

System Administration & Security

By: Tyler Chotikamars

Title Page

Tyler Chotikamars

University of Arizona

CYB 300 System Administration & Security

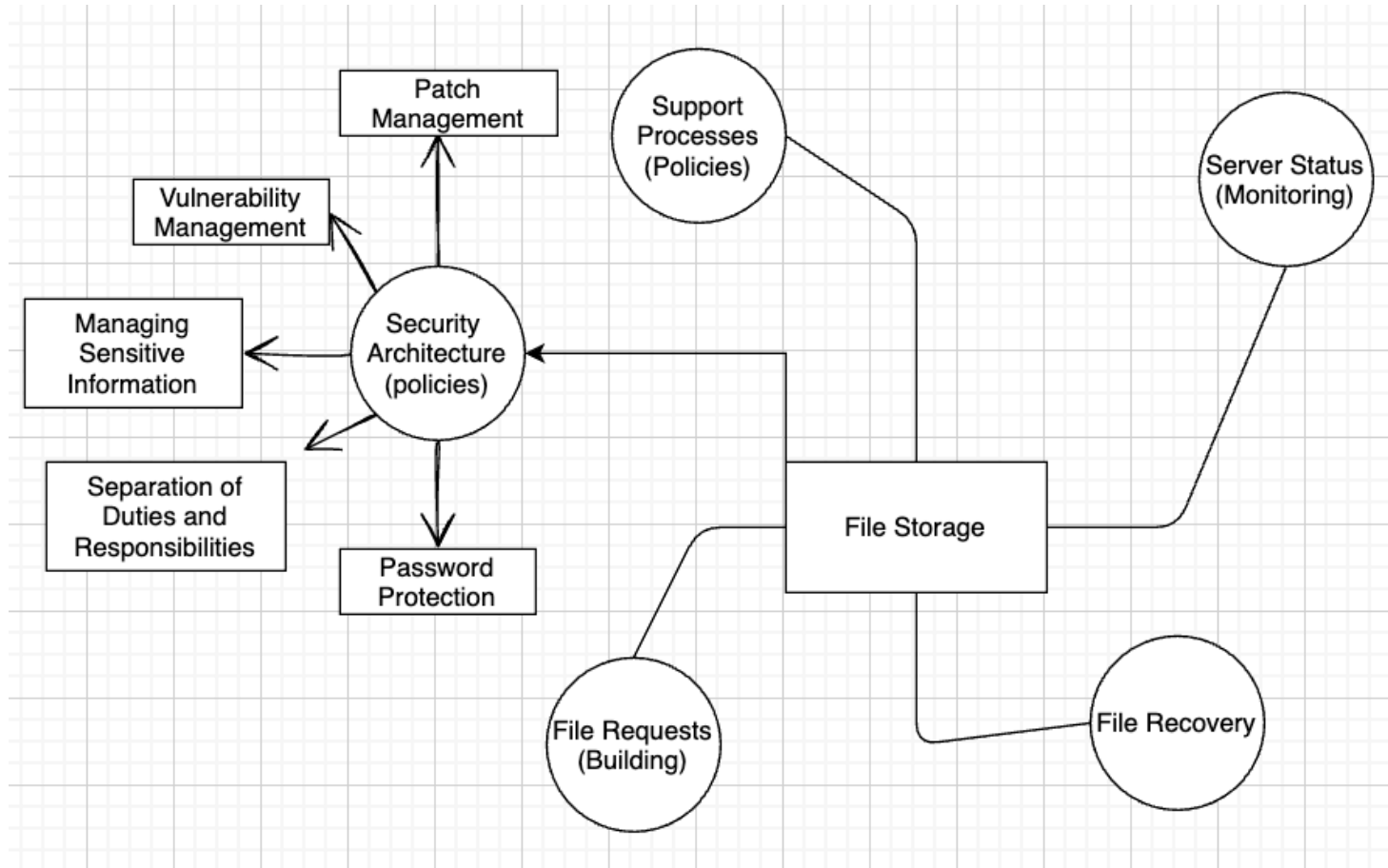
Bipin Bhatt

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How Technology Affects Your Organization

- Now-a-days technology is a part of every business/organization that operates. Gone are the days of barter trading where records are kept on paper only.
- Technology affects how your organization is run.
- With technology also comes some things to be wary about such as scams and reviews.
- Technology can also help your organization in many ways such as.
 - Managing employee's
 - Managing payroll
 - Communication
 - Security
 - Document organization

Concept Map



Documentation for Support of a Service

Documentation when building a service and when implementing changes is crucial for finding key points where things may have gone wrong. With the proper documentation mistakes can be easily found and fixed. Within change management, documentation is crucial for reverting changes as well. Although taking proper documentation procedures may be time consuming, it is crucial for the wellbeing of a service. It allows other system administrators to see the changes that have been made in the past so that they can configure the system based on the history it has.

Other important reasons to have documentation for support of a service include:

- Transparency
- Reliability
- Mutual Understanding

System Security Practices

- There are many layers of security that must be considered when implementing system security practices and they include:
 - Having policies, procedures, and awareness
 - Physical security
 - Perimeter
 - Network
 - Host
 - Application
 - Data

Things that can be implemented as security include access control lists, authentication, authorization, cryptography, and accounting.

Assessment of the Roles and Responsibilities

Like previously mentioned, one way to implement security is to implement an access control list. This means that permissions can be separated allowing only certain people to modify certain aspects of a system. Another great way to separate responsibilities within an organization is to implement a division of labor. This can mean that two people work on two parts of a system and that they can hold each other accountable for their actions.

In another aspect, the division of roles is crucial to any functioning organization, being a system administrator comes with the responsibility of assigning certain roles and permissions.

Change and Configuration Management

Change management can be described as when a service adopts a new change within a system, this can be a dramatic change or something small.

Important things to consider when implementing a change could be to make use of a change review board which allows coordination within the organization in an effort to:

- Define the changes being made.
- Understand the new standards that are being set.
- Plan future changes and requests.

Change management describes the different versions of hardware, software and compatibility the server is undergoing. Here, documentation is again important as well as deployment, version control, baseline information, regression testing, and reviewing the changes made.

Conclusion

In conclusion, being a system administrator for many means taking on a mantle of responsibility that includes:

- Granting roles & permissions
- Changing and configuring important aspects of services and operations
- Performing security operations
- Implementing proper documentation
- And lastly, understanding how technology affects the organization and learning about new technologies that could be implemented to benefit the organization

A system administrator is a crucial part of any organization where technology is being used. Many people may view the system admin as the office nerd or IT guy, but we're the only ones who can fix computers and systems when they go down!

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