

Oracle® Territory Manager

Implementation Guide

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Oracle Territory Manager Implementation Guide, Release 12

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Preface

Intended Audience

Welcome to Release 12 of the *Oracle Territory Manager Implementation Guide*.

This document is intended for implementers and territory planners.

This guide assumes that you have a working knowledge of the following:

- The principles and customary practices of your business area
- The Oracle Territory Manager application
- Oracle Application Framework Applications
- The Oracle Applications graphical user interface

To learn more about the Oracle Applications graphical user interface, read the *Oracle Applications User's Guide*.

See Related Information Sources on page x for more Oracle Applications product information.

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Structure

- 1 Introduction**
- 2 Dependencies and Integration Points**
- 3 Implementation Overview**
- 4 Territory Planning**
- 5 Implementation Tasks**
- 6 Verify and Troubleshoot**
- A Creating Custom Matching Attributes**

Related Information Sources

Oracle Territory Manager User Guide

This guide contains procedures for updating and managing territories.

Oracle Applications System Administrator's Guide - Security

This guide explains role-based security, including how to assign roles to users.

Oracle Applications Multiple Organizations Implementation Guide

This guide describes how to set up and use Oracle Territory Manager with Oracle Applications Multiple Organization support feature, so you can define and support different organization structures when running a single installation of Oracle Territory Manager.

Oracle Trading Community Architecture User Guide

The customer information used for creating named accounts comes from Oracle

Trading Community Architecture. Resource Manager is also documented here. This guide also explains how to obtain Dun & Bradstreet information for your named account customers.

Oracle Web Applications Desktop Integrator Implementation and Administration Guide

Use this guide to set up and troubleshoot your export to and import from spreadsheet.

Oracle Workflow Administrator's Guide

This guide explains how to complete the setup steps necessary for any Oracle Applications product that includes workflow-enabled processes, as well as how to monitor the progress of runtime workflow processes.

Oracle Workflow Developer's Guide

This guide explains how to define new workflow business processes and customize existing Oracle Applications-embedded workflow processes. It also describes how to define and customize business events and event subscriptions.

Oracle Workflow User's Guide

This guide describes how Oracle Applications users can view and respond to workflow notifications and monitor the progress of their workflow processes.

Oracle Sales Implementation Guide

Use this guide to implement your Sales application. It explains how to set up the territory assignment for sales objects.

Oracle TeleSales Implementation Guide

Use this guide to implement your TeleSales application. It explains how to set up the territory assignment for sales objects.

Oracle Application Framework Personalization Guide

This guide describes how to personalize Oracle Application Framework-based Oracle E-Business Suite application pages as an end-user and as a personalization administrator using the Oracle Application Personalization Framework.

Note: Oracle Territory Manager does not contain any end-user personalizable regions, and there are no special considerations that you need to be aware of when creating administrator-level personalizations of its regions or pages. For general information about how to create personalizations, refer to the Oracle Application Framework Personalization Guide.

Integration Repository

The Oracle Integration Repository is a compilation of information about the service endpoints exposed by the Oracle E-Business Suite of applications. It provides a complete catalog of Oracle E-Business Suite's business service interfaces. The tool lets users easily discover and deploy the appropriate business service interface for integration with any system, application, or business partner.

The Oracle Integration Repository is shipped as part of the E-Business Suite. As your instance is patched, the repository is automatically updated with content appropriate for the precise revisions of interfaces in your environment.

Do Not Use Database Tools to Modify Oracle Applications Data

Oracle **STRONGLY RECOMMENDS** that you never use SQL*Plus, Oracle Data Browser, database triggers, or any other tool to modify Oracle Applications data unless otherwise instructed.

Oracle provides powerful tools you can use to create, store, change, retrieve, and maintain information in an Oracle database. But if you use Oracle tools such as SQL*Plus to modify Oracle Applications data, you risk destroying the integrity of your data and you lose the ability to audit changes to your data.

Because Oracle Applications tables are interrelated, any change you make using an Oracle Applications form can update many tables at once. But when you modify Oracle Applications data using anything other than Oracle Applications, you may change a row in one table without making corresponding changes in related tables. If your tables get out of synchronization with each other, you risk retrieving erroneous information and you risk unpredictable results throughout Oracle Applications.

When you use Oracle Applications to modify your data, Oracle Applications automatically checks that your changes are valid. Oracle Applications also keeps track of who changes information. If you enter information into database tables using database tools, you may store invalid information. You also lose the ability to track who has changed your information because SQL*Plus and other database tools do not keep a record of changes.

Introduction

This chapter covers the following topics:

- Overview of Oracle Territory Manager
- Oracle Territory Manager Features

Overview of Oracle Territory Manager

Oracle Territory Manager assigns business objects (customers and leads, for example) to resources based on configurable business rules. It defines who owns what.

When concurrent programs are run, the territory assignment engine assigns business objects such as the following to resources:

- customers
- leads
- opportunities
- service requests
- tasks
- contract renewals
- trade management claims and offers

Additional information on concurrent programs for sales is in the "Setting Up and Using Territory Assignment Program (TAP)" section of either the *Oracle Sales Implementation Guide* or the *Oracle TeleSales Implementation Guide*.

Components

Territory implementations use all or a subset of the following components to build

territories:

- **Territory Types: Required.** Territory Types are the building blocks for all territories. A type is blueprint for territories, defined by a specific set of transaction types and corresponding matching attributes.
- **Self Service Named Accounts: Optional.** Sales administrators use the seeded named account territory type to create named account territories. Sales managers then assign their named accounts to individual sales representatives. Sales managers use the alignment tool to create different territory assignment models and compare them.
- **Self Service Geographic Territories: Optional.** Sales administrators create a self-service geographic type to create geographic territories and assign them to sales managers. Sales managers can then allocate their geographic region to their directs.
- Concurrent programs enable territory definitions.
- A stand-alone sales team search is available to any user.

Sales Territories

Sales organizations use territories to automatically assign prospects to salespeople.

An example of a sales territory is: High-tech companies within a specific geographic area. This territory is defined using the following matching attributes:

- Account Classification = High Tech
- State = California

The resource assigned to the territory is Joe who is in Sam's sales group. When the assignment engine is run Joe is assigned to all high-tech companies that have an address in the state of California. Because Joe is in Sam's sales group, his manager and the other resources within his group can be granted access to these same companies.

Named Accounts

Most customers fall into sales territories segmented along geographic or industry boundaries. Named accounts represent individual customers elevated from geographic territories and deemed by a sales organization as critical enough to have their own salesperson or account manager.

By their very nature, named account territories are difficult and complex to maintain and revolve around a decentralized business process.

Upper levels of sales management identify a set of named accounts and associate them to a sales division. The sales vice presidents responsible for the sales division distribute named accounts to their directs in a top down fashion through the sales hierarchy until

all named accounts are owned by salespersons.

Self-Service Named Account Alignment for Sales

Proper territory alignment is frequently overlooked and can have a high impact on sales force productivity. Without any additional salespeople, studies have shown 2-7% increases in sales revenue due to proper territory alignments.

Sales managers start the year with compensation plans, named accounts, and quotas. They can then build and save what-if territories in an iterative manner until their alignment goals are met.

Sales managers export a territory alignment to spreadsheet, change named account assignments, and upload the changes for the alignment. Through the HTML interface they use analytic data to compare two alignments using graphs and a calculated balance index. When managers have finalized an alignment they can activate it, making it the one of record.

At the end of the alignment process, you can manually enter named account quotas into the Oracle Incentive Compensation Quota Planning module.

Self-Service Geographic Territories for Sales

Geographies are centrally identified to a sales organization and distributed top down to individual salespeople. Ownership changes are reflected quickly to all levels of sales management and for incoming leads and opportunities.

At each level of the distribution process, the ownership of geographies is clearly and accurately communicated. Sales management interfaces are simplified for common administrative tasks such as the transfer of geographic territories between salespeople.

Non-Sales Territories

The following Oracle modules can use Oracle Territory Manager to assign business objects to resources:

- Oracle Collections
- Oracle Partner Manager
- Oracle Field Service
- Oracle Service Contracts
- Oracle Trade Management

Example

In Oracle Field Service, all high urgency service requests for internal IT support should go to the senior IT support person, John Gray. A territory is defined, with John Gray as the resource, using the following matching attributes for service requests:

- Request Type = Internal: IT
- Request Severity = High1
- Request Status = Open
- Request Urgency = Immediate

Oracle Territory Manager Features

Oracle Territory Manager includes the following features:

- Over 100 matching attributes through which to define territory rules
- Territory Types for ease of territory creation for any usage (such as Oracle Sales or Oracle Service)
- Assignment to individual resources, groups, or teams
- Named account support
- Self-service distribution of named accounts
- Named account alignments with visual comparison of what-if territories
- Export to spreadsheet for ease of territory maintenance
- Self-service distribution of geographic territories
- Configurable territory exception handling through Oracle Workflow
- Ability to create custom matching attributes through a public API

Dependencies and Integration Points

This chapter covers the following topics:

- Oracle Territory Manager Mandatory Dependencies
- Oracle Territory Manager Optional Integrations

Oracle Territory Manager Mandatory Dependencies

The following are the modules that Oracle Territory Manager depends upon:

- **Oracle Application Object Library (AOL):** Territory Manager uses AOL to manage responsibilities that are used in various modules.
- **Resource Manager:** Territory Manager uses resources defined in the Resource Manager to assign resources to a territory.

Oracle Territory Manager Optional Integrations

The following modules are required for specific features to work:

- **Oracle Web Applications Desktop Integrator:** The application uses Web ADI to export and import named account and geography assignments to and from Microsoft Excel. (Required for Geographic Territories and Named Account Territory Alignment.) Also, Oracle Web ADI requires that you use Microsoft Internet Explorer for your browser.
- **Oracle Field Sales or Oracle TeleSales:** Named account alignment metrics depend upon past opportunity data. (Required for Named Account Territory Alignment.)
- **Oracle Trading Community Architecture (TCA):** TCA provides the DUNS number, DNB annual revenue, and DNB number of employees. (Required for Named Accounts if you want to use this information.)

Implementation Overview

This chapter covers the following topics:

- Process Description

Process Description

Before using the Oracle Territory Manager, your functional implementation team must analyze your business and organization needs. This step is key before implementing the application.

Based on planning decisions, the implementation team enables seeded matching attributes to be used in defining your territories.

The territory administrator then begins the territory creation process, according to the implementation.

If you implement named accounts for sales, then the administrator creates territories, selecting named accounts, and assigning them to the top level of sales management. Sales managers in turn assign the named accounts to the salespeople or sales managers who report to them. The next level of sales managers in turn assign named accounts to their directs.

After territories are manually created, you can search and view territory hierarchies. The territory administrator must run the *Synchronize Territory Assignment Rules (STAR)* concurrent program to generate territories before modules can assign resources defined in your territories.

Oracle Territory Manager is implemented in the following four phases:

Phase I: Territory Planning

In Phase I, your implementation team analyzes business and organization needs and plans territories accordingly.

Phase II: Setting Up Territories

In Phase II, the territory administrator starts the territory creation process based on

territory planning. If you plan to implement sales territories, then you also need to set up the Territory Assignment Program per the steps provided in either the *Oracle Sales Implementation Guide* and the *Oracle TeleSales Implementation Guide*.

Phase III: Creating Named Account Territories

Phase III is optional. If you have sales territories and your planning includes the use of named accounts, then the territory administrator and sales managers use the self-service application to create named accounts and territories for sales.

Phase IV: Creating Geographic Territories

Phase IV is optional. If you have geographic sales territories, then the territory administrator and sales managers use the self-service application to create geographic territories for sales.

Phase V: Managing Territories

In Phase V, the territory administrator manages territory changes, such as copying or moving an entire territory in the hierarchy. In addition, the administrator can run territory reports to verify territory change information. See the *Oracle Territory Manager User Guide* for more information.

After updating existing territories, the *Synchronize Territory Assignment Rules (STAR)* concurrent program still needs to be run to generate territories for all usages.

Territory Planning

This chapter covers the following topics:

- User Security
- Planning Your Territories
- Sales Territory Planning Example
- Step 1: What business objects are we assigning?
- Step 2: What matching attributes should we use?
- Step 3: Territory hierarchy - Define date effectivity and number of winners
- Step 4: Territory hierarchy – Placeholder territories
- Step 5: Implement Self Service
- Step 6: Territory hierarchy – Define Catch Alls
- Step 7: How to implement named account territories
- Step 8: How to implement geographic territories
- Step 9: How to support overlays
- Step 10: What is an appropriate territory hierarchy for overlays?
- Step 11: What rank should each territory have?
- Step 12: Have you met all your business requirements?
- Leverage Territory Hierarchies and Inheritance
- Leverage Territory Ranking and Number of Winners
- Choosing Appropriate Matching Attributes
- Matching Rules
- Migrating Territories

User Security

Oracle Territory Manager supports role-based access control of data security. Each user is assigned one or more territory roles. When users log in to Oracle Applications, all menu items associated to their assigned roles appear on their personal home pages. The following roles are available for assignment:

- Sales Team Search User: Provides access to the stand-alone sales team search
- Territory Reports User
- Sales Territory Reports User (includes Territory Reports User role)
- Sales Territory User (includes Sales Team Search User)
- Territory Manager Application Administrator
- Sales Territory Administrator (includes Sales Team Search User and Sales Territory Reports User)
- Collections Territory Administrator (includes Territory Reports User)
- Partner Management Territory Administrator (includes Territory Reports User)
- Service Contracts Territory Administrator (includes Territory Reports User)
- Service Territory Administrator (includes Territory Reports User)
- Trade Management Territory Administrator (includes Territory Reports User)

Having a separate role for each usage makes it possible to restrict a user to see and work with territories, matching attributes, and so on within their usage only.

Example

For example, a user with only the Service Territory Administrator role can only manage service territories and will not have access to territories for another usage, such as sales or collections.

Related Topics

Oracle Applications System Administrator's Guide - Security

Planning Your Territories

The planning phase is the most important step in territory setup. Before using Oracle Territory Manager, a territory planning team should be established to analyze the territory setup in your organization. This territory planning process needs

enterprise-wide cooperation and feedback.

Note: Multiple territory revisions in the first months of operation should be expected as your enterprise discovers omitted information or territories that do not work on a day-to-day basis

Based on your business needs, your team needs to determine the following:

- Usage: What applications need territories?
- Transaction Type (which is based on usage): for example, leads, opportunities, service requests, and delinquencies.
- How many territories are needed?
- What transaction matching attributes should be enabled?
- What resources should be attached to the territories?
- What should the territory hierarchy structure be?
- How many winners are allowed? A winner is the territory that receives the transaction or customer.
- How are winning territories determined?
- Will Sales implement named account territories?
- Do you want to implement self service territory deployment?

This list is not all-inclusive and planning factors depend on your business needs.

Perform the following steps to plan your territories. This procedure is usually done in a group with pen and paper.

Steps:

1. Review your existing territories.

You need the following types of information:

- What is your usage? In other words, what business applications are you building territories for? For example, Oracle Sales, Oracle TeleSales, Oracle Collections, or Oracle Service.
- What transactional objects within your chosen usage are you assigning resources to? This is your transaction type. For example, for Sales, it is account, opportunity, or lead.

- How are your territories currently assigned (by state, by industry, by zip code, by account, and so on)?
 - Is Sales currently using named account territories, even if being manually maintained?
 - What are the names and current territory assignments for your sales or service personnel?
 - What are the names of employees in other organizations who receive account, lead, and opportunity information and how is that information accessed and used?
 - What are your products and how are they differentiated?
2. Decide what matching attributes you want to use to assign objects to territories.
 3. Decide on the hierarchy of territories.
 4. Identify any overlapping territories and decide the order in which the application chooses them.

Rank any overlapping territories from 1 to N to determine the order. A territory with a lower number wins over a territory with a higher number rank within the same level of the hierarchy. In case of a tie, the assignment is made randomly. The Territory Assignment Program for Sales objects assigns the tied object to the territory that was created first.
 5. Decide how many territories will win. For example, do you need one territory to win, which can be appropriate for service, or multiple winners, which can be appropriate for sales?
 6. Decide if named account territories are needed.
 7. Decide if you will use self service deployment for named account or geographic territories.
 8. Test the strategy before implementing territories throughout the company and consider any future territory maintenance efforts.
 9. Consider future territory maintenance efforts.

Note: Remember that the first territory setup is not necessarily the one that works best. You achieve optimum territory definition only gradually after much fine-tuning to accommodate user reactions and various interests in your organization.

Sales Territory Planning Example

This territory planning example utilizes best practices for a fictitious company with a typical sales model involving named accounts and geographic territories with overlay sales organizations.

Business World is a large manufacturer of computer equipment selling in the US and Canada. They organize their products into three families: servers, desktops/laptops, and storage. In their direct sales model, Business World has a named account sales force consisting of an account manager working specific accounts, and a telephony sales force working the remaining general pool of customers. A product overlay sales force works with account managers and telesales reps based on what products a customer is interested in. Each account manager or telesales representative works with three overlay specialists, one for each product family. In planning for FY2008, Business World is expected to have the following:

- US and Canada have separate sales forces
- The direct sales forces manage their top 200 key accounts
- The general business telesales forces manage their remaining customer pool
- The overlay sales forces service all opportunities for a product family and associated customers. There are 3 types of product specialists: Server, Desktop/Laptop, and Storage product specialists.

The following table shows the sales model:

Sales territory model

Role	US	Canada	Comments
Account Managers	15 account managers manage 150 large, key customers	5 account managers manage 50 large, key customers	Account manager territories encompass all leads and opportunities associated to a key customer.
Telesales Representatives	6 Telesales representatives in 6 geographic territories	3 Telesales representatives in 3 geographic territories	Telesales representative territories encompass all leads and opportunities associated to a customer.

Role	US	Canada	Comments
Overlay Product Specialists	3 product families, 9 product specialists for each product family and region	3 product specialists. Product specialists cover their mutually exclusive product families for the entire country.	Product specialists service all opportunities for a product family and geographic location and their related customers (they are only allowed to view customer information). Each account manager and telesales representative has a Server, Desktop/Laptop, and Storage product specialist.

Step 1: What business objects are we assigning?

Which business objects (transaction types) are being assigned to each type of resource? Are we defining territories to access customers, leads, or opportunities for account managers, telesales reps, and product specialists? Do you need to provide read access only or update privileges as well? To what territory usage are the business objects associated?

Business World is going to assign customer, lead, and opportunity transaction types for all territories assigned to account managers and telesales reps.

Territories assigned to overlay product specialists will have a transaction type of opportunity because they need update privileges for opportunities. Oracle Sales products (Sales and TeleSales) provide, by default, read only access to customers if a resource is assigned to the sales team of any of the customer's opportunities.

Investigate how to set up Oracle Territory Manager business objects in conjunction with the Oracle Sales data security model. If you need update access to customers, leads, or opportunities in Oracle Sales or Oracle TeleSales, then you will need to assign them in Oracle Territory Manager.

Step 2: What matching attributes should we use?

We enable the following matching attributes:

- CUSTOMER NAME RANGE, to identify the 200 named accounts
- COUNTRY, because this qualifier is used as a first criterion in identifying territory and offers the ability to support "Catch All" territories
- POSTAL CODE, to create geographic territories composed of postal codes. One can use less granular geographic matching attributes such as state or province as well.
- STATE, to create geographic "Catch All" territories for overlay product specialists
- OPPORTUNITY PRODUCT CATEGORY, to create overlay territories for product specialists.

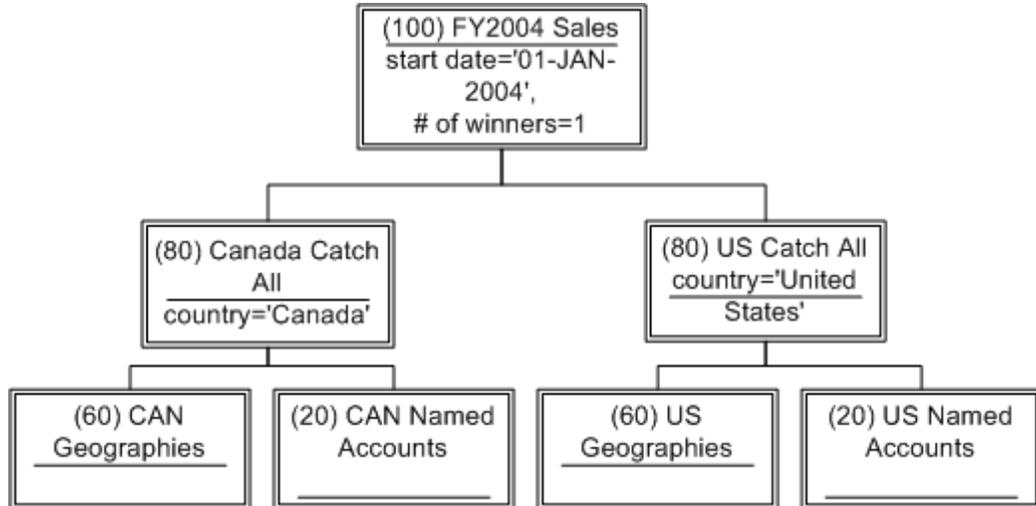
Review Choosing Appropriate Matching Attributes, page 4-17 to analyze your particular situation in greater detail.

Step 3: Territory hierarchy - Define date effectivity and number of winners

The hierarchy is largely designed for ease of maintenance and for the creation of "Catch All" territories. Hierarchies allow you to inherit matching rules and territory properties such as date effectivity and number of winners. Catch alls will be discussed later in Step 4.

For the Sales and TeleSales usage, different territory structures are supported for a business unit by selecting an independent number of winners within the top five levels of the territory hierarchy.

Under the Sales and TeleSales usage, we need to create a top-level territory representing Business World's FY2008 Sales territories. This FY2008 Sales territory will be effective from January 1, 2008 and does not have any transactional matching rules or resources. It is the top of the FY2008 Sales territories and is used to maintain the date effectivity of all territories underneath it and is used to set the number of winning territories (number of winners = 1).



Step 4: Territory hierarchy – Placeholder territories

Sometimes we create territories purely for organization and ease of maintenance. The territories under the US Catch All territory are an example of this.

Within the US and Canada, there are named account sales forces and geographic sales forces. We create two territories under the US Catch All territory:

- US Named Accounts, with no matching attributes or resources
- US Geographies, with no matching attributes or resources

Similarly, Canada has 2 territories called CAN Named Accounts and CAN Geographies underneath the Canada territory.

Step 5: Implement Self Service

Oracle Territory Manager supports the self-service deployment of named accounts and geographic territories. Following are some things to consider before deciding whether or not to utilize this feature:

1. How often do your named account assignments change? If they change frequently, then a self service deployment is recommended.
2. How large is your territory administration staff? What is the required timeliness of activating territory reassignments? How important is it to expose territory ownership to the sales force?

If representatives have very few named accounts and there is little change, then the self service deployment may not be necessary. However, we believe visibility to clear ownership is a best practice.

3. How many named accounts do you have? At what granularity do you need to define named accounts, for example, by customer name range and country or by customer name range and postal code?

If you defined your named accounts by customer name range and country and have a manageable number of customers, use the Forms Navigator to create your territories. If you have many named accounts and need to define territories by customer name range and postal code, then use self-service named account territory management.

Self service allows your total cost of ownership to decrease, reduces your time to implementation, and at the same time empowers your sales management with the ability to manage their own territory distribution and midyear adjustments. Steps 6 (Define Catch Alls) to 11 (Rank) are still relevant regardless of your implementation, but can be managed and generated through the self service flows for geographic and named account territories.

Step 6: Territory hierarchy – Define Catch Alls

Business World has separate sales forces for US and Canada so we will create two child territories underneath FY2008 Sales; one called US with a transaction matching rule COUNTRY = 'UNITED STATES' and another called Canada with a transaction matching rule COUNTRY = 'CANADA'. The COUNTRY matching rules will be inherited by all child territories, easing maintenance. These two territories will also serve as "Catch Alls" for exceptions of the assignment process. These are important because customers, leads or opportunities that do not find matching leaf node territories will fall into these "Catch All" territories based on their country matching attribute and can be assigned to a designated owner (typically the territory administrator) for resolution. The territory administrator should have customer, lead, and opportunity access.

