Overview
Sky is Europe’s leading direct-to-consumer media and entertainment company, providing original and acquired TV, cinema, news, sports, and other content to 23 million households across seven countries. The company employs more than 31,000 workers and reported fiscal 2018 revenue of £13.6 billion.

Challenge
A market innovator since 1989, Sky is a quad-play provider of bundled TV, telephone, broadband, and mobile services. However, testing limitations were causing activation problems with Sky telephony services—and therefore with the entire package.

“With Service Virtualization, we test earlier and gain more confidence in our end-to-end capabilities. We’ve replaced unreliable systems, increased staff efficiency, and launched new customer services with complete success.”

ALAN ABERNETHY
Principal Engineer
Sky

“We were having terrible trouble with the activation of telephony products—all sorts of stability problems,” recalls Alan Abernethy, principal engineer at Sky.

Sky was using an in-house solution to create and activate test customers, but the application had been designed for short-term use and was not stable over the longer term. Abernethy might successfully provision 30,000 broadband customers but then the application would fail, and he’d have to start over.

In terms of scale, creation of 30,000 broadband customers could take 18 to 20 hours and fully consume the test environment, blocking other activities. Having to start over meant repeating the process—and its resource consumption—all over again. During the project go-live and business-as-usual testing, Abernethy says he created more than 2 million customers in a 12-month period.

“We were asking the application to do something it was never designed to,” Abernethy says. “With maybe 75 percent of our non-functional tests, we would have an issue with telephony activation.”

Furthermore each of the various testing groups in Sky were writing their own ad hoc test stubs, duplicating efforts, and creating many unmaintained programs. Sky sought a

At a Glance
- Industry: Media
- Location: UK
- Challenge: Stabilize and streamline test environments through reusable and shareable virtual service components across development, functional automation, and nonfunctional testing processes
- Products and Services: Service Virtualization
- Results:
  + Eliminate process failures in the activation of telephony products
  + Increase staff productivity by hundreds of hours in provisioning 2 million customers a year
  + Successful launch of Sky Mobile in very short timescales
  + Successfully launch massive Netflix partnership
  + Reduce business risk by testing earlier in product lifecycles
  + Develop approximately 300 virtual services

Case Study
Application Delivery Management
“We estimate that stable, reliable testing saves hundreds of hours of staff time. As for telephony activation in test environments, Sky’s failure rate is now zero.”

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Solution
Market research showed Sky that Micro Focus Service Virtualization had every feature it wanted. The solution’s robust capabilities, coupled with Micro Focus’s commitment to continuous improvement, sealed the deal.

“The relationship with the vendor is critical to us,” Abernethy says. “The Micro Focus R&D organization listens to us and incorporates our requirements into their releases.”

Service Virtualization enables Sky to simulate the behavior of service components, letting developers and testers begin functional or performance testing in parallel even when the real service or data are unavailable. In a business that moves fast to compete, Sky uses this capability to mitigate market risks.

“We have a number of projects running now where we are doing development against virtual services,” Abernethy says. “Before, that development would not have started until much later in the project lifecycle, or it would have started and been dropped until we came back to test against a delivered endpoint. Now we work up front and test against the virtual service, and then push that solution from development into functional testing, nonfunctional testing, and production. It’s allowed us to do things we never could before.”

Service Virtualization reduces costs by eliminating the need to access constrained business-critical infrastructure, third-party systems, or pay-per-use cloud components.

Telephony activation was Sky’s first use case. “With Service Virtualization in place, we no longer have to provision customers; we can make use of existing depersonalized production data with SV providing the responses we would have obtained from an in-house test environment—saving effort and providing stability—and further we’ve been able to re-use our virtual services across all our 25+ test environments,” Abernethy says. “More recently, the launch of Sky Mobile, with its extremely short timescales, would have been impossible without Service Virtualization simulating critical system components and services ahead of their delivery.”

Additional use cases include fraud detection—simulating the service provider at zero cost per transaction—product shipping and returns, and early testing of new-product launches.

“This has been a powerful tool for us,” Abernethy says. “We’ve integrated Service Virtualization with our test environments to develop approximately 300 virtual services,” Abernethy says. “By testing early in the development cycle—against capabilities that don’t exist yet—we reduce risk. I have seen ideas at Sky go from concept to something in production in 10 days.”

Results
Abernethy is clear about the benefits: “We estimate that stable, reliable testing saves hundreds of hours of staff time. As for telephony activation in non-functional test environments, Sky’s failure rate is now zero.”

Pursuing strategic growth, Sky today is deploying more and more services across Europe, leveraging efficiencies supported by Service Virtualization. Its recent launch of a Netflix partnership, for example, was flawless.

“We had tens of thousands of customers signing up to the Netflix partnership within the first few hours and upgrading to that new package on our platform,” Abernethy says. “It performed perfectly.”

For the future Abernethy says, “As we move to cloud computing and the provisioning of test environments on demand, Service Virtualization will play a key enabling role, deriving further value from our investment.”

In summary, Abernethy says: “With Service Virtualization, we test earlier and gain more confidence in our end-to-end capabilities. We’ve replaced unreliable systems, increased staff efficiency, and launched new customer services with complete success.”