

# IT Services Handbook (Ver 2.1)

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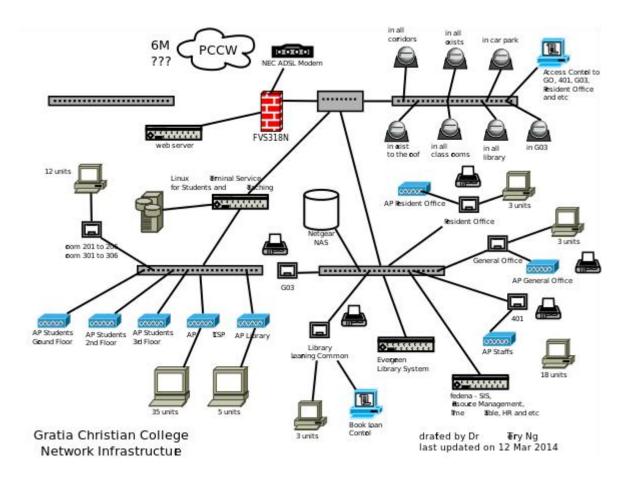
# **Section 1** Information Technology Services Office (ITSO)

#### 1.1 General Information of ITSO

- 1.1.1 The ITSO is located at G02 on the Ground floor of our campus at Ka Chi Building, 5 Wai Chi Street.
  - We recognise the importance of information technologies in learning, teaching, research and administration.
  - The College provides an extensive range of IT services and facilities to support the mission of the College.
  - We strive to be the leading institute to employ open-source strategy in the provision of all mission-critical and non-mission-critical IT services.
  - Act as the gateway to technology savvy communities to which our students are encouraged to contribute with their innovation.
  - Use of all IT services is governed by College policies (including this one) and the laws of Hong Kong Special Administrative Region.

# 1.2 The Gratia Campus Network – GNET

1.2.1 It covers the entire Ka Chi Building. The 3-layer architecture of GNET consists of the Core Layer, the Distribution Layer and the Access Layer. The 10G Ethernet Backbone of the CTNET consists of a pair of Layer-3 switches at the Core Layer and several pairs of Layer-2/3 switches at the Distribution Layer. The Layer-3 core switches and the Distribution Layer switches are interconnected using 10G Ethernet links in a mesh topology to provide path redundancy. Each pair of switches at the Distribution Layer is also connected to a number of Layer-2 switches (located inside wiring closets) at the Access Layer, forming a Distribution Group. Normally intra-group network traffic will be confined within the same Distribution Group while inter-group and off-campus network traffic will be exchanged at the Layer-3 core switches. For each Distribution Group, redundant links exist between each Access Layer Switch and the Distribution Layer switches, and Bridge Spanning Tree Protocol is used for load balancing the network traffic of various VLANs (Virtual LANs).



#### 1.3 Fixed Network Point

- 1.3.1 All classrooms are connected to the campus Gigabit Ethernet backbone as a subnet of GNET and therefore have access to all the facilities in the central host computers.
- 1.3.2 The GNET currently has a total of over 3 subnets. These subnets have standard setup for both academic and administrative departments. They support around 100 desktop computers, over 10 network printers, and provide access to software applications running under the Linux and Microsoft Windows environment. A single Lightweight Directory Access Protocol based directory service has been setup to host all staff and student LAN accounts. A central NAS with SAN storage is deployed to provide a fault-tolerant, ever-lasting file service. A CUPS server is set up to offer central print services for all departments. Most of the printers are inter-connected via the network print server devices which are capable of handling print jobs from PCs, Macs, and UNIX workstations at the same time.

#### 1.4 Wireless LAN

1.4.1 GCC WLAN is implemented as an extension to the wired network of the ITSO so that staff and students can connect easily within campus to the campus network and hence the Internet wirelessly. Currently over 15 access points are installed in Ka Chi Building covering areas including the Library, Classrooms, Computer Room and Patios. Data rate of up to 900 Mbps can be achieved with compatible device. More access points will be installed to achieve a

full-campus coverage.

