

Assignment NIST SP800-125

Guide to Security for Full Virtualization

For this assignment, you will need to download and read the Executive Summary and Chapter Two, "Introduction to Full Virtualization," from NIST's Guide to Security for Full Virtualization.

NIST Guides are online at:

csrc.nist.gov/publications/PubsSps.html

After you have completed the reading, briefly, and completely, answer the following questions. Place your answers into a file (text, doc, or html format) and save it. During the next class, you will receive credentials for your online portfolio where you will then upload your work.

1. How does NIST define virtualization?
2. What does NIST cite as some full virtualization advantages?
3. What distinguishes the different forms of virtualization?
4. What is the motivation for full virtualization?
5. Compare and contrast single vs multiserver virtualization.

Assignment NIST SP800-145

NIST Definition of Cloud Computing

In this assignment, you will download and read Chapter Two from the NIST Definition of Cloud Computing.

You can find NIST publications online at:

csrc.nist.gov/publications/PubsSps.html

After you have completed the reading, briefly, and completely, answer the following questions. Place your answers into a file (text, doc, or html format) in preparation for uploading to your online portfolio.

1. From NIST's perspective what are Cloud Computing's five essential attributes?
2. What are the three Cloud Computing service models that NIST cites?
3. What are the four Cloud Computing deployment models that NIST cites?

Assignment NIST SP800 - 146

Cloud Computing Synopsis and Recommendations

This NIST publication describes cloud computing benefits and presents an overview of major classes of cloud technology. It also provides organizational guidelines.

Because cloud computing is not a single kind of system, but instead spans a spectrum of underlying technologies, configuration possibilities, service models, and deployment models, some early attempts to describe cloud computing in general terms proved problematic. The NIST document that you read for this assignment attempts to remedy that by describing cloud systems and discussing their strengths and weaknesses.

For this assignment, you will download and read the chapters specified in Table One from NIST's "Cloud Computing Synopsis and Recommendations. "

Executive Summary
Cloud Computing Definition
Typical Commercial Terms of Service
General Cloud Environments
Software-as-a-Service Environments
Platform-as-a-Service Cloud Environments
Infrastructure-as-a-Service Cloud Environments

Table One: Chapters

You can find the NIST Special Publications online at:

csrc.nist.gov/publications/PubsSps.html

After you have completed the reading, briefly, and completely, answer the following questions. Place your answers into a file (text, doc, or html format) and upload it to your online portfolio.

1. What are the two parts of a consumer's terms of service for cloud computing?
2. What is a Service Level Agreement (SLA)?
3. What is a Service Agreement?
4. What are the three main parts of a cloud provider's service agreement?

5. How do customers access a cloud?
6. What is the general architectural model employed in cloud computing?
7. In a cloud context, what is a security perimeter?
8. Describe the risks associated with using a multi-tenancy on-site-private cloud.
9. In a public cloud, what are some of the systems that network dependency is associated with?