Catch Alls are used to "catch" business transactions that fall through the cracks (leaf node territories) and usually are assigned to territory administrators. To be more exact, they "catch" all business transactions that fall into the catchall territory itself or any territory below it in the hierarchy that does not have a resource.

It is recommended that you use the term "Catch All" in the naming of these territories to help visually distinguish this type of territory.

Step 7: How to implement named account territories

From a business perspective, there are various types of territories. Organizations will pull particular customers from the general pool that they deem as critical and assign a specific resource to it. These are termed "named accounts". In an attempt to organize the remaining pool of customers, general business customers are segmented by a simple criteria such as SIC code, state, or area code.

Named account territories may have rules utilizing the CUSTOMER NAME RANGE

matching attribute in combination with a geographic matching attribute such as state or country. For example, if IBM is a named account you define a territory with CUSTOMER NAME RANGE like 'IBM%' and CUSTOMER NAME RANGE like 'International Business Machines%'. This assigns IBM to the account manager regardless of how many customers exist that begin with IBM or International Business Machines.

The US direct sales force consists of 15 account managers, each responsible for a territory of large key accounts. There will be 15 US named account territories as children of the US Named Accounts territory, one for each account manager. There will also be a catch all territory for the US named accounts. Similarly there will be 5 Canadian named account territories as children of the CAN Named Accounts territory plus a catch all territory.

Lowest level territories or leaf node territories should always have resources assigned to them and therefore also require access types to be defined. All account managers are associated to territories with customer, lead, and opportunity access.

See Choosing Appropriate Matching Attributes, page 4-17 for a discussion on the selection of matching attributes for named accounts.

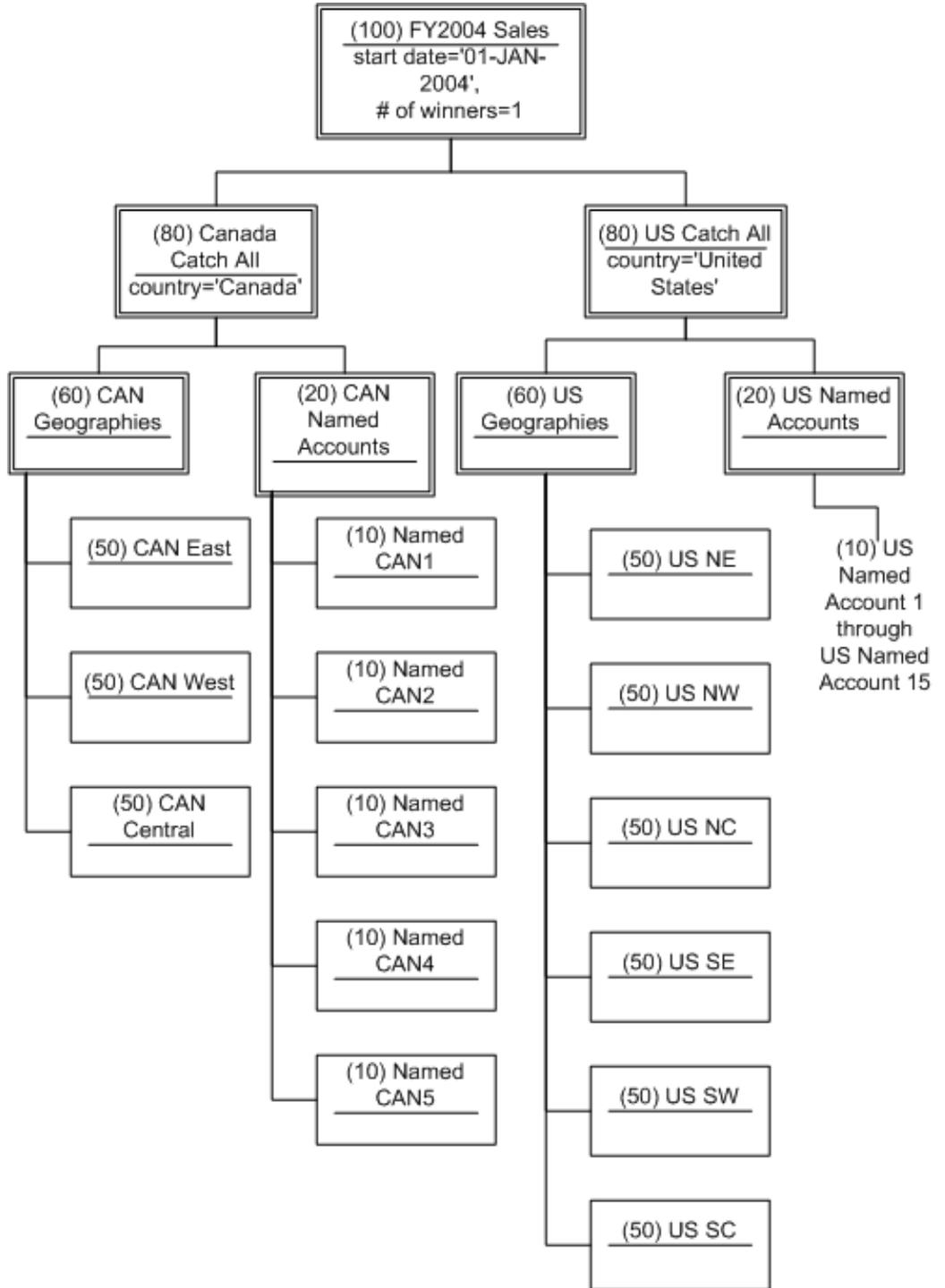
Step 8: How to implement geographic territories

The decision to utilize geographic territories should be based on your business requirements. Following are questions to ask before implementing this type of territory:

1. What granularity is used to distribute your geographies?
2. Do you distribute territories based on geographical requirements such as states, provinces, or postal codes? This will help determine what geographic matching attribute you use.

In our test case the US and Canada each have separate telesales forces, which are responsible for all non-named accounts in a particular geography. The US telesales force has 6 geographic territories as children of the US Geographies territory. The Canada telesales force has 3 geographic territories as children of the CAN Geographies territory. Each geographic territory will have transactional matching rules containing the postal codes that the respective telesales representatives will be responsible for. All telesales representatives will be assigned customer, lead, and opportunity access.

The following chart displays this example.



Step 9: How to support overlays

We recommend that you implement Overlays in a separate territory hierarchy.

The desired business behavior is to find:

1. Either a named account OR a geographic general business territory
2. AND one overlay territory.

Increasing the number of winners in the FY2008 Sales hierarchy and putting the overlay territories underneath it would not accomplish this. However, with the FY2008 Sales hierarchy and number of winners set to one, Territory Manager selects either a named account territory or a general business territory. With a separate FY2008 Overlay hierarchy and number of winners set to one, Territory Manager selects a single overlay territory.

Under the sales usage, you will need to create another top-level territory representing Business World's FY2008 Overlay territories. This FY2008 Overlay territory will be effective from January 1, 2008 and does not have any resources. It does have transaction matching rules to distinguish it as an overlay hierarchy, for example:

```
OPPORTUNITY PRODUCT CATEGORY= 'SERVER',  
OPPORTUNITY PRODUCT CATEGORY= 'DESKTOP',  
OPPORTUNITY PRODUCT CATEGORY= 'LAPTOP',  
OPPORTUNITY PRODUCT CATEGORY= 'STORAGE'.
```

It is the top of the FY2008 Overlay territories and is also used to maintain the date effectivity of all territories underneath it and is used to set the number of winning territories. Note the OPPORTUNITY PRODUCT CATEGORY matching attributes are necessary to distinguish these territories from Business World's geographic TeleSales territories.

Product specialists work opportunities, so we are going to assign Opportunity transaction types for all overlay territories.

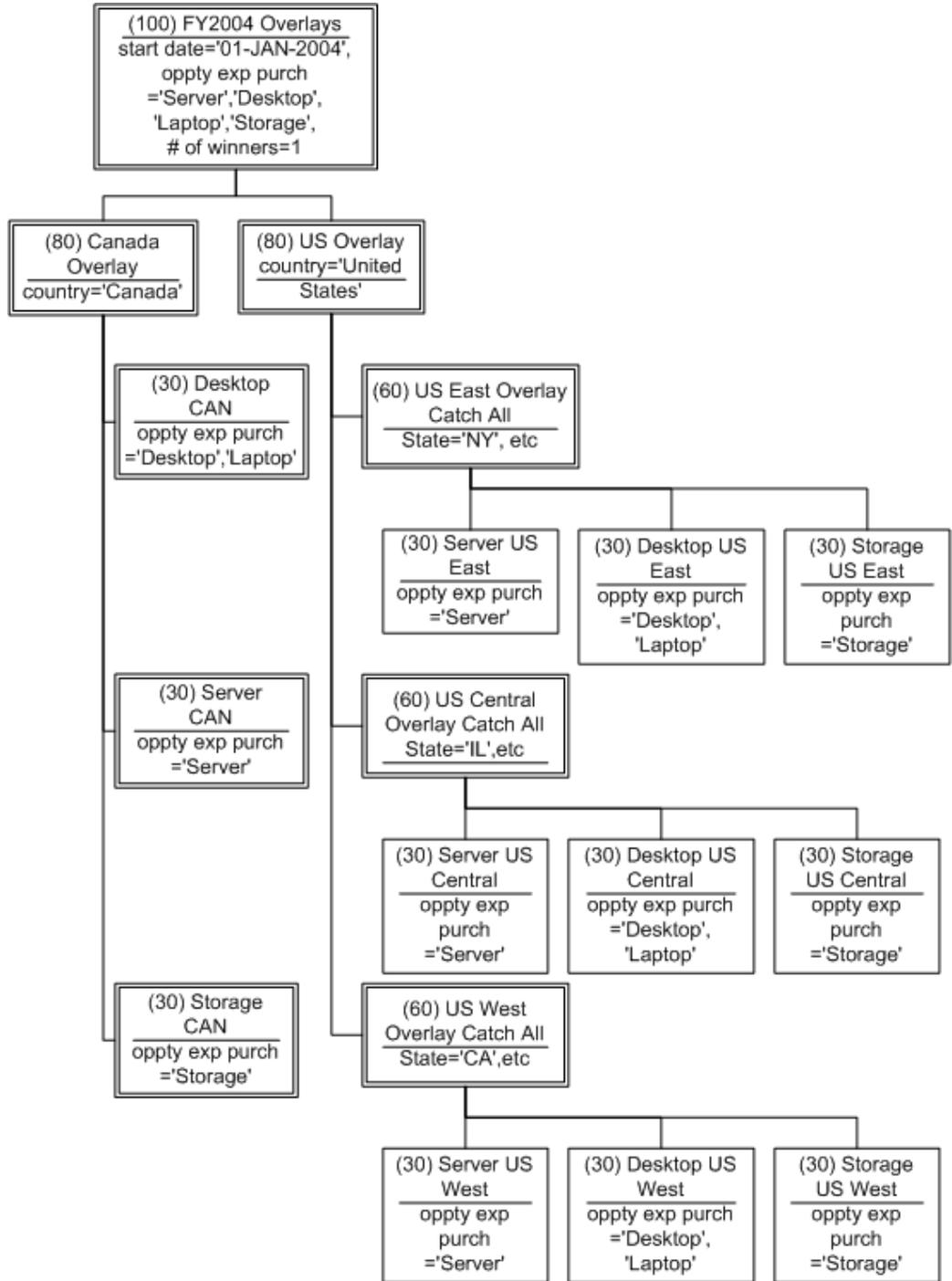
Step 10: What is an appropriate territory hierarchy for overlays?

We have separate sales forces for the US and Canada so we will create two child territories underneath FY2008 Overlay: one called USA Overlay with a transaction matching rule COUNTRY = 'UNITED STATES' and another called Canada Overlay with transaction matching rule COUNTRY = 'CANADA'.

Do you require Catch All territories and how are they organized? If Catch All territories are required, these need to be reflected in the hierarchy.

Is your sales management organized by product family or by geographic area? The territory hierarchy should closely mimic your sales management hierarchy for ease of understanding and maintenance.

Overlay territory hierarchy BY GEOGRAPHY



If Business World's overlay sales force is organized by geography and wants Catch Alls by geography, then we create three territories underneath the US Overlay territory:

- "US East Overlay Catch All", with transactional matching rules STATE = 'NY', STATE = 'NJ', STATE = 'MA', STATE = 'VT', and so on, and resource = Eastern Overlay territory administrator

- "US Central Overlay Catch All", with transactional matching rules STATE = 'IL', STATE = 'OH', STATE = 'AK', STATE = 'WI', and so on, and resource = Central Overlay territory administrator
- "US West Overlay Catch All", with transactional matching rules STATE = 'CA', STATE = 'NV', STATE = 'OR', STATE = 'WA', and so on, and resource = Western Overlay territory administrator

Similarly underneath the Canada Overlay territory, we create three territories:

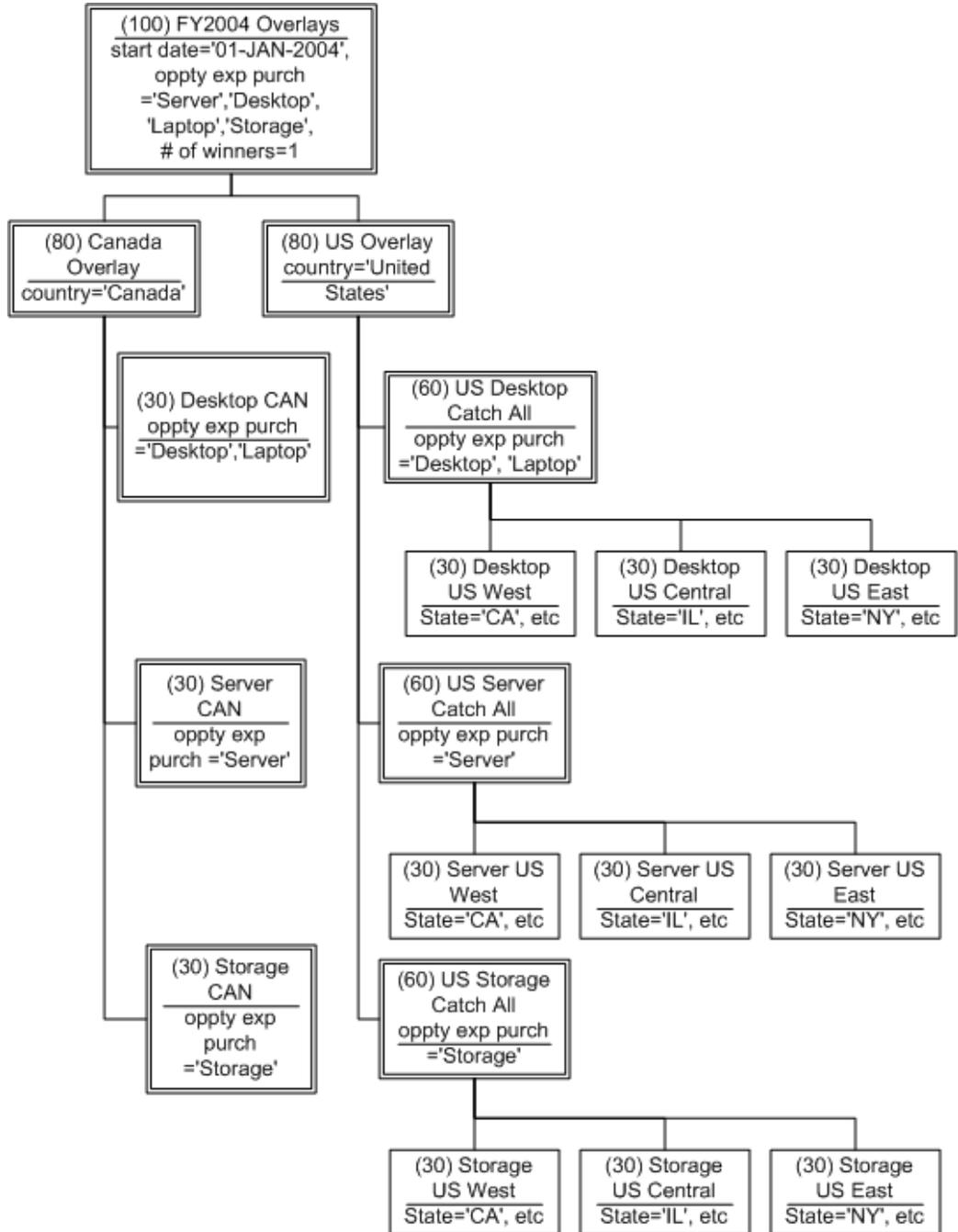
- "Server CAN", with the transactional matching rule OPPORTUNITY PRODUCT CATEGORY = 'SERVER' and resource = Canadian server specialist
- "Desktop CAN", with the transactional matching rule OPPORTUNITY PRODUCT CATEGORY = 'DESKTOP' and OPPORTUNITY PRODUCT CATEGORY = 'LAPTOP' and resource = Canadian desktop/laptop specialist
- "Storage CAN", with the transactional matching rule OPPORTUNITY PRODUCT CATEGORY = 'STORAGE' and resource = Canadian storage specialist

As Canada has a smaller number of customers, three product specialists cover the entire country, one for each product family.

The US overlay sales force consists of nine product specialists, each responsible for a territory of product family and geography. As there is no fixed teaming of account managers or telesales representatives to product specialists, we have chosen to implement the overlays separately as children of the country overlay territory. There will be nine US overlay territories as children of the US Overlay territory, one for each product specialist. Each specialist will cover one of three geographies: East, West, or Central.

All product specialists will be associated to territories with customer and opportunity access.

Alternative overlay territory hierarchy BY PRODUCT FAMILY



If Business World's US overlay sales force requires Catch Alls by product family or is organized by product family, we would create three territories underneath the US Overlay territory:

- "US Server Catch All", with the transactional matching rule OPPORTUNITY PRODUCT CATEGORY = 'SERVER' and resource = Server territory administrator

- "US Desktop Catch All", with the transactional matching rule OPPORTUNITY PRODUCT CATEGORY = 'DESKTOP' and OPPORTUNITY PRODUCT CATEGORY = 'LAPTOP' and resource = Desktop territory administrator
- "US Storage Catch All", with the transactional matching rule OPPORTUNITY PRODUCT CATEGORY = 'STORAGE' and resource = Storage territory administrator

The same 9 US overlay territories created in the first example are re-shuffled underneath the appropriate US product family Catch Alls.

Step 11: What rank should each territory have?

To the left of all the territory names in Figures 1, 2 and 3, is the rank of each territory. Named account territories are always ranked higher than geographic territories because a named account in California should fall in a named account territory and not the geographic territory that includes California. Catch Alls are always ranked lower than their associated territories. The rank applies to the territories on the same level in the hierarchy. Territories lower on a hierarchy always win over territories higher in the hierarchy. See Leverage Territory Ranking and Number of Winners, page 4-17 for a detailed discussion of territory rankings.

Step 12: Have you met all your business requirements?

Stand back and review your business requirements for sales territories. Ensure your territory implementation has met all your business requirements. How will you validate your territories are correct? Create and enable your territories on a test environment. Ensure you have an implementation plan in place that involves systematic validation and user acceptance testing. Don't forget about your ongoing maintenance requirements. See Migrating Territories, page 4-19 for a discussion on how to migrate territories from one year to the next.

For any implementation to succeed in the long run, clear and consistent business processes should be implemented to complement your territory setup.

Leverage Territory Hierarchies and Inheritance

Territory hierarchies do more than organize your territories. They also organize your transactional matching rules, critical to improving the ease of maintenance. Child territories always inherit transactional matching rules.

If you are building a set of 100 representative territories exclusive to the US, it is a best practice to introduce a hierarchy layer representing countries which should include the transactional matching rule "Country = United States". In this manner, all the 100 child territories will inherit its transaction matching rules. Instead of maintaining the rule in 100 territories it can be maintained in one parent territory.

These parent territories can also be assigned resources and act as "Catch All" territories in case the customer, lead or opportunity did not match one of the child territories. We have two catch alls in our business world example: one for Canada and the other for the US. Assigning a resource to "Catch All" territories will route customers, leads, and opportunities to the designated resource for resolution. Catch alls are typically assigned to territory administrators.

Leverage Territory Ranking and Number of Winners

The number of winners refers to the number of winning territories allowed. The number of winners can be defined for territories up to five levels down the hierarchy for the Sales and TeleSales usage. It can only be defined at the top level for other usages. Territory rankings work in conjunction with the number of winners = "w" by selecting the top ranked "w" territories within a level of the hierarchy. Territories lower in a hierarchy have an inherent higher ranking compared to territories higher in the hierarchy. When a winning territory is found, all of the resources assigned to it are assigned to the business object.

A good example of this is the difference between named account territories and geographic territories. You don't want to have to maintain the exclusion of named accounts from the geographic territories explicitly. Rather, you would set the number of winners to one and use the customer name range matching attribute in the named account territories and rank these higher than the geographic territories utilizing postal code qualifier. The territory engine finds that both territories match but the number of winners and rankings dictate that the higher ranked named account territory wins.

Choosing Appropriate Matching Attributes

The matching attributes used in defining named account territories are:

- Customer Name Range and Postal Code

The Customer Name and Postal Code matching attribute identifies organizations through ranges of names or even partial name matches. Unless you have strict data quality management policies in place and there is only one occurrence of each customer, we recommend that you use the Customer Name and Postal Code matching attribute for named accounts.

- DUNS Number

The DUNS Number qualifier identifies organizations through DUNS number matches.

- Site Number

- Registry ID from TCA

- Party Hierarchy from TCA

These matching attributes identify TCA (Oracle Trading Community Architecture) organizations or customer sites.

Be careful not to confuse SIC code, geographic, and so on territories with named accounts. Many organizations will attempt to implement geographic or SIC code based territories as named accounts because they say they have always done it this way.

Questions to ask:

- How many named accounts does the organization have?

If sales management claims that named accounts make up more than 20% of all TCA organizations, then they are likely to have incorrectly implemented named accounts.

For example, a Telecom territory is composed of 50 SIC codes. Implementing a Telecom territory as 20,000 named accounts would require a minimum of 20,000 CUSTOMER NAME RANGE qualifier rules. Clearly, it would be better implemented as a territory with 50 SIC CODE matching rules. There is a diagnostic test within the Oracle Diagnostic Framework for this.

- How many named accounts does a typical resource have?

If sales management claims their reps have any more than a hundred named accounts, they are likely to have incorrectly implemented a simple territory as named accounts. Investigate how the business derived the set of named accounts. Typically, reps do not have the bandwidth to manage more than 100 named accounts and give them the proper attention associated to critical customers.

- Does your business matching attribute fluctuate in the context of the business object you are assigning? Does it segment customers periodically based on a dynamic business matching attribute?

It is important to examine the fluctuation of the dynamic matching attribute in the context of the business object you are assigning. For instance in the credit card industry, customers are segmented by their total A/R balance every quarter into three territories (e.g., <\$250k, \$250k-\$500k, >\$500k) and customers maintain their segmentation even though their balances change.

In these cases, we recommend that you designate account classifications based on the dynamic matching attribute periodically and then use the account classification matching attribute in Oracle Territory Manager.

Using named accounts in lieu of geographic territories is an ineffective way to distribute a representative's territory. It is ineffective in terms of application performance, scalability, and ease of maintenance.

Example

20,000 customers are segmented by the number of employees quarterly into three

territories:

- Less than 100 employees
- 100 to 1000 employees
- Greater than 1000 employees

In this case, the territory assignment is quickly performed because there are only three rules.

Suppose that instead of maintaining three matching rules based on the number of employees matching attribute, you are maintaining a minimum of 20,000 customer name range matching rules. Territory assignment performance is directly correlated to the number of matching rules. Territory assignment will be slower with 20,000 matching rules than with three.

Matching Rules

Best practices around matching rules are the simplest to follow because they are very concrete. Matching rules are converted to SQL and are subject to the same performance constraints. The use of the % wildcard as the first character of the matching attribute value prevents the use of indexes.

