YODLEE CORPORATE

VERSION 6.0.1

GLOSSARY

TABLE OF CONTENTS

TABLE OF CONTENTS

1 INTRODUCTION

1.1 Objective

The Yodlee Glossary defines a common lexicon for consistently describing and discussing Yodlee products and services.

1.2 Version

This document applies to Yodlee 6, version 6.0.1.

1.3 Audience

This document is intended for Yodlee internal use and Yodlee customers.

1.4 Conventions

- Wherever an existing term is being replaced in favor of a more accurate and descriptive term, the new term is followed by the original (obsolete) term in parenthesis and quotation marks.
    - Example: <New Name> (formerly "<Old Name>")
- Wherever a term may be referenced by an alternate term, the primary term is listed first, followed by the alternate in parenthesis. In these cases, both names are valid for use.
    - Example: <Primary Name> (<Alternate Name>)
- The full name with capitalization should be used in every instance of official Yodlee documentation. Exceptions include:
    - Where the term is listed in lower case
    - Where lower case alternate is provided as an option
    - Where an acronym is provided as an option

2 GENERAL TERMINOLOGY

2.1 application

Any software application built on top of the Yodlee 6 Platform using the published and supported API's.

2.2 Data Aggregation

Technology that gathers and consolidates data from users' personal accounts into a common, normalized database.

2.3 customer (formerly "Partner")

An institution that licenses Yodlee products and services to serve its end users.

2.4 partner

An organization that participates in marketing and/or developing value-added software that leverages Yodlee 6.

2.5 user

An actual end user of Yodlee 6 or third party applications that leverage the Yodlee 6 Platform. A user can have any role within the system from administrator to actual consumer of an application such as Yodlee OnCenter.

3 YODLEE PLATFORM TERMINOLOGY

3.1 Automated Intelligent Refresh (AIR)

Automated Intelligent Refresh is a set of rules-based logic that optimizes the offline refresh frequency of Aggregated Data stored in the Yodlee Data Repository. For example, users who have not logged into the system in n days may not have their data updated until they log in and re-establish themselves as an active user.

3.2 Cleansing Augmentation Normalization (CAN)

Technology that improves the quality and consistency of Aggregated Data through a process of cleansing, augmentation and normalization.

3.3 Cobrand Control Panel (CCP)

The Cobrand Control Panel is a web-based management console that enables business level users to configure and create instances of Yodlee applications.

3.4 Configuration Manager

The Configuration Manager is a web-based management tool that manages configuration settings in the Configuration Database, which are used to administer Yodlee 6 Platform modules, groups, inheritance preferences, hardware additions and other platform level administration duties.

3.5 Gatherer

The Gatherer is the component in the Yodlee Data Engine that collects data from Yodlee-supported Sites.

3.6 MQ server

The MQ server handles all message requests within the Yodlee Data Engine and routes them to the appropriate module based on priority and other intelligent message handling rules.

3.7 Refresh

A Refresh is the act of updating Aggregated Data for one or a set of Item Accounts to obtain the most recent data available. Refresh requests may originate from either an explicit request during a user session (for user or application-initiated refreshes) or the Refresh Scheduler (for offline, automated refreshes)

3.8 Refresh Scheduler (formerly "Cache Server ")

The Refresh Scheduler is a module within the Yodlee Refresh Server. Using AIR logic, the Refresh Scheduler analyzes a set of variables for each Item Account and generates refresh requests on behalf of users not currently logged in and/or requesting data. This serves to improve the relevancy of the data most likely to be accessed by users while minimizing offline data collection waste.

3.9 Refresh Server (formerly "Refresh Services")

The Refresh Server contains the Yodlee CAN Server and the Refresh Scheduler, which file updated Aggregated Data into the Yodlee Data Repository, and manage the creation and queuing of Refresh requests.

NOTE: Refresh Server indicates the physical hardware, whereas the term "Refresh Services" still refers to the software that encompass the functions performed by the Yodlee CAN Server (formerly "DBFiler") and the Refresh Scheduler (formerly "Cache Server").

