



Vietnam Air Traffic Management

SWIM Architecture and Demonstration

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SWIM feasibility study for VATM

Legal and regulatory
analysis

SWIM governance
framework

Operational use cases

Service portfolio &
architecture

Cost Benefit Analysis

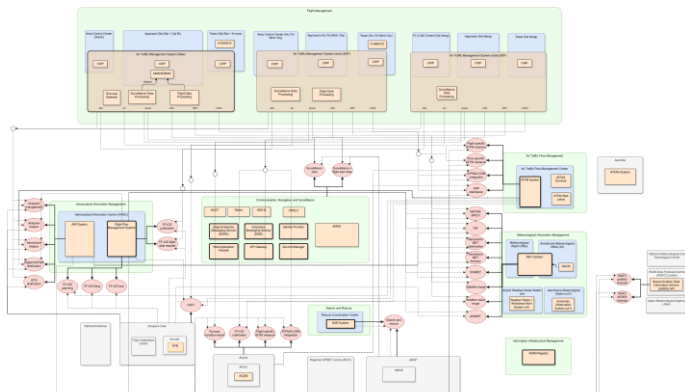
Roadmap

SWIM Demo platform

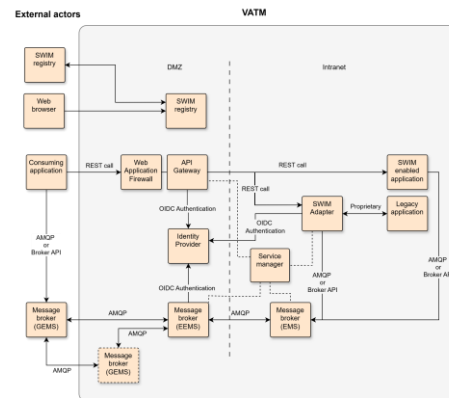
Knowledge transfer

VATM SWIM Architecture

SWIM Services



SWIM Infrastructure



SWIM Demo

Scenarios

Significant weather event

In-flight medical event

Actors

Airline

Airport

ATC

MET

ATFM

AIC

Services

FF-ICE

ATFM/A-CDM
integration

ATFM
measure

SIGMET

Weather
radar

Event

File

AIM

Infra

Message
broker

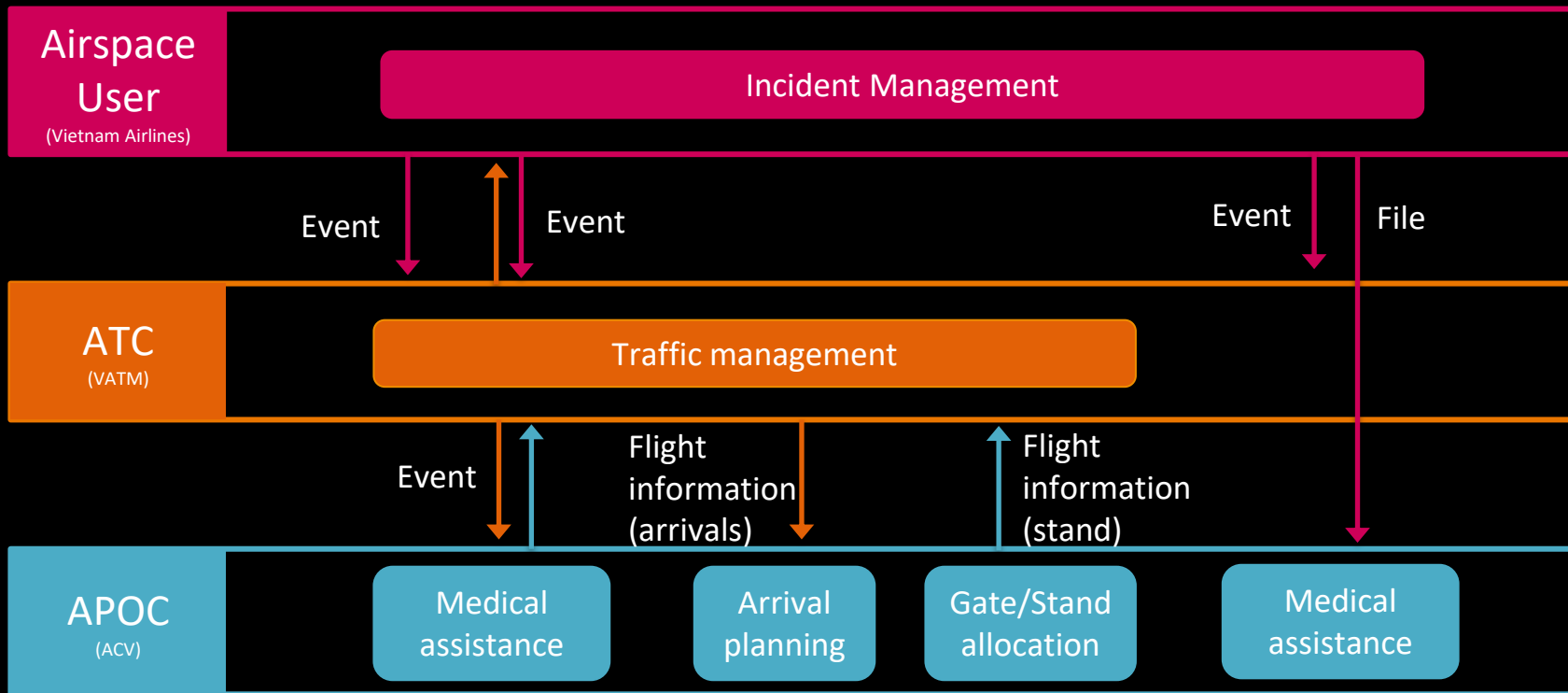
API
Gateway

Identity
provider

SWIM
adapter

SWIM
Registry

Medical scenario





Vietnam Airspace

Aerodrome controller. Manages the flight from touchdown through gate, off-block, and lift-off. Buttons stamp the actual-time events that drive the airport state machine.

Routes

Weather

Airports

Traffic

Airspace

Basemap

Plans 14

Arrivals 11

Departures 0

Events 6

Weather

Create event

C

2026-08-20T03:25:09Z

OPEN

Medical emergency

MED — Medical event

✓ 3 □ 4

B

2026-08-19T09:34:08Z

OPEN