Migrating Territories

For how long are your territories active? Your sales organization may migrate to new territories yearly or quarterly and you want to use the existing territory hierarchy as a starting baseline. By following best practices, it will be easier to migrate territories to the next period. The trick is to define a territory start date at the top level territory, since all those below it will be gated by the start date property. Copy the top-level territory, which will automatically copy all the child territories as well. Rename the top-level territory and give it a new start date. Don't forget to go back to the old territory hierarchy and end date the top-level territory. You can create territories with a future start date in order to have your territories created and ready to become active.

Implementation Tasks

This chapter covers the following topics:

- Setting Up User Security
- Setting Up Multiple Organization Access Control
- If You Have Value Added Tax (VAT)
- Creating Custom Matching Attributes
- Enabling Matching Attributes
- Sales Matching Attributes
- Running Concurrent Programs
- Setting Up Territory Assignment Program
- Setting Up to Use Dun & Bradstreet Data
- Setting Up Territory Alignment
- Proxy User
- Setting Up Export
- Loading Postal Codes

Setting Up User Security

In order for users to access Oracle Territory Manager, you need to assign roles to each user in addition to assigned the Territory Management responsibility. When users log in to Oracle Applications, all menu items associated to their assigned roles appear on their personal home pages. The following roles are available for assignment:

- Sales Team Search User: Provides access to the stand-alone sales team search
- Territory Reports User

- Sales Territory Reports User (includes Territory Reports User)
- Sales Territory User (includes Sales Team Search User)
- Territory Manager Application Administrator
- Sales Territory Administrator (includes Sales Team Search User and Sales Territory Reports User)
- Collections Territory Administrator (includes Territory Reports User)
- Partner Management Territory Administrator (includes Territory Reports User)
- Service Contracts Territory Administrator (includes Territory Reports User)
- Service Territory Administrator (includes Territory Reports User)
- Field Service Territory Administrator (includes Territory Reports User)
- Trade Management Territory Administrator (includes Territory Reports User)

Related Topics

See the *Oracle Applications System Administrator's Guide - Security* for information on how to assign roles to users.

Setting Up Multiple Organization Access Control

When properly set up, users in Oracle Territory Manager can make territory changes in different operating units.

1. Create a Global Security Profile in HRMS using the HRMS Management Responsibility > HRMS Manager > Security > Global Security Profile. Enter a Security Type: Secure organizations by organization hierarchy and/or organization list.
2. Set the *MO: Security Profile* profile option value at the Territory Management responsibility level to the security profile that you just created.
3. Run the *Security List Maintenance* concurrent program. You can run the program to process just your security profile by entering the following parameters:
 - Set Generate Lists for to One Named Security Profile
 - Set Security Profile to the profile you created in step 1.
4. Log into the Oracle Territory Manager application and verify that the multiple

operating units appear in the Operating Unit dropdown list in either the Territory tab, Territory Type tab, or the Enable Matching Attributes page. If they do not appear, try bouncing Apache.

If You Have Value Added Tax (VAT)

If you have VAT and want to use geographic matching attributes for the Sales usage, then you need to set up the geographies so that they appear in the lists of values (LOVs) for territory qualifiers in the Forms Territory Details window.

As the Sales Administrator, navigate to Sales Setup > Lookup Codes and create the lookup types and values for any of the following lookup types you may need:

- TAP_CITY: to add cities
- TAP_STATE: to add states
- TAP_COUNTY: to add counties
- TAP_PROVINCE: to add provinces

Creating Custom Matching Attributes

For the Sales or Collections usages, the system administrator can create custom matching attributes based on:

- Any APPS schema table column attribute
- Third party system table column attribute

To create a custom matching attribute:

1. Obtain script number 1.
2. Modify the variable `p_source_id` if needed. The number in the script is -1001, which is for the Sales usage. If you need to change the usage, query `JTF_SOURCES_ALL` for the correct number.
3. Modify the variable `p_trans_type_id` to the value for the transaction type your new matching attribute relates to. The value in the script is -1002. You can query `JTF_QUAL_TYPES_ALL` to determine the correct ID.
4. Run script number 1, which retrieves the transaction type SQL.
5. Save the output of script number 1 to a text file, saved as `name.sql`. This becomes script number 2.

6. Modify each query from script number 2 to include the attribute you want to use. The queries are:

- Real Time SQL
- Batch Total SQL
- Batch Incremental
- Batch Date of Effectivity
- Incremental Reassign

Make a note of the attribute and its alias. You will need this for script number 3.

7. Near the end of the script, modify values for `p_source_id` and `p_trans_type_id` to the same values as for script number 1.
8. Modify the value for `p_program_name`. You can query `JTY_TRANS_USG_PGM_DETAILS` for the value.
9. Modify the values for `p_version_name` and `p_enabled_flag`.
10. Run script number 2, which adds the attribute to the transaction type SQL.
11. Obtain script number 3, which creates the custom matching attribute (CMA).
12. Verify that there is not an existing CMA record for the unique matching attribute ID that you will use for the new CMA.
13. Follow the instructions in the script. Make sure you give a unique qualifier ID for each attribute you create. The ID numbers usually start from 9000. The ID in the script is -9010. Give your new attribute a name and description using the variables `p_name` and `p_description`.
14. Modify values for `p_source_id` and `p_trans_type_id` to the same values as for scripts 1 and 2.
15. Specify which columns to use in the values table to store the values for your custom matching attribute.
16. Enter the alias from step 6 for `p_qual_coll`.
17. Run script number 3.
18. Enable your new matching attribute.
19. Associate the matching attribute with a territory type.

Restrictions

If you create a custom matching attribute for the Account transaction, then you must also add the same custom matching attribute to the other Sales transactions.

The values table stores the values for your custom matching attributes. You can query JTF_TERR_VALUES_ALL to see existing the display type and corresponding columns for existing matching attributes. The following table lists the available columns and display types for storing your custom matching attributes.

DISPLAY_TYPE	CONVERT_T O_ID_FLAG	COLUMNS
CHAR	Y	low_value_char_id
CHAR	N	low_value_char, high_value_char
CHAR_2IDS		value1_id, value2_id
COMPETENCE		not used
CURRENCY		low_value_number, high_value_number, currency_code
DEP_2FIELDS		value1_id, value2_id
DEP_2FIELDS_CHAR_2IDS		value1_id, value2_id, value3_id
DEP_3FIELDS_CHAR_3IDS		value1_id, value2_id, value3_id, value4_id
INTEREST_TYPE		interest_type_id, primary_interest_code_id, secondary_interest_code_id
NUMERIC		low_value_number, high_value_number

Related Topics

Enabling Matching Attributes, page 5-6

Example of a Custom Matching Attribute for Account: Party Type, page A-1

Example of Custom Matching Attribute for Lead: Lead Status, page A-17

Example of Custom Matching Attribute for Quote: Quote Source, page A-38

Example of Custom Matching Attribute for Proposal: Proposal Status, page A-53

Example of Custom Matching Attribute for Opportunity: Budget Status, page A-63

Example of Custom Matching Attribute for Oracle Collections, Customer: Customer Party Type, page A-86

Script 1, page A-99

Enabling Matching Attributes

Matching attributes are seeded criteria used to identify territories. For example, country is a geographic matching attribute. Oracle Territory Manager has seeded matching attributes for the following usages and transaction types:

- Collections: customer
- Partner Management: partner
- Sales and TeleSales: account, lead, opportunity, proposal, quote
- Service: service request, service request and task, task
- Service Contracts: contract renewal
- Trade Management: claim, offer

In addition, you can create your own custom matching attribute through a public API. Before you can assign a matching attribute to a territory type, you need to enable it.

Role: Territory Manager Application Administrator

Restrictions

The *Service Request and Task* transaction type means tasks are created through a service request. If it is a stand-alone task, use the *Task* transaction type instead.

You cannot disable a matching attribute that is part of a territory type definition.

Sales Matching Attributes

The following table lists the transaction matching attributes used by Oracle Sales products and their respective uses. The Account transaction type is also used by Oracle Incentive Compensation.

Sales Matching Attributes

Transaction Type	Territory Matching Attribute	Sales/TeleSales Attribute
Account	Account Classification	Interest of "party site"
Account	Account Hierarchy	"Subsidiary Of" a particular organization
Account	Area Code	Area Code
Account	City	City
Account	City	City
Account	Country	Country
Account	Company Annual Revenue	Annual Revenue
Account	Customer Category	Customer Category
Account	Customer Name	Customer Name
Account	Customer Name Range	Customer Name
Account	DUNS Number	D-U-N-S Number
Account	Number of Employees	Total Employees
Account	Site Number	Party Site Num
Account	Postal Code	Postal Code
Account	Product Hierarchy	Product Category
Account	Province	Province
Account	Registry ID	Party Number or Registry ID
Account	SIC Code	SIC Code

Transaction Type	Territory Matching Attribute	Sales/TeleSales Attribute
Account	Sales Partner Of (This attribute is available only for Oracle Incentive Compensation)	Partner Of
Account	State	State
Lead	Budget Amount	Budget
Lead	Lead Product Category	Product Category
Lead	Lead Inventory Item	Inventory Item
Lead	Lead Source	Source Name
Lead	Purchase Amount	Amount
Lead	Sales Channel	
Opportunity	Opportunity Channel	Sales Channel
Opportunity	Opportunity Classification	Classification
Opportunity	Opportunity Product Category	Product Category
Opportunity	Opportunity Inventory Item	Inventory Item
Opportunity	Opportunity Status	Status
Opportunity	Total Amount	Total
Quoting	Product Category	

Running Concurrent Programs

It is important that the territory administrator runs the concurrent programs regularly in order to generate the territories and reflect all changes made.

- **Synchronize Territory Assignment Rules (STAR):** It builds the territory

assignment rules, builds the API that returns the winning territories and resources attached to the winning territories, which are defined in territory setup, generates all self-service territories.

- **Calculate Territory Alignment Metrics:** Calculates information such as DNB annual revenue for named accounts for the time period specified in the system profile options *Territory Alignment Metric Calculation From Date* and *Territory Alignment Metric Calculation To Date*.
- **Named Account Territory Post Processing:**
 - Kicks off named account catchall workflow processing.
 - Refreshes territory administration portals for Sales.
 - Refreshes the named account and geography distribution information for the Sales User responsibility.

Parameters

STAR uses the following parameters:

- Usage: Select the correct usage from the LOV, such as *Oracle Sales and TeleSales* or *Oracle Service*.
- Transaction Type
- Run Mode: Set to **Total Refresh** the first time you run the concurrent program. Subsequently, set to **Incremental Refresh** to process only the changes in named account and geographic territories, which saves processing time. Set to **Date Effective** to assign resources for a specified date range.
- Start Date
- End Date
- Debug Flag: Yes to write debug messages.

Setting Up Territory Assignment Program

If you are implementing sales territories, then you need to set up the Territory Assignment Program per the steps provided in either the *Oracle Sales Implementation Guide* and the *Oracle TeleSales Implementation Guide*.

Setting Up to Use Dun & Bradstreet Data

If you want to use Dun & Bradstreet data for your named accounts, or use the DUNS number qualifier, then you need to purchase the data. See the *Oracle Trading Community Architecture User Guide* for more information.

Setting Up Territory Alignment

The metrics DNB Number of Employees and DNB Annual Revenue, used for comparing alignments, depend upon information provided by Trading Community Architecture.

Login

Log in to the Personal Home Page.

Responsibility

Trading Community Manager

Navigation

Trading Community : Administration : Enrichment : Third Party Data Rules

Prerequisites

- Use the System Administrator responsibility to assign a user the Trading Community Manager responsibility.
- Purchase Dun & Bradstreet information. See the *Oracle Trading Community Architecture User Guide* for more information. Do not import the data into TCA until after performing this procedure.

Steps:

1. Click **Party Profile Entities**.
2. In the Organization Profile Entity region, click **View Attributes**.
The View Attributes for Organization Profile Entity page displays a list of attributes.
3. Select the attribute Employees at Primary Address.
4. Click **Update Individually**.
The Select and Rank Data Sources for Attributes: Employees at Primary Address page appears.

5. Move the data source Dun & Bradstreet from the Select Data Sources box to the Rank Data Sources box and move it to the top of the box ahead of User Entered.
6. Click **Finish**.
7. Using the System Administrator responsibility, set the following two profile options to set the date range for metric calculations. Profile category is Territory Administration.
 - Territory Alignment Metric Calculation From Date (mm/dd/yyyy)
 - Territory Alignment Metric Calculation To Date (mm/dd/yyyy)
8. Using the CRM Administrator responsibility, run the concurrent program *Calculate Territory Alignment Metrics*.

This concurrent program should be run whenever there are changes in the Dun & Bradstreet information, such as number of employees or annual revenue; changes in the desired date range; and when new named accounts are created.

Metric information is now calculated and available to use for territory alignments.

Proxy User

A user who is a member of a sales group and who is assigned the proxy user role can assign the named accounts or geographic territories owned by the manager of that sales group to any member of the sales group hierarchy that reports up to that manager. This role is typically assigned to a sales administrator or sales operations who can then assign accounts in the sales manager's organization.

Using Resource Manager, create a special role for this function of the type Sales and select the Administrator or Member flag.

Then assign the newly created role to a member of the sales group to be the proxy user.

Next, enter the role in the system profile option *Self Service Named Account Proxy User Role*. The category for this profile is Territory Administration.

When the proxy user logs in, he will see the same list of named accounts and geographic territories as the manager of the sales group that he is the proxy user for.

Setting Up Export

Territory creation requires the ability to export to and upload from spreadsheet. To use the export to Microsoft Excel and upload from spreadsheet features you need to do the following:

1. Install the Oracle Web Applications Desktop Integrator.

2. Enable *Initialize and script Active X controls not marked as safe* in your browser.
3. In your Microsoft Excel, set the macro security to low: Tools > Macro > Security.

Loading Postal Codes

You need to load geographic data into the table that is used by self-service geography. This section covers the public APIs you use to do so, and provides some sample SQL code. You must purchase your geography data, for example from the United States Postal Service. It needs to contain city, state or province, country, and postal code.

Table

The name of the table that contains the geographic data is JTF_TTY_GEOGRAPHIES.

Supported Geography Types

The types of geography supported in Oracle Territory Manager are:

- Country (COUNTRY)
- State (STATE)
- City (CITY)
- Postal Code (POSTAL_CODE)

APIs

The PL/SQL package JTF_TTY_GEOSOURCE_PUB contains three APIs:

- CREATE_GEO
- DELETE_GEO
- UPDATE_GEO

CREATE_GEO API

This API creates a geography. This is the API you will use to initially populate geographic data into the JTF_TTY_GEOGRAPHIES table.

Procedure Specification:

```
Create_geo(  
  p_geo_type IN VARCHAR2,  
  p_geo_name IN VARCHAR2,  
  p_geo_code IN VARCHAR2,  
  p_country_code IN VARCHAR2,  
  p_state_code IN VARCHAR2 default null,  
  p_province_code IN VARCHAR2 default null,  
  p_county_code IN VARCHAR2 default null,  
  p_city_code IN VARCHAR2 default null,  
  p_postal_code IN VARCHAR2 default null,  
  x_return_status IN OUT NOCOPY VARCHAR2,  
  x_error_msg IN OUT NOCOPY VARCHAR2)
```

Example

```
DECLARE

    err_status VARCHAR2(80);
    err_msg VARCHAR2(255);

BEGIN

-- to populate country with 'US'

JTF_TTY_GEOSOURCE_PUB.create_geo(p_geo_type => 'COUNTRY',
    p_geo_name => 'United States',
    p_geo_code => 'US',
    p_country_code => 'US',
    p_state_code => null,
    p_province_code => null,
    p_county_code => null,
    p_city_code => null,
    p_postal_code => null,
    x_return_status => err_status,
    x_error_msg => err_msg);

-- to populate state with 'California'

JTF_TTY_GEOSOURCE_PUB.create_geo(p_geo_type => 'STATE',
    p_geo_name => 'California',
    p_geo_code => 'CA',
    p_country_code => 'US',
    p_state_code => 'CA',
    p_province_code => null,
    p_county_code => null,
    p_city_code => null,
    p_postal_code => null,
    x_return_status => err_status,
    x_error_msg => err_msg);

-- to populate city with 'San Francisco'

JTF_TTY_GEOSOURCE_PUB.create_geo(p_geo_type => 'CITY',
    p_geo_name => 'San Francisco',
    p_geo_code => 'SAN_FRANCISCO',
    p_country_code => 'US',
    p_state_code => 'CA',
    p_province_code => null,
    p_county_code => null,
    p_city_code => 'SAN_FRANCISCO',
    p_postal_code => null,
    x_return_status => err_status,
    x_error_msg => err_msg);

-- to populate postal code with '94065'

JTF_TTY_GEOSOURCE_PUB.create_geo(p_geo_type => 'POSTAL_CODE',
    p_geo_name => '94065',
    p_geo_code => '94065',
    p_country_code => 'US',
    p_state_code => 'CA',
    p_province_code => null,
    p_county_code => null,
    p_city_code => 'SAN_FRANCISCO',
    p_postal_code => '94065',
```

```

x_return_status => err_status,
                x_error_msg => err_msg);

COMMIT;

END;
/

```

DELETE_GEO API

This API deletes a geography. This is the API you will use to delete geographic data into the JTF_TTY_GEOGRAPHIES table.

Procedure Specification:

```

delete_geo(
p_geo_type IN VARCHAR2,
p_geo_code IN VARCHAR2,
p_country_code IN VARCHAR2,
p_state_code IN VARCHAR2 default null,
p_province_code IN VARCHAR2 default null,
p_county_code IN VARCHAR2 default null,
p_city_code IN VARCHAR2 default null,
p_postal_code IN VARCHAR2 default null,
p_delete_cascade_flag IN VARCHAR2 default 'N',
x_return_status IN OUT NOCOPY VARCHAR2,
x_error_msg IN OUT NOCOPY VARCHAR2)

```

Example to delete state of 'Texas'

```

JTF_TTY_GEOSOURCE_PUB.delete_geo(p_geo_type => 'STATE',
                                p_geo_code => 'TX',
                                p_country_code => 'US',
                                p_state_code => 'TX',
                                p_province_code => null,
                                p_county_code => null,
                                p_city_code => null,
                                p_postal_code=> null,
                                p_delete_cascade_flag => 'N',
                                x_return_status => err_status,
                                x_error_msg => err_msg);

```

UPDATE_GEO API

This API updates a geography. This is the API you will use to edit geographic data into the JTF_TTY_GEOGRAPHIES table.

Procedure Specification:

```

update_geo(
p_geo_id IN VARCHAR2,
p_geo_name IN VARCHAR2,
x_return_status IN OUT NOCOPY VARCHAR2,
x_error_msg IN OUT NOCOPY VARCHAR2)

```

Example to update country name

```
JTF_TTY_GEOSOURCE_PUB.update_geo(p_geo_id => 249203,  
    p_geo_name => 'CANADA',  
    x_return_status => err_status,  
    x_error_msg => err_msg);
```

Verify and Troubleshoot

This chapter covers the following topics:

- Verification Tasks
- Profile Options
- Troubleshooting Export to Excel
- Party, Party Site, and Account Merge
- Tips for Fine-tuning Territory Assignment Performance
- If the Synchronize Territory Assignment Rules Fails
- Frequently Asked Questions (FAQs) about Transaction Matching Attributes

Verification Tasks

Verify your implementation by performing one or more of the following tasks:

1. Create a territory for your usage and run the concurrent program.
2. Create a transaction for your usage.
3. Verify that the transaction is assigned to the correct resources.

Profile Options

The following profile options are in the profile category Territory Administration. These system profile options are discussed in the preceding chapter.

- Territory Alignment Metric Calculation From Date (mm/dd/yyyy)
- Territory Alignment Metric Calculation To Date (mm/dd/yyyy)

The From and To dates specify the time period for information to be calculated by

concurrent programs for metric calculation used by territory alignment.

- Self Service Named Account Proxy User Role

When the role specified in this profile option is assigned to a user, that user becomes a proxy user and is able to view and manage self-service geographic and named account territories controlled by the manager of the sales group for whom the user is a proxy user.

Troubleshooting Export to Excel

Please refer to the Oracle Web Applications Desktop Integrator User Guide for more information when you troubleshoot your export to Excel. Following are some troubleshooting notes:

- If images are not displaying properly in the Web ADI page flow, then check the following profile options :
 - BNE UX Base Path: Default value is "/OA_HTML/cabo"
 - BNE UX Physical Directory: This should be set to the physical directory that is mapped to the value being used for BNE UX Base Path. The default is derived by looking up the Java system variable OA_HTML in jserv.properties. If OA_HTML cannot be found, then a search is done for MEDIA_DIRECTORY. Once the path of either of these is found, it is appended with "/cabo/".
- If you are getting an "Unexpected error" during download, then make sure that the log file has the write permission. The log file name and directory are specified by the following profile options:
 - BNE Server Log Filename: default value bne.log
 - BNE ServerLog Path: default is \$FND_TOP/log
- Oracle Web ADI provides a diagnostic tool named BNETEST to confirm the configuration of Web ADI. To run this tool, download the patch for the diagnostic tool that matches the version of Web ADI you have installed and enter the following URL: <http://:/:servlets/BNETEST>

Party, Party Site, and Account Merge

When you merge parties in Oracle Trading Community Architecture, it affects territories in the following ways:

- Named party merged into named party

The merge-from named account and the associated sales team are deleted if they

belong to the same territory. If the merge-from named account belongs to a separate territory, then the merge-from named account is deleted but the associated sales team becomes part of the merge-to named account, and the merge-to named account now belongs to all of the separate territories.

- Non-named party merged into named party
The merge-from party is deleted with no impact on territories.
- Named party merged into non-named party
The non-named party replaces the merge-from named party in the existing territory, and the territory and the sales team of the merge-from named party is retained.

Party Sites

If the party or party site records are identified as duplicates, then the territory definition values that are based on parties are transferred.

If both the merge-from party site and the merge-to party site are named accounts in Oracle Territory Manager, then:

- If both the named accounts belong to the same parent territory, then the merge-from named account and the associated sales team are deleted.
- If the named accounts belong to different parent territories, then the merge-to named account is added to the parent territory of the merge-from named account with the sales team of the merge-from named account. The merge-from named account is then deleted.

If the merge-from party site was set up as a named account in Oracle Territory Manager and the merge-to party site was not a named account in Oracle Territory Manager, then:

- If the merge-from named account belongs to a territory whose matching rule is either DUNS or REGISTRY ID, then:
 - If the party of the merge-to party site already exists as a named account in the territory, then the merge-from named account and the associated sales team are deleted.
 - If the party of the merge-to party site does not exist as a named account in the territory, then the merge-to party site will replace the merge-from party site as a named account.
- If the merge-from named account belongs to a territory whose matching rule is neither DUNS nor REGISTRY ID, then the merge-to party site replaces the merge-from party site as a named account.

Tips for Fine-tuning Territory Assignment Performance

Comparison Operators

Avoid using "<>" operator.

Additional Tips

The following tips can be useful.

- Set up territories in hierarchical fashion for easy maintenance.
- Make the territories as generic as possible.
- If you create a territory and do not assign resources to it, then the Territory Manager does not return this territory as a winning territory.
- You can create your own module specific "Catch All."

If the Synchronize Territory Assignment Rules Fails

If you run the Synchronize Territory Assignment Rules concurrent program and it errors out, run it again with the Debug and Trace flags set to Yes. Then review the log file that results. The log file gives clear information on exactly what step the error occurred at in the program and what the error is.

Frequently Asked Questions (FAQs) about Transaction Matching Attributes

The following are frequently asked questions about transaction matching attributes. Answers to these questions may help you in troubleshooting problems with Territory Manager.

How to Find Possible Transaction Matching Attribute Values?

Answer: In the Define Matching Attributes step, you must enter at least three letters in order to bring up the LOV in the Value From and Value To fields. For example, enter "Bus" to launch the LOV starting with "Bus". If wildcard "%" is used, then use it with letters, such as "B%%", or "%%%" to query the list of values.

What is Customer Name Range Transaction Matching Attribute?

