

Empirical Study on Network Monitoring System of Summit Communications Limited

By

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This Internship Report is presented in partial fulfillment of the requirements of the Degree of Bachelor of Science in Information and Communication Engineering

Supervised By

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**DAFFODIL INTERNATIONAL UNIVERSITY
DHAKA-1207, BANGLADESH January, 2019**



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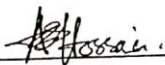
Date: 13 January, 2019

TO WHOM IT MAY CONCERN

This is to certify that **Ms. Suraya Akter AKA** was attached with Summit Communications Limited from 09 October, 2018 to till 13 January, 2019 as **Intern in Network Operations Center** department. During the internship program, we found Ms. Suraya as an honest, punctual and hardworking person.

We wish her the best of luck for her future endeavors.

For Summit Communications Limited

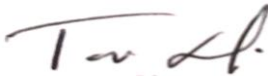

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APPROVAL

This Internship Report Titled “**Empirical Study on Network Monitoring System of Summit Communications Limited**” is submitted by Suraya Akter Aka to the Department of Information & Communication Engineering, Daffodil International University, has been accepted as fit for the partial fulfillment of the condition for the Degree of BSc (Hon’s) in Electronics & Telecommunication Engineering & approved as to its style and guts. The Presentation will be held on January, 2019.

BOARD OF EXAMINERS



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Associate Professor & Head
Department of ICE
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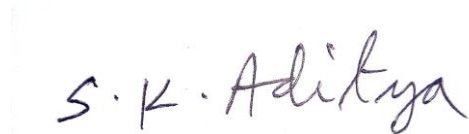
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DECLARATION

I hereby declare that this Internship Report has been done by me under the supervision of **Engr. Md. Zahirul Islam**, Assistant Professor, Department of ICE, Daffodil International University & Summit Communications Limited. I also declare that neither this report nor any part of it has been submitted away for award of any degree or diploma.

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At First, I am like to convey my gratitude to the Almighty for charitable me the right path while trying the duty.

The real sprit of achieving a goal is finished the way of quality and austere castigation. I would have never thrived in effecting my task without the teamwork, help and support provided to me by many personalities.

This internship report would not consume been possible without the provision and direction of **Engr. Md. Zahirul Islam, Assistant Professor**, Department of Information and Communication Engineering, Daffodil International University, Dhaka, under whose direction I chose this topic.

I would like to rapid my heartiest gratitude to **Md. Taslim Arefin, Associate Professor and Head**, Department of Information and Communication Engineering, for his kind help to surface our thesis and also to other faculty participants, the staffs of the ICE Department of Daffodil International University.

I must grant with due esteem the perpetual support and endurance of my family members for final this internship.

Suraya Akter Aka

Abstract

Interconnection is one of the most important areas which may emerge as a problem with the increase in number of operators with open market conditions. With the increase of number of operators in different services, the number of interconnecting links between operators increase in multiples and will be very soon unmanageable. Incumbents' networks generally in all developing countries do not have adequate interconnection facilities for new entrants. As a result investments made by new entrants are required to wait for the availability of interconnect facilities. It leads to higher cost of service, inefficient handling of call, sub-optimal utilization of network and serious increase of CAPEX and OPEX. The concept of "Interconnection Exchange (ICX)" can be a solution to the above mentioned problem. ICX is a step towards creation of a modern and efficient telecommunications infrastructure. With the introduction of ICX, operators can combine their services in the most flexible way. This paper represents the empirical study on Network Monitoring system of a renowned ICX, summit communication Ltd.

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Chapter 1

Introduction

1.1 Introduction

Summit Communications Limited (SCL) has made consistent and consistent development building the biggest fiber optic community infrastructure in Bangladesh with get right of entry to to over 33,000 km of excessive exceptional fiber optic community and voice/information Gateways. SCL additionally envisions a a hundred% nationwide coverage by way of 2017. With the belief of developing together with its companions inside the whole atmosphere SCL has been able to mixture the infrastructure in formerly unreachable regions even as putting off duplicacies by using others and lowering big investments.

Following this philosophy, SCL has been able to force success over a small time period and come to be a leading infrastructure operator in phrases of financial increase, operational overall performance and expertise acquisition. With strengthen technologies (DWDM, IPMPLS, Metro Ethernet, etc.) aligned with its consumer desires, SCL has been proudly serving all Talco's, ISPs, Cable television operators, Gateways and government offices with optical fiber network, net services and international bandwidth services. Summit's resilience as a team with an innovative spirit to be triumphant has helped summit's overcome the most tough terrains of the southern hill tract districts and build fiber optic network where no different has yet controlled to be gift. Having presence in already 64 districts and greater than 340 Upazillas and growing in addition, SCL pass to the destiny with the dream that each family in Bangladesh can have access to international magnificence multimedia services. Summit Communications restricted may be a main mum or dad of the value chain in phrases of state of the art era for fiber optic infrastructure and uncompromised fine in services.

1.2: About Summit Communications Ltd

Summit Communications Limited (“SCL”) is a leading end to end infrastructure guide issuer having nationwide Telecommunication Transmission community and Gateway licenses. Being a subject of the giant Summit institution, SCL has near involvement in numerous ICT tasks of the us of a, Summit Communications started its telecom transmission offerings in 2010. Aggregating a national network, SCL has constructed get entry to to over 33,000Km fiber optic community throughout the usa masking all 64 districts, 340 upazilas and extra than three,650 authorities workplaces, serving all the cell cellphone operators, primary ISPs and get in touch with facilities all around the country.

1.3 Company Profile

Name: **Summit Communications Lmd**

Address: Dhaka-1205, 18, Kawran Bazar Commercial Area, Bangladesh.

