

Computer Centre



**A Brief Profile and Progress Report
Last Five Years (2013-2019)**

Brief Profile



- Inauguration on Feb. 11, 1987.
- The Centre is providing the Computing facility for the benefit of students and staff for their enhanced learning and will continue to provide augmented research facility, which is the Prime Objective of UGC.

Brief Profile



- **Non-Teaching Staff : 4**

Name	Designation	Qualification
Mr. Manish Kumar	System Engineer	M.Tech
Mr. Praveen Kumar	Programmer	M.Tech
Mr. Vishwas Singh	Computer Operator	B.A
Mr. Surendra Singh	Farrash	

Services Provided



- DEI has unlimited license for Microsoft office provided by Microsoft which we will provide in university.
- Tally license server is installed to provide licenses in University.
- SPSS license server is installed to provide licenses for SPSS in University.
- Computer Centre has installed Auto Cad license server to provide licenses in Computer Lab and Individual user of University.
- There are sufficient Windows licenses, which we provide to different computer labs and individual users of University.
- Institute Web server and others servers are hosted and maintained by Computer Centre.
- Reliance and NKN (BSNL) Internet and other leased line are maintained by Computer Centre.

Activities of the Centre



- *The Centre provides regular Computing Facility and Printing Services to students and staff of Faculty of:*
- *Arts*
- *Commerce*
- *Education*
- *Science*
- *Social Science*
- *Women Polytechnic*
- *Engineering*

Activities of the Centre



- *Special Courses and regular Laboratory Classes for Information Technology related courses in B. Sc, BBM, B. Ed, MBA, M. Sc, Diploma in Engineering, M. Tech and for Ph. D. Scholars.*
- *The Management of Campus LAN, Internet and UGC Infonet (INFLIBNET) is the responsibility of the Centre.*

Activities of the Centre



- *Organization of Special IT Courses like Information Technology, Windows / Android Phone App Development, INFOSYS Campus Connect and Online Recruitment Test by the visiting Industry like TATA Motors etc., for the students of Engineering, community*
- *The extensive and crash training courses on IT Skills are organized for unemployed youth and are regular feature of Centre Activities in coordination with AADEIs.*

Activities of the Centre



- *Design, Development and maintenance of various Software for Administrative tasks :*
 - *Result Processing System*
 - *Payroll System*
 - *Examiners Database System*
 - *Library Management System*
 - *Essential Services Billing System*
 - *Login Record System*
 - *Network Tracking System*
 - *Ayush (Homeopathy Hospital Management System)*
- *IT Consultancy Services to various departments*

Activities of the Centre



Build In House Software for :

- *IP Management*
- *User Login / Password Management*
- *Printing Management*
- *Internet Access Monitoring*
- *Usage Time Management*

Infrastructure and Learning Resources



IT Infrastructure, as applicable

- *Networked Labs.* : **Yes.** : **1**
- *Wi-Fi Facility* : **Yes**
- *Video Conferencing Server for Online Teaching courses of Education faculty.*
- *Server Room*

Infrastructure and Learning Resources



IT Infrastructure in Server Room

- *Cisco Nexus 9508 core Switch.*
- *Cisco firepower 2140 firewall.*
- *Cisco 7200 Router provided by NKN.*
- *Cisco 6509 Switch*
- *Cisco ASA*
- *Cisco Ten Giga Switch*
- *Cisco 1 Giga Switch*
- *Cisco Wireless Controller*
- *HP ProLiant ML350 G6 Servers : 3*
- *HP ProLiant ML 110 Server : 1*
- *HP ProLiant ML 10 Gen 9 Server :1*

Infrastructure and Learning Resources



IT Infrastructure in Server Room

- *Computers for Student use* : 50
- *Cisco Manageable Switch* :4

Back UP Infrastructure in Electrical Room

- *APC 10 KVA UPS* : 1
- *APC 5 KVA UPS* : 2

Development of the Centre



- **14 Lakhs in 1985-86 for Setting up**
- **25 lakhs in 1994-95 for Upgradation**
- **50 lakhs in 1999-00 for Upgradation**
- **22 lakhs in 2002-03 for Networking and Building**
- **15 lakhs in 2006-07 for Upgradation**
- **90 lakhs in 2009-10 for Infrastructure (OBC)**
- **25 Lakhs in 2010-11 for Desktops upgrade (OBC)**
- **15 Lakhs in 2011-12 for Cisco ASA (OBC)**
- **35 Lakhs in 2016-17 for Desktops and WIFI System**
- **95 Lakhs in 2018-19 for Core switch, Cisco firepower firewall and Servers**