# 1.5 External Connections

1.5.1 A dedicated fiber optics has been installed to provide 1 Gbps bandwidth to the Internet. A couple of fiber optics have been reserved for MetroNet connectivity to support multi-campus operation in the future.

# **Section 2 Mobile Device Ownership Scheme for Students**

#### 2.1 Provision of Mobile Device

2.1.1 Students eligible for this Scheme may be granted a mobile device from the College. Each student can only apply for one mobile device throughout their studies in GCC.

# 2.2 Eligibility

2.2.1 All full time students of GCC are eligible to apply for the mobile device. Please refer to ITSO web site for details and application procedures.

# **Section 3** IT Service Policy Statement

- Each user is given a secure Electronic ID (EID) to access IT services. Users are responsible to maintain the security of their EIDs as they may be held accountable for all activities performed under their EIDs.
- Users are expected to use IT services with courtesy, respect and integrity.
- Users must not interfere with the work of other users or alter the integrity of IT services and facilities provided by the College.
- Users must not use IT Services for any illegal or unauthorized purpose such as conducting unauthorized commercial activities.
- Users are expected to use electronic communication (email, web content, real time chatting, forums, etc.) in an ethical and responsible manner and in compliance with generally accepted e-politeness applicable to the networked computing environment.
- Users must not attempt to gain unauthorised access to data, nor breach any security measures on any electronic communications system.
- Users must observe the Copyright Ordinance. Software or electronic contents without proper license are not allowed to be stored in computer equipment or used in IT facilities of the College.
- Users must adhere to the Personal Data (Privacy) Ordinance in all activities involving collection, processing and use of personal data.
- Users must observe all regulations governing a specific IT service.
- The College reserves the right, without the user's prior consent, to inspect, monitor or disclose
  any data stored on the College's IT services if there is compelling evidence of violating
  College policies and Hong Kong laws or adversely affecting the normal functioning of the
  College's IT environment.
- Failure to comply with this Policy may result in suspension or termination of some or all IT services provided to the users. Student and staff members may also be subject to College disciplinary action.
- This policy may be revised from time to time by the College.
- Windows based system and software is available to staff whose duty require:
  - Frequent handling of document exchange with external parties.
  - Use of application that is only available in the Windows platform.
- Teaching Materials and Assignment
  - All teaching materials should be readable by open-source software.
  - All assignment should be prepared with open-source software.

# **Section 4** Facilities Managed by the ITSO

#### 4.1 Central Server Room

4.1.1 Located in a specially designed room in G02, it has independent power line and air conditioning to ensure the highest availability of all IT Services. Multiple servers are hosted in a secured rack preventing unauthorized access to sensitive data.

# 4.2 General Computer Rooms

- 4.2.1 There are two general computer rooms. The one in G02 is reserved for students to support their learning in the College. All terminals are connected to a dedicated Linux Terminal Server that they provide all up-to-date software packages and a secure and safe storage of data which can also be accessed through WiFi and the cloud computing platform. Students can access all resources with their EID.
- 4.2.2 The other computer room is located in Room 401. It is dedicated for teaching staff. A mixed operating system environment, namely Linux and Windows, is maintained to achieve shorter training time for teaching staff who have limited operating experience with OS other than MS Windows.

### 4.3 Multifunction Printer, Scanner, Copier

4.3.1 High-end multifunction printers are installed in strategic locations, such as the Information Commons, to facilitate printing and digitisation of learning materials. These multifunction printers are networked and fully integrated to our on-campus storage systems.

<u>Model</u>	Colour/ Monochrome	Scanning	Paper Size	Location
Ricoh Aficio MF 9002	Monochrome	Yes	Up to A3	Registry
Ricoh Aficio MF 3002C	Colour	Yes	Up to A3	G03 Computer Room
Ricoh Aficio MF 3002C	Colour	Yes	Up to A3	Library
Ricoh Aficio MF 3002C	Colour	Yes	Up to A3	2 <sup>nd</sup> Floor
Ricoh Aficio MF 3002C	Colour	Yes	Up to A3	3 <sup>rd</sup> Floor
Ricoh Aficio MF 3002C	Colour	Yes	Up to A3	401 Staff Room
Ricoh Aficio MF 3002C	Colour	Yes	Up to A3	402

4.3.2 Printing quota policy has been implemented to facilitate resource planning of paper and toner. The default printing quota for a student is 600 pages per academic year. Printing fee of HK\$0.3 per page will be applied thereafter.