Telephone: [+880 2 8189573-5](tel:+880281895735)

Email: info@summitcommunications.net

1.4 Objective of the Report

SCL has a specific attention today's aggregating the present infrastructure of various operators on the way to cutting-edge investments with the aid of a couple of operators and expanding its very own community into regions which have been formerly unreachable. SCL offers excessive capacity transmission services via optical fiber network, and affords internet offerings and international bandwidth services, through its community with today's to be had technologies (DWDM, IPMPLS, Metro Ethernet). It has also linked more than 2, four hundred base stations in metro and rural areas. SCL has a bold plan contemporary being the leading fiber optic infrastructure operator within the use of a with 100% nationwide coverage via 2017.

1.5 Summary of the Report

The objective of this Internship is to progress an actual knowledge in of Network Monitoring system of summit communications Limited. In *The First chapter*, I have termed the Details & objective an overall view that I am going to instrument during this internship work and I would describe the background of summit communications.

The Second Chapter, generally discuss about Licenses of Summit Communications.

The Third chapter is telling, About Network of Summit Communications.

Chapter Four is about Clients of summit communications.

Then *Chapter Five* is about my activities in summit communications.

And the last one is *Chapter six* which is Conclusion.

Chapter 2

Licenses of SCL

The first thing to talk about Summit Communications are their four licenses.

They are:

- 1 Nationwide Telecommunication Transmission Network (NTTN)
- 4 International Terrestrial Cable (ITC)
- 5 International Internet Gateway (IIG)
- 6 Interconnection Exchange (ICX)

This four licenses are mainly the core of Summit Communications.

2.1: Nationwide Telecommunication Transmission Network (NTTN): Summit Communications restrained (SCL) is a leading give up-to-end infrastructure imparting agency having national Telecommunication Transmission network (NTTN) and Gateway licenses. SCL gives you high capacity transmission services, net services and global bandwidth services, through its state-of-the-art fiber optic community with trendy current technology (DWDM, IPMPLS, Metro Ethernet and so on.). Combining a national network, SCL has built get admission to to over 33,000 KM network getting the remotest corners brand new the united states with the aid of connecting all of the sixty four districts, 340 upazillas and greater than 3,650 government today's. SCL has a formidable plan trendy being the largest fiber optic infrastructure operator inside the use with 100% national insurance by 2017. SCL is the most effective NTTN operator with network availability in Chittagong Hill Tracts specifically Khagrachori, Rangamati and Bandarban.

2.2: International Terrestrial Cable (ITC): Summit Communications Limited is considered one of the biggest International Terrestrial Cable (ITC) service carriers in Bangladesh providing one 0.33 of the entire enterprise bandwidth. via ensuring 99 % uptime, SCL has secured the one of the top positions within the telecommunications region of Bangladesh as an ITC operator. SCL is imparting bandwidth thru distinctive submarine cables like I2I, IMEWE, TIC, TGN-EA, SMW3 and SMW4 by establishing strong partnership with Tata Communications limited and Bharti Airtel. SCL - ITC is retaining tertiary stage redundancy in terrestrial path with disaster recovery middle to offer first-class enjoy to its customers.

2.3: International Internet Gateway (IIG): SCL is considered one of the largest International Internet Gateway (IIG) service providers in Bangladesh which is linked to the international net traffic through Tata Communications Limited, Bharti Airtel Limited, Singapore Telecommunications Limited, stage 3 Communications Limited, COGENT, NTT and TIS. By means of the use of our distinguished worldwide networks our customers have international IP coverage and convergence offerings at some stage in North the USA, Europe and Asia-Pacific. While having the widest PoP presence in towns and all around the country, at the side of included network with global partners, our networks are completely redundant with nearly 999% uptime. SCL has already constructed world class (1+1) infrastructure structures and services for the clients below IIG network.

2.4: Interconnection Exchange (ICX): Summit Communications Limited (SCL) obtained an ICX License from BTRC in 2012 which permits SCL to establish, operate and hold the interconnection change services to offer telecommunication services (terminating to and originating from Bangladesh). SCL provides routing or switching facilities for inter-operator domestic voice calls and international calls between Access Network Service Operators and International Voice Gateways. We have established our infrastructure in Dhaka, Chittagong and Sylhet. We are connected to all mobile phone operators, PSTN operators and IGWs of the country. SCL is the pioneer to route local, international and roaming call facilities among 26 ICXs in Bangladesh because of its best-in-class Quality of Service (QoS), loss-less voice quality and optimal routing solutions.

Chapter 3

Network of SCL

SCL constructed a Fiber Optic energetic community to connect to diverse places originating from Dhaka through which summit's customers are connected. Most in their clients select the usage of summit's transmission network as its primary shipping machine because there network is exceedingly reliable and price powerful. Summit's foremost Point of Presence (PoP) is placed at Karwan Bazar. The transmission community branches out from summit's principal PoP to other PoPs throughout the nation.

- Summit's Dhaka-Narayangonj active transmission network is routed via Kaptan Bazar, Doyagang, Jatrabari, Jurain, Shympur, Kotwali, Pagla, Panchabati, Chashara, Godnail. The network span duration is roughly 49km. its miles connected in ring layout. Summit has located energetic devices in 6 websites (PoPs) in this direction and they're capable of offer transmission offerings from any of these PoPs. Summit's community capacity in Dhaka – Narayangonj community is STM-16. It can cater customer requirements in E1s or MB stage.
- SCL has installed their very own lively network in Dhaka-Chittagong long haul course. This lengthy haul community is routed from Dhaka to Chittagong thru Modonpur, Eliatganj, Laksam, Choddogram, Feni, Mirersorai, Shitakundo. They may be capable of offer connectivity from E1 up to STM-64 stage interface as there network bandwidth ability on this direction is STM-64. They has 7 PoPs on this direction and can offer the aforementioned bandwidth from all of the PoPs.
- Apart from their very own tailor made community, summit has additionally acquired STM stage bandwidth in few lengthy haul routes from BTCL in rent terms. For Dhaka stop they has used their own underground network and connected there energetic device in there Dhaka major PoP from Moghbazar BTCL.

