**Project Participants:**

Tom Nuse

**Title:**

Customer Router Database

**Executive Summary:**

The purpose of this program is to use CRUD operations to create tables of customers, routers, WAN IP addresses, and routed IP blocks to be announced over a routing protocol. This is all data that would be needed to generate a configuration for a router. The customers will be many-to-many with routers, one-to-one with wan\_ip (as

**Initial Features:**

List of Features/Endpoints for a Library API:

* Entities will be customer, router, wan\_ip, routed\_ip, location, and customer\_router join table
* Login, and use system
* User will be able to perform all CRUD operations for a customer
* User will be able to Create a router
* User will be able to Create and Update WAN IPs
* User will be able to perform all CRUD operations for routed IP blocks by customer
* User will be able to Create locations

**Stretch Goals (to be completed if time allows, or after graduation):**

* Add BGP ASN field to customer table
* Add firmware table to schema to document router firmware version (many-to-many with router table)
* Add interface columns to router table for LAN and WAN interfaces
* Add lan\_ip table for LAN information (one-to-one with router table)
* Perform all CRUD operations for a router
* Perform all CRUD operations for WAN IP’s
* Perform all CRUD operations for locations