3.10 Refresh Servlet Server

The Refresh Servlet Server contains the Request Servlet and Response Servlet. The Request Servlet receives Refresh requests from the Request Queue in the MQ server and passes them to the Gatherer. The Response Servlet receives Refresh responses from the Gatherer and passes them to the Response Queue in the MQ server.

3.11 Yodlee Agent (Agent) (formerly "Gatherer Script")

A Yodlee Agent is a software component within the Gatherer that collects data from one or several Content Services. The method of collection may be via any number of standards-based or proprietary direct data feeds such as HTML, OFX, IFX, XML, and YML. Yodlee Agents may be initiated on demand by applications or by the Refresh Scheduler.

3.12 Yodlee CAN Server (formerly "DBFiler")

The Yodlee CAN Server is responsible for filing Aggregated Data into the normalized data schema of the Yodlee Data Repository.

3.13 Yodlee Data Engine

The Yodlee Data Engine is the set of infrastructure components that intelligently aggregates, cleanses, augments and stores data on behalf of Members with their permission and using their credentials. The Yodlee Data Engine is capable of aggregating a highly extensible range of data from a large number of Data Providers using a variety of structured and semi-structured data formats.

3.14 Yodlee OLTP Database (formerly "Production Database")

The Yodlee OLTP Database is the collection of all Aggregated Data in Yodlee 6 Platform as well as all other persistent data including:

- Source Data - this is data relating to the Sites for the different content services such as URLs, site display names for HTML scraping feeds, auto-login URL, credential information for authentication with the content source

- Cobrand Data - includes the customizations that are specific to the installation of Yodlee 6 Platform

- Member Profile Data - includes the profile information and the authentication credential information for Members of Yodlee 6 Platform

- Item Information – includes the Items that have been added to Yodlee 6 Platform by Members and the credentials associated with each of them.

NOTE: The abbreviated versions of this term ("Yodlee DB" and "DB") may be used interchangeably on two conditions:

- The entire term (Yodlee OLTP Database) has already been used in the same sentence, paragraph, or context.

- No other Yodlee Databases (CCP, Configuration, etc.) are being discussed in the same sentence, paragraph, or context.

3.15 Ytask

Ytask is a module that performs scheduled and asynchronous activities such as operational maintenance and user notification.

4   DEVELOPER TERMINOLOGY

4.1   Aggregated Data

Data collected by Yodlee 6 Platform on behalf of Members.

4.2   Asset Type

An attribute associated with a Container that determines whether it's an asset, a liability or neither.

4.3   Cobrand

A Cobrand is a namespace exclusively associated with one Customer. It may contain a set of unique members, and is associated with one or more applications.

4.4   Configuration Database

The Configuration Database is the database used to store the operational and configuration parameters. These parameters are used during the start-up and run-time execution of all Yodlee 6 Platform components.

4.5   Container

A Container defines a particular type of Aggregated Data. Example:

- Email
- Banking
- Credit Card

Containers may contain child Containers or sub-Containers that further define a particular type of Aggregated Data. Example

- Holdings
- Transactions
- Statement

4.6   Content Service

A Content Service represents a relationship between a Container and a specific Site. Each Content Service corresponds to exactly one Site. Multiple Content Services may exist for a given Site. An exception is a custom service with data manually entered by a user. These are also considered Content Services even though they do not have a 1:1 relationship with a Site. Examples:

- Yahoo Email (Site = Yahoo, Container = Email)
- Yahoo Calendar (Site = Yahoo, Container = Calendar)
- Citibank Banking (Site = Citibank, Container = Banking)
- Citibank Credit Card (Site = Citibank, Container = Credit Card)

4.7 Credentials

Credentials represent any permutation of usernames, passwords, and other information required to authenticate a user.

4.8 Data Service Types

A Data Service Type is a logical "real world" grouping of data related to an Item Account. It is always associated with a Container. Each Container can contain multiple Data Service Types. Examples:

- Banking (describes the data related to the Container "Banking")
- Investment (describes the data related to the Container "Investment")
- Holding (describes the data related to holdings in the Container "Investment)
- Transaction (describes the data related to transactions in the Container "Investment)
- Statement (describes the data related to statements in the Container "Investment)

4.9 Member Item (Item)

An Item is an instance of a Content Service that corresponds to actual data collected on behalf of a Member. Every Item has a unique identifier and has a 1:1 correspondence with a Container. An Item consists of one or more Item Accounts.