- In Dhaka – Benapole long haul, summit has obtained an unprotected STM-5 level bandwidth capability that is kind of 550km in span duration. There Dhaka end is attached from Moghbazar BTCL and Benapole is attached from BTCL Sharsha, Jessore.
- In Dhaka – Bogra lengthy haul, summit has taken an unprotected STM-1 degree bandwidth ability which is roughly 200km in span duration. There Dhaka stop is hooked up from Moghbazar BTCL whereas the Bogra cease is connected from Banani (Bogra) BTCL.
- Inside the Dhaka – Sylhet long haul course, SCL has obtained an unprotected STM-4 stage bandwidth ability that's about 250km in span length. There Dhaka end is connected from Moghbazar BTCL and Sylhet give up is hooked up from Circuit house (Sylhet) BTCL.

The whole lively community prices is stated within the desk below:

Network Details of SCL	
Own Network	26,239 KM+
Leased from PGCB	1,800 KM
Leased from Telco and Govt. Organizations	4,961 KM
Total Network Size	33,000 KM+

NATIONWIDE PRESENCE	
No. of District Coverage	64
No. of Upazilla Coverage	340+

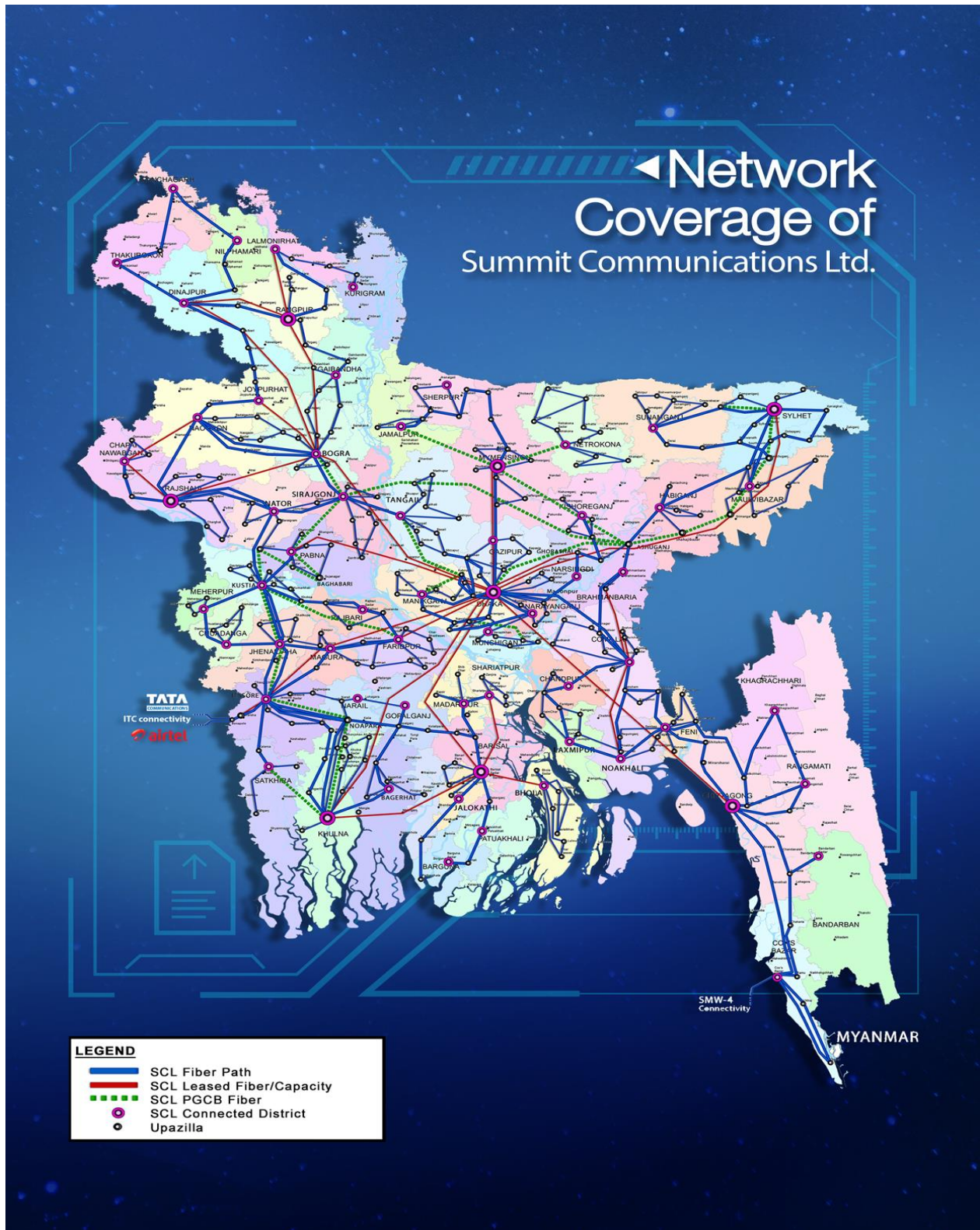


Fig1.1 : Present Nationwide Network Map of SCL

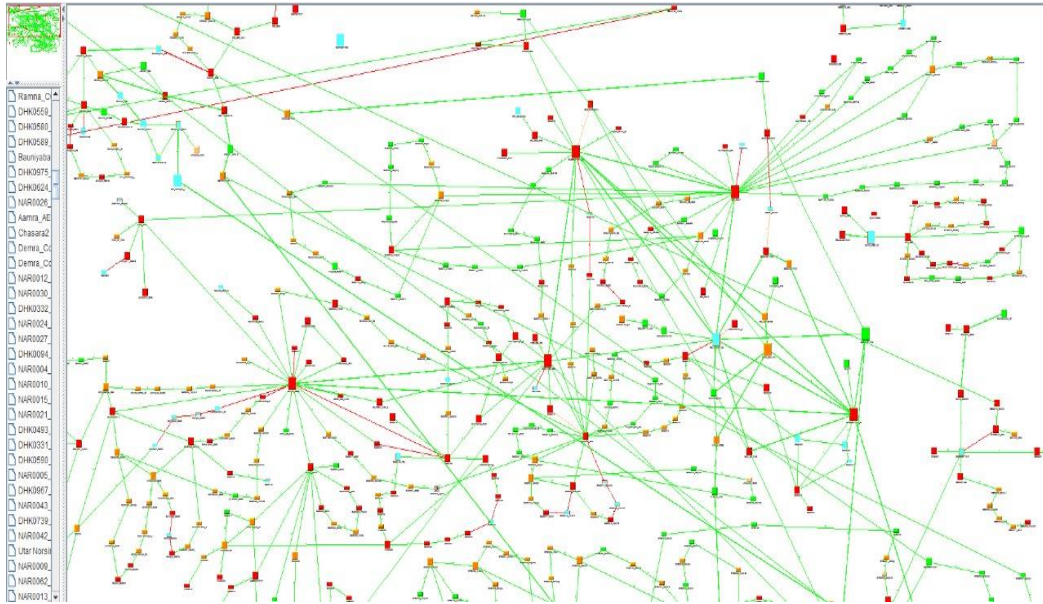


Fig3.2 : Part of Network of SCL (Dhaka region)

This is one of the Summit's network which is in Dhaka region. In this screenshot there are several sites and links shown. Routers which are in sky blue color are indicated as site down. And other colors are indicated as site up. Then links, the links which are in red color indicated as link down. And links which are in green color indicated as link up.

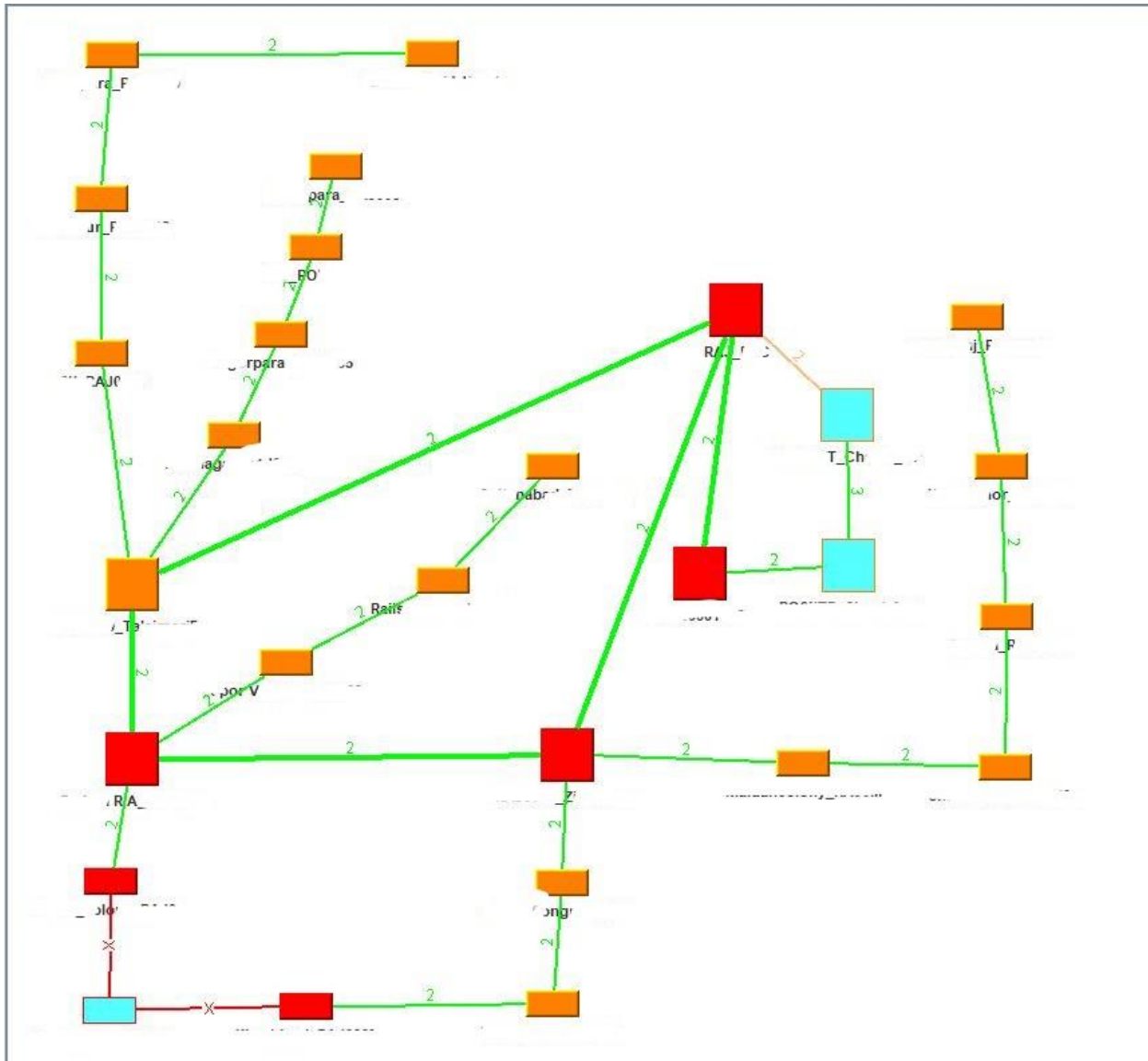


Fig3.3 : Part of Network of SCL (Rajshahi region)

This is a network of SCL of Rajshahi region.