Total 386 Lakhs in 32 Years

Development of the Centre



2010 - 13

- ***HP Pro Desktop Computers 60 Nos.***
- ***Wi-Fi facility Installed in Campus and Residential Area***
- ***Started New Courses in Android and Windows Programming for mobile and Tablets.***
- ***Developed Several new Software for management of Centre Activities.***

Development of the Centre



2016 - 17

- **WIFI facility installed and enhanced with latest Cisco Access Points.**
- **Wireless Controller is installed in Centre to control all the WIFI access points.**
- **Upgraded 33 Desktops to latest Dell System with i7 ver 7, 3.6 Ghz, 4 core, 8 logical processors, 8GB RAM, 1 TB HDD, Microsoft Windows 10 Pro**
- **BSNL Leased Line to Amritsar, Dedhgaon, MTV Puram, Murar, Timarni ICT Centre installed in 2016.**
- **CART, Distance Education and Leather Technology Departments connected to Campus LAN on Fiber in June 2017.**
- **Women's Polytechnic connected to Campus LAN on Fiber in September 2017.**

Development of the Centre



2018 - 19

- ***Cisco Firepower 2140 NGFW Security Appliance installed***
- ***Cisco Nexus C 9508 Core Switch installed***
- ***10 more Cisco Access point 2802 installed to enhance WIFI facility.***
- ***Rack Servers for large storage for DEI website and DEILMS is installed.***
- ***Rack Server for Cisco Management Centre for managing firewall rules and access rules installed.***

Development of the Centre Cisco Wireless Controller

Cisco AIR-CA2702I-D-K9 Access Point

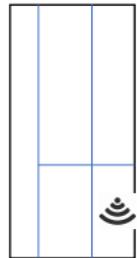
- *The Cisco 5520 Series Wireless LAN Controller is a highly scalable, service-rich, resilient, and flexible platform that is ideal for medium-sized to large enterprise and campus deployments.*
- *Its supports Cisco AIR 2700 series Access point.*
- *Optimize 802.11ac Wave 2 next-generation networks with 20 Gb throughput*
- *Support centralized, distributed, and mesh deployments*



WiFi Network



Existing WiFi MAP of DEI



Social Sciences



TC



International Seminar Hall



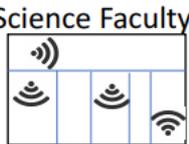
Central Library



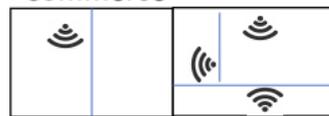
Engineering College



DES Block

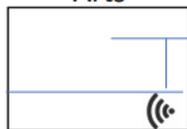


Science Faculty

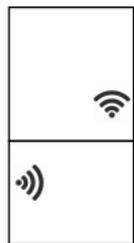


Commerce

B.Ed



Arts



Multimedia Extension

Computer Centre



ICT Building



USIC



Women's Polytechnic

WiFi Network



Existing WiFi Map of DEI



WiFi Network



Future Plan of Expansion



WiFi Network



Challenges of Best Computing Services to All



- *In present scenario, when knowledge to use computers for every job aspirant is a must, the Centre is giving best services.*
- *Every students passing out form the Institute is trained to have a good experience of use of common and advance computer applications like Word Processing, AutoCad, Visual Programming, internet surfing etc.*

Development of the Centre Cisco Wireless Controller



 Cisco 5520 Wireless Controller

AP or Client Search

Advanced



 Monitoring

 Network Summary

Access Points

Clients

 Wireless Dashboard

AP Performance

Client Performance

 Best Practices

NETWORK SUMMARY



TOP WLANS

SSIDs	No of Clients	Usage
DEI_Student	19	61.2 GB
DEIWF	5	2.4 GB

OPERATING SYSTEMS

	Name	Clients
1	Microsoft-Workstation	15
2	Android	3
3	Android-Samsung	1

APPLICATIONS

CLIENTS

Development of the Centre Cisco Wireless Controller

Apps Bookmarks Suggested Sites Imported From IE Image upload & pr... Excel Spreadsheet Microsoft Excel 200... Sample Program -... javascript - Populat... How do I expire a P... Configuring Gmail...

