Report Outline for Whether Security Problems Always Be Publicly Disclosed

(Con)

# The Issues and Frequency of Security Problems

What are the common issues we face regarding security and how frequent are they?

# Overview of the Solution

## How public repositories can help us regarding security problems.

How we can use public repositories to help us address security problems

## How we can develop a state-based process model of the security problem to address it

In what way(s) can a state-based process model help us address security problems? What is its role? What are our expectations from it?

## How developing security sub-models will help us address this problem

What are the security sub-models that we will need? How many are they? How are they developed? What is each one’s intended role? What do we expect from each one of them?

# Empirical Analysis

What is empirical analysis?

## How do we get the data that will be analyzed?

What are our sources to get the data that we intend to analyze?

## How to use the collected data properly for analysis

How to analyze the collected data?

# Security Problem Response Model

## Introduction

What is the security problem response model?

## How the response model is created

How do we create a security problem response model

## Example of Security problems from an open-source database

Case study and its results.

# Predictive Modeling

What is predictive modeling?

## What is the Classical Software Reliability Model on Security Data

What is the Classical Software Reliability Model? How reliable is it when it comes to security data?

## Bayesian Model

What is Bayesian Model

How we can model Disclosure related belief

Evaluation of the Bayesian Model

Operational use of the Bayesian model

# Disclosure and Patching Policies Analysis

## Impact of Security Failures

What are the effects of security failures?

## Impact of Patching Policies

What are the effects of patching policies?

# Why Security Problems Should Not Always Be Publicly Disclosed

# Conclusion