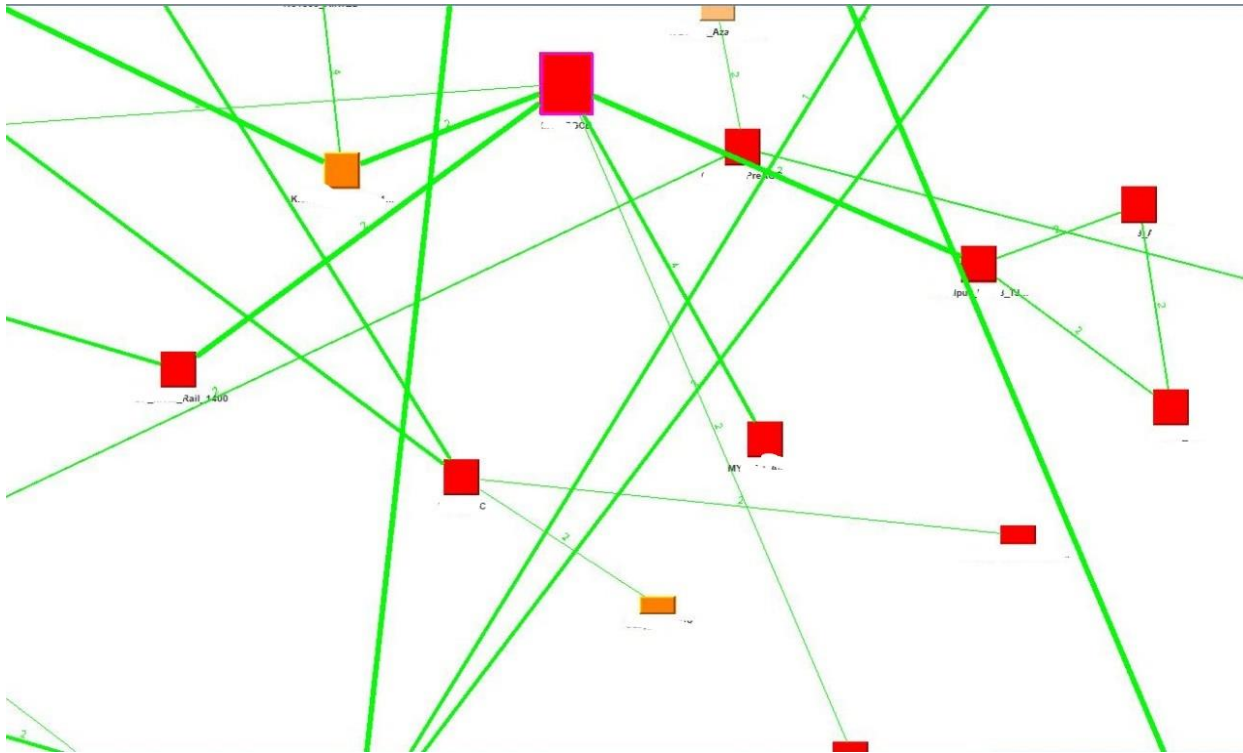


Fig3.4 : Part of Network of SCL (Mymensingh region)

This is a network of SCL of Mymensingh region.

Chapter 4

Clients of SCL

SCL provides its services to a wide range of clients including the top mobile network Operators in the country as well as internet service providers.

Clients of SCL:

- i) Internet service provider (**ISPs**)
- ii) Mobile Network Operators
- iii) Interconnection Exchange (**ICXs**)
- iv) International Gateways (**IGWs**)
- v) WiMAX Operators
- vi) Government Organizations

4.1 Internet service provider (ISPs)

SL.	Client Name	Type
1	Aamra Network Limited	ISP
2	Access Telecom (BD) Ltd.	ISP
3	Aalok IT Limited	ISP

SL.	Client Name	Type
4	Advanced Data Networks System Ltd.	ISP
5	Aftab IT Ltd.	ISP
6	Agni Systems Ltd.	ISP
7	AKCEYCOM Ltd.	ISP
8	Alap Communication Ltd.	ISP
9	Always On Network Bangladesh Ltd.	ISP
10	Bangla Phone Ltd.	ISP
11	Bangla Trac Communications Ltd.	ISP
12	Bangladesh Export Import Company Ltd.	ISP
13	BDCOM Online Limited	ISP
14	Bijoy Online Ltd.	ISP
15	BRAC BD Mail Network Ltd.	ISP
16	Broadband Telecom Services Ltd.	ISP
17	BUCT Communications Limited	ISP

SL.	Client Name	Type
18	Chittagong Online Ltd.	ISP
19	CITech Cybernet Ltd.	ISP
20	Communication One (Pvt.) Ltd.	ISP
21	Connect BD Ltd.	ISP
22	CPM Blue Online (PVT) Ltd.	ISP
23	Dhaka Broadband Network Ltd.	ISP
24	Dhaka Fiber Link Ltd.	ISP
25	Dhakacom Ltd.	ISP
26	DigiCon Telecommunication Ltd.	ISP
27	Drik Alokchitra Granthagar Ltd. (Drik ICT)	ISP
28	Dtech Limited	ISP
29	E-Bangla Limited	ISP
30	Eirtel Services	ISP
31	Ektoo Limited	ISP

SL.	Client Name	Type
32	Equitel Ltd.	ISP
33	Fusion Net	ISP
34	G4 Communications Limited	ISP
35	Gram Bangla System Ltd.	ISP
36	Grameen Cybernet Ltd.	ISP
37	HRC Technologies Ltd.	ISP
38	ICC Communication	ISP
39	ICON Infotech	ISP
40	IDS Bangladesh	ISP
41	Information Service Network Ltd.	ISP
42	Intercloud Limited	ISP
43	IP Communications	ISP
44	IS Pros Limited	ISP
45	IT Connect Ltd.	ISP

