Oracle Customer Data Hub – the Past (11i), the Present (R12) and the future (Fusion)

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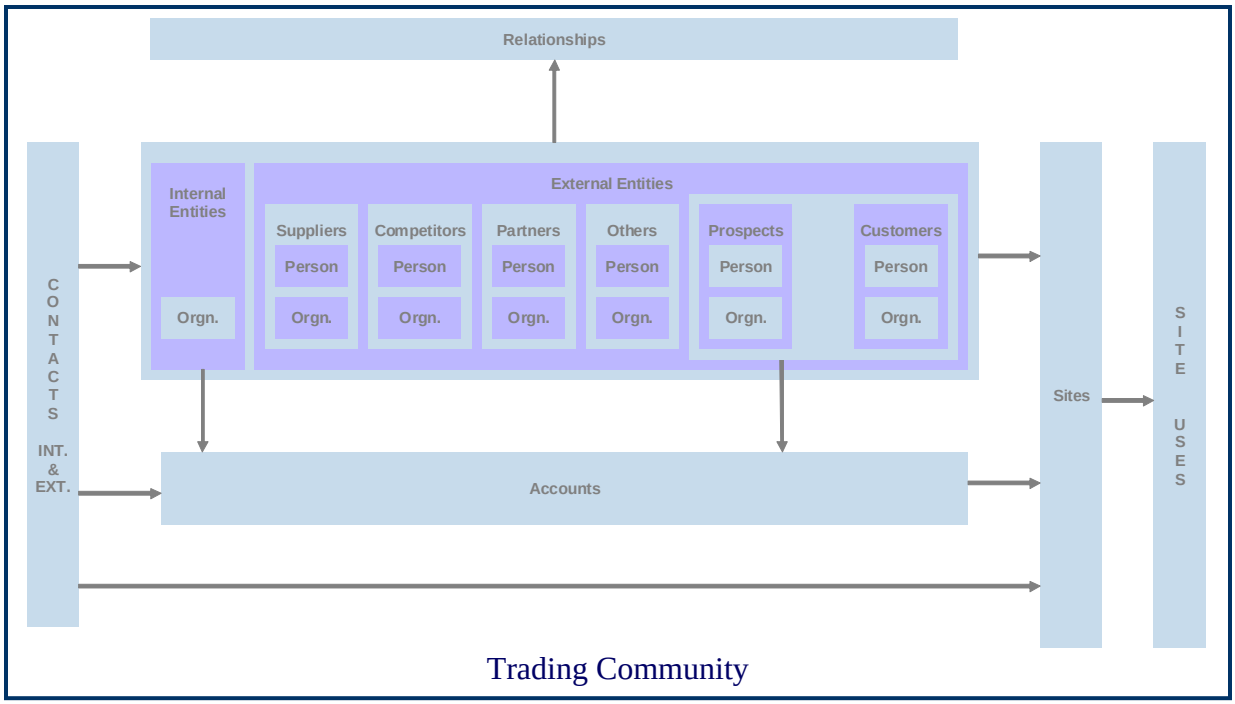
Introduction

The presentation will begin with the history of the oracles endeavor with CDI solutions with their Oracle CDH product and brief functionality of R11i. And the presentation quickly progresses into the new features and functionality of the R12 version of the CDH product. The presentation will conclude with the potential future aspects of the product beyond R12.

Prologue

Trading Community: Trading Community is defined as a group of entities taking part in commerce that includes both persons and organizations and also includes persons and organizations that take part in roles other than seller or buyer. Often times there are several parties involved such as Agents, Distributors, and Influencers that make commerce happen.



Trading Community

Customer Data Integration (CDI):

Gartner defines CDI as "The combination of the technology, processes and services needed to create and maintain an accurate, timely and complete view of the customer across multiple channels, business lines, and potentially enterprises, where there are multiple sources of customer data in multiple application systems and databases."