4.10 Item Account

An Item Account is contained within an Item and represents a logical set of collected data that corresponds to a "real world" account. Item Accounts correspond to actual account entities as users generally think of them. Example:

- Joe's Citibank Checking 1 (associated with Joe's Citibank Online Bank Item)
- Joe's Citibank Checking 2 (associated with Joe's Citibank Online Bank Item)
- Joe's Citibank Credit Card (associated with Joe's Citibank Online Credit Card Item)

4.11 Member

A Member represents a unique user within a Cobrand. A Member is created when a user registers for a Yodlee application or service, either explicitly via the registration process or implicitly via Single Sign On. Once created within a cobrand, the Member ID cannot be changed.

4.12 Organization

A logical entity that typically corresponds to an organization in the real world and consists of Sites from which data may be collected. Examples:

- Yahoo (Organization)
- Citibank (Organization)
  - Citibank Bank (Site)
  - Citibank Credit Card (Site)
- Merrill Lynch (Organization)

4.13 Partial Account

A Partial Account is a Site Account that has incomplete or missing credentials. Data is not collected for Partial Accounts. Accounts may be considered "Partial" if the set of Credentials is incomplete even though a subset is available and sufficient to allow successful authentication. The notion of Partial Account does not presuppose that any credentials entered by the user are correct.

4.14 Site

A Site is the set of Content Services that can be accessed with the same credentials. An Organization may have multiple Sites. For a given Organization, the set of Content Services that do not require credentials are also considered a Site.

An example Site named "Citibank Bank" may include the following Content Services:

- Citibank Checking
- Citibank Savings

A different Site within the same Organization named "Citibank Investment" may include the following Content Services:

- Citibank Brokerage
- Citibank Bonds

4.15 Site Account (Account)

A Site Account is a set of credentials a Member has for a particular Site, which can access the Member Items associated with the Site. A Member may have multiple Site Accounts.

The term "Account" may be used interchangeably with "Site Account", unless the "Yodlee Account" is discussed in the same context. In this case there should be clear differentiation between "Site Account" and "Yodlee Account".

4.16 Source Element ID

The Source Element ID is a unique identifier of a transaction generated by the Yodlee 6 Platform. This identifier is derived from a combination of multiple fields within a transaction instance. It is used to identify unique transactions and eliminate duplicates.

4.17 Yodlee Account

The Member account created within the Yodlee 6 Platform is referred to as a Yodlee Account. Before creation, a user must accept the terms and conditions of use. If the user has accepted the relevant T&C, the account is considered active. If the T&C is updated and the user has not yet accepted them, it is considered inactive until acceptance is obtained.