SL.	Client Name	Type
46	KS Network	ISP
47	Link3 Technologies Ltd.	ISP
48	M/S. Comilla Online	ISP
49	Media & Multimedia	ISP
50	Metronet Bangladesh	ISP
51	Mir Telecom Ltd.	ISP
52	MIRAE Company Limited	ISP
53	New Generation Graphics Limited	ISP
54	New Generation Technology Ltd.	ISP
55	Next Online Ltd.	ISP
56	Nextgen Networks Ltd.	ISP
57	Onenet Communications Ltd.	ISP
58	Optimax Communications Ltd.	ISP
59	PC Anodyne Online	ISP

SL.	Client Name	Type
60	PraDeshta Ltd.	ISP
61	Prisma Digital Network Limited	ISP
62	Professionals' System	ISP
63	Radiant Communications Ltd.	ISP
64	Ranks ITT Ltd.	ISP
65	SB Network	ISP
66	Sine-10 (BD.) Ltd.	ISP
67	Sirius Broadband (BD.) Ltd.	ISP
68	Sky Tel Ltd.	ISP
69	Square Informatix Limited	ISP
70	Telnet Communication Limited	ISP
71	Tomato Web (Pvt) Ltd.	ISP
72	Triangle Services Ltd.	ISP
73	Vision Tel Ltd.	ISP

SL.	Client Name	Type
74	X-Net Ltd.	ISP
75	ZX Online Limited	ISP

4.2 Mobile Network Operators

SL.	Client Name	Type
1	GrameenPhone Ltd	MNO
2	Teletalk Bangladesh Ltd	MNO
3	Robi Axiata Ltd	MNO
4	Airtel Bangladesh Ltd	MNO
5	Pacific Telecom Bangladesh Ltd	MNO

4.3 Interconnection Exchange (ICXs):

SL.	Client Name	Type
1	Bangla ICX	ICX
2	Imam Networks Limited	ICX
3	Integrated Services Limited (Sheba ICX)	ICX
4	Jibondhara Solutions Ltd	ICX
5	M&H Telecom Ltd	ICX
6	M.M Communications Ltd	ICX
7	Microtrade ICX Ltd	ICX
8	Mother Telecommunication	ICX
9	Paradise Telecom Ltd	ICX
10	Crossworld Ltd	ICX
11	Softex Communications Ltd	ICx
12	Teleplus Newyork Ltd	ICX
13	Voice Tel ltd	ICX

4.4 International Gateways (IGWs):

SL.	Client Name	Type
1	Asia Alliance Ltd	IGW
2	Apple Global Tel	IGW
3	Banglatrac Communications Ltd	IGW
4	BG Tel Limited	IGW
5	Bestec Telecom Limited	IGW
6	Bangladesh International Gateway Ltd	IGW
7	Bangla Tel Limited	IGW
8	Cel Telecom Limited	IGW
9	DBL Telecom Limited	IGW
10	DigiCon Telecommunication Ltd	IGW
11	Global Voice Telecom Limited	IGW

SL.	Client Name	Type
12	Hamid Sourcing	IGW
13	HRC Technologies Ltd	IGW
14	Mir Telecom Ltd	IGW
15	Novotel Limited	IGW
16	Platinum Communications Ltd	IGW
17	Roots Communication Ltd	IGW
18	Ranks Telecom Ltd	IGW
19	Sigma Telecom Ltd	IGW
20	Telex Limited	IGW
21	Unique Infoway Limited	IGW
22	Vision Tel Limited	IGW

4.5 WiMAX Operators:

SL.	Client Name	Type
1	Banglalion Communications Ltd	WiMax
2	Augere Wireless Broadband Bangladesh Ltd	WiMax

4.6 Government Organizations:

SL.	Client Name	Type
1	University Grants Commission	Govt. Org
2	Bangladesh Army	Govt. Org
3	DC Office	Govt. Org
4	ICT Ministry & BCC (Infor Sarker Project)	Govt. Org
5	LGRD (Development of ICT & E-Citizen Services Project)	Govt. Org

Chapter 5

Activities

SCL treats its Interns as significant elements in addition to personnel of this company. Interns get the opportunity to discover the actual commercial enterprise & expert global of this organization. SCL presents the environment to Interns to study thru way of life. I used to work as an Intern with team of NOC Department.

5.1 Work Load:

Workload is the amount of labor a man or woman has to do. There may be a difference among the actual amount of work and the person's belief of the workload. Workload can also be classified as quantitative (the amount of labor to be finished) or qualitative (the issue of the work).

As an intern of Networking group my first and most important responsibility became to understand the systems topology of the organization. Important report became furnished to get the assessment of the machine and crew discussions were additionally setup to help me to apprehend all the terms and subject matter of the system.