The CDI Institutes defines CDI as

- Comprised of solutions (processes & technologies)
- Recognizing a customer and its relationships at any touch-point
    - Aggregating, managing and harmonizing accurate, up-to date knowledge about that customer
    - Delivering it in an actionable form just-in-time to touch-points

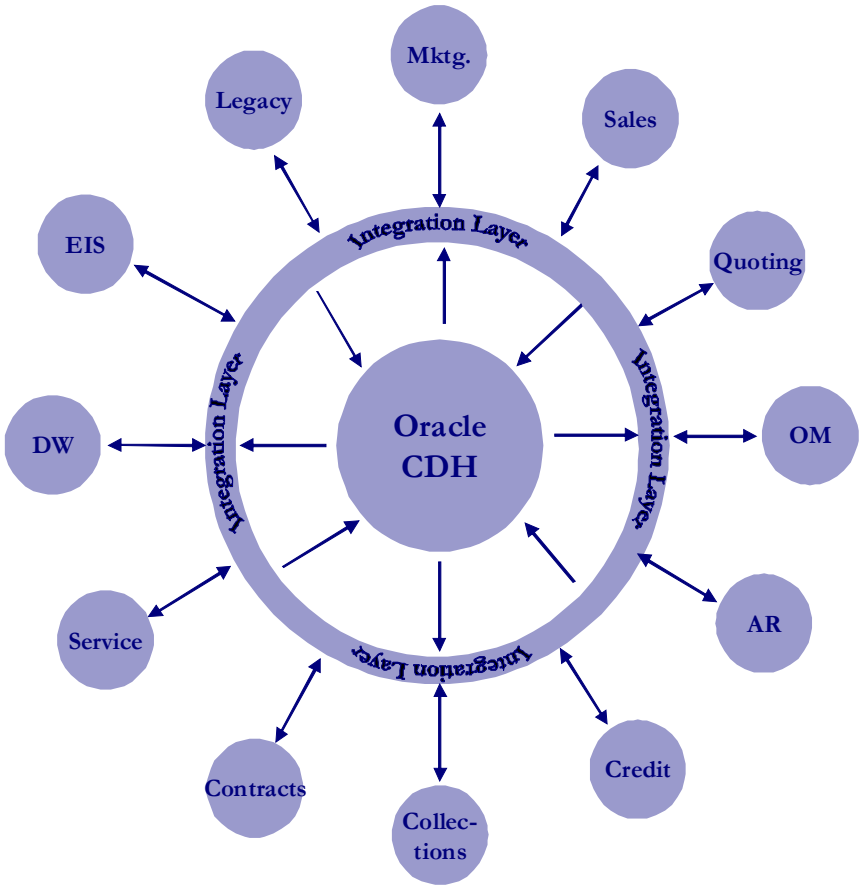
Rhapsody defines CDI as

- About establishing the Single Source of Truth, in other words a System of Record that is reliable, available when needed and always maintained.
- About cross-referencing the Customer Data across heterogeneous systems to establish a Single View of the Customer
- About providing 3600 view of the Customer.
- About establishing a Data Governance structure for welfare of the Customer Master solution by establishing Roles and Responsibilities; Policies and Procedures to maintain data quality on an ongoing basis
- About defining and maintaining Analytics and Segmentation to drive top line growth (Revenue) and increase bottom-line (Profits) by increasing the effectivity of various business processes
- Increasing the operational excellence across the Enterprise

The Past (11i)

What is Oracle Customer Data Hub (CDH)?

CDH is a full featured CDI solution offered by Oracle addressing the customer domain of the MDM space. The CDH includes TCA, Interfaces (API's, Web Services, etc.), UI (Oracle Customers Online, Oracle Data Librarian), out of the box integration for Third party enrichment (D&B) and address validation (Trillium and First Logic). The CDH application from Oracle facilitates the establishment of a central repository of customer data that can be maintained continuously and synchronized with all other applications in the enterprise in a hub and spoke manner with hub becoming the master source of customer data that is cleansed, de-duped, enriched, dependable and is available when needed for consuming applications known as spokes. The spoke systems are synchronized with Hub as well as with other spoke applications via Hub.

