




ubitech Portal

AMHS Gateway

www.ubitech.com



+ WHAT IS AN AMHS GATEWAY?

The **Ubitech Portal** is an ICAO SARPs compliant AMHS Gateway that provides a portal into the ATN network. When deployed, the **Ubitech Portal** integrates an AFTN centre into the world of ATN while keeping the current infrastructure and investments intact.

The **Ubitech Portal** provides:

- Integration into any 3rd party AFTN System
- Bidirectional AMHS «» AFTN Message Conversion
- AMHS «» AFTN Address Mapping
- Control & Monitoring Position

+ WHY USE THE GATEWAY APPROACH?

Deploying the **Ubitech Portal** is the appropriate choice for many CAA's:

- Low-risk solution to add AMHS compatibility
- Significantly smaller investment than a complete AFTN system overhaul
- Protects the investment already made in AFTN technology
- Leverages highly on the existing & proven AFTN system and infrastructure

The **Ubitech Portal** represents the sound approach, the safe approach, and the economical approach to ATN migration. Considering that for many years to come, the majority of the global ATS network will be continue to be AFTN based, the **Ubitech Portal** is the right choice for many CAA's.

+ ATN MIGRATION MADE EASY

The **Ubitech Portal** is designed to form a gradual migration to full AMHS & ATN operations.

Step One

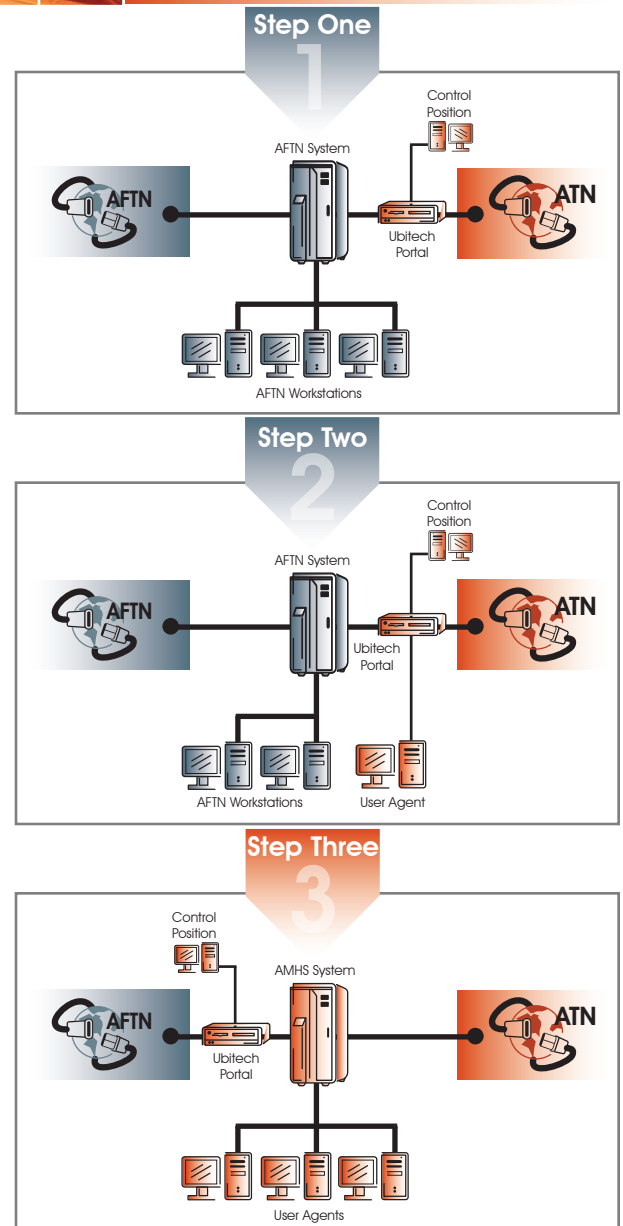
The **Ubitech Portal** is installed as a gateway to the AFTN system and performs message conversion and address mapping to enable communication with ATN infrastructure.

Step Two

Some of the existing local or remote AFTN Workstations can be transitioned to User Agents which can communicate directly with the Ubitech Portal.

Step Three

The AFTN system is replaced by an AMHS system, such as the **Ubimex 6**, while the **Ubitech Portal** is retained as an Access Unit (UbiAU) to provide backwards compatibility to legacy AFTN circuits and systems.