#### 4.4 Classrooms

- 4.4.1 Classrooms are equipped with the following equipment:
  - a Desktop PC with multimedia DVD drive
  - a projector
  - a visualiser
  - an audio system
- 4.4.2 Lecturers can access to their data folder and teaching materials by logging into the LTSP system with EID.
- 4.4.3 WiFi connection is available for students to access to electronic teaching materials.

### **Section 5** Offered Services

# 5.1 Hardware Supported by ITSO

- 5.1.1 The following hardware are being offered by the ITSO:
  - i. Networking
    - 1. Internet connection (1G Trunk)
    - 2. Local Area Network
    - 3. WiFi Network in campus
    - 4. Firewall
    - 5. Proxy Internet Connection
  - ii. Server Room
    - 1. Servers running Linux/Windows
    - 2. Uninterpretable Power Supply
  - iii. Security Systems
    - 1. Video Surveillance System
    - 2. Staff and Student IC Card Management
    - 3. Door Access Control
  - iv. Audio Visual Equipment in Classroom
    - 1. Projectors
    - 2. Amplifier
    - 3. Visualiser
  - v. Library
    - 1. Projectors
    - 2. Audio System
    - 3. Chromecast (Video display through WiFi)
  - vi. Photocopiers and scanners
  - vii. Desktop PC
    - 1. Linux (90%)
    - 2. Windows (10%)
    - 3. Mac
  - viii. Tablet Computers
    - 1. RemixOS (80%)
    - 2. Lenovo (20%)
  - ix. Data Storage System (Google Drive, NAS and RAID)
  - x. Data Backup System

### 5.2 Software Supported by ITSO

The following software are being supported by ITSO:

- 5.2.1 Operating System
  - Ubuntu 14.04 (Linux)

• Windows 7

#### 5.2.2 Office Suite

- LibreOffice (Openoffice)
- WPS
- Desktop Publishing (scribus)
- MS Office 2013
- Google Document

### 5.2.3 Storage

- RAID storage (22T)
- Google Drive (unlimited)

#### 5.2.4 Internet Browser

- Firefox
- Chrome
- Internet Explorer
- Proxy Connection

### 5.2.5 Anti-virus Program (MS Windows OS only)

• NOD32

#### 5.2.6 Multimedia Software

- GIMP (Photoshop like image editor)
- Dia (Vector based drawing program)
- Technical Drawing (LibreCAD)
- Audacity sound editor
- eBook Library Catalog system (calibre)
- VLC Player (multi-platform media player)
- Flowblade movie editor

#### 5.2.7 School Administrative Packages

- Student Information System (OpenSIS)
- Learning Management System (Moodle)
- ePortfolio System (Mahara)
- Admission System
- Locker Allocation System
- Integrated Library System (SLS)
- Facility Booking System (MRBS)
- General Computing Platform (Linux Terminal Server Program)

- Web Site Content Management System (WordPress)
- File sharing (Samba)
- Directory Service (LDAP)
- Printing Management System

# **Section 6** Electronic Mail Service Policy

The Electronic Mail service (email) is intended for the communication among users (students, faculty and staff) at Gratia Christian College. The College provides electronic communication resources to support its work of teaching, scholarly research, and public service. It provides a convenient, speedy, cost-effective and environment friendly form of communication as compared to printed communication. Because of this increasing reliance and acceptance of electronic communication, email is considered an official means for communication within the College.

Implementation of this policy ensures that users have access to this critical form of communication. For the majority of users, this will not represent any change from what is currently done; it will, however, ensure that all students can access, and be accessed by, email as needed.

#### 6.1 Scope of Policy

This email policy provides guidelines regarding the following aspects of email as an official means of communication:

- College use of email;
- Assignment of email addresses;
- User use of and responsibilities associated with assigned email addresses; and
- Expectation of email communication between faculty and student, staff and student and external party and student.