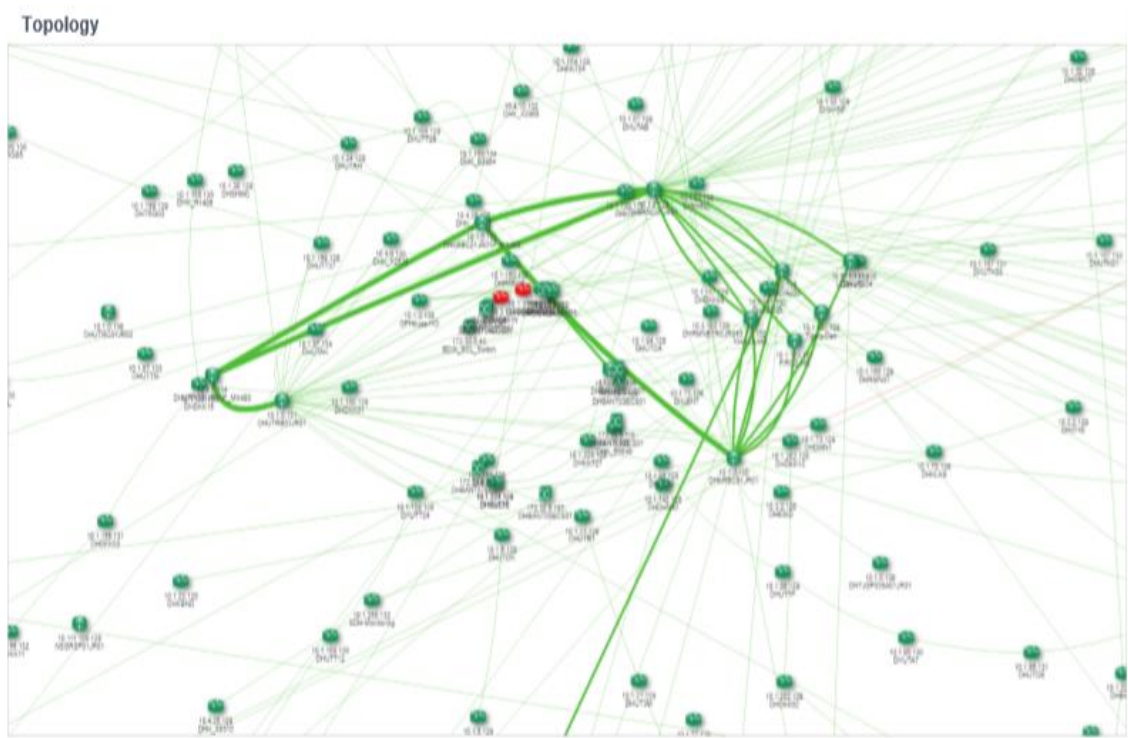


Fig5.1 : Network Topology Map of SCL

This is a small part of the network topology of Summit Communications. In the screenshot the bold lines are of 100Gbps links then the less bold lines are of 10Gbps links and lines which are not bolds of 1Gbps links.

My main task was if any alarm comes on UNMS such as link down, site down I had to escalate to the responsible operation department through creating ticket on Phoenix (SCL ticketing tool).

The screenshot displays the UNMS (Network Management System) interface, specifically the 'Alarms' section. The interface shows a list of network devices and their associated alarms. Each alarm entry includes the device name, resource type, threshold, alarm value, a 'LINK DOWN' status indicator, and the time of the alarm. The interface also shows various navigation and utility icons at the top and bottom.

Device Name	Resource	Type	Threshold	Alarm Value	Status	Time	Count
Info-Sarker Shibelya Switch Port1	ge-0/2/2	Ethernet			LINK DOWN	Thu Nov 29 14:45:20 2018	1076
Info-Sarker Switch Port-Banbazar	GigabitEthernet0/2/2	Ethernet	< 99 %	0 %	LINK DOWN	Thu Nov 29 14:14:20 2018	681
Info-Sarker Switch Port-Banbazar	GigabitEthernet0/2/2	Ethernet	< 99 %	0 %	LINK DOWN	Thu Nov 29 14:14:20 2018	613
To-Info-Sarker Switch Port-Golaggonj	GigabitEthernet0/2/2...	L2 VLAN	< 99 %	0 %	LINK DOWN	Thu Nov 29 14:13:00 2018	499
TO-Info-Sarker_BRTA	ge-0/2/3	Ethernet	< 99 %	0 %	LINK DOWN	Thu Nov 29 13:33:20 2018	7
Info-Sarker Switch Port_Namabaganj_SW1	ge-0/2/2	Ethernet	< 99 %	0 %	LINK DOWN	Thu Nov 29 11:39:00 2018	1
Info-Sarker Switch Port-Companyganj	GigabitEthernet0/2/2	Ethernet	< 99 %	0 %	LINK DOWN	Thu Nov 29 10:11:00 2018	1
Info-Sarker Dumuria Switch1	ge-0/2/2	Ethernet			LINK DOWN	Thu Nov 29 10:05:18 2018	3
Info-Sarker Banghata SW2	GigabitEthernet0/2/4	Ethernet			LINK DOWN	Thu Nov 29 10:00:54 2018	1
Info-Sarker Rajbari-District SW1	ge-0/2/2	Ethernet	< 99 %	0 %	LINK DOWN	Thu Nov 29 09:48:20 2018	1
Info-Sarker_Kirish_Biponon	ge-0/2/0	Ethernet	< 99 %	0 %	LINK DOWN	Thu Nov 29 09:09:20 2018	1
Info-sarker_Switch1	ge-0/2/0	Ethernet	< 99 %	0 %	LINK DOWN	Thu Nov 29 07:07:00 2018	3
Info-Sarker Dhanamari SW-1	ge-0/2/1	Ethernet	< 99 %	0 %	LINK DOWN	Thu Nov 29 07:06:00 2018	141
Info-Sarker Phuttala SW2	GigabitEthernet0/2/0	Ethernet			LINK DOWN	Wed Nov 28 16:56:50 2018	3

Fig5.2 : Alarm on UNMS

This Is UNMS tool, by which we get to know where the links and sides are down. If there is any link or site is down we get alarm in UNMS.