+ BRIDGING THE AFTN & ATN

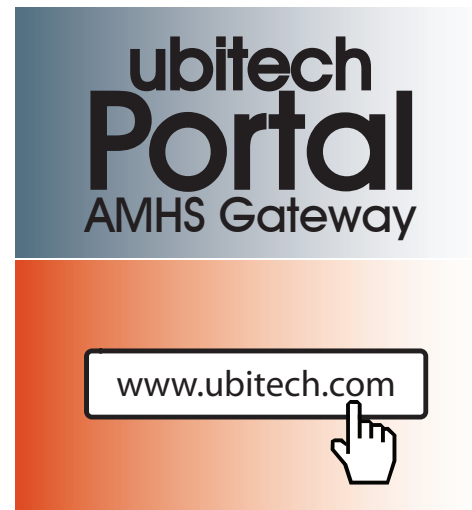
The **Ubitech Portal** bridges the AFTN & ATN:

AFTN Interface

- Manages connectivity to existing AFTN system or circuits
- Converts all messages to ITA-2 or IA-5
- Ensures messages are mapped by a unique AFTN address
- Traceability & Traffic Logging
- API for submission of messages from other systems

ATN Interface

- Manages connectivity to adjacent MTA or ATN Router
- Converts all messages to X.400 P1 (92,88,84) formatting
- Ensures AFTN messages are mapped to a unique ATN address
- Traceability & Traffic Logging
- API for submission of messages from other systems

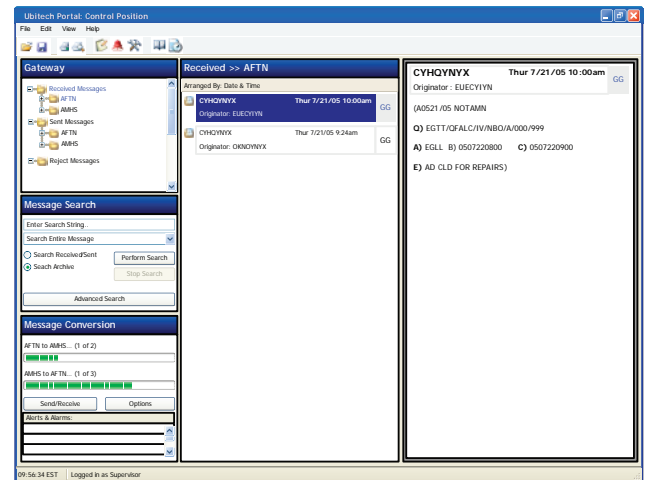


+ CONTROL POSITION

The Control Position gives the system administrator a comprehensive real-time view of the gateway.

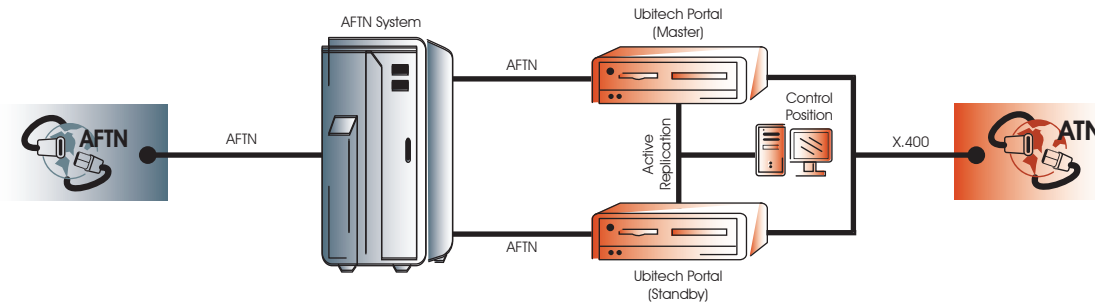
- System status
- Performance measurement
- Report generation
- System configuration

The Control Position also acts as a reject terminal where messages containing errors can be received by an operator and manually corrected.



+ REDUNDANCY MATTERS

Ubitech's redundancy technology is unique from our competitor's and is exclusive to Ubitech products. The **Ubitech Portal** is deployable as a single standalone server or in a fully redundant Master/Standby server configuration with an automatic switchover mechanism.



Using *Active Replication*, the Standby server duplicates the data and processes being carried out by the Master. In the case of a failure in the Master, the Standby is immediately ready to assume operations without the loss of data.

+ FIELD-TESTED

At the request of our customers, the **Ubitech Portal** was successfully deployed into operational AFTN centres for a number of pilot projects.

- Directorate of Civil Aviation, State of Kuwait
- National Air Navigation Services Company, CAA of Egypt

Live AFTN data was diverted from the operational AFTN system and transmitted to the **Ubitech Portal**. The messages were converted from AFTN format to X.400 formatting including AMHS address mapping and routed to the corresponding User Agent.

X.400 messages were created by the User Agents and addressed to AFTN workstations. The **Ubitech Portal** received these messages, converted them to AFTN messages and forwarded them to the AFTN system for delivery.

