

Project HealthDesign
Common Platform Components

Technical Specifications
Overview

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Revision History

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| 0.9 | Walter Sujansky / Sam Faus | 1/15/2008 | Pre-baselined version, pending final review |
| 1.0 | Walter Sujansky | 1/31/2008 | Baselined version |

1. Introduction

This document provides an overview of the technical specifications for the common platform components (CPCs) of Project HealthDesign, particularly the programmatic interfaces to these services. The CPCs are intended to provide certain common, shared services to a wide variety of personal health applications (PHAs), with the goal of reducing implementation time and increasing interoperability. PHAs may use the defined interfaces to receive services from one or more common platform components, as needed. Initially, the CPCs will be implemented as web services that may be jointly accessed by multiple PHAs via internet protocols.

This documentation is intended to supplement the web services definition language (WSDL) specifications that formally define the programmatic interfaces to the CPCs. The WSDL specifications are provided in a separate set of files (see Appendix A for further information about the WSDL specifications).

2. Architecture and Functional Overview

For the initial implementation of the Project HealthDesign common platform, five components (or *services*) have been defined and will be implemented, as listed in Table 1.

Table 1. Common Platform Components provided in initial implementation of Project HealthDesign

| Component | Description |
|---------------------------|--|
| 1. Registry Service | Stores demographic and password information of the users and applications that may access the common platform components, as well as of any patients whose data are managed by the components. |
| 2. Authentication Service | Authenticates the identities of users and applications upon log in, and provides single sign-on across all of the CPCs. |
| 3. Access Control Service | Stores the rules that specify which resources and operations users have access to. Also, enforces these rules when users request read and/or write access to specific patient data. |
| 4. Medications Service | Stores and makes available the list of medications that patients take regularly. |
| 5. Observations Service | Stores and makes available health-related observations that are captured by or on behalf of patients in the course of daily living. |

Figure 1 illustrates how these components interact with each other and with a PHA to provide the defined services.

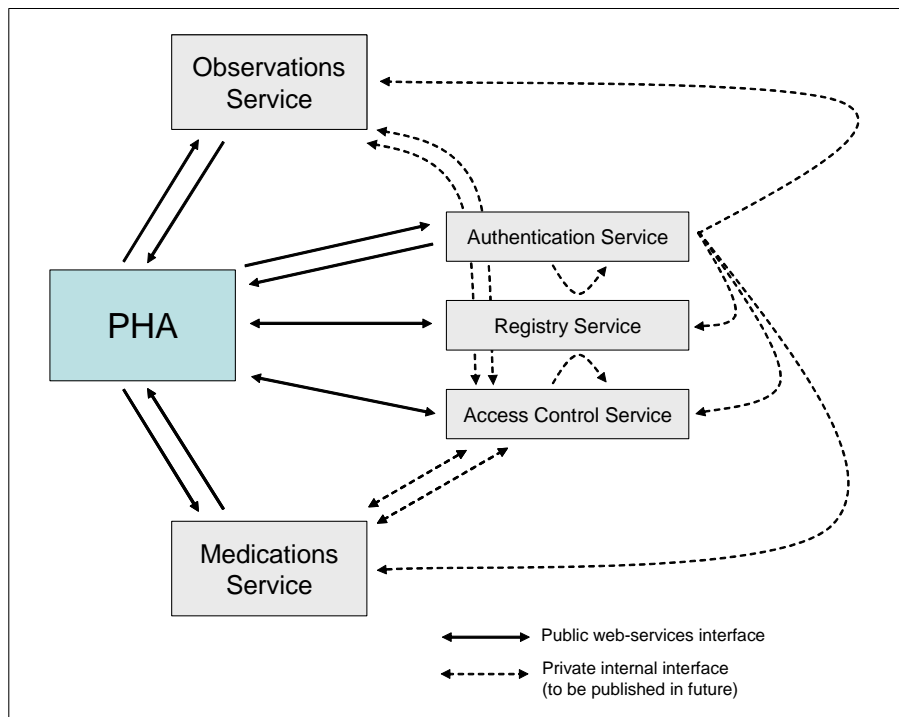


Figure 1. Component architecture of the common platform and points of interaction among the components

Note that only those interfaces depicted by solid arrows in Figure 1 will be publicly available in the pilot implementation and are described in the WSDL specifications. These are the interfaces that allow PHAs to directly request services from each of the five CPCs. To perform certain of these services, however, the CPCs must also interact with each other via additional internal interfaces (depicted by dashed arrows in Figure 1). These internal interfaces will not be publicly available during the pilot implementation of the CPCs because of time constraints and prioritization. However, these interfaces will be published at a later time to support alternative architectures in which PHAs can use Project HealthDesign CPCs for certain functions, but substitute their own or third-party components for other functions. For example, a PHA might wish to leverage the Project HealthDesign authentication, access-control, and observations services, while using its own registry and medications services. This architecture would require that the PHAs medications service be able to access the common Access Control Service via a public interface.

The following sections explain in detail how the components interact to provide various services (e.g., authentication, registration, medication management, etc.).

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