Virtual Connect

Delivering broadcast-quality linear and live content into, through and out of the cloud.

Arqiva's Virtual Connect service provides a secure and resilient gateway into and out of Amazon Web Services (AWS) for full-time channels and live events. It offers cloud-based, broadcast-quality media contribution and distribution integrated with established services (POPs, Teleports).
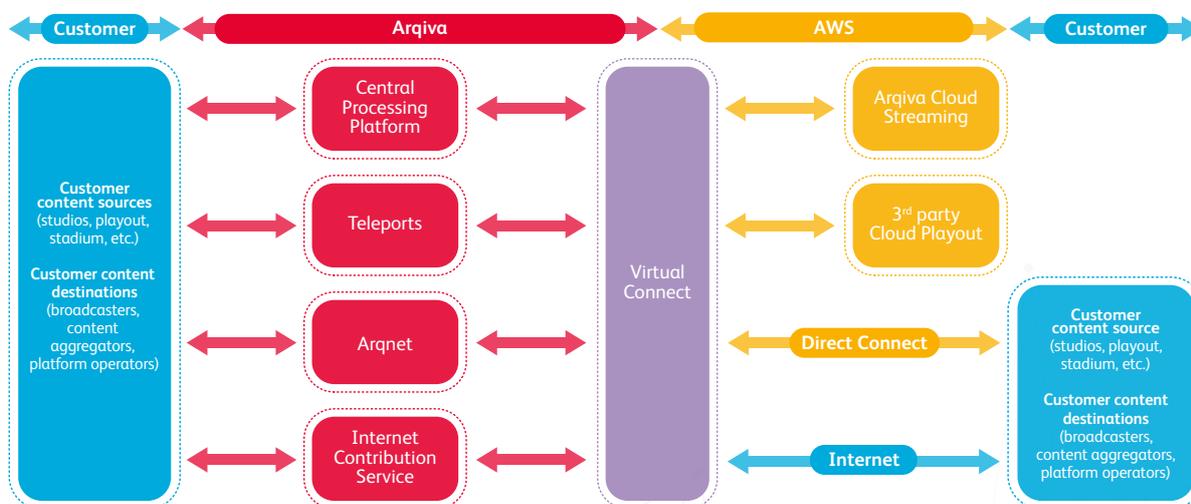
Key benefits

> **Low cost alternative to satellite and fibre distribution**

> **Easy and rapid transition from established solutions to cloud services**

> **Highly scalable**

> **Flexible commercial models**

> **24/7 Arqiva fully managed service**

> **End-to-end monitoring options**

Whether you are a broadcaster moving playout to the cloud, a rights holder experimenting with IP contribution or a content provider interested in cloud distribution, Virtual Connect provides you with a rapid, flexible and cost effective transition from established to cloud solutions.

Utilising AWS Elemental MediaConnect, it leverages AWS's vast network. Virtual Connect is a 24/7 fully managed service ensuring availability, redundancy and quality.

Virtual Connect within the Arqiva network portfolio

Example uses of Virtual Connect

Enabling cloud playout

If you are a broadcaster looking to migrate playout to the cloud Virtual Connect enables you to easily connect to already established distribution systems, e.g. DTH, DTT as well new ones.

Delivering content to cloud native OTT platforms

OTT aggregators who want to onboard more and more channels and live events as part of their content offering. Virtual Connect is ideally suited to delivering content onto these rapidly growing OTT platforms.

Supporting new content sources

Virtual Connect is ideally suited for rights holders and content creators who are experimenting with new live sources (e.g. eSports, mobile journalism) and are looking to avoid the cost and complexity of traditional outside broadcasts, SNG trucks and satellite capacity. Virtual Connect enables broadcasters and content aggregators to onboard these new sources and make them available on both conventional and OTT platforms.

Driving fast start services

In a rapidly changing industry, start-ups are emerging whilst existing media companies are innovating. Virtual Connect enables fast start services that reach diverse geographies and new audiences without the need to commit to fixed infrastructure.

Extending Arqiva's Arqnet footprint

Arqnet, Arqiva's fibre network, carries thousands of TV, radio channels and live events, linking broadcasters and rights holders with hundreds of affiliates, takers and head-ends. Virtual Connect seamlessly moves them to the cloud for rapid and cost-effective distribution to new audiences around the world through AWS's global footprint. It also delivers channels and events from the cloud to be fed into Arqnet for distribution.

Service Description

Arqiva is connected to AWS Ireland (eu-west-1) via dual and diverse Direct Connects from Arqiva's facilities in Newman Street, London and Chalfont, Buckinghamshire. Arqiva provides both channel and event flows to and from AWS connecting with DTH and DTT multiplexes, content processing, the Arqnet fibre network and global teleports.

With Virtual Connect, customers do not need dedicated Arqiva hardware on their sites to send or receive flows, they just need applications that support the transport protocols used by Virtual Connect. However, Arqiva can provide interface units at customers sites which will transforms feeds to and from the supported formats. These units also enable end-to-end monitoring.

Technical Features

Maximum bandwidth per flow:
80 Mbps

Resilience:
Fully redundant network architecture
with single and dual flow service options

Transport Protection:
Zixi and RIST (SRT later in 2020)

Infrastructure:
Diverse (A&B) power supplies, complimented
by full UPS and generator systems

Encryption:
End-to-end AES 256 (keys stored in
AWS Key Management Service)

Source Failover:
SMPTE 2022-7 compliant
and non-compliant sources

Entitlements:
Standard AWS MediaConnect entitlement
functionality supported, including
allocation of transfer fees

Monitoring Notifications:
System generated threshold notifications
available via email, Teams and Slack to customers

Active Monitoring:
24/7 Arqiva Crawley Court Master
Control Room (MCR)

With the addition of Virtual Connect to the Arqiva portfolio,
it reinforces our capability to acquire live content from anywhere – receiving
the feeds via satellite, our global fibre network, the cloud or via the open
internet. We can distribute the live stream wherever it needs to go to such as –
to traditional TV platforms, direct-to-consumer services, social media sites like
Twitch and YouTube and OTT platforms like Amazon Prime.

If you want to find out more
please contact **sales@arqiva.com**