Answer: Customer Name Range is used to group similar customer names. It allows you

to define access based on pre-defined customer names.

What Is the Difference Between the Following Service Transaction Types?

Service Request: This transaction type allows you to define access for account and service request related transaction qualifiers. It limits the transaction access to a service request only.

For example, a territory is defined with appropriate rank information and has Service Request transaction type identified. That territory can be a winning territory among other competitive territories only if it is for a service request transaction, but not a task or a task associated with a service request transaction.

Task: This type allows you to define access for account and task related transaction qualifiers. It limits the transaction access to a task only, not a task created within a service request.

Service Request and Task: This type allows you to define access for account, task and service request related transaction qualifiers. However, it limits the transaction access to a task associated with a service request only, not a task or a service request.

For example, a territory is created with "Service Request" and "Task" transaction types. When a transaction is lunched through a task within a service request, that territory will not be selected as a winning territory even the qualifier and its value is matched to the transaction (a task associated with a service request).

Creating Custom Matching Attributes

CMA for Account: Party Type

This is an example of creating a custom matching attribute for Sales using the account transaction and the party type attribute.

Modify Script 1

Modify Script 1, page A-99 to retrieve the relevant account transaction type SQL meta-data.

1. Set the source ID corresponding to the usage (Sales or Collections). The source ID -1001 corresponds to the Sales usage. To find the desired usage ID query JTF_SOURCES_ALL.

```
p_source_id      NUMBER := -1001;
```

2. Set the transaction type ID. The ID -1002 corresponds to the Account transaction type ID. To find the desired transaction type ID, query JTF_QUAL_TYPES_ALL

```
p_trans_type_id  NUMBER := -1002;
```

3. Run the script and save the output to a file. Running this command will save the Account transaction type SQL meta-data to the "R12AccountTT.sql" file.

```
SQL> spool <output filename - e.g., "d:\R12AccountTT.sql">  
SQL> set serveroutput on size 999999  
SQL> @Script1.sql /
```

Modify Transaction SQL Meta-Data

Modify the transaction type SQL meta-data (R12AccountTT.sql) to get the CMA's corresponding transaction attribute value.

1. Add the party_type attribute to each of the following SQLs:

- l_real_time_sql :=

```

SELECT
    party.party_id      trans_object_id,
    null               trans_detail_object_id,
    TO_CHAR(NULL)      city,
    TO_CHAR(NULL)
postal_code,
    TO_CHAR(NULL)      state,
    TO_CHAR(NULL)      province,

    TO_CHAR(NULL)      county,
    TO_CHAR(NULL)      country,
    party.party_id
party_id,
    TO_NUMBER(NULL)    party_site_id,

    upper(party.primary_phone_area_code)    area_code,
    upper(party.party_name)
comp_name_range,
    party.party_id      partner_id,

    party.employees_total
num_of_employees,
    upper(party.category_code)
category_code,
    party.party_id
party_relationship_id,
    upper(party.sic_code_type|| : ||party.sic_code)    sic_code,

    orgp.CURR_FY_POTENTIAL_REVENUE    squal_num06,

    upper(orgp.PREF_FUNCTIONAL_CURRENCY)    car_currency_code,

    upper(party.duns_number_c)
squal_char11,
    l_txn_date    txn_date

-- Party Type CMA
, UPPER(party.party_type)
Q9010_PARTY_TYPE
--

FROM
    HZ_PARTIES party,
    HZ_ORGANIZATION_PROFILES ORGP
WHERE party.party_type IN ('PERSON','ORGANIZATION')
AND party.status='A'
AND party.party_id = orgp.party_id(+)
AND nvl(orgp.effective_end_date(+),sysdate + 1) > sysdate
AND party.party_id = l_trans_object_id1 UNION ALL
SELECT
    party.party_id
trans_object_id,
    addr.party_site_id
trans_detail_object_id,
    upper(LOC.city)    city,
    upper(LOC.postal_code)    postal_code,

    upper(LOC.state)    state,
    upper(LOC.province)    province,
    upper(LOC.county)    county,

```

```

upper(LOC.country)                country,
party.party_id                    party_id,
addr.party_site_id
party_site_id,
upper(phone.phone_area_code)     area_code,
upper(party.party_name)
comp_name_range,
party.party_id                    partner_id,

party.employees_total
num_of_employees,
upper(party.category_code)
category_code,
party.party_id
party_relationship_id,
upper(party.sic_code_type||': '||party.sic_code) sic_code,
orgp.CURR_FY_POTENTIAL_REVENUE    squal_num06,
upper(orgp.PREF_FUNCTIONAL_CURRENCY) car_currency_code,

upper(party.duns_number_c)
squal_char11,
l_txn_date                        txn_date

-- Party Type CMA
, UPPER(party.party_type)
Q9010_PARTY_TYPE
--

FROM
  HZ_CONTACT_POINTS phone,
  HZ_PARTIES party,
  HZ_PARTY_SITES addr,
  HZ_LOCATIONS LOC,
  HZ_ORGANIZATION_PROFILES ORGP
WHERE phone.owner_table_name(+) = 'HZ_PARTY_SITES'
AND   phone.primary_flag(+) = 'Y'
AND   phone.status(+) = 'A'
AND   phone.contact_point_type (+) = 'PHONE'
AND   addr.party_site_id = phone.owner_table_id(+)
AND   addr.party_id=party.party_id
AND   party.party_id = orgp.party_id(+)
AND   nvl(orgp.effective_end_date(+),sysdate + 1) > sysdate
AND   party.party_type IN ('PERSON','ORGANIZATION')
AND   party.status='A'
AND   LOC.location_id = addr.location_id
AND   addr.status='A'
AND   party.party_id = l_trans_object_id1
AND   addr.party_site_id = nvl(l_trans_object_id2,
addr.party_site_id) ;

```

- l_batch_total_sql :=

```

select /*+ parallel(ORGPRO) parallel(CNTPNT) parallel(X)
use_hash(ORGPRO CNTPNT X) */
-1001      source_id,
-1002      trans_object_type_id,
X.party_id  trans_object_id,
X.party_site_id      trans_detail_object_id,
x.party_type      party_type,
UPPER(X.party_name)  squal_char01,
UPPER(X.city)       squal_char02,
UPPER(X.county)     squal_char03,
UPPER(X.state)      squal_char04,
UPPER(X.province)   squal_char05,
UPPER(X.postal_code) squal_char06,
UPPER(X.country)    squal_char07,
UPPER(CNTPNT.phone_area_code) squal_char08,
UPPER(X.category_code) squal_char09,
UPPER(X.sic_code_type||': '||X.sic_code) squal_char10,
UPPER(X.duns_number_c) squal_char11,
UPPER(ORGPRO.pref_functional_currency) squal_curc01,
UPPER(X.party_name_substring) squal_fc01,
X.party_id squal_num01,
X.party_site_id squal_num02,
X.party_id squal_num03,
X.party_id squal_num04,
X.employees_total squal_num05,
ORGPRO.curr_fy_potential_revenue squal_num06

-- Party Type CMA
, UPPER(X.party_type)
Q9010_PARTY_TYPE
--

from HZ_ORGANIZATION_PROFILES  ORGPRO ,
     HZ_CONTACT_POINTS CNTPNT,
     (select /*+ parallel(PARTY) parallel(SITE) parallel(LOC)
use_hash(SITE) use_hash(PARTY) use_hash(LOC) */
PARTY.party_type party_type,
SITE.party_site_id party_site_id,
Site.party_id party_id,
LOC.city city,
LOC.country country,
LOC.county county,
LOC.state state,
LOC.province province,
LOC.postal_code postal_code,
PARTY.employees_total employees_total,
PARTY.sic_code_type sic_code_type,
PARTY.sic_code sic_code,
upper(substr(PARTY.party_name,1,1)) party_name_substring,

upper(PARTY.party_name) party_name,
PARTY.category_code category_code,
'HZ_PARTY_SITES' owner_table_name,
SITE.party_site_id owner_table_id,
PARTY.duns_number_c

-- Party Type CMA
, party.party_type party_type
--

```

```

from HZ_PARTY_SITES SITE,
     HZ_LOCATIONS LOC,
     HZ_PARTIES PARTY
where SITE.status = 'A'
and SITE.party_id = PARTY.party_id
and PARTY.party_type in ('PERSON', 'ORGANIZATION')
and PARTY.status = 'A'
and LOC.location_id = SITE.location_id
union all
select /*+ parallel(PARTY) */
     PARTY.party_type party_type,
     to_number(NULL) party_site_id ,
     PARTY.party_id party_id ,
     to_char(NULL) city ,
     to_char(NULL) country ,
     to_char(NULL) county ,
     to_char(NULL) state ,
     to_char(NULL) province ,
     to_char(NULL) postal_code ,
     PARTY.employees_total employees_total,
     PARTY.sic_code_type sic_code_type,
     PARTY.sic_code sic_code,
     upper(substr(PARTY.party_name,1,1)) party_name_substring,

     upper(PARTY.party_name) party_name,
     PARTY.category_code category_code,
     'HZ_PARTIES' owner_table_name,
     PARTY.party_id owner_table_id,
     PARTY.duns_number_c

-- Party Type CMA
     , party.party_type party_type
--

     from HZ_PARTIES PARTY'
where PARTY.party_type in ('PERSON', 'ORGANIZATION')
and PARTY.status = 'A'
) X
where CNTPNT.owner_table_name(+) = X.owner_table_name
and CNTPNT.owner_table_id(+) = X.owner_table_id
and CNTPNT.status(+)='A'
and CNTPNT.primary_flag(+)='Y'
and CNTPNT.contact_point_type(+)='PHONE'
and ORGPRO.party_id(+) = X.party_id

and nvl(ORGPRO.effective_end_date(+),sysdate+1) > sysdate ;

```

- l_batch_incr_sql :=

```

select /*+ use_nl(ORGPRO CNTPNT) */
-1001 source_id,
-1002 trans_object_type_id,
X.party_id trans_object_id,
X.party_site_id trans_detail_object_id,
x.party_type party_type,
X.party_id squal_num01,
X.party_site_id squal_num02,
X.party_id squal_num03,
X.party_id squal_num04,
X.employees_total squal_num05,
ORGPRO.curr_fy_potential_revenue squal_num06,
UPPER(ORGPRO.pref_functional_currency) squal_curc01,
UPPER(X.party_name_substring) squal_fc01,
UPPER(X.party_name) squal_char01,
UPPER(X.city) squal_char02,
UPPER(X.county) squal_char03,
UPPER(X.state) squal_char04,
UPPER(X.province) squal_char05,
UPPER(X.postal_code) squal_char06,
UPPER(X.country) squal_char07,
UPPER(CNTPNT.phone_area_code) squal_char08,
UPPER(X.category_code) squal_char09,
UPPER(X.sic_code_type||': '||X.sic_code) squal_char10,
UPPER(X.duns_number_c) squal_char11

-- Party Type CMA
, UPPER(X.party_type)
Q9010_PARTY_TYPE
--

from HZ_ORGANIZATION_PROFILES ORGPRO ,
HZ_CONTACT_POINTS CNTPNT,
(select /*+ leading(y) */
Z.party_site_id, Z.party_id,
z.party_type, Z.city,
Z.country, Z.county, Z.state,
Z.province, Z.postal_code,
Z.employees_total,
Z.sic_code_type, Z.sic_code,
Z.party_name_substring,
Z.party_name, Z.category_code,
Z.owner_table_name,
Z.owner_table_id, Z.duns_number_c
from (select /*+ no_merge */ distinct customer_id
from AS_CHANGED_ACCOUNTS_ALL CHGACC
where lead_id is null and sales_lead_id is null
and CHGACC.request_id = 1_REQUEST_ID) Y,
(select SITE.party_site_id party_site_id,
SITE.party_id party_id,
PARTY.PARTY_TYPE party_type,
LOC.city city,
LOC.country country,
LOC.county county,
LOC.state state,
LOC.province province,
LOC.postal_code postal_code,
PARTY.employees_total employees_total,
PARTY.sic_code_type sic_code_type,
PARTY.sic_code sic_code,

```

```

upper(substr(PARTY.party_name,1,1)) party_name_substring,
      upper(PARTY.party_name) party_name,
      PARTY.category_code category_code,
      'HZ_PARTY_SITES' owner_table_name,
      SITE.party_site_id owner_table_id,
      PARTY.duns_number_c

-- Party Type CMA
      , party.party_type'
--

      from HZ_PARTY_SITES SITE,
           HZ_LOCATIONS LOC,
           HZ_PARTIES PARTY
      where SITE.status = 'A'
            and SITE.party_id = PARTY.party_id
            and PARTY.party_type in ('PERSON',
''ORGANIZATION'')
            and PARTY.status = 'A'
            and LOC.location_id = SITE.location_id
union all
      select to_number(NULL) party_site_id,
            PARTY.party_id party_id,
            PARTY.PARTY_TYPE party_type,
            to_char(NULL) city,
            to_char(NULL) country,
            to_char(NULL) county,
            to_char(NULL) state,
            to_char(NULL) province,
            to_char(NULL) postal_code ,
            PARTY.employees_total employees_total,
            PARTY.sic_code_type sic_code_type,
            PARTY.sic_code sic_code,
            upper(substr(PARTY.party_name,1,1))
party_name_substring,
      upper(PARTY.party_name) party_name,
      PARTY.category_code category_code,
      'HZ_PARTIES' owner_table_name,
      PARTY.party_id owner_table_id,
      PARTY.duns_number_c

-- Party Type CMA
      , party.party_type
--

      from HZ_PARTIES PARTY
      where PARTY.party_type in ('PERSON',
''ORGANIZATION'')
            and PARTY.status = 'A') Z
where y.customer_id = z.party_id) X
where CNTPNT.owner_table_name(+) = X.owner_table_name
and CNTPNT.owner_table_id(+) = X.owner_table_id
and CNTPNT.status(+)='A'
and CNTPNT.primary_flag(+)='Y'
and CNTPNT.contact_point_type(+)='PHONE'
and ORGPRO.party_id(+) = X.party_id
and nvl(ORGPRO.effective_end_date(+),sysdate+1) > sysdate ;

```

- l_batch_dea_sql := NO

- l_incr_reassign_sql :=

```

select /*+ use_nl(ORGPRO CNTPNT) */
-1001 source_id,
-1002 trans_object_type_id,
X.party_id trans_object_id,
X.party_site_id trans_detail_object_id,
x.party_type party_type,
X.party_id squal_num01,
X.party_site_id squal_num02,
X.party_id squal_num03,
X.party_id squal_num04,
X.employees_total squal_num05,
ORGPRO.curr_fy_potential_revenue squal_num06,
UPPER(ORGPRO.pref_functional_currency) squal_curc01,
UPPER(X.party_name_substring) squal_fc01,
UPPER(X.party_name) squal_char01,
UPPER(X.city) squal_char02,
UPPER(X.county) squal_char03,
UPPER(X.state) squal_char04,
UPPER(X.province) squal_char05,
UPPER(X.postal_code) squal_char06,
UPPER(X.country) squal_char07,
UPPER(CNTPNT.phone_area_code) squal_char08,
UPPER(X.category_code) squal_char09,
UPPER(X.sic_code_type||': '||X.sic_code) squal_char10,
UPPER(X.duns_number_c) squal_char11

-- Party Type CMA
, UPPER(X.party_type)
Q9010_PARTY_TYPE
--

from HZ_ORGANIZATION_PROFILES ORGPRO ,
HZ_CONTACT_POINTS CNTPNT,
(select /*+ leading(y) */
Z.party_site_id, Z.party_id,
z.party_type, Z.city,
Z.country, Z.county, Z.state,
Z.province, Z.postal_code,
Z.employees_total,
Z.sic_code_type, Z.sic_code,
Z.party_name_substring,
Z.party_name, Z.category_code,
Z.owner_table_name,
Z.owner_table_id, Z.duns_number_c
from ( select distinct ACC.customer_id customer_id
from ( select distinct terr_id terr_id
from jty_changed_terrs
where tap_request_id = l_request_id )
CHG_TERR,
AS_ACCESSES_ALL ACC,
AS_TERRITORY_ACCESSES TERR_ACC
where CHG_TERR.terr_id = TERR_ACC.territory_id
and TERR_ACC.access_id = acc.access_id
and acc.lead_id is null
and acc.sales_lead_id is null ) Y,
( select SITE.party_site_id party_site_id,
SITE.party_id party_id,
PARTY.PARTY_TYPE party_type,
LOC.city city,
LOC.country country,

```

```

LOC.county county,
    LOC.state state,
    LOC.province province,
    LOC.postal_code postal_code,
    PARTY.employees_total employees_total,
    PARTY.sic_code_type sic_code_type,
    PARTY.sic_code sic_code,
    upper(substr(PARTY.party_name,1,1))
party_name_substring,
    upper(PARTY.party_name) party_name,
    PARTY.category_code category_code,
    'HZ_PARTY_SITES' owner_table_name,
    SITE.party_site_id owner_table_id,
    PARTY.duns_number_c

-- Party Type CMA
    , party.party_type
--

    from HZ_PARTY_SITES SITE,
         HZ_LOCATIONS LOC,
         HZ_PARTIES PARTY
    where SITE.status = 'A'
    and SITE.party_id = PARTY.party_id
    and PARTY.party_type in ('PERSON',
'ORGANIZATION')
    and PARTY.status = 'A'
    and LOC.location_id = SITE.location_id union all
    select to_number(NULL) party_site_id,
           PARTY.party_id party_id,
    PARTY.PARTY_TYPE party_type,
    to_char(NULL) city,
           to_char(NULL) country,
           to_char(NULL) county,
           to_char(NULL) state,
           to_char(NULL) province,
           to_char(NULL) postal_code ,
    PARTY.employees_total employees_total,
    PARTY.sic_code_type sic_code_type,
    PARTY.sic_code sic_code,
    upper(substr(PARTY.party_name,1,1))
party_name_substring,
    upper(PARTY.party_name) party_name,
    PARTY.category_code category_code,
    'HZ_PARTIES' owner_table_name,
    PARTY.party_id owner_table_id,
    PARTY.duns_number_c

-- Party Type CMA
    , party.party_type
--

    from HZ_PARTIES PARTY
    where PARTY.party_type in ('PERSON',
'ORGANIZATION')
    and PARTY.status = 'A') Z
    where y.customer_id = z.party_id) X
where CNTPNT.owner_table_name(+) = X.owner_table_name
and CNTPNT.owner_table_id(+) = X.owner_table_id
and CNTPNT.status(+)='A'
and CNTPNT.primary_flag(+)='Y'
and CNTPNT.contact_point_type(+)='PHONE'
and ORGPRO.party_id(+) = X.party_id

```

```
and nvl(ORGPRO.effective_end_date(+),sysdate+1) > sysdate;
```

```
JTY_TRANS_USG_PGM_SQL_PKG.Insert_Row(
  p_source_id => -1001
,p_trans_type_id => -1002
,p_program_name => 'SALES/ACCOUNT PROGRAM'
,p_version_name => '18-NOV-05: CMA PARTY TYPE ADDED'
,p_real_time_sql => l_real_time_sql
,p_batch_total_sql => l_batch_total_sql
,p_batch_incr_sql => l_batch_incr_sql
,p_batch_dea_sql => l_batch_dea_sql
,p_incr_reassign_sql => l_incr_reassign_sql
,p_use_total_for_dea_flag => null
,p_enabled_flag => 'Y'
,retcode => retcode
,errbuf => errbuf);
```

```
dbms_output.put_line('SALES/ACCOUNT PROGRAM retcode : ' ||
retcode);
dbms_output.put_line('SALES/ACCOUNT PROGRAM errbuf : ' ||
errbuf);
```

```
COMMIT;
```

```
END;
```

2. Modify the R12AccountTT.sql file with the appropriate package parameters to make the SQL meta-data change.

```
JTY_TRANS_USG_PGM_SQL_PKG.Insert_Row(
  p_source_id => -1001 /* From JTF_SOURCES_ALL*/
,p_trans_type_id => -1002 /*From JTF_QUAL_TYPES_ALL*/
,p_program_name => 'SALES/ACCOUNT PROGRAM' /*FROM
JTF_TRANS_USG_PGM_DETAILS*/
,p_version_name => '18-NOV-05: CMA PARTY TYPE ADDED'
,p_real_time_sql => l_real_time_sql
,p_batch_total_sql => l_batch_total_sql
,p_batch_incr_sql => l_batch_incr_sql
,p_batch_dea_sql => l_batch_dea_sql
,p_incr_reassign_sql => l_incr_reassign_sql
,p_use_total_for_dea_flag => null
,p_enabled_flag => 'Y'
,retcode => retcode
,errbuf => errbuf);
```

3. Run the R12AccountTT.sql file.

```
SQL> @R12AccountTT.sql /
```

Create the Custom Matching Attribute

Create the CMA. The basis of this script is to populate all the necessary information in the following tables:

JTF_SEEDED_QUAL_ALL_B

JTF_SEEDED_QUAL_ALL_TL

JTF_QUAL_USGS_ALL

1. Ensure that there is not an existing CMA record for the unique matching attribute ID that you will use for the new CMA.

```
set serveroutput on size 999999
```

```
DECLARE
```

```
l_real_time_sql varchar2(32000) := NULL;  
l_batch_total_sql varchar2(32000) := NULL;  
l_batch_incr_sql varchar2(32000) := NULL;  
l_batch_dea_sql varchar2(32000) := NULL;  
l_incr_reassign_sql varchar2(32000);  
retcode varchar2(250);  
errbuf varchar2(1000);BEGIN
```

```
DELETE  
FROM jtf_seeded_qual_all_b  
WHERE seeded_qual_id = -9010;  
EXCEPTION  
WHEN NO_DATA_FOUND THEN  
NULL;  
END;
```

```
BEGIN  
DELETE  
FROM jtf_seeded_qual_all_tl  
WHERE seeded_qual_id = -9010;  
EXCEPTION  
WHEN NO_DATA_FOUND THEN  
NULL;  
END;
```

```
BEGIN  
DELETE  
FROM jtf_qual_usgs_all  
WHERE qual_usg_id = -9010;  
EXCEPTION  
WHEN NO_DATA_FOUND THEN  
NULL;  
END;
```

2. Create the meta-data for the CMA. Follow the comments provided in the script to enter the relevant CMA information.

```

/* The following meta-data will create the custom matching attribute
** for the Customer Party Type.
*/
JTY_CUST_QUAL_PKG.create_qual(

    /* Unique Identifier/Primary Key */
    p_seeded_qual_id      => -9010 /*This number should
correspond to the number used in the alias for the attribute*/
    ,p_name                => 'Party Type (CMA)'
    ,p_description         => 'Party Type (CMA)'
    ,p_language           => 'US'

    ,/* Sales Usage: FK to
        JTF_SOURCES_ALL.SOURCE_ID*/
    p_source_id           => -1001

    ,/* Sales Account Transaction Type: FK to
        JTF_QUAL_TYPE_USGS_ALL.QUAL_TYPE_USG_ID*/
    p_trans_type_id       => -1002
    ,p_enabled_flag       => 'N'

    ,/* QUAL_RELATION_FACTOR
        This needs to be the next prime number greater than
        the value from the following SQL:

        SELECT MAX(qual_relation_factor)
        FROM jtf_qual_usgs_all

        The first 1000 primes can be found at:
        http://primes.utm.edu/lists/small/1000.txt

        Custom matching attributes should start at the 303rd prime
        which is 1999. This is to keep 1st to 302nd primes
        for product development to seed matching attributes.
        */
    p_qual_relation_factor      => 1999

    /* The following set of meta-data setups determine
    ** the behavior of the matching attribute in
    ** HTML and Excel UIs: how it is displayed; what
    ** is the LOV SQL; and, what comparison operators
    ** are supported.
    */

    ,/* CONVERT_TO_ID_FLAG: displayed qualifier value is a CHAR
but stored qualifier value is stored as an internal id. For example,
customer name
is displayed as a char but stored by party_id value. */
    p_convert_to_id_flag       => 'N'

    ,/* DISPLAY_TYPE: display type on UI (NUMERIC/CHAR) */
    p_display_type             => 'CHAR'

    ,/* LOV SQL */
    p_html_lov_sql1            =>
    ' SELECT a.meaning col1_value, a.lookup_code col2_value ' ||
CHR(10) ||
    ' FROM ar_lookups a ' || CHR(10) ||
    ' WHERE a.lookup_type = ''PARTY_TYPE'' ' || CHR(10) ||
    ' AND a.lookup_code IN (''ORGANIZATION'', ''PERSON'') ' ||