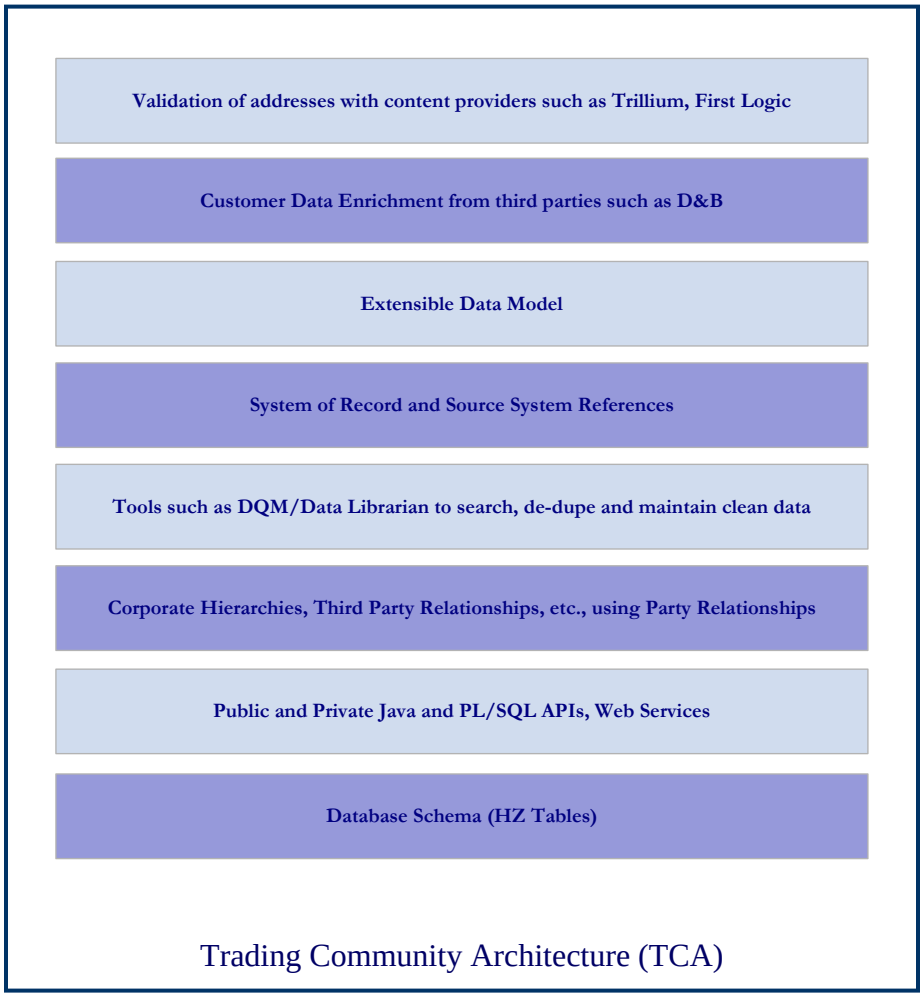


CDH – Hub and Spoke Integration

What is Oracle Trading Community Architecture (TCA)?

TCA lets you capture and maintain the trading community of your business including the ability to capture real world entities, and their locations, relationships between them, contacts of these entities, with their phone/fax/cell numbers, email, etc. TCA forms the core foundation for ERP, CRM, SCM, PRM and HR applications. The transactional activities in the above applications such as Leads and Opportunities in Sales, Orders in Distribution, Invoices, Statements in Receivables, Install base, Service Contracts, Service Requests in Service modules, etc., are all tied to various entities of TCA.

The TCA is made up of a group of tables that all start with a prefix ‘HZ’, APIs that interact with these tables to retrieve, create, update and delete the data when applicable, functionality that lets us create corporate hierarchies, third party relationships, tools to manage the Data quality such as DQM, ability to manage Source System References (SSR) as well as Single Source of Truth (SST), ability to capture business specific information using extensible model, with ability to enrich customer data as well as ability to validate and standardize address data using third party content providers such as D&B, Trillium and First Logic.

