# ITAS362 Unit 5 Lab

## Introduction

LabSim Security Pro is used to provide a simulated, hands-on laboratory for the purposes of learning about important security concepts. In an online environment it is impossible for students to work directly with security mechanisms in administrative scenarios. Therefore, LabSim is the tool that supports students in their pursuit to understand difficult concepts in an online environment.

Use of LabSim Security Pro requires a one-time registration process. You should have received an activation code from the bookstore (Words of Wisdom). Notify the bookstore immediately if you have not yet received your activation code. Contact them at [aiuonlinebooks@wordsofwisdombooks.com](mailto:aiuonlinebooks@wordsofwisdombooks.com).

Instructions for accessing LabSim can be found in the Course Materials section. You can also contact your instructor with any questions. You will have access to Security Pro for 36 months (3 years) from the date of registration.

Note that LabSim Security Pro is aligned with CompTIA’s Security+ certification. CompTIA suggests that individuals pursuing certification in this area have approximately two years of experience in IT administration with Security focus. Completing this lab will not qualify you to complete the exam. One must complete several courses in order to cover all the concepts included in the certification exam. Further, completing the coursework does not conclude with automatic certification. Those students who wish to pursue certification may do so outside the classroom. For those students that qualify, they may contact the Registrar’s office for receipt of a discounted certification voucher honored by CompTIA.

LabSim Security Pro is aligned with (ISC)2 SCCP (Systems Security Certified Practitioner )certification exam. Completing this lab will not qualify you to complete the exam. One must complete several courses in order to cover all the concepts included in the certification exam. Further, completing the coursework does not conclude with automatic certification. Those students who wish to pursue certification may do so outside the classroom.

***Hardware Requirements***: Refer [here](http://www.testout.com/home/support/quick-start-guides/system-requirements) to verify that you meet the necessary Hardware Requirements. Note that you will need speakers.

***Expected Time for Completion*: Eight (8) hours or more depending on time necessary to familiarize yourself with tool**. You may complete the tasks in numerous iterations. You do not need to complete all the lab tasks in one sitting.

## Lab Description

Upon completion, you will:

* describe malware and password attacks;
* explain system hardening and enforcement;
* describe Linux and file system security;
* describe redundancy, backup and restore, and cloud storage relative to security;
* configure systems security mechanisms;
* back up workstations and domain controllers.

## Lab Tasks

Each Module contains numerous Sections. The last section in each Module is a Practice Exam. The Practice Exam is **not** required. Taking the Practice Exam is **optional**. The results of the Practice Exam do **not** impact your course grade one way or the other.

All Module Sections (excluding the last Section – Practice Exam) are required unless otherwise designated.

### Module 7.0 Host Defenses

Section 7.1 Malware(Review video, demos and **simulation**: 7.1.1, 7.1.4, 7.1.5, **7.1.6**)

Section 7.2 Password Attacks (Review video and demos only: 7.2.1, 7.2.3, 7.2.4)

Section 7.3 Windows System Hardening (Review video, demos and **simulations**: 7.3.1, 7.3.3. 7.3.4, **7.3.5,** 7.3.6, **7.3.7**, 7.3.8)

Section 7.4 Hardening Enforcement (Review video, demos and **simulation**: 7.4.1, 7.4.2, 7.4.3, **7.4.5**)

Section 7.5 File Server Security (Review video, demo and **simulations**: 7.5.1, 7.5.4, **7.5.5**, **7.5.6**)

Section 7.6 Linux Host Security (Review video and demo only: 7.6.1, 7.6.2)

### Module 9.0 Data

Section 9.12 Redundancy (Review videos, demo and **simulation**: 9.12.1, 9.12.2, 9.12.4, 9.12.5, **9.12.7**, 9.12.8)

Section 9.13 Backup and Restore (Review video, demos and complete **simulations**: 9.13.1, 9.13.4, **9.13.5**, 9.13.6, 9.13.7, **9.13.8**, 9.13.9)

Section 9.14 Cloud Storage (Review video: 9.14.1)

The above Section includes a number of hands-on activities. Be sure to complete the following:

7.1.6 Configure Windows Defender

7.3.5 Configure Automatic Updates

7.3.7 Configure Windows Firewall

7.4.5 Manage Services with Group Policy

7.5.5 Configure NTFS Permissions

7.5.6 Disable Inheritance

9.12.7 Configure Fault-Tolerant Volumes

9.13.5 Back Up a Workstation

9.13.8 Back Up a Domain Controller