Monitoring

Network Summary

Access Points

Clients

Wireless Dashboard

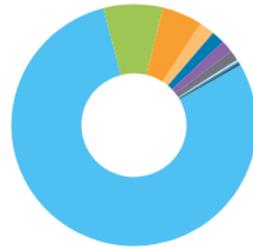
AP Performance

Client Performance

Best Practices

APPLICATIONS

BY USAGE

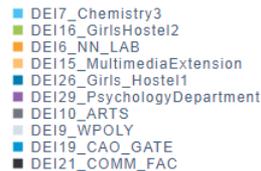


CLIENTS

	Username	Device Type	Usage	Throughput
1	Unknown	Microsoft-Workstati...	607.8 MB	14.3 Mbps
2	Unknown	Microsoft-Workstati...	160.2 MB	50.7 kbps
3	Unknown	Microsoft-Workstati...	148.4 MB	26.7 Mbps
4	Unknown	Microsoft-Workstati...	95.4 MB	1.5 Mbps
5	Unknown	Microsoft-Workstati...	95.0 MB	400.4 kbps
6	Unknown	Microsoft-Workstati...	84.6 MB	234.6 kbps
7	Unknown	Microsoft-Workstati...	56.8 MB	42.0 Mbps
8	Unknown	Microsoft-Workstati...	36.0 MB	208.8 kbps
9	Unknown	Microsoft-Workstati...	33.1 MB	113.6 kbps
10	Unknown	Microsoft-Workstati...	32.5 MB	0.0 bps

