# CIS-481: Introduction to Information Security

**InfoSec Chapter Exercise #10**

**Team: Project Team 11**
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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)*

**The four conversion strategies:**

1. **Direct Changeover:** When the old system is terminated, and the new system implemented after the old one's termination. There is no overlap, so there will be only one acting system at a time. The new system can continue where the old one left off; business will continue as usual. This sort of conversion strategy is used when the company wants to change their firewall. The old one must be terminated before the new one is implemented.
2. **Parallel operations:** Where the new system and the old system are both used. This sort of conversion will provide a smooth transition from the old system to the new system. This strategy is used when a backup system is needed. The old system can act as a backup system when converting to the new system. If the new system fails the old one will continue to provide service in its place.
3. **Phased Implementation:** Can be described as the implementation of a part of the new system and the termination of a part of the old system. This helps the organization introduce new security concepts to employees without overwhelming them with too many new policies. This strategy can be used when introducing a new security policy to the organization. One department will implement the policy one week, and a new department will implement the policy the week after.
4. **Pilot Implementation:** The implementation of a new system into a single department in the organization. After the system has finished its test run in one department, it can be implemented into the entire organization. It should be used when there is a department that can be used as a test subject. This department must be either cut off from the rest of the company or not pertinent for daily business operations.

**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 point)*

**WBS Table**

| Task or Subtask | Resources | Start and End date | Estimated Effort in Hours | Estimated Capital Expenses | Estimated Non-Capital Expense | Dependencies |
|---|---|---|---|---|---|---|
| 1 Contact field office to confirm the problem. | Network architect | S: 6/29<br>E: 6/29 | 2 | $0 | $200 | |
| 2 Purchase filtering device hardware | | | | | | |
| 2.1 Order filtering device through purchasing group | Network architect | S: 6/30<br>E: 6/30 | 1 | $0 | $100 | 1 |
| 2.2 Order filtering device | Purchasing group | S: 7/1<br>E: 7/1 | 2 | $15000 | $100 | 2.1 |
| 2.3 filtering device delivered | Purchasing group | E: 7/10 | 1 | $0 | $50 | 2.2 |
| 3 Implement the filtering device into the system | Network architect | S: 7/10<br>E: 8/4 | 150 | $0 | $1500 | 2.3 |
| 6 Work with the technical support to install and test | Network architect | S: 8/5<br>E: 8/12 | 4 | $3240 | $400 | 3 |
| 7 Purchase software component that will runs on the administrator's desktop | | | | | | |
| 7.1 Purchase software online | Purchasing group | S: 6/30<br>E: 6/30 | 1 | $550 | $50 | 1 |
| 7.2 install software | Network architect | S: 7/1<br>E: 7/1 | 2 | $0 | $200 | 7.1 |
| 8 Purchase a monthly subscription: (provides the list of sites that need to be blocked) | Purchasing group | S: 8/13<br>E: 8/13 | 1 | $250 | $50 | 4 |

**Exercise Notes:**

- **Problem:** Sequential Label and Supply has a problem with employees surfing the Web to access material the company deems inappropriate for a professional environment.
- **Solution:** Implement filtering device
- **Time it takes to implement:** 150hrs
- **Price:** $18000
- **Technical support cost:** 18%  * $18000 = 3240
- **Software component that runs on the administrator's desktop:** $550
- **monthly subscription (provides the list of sites that need to be blocked):** $250 per month
- Four hour per week are required for administrator functions

**Estimated Non-Capital Expenses:**

- Network architect will be paid $100 per hour
- The purchasing group will be paid $50 per hour