#### 6.2 Policy

#### i. College use of email

Email is an official means of communication within College. Therefore, the College has the right to send messages to students via email and the right to expect that those communications will be received and read in a timely fashion.

#### ii. Assignment of email addresses

Information Technology Services Office will assign all users an official College email address. It is to this official address that the College will send email communications; this official address will be the address listed in the Student Information System for that student.

#### iii. Redirecting of email

User may have email electronically redirected to another email address. If a user wished to have email redirected from his or her official address to another email address, they may do so, but at his or her own risk. The College will not be responsible for the handling of email by outside vendors or by departmental servers. Having email redirected does not absolve a user from the responsibilities associated with communication sent to his or her official email address

#### iv. Expectations regarding the use of email

- Users are expected to check their official email address on a frequent and consistent basis in order to stay current with College communications. The campus recommends checking email once a week at a minimum, in recognition that certain communications may be time-critical.
- Members of the College, all employees, students, appropriate affiliate student organisations, appropriate affiliated staff and associates, are responsible for information contained in electronic communications to their official College email account.

#### v. Educational use of email

Faculty may determine how email will be used in their classes. It is highly recommended that if faculty have email requirements and expectations they specify these requirements in their course syllabus. Faculty may expect that users' official email addresses are being accessed, and faculty may use email for their courses accordingly.

### vi. Appropriate use of email

In general, email is not appropriate for transmitting sensitive or confidential information unless its use for such purposes is matched by an appropriate level of security.

- Confidentiality regarding user records is protected under the Personal Data (Privacy) Ordinance (Cap 486).
- Email shall not be the sole method for notification of any legal action.

#### vii. Official communications sent on behalf of the College

When sending official mass electronic communications, care must be taken to:

- ensure the message delivery does not adversely affect the network, email routing or mail server infrastructure;
- ensure that communications are consistent with the College policy;
- not hinder the ability to validate that an electronic communication is legitimate.
- All official mass electronic communications sent on behalf of the College, including, but not limited to, promotions, awareness, invitations, and notifications, shall originate from authorised College domains.
- All official mass electronic communications sent on behalf of the College should only contain web address links to authorised College domains.
- To assist in validating the legitimacy of a communication the College shall publish copies of official mass electronic communications in the College web portal until no longer needed for reference.

### 6.3 Review procedure

This policy is subject to review by the Vice President (Administration) on a need basis. Users with questions or comments about this policy should contact the ITSO.

# **Section 7 Proxy Connection**

The GCC Proxy Connection is intended for all College members to gain access to electronic resources, <u>such as the Databases subscribed through the GCC Library</u>, that are limited to the College members only. To access online resources through the campus network, your network settings need to be configured to route network traffic through the college proxy server.

You are reminded that all Internet traffic to and from your device will be routed through the college proxy server. In case of internet service interruption, please restore your network settings accordingly. You don't need to connect to the proxy server if you are connected to the campus network.

The proxy server is available at proxy.gcc.edu.hk. Please refer to the Automatic Proxy Setting document, which is available in the ITSO website, for configuration details.

# **Section 8** Learning Management System (Moodle)

#### 8.1 Introduction to Moodle

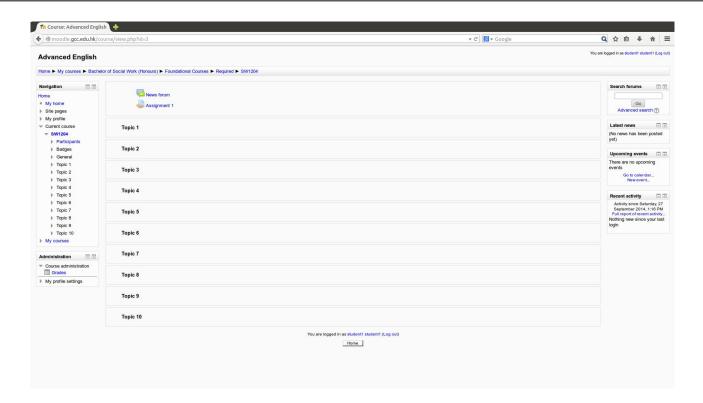
8.1.1 It is one of the most popular LMS used by many higher institutes to facilitate communications between lecturers and students. It can be accessed from Internet or the GCC Campus network.

