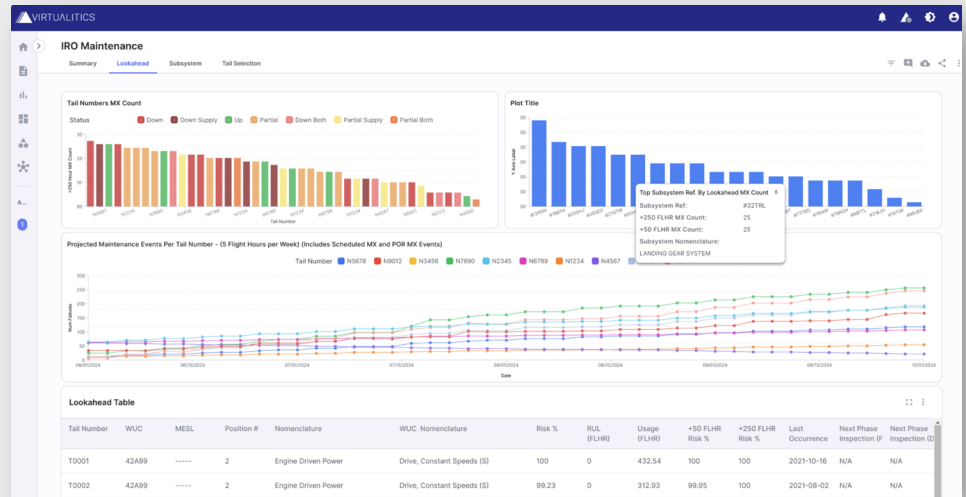
Identify components and assets at risk and when failure is likely.

### How should you respond?

Schedule maintenance to optimize resources and availability.

### What if?

Find solutions to unanticipated challenges.



## AI-Powered Sustainment Operations

IRO Maintenance is based on four key areas that impact operational readiness.



### Asset Risk Assessment

Run machine learning survival analysis to determine when and why a component is going to fail.



### Operational Planning

Simulate strategies and surges in asset usage to determine impacts on operations and availability.



### Resource Constraint Analysis

Identify limiting factors across inventory, staffing, and repair equipment based on current, scheduled, and predicted needs.



### Scheduling Optimization

Optimize maintenance schedules based on resource constraints, asset usage, and uptime requirements.

## Deployed at Scale in the Mission Today

**10 Years**

### Historical Data + Backtesting

Across 161 bombers, 495 launch facilities, and 99K critical maintenance events

**3 Months**

### Time to Value

From contract award to fielding for additional platforms

**1 Million+**

### AI-Generated Insights

Insights drive strategic prioritization and actionable recommendations

**10+ US Patents**

### Supporting IRO

Our growing patent portfolio demonstrates the level of innovation in IRO applications

**24%**

### Open + Scheduled MX Flagged

Potential improvement in jobs flagged as "No-Go" by IRO based on resource constraint analysis

**32%**

### Improved Scheduling

Potential improvement in the efficiency of scheduling team process

