

MITRE is a Federally Funded Research and Development Center (FFRDC) organization that is working with the Federal Communications Commission (FCC) to perform research in the area of Telecommunications Relay Services (TRS).

As part of this research, MITRE uses an open-source tool called ACE Quill, developed at MITRE. ACE Quill provides a self-contained and customizable captioned phone platform ideal for user-in-the-loop experimentation and evaluation of all aspects of captioned phone communication, such as:

- Caption presentation features (e.g., size, position, color, and font)
- User interface controls
- Caption service performance (e.g., latency and accuracy)

This environment supports researchers and innovators who are developing and testing novel features that make effective communication easier for Hard of Hearing users of captioned phones.

The ACE Quill Platform uses a 10 digit number acquired through Bandwidth, a Global SIP Trunking Service. Bandwidth has its own mechanisms related to STIR/SHAKEN. We have enabled their transit identity header service on all of our registered IPs.

Additionally, the ACE Quill servers are used to place test calls to either test numbers owned by MITRE or a small number of external phone numbers. From a security point of view, ACE Quill resides on MITRE controlled AWS servers. These servers are not externally accessible and only MITRE IPs are able to reach them and register with the Asterisk PBX to place calls.