ACCESS POINTS

BY USAGE



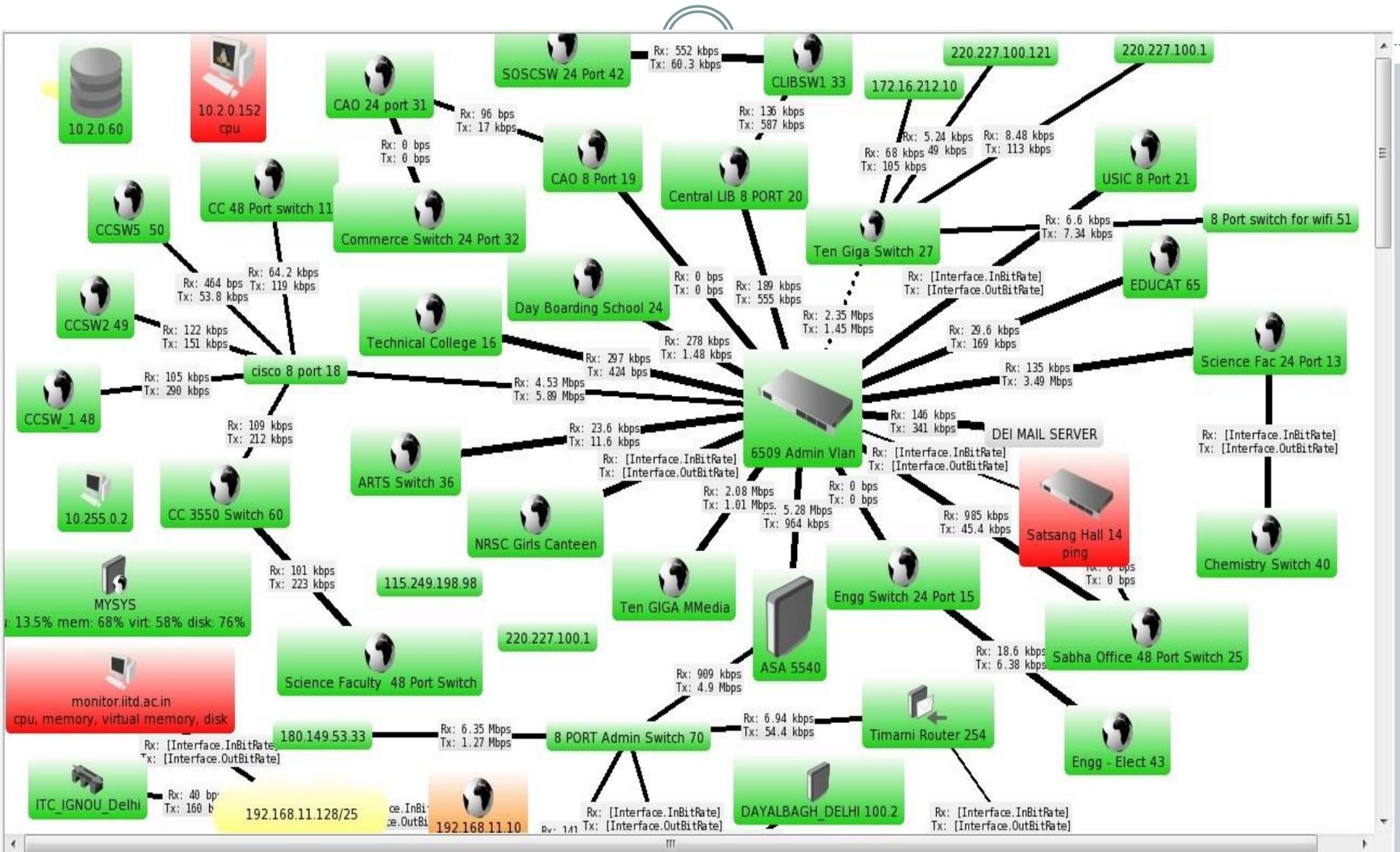
Facilities in the Centre



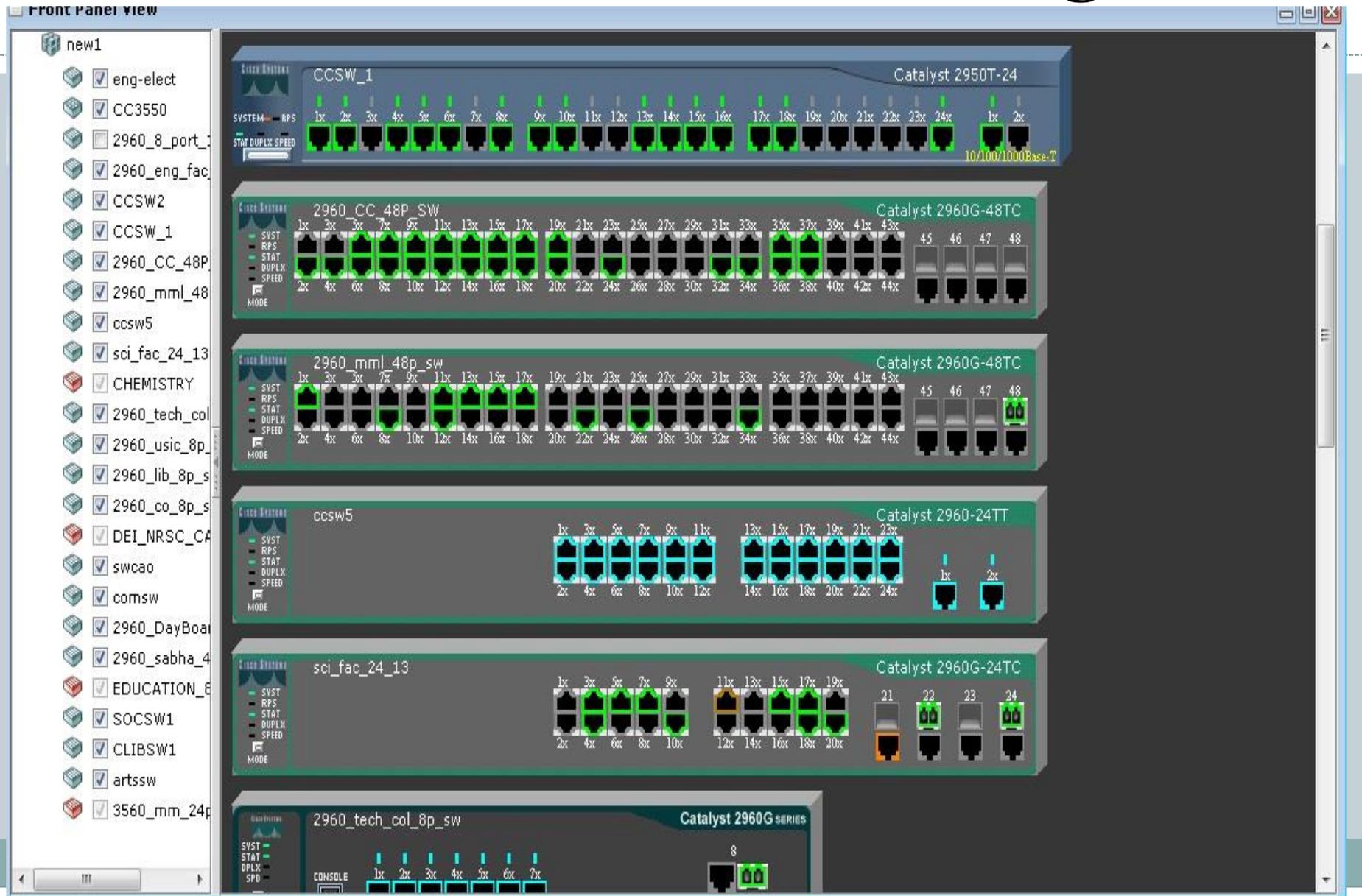
Network Management Software

- *Cisco Network Assistant*
- *DEI IP Management Software*
- *Squid Analyzer*
- *DEI User management Software*
- *DEI Printing Management Software*
- *DEI Internet Access Control Software*