```

```

CHR(10) ||
      ' ORDER BY coll_value '

/*Use the following parameters for dependent LOV SQLs */
,p_html_lov_sql2           => null
,p_html_lov_sql3           => null
,p_display_sql1            => null
,p_display_sql2            => null
,p_display_sql3            => null

/* The p_hierarchy_type value should always be set to null */
,p_hierarchy_type          => null

,/* Is the "=" operator supported? */
p_equal_flag               => 'Y'
,/* Is the "LIKE" operator supported? */
p_like_flag                => 'N'
,/* Is the "BETWEEN" operator supported? */
p_between_flag             => 'N'

/* Values table - this table will store the matching attribute
vales of a territory*/
/* Specify which columns to use by giving it a name for the
corresnding custom matching attribute values. In this example, the
party type value (person, organization), will be stored in the
'q9010_low_value_CHAR' column. In order to avoid confusion, it is
recommended that you start the column name with the custom matching
attribute unique identifier (ie. "q9010"). Use the following table
to determine which column to use based on the display type of the
custom matching attribute. You can query JTF_TERR_VALUES_ALL to see
existing matching attributes' display type and the corresponding
column(s). */

```

```

,p_comparison_operator      => 'q9010_cp'
,p_low_value_char          => 'q9010_low_value_CHAR'
,p_high_value_char         => null
,p_low_value_char_id       => null
,p_low_value_number        => null
,p_high_value_number       => null
,p_interest_type_id        => null
,p_primary_interest_code_id => null
,p_sec_interest_code_id    => null
,p_value1_id               => null
,p_value2_id               => null
,p_value3_id               => null
,p_value4_id               => null
,p_first_char              => null
,p_currency_code           => null

    /* Transaction Type Alias/_TRANS table column mapping */
    p_qual_coll              => 'Q9010_PARTY_TYPE' /*This is
the alias used in script #2*/

    /* TCA Classification for derivation. This value should remain
null*/
    p_alias_rule1            => null

    /* Rule SQL.
In this example we are matching the Q9010_PARTY_TYPE value from the
transaction type SQL with the q9010_low_value_CHAR value stored in
JTF_TERR_ALL_VALUES.
*/
    p_op_eq1                 =>
' (A.Q9010_PARTY_TYPE = B.q9010_low_value_CHAR AND B.q9010_cp
= ''='') '
    ,p_op_like                => null
    ,p_op_between             => NULL
    ,p_op_common_where        => null

    ,p_real_time_select       =>
'SELECT DISTINCT A.trans_object_id, A.trans_detail_object_id,
A.txn_date, B.terr_id, B.absolute_rank, B.top_level_terr_id,
B.num_winners'
    ,p_real_time_from         => null
    ,p_real_time_where        =>
'WHERE ' || CHR(10) ||
' B.q9010_low_value_CHAR = A.Q9010_PARTY_TYPE ' || CHR(10) ||
' AND B.q9010_cp = ''='' ' || CHR(10) ||
' AND B.source_id = -1001 ' || CHR(10) ||
' AND A.txn_date between B.start_date and B.end_date'

    ,retcode                  => retcode
    ,errbuf                    => errbuf);

dbms_output.put_line('Retcode : ' || retcode);
dbms_output.put_line('Errbuf : ' || errbuf);

ad_morg.replicate_seed_data(NULL, 'JTF', NULL);

COMMIT;

exception

```

```

when others then
    dbms_output.put_line('Retcode : ' || retcode);
    dbms_output.put_line('Errbuf : ' || errbuf);
    raise;
end;
/

```

3. Run this script.

CMA for Lead: Lead Status

This is an example of creating a custom matching attribute for Sales using the lead transaction and the lead status attribute.

Modify Script 1

Modify Script 1, page A-99 to retrieve the relevant lead transaction type SQL meta-data.

1. Set the source ID corresponding to the usage (Sales or Collections). The source ID -1001 corresponds to the Sales usage. To find the desired usage ID query JTF_SOURCES_ALL.

```
p_source_id      NUMBER := -1001;
```

2. Set the transaction type ID. The ID -1003 corresponds to the Lead transaction type ID. To find the desired transaction type ID, query JTF_QUAL_TYPES_ALL

```
p_trans_type_id  NUMBER := -1003;
```

3. Run the script and save the output to a file. Running this command will save the Lead transaction type SQL meta-data to the "R12LeadTT.sql" file.

```

SQL>spool <output filename - e.g., "d:\R12LeadTT.sql">
SQL> set serveroutput on size 999999
SQL> @Script1.sql /

```

Modify Transaction SQL Meta-Data

Modify the transaction type SQL meta-data (R12ALeasTT.sql) to get the CMA's corresponding transaction attribute value.

1. Add the status_code attribute to each of the following SQLs:
 - l_real_time_sql :=

```

'SELECT ' || CHR(10) ||
' LEAD.sales_lead_id trans_object_id ' || CHR(10) ||
' ,to_number(NULL) trans_detail_object_id ' || CHR(10) ||
' ,LEAD.sales_lead_id sales_lead_id ' || CHR(10) ||
' ,to_number(NULL) sales_lead_line_id ' || CHR(10) ||
' ,TO_CHAR(NULL) city ' || CHR(10) ||
' ,TO_CHAR(NULL) postal_code ' || CHR(10) ||
' ,TO_CHAR(NULL) state ' || CHR(10) ||
' ,TO_CHAR(NULL) province ' || CHR(10) ||
' ,TO_CHAR(NULL) county ' || CHR(10) ||
' ,TO_CHAR(NULL) country ' || CHR(10) ||
' ,PARTY.PARTY_ID party_id ' || CHR(10) ||
' ,to_number(null) party_site_id ' || CHR(10) ||
' ,upper(PARTY.PRIMARY_PHONE_AREA_CODE) area_code ' || CHR(10)
||
' ,upper(PARTY.PARTY_NAME) comp_name_range ' || CHR(10) ||
' ,PARTY.PARTY_ID partner_id ' || CHR(10) ||
' ,PARTY.EMPLOYEES_TOTAL num_of_employees ' || CHR(10) ||
' ,upper(PARTY.CATEGORY_CODE) category_code ' || CHR(10) ||
' ,PARTY.PARTY_ID party_relationship_id ' || CHR(10) ||
' ,upper(party.sic_code_type||': '||party.sic_code) sic_code
' || CHR(10) ||
' ,LEAD.budget_amount budget_amount ' || CHR(10) ||
' ,upper(lead.currency_code) currency_code ' || CHR(10) ||
' ,LEAD.source_promotion_id source_promotion_id ' || CHR(10) ||
' ,ORGP.CURR_FY_POTENTIAL_REVENUE squal_num06 ' || CHR(10) ||
' ,upper(ORGP.PREF_FUNCTIONAL_CURRENCY) car_currency_code ' ||
CHR(10) ||
' ,PARTY.PARTY_ID squal_num01 ' || CHR(10) ||
' ,UPPER(PARTY.DUNS_NUMBER_C) SQUAL_CHAR11 ' || CHR(10) ||
' ,UPPER(LEAD.channel_code) SQUAL_CHAR30 ' || CHR(10) ||
' ,l_txn_date txn_date ' || CHR(10) ||
' , UPPER(PARTY.party_type)
Q9010_PARTY_TYPE ' ||
' ,UPPER(LEAD.status_code) Q9100_LEAD_STATUS ' || CHR(10) ||

```

```

'FROM ' || CHR(10) ||
' AS_SALES_LEADS LEAD, ' || CHR(10) ||
' HZ_PARTIES PARTY, ' || CHR(10) ||
' HZ_ORGANIZATION_PROFILES ORGP, ' || CHR(10) ||
' AS_STATUSES_B STATUS ' || CHR(10) ||
'WHERE LEAD.ADDRESS_ID IS NULL ' || CHR(10) ||
'AND LEAD.CUSTOMER_ID = PARTY.PARTY_ID ' || CHR(10) ||
'AND party.party_id = orgp.party_id(+) ' || CHR(10) ||
'AND party.STATUS = 'A' ' || CHR(10) ||
'AND nvl(orgp.effective_end_date(+),sysdate + 1) > sysdate '
|| CHR(10) ||
'AND LEAD.status_code = STATUS.status_code ' || CHR(10) ||
'AND STATUS.lead_flag = 'Y' ' || CHR(10) ||
'AND LEAD.sales_lead_id = l_trans_object_id1 ' || CHR(10) ||
'UNION ALL ' || CHR(10) ||
'SELECT ' || CHR(10) ||
' LEAD.sales_lead_id trans_object_id ' || CHR(10) ||
' ,SITE.PARTY_SITE_ID trans_detail_object_id ' || CHR(10) ||
' ,LEAD.sales_lead_id sales_lead_id ' || CHR(10) ||
' ,SITE.PARTY_SITE_ID sales_lead_line_id ' || CHR(10) ||
' ,upper(LOC.CITY) city ' || CHR(10) ||
' ,upper(LOC.POSTAL_CODE) postal_code ' || CHR(10) ||
' ,upper(LOC.STATE) state ' || CHR(10) ||
' ,upper(LOC.PROVINCE) province ' || CHR(10) ||
' ,upper(LOC.COUNTY) county ' || CHR(10) ||
' ,upper(LOC.COUNTRY) country ' || CHR(10) ||
' ,PARTY.PARTY_ID party_id ' || CHR(10) ||
' ,SITE.PARTY_SITE_ID party_site_id ' || CHR(10) ||
' ,upper(CNTPNT.PHONE_AREA_CODE) area_code ' || CHR(10) ||
' ,upper(PARTY.PARTY_NAME) comp_name_range ' || CHR(10) ||
' ,PARTY.PARTY_ID partner_id ' || CHR(10) ||

```

```

' ,PARTY.EMPLOYEES_TOTAL num_of_employees ' || CHR(10) ||
' ,upper(PARTY.CATEGORY_CODE) category_code ' || CHR(10) ||
' ,PARTY.PARTY_ID party_relationship_id ' || CHR(10) ||
' ,upper(party.sic_code_type||': '||party.sic_code) sic_code
' || CHR(10) ||
' ,LEAD.budget_amount budget_amount ' || CHR(10) ||
' ,upper(lead.currency_code) currency_code ' || CHR(10) ||
' ,LEAD.source_promotion_id source_promotion_id ' || CHR(10) ||
' ,ORGP.CURR_FY_POTENTIAL_REVENUE squal_num06 ' || CHR(10) ||
' ,upper(ORGP.PREF_FUNCTIONAL_CURRENCY) car_currency_code ' ||
CHR(10) ||
' ,PARTY.PARTY_ID squal_num01 ' || CHR(10) ||
' ,UPPER(PARTY.DUNS_NUMBER_C) SQUAL_CHAR11 ' || CHR(10) ||
' ,UPPER(LEAD.channel_code) SQUAL_CHAR30 ' || CHR(10) ||
' ,l_txn_date txn_date ' || CHR(10) ||
' , UPPER(PARTY.party_type)
Q9010_PARTY_TYPE ' ||
' ,UPPER(LEAD.status_code) Q9100_LEAD_STATUS ' || CHR(10) ||
'FROM ' || CHR(10) ||
' AS_SALES_LEADS LEAD, ' || CHR(10) ||
' HZ_CONTACT_POINTS CNTPNT, ' || CHR(10) ||
' HZ_PARTY_SITES SITE, ' || CHR(10) ||
' HZ_LOCATIONS LOC, ' || CHR(10) ||
' HZ_PARTIES PARTY, ' || CHR(10) ||
' HZ_ORGANIZATION_PROFILES ORGP, ' || CHR(10) ||
' AS_STATUSES_B STATUS ' || CHR(10) ||
'WHERE CNTPNT.OWNER_TABLE_NAME(+) = 'HZ_PARTY_SITES' ' ||
CHR(10) ||
'AND SITE.PARTY_SITE_ID = CNTPNT.OWNER_TABLE_ID(+) ' ||
CHR(10) ||
'AND CNTPNT.PRIMARY_FLAG(+) = 'Y' ' || CHR(10) ||
'AND CNTPNT.STATUS(+) <> 'I' ' || CHR(10) ||
'AND CNTPNT.contact_point_type(+)='PHONE' ' || CHR(10) ||
'AND LEAD.ADDRESS_ID = SITE.PARTY_SITE_ID ' || CHR(10) ||
'AND SITE.LOCATION_ID = LOC.LOCATION_ID ' || CHR(10) ||

```

```
'AND    SITE.STATUS = 'A' ' || CHR(10) ||  
'AND    LEAD.CUSTOMER_ID = PARTY.PARTY_ID ' || CHR(10) ||  
'AND    party.party_id = orgp.party_id(+) ' || CHR(10) ||  
'AND    party.STATUS = 'A' ' || CHR(10) ||  
'AND    nvl(orgp.effective_end_date(+),sysdate + 1) > sysdate '  
|| CHR(10) ||  
'AND    LEAD.status_code = STATUS.status_code ' || CHR(10) ||  
'AND    STATUS.lead_flag = 'Y' ' || CHR(10) ||  
'AND    LEAD.sales_lead_id = l_trans_object_id1 ';
```

- l_batch_total_sql :=

```

l_batch_total_sql :=

'SELECT ' || CHR(10) ||

' -1001                                source_id, ' || CHR(10) ||

' -1003                                trans_object_type_id, '
|| CHR(10) ||
' LEAD.sales_lead_id                    trans_object_id, ' ||
CHR(10) ||
' to_number(NULL)
trans_detail_object_id, ' || CHR(10)
||

' STATUS.OPP_OPEN_STATUS_FLAG           OPEN_FLAG,
' || CHR(10) ||
' PARTY.PARTY_ID                         squal_num01, ' ||
CHR(10) ||
' to_number(null)                        squal_num02, ' ||
CHR(10) ||
' PARTY.PARTY_ID                         squal_num03, ' || CHR(10) ||

' lead.sales_lead_id                     squal_num04, ' || CHR(10)
||
' PARTY.EMPLOYEES_TOTAL                   squal_num05, ' ||
CHR(10) ||
' ORGP.CURR_FY_POTENTIAL_REVENUE         squal_num06, ' ||
CHR(10) ||
' LEAD.budget_amount                     squal_num30, ' || CHR(10)
||
' LEAD.source_promotion_id               squal_num31, ' ||
CHR(10) ||
' upper(ORGP.PREF_FUNCTIONAL_CURRENCY)   squal_curc01, '
|| CHR(10) ||
' upper(lead.currency_code)              squal_curc07, ' ||
CHR(10) ||
' upper(substr(PARTY.party_name,1,1))    squal_fc01, ' ||
CHR(10) ||
' upper(PARTY.PARTY_NAME)                 squal_char01, ' ||
CHR(10) ||
' TO_CHAR(NULL)                          squal_char02, ' || CHR(10)
||
' TO_CHAR(NULL)                          squal_char03, ' || CHR(10)
||
' TO_CHAR(NULL)                          squal_char04, ' || CHR(10)
||
' TO_CHAR(NULL)                          squal_char05, ' || CHR(10)
||
' TO_CHAR(NULL)                          squal_char06, ' || CHR(10)
||
||
' TO_CHAR(NULL)                          squal_char07, ' || CHR(10)
||
' upper(PARTY.PRIMARY_PHONE_AREA_CODE)   squal_char08, ' ||
CHR(10) ||
' upper(PARTY.CATEGORY_CODE)             squal_char09, ' || CHR(10)
||
||

```

```

' upper(party.sic_code_type||': '||party.sic_code)
squal_char10, ' ||
CHR(10) ||

' UPPER(PARTY.DUNS_NUMBER_C)          squal_char11, ' ||
CHR(10) ||
' UPPER(LEAD.channel_code)           squal_char30 ' ||
CHR(10) ||
' ,UPPER(PARTY.party_type)
Q9010_PARTY_TYPE ' ||
' ,UPPER(LEAD.status_code) Q9100_LEAD_STATUS ' || CHR(10) ||

'FROM ' || CHR(10) ||

' AS_SALES_LEADS LEAD, ' || CHR(10) ||

' HZ_PARTIES PARTY, ' || CHR(10) ||

' HZ_ORGANIZATION_PROFILES ORGP, ' || CHR(10) ||

' AS_STATUSES_B STATUS ' || CHR(10) ||

'WHERE LEAD.ADDRESS_ID IS NULL ' || CHR(10) ||

'AND LEAD.CUSTOMER_ID = PARTY.PARTY_ID ' || CHR(10) ||

'AND party.party_id = orgp.party_id(+) ' || CHR(10) ||

'AND party.STATUS = 'A' ' || CHR(10) ||

'AND nvl(orgp.effective_end_date(+),sysdate + 1) > sysdate '
|| CHR(10) ||
'AND LEAD.status_code = STATUS.status_code ' || CHR(10) ||

'AND STATUS.lead_flag = 'Y' UNION ALL ' || CHR(10) ||

'SELECT ' || CHR(10) ||

' -1001          source_id, ' || CHR(10) ||

' -1003          trans_object_type_id, ' ||
CHR(10) ||
' LEAD.sales_lead_id
trans_object_id, ' ||
CHR(10) ||

' SITE.PARTY_SITE_ID          trans_detail_object_id, '
|| CHR(10) ||
' STATUS.OPP_OPEN_STATUS_FLAG          OPEN_FLAG,
' || CHR(10) ||
' PARTY.PARTY_ID          squal_num01, ' || CHR(10) ||

' SITE.PARTY_SITE_ID          squal_num02,
' || CHR(10)
||

' PARTY.PARTY_ID          squal_num03, ' || CHR(10) ||

' LEAD.SALES_LEAD_ID          squal_num04, ' || CHR(10)
||

```

```

' PARTY.EMPLOYEES_TOTAL                                squal_num05,
' || CHR(10)
||

' ORGP.CURR_FY_POTENTIAL_REVENUE                      squal_num06, ' ||
CHR(10) ||
' LEAD.budget_amount                                  squal_num30, ' || CHR(10)
||
' LEAD.source_promotion_id                            squal_num31, ' ||
CHR(10) ||
' upper(ORGP.PREF_FUNCTIONAL_CURRENCY)                squal_curc01, ' ||
CHR(10) ||
' upper(lead.currency_code)                           squal_curc07, ' ||
CHR(10) ||
' upper(substr(PARTY.party_name,1,1))                  squal_fc01, ' ||
CHR(10) ||
' upper(PARTY.PARTY_NAME)                              squal_char01, ' ||
CHR(10) ||
' upper(LOC.CITY)                                     squal_char02, ' || CHR(10)
||
' upper(LOC.COUNTY)                                   squal_char03, ' ||
CHR(10) ||
' upper(LOC.STATE)                                    squal_char04, ' ||
CHR(10) ||
' upper(LOC.PROVINCE)                                 squal_char05, ' ||
CHR(10) ||
' upper(LOC.POSTAL_CODE)                              squal_char06, ' || CHR(10)
||
' upper(LOC.COUNTRY)                                  squal_char07, ' || CHR(10)
||
' upper(CNTPNT.PHONE_AREA_CODE)                       squal_char08, ' ||
CHR(10) ||
' upper(PARTY.CATEGORY_CODE)                          squal_char09,
' || CHR(10) ||
' upper(party.sic_code_type||': '||party.sic_code)
squal_char10, ' ||
CHR(10) ||

' UPPER(PARTY.DUNS_NUMBER_C)                           squal_char11, ' ||
CHR(10) ||
' UPPER(LEAD.channel_code)                             squal_char30 ' ||
CHR(10) ||
' ,UPPER(PARTY.party_type)
Q9010_PARTY_TYPE ' ||
' ,UPPER(LEAD.status_code) Q9100_LEAD_STATUS ' || CHR(10) ||

'FROM ' || CHR(10) ||

' AS_SALES_LEADS LEAD, ' || CHR(10) ||
' HZ_CONTACT_POINTS CNTPNT, ' || CHR(10) ||
' HZ_PARTY_SITES SITE, ' || CHR(10) ||
' HZ_LOCATIONS LOC, ' || CHR(10) ||
' HZ_PARTIES PARTY, ' || CHR(10) ||
' HZ_ORGANIZATION_PROFILES ORGP, ' || CHR(10) ||

```

```

' AS_STATUSES_B STATUS ' || CHR(10) ||

'WHERE CNTPNT.OWNER_TABLE_NAME(+) = 'HZ_PARTY_SITES' ' ||
CHR(10) ||
'AND SITE.PARTY_SITE_ID = CNTPNT.OWNER_TABLE_ID(+) ' ||
CHR(10) ||
'AND CNTPNT.PRIMARY_FLAG(+) = 'Y' ' || CHR(10) ||

'AND CNTPNT.STATUS(+) <> 'I' ' || CHR(10) ||

'AND CNTPNT.contact_point_type(+)='PHONE' ' || CHR(10) ||

'AND LEAD.ADDRESS_ID = SITE.PARTY_SITE_ID ' || CHR(10) ||

'AND SITE.LOCATION_ID = LOC.LOCATION_ID ' || CHR(10) ||

'AND SITE.STATUS = 'A' ' || CHR(10) ||

'AND LEAD.CUSTOMER_ID = PARTY.PARTY_ID ' || CHR(10) ||

'AND party.party_id = orgp.party_id(+) ' || CHR(10) ||

'AND party.STATUS = 'A' ' || CHR(10) ||

'AND nvl(orgp.effective_end_date(+),sysdate + 1) > sysdate '
|| CHR(10) ||
'AND LEAD.status_code = STATUS.status_code ' || CHR(10) ||

'AND STATUS.lead_flag = 'Y' ';

```

- l_batch_incr_sql :=

```

l_batch_incr_sql :=
'SELECT ' || CHR(10) ||
' -1001          source_id, ' || CHR(10) ||
' -1003          trans_object_type_id, ' ||
CHR(10) ||
' LEAD.sales_lead_id    trans_object_id, ' || CHR(10) ||
' to_number(NULL)      trans_detail_object_id, ' ||
CHR(10) ||
' STATUS.OPP_OPEN_STATUS_FLAG      OPEN_FLAG, ' || CHR(10)
||
' PARTY.PARTY_ID        squal_num01, ' || CHR(10) ||
' to_number(null)      squal_num02, ' || CHR(10) ||
' PARTY.PARTY_ID        squal_num03, ' || CHR(10) ||
' lead.sales_lead_id    squal_num04, ' || CHR(10) ||
' PARTY.EMPLOYEES_TOTAL  squal_num05, ' || CHR(10) ||
' ORGP.CURR_FY_POTENTIAL_REVENUE    squal_num06, ' || CHR(10) ||
' LEAD.budget_amount    squal_num30, ' || CHR(10) ||
' LEAD.source_promotion_id    squal_num31, ' || CHR(10) ||
' upper(ORGP.PREF_FUNCTIONAL_CURRENCY) squal_curc01, ' ||
CHR(10) ||
' upper(lead.currency_code)    squal_curc07, ' || CHR(10) ||
' upper(substr(PARTY.party_name,1,1)) squal_fc01, ' || CHR(10)
||
' upper(PARTY.PARTY_NAME)    squal_char01, ' || CHR(10) ||
' TO_CHAR(NULL)            squal_char02, ' || CHR(10) ||
' TO_CHAR(NULL)            squal_char03, ' || CHR(10) ||
' TO_CHAR(NULL)            squal_char04, ' || CHR(10) ||
' TO_CHAR(NULL)            squal_char05, ' || CHR(10) ||
' TO_CHAR(NULL)            squal_char06, ' ||
CHR(10) ||
' TO_CHAR(NULL)            squal_char07, ' || CHR(10) ||
' upper(PARTY.PRIMARY_PHONE_AREA_CODE) squal_char08, ' ||
CHR(10) ||
' upper(PARTY.CATEGORY_CODE)    squal_char09, ' ||
CHR(10) ||
' upper(party.sic_code_type||': '||party.sic_code)
squal_char10, ' ||
CHR(10) ||
' UPPER(PARTY.DUNS_NUMBER_C)    squal_char11, ' || CHR(10) ||

