

## **An Interface Security Approach**

### **Abstract:**

To secure a DLT from the provision of services that may contaminate or otherwise disrupt its integrity, the security of the interface between a DLT and an outside service is critically important.

In one example, a weather updating service provides the DLT with access to information in digital form, with such access provided via a security interface program, perhaps structured as a digital entity. Rather than interact directly with the updating service, the DLT would first create such an interface so the DLT can safely access the service facilities; except for security matters, the interface would operate substantially the same way as the interface that the weather service provides. This interface would enable a secure handshake between the DLT and the service facilities prior to enabling direct access between the DLT and the actual weather services. For example, the digital entity could perform type checking via dry runs on all method calls made by the interface program to the service facility.

An early implementation of this capability, known as a “bastion object,” was based on work by Robert E. Kahn and Vinton G. Cerf first described in the paper “The World of Knowbots.”