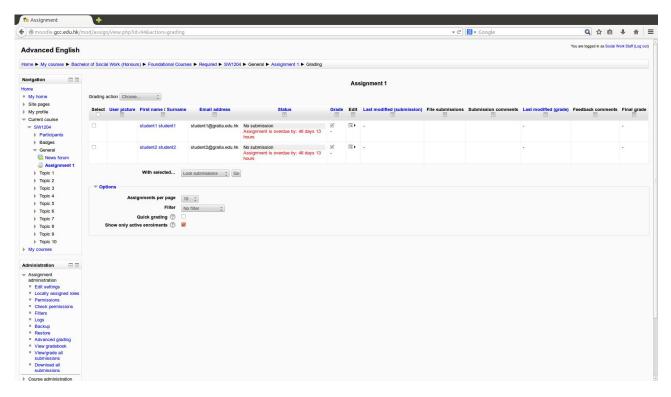
#### 8.1.2 Lecturers can:

- Manage multiple classes
- Distribute lecture notes
- Assessment:
  - Create on-line assessment
  - Distribute assessment requirement
  - Collect assessment from students
- Hold discussion with groups of students
- Submit result of assessment or examination to registrar
- Take attendance
- Perform grade distribution analysis

#### 8.1.3 Students can:

- Get updated information, such as time table, of registered courses
- Receive lecture notes
- Hold discussion with Lecturers and classmates
- Hand in assessment
- Perform course registration
- Consult result of assessment or examination

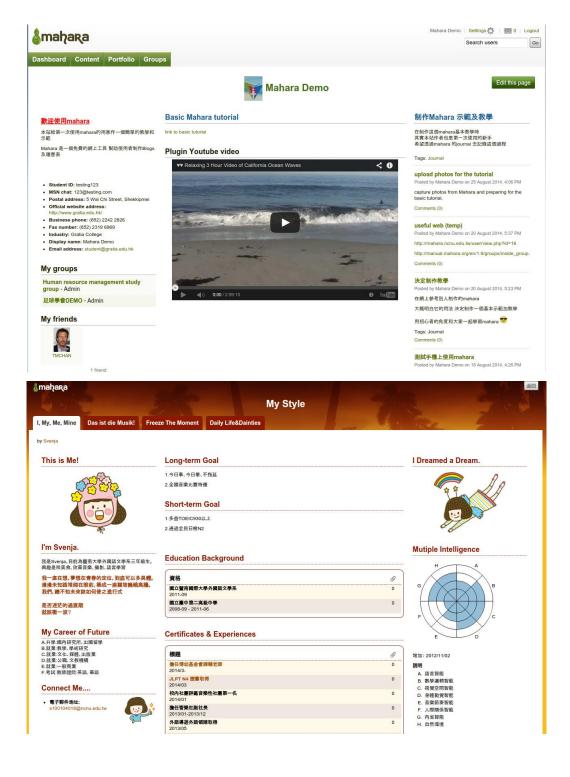




# Section 9 ePortoflio System (Mahara)

#### 9.1 Mahara

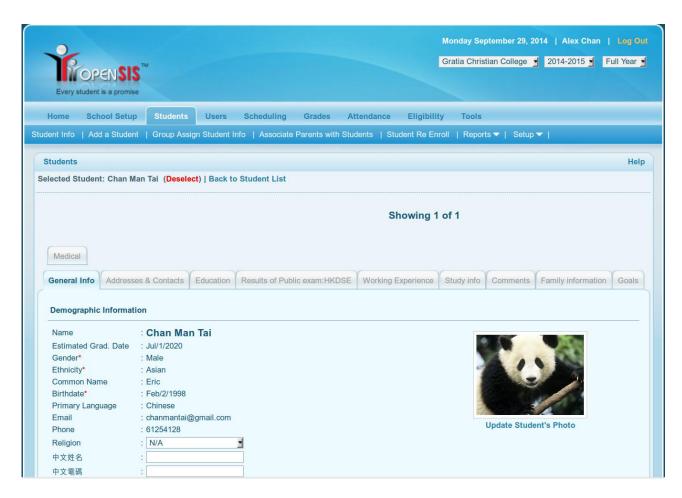
9.1.1 It is a social network alike system that is designed for learning experience sharing. Students are encouraged to publish information of their choice. Classmates are able to learn from each other by sharing their information related to non-formal learning, such as the General Education courses.