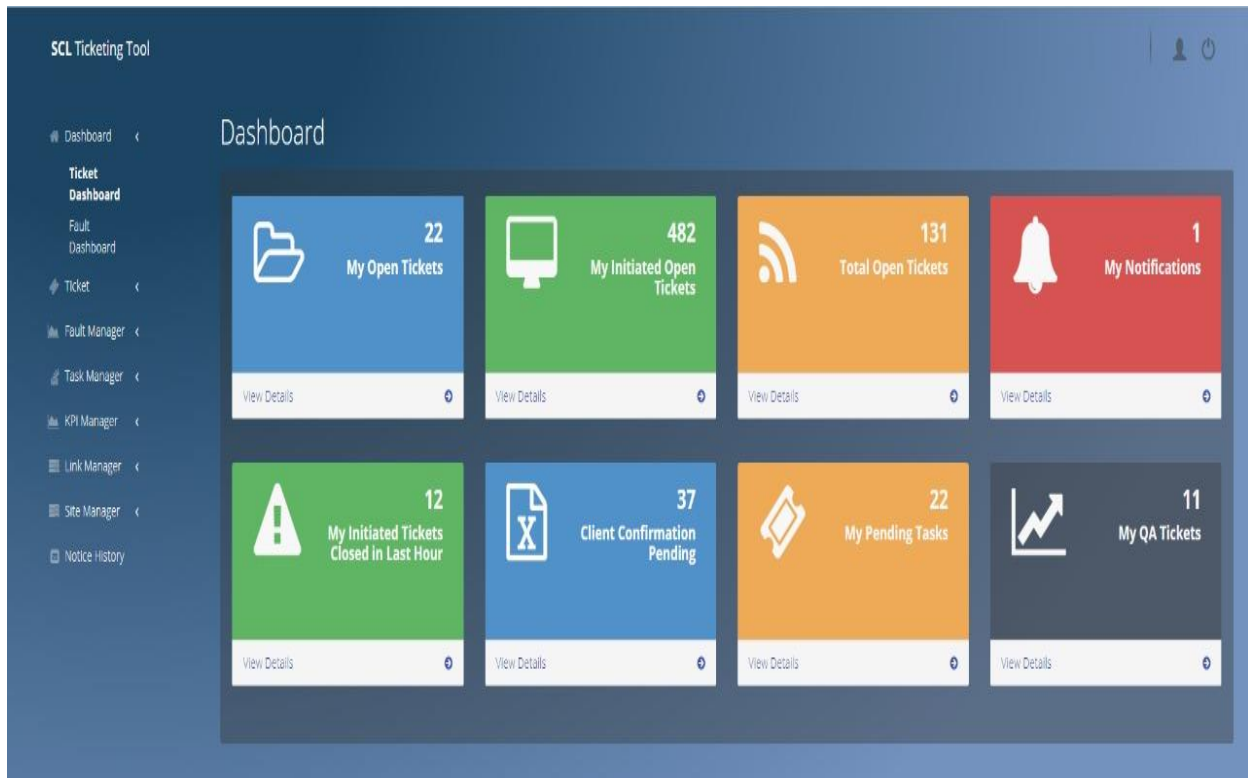


Fig5.3 : SCL Ticketing Tool (Phoenix)

This is phoenix tool or SCL ticketing tool. After getting the alarm of link down or site down in UNMS we create tickets by using phoenix tool. And again when we get the alarm of link up or site up then we close those tickets by using the same phoenix tool.

Fig5.4 : Phoenix (SCL ticketing tool)

We create tickets after receiving those alarms for those link down and site down by using ‘create a ticket’ option in phoenix tool.

When the links and sites are up we also get alarms for this in ‘ticket dashboard’ of phoenix tool.

	ASSIGNED TO	OPENING TIME	TT DURATION	STATUS	PENDING TASK OWNER DEPT	SUBCENTER	EDIT	VIEW
POP	Regional Implementation & Operations 4, NOC	2018-11-29 13:47:17	1.02 Hr	New	NOC			
	Regional Implementation & Operations 1, NOC	2018-11-29 13:18:41	1.5 Hr	New	NOC			
PH	Regional Implementation & Operations 2, NOC	2018-11-29 13:08:14	1.67 Hr	New	NOC			
	Regional Implementation & Operations 2, NOC	2018-11-29 12:50:10	1.97 Hr	New	NOC			
	Regional Implementation & Operations 1, NOC	2018-11-29 12:48:32	2 Hr	New	NOC			
	Regional Implementation & Operations 2, NOC	2018-11-29 12:24:41	2.4 Hr	New	NOC			
	Regional Implementation & Operations 4, NOC	2018-11-29 12:23:07	2.42 Hr	New	NOC			
	Regional Implementation & Operations 1, NOC	2018-11-29 11:53:47	2.92 Hr	New	NOC			
	NOC	2018-11-29 09:50:29	4.97 Hr	New	NOC			

Fig5.5 : Phoenix (SCL ticketing tool)

And then we close the ticket by using the edit option of that ticket.

5.2 Other Relevant Activities:

Even though I was assigned to IIG & ITC team to have a clear understanding of gateway and bandwidth supply. A week long rotation program was arranged. In this rotation period I had the opportunity to sit with every other team. This enabled me to gain the knowledge how every single team is supporting the whole department. I also learned about the functionality, working procedures and systems used by these teams. I enjoyed this opportunity of being able to learn the ways every team worked and surprised by the fact how vital every team operation is.

Chapter 6

Conclusion

SCL promises that their clients are successful by means of expertise and being aware of their desires, as well as running collaboratively with them to offer one-prevent quicker, fee competitive and scalable services that create aggressive advantages inside the global of digital communication. I've labored with NOC team of SCL. Right here many findings and analysis had been mentioned formerly where in the activity will have the tendencies. Doing this study i have received the functional knowledge of how router, switch are dealt with, how the network device procedure works and also learned the significance of networking in businesses. Besides understanding the company culture, this file has helped me to get a complete idea to grow in my destiny attempt. As a final point I'd say that recruitment technique of SCL is also leading-edge and pleasant as compared to different businesses inside the enterprise.

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