Daily Tasks:

As it is written in the job description. I am working as NGA Fibre Technician. My role is to represent the Chorus and communicate with customers to provide them technical support via phone as well as field support depending upon the issue. Fibre is a technology or we can say a medium of our network that provides faster speed of internet. We connect customers to Wide area network through fibre technology. To manage their local area network, we use fibre, data cables and patch cables. Integrate their exiting wires to connect their all the jack points for telephone lines. We setup Routers, ONT, ITP, and RGW at their premises. Then check the connectivity of their local computers. Most of the network currently operate on laptops and mobile phones through wireless routers. In case of computes, we run separate Ethernet cable to provide the internet to each computer. In case of business job. We connect communication room or patch panel. So all of their computers can connect to wide area network. (We must have knowledge of **Mobile and wireless communication, Enterprise network information security and management**)

General Fault:

In case of fault, I test their network connectivity on my phone or laptop to locate the fault and check time when it occurred. Then I act accordingly. As chorus is responsible for New Zealand's Telecom network. We work on their behalf to sort any issue on their network. Issue can be at customer's premises, council's property or in the exchange. My responsibility is to look after it and resolve any issue. After finding the fault, it comes to troubleshooting. First of all, I test the equipment's installed at customer's premises using Techmate login. Then I check the ONT, ITP and FTP. Patch cables, Ethernet cables and integrated wires to resolve the fault. This was a basic fault job. It may take 60 minutes or sometimes 3-4 hours depends upon type of fault and troubleshooting done by me because Chorus is looking after a huge network in the New Zealand.

Complete Job:

My other role is to provide a network support to a customer by replacing their existing copper network with Next Generation Access (NGA) Fibre technology.
Every job is different, it depends upon the infrastructure of the customer's residential or business area. If we talk about a simple job it may take us up to 4 hours if there is no fault in the network.
To perform an installation and provide fibre technology to our customer, I goes through following tasks

- Scope
- Build
- Connect

Scope:

To perform this task, we must have knowledge of network that I have gained from my courses **Enterprise networks design and management, Managing Information technology projects, internet and intranet**)

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Scope includes communication. I contact customer to book an appointment. I visit their site. I find the network type first then consider the possible ways to extend it to the customer's property (Residential or Business). After checking Chorus network. I explain him all the possible ways to extend our chorus network to their property. Then it comes to internal wiring. I check customer's existing network consider the options and explain the best possible ways with least damage to property. I explain him where and how I will manage and mount and install my internal and external boxes (FTP, ONT, ITP, RGW, and Router), connectivity of wires, patch cables and integration of telephone jacks). When customer make a final decision then I sign an agreement. Scope task completed. This task may take 40 minutes to 2 hours depends upon size of residential or business area.

Build:

It is the stage where we implement the things that I had discussed in the Scope. To build the network we chose one route (aerial, underground or surface mounting) as per the existing network and customer's decision. We use network cables like Ribbonet, fixed fibre, and blown fibre. In case of blown fibre, I made a boundary joint and install FTP at customer's premises then blow the fibre using blown gun from Cabinet or FAT (Chorus Network). In case of Aerial route, I climb on pole and connect fix fibre cord to the RAT or CT box and other end in the FTP. This task may take 1-4 hours depends on the distance of customer's premises to boundary or Pole. (Management of inventory, stock, handling of tools, blowing gun and network knowledge, Familiarity with Chorus and local council standards is important to perform this task.

Connect:

This is final stage, where I perform final installation at customer's and Chorus property. It is my responsibility to visit and leave the Chorus site in proper way. I look after the Security of cabinets, FATs and Exchanges. I am provided with the access cards to visit Chorus Exchange, FAT, FTP and Cabinets to perform the connectivity and fusion splicing. I terminate the network cables, perform splicing and integrate the jack points for telephone lines. Then I run CAT 6 cable from FTP to Patch panel or nearby jack point and mount ONT and ITP inside the premises. After installation, I do the configuration in the FTP, ONT and ITP. Then it comes to programming. I do the programming in the ONT and finally connect the fibre optic cable and run the service. Once the service is updated, I test the internet at all the computers and laptops, test their phone services, perform the speed test, optical test and Techmate test. If everything is running and update. I provide the password to the customer and request him to change it as per their need to ensure the security of their network from cyber-attacks and threats. I finish the job in the system. In case any error occurs, I perform troubleshooting and resolve it on spot. This task takes 3 hours. (Knowledge gained from **Network Programming, Enterprise Network information security and Management, Cyber Security and cloud computing)**

4/10/2017