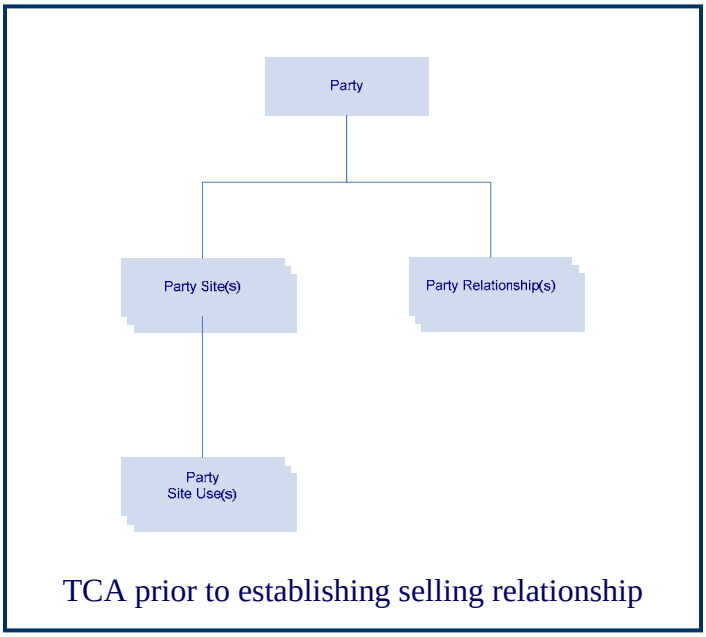


Trading Community Architecture (TCA)

TCA includes following key entities:

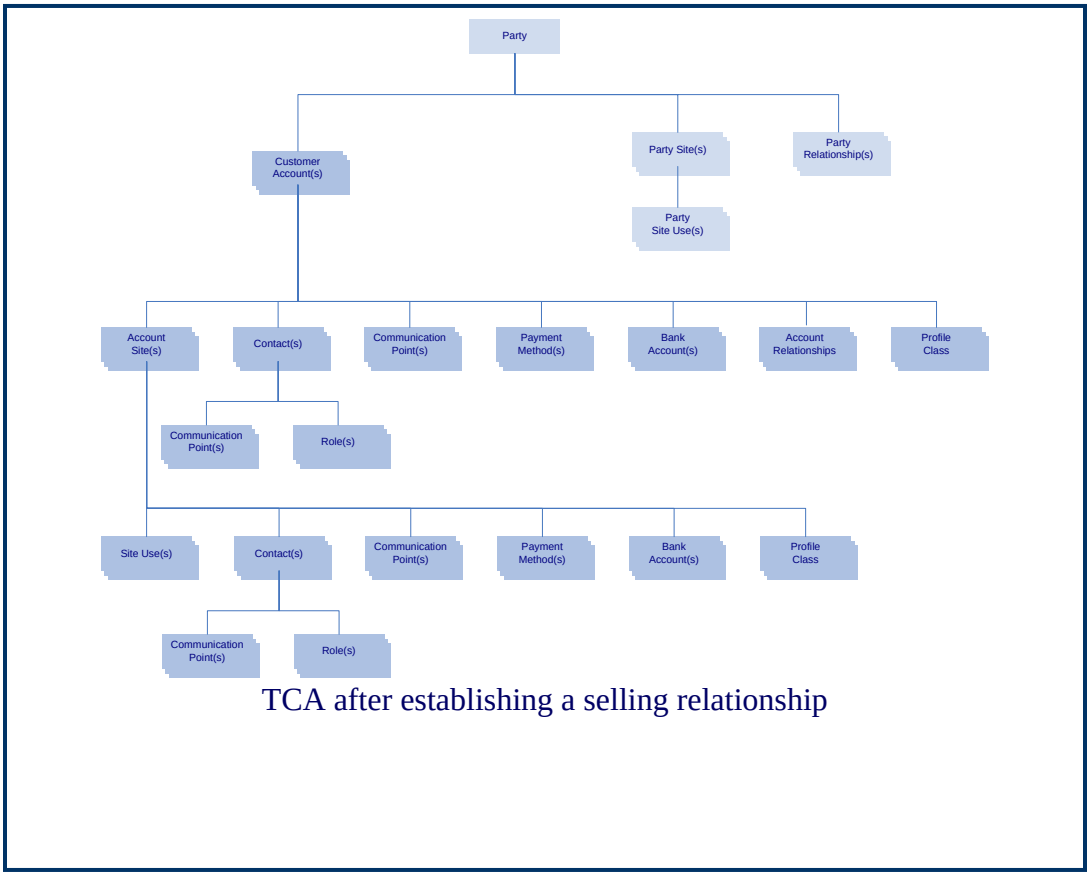
- Parties
- Party Relationships
- Customer Accounts
- Locations – Party Sites, Account Sites
- Contacts

