# Aircraft Giant Reinforces Their Comprehensive Network Monitoring



## Major Aircraft Company Airbus Chooses Network Critical To Deploy Network TAPs Across Test Rigs

## Summary

The networks that operate within the aviation industry are exceptionally vital to monitor. Whether flights are for cargo or passengers, the aviation network managers must achieve 100% visibility into their network in order to see and generate the results required for passing flight safety tests. This makes it particularly important for aviation companies to understand, utilize and execute the best practises for their network security, monitoring and performance. This is why Airbus came to Network Critical to achieve network monitoring with 100% visibility into their network.

## The Challenge

Due to their need for increased visibility into their network, to pass extensive tests for their aircraft, Airbus needed to replace their current network monitoring tools. The company needed to receive the most accurate data being generated by these tests, which had involved the testing of steering, braking, landing and avionics network systems. Therefore, Airbus required the deployment of a range of specialized and flexible Network TAPs in order to capture and monitor the important testing data that transmits through their network.

One main challenge for Airbus was to ensure that their new network monitoring tools were to be non-intrusive. Network monitoring tools must have zero impact on aviation companies' networks because interruptions can affect the accuracy and reliability of the comprehensive tests that are critical to be accurate for flight safety.

Flying safety and reputation are two more important responsibilities and challenges that

"I'm delighted to say the use of Network Critical's TAPs across the multiple rigs, has helped us to complete all our first flight test objectives on schedule, whilst at the same time offering us the additional capability to resolve some of the inherent limitations of layer 2 switches."

System Test Lead Engineer, Airbus

Airbus needed to ensure were maintained to the highest degree. If the new network solutions that Airbus deployed were to lose packets and data, it could significantly affect their ability to fly safely.

The limited amount of time before network monitoring solutions needed to be installed was another challenge that Airbus and Network Critical had to face. The deployment of TAPs into Airbus's network, in the specialist avionics bus analyser, known as FdXplorer, required a solution with rapid deployment in order to ensure Airbus could keep to their extensive testing schedule.

**Network Critical** The Window to your Network™

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'The choice by Airbus in using Network TAP technology at the centre of their test bed has once again proven that Network TAPs are a vital component for major corporate companies.'

Network Critical CEO

## **Network Critical Solution**

Our solution, which involved deploying our Network TAPs, was a great success because our products are highly flexible, allowing for Airbus to complete the multiple test scenarios that they need. The TAPs are able to keep Airbus's network up and running constantly because they feature Failsafe technology; a crucial element that enabled Airbus to have the safety assurance they needed from testing in order to proceed with their project.

The solution also provided Airbus with zero impact on the monitored data, meaning no interruptions will be made on the passing traffic. This is very important to aviation networks because this increases the network's performance and therefore accuracy. We also used commercial ethernet switches which allowed for testing to be done earlier than they had planned. Being able to complete vital testing under tight time constraints was certainly an impressive feat for the company. the Network TAPs, Airbus were also able to use them to resolve a number of limitations they were experiencing with the in-house Commercial Off The Shelf (COTS) switches, in looping back data to the transmitter, as required by the aircraft implementation.

Monitoring equipment is expensive, that's why our Network TAPs work with multiple points of traffic for monitoring and tapping networks to achieve a cost-effective solution. This meant Airbus achieved significant monetary savings, enabling them to spend the rest of the budget on more network tools they needed for their extensive testing requirements.

Following on from the aircraft test rigs, Airbus is now working closely with Network Critical on the tapping technologies required for the testing processes associated with the new A400M military aircraft and more. Critical products eliminate any concerns of downtime and our unique scale-out capabilities enable simple, cost effective expansion, as network and port density requirements grow.

The health of your network is always secure with Network Critical products. Our fully flexible range of TAPs and Packet Brokers are used with IDS, IPS, network traffic monitoring tools, sniffers and many other mission critical appliances, to provide 100% network visibility with zero packet loss.

With over 20 years experience, a number of industry "firsts" and a reputation for excellent customer service, Network Critical's solutions are widely used in global networks across a wide range of sectors including Finance, Telco, Government, Energy and Healthcare. For more information, visit http://www.networkcritical. com.

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#### **Solution Benefits**

The rationale behind the use of the specialised network TAPs across the numerous test rigs was to ensure a simple yet secure, none-intrusive method of capturing the data generated by these "mission critical" sections of the aircraft. Due to the capabilities of

#### **About Network Critical**

Network Critical is an industry leader in network access technology. Our quality 1/10/25/40/100/400G modular TAP and Packet Broker solutions ensure that our customers have continuous network visibility. Network



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