```

```

' UPPER(LEAD.channel_code)      squal_char30  ' || CHR(10) ||
' ,UPPER(PARTY.party_type)
Q9010_PARTY_TYPE ' ||
' ,UPPER(LEAD.status_code) Q9100_LEAD_STATUS ' || CHR(10) ||
'FROM AS_SALES_LEADS LEAD, ' || CHR(10) ||
'     HZ_PARTIES PARTY, ' || CHR(10) ||
'     HZ_ORGANIZATION_PROFILES ORGP, ' || CHR(10) ||
' AS_STATUSES_B STATUS, ' || CHR(10) ||
' AS_CHANGED_ACCOUNTS_ALL ACHNG ' || CHR(10) ||
'WHERE lead.address_id is null ' || CHR(10) ||
'AND lead.customer_id = party.party_id ' || CHR(10) ||
'AND party.party_id = orgp.party_id(+) ' || CHR(10) ||
'AND party.STATUS = 'A' ' || CHR(10) ||
'AND nvl(orgp.effective_end_date(+),sysdate + 1) > sysdate '
|| CHR(10) ||
'AND lead.status_code = status.status_code ' || CHR(10) ||
'AND status.lead_flag = 'Y' ' || CHR(10) ||
'AND achng.sales_lead_id = lead.sales_lead_id ' || CHR(10) ||
'AND achng.request_id = l_REQUEST_ID UNION ALL ' || CHR(10)
||
'SELECT ' || CHR(10) ||
' -1001          source_id, ' || CHR(10) ||
' -1003          trans_object_type_id, ' || CHR(10) ||
' LEAD.sales_lead_id          trans_object_id, ' ||
CHR(10) ||
' SITE.PARTY_SITE_ID          trans_detail_object_id, ' || CHR(10)
||
' STATUS.OPP_OPEN_STATUS_FLAG          OPEN_FLAG, ' || CHR(10)
||
' PARTY.PARTY_ID          squal_num01, ' || CHR(10) ||
' SITE.PARTY_SITE_ID          squal_num02, ' ||
CHR(10) ||
' PARTY.PARTY_ID          squal_num03, ' || CHR(10) ||
' LEAD.SALES_LEAD_ID          squal_num04, ' || CHR(10) ||
' PARTY.EMPLOYEES_TOTAL          squal_num05, ' ||
CHR(10) ||
' ORGP.CURR_FY_POTENTIAL_REVENUE          squal_num06, ' || CHR(10) ||
' LEAD.budget_amount          squal_num30, ' || CHR(10) ||

```

```

' LEAD.source_promotion_id    squal_num31, ' || CHR(10) ||
' upper(ORGP.PREF_FUNCTIONAL_CURRENCY) squal_curc01, ' ||
CHR(10) ||
' upper(lead.currency_code)    squal_curc07, ' || CHR(10) ||
' upper(substr(PARTY.party_name,1,1)) squal_fc01, ' || CHR(10)
||
' upper(PARTY.PARTY_NAME)      squal_char01, ' || CHR(10) ||
' upper(LOC.CITY)              squal_char02, ' || CHR(10) ||
' upper(LOC.COUNTY)            squal_char03, ' || CHR(10) ||
' upper(LOC.STATE)             squal_char04, ' || CHR(10) ||
' upper(LOC.PROVINCE)          squal_char05, ' || CHR(10) ||
' upper(LOC.POSTAL_CODE)       squal_char06, ' || CHR(10) ||
' upper(LOC.COUNTRY)           squal_char07, ' || CHR(10) ||
' upper(CNTPNT.PHONE_AREA_CODE) squal_char08, ' || CHR(10) ||
' upper(PARTY.CATEGORY_CODE)    squal_char09, ' || CHR(10)
||
' upper(party.sic_code_type||': '||party.sic_code)
squal_char10, ' ||
CHR(10) ||
' UPPER(PARTY.DUNS_NUMBER_C)    squal_char11, ' || CHR(10) ||
' UPPER(LEAD.channel_code)      squal_char30 ' || CHR(10) ||
' ,UPPER(PARTY.party_type)
Q9010_PARTY_TYPE ' ||
' ,UPPER(LEAD.status_code) Q9100_LEAD_STATUS ' || CHR(10) ||
'FROM AS_SALES_LEADS LEAD, ' || CHR(10) ||
' HZ_CONTACT_POINTS CNTPNT, ' || CHR(10) ||
' HZ_PARTY_SITES SITE, ' || CHR(10) ||
' HZ_LOCATIONS LOC, ' || CHR(10) ||
' HZ_PARTIES PARTY, ' || CHR(10) ||
' HZ_ORGANIZATION_PROFILES ORGP, ' || CHR(10) ||
' AS_STATUSES_B STATUS, ' || CHR(10) ||
' AS_CHANGED_ACCOUNTS_ALL ACHNG ' || CHR(10) ||
'WHERE CNTPNT.OWNER_TABLE_NAME(+) = 'HZ_PARTY_SITES' ' ||
CHR(10) ||
'AND SITE.PARTY_SITE_ID = CNTPNT.OWNER_TABLE_ID(+) ' ||
CHR(10) ||
'AND CNTPNT.PRIMARY_FLAG(+) = 'Y' ' || CHR(10) ||

```

```

'AND    CNTPNT.STATUS(+) <> 'I' ' ' || CHR(10) ||
'AND    CNTPNT.contact_point_type(+)='PHONE' ' ' || CHR(10) ||
'AND    LEAD.ADDRESS_ID = SITE.PARTY_SITE_ID ' ' || CHR(10) ||
'AND    SITE.LOCATION_ID = LOC.LOCATION_ID ' ' || CHR(10) ||
'AND    SITE.STATUS = 'A' ' ' || CHR(10) ||
'AND    LEAD.CUSTOMER_ID = PARTY.PARTY_ID ' ' || CHR(10) ||
'AND    party.party_id = orgp.party_id(+) ' ' || CHR(10) ||
'AND    party.STATUS = 'A' ' ' || CHR(10) ||
'AND    nvl(orgp.effective_end_date(+),sysdate + 1) > sysdate '
|| CHR(10) ||
'AND    LEAD.status_code = STATUS.status_code ' || CHR(10) ||
'AND    STATUS.lead_flag = 'Y' ' ' || CHR(10) ||
'AND    achng.sales_lead_id = lead.sales_lead_id ' || CHR(10) ||
'AND    achng.request_id = l_REQUEST_ID ' ;

```

- l_batch_dea_sql :=

```

l_batch_dea_sql :=
NULL;

l_incr_reassign_sql :=
'SELECT ' || CHR(10) ||
' -1001                source_id, ' || CHR(10) ||
' -1003                trans_object_type_id, ' ||
CHR(10) ||
' LEAD.sales_lead_id  trans_object_id, ' || CHR(10) ||
' STATUS.OPP_OPEN_STATUS_FLAG      OPEN_FLAG, ' ||
CHR(10) ||
' to_number(NULL)          trans_detail_object_id, ' ||
CHR(10) ||
' PARTY.PARTY_ID          squal_num01, ' || CHR(10) ||
' to_number(null)        squal_num02, ' || CHR(10) ||
' PARTY.PARTY_ID          squal_num03, ' || CHR(10) ||
' lead.sales_lead_id      squal_num04, ' || CHR(10) ||
' PARTY.EMPLOYEES_TOTAL    squal_num05, ' || CHR(10) ||
' ORGP.CURR_FY_POTENTIAL_REVENUE    squal_num06, ' || CHR(10)
||
' LEAD.budget_amount      squal_num30, ' || CHR(10) ||
' LEAD.source_promotion_id      squal_num31, ' || CHR(10) ||
' upper(ORGP.PREF_FUNCTIONAL_CURRENCY)  squal_curc01, ' ||
CHR(10) ||
' upper(lead.currency_code)  squal_curc07, ' || CHR(10) ||
' upper(substr(PARTY.party_name,1,1))  squal_fc01, ' || CHR(10)
||
' upper(PARTY.PARTY_NAME)      squal_char01, ' || CHR(10) ||
' TO_CHAR(NULL)              squal_char02, ' || CHR(10) ||
' TO_CHAR(NULL)              squal_char03, ' || CHR(10) ||
' TO_CHAR(NULL)              squal_char04, ' || CHR(10) ||
' TO_CHAR(NULL)              squal_char05, ' || CHR(10) ||
' TO_CHAR(NULL)              squal_char06, ' ||
CHR(10) ||
' TO_CHAR(NULL)              squal_char07, ' || CHR(10) ||
' upper(PARTY.PRIMARY_PHONE_AREA_CODE)  squal_char08, ' ||
CHR(10) ||
' upper(PARTY.CATEGORY_CODE)          squal_char09, ' ||
CHR(10) ||
' upper(party.sic_code_type||': '||party.sic_code)
squal_char10, ' ||

```

```

CHR(10) ||
' UPPER(PARTY.DUNS_NUMBER_C)      squal_char11, ' || CHR(10) ||
' UPPER(LEAD.channel_code)        squal_char30  ' || CHR(10) ||
' ,UPPER(PARTY.party_type)
Q9010_PARTY_TYPE ' ||
' ,UPPER(LEAD.status_code) Q9100_LEAD_STATUS ' || CHR(10) ||
'FROM AS_SALES_LEADS LEAD, ' || CHR(10) ||
'      HZ_PARTIES PARTY, ' || CHR(10) ||
'      HZ_ORGANIZATION_PROFILES ORGP, ' || CHR(10) ||
'      AS_STATUSES_B STATUS, ' || CHR(10) ||
'      ( select distinct ACC.sales_lead_id sales_lead_id ' ||
CHR(10) ||
'          from (select distinct terr_id terr_id ' || CHR(10) ||
'
'              from JTY_CHANGED_TERRS ' || CHR(10) ||
'
'                  where tap_request_id = l_request_id) CHG_TERR, '
|| CHR(10) ||
'          AS_ACCESSES_ALL ACC, ' || CHR(10) ||
'
'              AS_TERRITORY_ACCESSES TERR_ACC ' || CHR(10) ||
'
'                  where CHG_TERR.terr_id = TERR_ACC.territory_id ' ||
CHR(10) ||
'          and TERR_ACC.access_id = acc.access_id ' || CHR(10) ||
'
'          and acc.sales_lead_id is not null ' || CHR(10) ||
'
'          and acc.lead_id is null ) ACHNG ' || CHR(10) ||
'WHERE lead.address_id is null ' || CHR(10) ||
'AND lead.customer_id = party.party_id ' || CHR(10) ||
'AND party.party_id = orgp.party_id(+) ' || CHR(10) ||
'AND party.STATUS = 'A' ' || CHR(10) ||
'AND nvl(orgp.effective_end_date(+),sysdate + 1) > sysdate ' ||
CHR(10) ||
'AND lead.status_code = status.status_code ' || CHR(10) ||
'AND status.lead_flag = 'Y' ' || CHR(10) ||
'AND achng.sales_lead_id = lead.sales_lead_id UNION ALL ' ||
CHR(10) ||
'SELECT ' || CHR(10) ||
' -1001          source_id, ' || CHR(10) ||
' -1003          trans_object_type_id, ' || CHR(10) ||

```

```

' LEAD.sales_lead_id                trans_object_id, '
|| CHR(10) ||
' STATUS.OPP_OPEN_STATUS_FLAG      OPEN_FLAG, ' ||
CHR(10) ||
' SITE.PARTY_SITE_ID              trans_detail_object_id, ' ||
CHR(10) ||
' PARTY.PARTY_ID                  squal_num01, ' || CHR(10) ||

' SITE.PARTY_SITE_ID              squal_num02, ' ||
CHR(10) ||
' PARTY.PARTY_ID                  squal_num03, ' || CHR(10) ||

' LEAD.SALES_LEAD_ID              squal_num04, ' || CHR(10) ||

' PARTY.EMPLOYEES_TOTAL            squal_num05, ' ||
CHR(10) ||
' ORGP.CURR_FY_POTENTIAL_REVENUE   squal_num06, ' || CHR(10) ||

' LEAD.budget_amount              squal_num30, ' || CHR(10) ||

' LEAD.source_promotion_id         squal_num31, ' || CHR(10) ||

' upper(ORGP.PREF_FUNCTIONAL_CURRENCY) squal_curc01, ' ||
CHR(10) ||
' upper(lead.currency_code)        squal_curc07, ' || CHR(10) ||

' upper(substr(PARTY.party_name,1,1)) squal_fc01, ' || CHR(10)
||
' upper(PARTY.PARTY_NAME)          squal_char01, ' || CHR(10) ||

' upper(LOC.CITY)                  squal_char02, ' || CHR(10) ||

' upper(LOC.COUNTY)                squal_char03, ' || CHR(10) ||

' upper(LOC.STATE)                 squal_char04, ' || CHR(10) ||

' upper(LOC.PROVINCE)              squal_char05, ' || CHR(10) ||

' upper(LOC.POSTAL_CODE)           squal_char06, ' || CHR(10) ||

' upper(LOC.COUNTRY)               squal_char07, ' || CHR(10) ||

' upper(CNTPNT.PHONE_AREA_CODE)    squal_char08, ' || CHR(10)
||
' upper(PARTY.CATEGORY_CODE)        squal_char09, ' ||
CHR(10) ||
' upper(party.sic_code_type||': '||party.sic_code)
squal_char10, ' ||
CHR(10) ||

' UPPER(PARTY.DUNS_NUMBER_C)        squal_char11, ' || CHR(10) ||

' UPPER(LEAD.channel_code)          squal_char30 ' || CHR(10) ||

' ,UPPER(PARTY.party_type)
Q9010_PARTY_TYPE ' ||
' ,UPPER(LEAD.status_code) Q9100_LEAD_STATUS ' || CHR(10) ||

'FROM AS_SALES_LEADS LEAD, ' || CHR(10) ||

```

```

'      HZ_CONTACT_POINTS CNTPNT, ' || CHR(10) ||
'      HZ_PARTY_SITES SITE, ' || CHR(10) ||
'      HZ_LOCATIONS LOC, ' || CHR(10) ||
'      HZ_PARTIES PARTY, ' || CHR(10) ||
'      HZ_ORGANIZATION_PROFILES ORGP, ' || CHR(10) ||
'      AS_STATUSES_B STATUS, ' || CHR(10) ||
'      ( select distinct ACC.sales_lead_id sales_lead_id ' ||
CHR(10) ||
'      from (select distinct terr_id terr_id ' || CHR(10) ||
'
'      from JTY_CHANGED_TERRS ' || CHR(10) ||
'
'      where tap_request_id = l_request_id) CHG_TERR, '
|| CHR(10) ||
'      AS_ACCESSES_ALL ACC, ' || CHR(10) ||
'
'      AS_TERRITORY_ACCESSES TERR_ACC ' || CHR(10) ||
'
'      where CHG_TERR.terr_id = TERR_ACC.territory_id ' ||
CHR(10) ||
'      and TERR_ACC.access_id = acc.access_id ' || CHR(10) ||
'
'      and acc.sales_lead_id is not null ' || CHR(10) ||
'
'      and acc.lead_id is null ) ACHNG ' || CHR(10) ||
'WHERE CNTPNT.OWNER_TABLE_NAME(+) = 'HZ_PARTY_SITES' ' ||
CHR(10) ||
'AND SITE.PARTY_SITE_ID = CNTPNT.OWNER_TABLE_ID(+) ' || CHR(10)
||
'AND CNTPNT.PRIMARY_FLAG(+) = 'Y' ' || CHR(10) ||
'AND CNTPNT.STATUS(+) <> 'I' ' || CHR(10) ||
'AND CNTPNT.contact_point_type(+)='PHONE' ' || CHR(10) ||
'AND LEAD.ADDRESS_ID = SITE.PARTY_SITE_ID ' || CHR(10) ||
'AND SITE.LOCATION_ID = LOC.LOCATION_ID ' || CHR(10) ||
'AND SITE.STATUS = 'A' ' || CHR(10) ||
'AND LEAD.CUSTOMER_ID = PARTY.PARTY_ID ' || CHR(10) ||
'AND party.party_id = orgp.party_id(+) ' || CHR(10) ||
'AND party.STATUS = 'A' ' || CHR(10) ||
'AND nvl(orgp.effective_end_date(+),sysdate + 1) > sysdate ' ||
CHR(10) ||
'AND LEAD.status_code = STATUS.status_code ' || CHR(10) ||
'AND STATUS.lead_flag = 'Y' ' || CHR(10) ||

```

```
'AND achng.sales_lead_id = lead.sales_lead_id  ';
```

- l_incr_reassign_sql :=

2. Modify the R12LeadTT.sql file with the appropriate package parameters to make the SQL meta-data change.

```
JTY_TRANS_USG_PGM_SQL_PKG.Insert_Row(  
  
p_source_id => -1001  
  
,p_trans_type_id => -1003  
  
,p_program_name => 'SALES/LEAD PROGRAM'  
  
,p_version_name => '12-JAN-06: CMA LEAD STATUS ADDED'  
  
,p_real_time_sql => l_real_time_sql  
  
,p_batch_total_sql => l_batch_total_sql  
  
,p_batch_incr_sql => l_batch_incr_sql  
  
,p_batch_dea_sql => l_batch_dea_sql  
  
,p_incr_reassign_sql => l_incr_reassign_sql  
  
,p_use_total_for_dea_flag => null  
  
,p_enabled_flag => 'Y'  
  
,retcode => retcode  
  
,errbuf => errbuf);  
  
dbms_output.put_line('SALES/LEAD PROGRAM retcode : ' || retcode);  
  
dbms_output.put_line('SALES/LEAD PROGRAM errbuf : ' || errbuf);
```

3. Run the R12LeadTT.sql file.

```
SQL> @R12LeadTT.sql /
```

Create the Custom Matching Attribute

Create the CMA). The basis of this script is to populate all the necessary information in the following tables:

JTF_SEEDED_QUAL_ALL_B

JTF_SEEDED_QUAL_ALL_TL

JTF_QUAL_USGS_ALL

1. Ensure that there is not an existing CMA record for the unique matching attribute ID that you will use for the new CMA.

```

set serveroutput on size 999999

DECLARE

    l_real_time_sql varchar2(32000) := NULL;
    l_batch_total_sql varchar2(32000) := NULL;
    l_batch_incr_sql varchar2(32000) := NULL;
    l_batch_dea_sql varchar2(32000) := NULL;
    l_incr_reassign_sql varchar2(32000);
    retcode varchar2(250);
    errbuf varchar2(1000);

BEGIN

    BEGIN
        DELETE
        FROM jtf_seeded_qual_all_b
        WHERE seeded_qual_id = -9100;
    EXCEPTION
        WHEN NO_DATA_FOUND THEN
            NULL;
    END;

    BEGIN
        DELETE
        FROM jtf_seeded_qual_all_t1
        WHERE seeded_qual_id = -9100;
    EXCEPTION
        WHEN NO_DATA_FOUND THEN
            NULL;
    END;

    BEGIN
        DELETE
        FROM jtf_qual_usgs_all
        WHERE qual_usg_id = -9100;
    EXCEPTION
        WHEN NO_DATA_FOUND THEN
            NULL;
    END;

```

2. Create the meta-data for the CMA. Follow the comments provided in the script to enter the relevant CMA information.

```

/* The following meta-data will create the custom qualifier
** for the Lead Status.
*/
JTY_CUST_QUAL_PKG.create_qual(

    /* Unique Identifier/Primary Key */
    p_seeded_qual_id          => -9100
  ,p_name                    => 'Lead Status (CMA)'
  ,p_description             => 'Lead Status (CMA)'
  ,p_language                => 'US'

  ,/* Sales Usage: FK to
      JTF_SOURCES_ALL.SOURCE_ID*/
    p_source_id              => -1001

  ,/* Sales Lead Transaction Type: FK to
      JTF_QUAL_TYPE_USGS_ALL.QUAL_TYPE_USG_ID*/
    p_trans_type_id         => -1003

  ,p_enabled_flag           => 'N'

  ,/* QUAL_RELATION_FACTOR
      This needs to be the next prime number greater than
      the value from the following SQL:

      SELECT MAX(qual_relation_factor)
      FROM jtf_qual_usgs_all

      The first 1000 primes can be found at:
      http://primes.utm.edu/lists/small/1000.txt

      Custom qualifiers should start at the 303rd prime
      which is 1999. This is to keep 1st to 302nd primes
      for product development to seed qualifiers.
      */
    p_qual_relation_factor   => 2003

  ,/* The following set of meta-data setups determine
      ** the behaviour of the matching attribute in
      ** HTML and Excel UIs: how it is displayed; what
      ** is the LOV SQL; and, what comparison operators
      ** are supported.
      */

  ,/* CONVERT_TO_ID_FLAG: displayed qualifier value is a CHAR
      but stored qualifier value is stored as an internal id */
    p_convert_to_id_flag     => 'N'

  ,/* DISPLAY_TYPE: display type on UI (NUMERIC/CHAR) */
    p_display_type          => 'CHAR'
  ,/* LOV SQL */
    p_html_lov_sql1         =>
    ' SELECT a.meaning coll_value, a.status_code col2_value ' ||
CHR(10) ||
    ' FROM as_statuses_vl a ' || CHR(10) ||
    ' WHERE a.enabled_flag = ''Y'' ' || CHR(10) ||
    ' AND a.lead_flag = ''Y'' ' || CHR(10) ||
    ' ORDER BY coll_value '

  ,p_html_lov_sql2          => null

```

```

,p_html_lov_sql3          => null
,p_display_sql1          => ' SELECT meaning FROM
as_statuses_vl
WHERE enabled_flag = 'Y' AND lead_flag = 'Y' AND STATUS_CODE=
'
,p_display_sql2          => null
,p_display_sql3          => null
,p_hierarchy_type        => null

/* Is the "=" operator supported? */
p_equal_flag             => 'Y'
/* Is the "LIKE" operator supported? */
p_like_flag              => 'N'
/* Is the "BETWEEN" operator supported? */
p_between_flag           => 'N'

/* Values table */
/* matching attribute comparison operator */
,p_comparison_operator   => 'q9100_cp'
,p_low_value_char        => 'q9100_low_value_CHAR'
,p_high_value_char       => null
,p_low_value_char_id     => null
,p_low_value_number      => null
,p_high_value_number     => null
,p_interest_type_id      => null
,p_primary_interest_code_id => null
,p_sec_interest_code_id  => null
,p_value1_id             => null
,p_value2_id             => null
,p_value3_id             => null
,p_value4_id             => null
,p_first_char            => null
,p_currency_code         => null

/* Transaction Type Alias/_TRANS table column mapping */
p_qual_coll              => 'Q9100_LEAD_STATUS'

/* TCA Classification for derivation */
p_alias_rule1            => null

/* OP_EQL FOR BATCH-MODE ASSIGNMENT:
** Since the AS_SALES_LEADS.STATUS_CODE value is not passed to
the
** assignment API, we must the PK (SALES_LEAD_ID) to get the
** STATUS_CODE value from AS_SALES_LEADS and compare to the
** territory qualifier value
*/
p_op_eql                 =>
' (A.Q9100_LEAD_STATUS = B.q9100_low_value_CHAR AND B.q9100_cp
= ''='') '
,p_op_like                => null
,p_op_between             => NULL
,p_op_common_where        => null

,p_real_time_select       =>
'SELECT DISTINCT A.trans_object_id, A.trans_detail_object_id,
A.txn_date, B.terr_id, B.absolute_rank, B.top_level_terr_id,
B.num_winners'
,p_real_time_from         => null
,p_real_time_where        =>

```

```

'WHERE ' || CHR(10) ||
' B.q9010_low_value_CHAR = A.Q9100_LEAD_STATUS ' || CHR(10) ||
' AND B.q9010_cp = '=' ' || CHR(10) ||
' AND B.source_id = -1001 ' || CHR(10) ||
' AND A.txn_date between B.start_date and B.end_date'

,retcode                => retcode
,errbuf                 => errbuf);

dbms_output.put_line('Retcode : ' || retcode);
dbms_output.put_line('Errbuf : ' || errbuf);

ad_morg.replicate_seed_data(NULL, 'JTF', NULL);

exception
when others then
dbms_output.put_line('Retcode : ' || retcode);
dbms_output.put_line('Errbuf : ' || errbuf);
raise;
end;
/

```

3. Run this script.

CMA for Quote: Quote Source

This is an example of creating a custom matching attribute for Sales using the quote transaction and the quote source attribute.