It is important to understand the key entities and their usage in order to understand how exactly TCA works. The party layer of TCA is created to capture prospect information prior to establishing a selling relationship. The party layer includes information such as Party Name, DUNS Number, Person Name, Identifiers such as SSN or FEIN, organization information such as number of employees, CEO, etc.



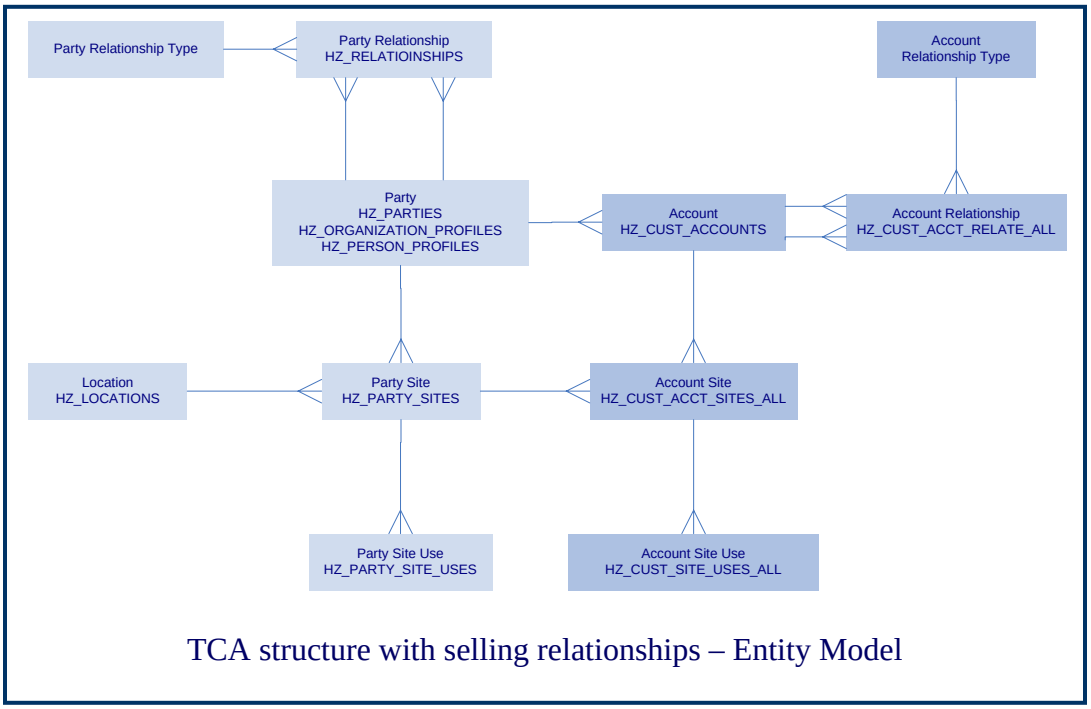
TCA prior to establishing selling relationship

The Account layer is captured in the context of a selling relationship and includes Account Number, shipping and billing locations, account classifications, contacts, etc.



TCA after establishing a selling relationship

The party information is captured in multiple entities HZ_PARTIES, HZ_ORGANIZATION_PROFILES for parties of type Organization and HZ_PARTIES and HZ_PERSON_PROFILES for parties of type Persons.



