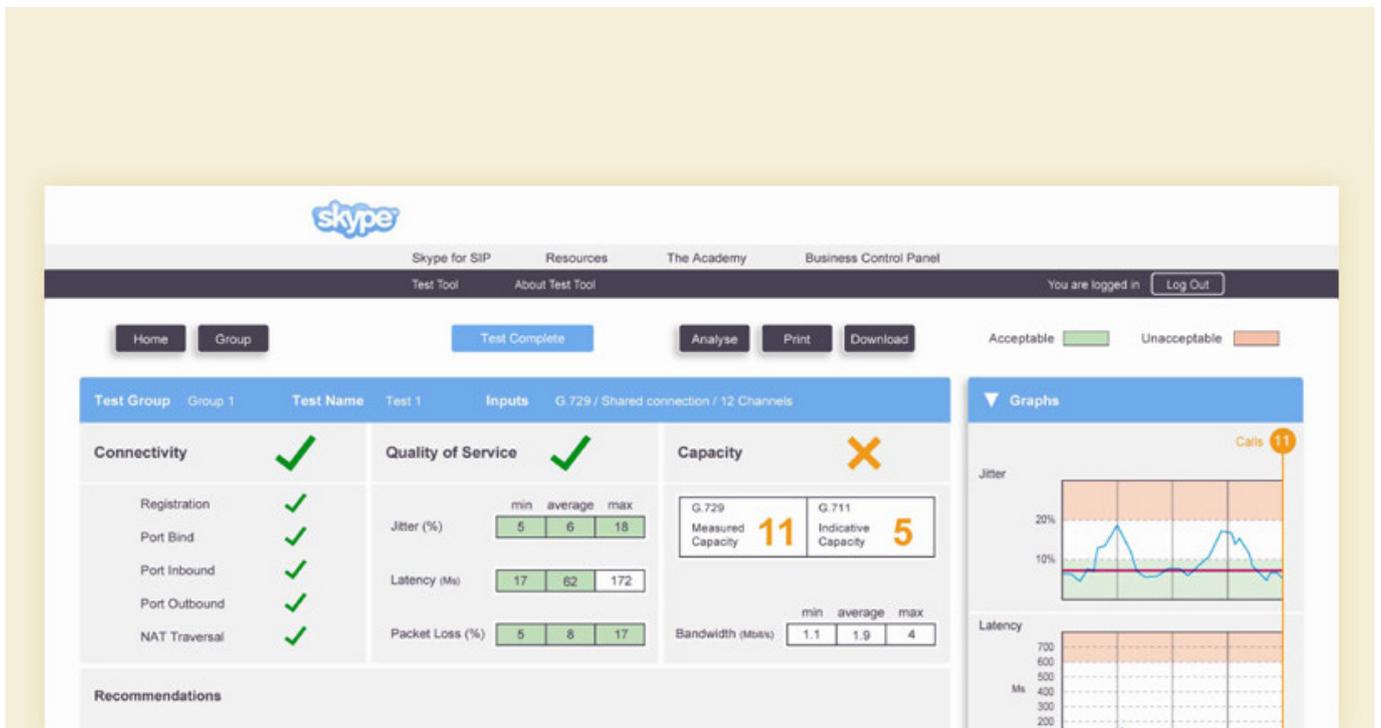


CASE STUDY

Skype

Skype connect test tool



Designing an enterprise and channel partner diagnostics suite for the World's largest VoIP company

We conceived, designed and built an innovative browser based test tool which enables businesses to easily check their network and internet connection's suitability for Skype Connect. Our solution helps to improve the customer experience and to reduce support costs for Skype.

Our brief included:

- Product concept and creation
- UI and UX design
- Software engineering
- Operational management and support



We were asked by Skype to help them devise the support strategy for Skype Connect, a service that enables businesses to use their phone systems (a SIP enabled PBX) with Skype.

In-life support issues with IP voice can often be avoided through diligence at the feasibility phases prior to deployment. If a business's network and internet connection suffer from high latency for example, they may not be appropriate for services like IP voice. The problem is the absence of a quick and simple way for a business to understand how well its network and internet connection will support real time communications.

Our solution

Our solution for Skype was to build an easy to use online tool so a business can quickly make an assessment of their network, without specialist equipment or training. The result is that customer experience and brand perceptions are improved, while Skype's support burden is reduced.

We began designing the tool during the Skype Connect product beta trial. We wanted it to provide better information than broadband speed tests, which do not provide the right data for assessing an internet connection's suitability for IP voice. Tests also had to be simple to run and not require any specialist equipment or the customer to configure their SIP PBX.

Customer experience and brand perceptions are improved while Skype's support burden is reduced.

To achieve these objectives we developed a JAVA based SIP client which runs in an internet browser and simulates real two-way voice traffic using UDP between the business location and Skype. Simply put, the solution creates a comprehensive and realistic calling test, without having to configure your phone network, simply by browsing to the tool's website.