Modify Script 1

Modify Script 1, page A-99 to retrieve the relevant quote transaction type SQL meta-data.

1. Set the source ID corresponding to the usage (Sales or Collections). The source ID -1001 corresponds to the Sales usage. To find the desired usage ID query JTF_SOURCES_ALL.

```
p_source_id    NUMBER := -1001;
```

2. Set the transaction type ID. The ID -1105 corresponds to the Quote transaction type ID. To find the desired transaction type ID, query JTF_QUAL_TYPES_ALL

```
p_trans_type_id NUMBER := -1105;
```

3. Run the script and save the output to a file. Running this command will save the Quote transaction type SQL meta-data to the "R12QuoteTT.sql" file.

```
SQL> spool <output filename - e.g., "d:\R12QuoteTT.sql">
SQL> set serveroutput on size 999999
SQL> @Script1.sql /
```

Modify Transaction SQL Meta-Data

Modify the transaction type SQL meta-data (R12QuoteTT.sql,) to get the CMA's corresponding transaction attribute value.

1. Add the quote_source_code attribute to each of the following SQLs:
 - l_real_time_sql :=

```

'select ' || CHR(10) ||
'   header.quote_header_id trans_object_id ' || CHR(10) ||
' ,header.quote_header_id trans_detail_object_id ' || CHR(10)
||
' ,upper(location.city) city ' || CHR(10) ||
' ,upper(location.postal_code) postal_code ' || CHR(10) ||
' ,upper(location.state) state ' || CHR(10) ||
' ,upper(location.province) province ' || CHR(10) ||
' ,upper(location.county) county ' || CHR(10) ||
' ,upper(location.country) country ' || CHR(10) ||
' ,header.cust_party_id party_id ' || CHR(10) ||
' ,header.sold_to_party_site_id party_site_id ' || CHR(10) ||
' ,upper(cust_contact.phone_area_code) area_code ' || CHR(10)
||
' ,upper(party.party_name) comp_name_range ' || CHR(10) ||
' ,header.cust_party_id partner_id ' || CHR(10) ||
' ,party.employees_total num_of_employees ' || CHR(10) ||
' ,upper(party.category_code) category_code ' || CHR(10) ||
' ,header.cust_party_id party_relationship_id ' || CHR(10) ||
' ,upper(party.sic_code_type||': '||party.sic_code) sic_code
' || CHR(10) ||
' ,header.quote_header_id squal_num50 ' || CHR(10) ||
' ,UPPER(party.duns_number_c) squal_char11 ' || CHR(10) ||
' ,orgp.CURR_FY_POTENTIAL_REVENUE squal_num06 ' || CHR(10) ||
' ,upper(orgp.PREF_FUNCTIONAL_CURRENCY) car_currency_code ' ||
CHR(10) ||
' ,l_txn_date txn_date ' || CHR(10) ||
' ,UPPER(party.party_type)
Q9010_PARTY_TYPE ' ||
' ,UPPER(header.quote_source_code) Q9101_QUOTE_SOURCE ' ||

'from aso_quote_headers_all header, ' || CHR(10) ||
'   hz_parties party, ' || CHR(10) ||
'   hz_party_sites party_site, ' || CHR(10) ||
'   HZ_ORGANIZATION_PROFILES ORGP, ' || CHR(10) ||
'   hz_locations location, ' || CHR(10) ||
'   hz_contact_points cust_contact ' || CHR(10) ||

```

```

'where header.cust_party_id          = party.party_id  ' ||
CHR(10) ||
'and  header.sold_to_party_site_id  =
party_site.party_site_id  ' || CHR(10)
||

'and  party_site.location_id        = location.location_id  '
|| CHR(10) ||
'AND  party.party_id                = orgp.party_id(+)  ' ||
CHR(10) ||
'AND  nvl(orgp.effective_end_date(+),sysdate + 1) > sysdate  '
|| CHR(10) ||
'and  cust_contact.owner_table_id(+) = header.party_id  ' ||
CHR(10) ||
'and  cust_contact.owner_table_name(+) = 'HZ_PARTIES'  ' ||
CHR(10) ||
'and  cust_contact.contact_point_type(+) = 'PHONE'  ' ||
CHR(10) ||
'and  cust_contact.status(+)        = 'A'  ' || CHR(10) ||
'and  cust_contact.primary_flag(+)  = 'Y'  ' || CHR(10) ||
'and  header.quote_header_id        = l_trans_object_id1  ';

```

- l_batch_total_sql :=

```

l_batch_total_sql :=

'select ' || CHR(10) ||

'   -1001                               source_id,
' || CHR(10) ||
'   -1105
trans_object_type_id, ' ||
CHR(10) ||

'   header.QUOTE_NUMBER
trans_object_id, ' ||
CHR(10) ||

'   header.sold_to_party_site_id
trans_detail_object_id, '
|| CHR(10) ||

'   header.order_id                       order_id, '
|| CHR(10) ||
'   header.quote_expiration_date
quote_expiration_date, '
|| CHR(10) ||

'   header.party_id                       squal_num01, '
|| CHR(10) ||
'   header.sold_to_party_site_id
squal_num02,
' || CHR(10)
||

'   header.party_id                       squal_num03,
' || CHR(10)
||

'   header.party_id                       squal_num04,
' || CHR(10)
||

'   party.employees_total                 squal_num05,
' || CHR(10)
||

'   orgp.CURR_FY_POTENTIAL_REVENUE
squal_num06,
' || CHR(10)
||

'   header.quote_header_id               squal_num50,
' || CHR(10)
||

'   upper(party.party_name)
squal_char01, ' || CHR(10)
||

'   upper(location.city)
squal_char02, ' || CHR(10)
||

'   upper(location.county)
squal_char03, ' || CHR(10)

```

```

||

' upper(location.state)
squal_char04, ' || CHR(10)
||

' upper(location.province)
squal_char05, ' || CHR(10)
||

' upper(location.postal_code)
squal_char06, ' || CHR(10)
||

' upper(location.country)
squal_char07, ' || CHR(10)
||

' upper(cust_contact.phone_area_code)
squal_char08, ' || CHR(10)
||

' upper(party.category_code)
squal_char09, ' || CHR(10)
||

' upper(party.sic_code_type||': '||party.sic_code)
squal_char10, ' ||
CHR(10) ||

' UPPER(party.duns_number_c) squal_char11, '
|| CHR(10) ||
' upper(orgp.PREF_FUNCTIONAL_CURRENCY)
squal_curc01, ' || CHR(10)
||

' upper(substr(party.party_name,1,1)) squal_fc01
' || CHR(10) ||
' ,UPPER(party.party_type)
Q9010_PARTY_TYPE ' ||
' ,UPPER(header.quote_source_code) Q9101_QUOTE_SOURCE ' ||
'from aso_quote_headers_all header, ' || CHR(10) ||

' hz_parties party, ' || CHR(10) ||

' hz_party_sites party_site, ' || CHR(10) ||

' HZ_ORGANIZATION_PROFILES ORGP, ' || CHR(10) ||

' hz_locations location, ' || CHR(10) ||

' hz_contact_points cust_contact ' || CHR(10) ||

'where header.cust_party_id = party.party_id ' ||
CHR(10) ||
'and header.sold_to_party_site_id =
party_site.party_site_id ' || CHR(10)
||

'and party_site.location_id = location.location_id '

```

```

|| CHR(10) ||
'AND party.party_id = orgp.party_id(+) ' ||
CHR(10) ||
'AND nvl(orgp.effective_end_date(+),sysdate + 1) > sysdate '
|| CHR(10) ||
'and cust_contact.owner_table_id(+) = header.party_id ' ||
CHR(10) ||
'and cust_contact.owner_table_name(+) = 'HZ_PARTIES' ' ||
CHR(10) ||
'and contact_point_type(+) = 'PHONE' ' || CHR(10)
||
'and cust_contact.status(+) = 'A' ' || CHR(10) ||
'and primary_flag(+) = 'Y' ' || CHR(10) ||
'and header.max_version_flag = 'Y' ';

l_batch_dea_sql :=
NULL;

```

- l_batch_incr_sql :=

```

l_batch_incr_sql :=

'select ' || CHR(10) ||

' -1001                                source_id, ' || CHR(10) ||

' -1105                                trans_object_type_id,
' || CHR(10)
||

' header.QUOTE_NUMBER                  trans_object_id, ' || CHR(10)
||
' header.sold_to_party_site_id
trans_detail_object_id, ' ||
CHR(10) ||

' header.order_id                      order_id, ' || CHR(10) ||

' header.quote_expiration_date        quote_expiration_date, '
|| CHR(10) ||
' header.party_id                      squal_num01, ' ||
CHR(10) ||
' header.sold_to_party_site_id        squal_num02, ' ||
CHR(10) ||
' header.party_id                      squal_num03, ' ||
CHR(10) ||
' header.party_id                      squal_num04, ' ||
CHR(10) ||
' party.employees_total                squal_num05, ' ||
CHR(10) ||
' orgp.CURR_FY_POTENTIAL_REVENUE      squal_num06, '
|| CHR(10) ||
' header.quote_header_id              squal_num50, ' || CHR(10)
||
' upper(party.party_name)             squal_char01, ' ||
CHR(10) ||
' upper(location.city)                squal_char02, ' ||
CHR(10) ||
' upper(location.county)              squal_char03, ' ||
CHR(10) ||
' upper(location.state)               squal_char04, ' ||
CHR(10) ||
' upper(location.province)            squal_char05, ' ||
CHR(10) ||
' upper(location.postal_code)         squal_char06, ' ||
CHR(10) ||
' upper(location.country)             squal_char07, ' ||
CHR(10) ||
' upper(cust_contact.phone_area_code) squal_char08, ' ||
CHR(10) ||
' upper(party.category_code)          squal_char09, ' ||
CHR(10) ||
' upper(party.sic_code_type||': '||party.sic_code)
squal_char10, ' ||
CHR(10) ||

' UPPER(party.duns_number_c)          squal_char11, ' ||
CHR(10) ||
' upper(orgp.PREF_FUNCTIONAL_CURRENCY) squal_curc01, '
|| CHR(10) ||

```

```

' upper(substr(party.party_name,1,1))    squal_fc01  ' || CHR(10)
||
' ,UPPER(party.party_type)
Q9010_PARTY_TYPE  ' ||
' ,UPPER(header.quote_source_code) Q9101_QUOTE_SOURCE ' ||
'from  aso_quote_headers_all  header,  ' || CHR(10) ||

'      hz_parties            party,  ' || CHR(10) ||

'      hz_party_sites       party_site,  ' || CHR(10) ||

'      HZ_ORGANIZATION_PROFILES ORGP,  ' || CHR(10) ||

'      hz_locations         location,  ' || CHR(10) ||

'      hz_contact_points    cust_contact,  ' || CHR(10) ||

'      aso_changed_quotes  chng  ' || CHR(10) ||

'where header.party_id                = party.party_id  ' ||
CHR(10) ||
'and  header.sold_to_party_site_id    =
party_site.party_site_id  ' || CHR(10)
||

'and  party_site.location_id          = location.location_id  '
|| CHR(10) ||
'AND  party.party_id                  = orgp.party_id(+)  ' ||
CHR(10) ||
'AND  nvl(orgp.effective_end_date(+),sysdate + 1) > sysdate  '
|| CHR(10) ||
'and  cust_contact.owner_table_id(+)  = header.party_id  ' ||
CHR(10) ||
'and  cust_contact.owner_table_name(+) = 'HZ_PARTIES'  ' ||
CHR(10) ||
'and  contact_point_type(+)           = 'PHONE'  ' || CHR(10)
||
'and  cust_contact.status(+)          = 'A'  ' || CHR(10) ||

'and  primary_flag(+)                 = 'Y'  ' || CHR(10) ||

'and  header.max_version_flag         = 'Y'  ' || CHR(10) ||

'and  chng.quote_number               = header.quote_number  '
|| CHR(10) ||
'and  chng.conc_request_id            = l_REQUEST_ID  ';

```

- l_batch_dea_sql := NO
- l_incr_reassign_sql :=

```

l_incr_reassign_sql :=
'select ' || CHR(10) ||
' -1001          source_id, ' || CHR(10) ||
' -1105                                trans_object_type_id,
' || CHR(10)
||
' header.QUOTE_NUMBER    trans_object_id, ' || CHR(10) ||
' header.order_id       order_id, ' || CHR(10) ||
' header.quote_expiration_date    quote_expiration_date, ' ||
CHR(10) ||
' header.sold_to_party_site_id
trans_detail_object_id, ' ||
CHR(10) ||
' header.party_id                squal_num01, ' ||
CHR(10) ||
' header.sold_to_party_site_id    squal_num02, ' ||
CHR(10) ||
' header.party_id                squal_num03, ' ||
CHR(10) ||
' header.party_id                squal_num04, ' ||
CHR(10) ||
' party.employees_total          squal_num05, ' ||
CHR(10) ||
' orgp.CURR_FY_POTENTIAL_REVENUE    squal_num06, '
|| CHR(10) ||
' header.quote_header_id          squal_num50, ' || CHR(10)
||
' upper(party.party_name)          squal_char01, ' ||
CHR(10) ||
' upper(location.city)             squal_char02, ' ||
CHR(10) ||
' upper(location.county)           squal_char03, ' ||
CHR(10) ||
' upper(location.state)            squal_char04, ' ||
CHR(10) ||
' upper(location.province)         squal_char05, ' ||
CHR(10) ||
' upper(location.postal_code)      squal_char06, ' ||
CHR(10) ||
' upper(location.country)          squal_char07, ' ||
CHR(10) ||
' upper(cust_contact.phone_area_code) squal_char08, ' ||
CHR(10) ||
' upper(party.category_code)       squal_char09, ' ||
CHR(10) ||
' upper(party.sic_code_type||': '||party.sic_code)
squal_char10, ' ||
CHR(10) ||
' UPPER(party.duns_number_c)        squal_char11, ' ||
CHR(10) ||
' upper(orgp.PREF_FUNCTIONAL_CURRENCY) squal_curc01, '
|| CHR(10) ||

```

```

' upper(substr(party.party_name,1,1))          squal_fc01 ' ||
CHR(10) ||
' ,UPPER(party.party_type)
Q9010_PARTY_TYPE ' ||
' ,UPPER(header.quote_source_code) Q9101_QUOTE_SOURCE ' ||
'from aso_quote_headers header, ' || CHR(10) ||

'      hz_parties          party, ' || CHR(10) ||

'      hz_party_sites     party_site, ' || CHR(10) ||

'      HZ_ORGANIZATION_PROFILES ORGP, ' || CHR(10) ||

'      hz_locations       location, ' || CHR(10) ||

'      hz_contact_points  cust_contact, ' || CHR(10) ||

'      ( select distinct acc.quote_number quote_number ' ||
CHR(10) ||
'          from (select distinct terr_id terr_id ' || CHR(10) ||

'              from JTY_CHANGED_TERRS ' || CHR(10) ||

'              where tap_request_id = l_request_id) CHG_TERR, '
|| CHR(10) ||
'          ASO_QUOTE_ACCESSES ACC, ' || CHR(10) ||

'              ASO_TERRITORY_ACCESSES TERR_ACC ' || CHR(10) ||

'              where CHG_TERR.terr_id = TERR_ACC.territory_id ' ||
CHR(10) ||
'          and TERR_ACC.access_id = acc.access_id) chng ' ||
CHR(10) ||
'where header.party_id          = party.party_id ' ||
CHR(10) ||
'and  header.sold_to_party_site_id
party_site.party_site_id ' || CHR(10)
||

'and  party_site.location_id    = location.location_id '
|| CHR(10) ||
'AND  party.party_id            = orgp.party_id(+) ' ||
CHR(10) ||
'AND  nvl(orgp.effective_end_date(+),sysdate + 1) > sysdate '
|| CHR(10) ||
'and  cust_contact.owner_table_id(+) = header.party_id ' ||
CHR(10) ||
'and  cust_contact.owner_table_name(+) = 'HZ_PARTIES' ' ||
CHR(10) ||
'and  contact_point_type(+)      = 'PHONE' ' || CHR(10)
||
'and  cust_contact.status(+)     = 'A' ' || CHR(10) ||

'and  primary_flag(+)            = 'Y' ' || CHR(10) ||

'and  header.max_version_flag    = 'Y' ' || CHR(10) ||

'and  chng.quote_number          = header.quote_number ';

```

2. Modify the R12QuoteTT.sql file with the appropriate package parameters to make the SQL meta-data change.

```
JTY_TRANS_USG_PGM_SQL_PKG.Insert_Row(  
p_source_id => -1001  
,p_trans_type_id => -1105  
,p_program_name => 'SALES/QUOTE PROGRAM'  
,p_version_name => '12-JAN-06: CMA QUOTE SOURCE ADDED'  
,p_real_time_sql => l_real_time_sql  
,p_batch_total_sql => l_batch_total_sql  
,p_batch_incr_sql => l_batch_incr_sql  
,p_batch_dea_sql => l_batch_dea_sql  
,p_incr_reassign_sql => l_incr_reassign_sql  
,p_use_total_for_dea_flag => null  
,p_enabled_flag => 'Y'  
,retcode => retcode  
,errbuf => errbuf);  
  
dbms_output.put_line('SALES/QUOTE PROGRAM retcode : ' || retcode);  
dbms_output.put_line('SALES/QUOTE PROGRAM errbuf : ' || errbuf);
```

3. Run the R12QuoteTT.sql file.

```
SQL> @R12QuoteTT.sql /
```

Create the Custom Matching Attribute

Create the CMA. The basis of this script is to populate all the necessary information in the following tables:

JTF_SEEDED_QUAL_ALL_B

JTF_SEEDED_QUAL_ALL_TL

JTF_QUAL_USGS_ALL

1. Ensure that there is not an existing CMA record for the unique matching attribute ID that you will use for the new CMA.

```

set serveroutput on size 999999

DECLARE

l_real_time_sql varchar2(32000) := NULL;
l_batch_total_sql varchar2(32000) := NULL;
l_batch_incr_sql varchar2(32000) := NULL;
l_batch_dea_sql varchar2(32000) := NULL;
l_incr_reassign_sql varchar2(32000);
retcode varchar2(250);
errbuf varchar2(1000);BEGIN

BEGIN
DELETE
FROM jtf_seeded_qual_all_b
WHERE seeded_qual_id = -9101;
EXCEPTION
WHEN NO_DATA_FOUND THEN
NULL;
END;

BEGIN
DELETE
FROM jtf_seeded_qual_all_tl
WHERE seeded_qual_id = -9101;
EXCEPTION
WHEN NO_DATA_FOUND THEN
NULL;
END;

BEGIN
DELETE
FROM jtf_qual_usgs_all
WHERE qual_usg_id = -9101;
EXCEPTION
WHEN NO_DATA_FOUND THEN
NULL;
END;

```

2. Create the meta-data for the CMA. Follow the comments provided in the script to enter the relevant CMA information.

```

/* The following meta-data will create the custom qualifier
** for the Lead Status.
*/
JTY_CUST_QUAL_PKG.create_qual(

    /* Unique Identifier/Primary Key */
    p_seeded_qual_id          => -9101
    ,p_name                   => 'Quote Source (CMA)'
    ,p_description            => 'Custom Matching Attribute for
Source Marketing Campaign of a Quote'
    ,p_language               => 'US'

    ,/* Sales Usage: FK to
        JTF_SOURCES_ALL.SOURCE_ID*/
    p_source_id              => -1001

    ,/* Sales Lead Transaction Type: FK to
        JTF_QUAL_TYPE_USGS_ALL.QUAL_TYPE_USG_ID*/
    p_trans_type_id          => -1105

    ,p_enabled_flag          => 'N'

    ,/* QUAL_RELATION_FACTOR
        This needs to be the next prime number greater than
        the value from the following SQL:

        SELECT MAX(qual_relation_factor)
        FROM jtf_qual_usgs_all

        The first 1000 primes can be found at:
        http://primes.utm.edu/lists/small/1000.txt

        Custom qualifiers should start at the 303rd prime
        which is 1999. This is to keep 1st to 302nd primes
        for product development to seed qualifiers.
        */
    p_qual_relation_factor    => 2017

    /* The following set of meta-data setups determine
    ** the behaviour of the matching attribute in
    ** HTML and Excel UIs: how it is displayed; what
    ** is the LOV SQL; and, what comparison operators
    ** are supported.
    */

    ,/* CONVERT_TO_ID_FLAG: displayed qualifier value is a CHAR
        but stored qualifier value is stored as an internal id */
    p_convert_to_id_flag      => 'N'

    ,/* DISPLAY_TYPE: display type on UI (NUMERIC/CHAR) */
    p_display_type            => 'CHAR'
    ,/* LOV SQL */
    p_html_lov_sql1           =>
    ' SELECT c.campaign_name || ': ' || b.status_code || ': '
|| a.source_code || ': ' || c.description coll_value, ' ||
CHR(10) ||
    ' TO_CHAR(a.source_code_id) col2_value ' || CHR(10) ||
    ' FROM ams_source_codes a, ams_campaigns_all_b b,
ams_campaigns_all_tl c ' || CHR(10) ||
    ' WHERE b.source_code = a.source_code ' || CHR(10) ||

```

```

' AND a.arc_source_code_for = 'CAMP' ' || CHR(10) ||
' AND b.campaign_id = c.campaign_id ' || CHR(10) ||
' AND c.LANGUAGE = userenv('LANG') ' || CHR(10) ||
' ORDER BY b.status_code, c.campaign_name '

,p_html_lov_sql2           => null
,p_html_lov_sql3           => null
,p_display_sql1            => null
,p_display_sql2            => null
,p_display_sql3            => null
,p_hierarchy_type          => null

,/* Is the "=" operator supported? */
p_equal_flag               => 'Y'
,/* Is the "LIKE" operator supported? */
p_like_flag                => 'N'
,/* Is the "BETWEEN" operator supported? */
p_between_flag             => 'N'

/* Values table */
/* matching attribute comparison operator */
,p_comparison_operator     => 'q9101_cp'
,p_low_value_char         => 'q9101_low_value_char'
,p_high_value_char        => null
,p_low_value_char_id      => null
,p_low_value_number       => null
,p_high_value_number      => null
,p_interest_type_id       => null
,p_primary_interest_code_id => null
,p_sec_interest_code_id   => null
,p_value1_id              => null
,p_value2_id              => null
,p_value3_id              => null
,p_value4_id              => null
,p_first_char             => null
,p_currency_code          => null

,/* Transaction Type Alias/_TRANS table column mapping */
p_qual_coll               => 'Q9101_QUOTE_SOURCE'

,/* TCA Classification for derivation */
p_alias_rule1             => null

,/* OP_EQL FOR BATCH-MODE ASSIGNMENT:
** Since the AS_SALES_LEADS.STATUS_CODE value is not passed to
the
** assignment API, we must the PK (SALES_LEAD_ID) to get the
** STATUS_CODE value from AS_SALES_LEADS and compare to the
** territory qualifier value
*/
p_op_eql                  =>
' (A.Q9101_QUOTE_SOURCE = B.q9101_low_value_CHAR AND
B.q9101_cp = '=' ) '
,p_op_like                 => null
,p_op_between              => NULL
,p_op_common_where        => null

,p_real_time_select       =>
'SELECT DISTINCT A.trans_object_id, A.trans_detail_object_id,
A.txn_date, B.terr_id, B.absolute_rank, B.top_level_terr_id,

```

```

B.num_winners'
,p_real_time_from          => null
,p_real_time_where        =>
'WHERE ' || CHR(10) ||
' B.q9101_low_value_CHAR = A.Q9101_QUOTE_SOURCE ' || CHR(10) ||
' AND B.q9101_cp = '=' ' || CHR(10) ||
' AND B.source_id = -1001 ' || CHR(10) ||
' AND A.txn_date between B.start_date and B.end_date'

,retcode                   => retcode
,errbuf                     => errbuf);

dbms_output.put_line('Retcode : ' || retcode);
dbms_output.put_line('Errbuf : ' || errbuf);

ad_morg.replicate_seed_data(NULL, 'JTF', NULL);

exception
when others then
    dbms_output.put_line('Retcode : ' || retcode);
    dbms_output.put_line('Errbuf : ' || errbuf);
    raise;
end;
/

```

3. Run this script.

CMA for Proposal: Proposal Status

This is an example of creating a custom matching attribute for Sales using the proposal transaction and the proposal status attribute.

