



epitiro

The Broadband Communications Authority

Launching The 21CN Network

BT Wholesale Strives for NGN Quality

Case Study

“With ISP-I™ we’ve found and resolved numerous design issues before they’ve affected our customers.”

Ken Hayes,
Technology Change Manager,
BT Wholesale

Challenge

Manage the successful rollout of BT Wholesale’s 21CN next generation network to ISPs and Operators that demand exceptional quality of service.

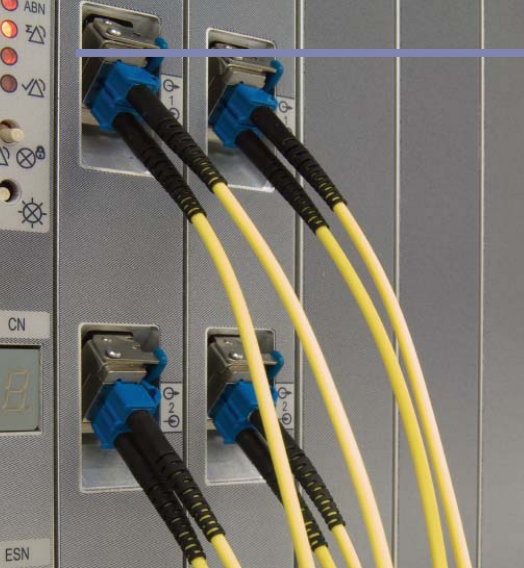
Solution

Provide nationwide monitoring of end user service experience via a deployment of probes across both 20CN and 21CN networks. Provide real-time views and integrated reporting to the NGN project team to ensure quality targets can be met or exceeded.

Benefits

- Ensure consistent quality through Real-time Comparisons of 20CN vs. 21CN
- Reduce unforeseen errors due to network changes and enhancements
- Ability to demonstrate SLA compliance to BT Wholesale customers
- Visibility of network errors before customers begin to complain
- Support technology testing
- Prove e-2-e service
- Understand quality through simulated ‘war game’ processes with no live customer traffic
- Understand impact to customers in failure scenarios
- Use as an Operations Team training tool

BT wholesale



The Background

BT Wholesale is a member of the BT Group plc, the holding company for an integrated group of businesses that provide voice and data services to over 600 service providers and mobile operators around the world. BT Wholesale has a reputation for delivering leading-edge communication solutions with a quality of service on which businesses and countries can rely.

The Challenge

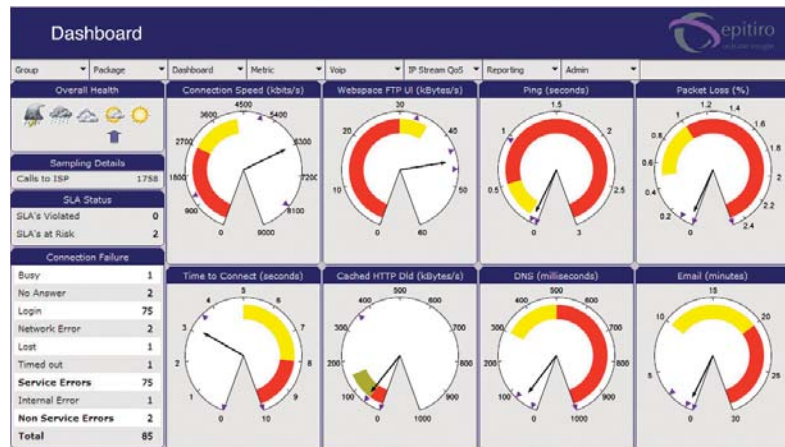
BT Wholesale's clientele supply to the extremely competitive consumer and business markets and thus demand a high level quality of service. So when the decision was made to move to a Next Generation Network (NGN, a project called the 21st Century Network (21CN), it was essential that these standards were maintained or surpassed, and that the expected improvement could be measured and demonstrated. However, it was recognised within BT Wholesale that existing network monitoring systems could not fulfill this goal as these gave no overall view of end-user experience. This fact was clearly recognised by Ken Hayes, Technology Change Manager, BT Wholesale;

"For 21 CN it was vital that we monitored the actual service levels we delivered to our customers. BT is expected to deliver the highest possible quality. We needed to know about any issues before our customers complained, not after."

Historically BT Wholesale had no view of the consequences that changes to the network would have on end user experience, other than complaints from customers. Obviously by the time complaints were received the damage had been done.

Although BT Wholesale performed laboratory testing of new technologies and systems, experience had shown this process could not highlight some of the unforeseen effects which occasionally appeared once the transition was made from laboratory to national network.

"BT is expected to deliver the highest possible quality. We needed to know about any issues before our customers complained, not after."



The Solution

BT Wholesale's vision was a philosophical change to their approach to network monitoring.

The vision was to give BT Wholesale an immediate view of service performance beyond the point of delivery and empower support staff to tackle issues before they were widespread.

