Description: This course will introduce a scenario based on a new contract that has been awarded to your IT Telecommunications Company. The company’s main focus is on the installation of communication networks for government agencies and prides itself on meeting contractual agreements on time with professional installations. This contract stipulates that all networking communications must be in place and running at full capacity in order to meet the terms of the contract. There is one primary term to the contract that must be met without exception: Our client, a division of The Department of Homeland Security in Virginia, must have all communications completed and running at full capacity in time for them to meet a mandate by the President of the United States on airline security. Failure to meet this term will result in penalty fees and possibly the loss of future contracts with the government. To heighten the urgency to complete the contract on time, there are rumors of possible terrorist activities that are making this contract top priority for the safety of the traveling public.

Justification: The justification for this simulation (course?) is to prepare participants for what they will be responsible for on the job and to ensure they meet the guidelines and intentions set forth for the simulation. Due to the needed increases in the knowledge of IT professionals, this course was designed to stimulate new learning skills, strengthen managerial and designing skills, as well as high level networking skills. Successful candidates will receive the benefit of utilizing state of the art equipment and being part of a high-level IT installation that can boost their career opportunities. Also, through the use of remote access systems, design simulations, and documentation software, students will benefit from having access to this training from outside the classroom environment at times when it is convenient for them to work on it. This same distance learning scenario can be utilized in business practices to promote accuracy, speed, and performance baselines for its workers. Prior to the implementation of remote access and simulation software, the cost for utilizing equipment to produce these scenarios was very high; basically these barriers limited what the learners were able to accomplish. Therefore, businesses who promote the use of simulations and other forms of remote or distance learning may see benefits that can be to their advantage as well as the learner. In my opinion, the advantages to using simulation software in learning environments is nothing short of positive due to the impact I have seen personally. For example, simulation software like Boson Netsim, Boson Netsim Designer, Packet Tracer, and Microsoft Visio, all provide benefits that include the participant learning how to use the different software packages effectively and obtaining a more concise, thorough knowledge of networking systems and their configurations; of course this is not to say that simulations work in every learning environment.
**Target Audience:** The target audience for this training includes individuals either enrolled in the VCCS networking curriculum or has advanced training in IT Communications. Participants taking this course will enhance their knowledge and abilities to perform in various mission critical situations that require a moderate to advanced level understanding of IP Digital Networks. The roles of the participants will be self-motivated participation during team discussions, individualized thinking to promote independence, and being able to speak comfortably in group environments to convey ideas or concerns. The progression of the simulation during this training will be defined on a point-to-point basis as determined by the team leader. It is important to note that time constraints are in place, but should be adequate for proper understanding and implementation.

The basic skills and concepts that will be covered in this course include learning how to work in teams, demonstrate aggressiveness with thoughts and ideas, provide positive reinforcements of desired skills through the use of simulations, provide basic knowledge required to formulate designs into a concise networking diagrams to support the scenario, and finally the understanding of what is expected from the IT field and what goals each participant should have.

**Framework:** The President of the United States has mandated that a control center be put in place immediately to address the security issues of our airlines. This facility must be configured for network communications including data and voice and linked to the White House for monitoring and remote access. Each team will be assigned a designated location in the training room, provided blueprints of the government facility, given technical specifications for all cabling requirements, and finally all the necessary equipment needed to produce an effective simulation training session.

**Anticipated Events:** Some anticipated events that participants of the simulation may expect to do include designing strategies, documenting results, and implementing all the necessary equipment and computer systems to complete the contract. Team leaders will be responsible for the final submission as well as obtaining all necessary hardware and software for this simulation. Each team leader will be given all the necessary routers, switches, and workstations to complete this simulation and it is the responsibility of the team leader to make sure equipment is issued correctly.

**Projected Sequence:** The projected sequence of events may include:

1. Students will enter the training simulation room and be placed into their teams by the instructor.
2. Students will be given the contract to review.
3. Team leaders will be chosen based on voting of individual team members.
4. Each team’s participants will work together to formulate a plan of action to complete the contract including delegation of duties to help meet the time requirement of the simulation. Student conversation should be a driving force in the success of the best team.
5. After completion of the terms of the contract, students will be evaluated by the instructor to verify all requirements are met and within the specified time period.

I suggest that you include opportunity for the players to ask for more information, tools, materials, equipment, etc. of which you may give them or not. Also, you could send in modifications to the
contract as they are working (like government always dies) that send them back to retooling their ideas and products. Think of this as a series of problems (events) you give the participants that are based on the overall contract. Make it real!