NORTHERN LIGHTS COLLEGE

Modification of Information Technology Infrastructure

Policy Number:	TBD
Category:	Administration
Approval Date:	May 7, 2014
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POLICY

No modifications to the Northern Lights College Information Technology infrastructure will be made without the written approval of the Director of Information Technology Services or his / her designate.

PURPOSE

- Ensure compliance with Information Technology governance processes through:
  - Controlled change management processes by:
    - ensuring changes are:
      - compliant with regulatory requirements
      - consistent with organizational and departmental goals, strategies, and operational plans
      - beneficial to the organization
      - carried out using approved methodology
    - enabling changes to be tested, monitored, and documented
- Ensure Northern Lights College business continuity through a stable and robust Information Technology computing and communications environment
- Ensure consistent, efficient, and effective customer service
- Facilitate the effective growth and maintenance of Northern Lights College Information Technology resources
- Ensure the appropriate use of Northern Lights College human, technological, and financial resources

PROCEDURE

- If a work order request is made to provide customer support that requires modifications to the Northern Lights College Information Technology infrastructure:
  - the designated IT team member who is responsible for creating and assigning the work order (Helpdesk technician or relieving staff member, herein after referred to as the Helpdesk) will escalate the work order to the Director of Information Technology Services or his / her designate (herein after referred to as the Director) for approval
  - the Director will review the work order request to determine whether or not he / she is able to approve or deny the request based on the "Approval Criteria" (see below)
    - if approved, the Director will send the work order request, marked "Approved", back to the Helpdesk for work order creation and assignment

  - □ if denied, the Director will send the work order, marked "Denied", back to the Helpdesk for work order request denial
  - □ if more information is required to make an approval / denial decision, the Director will contact the Helpdesk or the requester, asking for more information, until the work order can be approved or denied
- Requests to perform modifications to the Northern Lights College Information Technology infrastructure, not requested through the work order system will be in written form containing the following information:
  - o purpose of the requested modification(s) – *Why are you wanting to do this?*
  - o date and time that modifications will occur – *When are you planning to do this?*
  - o detailed description of the requested modification(s), including: - *What are you planning on doing?*
    - □ which device(s) / function(s) will be modified
    - □ what modifications will be made to each device / function
    - □ time required to complete modifications
  - o impact of the requested modification(s) to the infrastructure – *How is this going to change the infrastructure?*
  - o impact of the requested modification(s) to the NLC users and business continuity such as outages or training – *How is this going to impact the users?*
  - o impact and risks of not completing requested modifications – *What if we don't do this?*
  - o risks and mitigation strategies – *What could go wrong and how are you going to make sure it doesn't?*
  - o testing / monitoring strategies – *How will you ensure it works as expected?*
  - o reversal plan in the event that the requested modification(s) is / are detrimental or ineffective – *If it goes wrong, how are you going to put it back the way it was?*
  - o expected financial implications of the modifications – *How much is this going to cost or are we going to save money?*
    - □ In the event of project work that requires yet unknown modifications, a detailed project description is required. The plan will include as much of the above information as possible and enough information to make an approval decision.

DEFINITIONS

General use(r)
A general use device is defined as computing / communications system that is not performing server based functions. General user is defined as a computer / communications user that is not an Information Technology department member or a member of the Northern Lights College Administration.

Information Technology Infrastructure
For the purpose of this document, Information Technology infrastructure is comprised of, but not limited to, the following components and functions:
- Physical and virtual servers and their hosts and operating systems
- Switches
- Routers

- Fibre optic and copper based cabling
- Firewall appliances
- Wireless network controllers
- Wireless access points
- Network Access Control (NAC) appliances and / or services
- Virtual Local Area Network (VLAN)
- Network routing
- Storage Area Network (SAN)
- Network Attached Storage (NAS)
- Data backup devices and / or services
- Dynamic Host Configuration Protocol (DHCP) appliances and / or services
- Domain Name System (DNS) services
- Electronic mail systems and / or services
- Active Directory structure and / or policies
- Videoconferencing devices
- External vendor owned / maintained devices and / or services attached to NLC network
  - Direct Digital Control (DDC) devices and / or services
  - Security / Fire / Alarm devices and / or services
  - Provincial Learning Network (PLNet) devices and / or services
- Core telephony devices and / or services
- Emergency Notification system devices and / or services

Not included in this definition are the following components and / or functions:
- General use desktop / laptop / mobile computers
- Desktop / Mobile telephones and accessories
- Wall to device cabling for general use desktop / laptop / mobile computers
- Active directory
  - General user password reset
  - General user account create / disable / enable
  - Add / remove computer to / from domain
- Port VLAN tagging for general use desktop / laptop / mobile computers
- Regularly scheduled Microsoft Windows Server security updates (i.e.; "Patch Tuesday")
- External vendor owned / maintained devices and / or services attached to NLC network, if the work is performed by NLC Facilities department members as part of their normal job duties.

Modification
Addition, removal, and changes to physical, logical, and virtual devices and their configuration that affect function, operation, settings, or location.

Written Approval
Written approval will be in the form of:
- an email sent to the IT team member who will be performing the modification with explicit approval for specific actions to be performed
- an approved and assigned work order

PROCESS:

Approval for modifications to the Northern Lights College Information Technology infrastructure will be based on the following "Approval Criteria":

- Meets regulatory requirements
- Meets NLC goals, strategies, and operational plans
- Meets IT departmental goals, strategies, and operational plans
- Is beneficial to NLC
- Meets budgetary requirements
- Will not excessively affect business continuity
- Will contribute to infrastructure stability
- Will contribute to consistent, efficient, and effective customer service
- Will contribute to effective growth and maintenance of Northern Lights College Information Technology resources
- Will be carried out using approved methodology
- Is properly researched and planned
- Will be performed by suitable IT personnel or contractor
- Will be an appropriate use of Northern Lights College human, technological, and financial resources
- Contains detailed enough information to make an informed decision

STAKEHOLDERS

N/A (College-Wide Policy)

Amendment History

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May 2019