The solution envisaged would also provide BT Wholesale with the confidence that all network upgrades had been successfully deployed and a yardstick to measure the business benefits delivered by the NGN architecture against the existing 20C network.

With the concept established, BT Wholesale went looking for a potential supplier and found that BT Wholesale's sister company, BT Retail, had already been using EpiTiro technology to provide real-time consumer experience data to enforce their SLAs. Following investigative work it was quickly established that EpiTiro could provide BT Wholesale with a near perfect fit solution through its ISP-I™ monitoring solution.

EpiTiro's ISP-I™ monitoring solution enables bandwidth providers to quickly and easily capture real-time performance data from beyond the edge of the network, and alert operators to KPI or SLA breaches as they evolve and before they become significant issues.

The Results

Since 2007 BT Wholesale has been deploying 21CN NGN technology across the UK. In parallel they have deployed over 200 ISP-I™ AT400 probes across both the existing 20C and the new 21CN networks. The data provided by the AT400 probes has proved invaluable during the implementation and commissioning phases and now provides essential in-life monitoring of BT Wholesale 21C network across the country, 24/7. ISP-I™ is now used in migrations, new topology deployments and code changes.

"With ISP-I™ we've found and resolved numerous design issues before they've affected our customers. We now deploy EpiTiro technology into 20CN and 21CN network segments before any trials are undertaken. Without these we cannot be sure of the impacts to service."

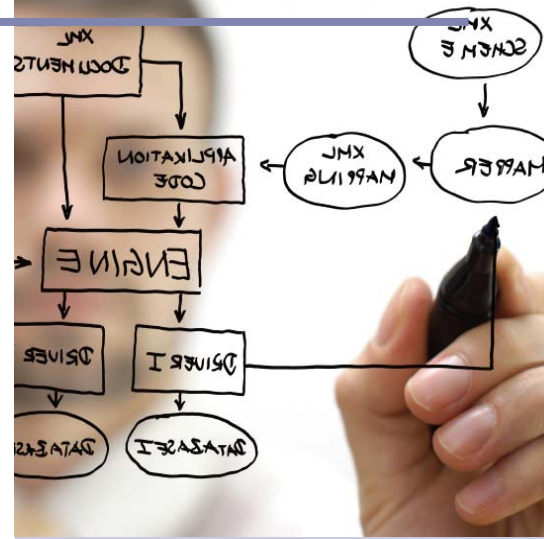
BT Wholesale provides communications companies with the wholesale services, products and solutions they need beyond network access in order to operate, serve their customers and develop their markets and reach. EpiTiro are working alongside BT Wholesale to ensure this capability is maintained and expanded well into the future.

"It's no exaggeration to say that if we had tried to deploy our 21C network without using EpiTiro it would have been considerably more difficult, expensive and time-consuming."

About ISP-I

ISP-I™ is EpiTiro's flagship 'software-as-a-service' network monitoring solution that measures true customer experience of broadband services. ISP-I™ monitors and makes available the performance metrics in real-time as a fully managed outsourced solution enabling service providers to benefit from immediate access to customer experience intelligence without investing heavily in remote test equipment.

The ISP-I™ network of test and monitoring agents are located "in-country" at the very edge of the network where customers reside. Traditionally monitoring equipment is located at a service provider's premises to provide an internal view of the core network. ISP-I™ agents simulate customer behaviour – connecting, downloading and emailing as a subscriber and thereby giving service providers actual customer experience insight.



"Many of our ISP customers already had a Customer Experience view of their services. If we could have the same perspective, we could ensure that any issues were pro-actively managed, and also be confident of the service levels being delivered by our NGN."

Agents continuously gather Key Performance Indicator (KPI) metrics then forward measurements directly to the ISP-I™ data warehouse. The data is accessible by Epitiro's service provider clients using a web browser with secure access. This data can be displayed via the on-line dashboard or compiled into reports for distribution and analysis.

The ISP-I™ platform consists of a centralised database and reporting system along with deployments of three types of customer experience measurement "agents"; the AT400 for fully controlled testing, AT100 for customer premise testing and AT50 for mobile broadband and large scale network service monitoring. Testing is maintained 24x7 from Epitiro's Network Operating Centre.

With the three methods of collecting actual broadband performance data Epitiro is able to analyse broadband services thoroughly in terms of accuracy and scope.

About Epitiro

Epitiro is the global leader in comparative broadband benchmarking providing customer experience insight to ISPs, cellular and fixed line operators, media providers, multi-national corporations and government regulators.

Clients such as Vodafone, Orange, Telefonica O2, Mobily, Virgin Media, Telecom New Zealand, BT, IP.access, Ofcom, IDA Singapore, Tiscali, CTM China, KPN and many others benefit from Epitiro's coverage of fixed and wireless broadband performance.

Founded in 2000, Epitiro is based in Cardiff, Wales, UK.



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