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OSID Version 3 Design Goals

Status

Abstract

This document outlines the measures of success of an updated suite of OSID specifications. O.K.I. has captured Service-Oriented Architecture in a series of OSID (service interface) specifications and has evolved through iterated design into it current version 2.1. Version 3 will be the product of another comprehensive design iteration that captures a greater understanding of software interface methodology and a greater level of experience in using OSIDs in real-world applications. It is expected that Version 3 will make the following improvements.

Table of Contents

1. Improve Interoperability

The greatest value of the OSIDs is realized with hot-swappable implementations. Ideally, an OSID consumer should be able to select from any service provider without prior negotiation of mechanisms not included in an OSID specification. The specification should result in fewer of these out-of-band agreements to increase the degree of interoperability possible.

2. Improve Usefulness

New interfaces should be included where they are missing in the current specification and where demand for new services is sufficient.

Many of the OSIDs represent high level services to provide the greatest level of utility and interoperability for consumers. The complexity of a service provider (implementation) may be significant in a complex production system. Implementations may benefit from a wider array of lower-level OSIDs on which to abstract supporting technologies to ease implementation development cost and provide a greater degree of flexibility.

3. Improve System Integration

While the interface definitions ensure syntactic compliance, logical interoperability involves knowing what methods are implemented and that the implementation performs the job required. The OSID specification should address understanding logical compatibility issues between the consumer and the implementation.

Implementations often require configuration information. Management of these configurations can be complex if each implementation requires a separate configuration location. A better framework for managing configurations ought to be available.

4. Improve Learning Curve

The success of any project depends on the amount of adoption. For developers to endorse this framework it first needs to be understood. The specification ought to be such that it is easier to understand, has improved clarity, and offers contextual information on the intended usage of the OSID interfaces.

OSIDs are ultimately a software framework used by programmers. Programmers are often versed in the computer language in which they have experience. The specification ought to result in a language binding that is truer to the native language of programmers to the extent possible where the integrity of the interface and primary goal of interoperability is not sacrificed.

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