

Employeease Extend

Web Services Design Methodology

White Paper



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Employeease Extend - Web Services Methodology

This document is intended for consumption by technical developers interested in the design methodology of the Employeease Web Service library and content model.

The Employeease Web Service library provides an interface to access and provision data within the Employeease Network. All services within the library are synchronous "request-response" services, where an external system is the requestor and the Employeease Network is the responder.

Content Model

Naming Conventions

All Employeease Web Services are named using the "VerbNoun" convention. The "Noun" is the entity on which the "Verb" should be performed. All service action names are UpperCamelCase. This naming convention is loosely based on the methodology adhered to by the Open Applications Group (or OAGi).

Schema

The schema library for Employeease Web Services is designed to provide modular reuse of schema components and common naming conventions for elements. Each service action must have a corresponding request schema and response schema.

The schema library generally conforms to the schema design guidelines provided by the HR-XML Consortium. The following are the most important schema design mechanisms:

- Elements of mixed type (containing content and other elements) are not allowed.
- Element names should be UpperCamelCase and should be descriptive without verbosity.
- Repeatable elements with peer elements are not allowed. Repeatable elements should be contained.
- The "union" schema construct is not allowed. Representations of data with multiple options should be contained within a "choice" construct.

Given that schema is the "meat" of a web service, all efforts have been taken to make sure that new versions of a schema are backwardly compatible. However, certain situations can dictate that schema be made non-backwardly compatible. Employeease will proactively work with all customers who have implemented affected services when these changes must occur.

Requesting User

Every request schema contains an optional "RequestingUser" element. If this element is supplied, then the service will attempt execute as the specified user. If it is not supplied, then the service will attempt to execute as the user calling the service. The allowed roles for requesting users are provided in the service documentation under the "Required Rights" section.

Disposition

Each response which modifies data housed in the Employeease Network will contain a Disposition element. The disposition contains a success/fail indicator and associated messages. The presence of a message should not be construed as a failure, as successful transactions may contain warning messages and/or status messages.



Transport

In 2001, Employeease adopted and implemented the ebXML Messaging Specification 1.0. This specification provided mechanisms for authentication, encryption, and message integrity, in addition to providing basic SOAP support. The specific implementation documentation for this messaging protocol is available as the "E-Connect XML Messaging Specification" available on the Employeease Developer web site.

Employeease recognizes the growing support for other standards in web services technology, including WS-Security and the Web Services Interoperability Organization (WS-I) profiles. Such technologies may be implemented in the future, depending on business needs and customer requests.