5   DIAGRAMS

5.1   General Product Marketing Architecture
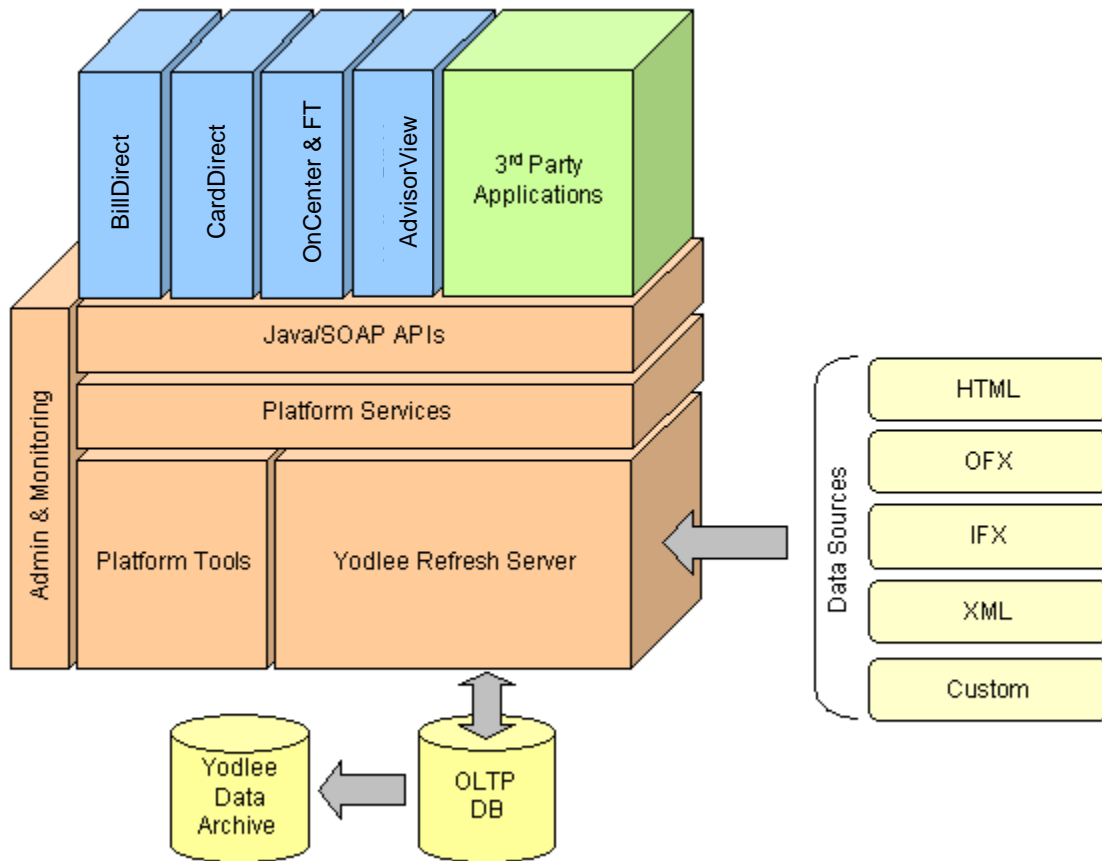
5.2 Data Model Relationships

This diagram shows the relationships among various data model entities in this Glossary.

```
                                    ┌─────────────────────────────┐
                                    │          Container          │
                                    │   (  BANK_ACCOUNT  )        │
                                    │   (  CARD_ACCOUNT  )        │
                                    │   ( INVESTMENT_ACCOUNT )    │
                                    │   (      MAIL      )        │
                                    │   (      Etc.      )        │
                                    └─────────────────────────────┘
  ┌──────────────────┐                       │ schema for
  │   Organization   │                       │
  │  (organization)  │                       │
  └──────────────────┘                       │
        │ composed of                        │ classified by
        │                                    │
  ┌──────────────────┐  provider of  ┌──────────────────────┐      ┌──────────────────┐
  │       Site       │──────────────│    Content Service     │      │  Member (user)   │
  │  .Site username  │  belongs to   │      (sum_info)        │      │  .member_ID      │
  │  .Site password  │               │ .content service name  │      │  .member_login   │
  └──────────────────┘               └──────────────────────┘      │  .email address  │
        │ provider of                        │ provider of          └──────────────────┘
        │ provided by                        │ added instance of            │ owner of
  ┌──────────────────┐  consists of  ┌────────────────────────────┐         │ owned by
  │   Site Account   │──────────────│    Member Item (Item)       │
  │    (Account)     │ associated    │       (mem_item)           │
  │   .credentials   │    with       │     .last updated          │
