

Benjamin Pomeranke, Computer Science

Year in School: Senior

Hometown: Springfield, MO

Faculty Mentor: Dr. Wenjun Zeng, Computer Science

Funding Source: College of Engineering Undergraduate Research Option

Microsoft conferenceXP reflector service

Benjamin Pomeranke & Wenjun Zeng

ConferenceXP is an open source collaborative project that is sponsored by Microsoft Corporation. This project is exploring ways to utilize a new IPv6 protocol that allows for multicast messages to be sent and routed throughout the network so that multiple users may receive the same message. It is a revolutionary way of approaching conferencing software; however it relies on a technology that is not widely used throughout the current network. As a means of incorporating both old and new technology, the software includes a Reflector Service that enables networks using the old IPv4 to interact with the software on a peer to peer basis so that a virtual multicast can be utilized. By allowing for the old network to be incorporated, the Reflector Service broadens the scope of users so that many can be involved in a single conference. Our goal is to test and possibly improve the Reflector Service so that it is able to accomplish the goals set forth by its creators. Testing will include setting up a Reflector Service on a server that is connected to the current IPv6 network, connecting through it from an IPv4 network connection, and monitoring its ability to act as an intermediary between the two networks. Source code is readily available due to the fact that ConferenceXP is an open source project. Development will generally include tools for testing the connections and performance but may delve into the improvements on the service itself. This research will provide further incite into the workings of the Reflector Service and improve the usability of the ConferenceXP software so that organizations on any network will be able to utilize it.