TCA structure with selling relationships – Entity Model

The Present (R12)

The Release 12 version of Oracle CDH has introduced new functionality that facilitates the better use of the application. Some of the new functionality are – Business Object API's, Business Object Events, Geographic Hierarchies, New Customer UI in Receivables, and Supplier integration with TCA. Also R12 includes enhancements in Bulk Import, Data Quality Management (DQM), Data Librarian and D&B Configuration. There are many other smaller improvements all over the application.

Business Object APIs: A Business object is an abstract grouping of TCA entities to form an operable logical business unit. The Business Object API's facilitate the easier integration and faster development of conversions and integrations including synchronizing routines. The resulting code is smaller due to few calls to TCA API's thus increasing the quality of code with a reduced development time.

There are 16 Business Object level API's with each object having four procedures each – Create, Update, Save and Get procedures. A key aspect of Business Object API's is the ability to embed other business objects. Bank Account assignments that can be captured at Account level are now part of iPayments.

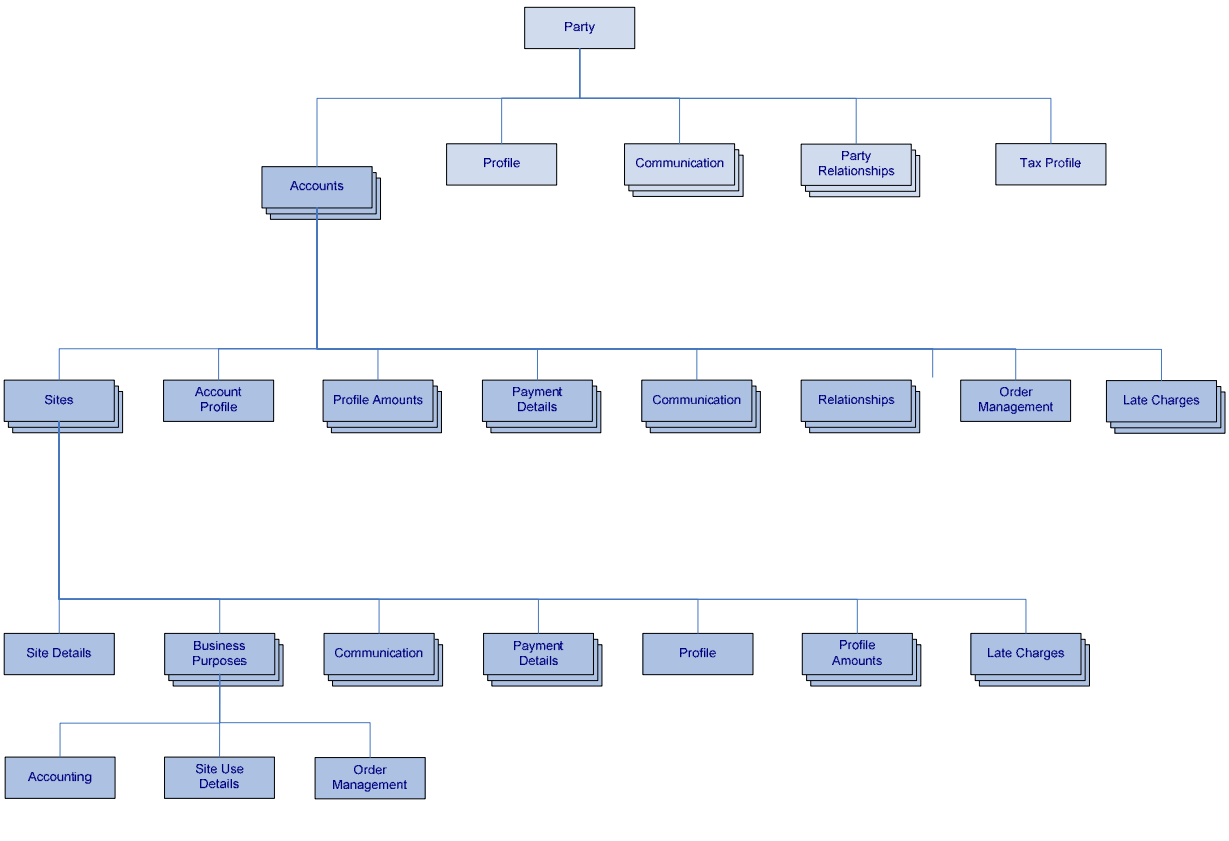
The 16 supported Business objects in R12 are:

