



CONESTOGA

Connect Life and Learning



Student Name:	
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Deliverable:	NTWK8140 Practical Assignment #2
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Course Name:	NTWK8140
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Date Assigned:	
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Date Due:	
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Rules:	<ul style="list-style-type: none">• Individual.• Cheating is not allowed.• Plagiarism counts as cheating!• That FAILURE to submit work in the course can result in a grade of 'F' or 'I' for failure to complete the course!
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Deliverables

****This assignment has 3 parts, a hand-in/build-book, a demo of the guacamole and reverse proxy servers, and a practical skills demo focusing on material from weeks 9-14.****

The final Linux assignment will be to install the software Guacamole on two **headless (no GUI)** Linux Server VM's (One Ubuntu, One Fedora or Rocky). Guacamole will create an RDP over html connection to a Windows 10 or 11 VM and a Windows Server VM. From there you will use a **Reverse Proxy** with **Load Balancing** on a third headless Linux VM using Apache to the url: <http://www.linuxtest.ca>.

- One Guacamole server VM must be Debian/Ubuntu Based Headless Server and the other must be Red Hat Based Headless Linux Server (No GUI's allowed).
- NO external install/configuration scripts are allowed. You must install and configure all parts of this assignment manually.
- For guacamole user logins you must use the usermapping.xml method for users on Ubuntu, and LDAP on Red Hat.
- Each Guacamole server must have a unique landing page/login page (Put Ubuntu/Fedora in the title of the login screen)

On a separate GUI machine (not one of the computers configured in the project) you will open a web browser to <http://www.linuxtest.ca> and you should see the Guacamole portal. Connect to the each windows machine. Open the CLI on your Guac server and RP server and prove the connections.

You will be required to demo RDP links from a browser on any machine to each Windows machine. You may be required to demonstrate any or all steps of this assignment.

Please see the links below (you may need to google for updated links) for assistance with the guacamole software:

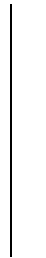
<https://guacamole.incubator.apache.org/> <https://guacamole.incubator.apache.org/doc/0.8.4/gug/guacamole-architecture.html> <https://deviant.engineer/2015/02/guacamole-centos7/>
<https://thatservernerd.wordpress.com/2016/02/> <http://lostdomain.org/2014/06/23/installing-guacamole-html5-remote-desktop/>

All connections between VMs should resolve DNS connection properly. Please provide a screen shot of the uermapping.xml in Guacamole, and for the final grade I will be walking around and asking the connection to be demonstrated.

Evaluation

Your evaluation will be held to the following rules and constraints. These rules are firm and are irrefutable.

- Failure to submit this completed deliverable will result in a grade of zero (0) on this deliverable. ○ There will be no opportunity provided to make up for this missed deliverable or raise your grade.
 - In the instance that the failure to submit this work results in a grade of zero (0) that ultimately causes an overall course grade below fifty-five (55) then there will be no opportunity to perform any work, tests, activities or tasks to raise your grade above the failing mark.
- It is the student's responsibility to ensure that their work has been submitted through eConestoga, on-time, to the correct course and in the correct folder.
 - If you submit your work to the incorrect folder then you may not receive any grade for your work. This will be completely up to the discretion of your Instructor.
 - If you, the student, submit your file to the wrong folder or course on eConestoga then you must simply resubmit to the correct folder.
- To pass this course you are required to submit every single deliverable. ○ If you have failed to submit any work by the end of the course your Instructor reserves the right to assign a final course grade of incomplete (I) or failure (F) for your performance in the entire course.
- Submission Details



FILE NAMES

All submissions must adhere to the programs naming convention. For details regarding this naming convention documentation can be retrieved from the *How-To* module, within the *Support* module for your course on eConestoga, file name "O3 - Student Submissions Naming Convention - ver1.0.PDF." If this is group work you must include your group members names within your work and within the NOTES section of your dropbox submission. Submitting your work with an improper file type may result in a grade of zero (0) being assigned.

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ACADEMIC HONESTY

- 1) By submitting your work through Conestoga College's eConestoga dropbox you hereby affirm that;
 - a. You are in complete understanding of, and accept in full, the *Academic Integrity Policy* and *Violation of Academic Integrity Policy* of Conestoga College. If you are not familiar with these policies it is your responsibility to familiarize yourself with them, in full, before submitting any work through eConestoga.
 - b. The work that you have submitted is your own work and has not been: taken, replicated, duplicated or copied in any way from any source inside or outside of the classroom.
 - c. Your work will be retained and indexed by Turnitin.com for academic honesty and comparison purposes.
- 2) If you share your work with, or use the work of, others then your grade, along with the grade of any other participating¹ student, will be adjusted to reflect this infraction and you will face academic penalties² including, but not limited to;

¹ Participation includes both unknowing participation as well as willful participation in any activity that results in academic misconduct.

² No refunds will be made available to any student who has been discontinued from their program due to violations of academic policy.

- Discontinuance for Conestoga for a minimum of 12 months and a failing grade for all current courses. •
- A failed grade for the course and suspension from Conestoga College for an undetermined length of time.
- A failed grade for the course, which may result in your inability to continue in your Program.
- A failed grade for the deliverable on which the *Academic Integrity Policy* was violated.

3) Turnitin.com will compare the values and data of each student submission against submissions from;

- Your current classmates, including all submissions they have made in the past or present.
- Former students of your program as well as students from other intakes for your program.
- Students enrolled in any course or program at Conestoga College, past or present.
- A perpetually growing database of work from 26 million students from Colleges and Universities worldwide.
- More than 12 billion webpages including all mainstream data sites, repositories and wikis.

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- Direct quotations taken from any source will be identified by Turnitin.com and will require Instructor review, it is, therefore, imperative that you cite any work(s) taken from other sources following proper APA form
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