## **IT TRIP 2018**

**Date: 19th July 2018** 

Place Visit: Department of Information and Technology, Government of Mizoram

The meeting of department of computer science on July 2018 feels that it would be helpful if our students (BCA students) visits IT centers so as to enrich their knowledge in the IT field. So, the meeting decided to visit Department of Information and Communuication Technology, Government of Mizoram (ICT). Request letter to visit ICT department was sent to Dr. Lalthlamuana, Chief Informatics Officer, ICT by our Principal, Mr Laltanpuia which he gladly accepted..

On 19th July 2018, under the assistance of Miss M.S.Dawngliani and Sir Vanlallura, the final vear student of BCA are taken to ICT. There are 25 students present. We are fortunate to know that the ICT department deputed four staffs to demonstration their infrastructure. We are taken to State Data Centre, ICT. The rooms we visit are:

1. BMS Room:

In this room, all the room lights, doors, alarms were monitored. They can control, open and close all doors, switch on and off the light and are able to see whether alarm was trigerred or not, monitor temperature of the server room and also monitor all the visitor using CCTV from the BMC room.

2. Composite Room:

This room serves as a store room where all the extra or surplus hardware are stored.

3. Gas Bank Room:

If there is a fire and overheating, the gas which is available at the gas bank room automatically extinguished the fire. The pipe from the gas bank room directly connect to the server room. It is able to extinguished fire in less than 10 seconds. The tank is very expensive that on tank may cost above 10 lakhs. There are three gas tank which has to be replaced after 10 years. If there is a fire outsite the server room, there is fire extinguisher in every room.

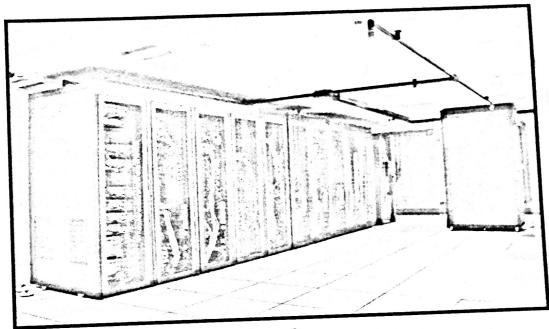
This room connect all the department through intercom. New line and damage line can be update/repair from this room

This room control all the power supply line. It is divided into different sections. The lines which are available are lights and fans, air conditioner, Uninteruppted power supply, inverter etc.

This is the main room in the state data centre. All the data are stored in this room. There are a number of server from different department like NeDP, Common service Centre, Transport, Police, Application and websites etc. Since the server produce enormous heat, an air conditioning system was installed which keep the temperature below minus degree. There are three giant power generator out of which two are operating simultaneously. If on fails the third generator is already to back up. There is also backup to all data which is connected to NIC Delhi. So data which is kept inside this server room cannot be lost as long as the world exist.

The engineers monitor all the connection to the server. The link can be seen in a monitor and if on fail, the link turn into red color, otherwise it remain green. Rapid action must be taken as soon as the link turns red.

Picure below is the main server room. We are not allowed to take pictures on the room other than the lecture room. The picture below is also taken from the official website of ICT Department. And the brief introduction of the state data centre as published from their official website is pasted below:



Server Room

State Data Centre (SDC) is one of the key infrastructure pillars that is being set up to consolidate citizen services, eGovernance applications and supporting infrastructure to provide efficient electronic delivery of G2G, G2C and G2B services. These services shall be rendered through a common delivery platform supported by other core infrastructure elements i.e. SWAN and CSC with connectivity extended up to the block level. The SDCs shall therefore enable aggregation of IT Infrastructure (Hardware, Storage, Networking and Software) and Management Resources to ensure better Operations, Standardization of Systems & management control leading to faster application deployment and reduced costs, offering dynamic scalability as their demand grows including security related requirements and uptime of the 99.749%. Thus, different line department would get a seamless, highly reliable/robust, shared, secured Data Centre infrastructure with reasonable/scalable capacity for their e-Governance application hosting infrastructure with reasonable/scalable capacity for their e-Governance application hosting requirements. SDC would provide better operations & management control and minimize overall cost of Data Management, IT Management, Deployment and other costs.



The State Data Centres (SDCs) would thus help the State Government and Departments in providing central repository (database consolidation), application consolidation, State Intranet/Internet portal, State messaging infrastructure, remote management, business continuity site etc. for their G2G, G2C service delivery and G2B services. State Data Centre would also help in providing common security infrastructure, storage infrastructure, back-up infrastructure, directory infrastructure, web servers, application servers, database servers etc. The SDC thus established would be able to meet various application hosting requirements. If the infrastructure is adequately scaled up, the SDC may take care of hosting requirements in the State for another 5 year period.

Here are some of the pictures taken in the atate data centres:



