

## GoDirect™ Connected Maintenance for Mechanical Components

### Features

- Connected Components program provides an on-condition / predictive maintenance service and helps reduce unscheduled maintenance events due to failed components. Monitor mechanical components and generate specific, actionable alerts to implement preventative health monitoring solutions.
- Diagnostic and Health Monitoring provides digital transformation from scheduled preventive maintenance to predictive maintenance with enhanced reports & data trends indicating system health utilizing existing aircraft data
- Predictive Maintenance offers component level insight into system issues, notifications, recommended actions and applicable reference to the aircraft maintenance manuals
- Asset Management and Inventory Control by helping track assets and maintain inventory at optimal levels for the Airlines
- Connected Components utilizes existing aircraft data and provides alerts in real time. It requires no costly retrofit. The service is delivered over the web through a secured website that customer has access to.

### Customer benefits at a minimum in the following categories:

- Reduce preventive maintenance costs (labor hours, fuel burn, parts replacements)
- Reduced troubleshooting labor
- Less ground equipment usage (possible)
- Improved first time fix rate
- Reduced no fault founds penalty
- Fewer premature part removals
- Reduction in delays and cancellations



## On-Condition / Predictive Maintenance from Unscheduled Maintenance events

- Reduction in number of operational disruptions
- Fewer unscheduled maintenance events due to failed components

## Asset Management and Inventory Control

- Track assets and maintain inventory at optimal levels

## Operation

- Uses QAR Data, Fault Data, ACMS reports, flight schedules, schedule disruptions, maintenance data, MRO shop data, and Weather data
- Alerts provide health check, components analysis, recommended actions

## Solution Overview

- Reduce Schedule and Operational Disruptions due to component failures
- Proactively manage the health of critical components on aircraft

### Input Data



- ACMS reports & QAR data
- Maintenance and Tech Logs



- Actual flight schedule
- Schedule disruption events



- Maintenance data
- MRO shop data

### Advanced Analytics



Analyze data in real-time to identify on-condition problems

### Maintenance Alert

ECB Health Report for 2017-11-02			
ALARM	Priority	STATUS	Message
ECB Health (1)	4.00	OK	ECB Health (1)
Engine Health (1)	1.00	OK	Engine Health (1)
ECB Health (2)	4.00	OK	ECB Health (2)
ECB Health (3)	4.00	OK	ECB Health (3)
ECB Health (4)	4.00	OK	ECB Health (4)
ECB Health (5)	4.00	OK	ECB Health (5)
ECB Health (6)	4.00	OK	ECB Health (6)
ECB Health (7)	4.00	OK	ECB Health (7)
ECB Health (8)	4.00	OK	ECB Health (8)
ECB Health (9)	4.00	OK	ECB Health (9)
ECB Health (10)	4.00	OK	ECB Health (10)
ECB Health (11)	4.00	OK	ECB Health (11)
ECB Health (12)	4.00	OK	ECB Health (12)
ECB Health (13)	4.00	OK	ECB Health (13)
ECB Health (14)	4.00	OK	ECB Health (14)
ECB Health (15)	4.00	OK	ECB Health (15)
ECB Health (16)	4.00	OK	ECB Health (16)
ECB Health (17)	4.00	OK	ECB Health (17)
ECB Health (18)	4.00	OK	ECB Health (18)
ECB Health (19)	4.00	OK	ECB Health (19)
ECB Health (20)	4.00	OK	ECB Health (20)
ECB Health (21)	4.00	OK	ECB Health (21)
ECB Health (22)	4.00	OK	ECB Health (22)
ECB Health (23)	4.00	OK	ECB Health (23)
ECB Health (24)	4.00	OK	ECB Health (24)
ECB Health (25)	4.00	OK	ECB Health (25)
ECB Health (26)	4.00	OK	ECB Health (26)
ECB Health (27)	4.00	OK	ECB Health (27)
ECB Health (28)	4.00	OK	ECB Health (28)
ECB Health (29)	4.00	OK	ECB Health (29)
ECB Health (30)	4.00	OK	ECB Health (30)
ECB Health (31)	4.00	OK	ECB Health (31)
ECB Health (32)	4.00	OK	ECB Health (32)
ECB Health (33)	4.00	OK	ECB Health (33)
ECB Health (34)	4.00	OK	ECB Health (34)
ECB Health (35)	4.00	OK	ECB Health (35)
ECB Health (36)	4.00	OK	ECB Health (36)
ECB Health (37)	4.00	OK	ECB Health (37)
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ECB Health (81)	4.00	OK	ECB Health (81)
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ECB Health (93)	4.00	OK	ECB Health (93)
ECB Health (94)	4.00	OK	ECB Health (94)
ECB Health (95)	4.00	OK	ECB Health (95)
ECB Health (96)	4.00	OK	ECB Health (96)
ECB Health (97)	4.00	OK	ECB Health (97)
ECB Health (98)	4.00	OK	ECB Health (98)
ECB Health (99)	4.00	OK	ECB Health (99)
ECB Health (100)	4.00	OK	ECB Health (100)

Proactive, actionable tasks, and troubleshooting

### Value to Airlines

- Maintenance Team:
  - Convert Unscheduled Maintenance events to On-Condition / Predictive Maintenance
  - Reduce NFF rates & early removals.
  - Reduce component life unpredictability.
- Flight Ops Team: Reduce schedule disruptions caused by unexpected component failure