

## 4.4 IT Infrastructure

### 4.4.1 Does the Institution have a comprehensive IT Policy with regard to:

#### 1. IT Service Management

ITS Centre for Dental Studies & Research is focused towards the applications of new technologies for easing up the day-to-day jobs and functions performed within and outside the campus. To achieve the same we at ITS CDSR are running many application to facilitate the routine works including the OPD & IPD, Resource management through ERP, and effective complaint handling and resolutions using Cloud Hosted Complaint Management System. Seamless 24\*7 availability of Internet plays a vital role for effective use of the mentioned applications.

A core IT staff team provides immediate resolutions to the user complaints and maintain the application uptime.

#### 2. Information Security

- **Server Level Security:** Quick Heal End Point Security Server Edition is installed on all the Servers to protect the Information from all Threats.
- **Client Level Security:** All the desktop machines are installed with Quick Heal End Point Security to protect the client side Information from various Threats.
- **Network Level Security:** The Campus Network is protected using UTM Device which protects the entire network from breaches and intrusion attacks from Internet.
- **Backups:**
  - **Server Side:** Daily backups of all the Servers a taken by the Server Staff on External Hard Drives.
  - **Client Side:** Daily backups are taken by the staff members of their data on External Hard Drives.

#### 3. Network Security

- **Installation of Unified Threat Management (UTM) Device:** The campus wide network is protected from the Threats which propagates from Internet using the UTM device which offers following facilities:
  - Firewall
  - Gateway Level Anti-Virus
  - Gateway Level Anti-Spyware
  - Gateway Level Anti-Malware
  - Intrusion Detection/Prevention System
  - SSL and IPSec VPN's

**Note: Please find detailed UTM Policy implementation for Authentication, Web & Application Filtration, Quota Management, QoS, and Data Transfer Limits in ANNEXURE I.**

- **Installation of Quick Heal End Point Security:** All the User Computer Systems are installed with Quick Heal End Point Security Software which offers Desktop Level Protection from Threat propagating using portable media.
- **Network/Internet Access:** Any user who wishes to access the Internet on the Campus network should be an Authorised User. Every user is provided with an individual Username and Password with which he/ she needs to logon to the Internet Access System to access the

Internet. No user without the proper Authentication Credentials can access the Campus wide network.

#### **4. Risk Management**

- Protection and Recovery from the damage caused by Threats like Viruses, Spywares, Malwares, Trojans, etc is ensured by the UTM Device and the End Point Security Solution.
- Information/Data Recovery is ensured by Backup's which are maintained by the Server Staff.

#### **5. Software Asset Management**

We indorse the use of licenced Software Applications in our campus and are holding the licences for all the Applications which are used in the campus premises.

Some of the Software's are as follows:

- Microsoft Windows 8.1 Base Licences
- Microsoft Windows Upgrade Licences
- Microsoft Office Professional
- Microsoft Windows Server
- Orion
- Tally
- Securite End Point Protection

#### **6. Open Source Resources**

We are using Linux Open Source OS at server level.

#### **7. Green Computing**

- Use of LCD/TFT monitors is promoted and most of the old CRT monitors are replaced with LCD/TFT monitors.
- AMC (by Uniline Energy System and 3eM) for the maintenance and refurbishment of the existing systems and components.
- Sale of e-waste to authorised e-waste disposal vendors.
- Refilling of the printer cartridges to help reduce e-waste.
- Power management policy on all the computer system.
  - Display: Auto turn off display after 5 min of system idle detection
  - Hard Disk: Auto turn off Hard Disk after 15 min of system idle detection
  - Full Sleep Mode: Enter full sleep mode immediately after auto turn off Hard Disk
- Turning off the systems when not in use to reduce electricity consumption and emittance of excess heat in the environment.

# **ANNEXURE I**

## **Detailed UTM Policy Settings**

### **Authentication:**

- A. Single USER ID per User (Faculty/Staff/Students).
- B. Single Device Log on (User can log on to only one device at a time).
- C. Users can Log on from Wi-Fi as well as Campus LAN.