University Network Diagram

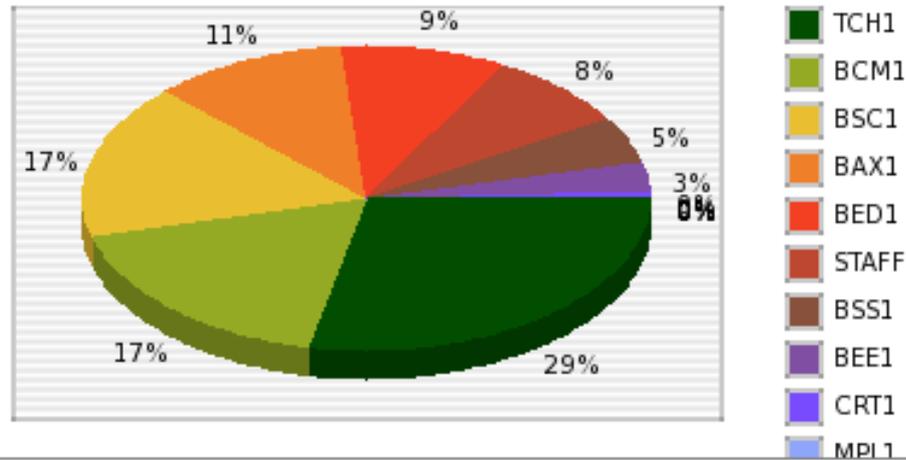


DEI Network Monitoring

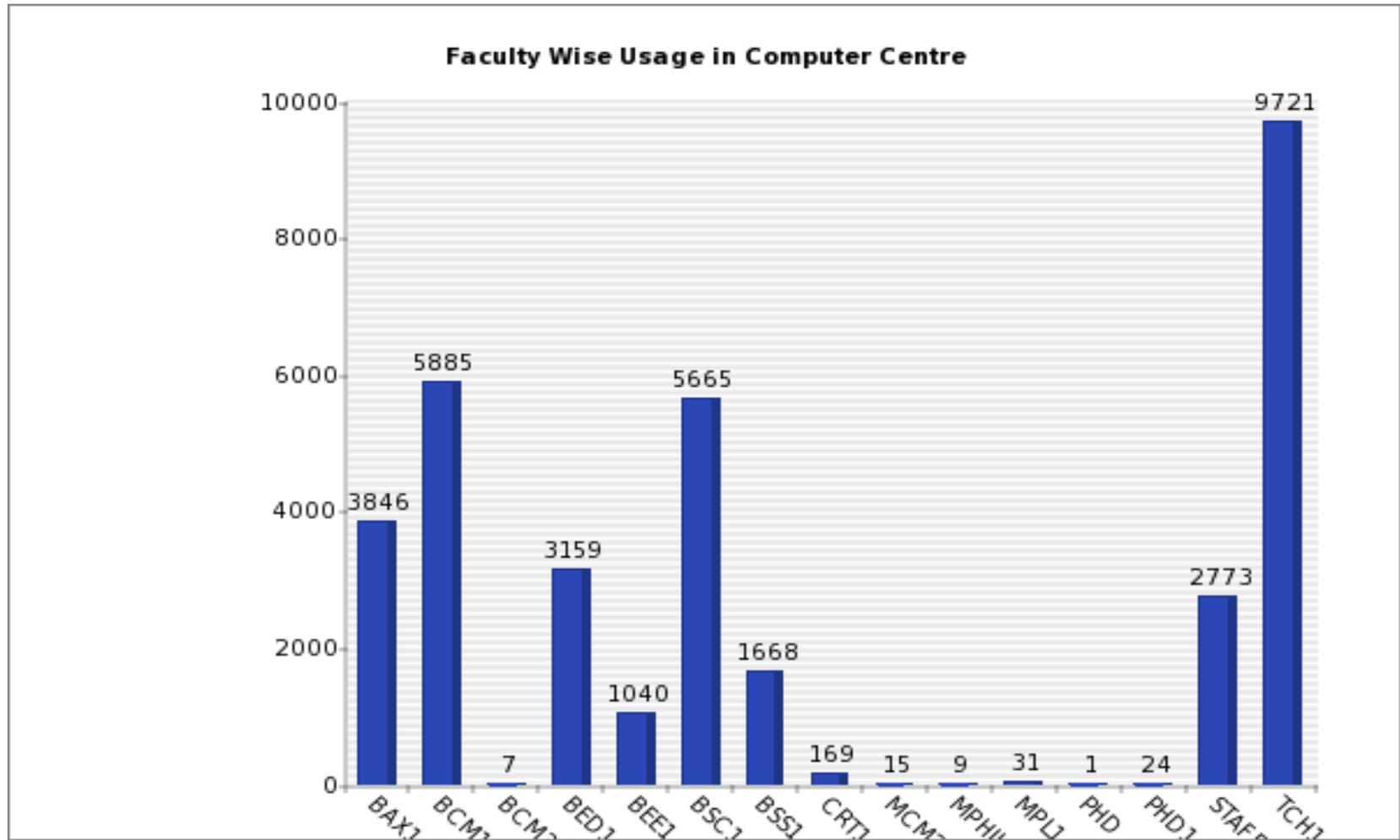


Faculties Utilization

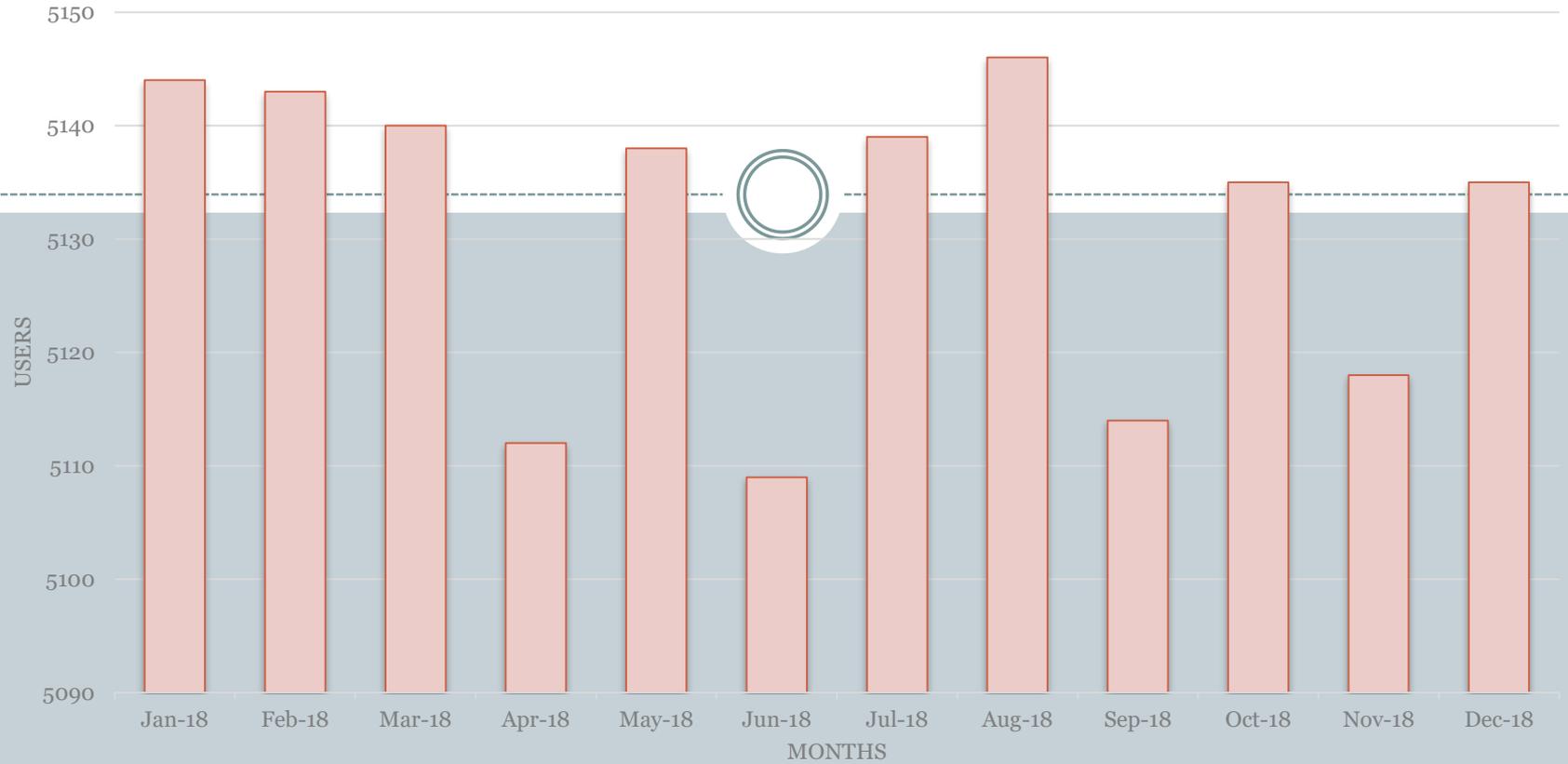
Faculty Wise Usage in Computer Centre



Faculties Utilization



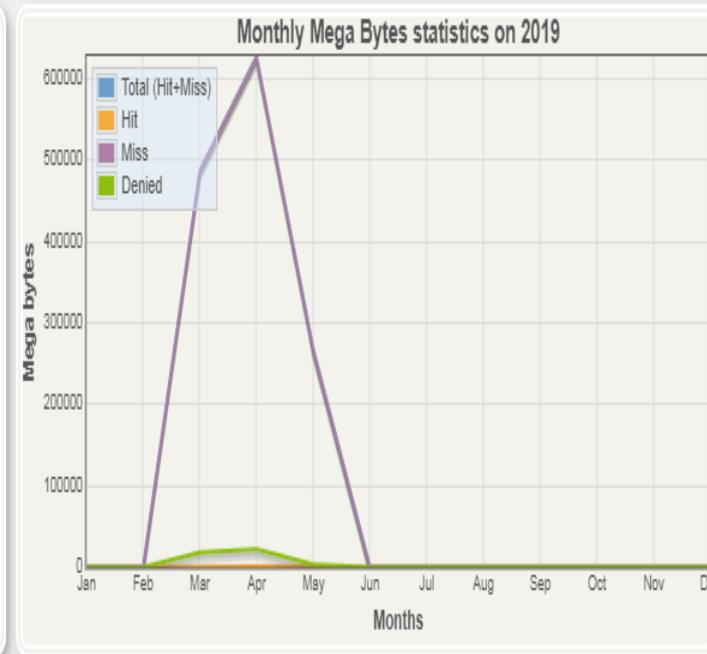
