Information Security

A Fresh Approach

[Based on material from Kevin Day's book: Inside the Security Mind: Making the Tough Decisions, Prentice-Hall, 2003, ISBN: 0-13-111829-3]

Why?

Why concentrate on Information Security (or IT Security) when this is a course in Networks and Systems Administration?

Good Question.

Easy answer: if your IT Security is broken, not much else matters ...

Fundamental Flaw

Many organizations think that the practice of Information Security is like anything else technological.

Throw pots of money, technology, gurus and consultants at the problem and it'll go away.

IT Security is **not like this** (and it involves more than just technology).

Developing a Security Mind

Key point: avoid emphasizing a multitude of specific details.

Key point: Avoid concentrating on one specific aspect.

Trying to know/handle all the details is very hard and getting harder. So, don't even try to!

Better to adopt a higher level of security focus.

Dealing with Security

Security can be accomplished in any environment. It can be accomplished without monopolizing our time and resources, and without emptying our wallets. It can be accomplished without years of training and without having to know every vulnerability, threat, and countermeasure in existence. When addressed in the correct manner, security simply becomes an extension of our normal operations, and the best protective measures require the least amount of ongoing effort.

A New Look at Security

The Youngest of IT Practices.

The Most Dynamic of IT Practices.

It's all about humans, not computers!

The good guys and bad guys have a symbiotic relationship.

The battle is constant and ongoing ...

Should we be afraid?

Yes, most definitely.

However, don't let fear be your guide: it is in reaction to fear that most poor security decisions are made.

This can have a **positive** and **negative** effect.

Fear can help purchase necessary equipment. Fear can lead to hastily implemented security measures.

And haste is **never good** re: making security decisions.

Achieving a Security Focus

Focus on the basic principles of security.

It is important to understand:

- The four virtues of security
- The eight rules of security

Introducing the Security Virtues

If observed and practiced, the four virtues of security equip you to understand and practice information security.

The virtues are broad in scope.

The virtues act as a guide.

The Security Virtues need to be upheld at all times.

Introducing the Security Rules

When making security decisions, it is necessary to ensure the eight rules are not broken.

The rules are derived from the virtues.

It's the rules that will, if practiced, keep you safe.

The goal is to incorporate the rules into the **everyday thought processes** of the network and/or systems admin.

No decision should break any rule.

Summary

As IT Security is such a big issue, a fresh approach is required to effectively deal with it.

By developing a **Security Mind**, resulting in a better **Security Focus**, the beast which is IT Security can be tamed.

Four **Virtues** and Eight **Rules** provide the mechanism with which we can handle our organization's IT Security in a manageable way.