C Secure Coding Guidelines Study Group WG 14 Liaison Report

2010-03-16

Introduction

At the Santa Cruz meeting, WG 14 formed the C Secure Coding Guidelines Study Group (CSCG SG) to study the problem of producing analyzable guidelines for C99 and C1x.

The CSCG SG has been meeting by teleconference every two to four weeks.

Scope

The study group's charter includes three questions.

- 1. Where does this work belong?
- 2. What should we use as a base document, if any?
- 3. What is the appropriate deliverable?

After discussing the options of forming a new WG, or proposing the work to WG 14 or WG 23, the study group decided to propose it to WG 14 because the work relates to application vulnerability and requires C-language-specific expertise. Nothing will be proposed to the full committee until the C1x revision is completed, to avoid competing for resources.

To gain experience in writing guidelines as a way to learn what types of decisions will need to be made, the study group has been developing a set of rules on a wiki hosted at CERT. The group decided tentatively that it will propose the resulting guidelines as a base document, but it is open to suggestions for other documents to consider.

The group has decided that the appropriate deliverable is a Type 2 Technical Report. This alternative was chosen because it provides an option, but not a requirement, to incorporate the results into a standard at a later date.

An additional question that arose was whether to address legacy code or new code. The study group decided to write both rules that help with legacy code and rules that help with new code.

Current Discussions

The study group is discussing the meaning of compliance to the guidelines, and how to detect sensitive information. It is also continuing to use the wiki to develop rules for proposed use in the guidelines.

CERT has offered to develop a publicly-available test suite that would help assess an analyzer's effectiveness.

People interested in participating in the study group can contact David Keaton.