

# CIS-481: Introduction to Information Security

## InfoSec Chapter Exercise #10

**Team: Seven**

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### Logistics

- A. Get together with other students on your assigned team in person and virtually.
- B. Discuss and complete this assignment in a collaborative manner. Don't just assign different problems to each teammate as that defeats the purpose of team-based learning.
- C. Choose a scribe to prepare a final document to submit via Blackboard for grading, changing the file name provided to denote the number of your assigned **Team**.

### Problem 1

Name and describe the four basic conversion strategies discussed in the text that may be used when converting to a new system. Under which circumstances would each be considered the right approach? (10 points)

- **Direct Changeover:** Also known as going "cold turkey," this conversion strategy involves stopping an old system and starting a new system with no overlap. The biggest drawback is that users can be without service if the new system needs maintenance for a specific problem. Circumstances where this would be considered the best approach would be employees being required to use a stronger type of password or when a new firewall is implemented into a system.
- **Phased Implementation:** This is the most common conversion strategy; it involves bringing out part of a system and disseminating it across an organization before the next piece is implemented. An advantage of this is the idea of users getting used to the system a little bit at a time and getting used to any issues that come up. A circumstance that this strategy would be the best is if an organization is looking to update both its VPN and IDPS systems. It can introduce one of them first, let the organization get used to it, and then introduce the other.
- **Pilot Implementation:** This type of conversion strategy is when an entire security system is implemented in a single place such as an office, department, or division before it expands to the rest of the organization. The group that this system is implemented to is referred to as the "guinea pig" and if any issues arise, then they can be handled by the small group before it interferes with the rest of the organization. A circumstance that this strategy would be the best is if an organization is looking to test out a firewall. They can implement it to a small group and if any major issues arise, then they know not to implement it to the rest of the organization.
- **Parallel Operations:** This type of conversion strategy involves implementing and running the new system alongside the old one. This is the most complex of the conversion strategies, however, an advantage of this is that if the new system fails, the old one can serve as a backup for an organization. Although, the biggest drawback to this is having to maintain both systems at the same time. A circumstance that this would be used for is trying to run two different firewalls at the same time.

**Problem 2**

Complete Exercise 1 from p. 576 of the text. Model your WBS on Table 10-1 from p. 541 of the text. Assume that work on the project may begin as early as next Monday. (15 points)

Task or Subtask	Resources	Start & End Dates	Estimated Effort in Hours	Estimated Capital Experience	Estimated Noncapital Experience	Dependencies
1 Contact field office and confirm network assumptions	Network Architect	S: 06/29 E: 06/29	2	\$0	\$200	
2 Purchase filter						
2.1 Order filter through purchasing group	Network Architect	S: 06/30 E: 06/30	1	\$0	\$100	1
2.2 Order filter from manufacturer	Purchasing group	S: 07/01 E: 07/01	2	\$18000	\$100	2.1
2.3 Filter Delivered	Purchasing group	E: 07/10	1	\$0	\$50	2.2
3 Configure filter	Network Architect	S: 07/10 E: 07/12	75	\$0	\$800	2.3
4 Package and ship filter to field office	Student Intern	S: 07/13 E: 07/22	2	\$0	\$85	3
5 Work with local technical resource to install	Network Architecture	S: 07/25 E: 07/31	75	\$0	\$600	4
6 Purchase technical support with training allowance	Purchasing Group	S: 08/01 E: 08/01	1	\$0	\$3240	5
7 Install software component on administrators desktop	Administrator	S: 08/03 E: 08/07	4	\$0	\$550	6
8 Purchase subscription list of sites to be blocked	Administrator	S: 08/08 E: 08/08	1	\$0	\$3000	7
9 Filter test						

9.1 Request filter test	Network Architect	S: 08/10 E: 08/10	1	\$0	\$100	8
9.2 Preform filter test	Filter test team	S: 08/12 E: 08/19	9	\$0	\$900	9.1
9.3 Verify results of filter test were passing	Network Architect	S: 08/20 E: 08/22	2	\$0	\$200	9.2
10 Get remote office sign-off and update all network drawings and documentation	Network Architect	S: 08/23 E: 09/01	8	\$0	\$800	9.3
11 Weekly administrative functions are performed	Network Architect	S:09/02	208	\$0	\$0	10