Runway 11L/29R closed — disabled aircraft

D

2026-08-19T09:34:08Z

OPEN

Thunderstorm cell approaching from the west

WX — Weather event

✓ 0 □ 0

E

2026-08-19T09:34:08Z

OPEN

De-icing pad congestion

OPS — Operational event

✓ 0 □ 0

AA

2026-08-19T09:34:08Z

CLOSED

Perimeter fence breach — resolved

SEC — Security related event

✓ 1 □ 0

ACTIVITY LOG

• AMQP SIGMET 10:09:13

Received SIGMET 1 for VVHN

• AMQP SIGMET 09:50:56

Received SIGMET 1 for VVHN

• AMQP SIGMET 09:48:35

Received SIGMET 1 for VVHN

• AMQP SIGMET 09:48:35

Received SIGMET 1 for VVHN

• AMQP FF-ICE pu... 09:42:12

on resolved: GUF1 3c4e6d97-3-70619a83f991 (standard message type unmapped) -- stored

• AMQP FF-ICE publica... 09:42:12

FF-ICE publication received: GUF1 3c4e6d97-5775-420b-ae53-70619a83f991

• INTERNAL FF-ICE pu... 09:38:40

FF-ICE publication resolved: GUF1 247c1b33-d65f-488a-a80c-a8d40e2e13ad (standard headers, message type recognised) -- stored

• AMQP FF-ICE publica... 09:38:40

FF-ICE publication received: GUF1 247c1b33-d65f-488a-a80c-a8d40e2e13ad

Live demonstration

Welcome back to Hanoi

8 December

Operational
day

9 December

Technical
day

For invitations

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VATM



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