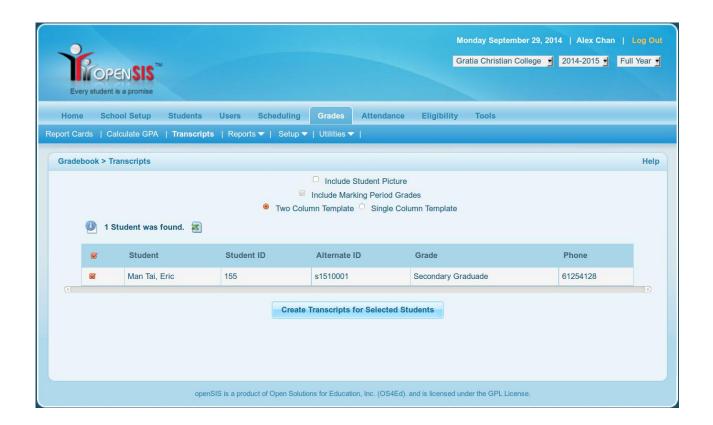


# **Section 10 Student Information System**

#### 10.1 Student Information System

- 10.1.1 The SIS is designed to handle sensitive student information. It is a closed system designed for keeping information of all students. It is only accessible from within the GCC Campus Network by authorized personnel, e.g. the Registrar. Multi-level of access can be configured to protect access of information from unauthorized personnel.
- 10.1.2 Who is it for? Registrar, Lecturers and Course Administrator
  - Particulars of students
  - Entrance academic result
  - Programme Information
    - Course Information
    - Academic record
    - o GPA
  - Disciplinary Record
  - Transcript printing
  - Report printing





# **Section 11 IT Service Reporting Procedure**

### 11.1 Information for Reporting

- 11.1.1 Please note down the following before reporting any incident:
  - Name of service/software
  - Date and Time of the incident
  - Details of the thing that you cannot do with (1)

# 11.2 Methods of Reporting

- 11.2.1 You may report the incident through:
  - Telephone (ext 450)
  - eMail (itso@gratia.edu.hk)
  - Writing

# 11.3 Results of Reporting

- 11.3.1 Upon receiving the incident report, you may be offered with:
  - solution(s) to the reported issue
  - explanation to the cause of the issue
  - a projected time frame of solution delivery

# **Section 12 IT Service Requesting Procedure**

# 12.1 Information for Request of Service

- 12.1.1 Please note down the following before requesting a new IT service:
  - Brief description of the request
  - Name of concerned service/software

### 12.2 Methods of Making a Request

- 12.2.1 You may send in your request through:
  - Telephone (ext 450)
  - eMail (itso@gratia.edu.hk)
  - Writing

# 12.3 Results of the Request

- 12.3.1 Upon receiving a request, you may be offered with:
  - an alternative to your requested service
  - a tentative solution to your requested service
  - a projected time frame of solution delivery

# **Section 13 ITSO Service Charter**

- We promise to respond to all IT Service Report/Request within 60 minutes after receiving a report/request from the users.
- We promise to safe guard the privacy and security of your data stored in the systems that are managed by us.
- We promise to ensure high availability of software and hardware systems on campus.
- We promise to ensure smooth access to external resource by maintaining an effective liaison framework with relevant service providers.

# **Section 14 Contacting the ITSO**

# **14.1 Methods of Contact**

# 14.1.1 The ITSO can be contacted by:

• email to itso@gratia.edu.hk

• telephone: 58044148 or ext 450

• Whatsapp (for selected users)

• website: http://itso.gcc.edu.hk