The tool tests and measures an array of key criteria including:

- NAT traversal
- Connection to Skype's SIP server
- Connection session drops
- Connection packet loss, jitter and latency
- The number of simultaneous calls the internet connection and network can support

Empowered with this information, a business or Skype Channel Partner can identify any adjustments to the deployment network prior to implementation. This helps to avoid a bad product experience and to reduce support enquiries for Skype.

Our design process

With a working prototype in place, we started to think about the customer journey, user interface and information architecture. We spoke to beta trialists, Skype Channel Partners and hardware manufacturers. We made detailed flow diagrams which were then brought to life in a comic. The output of this usability modelling fed a design review process during which the ability to save, manage and print test results were added along with other features and UX changes.

Displaying the measured data in a simple format without diluting the detail, for those who wanted it, was an important consideration. Mapping the measured data types showed that everything could be consolidated into three areas - connectivity, quality and capacity. We used these as the basis for the first UI sketches which evolved over many versions.

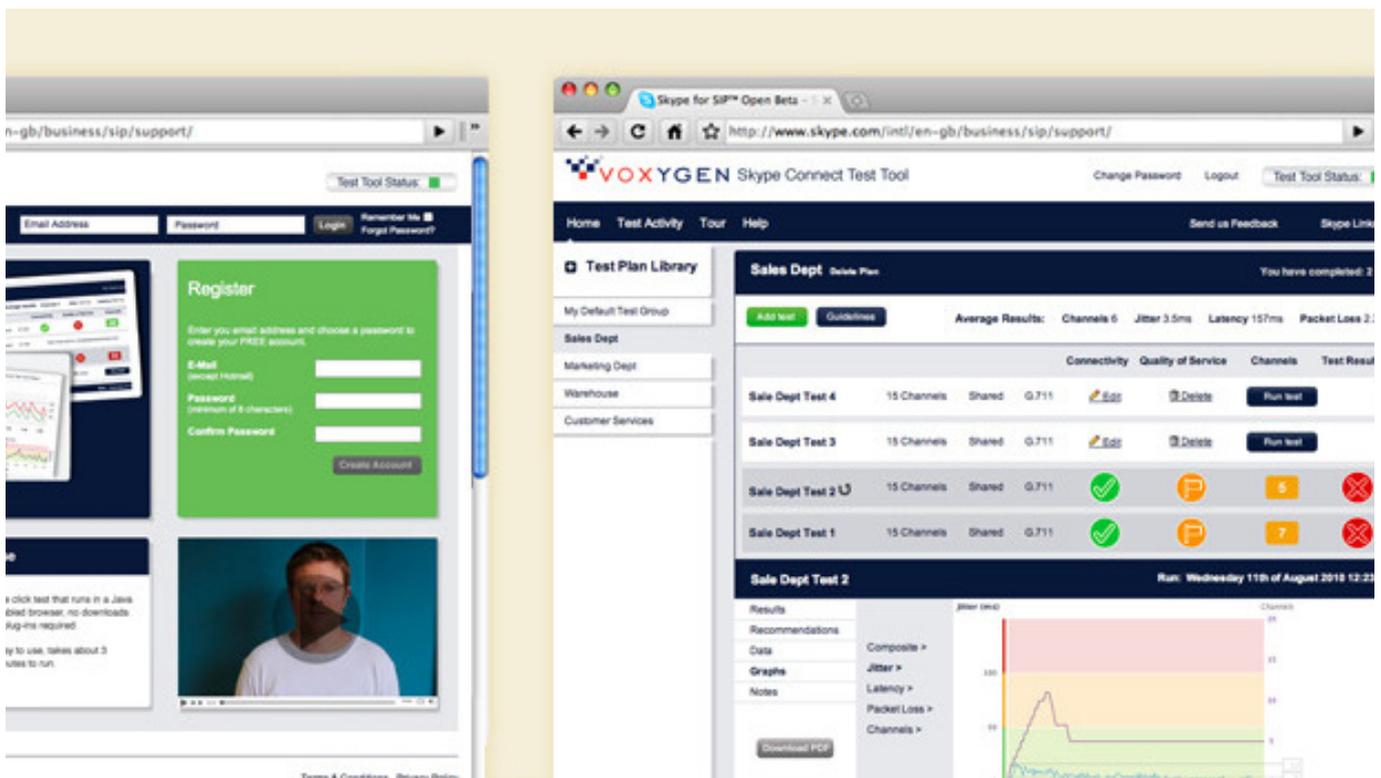
The outcome

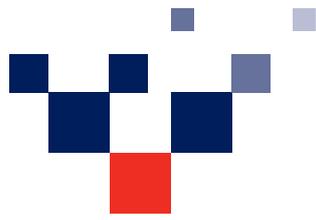
The original intention was that Skype would style our wireframes and host the tool itself. However, as an open beta launch approached, they asked us to take on these responsibilities, which continue today. The version for the launch of Skype Connect included some new tests, an improved UI, a tour section and internal reporting interface.

To date several thousand tests have been completed by customers. We are continuing to iterate the tool based on feedback and in partnership with Skype.

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