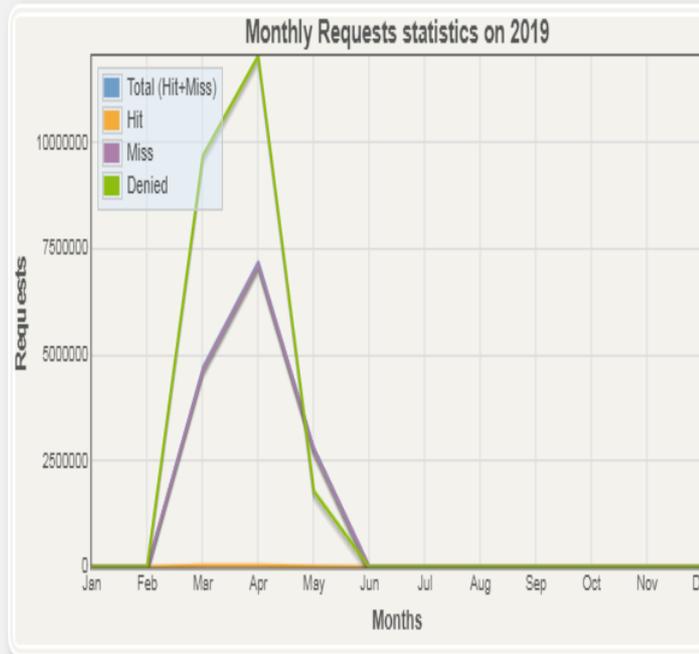
Utilization by Users



Internet Usage of University

CACHE STATISTICS ON 2019

REQUESTS			BYTES			TOTAL						
HIT	MISS	DENIED	HIT	MISS	DENIED	REQUESTS	BYTES	THROUGHPUT	USERS	SITES	DOMAINS	COST €
84561	14614814	23541070	2,410,404,212	1,380,000,465,308	43,548,968,538	14699375	1,382,410,869,520	2,393 Bytes/s	1167	71424	28730	691205.00



Internet Usage of Individual



SQUIDANALYZER

Report generated on Thu May 16 13:17:40 2019.

2019-05						
Mo	Tu	We	Th	Fr	Sa	Su
18		01	02	03	04	05
19	06	07	08	09	10	11
20	13	14	15	16	17	18
21	20	21	22	23	24	25
22	27	28	29	30	31	