  └──────────────────┘               │     .create date           │
                                     │     .is custom             │
                                     └────────────────────────────┘
                                                │
                            ┌──────────────────────┐   ┌──────────────────┐
                            │    Item Account      │   │     Holding      │
                            │  .account_number     │───│  .symbol         │
                            │  .account_type       │   │  .quantity       │
                            │  .balance            │   │  .price          │
                            │                      │   └──────────────────┘
                            │                      │   ┌──────────────────┐
                            │                      │   │  Item Statement  │
                            │                      │───│                  │
                            │                      │   │ .statement begin date │
                            │                      │   │ .statement end date   │
                            └──────────────────────┘   └──────────────────┘
                                       │                       │
                            ┌──────────────────────────────────────┐
                            │            Transaction               │
                            │         .transaction ID              │
                            │         .transaction date            │
                            │         .amount                      │
                            └──────────────────────────────────────┘
```
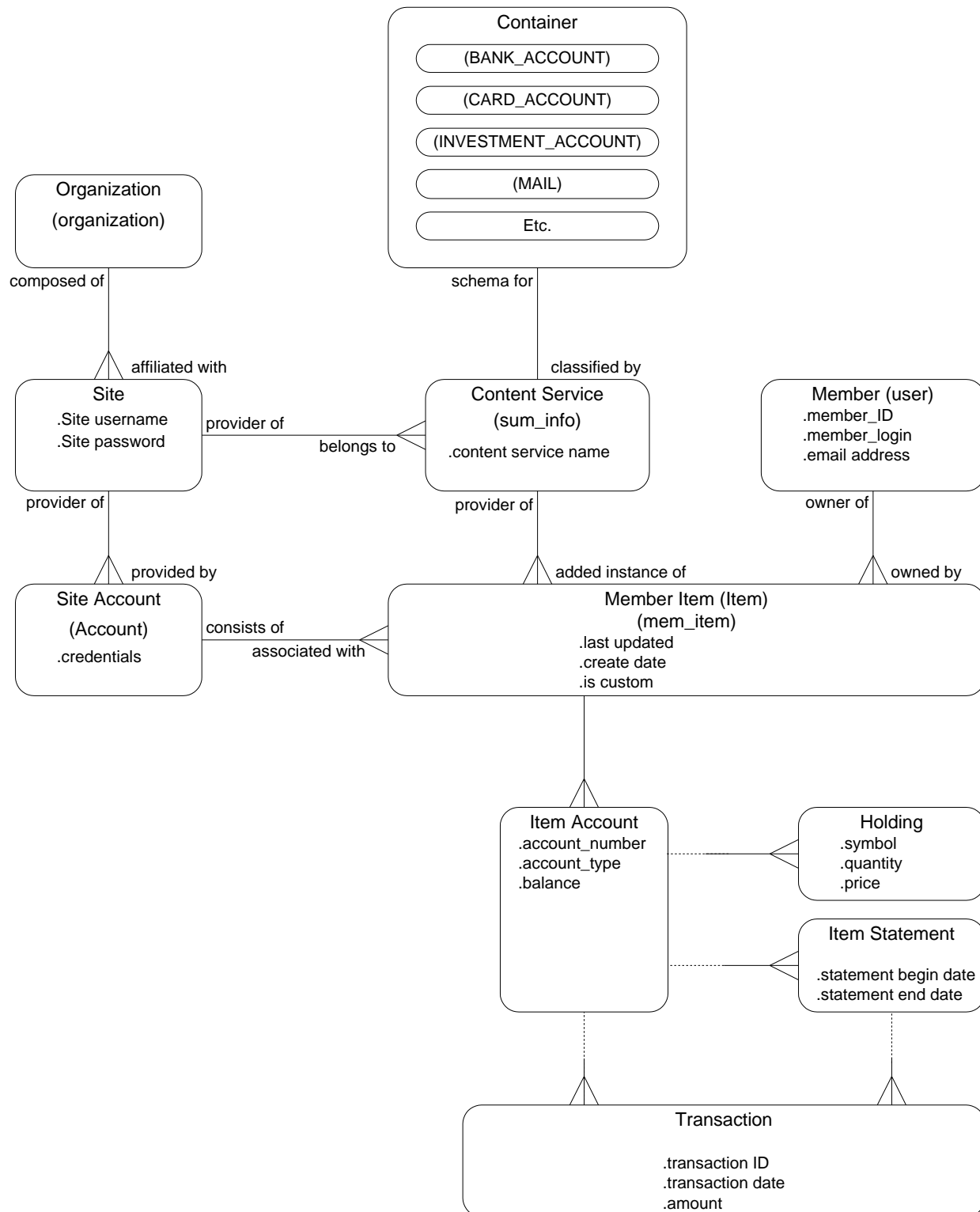
5.3 Yodlee Platform

This physical architecture diagram includes many of the terms defined in this document. The dotted lines show how the runtime configuration settings in the Configuration Database are used by all other components.