### **Web Filter:**

#### **For Students:**

Web Portals related to the following categories are BLOCKED and the Categories marked with \* are open from 18:00 hrs to 8:00 Hrs (Will remain blocked during office hours 8:00am to 6:00pm). All the other web portals which do not fall in these categories are allowed to all the students:

- a. Porn
- b. Music \*
- c. Dating and Matrimonial
- d. Games \*
- e. Gambling
- f. URL Translation Sites
- g. Drugs
- h. Entertainment \*
- i. Swimwear and Lingerie
- j. Violence
- k. Adult Contents
- l. Nudity
- m. Alcohol and Tobacco
- n. Crime and Suicide
- o. Weapons
- p. Phishing and Fraud
- q. Hacking
- r. Mobile Entertainment \*
- s. Illegal and Unethical
- t. Audio Search \*
- u. Video Search \*
- v. SPAM URL
- w. Spyware
- x. P2P
- y. Video Files \*

#### **For Faculty:**

The above policy applies same to faculty, with the undermentioned exceptions which are allowed all the time:

- a. Audio Search
- b. Video Search
- c. Music

**For Staff:**

The above policy applies same to Staff with no exception all the above mentioned categories are blocked all the time.

**Application Filter:**

**For Students:**

All the Applications falling under the following categories are blocked a part from **Category: Streaming Media, Download Applications** is allowed to students from 18:00 hrs to 8:00 Hrs (Will remain blocked during office hours 8:00am to 6:00pm).

**Category: P2P**

Manolito P2P Search, Piolet FileTransfer P2P, NapMX Retrieve P2P, Freenet P2P, Imesh P2P, Stealthnet P2P, Bearshare P2P, Ants IRC Connect P2P, MediaGet P2P, Gnutella P2P, DirectConnect P2P, Manolito P2P Download, Phex P2P, QQ Download P2P, DC++ Hub List P2P, Kugoo Playlist P2P, Piolet Initialization P2P, GoBoogy Login P2P, DC++ Connect P2P, Klite Initiation P2P, Ares P2P, Manolito P2P Connect, MP3 Rocket Download, Souseek Retrieving P2P, Winny P2P, Soul Attempt P2P, LimeWire, VeryCD, Pando P2P, Morpheus P2P, Shareaza P2P, DC++ Download P2P, WinMX P2P, Ants Initialization P2P, Ants P2P, Tixati P2P, Miro P2P, Torrent Clients P2P, Mute P2P, Peercast P2P, Manolito P2P GetServer List, 100BAO P2P, SoMud, Souseek Download P2P, eMule P2P, Apple-Juice P2P, Vuze P2P, Flashget P2P, Napster P2P, Fileguri P2P

**Category: Proxy and Tunnel**

Ultrasurf Proxy, TOR Proxy, Your-Freedom Proxy, Kongshare Proxy, HTTPPort Proxy, Netevader Proxy, Avoidr Web Proxy, CyberGhost VPN Proxy, SurfEasy VPN, Proxyway Proxy, Proxy Switcher Proxy, Njutrino Proxy, K Proxy, Proxycap Proxy, Spinmyass Proxy, Camoproxy Proxy, Circumventor Proxy, Idhide Proxy, Lok5 Proxy, Your-Freedom Proxy, Onavo, SOCK4 Proxy, Wallcooler VPN Proxy, Proxeasy Proxy, Tor2Web Proxy, Vpntunnel Proxy, Tunnel Guru, MiddleSurf Proxy, RemoboVPN Proxy, Privatize VPN Proxy, Redirection Web-Proxy, Surrogofier Proxy, Proxifier Proxy, HTTP Tunnel Proxy, Asproxy Web Proxy, Cocoon, RealTunnel Proxy, Aniscartujo Web Proxy, Proximize Proxy, Securitykiss Proxy, Opera Off Road Mode, FinchVPN, Hamachi VPN Streaming, Air Proxy, Dtunnel Proxy, Bypassfw Proxy, Globosurf Proxy, JAP Proxy, AOL Desktop, SumRando, PD Proxy, Hide-Your-IP Proxy, Invisible Surfing Proxy, Kproxyagent Proxy, Zelune Proxy, Hide-My-IP Proxy, Proxyfree Web Proxy, VPNMakers Proxy, Tunnelbear Proxy Data, Suresome Proxy, Hide-IP Browser Proxy, Ultrasurf Proxy, Classroom Spy, Operamini Proxy, Sslpro.org Proxy, CProxy Proxy, I2P Proxy, Pingfu Proxy, Hotspotshield Proxy, Nateon Proxy, Mega Proxy, SOCK5 Proxy, Divavu Proxy, Kopard Proxy, Ztunnel Proxy, VPNium Proxy, 4everproxy Proxy, Spotflux Proxy, Proxify-Tray Proxy, Freegate Proxy, Proxy-service.de Proxy, Meebo Repeater Proxy, RPC over HTTP Proxy, FreeU Proxy, CyberghostVPN Web Proxy, OneClickVPN Proxy, My-Addr(SSL) Proxy, Vpndirect Proxy, Mysslproxy Proxy, Hopster Proxy, Skydur Proxy, Fly Proxy, HOS Proxy, Dynapass Proxy, Proxeasy Web Proxy, Anonymox, Ctunnel Proxy, Browsec VPN, DNSCrypt, WebFreer Proxy, Real-Hide IP Proxy, Telex, Expatshield Proxy, CoralCDN Proxy, PingTunnel Proxy, Socks2HTTP Proxy, Packetix Proxy, Simurgh Proxy, Ghostsurf Proxy, Puff Proxy, Auto-Hide IP Proxy,