USER STATISTICS ON 2019-05

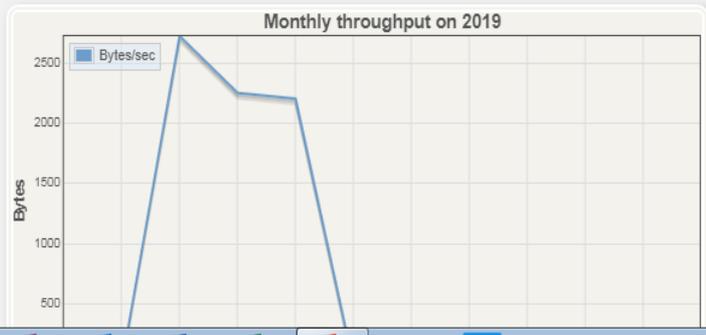
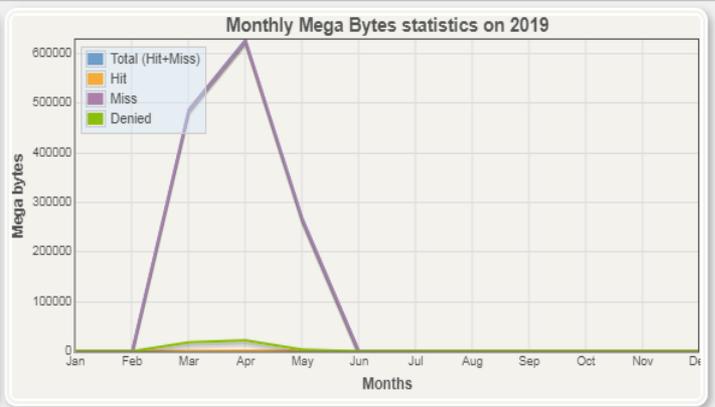
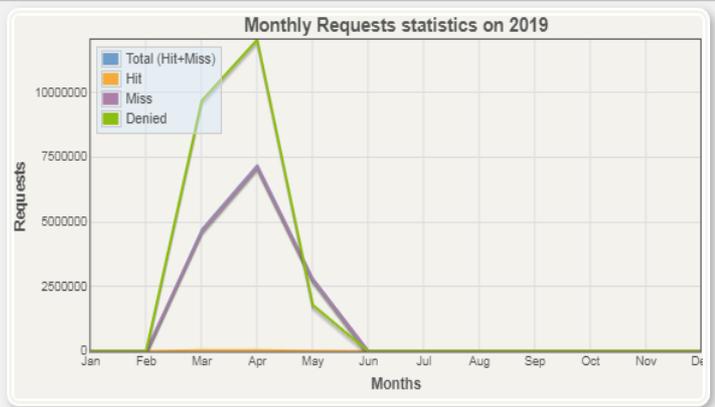
NUMBER OF USER: 694

USERS	REQUESTS (%)	BYTES (%)	DURATION (%)	THROUGHPUT (B/s)	COST €	LARGEST	URL
MAMTAMEENADEI@REDIFFMAIL.COM	126190 (4.47)	31,385,109,058 (11.73)	971:33:45 (2.89)	8,973	15692.50	528,295,206	upload.docs.google.com
DRSAHABDAS	20630 (0.73)	18,247,273,628 (6.82)	373:52:34 (1.11)	13,557	9123.50	201,758,072	ipv4-c009-bom001-ix.1.oca.nflxvideo.net
ABHIBHIRS008@GMAIL.COM	9201 (0.33)	16,076,075,515 (6.01)	216:44:17 (0.64)	20,603	8038.00	2,468,868,901	f35.megaup.net
CHANCHALBHALLA@GMAIL.COM	79770 (2.83)	14,750,406,673 (5.51)	638:35:22 (1.90)	6,416	7375.00	1,722,312,912	http://ldjosh.menoetius.bysh.me/data/iron%20man%20
DAMINICHAUDHARY100@GMAIL.COM	26048 (0.92)	14,660,525,692 (5.48)	321:14:52 (0.95)	12,676	7330.00	2,851,792,873	upload.docs.google.com
SANJAYM	47004 (1.67)	9,965,640,945 (3.72)	904:53:46 (2.69)	3,059	4982.50	672,254,476	http://51.68.154.119/getintopc.com/rs6x64.10in1.oem.
SHRADHA17.SETH@GMAIL.COM	36890 (1.31)	6,393,057,841 (2.39)	335:20:47 (1.00)	5,295	3196.50	366,953,070	p9mch.aoscdn.com
SURATPRIYARAVURI@GMAIL.COM	53977 (1.91)	5,640,432,654 (2.11)	672:59:29 (2.00)	2,328	2820.00	69,981,599	gcpvuclip-a.akamaihd.net
DHEERAJKUMAR.DEI	21599 (0.77)	5,443,644,796 (2.03)	2286:43:32 (6.80)	661	2721.50	3,552,196,477	community-static.aldebaran.com
MTVPMURUGAN@YAHOO.CO.IN	29195 (1.04)	4,647,550,167 (1.74)	616:50:29 (1.83)	2,092	2323.50	519,557,630	172.217.163.126
RUCHMEHTA0301@GMAIL.COM	98688 (3.50)	4,375,106,304 (1.64)	307:21:19 (0.91)	3,954	2187.50	64,071,344	cdn.sharechat.com
SADHANAKUMARI1523@GMAIL.COM	4768 (0.17)	4,337,094,263 (1.62)	28:34:36 (0.08)	42,158	2168.50	189,765,777	fmt.educdn.com
SUNNY	2052 (0.74)	2,428,428,502 (0.89)	17:26:44 (0.51)	54,742	4710.00	4,206,864,204	http://download.microsoft.com/506/12/mar/2019/2...

Internet User Statistics

CACHE STATISTICS ON 2019

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Utilization of Resources



- *All the Staff and Students make use of the resources of the Computer Centre facility using more than 1168 computers which are connected to the campus LAN in various departments.*
- *More than 400 students visit the Centre and use the computing facility on a normal teaching day.*



Thank you