- Organization
- Organization Contact
- Organization Customer
- Person
- Person Customer
- Customer Account
- Customer Account Contact
- Customer Account Site
- Party Site
- E-Mail
- Phone
- SMS
- Telex
- Web
- EDI
- EFT

Business Events: While API's provides the means to create and update the customer data in TCA tables, Business Events help in extracting the data that is created or updated so that this data can be synchronized with spoke applications. Business events are raised every time customer data is created or changed in TCA. In R12, Business events can be raised using concurrent programs or API calls. Each raised event generates an event_id using which the detailed information associated with the event can be obtained using corresponding get procedure of the Business Event. In R12, oracle has provided new set of Business Events that are business object level which facilitates the easier integration of customer data with spoke applications with fewer calls (or messages).

Geographic Hierarchies: is a functionality to create and maintain hierarchies between multiple address elements or tax authorities for the purpose of real time address validation and/or tax calculation which does include the street level information. The Geographic Hierarchies can be created using tax vendor data which further can be customized to suit the business needs.

New Customer UI in Receivables: Old Customer Standard form from R11i applications has been replaced in R12 by a brand new HTML based User Interface built using OA Framework leveraging TCA that can be used to manage Customer data both at the party layer as well as at the Account layer including Sites and Site usages. The new UI has more features than the older version of the Customer Standard UI and is backward compatible.



R12 – Customer Tab Structure in new Receivables UI

The Future (Fusion?)

The future of CDH involves enhancements made in several areas. Many of these are more of a guesses at this time based on problems associated with current functionality or the current trends in CDI/MDM technologies. This information is not provided by Oracle and are provided here more as a guidance.

The TCA will under go some architectural changes which includes some aspects of Siebel UCM application. Either through CDH or through a fusion middleware product such ad Oracle Data Integrator (ODI), oracle will try to provide more meta data management capabilities for managing CDI/MDM projects.

Oracle will also provide more hooks to third party content enrichment and data quality providers in line with current functionality of Siebel UCM that will be incorporated into Fusion version of applications.

A significant improvements will be made in the areas of data quality management in terms of monitoring the reporting of data quality metrics. A potential possibility is a dash board type of functionality targeted for Data Stewards.

One of the shortcoming in the current version of Oracle CDH (R12) is its inability to manage privacy and communication requirements (or preferences). Oracle will provide more functionality in this regard.

Also there will be several performance improvements in Bulk Import, batch interfaces, Data Quality Management in general as well as enhanced capabilities for Account level batch interfaces.

About the Author

Mani Kumar Manda is Founder of Rhapsody Technologies, Inc. and OAUG Customer Data Management Special Interest Group (OAUG CDM SIG). Mani has been a consultant for his entire career to mid-market and large customers and has been a recognized speaker in the areas of MDM and CDI with numerous presentations at OAUG, Open World, MDM Summit and several local GEO and SIG groups. Mani has developed a RHYTHM Methodology that significantly increases the success factor for any MDM/CDI implementations.

About Rhapsody Technologies, Inc.

Rhapsody Technologies, a pioneer in advisory, auditing, and implementation services for Master Data Management (MDM), Customer Data Integration (CDI), ERP and CRM solutions for mid to large customers. Over the years, Rhapsody had provided consulting services to Fortune companies such as ADP, GE, DoubleClick, Hewlett Packard, Motorola, etc., firms in their pursuit to solve business problems using enterprise applications such as Oracle CDH, Oracle eBusiness Suite, and PeopleSoft Applications. In addition to Consulting, advisory and auditing services for CDI, ERP and CRM, Rhapsody also provides 'MDM Awareness Seminar for CXOs', 'CDH Functional Fundamentals' training, and training for Data Stewards and Data Librarians.

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