SSlunblock Proxy, Reduh Proxy, Toonel, Btunnel Proxy, ProXPN Proxy, Glype Proxy, Manual Proxy Surfing, Vtunnel Proxy, Rxproxy Proxy, Gbridge VPN Proxy, Vedivi-VPN Proxy, ZenMate, VNN-VPN Proxy, Max-Anonymsurf Proxy, Frozenway Proxy, PHProxy, Tunnelbear Proxy Login, Gtunnel Proxy, Hola, Gapp Proxy, Psiphon Proxy, Sslbrowser Proxy, WiFree Proxy, TOR Proxy, ItsHidden Proxy, HTTP-Tunnel Proxy, ShadeYouVPN, Easy-Hide IP Proxy, IP-Shield Proxy, Justproxy Proxy, Launchwebs Proxy, Proxmachine Proxy, Hiddenvillage Proxy, FreeVPN Proxy, Tunnelier

**Category: Streaming Media, Download Applications**

Youtube Video Streaming, Youtube Downloader, Youtube Video Search, Youtube Video Upload

**Category: File Transfer, P2P**

Multiupload Download, DAP FTP FileTransfer, Torrent Clients P2P, Internet Download Manager, Multi Thread File Transfer, DAP Download

**Category: Gaming**

TrialMadness Facebook Game, World Of Warcraft Game, Hyves Games, iPlay Website, Party Poker Website, Sina Games, Steam, WildOnes Facebook Game, Kongregate Game, Blokus Game, Necromanthus Game, JungleJewels Facebook Game, Call Of Duty 4 Game, Ace2Three Game, Yoville Facebook Game, Runesofmagic Game, Scramble Facebook Game, Pogo Website, Khanwars Game, Popcap Website, FrontierVille-Facebook Games, Ragnarokonline Game, Gamespy Game, MyTribe Facebook Game, Flashgames247 Game, TypingManiac Facebook Game, Clash Of Clans, NightClubCity Facebook Game, PoolMaster Facebook Game, Facebook Games, Shockwave, AIM Games, Shockwave Game Website, Quake Halflife Game, Allslotscasino Game, Bored Website, Poker-Facebook Games, Doof Game, Winamax Game, QQ Games, Team-Fortress2 Game, PremierFootball Facebook Game, Chosenspace Game, Freeonlinegames Website, Second Life, Minecraft Games, Windows Live Games, Y8 Game, Mail.ru Games, 51.COM Games, PetSociety-Facebook Games, Poker Stars Website, Metin Game, MillionaireCity-Facebook Games, Gamehouse Website, Ibibo Game, JewelPuzzle Facebook Game, Bejeweled-Facebook Games, Armor Games, Freeridegames Website, Xbox LIVE, Bomberclone Game, Bigfishgames Website, MobWars Facebook Game, Wordfeud Game, Battle-Net, Yahoo game, MindJolt-Facebook Games, Addicting Game, MSN Games, Bet365 Game, Sploder Game, JinWuTuan Game, Baidu.Hi Games, Mafia Wars-Facebook Games, Godgame, Omerta, EA.FIFA Game, FarmVille-Facebook Games, Hattrick Game, Evony Game, Doom3 Game, TreasureIsle-Facebook Games, Bigpoint Game, Roblox Game Play, Hangame, Playstation Network, Miniclip Games, Zango Website, Pokerstars Online Game, Zynga Game, CafeWorld-Facebook Games

**For Faculty:**

All the applications falling in the above categories are blocked, only **Category: Streaming Media, Download Applications** is allowed all the time.

**For Staff:**

All the applications falling in the above categories are blocked.

**Quota Management**

Unlimited Internet usage to all the Students, Faculty & Staff Members.