Modify Script 1

Modify Script 1, page A-99 to retrieve the relevant proposal transaction type SQL meta-data.

1. Set the source ID corresponding to the usage (Sales or Collections). The source ID -1001 corresponds to the Sales usage. To find the desired usage ID query JTF_SOURCES_ALL.

```
p_source_id    NUMBER := -1001;
```

2. Set the transaction type ID. The ID -1106 corresponds to the Proposal transaction type ID. To find the desired transaction type ID, query JTF_QUAL_TYPES_ALL

```
p_trans_type_id NUMBER := -1106;
```

3. Run the script and save the output to a file. Running this command will save the Proposal transaction type SQL meta-data to the "R12ProposalTT.sql" file.

```

SQL>spool <output filename - e.g., "d:\R12ProposalTT.sql">
SQL> set serveroutput on size 999999
SQL> @Script1.sql /

```

Modify Transaction SQL Meta-Data

Modify the transaction type SQL meta-data (R12AccountTT.sql) to get the CMA's corresponding transaction attribute value.

1. Add the proposal_status attribute to each of the following SQLs:
 - l_real_time_sql :=

```

'Select ' || CHR(10) ||
'   prop.proposal_id TRANS_OBJECT_ID ' || CHR(10) ||
' ,SITE.party_site_id trans_detail_object_id ' || CHR(10) ||
' ,UPPER(LOC.CITY) city ' || CHR(10) ||
' ,UPPER(LOC.POSTAL_CODE) postal_code ' || CHR(10) ||
' ,UPPER(LOC.STATE) state ' || CHR(10) ||
' ,UPPER(LOC.PROVINCE) province ' || CHR(10) ||
' ,UPPER(LOC.COUNTY) county ' || CHR(10) ||
' ,UPPER(LOC.COUNTRY) country ' || CHR(10) ||
' ,hzp.party_id party_id ' || CHR(10) ||
' ,SITE.party_site_id party_site_id ' || CHR(10) ||
' ,UPPER(CNTPNT.phone_area_code) area_code ' || CHR(10) ||
' ,UPPER(hzp.party_name) comp_name_range ' || CHR(10) ||
' ,hzp.party_id partner_id ' || CHR(10) ||
' ,hzp.employees_total num_of_employees ' || CHR(10) ||
' ,UPPER(hzp.category_code) category_code ' || CHR(10) ||
' ,hzp.party_id party_relationship_id ' || CHR(10) ||
' ,UPPER(hzp.sic_code_type||': '||hzp.sic_code) sic_code ' ||
CHR(10) ||
' ,ORGPRO.curr_fy_potential_revenue squal_num06 ' || CHR(10) ||
' ,UPPER(ORGPRO.pref_functional_currency) car_currency_code '
|| CHR(10) ||
' ,hzp.party_id squal_num01 ' || CHR(10) ||
' ,UPPER(hzp.duns_number_c) SQUAL_CHAR11 ' || CHR(10) ||
' ,l_txn_date txn_date ' || CHR(10) ||
' ,UPPER(hzp.party_type)
Q9010_PARTY_TYPE ' || CHR(10) ||
' ,UPPER(PROP.proposal_status) Q9102_PROPOSAL_STATUS' ||
CHR(10) ||
'FROM HZ_PARTY_SITES SITE, ' || CHR(10) ||
'   HZ_LOCATIONS LOC, ' || CHR(10) ||
'   HZ_PARTIES HZP, ' || CHR(10) ||
'   HZ_ORGANIZATION_PROFILES ORGPRO , ' || CHR(10) ||
'   HZ_CONTACT_POINTS CNTPNT, ' || CHR(10) ||

```

```

'   prp_proposals   PROP   ' || CHR(10) ||
'WHERE CNTPNT.owner_table_id(+) = HZP.party_id   ' || CHR(10) ||
'and CNTPNT.status(+)='A'   ' || CHR(10) ||
'and CNTPNT.primary_flag(+)='Y'   ' || CHR(10) ||
'and CNTPNT.contact_point_type(+)='PHONE'   ' || CHR(10) ||
'and ORGPRO.party_id(+) = HZP.party_id   ' || CHR(10) ||
'and nvl(ORGPRO.effective_end_date(+),sysdate+1) > sysdate   ' ||
CHR(10) ||
'AND PROP.PARTY_ID = HZP.PARTY_ID   ' || CHR(10) ||

'AND HZP.party_type in ('PERSON', 'ORGANIZATION')   ' ||
CHR(10) ||
'AND HZP.status = 'A'   ' || CHR(10) ||

'AND SITE.status = 'A'   ' || CHR(10) ||

'and SITE.party_id = hzp.party_id   ' || CHR(10) ||

'and LOC.location_id = SITE.location_id   ' || CHR(10) ||

'AND PROP.Proposal_id = l_trans_object_id1   ' || CHR(10) ||

'UNION ALL   ' || CHR(10) ||

'select   ' || CHR(10) ||

'   prop.proposal_id TRANS_OBJECT_ID   ' || CHR(10) ||
'   ,to_number(NULL) trans_detail_object_id   ' || CHR(10) ||
'   ,To_char(null) city   ' || CHR(10) ||
'   ,To_char(null) postal_code   ' || CHR(10) ||
'   ,To_char(null) state   ' || CHR(10) ||
'   ,To_char(null) province   ' || CHR(10) ||
'   ,To_char(null) county   ' || CHR(10) ||
'   ,To_char(null) country   ' || CHR(10) ||
'   ,hzp.party_id party_id   ' || CHR(10) ||
'   ,to_number(NULL) party_site_id   ' || CHR(10) ||
'   ,UPPER(CNTPNT.phone_area_code) area_code   ' || CHR(10) ||
'   ,UPPER(hzp.party_name) comp_name_range   ' || CHR(10) ||
'   ,hzp.party_id partner_id   ' || CHR(10) ||
'   ,hzp.employees_total num_of_employees   ' || CHR(10) ||

```

```

' ,UPPER(hzp.category_code) category_code ' || CHR(10) ||
' ,hzp.party_id party_relationship_id ' || CHR(10) ||
' ,UPPER(hzp.sic_code_type||': '||hzp.sic_code) sic_code ' ||
CHR(10) ||
' ,ORGPRO.curr_fy_potential_revenue squal_num06 ' || CHR(10) ||

' ,UPPER(ORGPRO.pref_functional_currency) car_currency_code '
|| CHR(10) ||
' ,hzp.party_id squal_num01 ' || CHR(10) ||

' ,UPPER(hzp.duns_number_c) SQUAL_CHAR11 ' || CHR(10) ||

' ,l_txn_date txn_date ' || CHR(10) ||

' ,UPPER(hzp.party_type)
Q9010_PARTY_TYPE ' ||
' ,UPPER(PROP.proposal_status) Q9102_PROPOSAL_STATUS' ||
CHR(10) ||
CHR(10) ||

'from HZ_ORGANIZATION_PROFILES ORGPRO , ' || CHR(10) ||
' HZ_CONTACT_POINTS CNTPNT, ' || CHR(10) ||
' prp_proposals PROP, ' || CHR(10) ||
' hz_parties hzp ' || CHR(10) ||
'where CNTPNT.owner_table_id(+) = HZP.party_id ' || CHR(10) ||
'and CNTPNT.status(+)='A' ' || CHR(10) ||
'and CNTPNT.primary_flag(+)='Y' ' || CHR(10) ||
'and CNTPNT.contact_point_type(+)='PHONE' ' || CHR(10) ||
'and ORGPRO.party_id(+) = HZP.party_id ' || CHR(10) ||
'and nvl(ORGPRO.effective_end_date(+),sysdate+1) > sysdate ' ||
CHR(10) ||
'AND PROP.PARTY_ID = HZP.PARTY_ID ' || CHR(10) ||
'AND HZP.party_type in ('PERSON', 'ORGANIZATION') ' ||
CHR(10) ||
'and HZP.status = 'A' ' || CHR(10) ||
'AND PROP.Proposal_id = l_trans_object_id1 ';

```

- l_batch_total_sql :=

```

l_batch_total_sql :=
NULL;

l_batch_incr_sql :=
NULL;

l_batch_dea_sql :=
NULL;

l_incr_reassign_sql :=
NULL;

```

- l_batch_incr_sql :=
- l_batch_dea_sql := NO
- l_incr_reassign_sql :=

2. Modify the R12ProposalTT.sql file with the appropriate package parameters to make the SQL meta-data change.

```

JTY_TRANS_USG_PGM_SQL_PKG.Insert_Row(
p_source_id => -1001
,p_trans_type_id => -1106
,p_program_name => 'SALES/PROPOSAL PROGRAM'
,p_version_name => '12-JAN-06: CMA PROPOSAL STATUS ADDED'
,p_real_time_sql => l_real_time_sql
,p_batch_total_sql => l_batch_total_sql
,p_batch_incr_sql => l_batch_incr_sql
,p_batch_dea_sql => l_batch_dea_sql
,p_incr_reassign_sql => l_incr_reassign_sql
,p_use_total_for_dea_flag => null
,p_enabled_flag => 'Y'
,retcode => retcode
,errbuf => errbuf);

dbms_output.put_line('SALES/PROPOSAL PROGRAM retcode : ' ||
retcode);
dbms_output.put_line('SALES/PROPOSAL PROGRAM errbuf : ' || errbuf);

```

3. Run the R12ProposalTT.sql file.

```
SQL> @R12ProposalTT.sql /
```

Create the Custom Matching Attribute

Create the CMA. The basis of this script is to populate all the necessary information in the following tables:

JTF_SEEDED_QUAL_ALL_B

JTF_SEEDED_QUAL_ALL_TL

JTF_QUAL_USGS_ALL

1. Ensure that there is not an existing CMA record for the unique matching attribute ID that you will use for the new CMA.

```
set serveroutput on size 999999
```

```
DECLARE
```

```
l_real_time_sql varchar2(32000) := NULL;  
l_batch_total_sql varchar2(32000) := NULL;  
l_batch_incr_sql varchar2(32000) := NULL;  
l_batch_dea_sql varchar2(32000) := NULL;  
l_incr_reassign_sql varchar2(32000);  
retcode varchar2(250);  
errbuf varchar2(1000);
```

```
BEGIN
```

```
  BEGIN
```

```
    DELETE
```

```
    FROM jtf_seeded_qual_all_b
```

```
    WHERE seeded_qual_id = -9102;
```

```
  EXCEPTION
```

```
    WHEN NO_DATA_FOUND THEN
```

```
      NULL;
```

```
  END;
```

```
  BEGIN
```

```
    DELETE
```

```
    FROM jtf_seeded_qual_all_tl
```

```
    WHERE seeded_qual_id = -9102;
```

```
  EXCEPTION
```

```
    WHEN NO_DATA_FOUND THEN
```

```
      NULL;
```

```
  END;
```

```
  BEGIN
```

```
    DELETE
```

```
    FROM jtf_qual_usgs_all
```

```
    WHERE qual_usg_id = -9102;
```

```
  EXCEPTION
```

```
    WHEN NO_DATA_FOUND THEN
```

```
      NULL;
```

```
  END;
```

-
2. Create the meta-data for the CMA. Follow the comments provided in the script to enter the relevant CMA information.

```

/* The following meta-data will create the custom qualifier
** for the Proposal Status.
*/
JTY_CUST_QUAL_PKG.create_qual(

    /* Unique Identifier/Primary Key */
    p_seeded_qual_id      => -9102
  ,p_name                  => 'Proposal Status (CMA)'
  ,p_description          => 'Custom Matching Attribute for
Proposal Status'
  ,p_language             => 'US'

  ,/* Sales Usage: FK to
      JTF_SOURCES_ALL.SOURCE_ID*/
    p_source_id           => -1001

  ,/* Sales Lead Transaction Type: FK to
      JTF_QUAL_TYPE_USGS_ALL.QUAL_TYPE_USG_ID*/
    p_trans_type_id       => -1106

  ,p_enabled_flag         => 'N'

  ,/* QUAL_RELATION_FACTOR
      This needs to be the next prime number greater than
      the value from the following SQL:

      SELECT MAX(qual_relation_factor)
      FROM jtf_qual_usgs_all

      The first 1000 primes can be found at:
      http://primes.utm.edu/lists/small/1000.txt

      Custom qualifiers should start at the 303rd prime
      which is 1999. This is to keep 1st to 302nd primes
      for product development to seed qualifiers.
      */
    p_qual_relation_factor    => 2029

  ,/* The following set of meta-data setups determine
      ** the behaviour of the matching attribute in
      ** HTML and Excel UIs: how it is displayed; what
      ** is the LOV SQL; and, what comparison operators
      ** are supported.
      */

  ,/* CONVERT_TO_ID_FLAG: displayed qualifier value is a CHAR
      but stored qualifier value is stored as an internal id */
    p_convert_to_id_flag     => 'N'

  ,/* DISPLAY_TYPE: display type on UI (NUMERIC/CHAR) */
    p_display_type           => 'CHAR'
  ,/* LOV SQL */
  ,p_html_lov_sql1         => NULL
  ,p_html_lov_sql2         => null
  ,p_html_lov_sql3         => null
  ,p_display_sql1          => null
  ,p_display_sql2          => null
  ,p_display_sql3          => null
  ,p_hierarchy_type        => null

```

```

,/* Is the "=" operator supported? */
p_equal_flag          => 'Y'
,/* Is the "LIKE" operator supported? */
p_like_flag          => 'N'
,/* Is the "BETWEEN" operator supported? */
p_between_flag       => 'N'

/* Values table */
/* matching attribute comparison operator */
,p_comparison_operator => 'q9102_cp'
,p_low_value_char     => 'q9102_low_value_CHAR'
,p_high_value_char    => null
,p_low_value_char_id  => null
,p_low_value_number   => null
,p_high_value_number  => null
,p_interest_type_id  => null
,p_primary_interest_code_id => null
,p_sec_interest_code_id => null
,p_value1_id         => null
,p_value2_id         => null
,p_value3_id         => null
,p_value4_id         => null
,p_first_char        => null
,p_currency_code     => null

,/* Transaction Type Alias/_TRANS table column mapping */
p_qual_coll          => 'Q9102_PROPOSAL_STATUS'

,/* TCA Classification for derivation */
p_alias_rule1        => null

,/* OP_EQL FOR BATCH-MODE ASSIGNMENT:
** Since the AS_SALES_LEADS.STATUS_CODE value is not passed to
the
** assignment API, we must the PK (SALES_LEAD_ID) to get the
** STATUS_CODE value from AS_SALES_LEADS and compare to the
** territory qualifier value
*/
p_op_eql              =>
' (A.Q9102_PROPOSAL_STATUS = B.q9102_low_value_CHAR AND
B.q9102_cp = '=' ) '
,p_op_like            => null
,p_op_between         => NULL
,p_op_common_where    => null

,p_real_time_select   =>
'SELECT DISTINCT A.trans_object_id, A.trans_detail_object_id,
A.txn_date, B.terr_id, B.absolute_rank, B.top_level_terr_id,
B.num_winners'
,p_real_time_from     => null
,p_real_time_where    =>
'WHERE ' || CHR(10) ||
' B.q9102_low_value_CHAR = A.Q9102_PROPOSAL_STATUS ' || CHR(10)
||
' AND B.q9102_cp = '=' ' || CHR(10) ||
' AND B.source_id = -1001 ' || CHR(10) ||
' AND A.txn_date between B.start_date and B.end_date'

,retcode              => retcode

```

```

,errbuf                                => errbuf);

dbms_output.put_line('Retcode : ' || retcode);
dbms_output.put_line('Errbuf : ' || errbuf);

ad_morg.replicate_seed_data(NULL, 'JTF', NULL);

exception
when others then
dbms_output.put_line('Retcode : ' || retcode);
dbms_output.put_line('Errbuf : ' || errbuf);
raise;
end;
/

```

3. Run this script.

CMA for Opportunity: Budget Status

This is an example of creating a custom matching attribute for Sales using the opportunity transaction and the budget status attribute.

Modify Script 1

Modify Script 1, page A-99 to retrieve the relevant Opportunity transaction type SQL meta-data.

1. Set the source ID corresponding to the usage (Sales or Collections). The source ID -1001 corresponds to the Sales usage. To find the desired usage ID query JTF_SOURCES_ALL.

```
p_source_id      NUMBER := -1001;
```

2. Set the transaction type ID. The ID -1004 corresponds to the Opportunity transaction type ID. To find the desired transaction type ID, query JTF_QUAL_TYPES_ALL

```
p_trans_type_id  NUMBER := -1004;
```

3. Run the script and save the output to a file. Running this command will save the Opportunity transaction type SQL meta-data to the "R12OpportunityTT.sql" file.

```
SQL>spool <output filename - e.g., "d:\R12OpportunityTT.sql">
SQL> set serveroutput on size 999999
SQL> @Script1.sql /

```

Modify Transaction SQL Meta-Data

Modify the transaction type SQL meta-data (R12OpportunityTT.sql) to get the CMA's corresponding transaction attribute value.

1. Add the budget_status_code attribute to each of the following SQLs:

- l_real_time_sql :=

```

'SELECT ' || CHR(10) ||

'   OPP.LEAD_ID
trans_object_id, ' ||
CHR(10) ||

'   -1
trans_detail_object_id, '
|| CHR(10) ||

'   OPP.LEAD_ID                                lead_id, '
|| CHR(10) ||
'   -1                                          lead_line_id,
' || CHR(10)
||

'   TO_CHAR(NULL)                             city, ' ||
CHR(10) ||
'   TO_CHAR(NULL)                             postal_code,
' || CHR(10)
||

'   TO_CHAR(NULL)                             state, ' ||
CHR(10) ||
'   TO_CHAR(NULL)                             province, '
|| CHR(10) ||
'   TO_CHAR(NULL)                             county, ' ||
CHR(10) ||
'   TO_CHAR(NULL)                             country, '
|| CHR(10) ||
'   PARTY.PARTY_ID                             party_id, '
|| CHR(10) ||
'   TO_NUMBER(NULL)
party_site_id, ' || CHR(10)
||

'   upper(PARTY.PRIMARY_PHONE_AREA_CODE)      area_code, '
|| CHR(10) ||
'   upper(PARTY.PARTY_NAME)
comp_name_range, ' ||
CHR(10) ||

'   PARTY.PARTY_ID                             partner_id,
' || CHR(10) ||
'   PARTY.EMPLOYEES_TOTAL
num_of_employees, ' ||
CHR(10) ||

'   upper(PARTY.CATEGORY_CODE)
category_code, ' || CHR(10)
||

'   PARTY.PARTY_ID
party_relationship_id, ' ||
CHR(10) ||

'   upper(party.sic_code_type||': '||party.sic_code) sic_code,
' || CHR(10) ||
'   OPP.TOTAL_AMOUNT                           total_amount,
' || CHR(10)

```

```

||
' upper(OPP.CURRENCY_CODE)
currency_code, ' || CHR(10)
||
' NVL(OPP.DECISION_DATE, OPP.LAST_UPDATE_DATE) pricing_date,
' || CHR(10)
||
' upper(OPP.CHANNEL_CODE) channel_code,
' || CHR(10)
||
' OPP.SOURCE_PROMOTION_ID squal_num40,
' || CHR(10)
||
' upper(OPP.STATUS) squal_char41,
' || CHR(10)
||
' ORGP.CURR_FY_POTENTIAL_REVENUE squal_num06,
' || CHR(10)
||
' upper(ORG.PREF_FUNCTIONAL_CURRENCY)
car_currency_code, ' ||
CHR(10) ||
' UPPER(PARTY.DUNS_NUMBER_C) squal_char11,
' || CHR(10)
||
' l_txn_date txn_date '
|| CHR(10) ||
',UPPER(PARTY.party_type)
Q9010_PARTY_TYPE ' ||
',UPPER(OPP.budget_status_code)
Q9103_BUDGET_STATUS ' ||
'FROM ' || CHR(10) ||
' AS_LEADS OPP, ' || CHR(10) ||
' HZ_PARTIES PARTY, ' || CHR(10) ||
' HZ_ORGANIZATION_PROFILES ORGP ' || CHR(10) ||
'WHERE OPP.ADDRESS_ID IS NULL ' || CHR(10) ||
'AND OPP.CUSTOMER_ID = PARTY.PARTY_ID ' || CHR(10) ||
'AND party.party_id = orgp.party_id(+) ' || CHR(10) ||
'AND party.STATUS = 'A' ' || CHR(10) ||
'AND nvl(orgp.effective_end_date(+),sysdate + 1) > sysdate '
|| CHR(10) ||
'AND OPP.lead_id = l_trans_object_id1 UNION ALL SELECT ' ||
CHR(10) ||

```

```

' OPP.LEAD_ID
trans_object_id, ' ||
CHR(10) ||

' -1
trans_detail_object_id, '
|| CHR(10) ||

' OPP.LEAD_ID
|| CHR(10) ||
' -1
' || CHR(10)
||

' upper(LOC.CITY)
CHR(10) ||
' upper(LOC.POSTAL_CODE)
' || CHR(10)
||

' upper(LOC.STATE)
CHR(10) ||
' upper(LOC.PROVINCE)
|| CHR(10) ||
' upper(LOC.COUNTY)
CHR(10) ||
' upper(LOC.COUNTRY)
|| CHR(10) ||
' PARTY.PARTY_ID
|| CHR(10) ||
' SITE.PARTY_SITE_ID
party_site_id, ' || CHR(10)
||

' upper(PHONE.AREA_CODE)
|| CHR(10) ||
' upper(PARTY.PARTY_NAME)
comp_name_range, ' ||
CHR(10) ||

' PARTY.PARTY_ID
' || CHR(10) ||
' PARTY.EMPLOYEES_TOTAL
num_of_employees, ' ||
CHR(10) ||

' upper(PARTY.CATEGORY_CODE)
category_code, ' || CHR(10)
||

' PARTY.PARTY_ID
party_relationship_id, ' ||
CHR(10) ||

' upper(party.sic_code_type||': '||party.sic_code) sic_code,
' || CHR(10) ||
' OPP.TOTAL_AMOUNT
' || CHR(10)
total_amount,
||

```

```

' upper(OPP.CURRENCY_CODE)
currency_code, ' || CHR(10)
||

' NVL(OPP.DECISION_DATE, OPP.LAST_UPDATE_DATE) pricing_date,
' || CHR(10)
||

' upper(OPP.CHANNEL_CODE) channel_code,
' || CHR(10)
||

' OPP.SOURCE_PROMOTION_ID squal_num40,
' || CHR(10)
||

' upper(OPP.STATUS) squal_char41,
' || CHR(10)
||

' ORGP.CURR_FY_POTENTIAL_REVENUE squal_num06,
' || CHR(10)
||

' upper(ORGP.PREF_FUNCTIONAL_CURRENCY)
car_currency_code, ' ||
CHR(10) ||

' UPPER(PARTY.DUNS_NUMBER_C) squal_char11,
' || CHR(10)
||

' l_txn_date txn_date '
|| CHR(10) ||
' ,UPPER(PARTY.party_type)
Q9010_PARTY_TYPE ' ||
' ,UPPER(OPP.budget_status_code)
Q9103_BUDGET_STATUS ' ||
'FROM ' || CHR(10) ||

' AS_LEADS_ALL OPP, ' || CHR(10) ||

' AS_PARTY_PHONES_V PHONE, ' || CHR(10) ||

' HZ_PARTY_SITES SITE, ' || CHR(10) ||

' HZ_LOCATIONS LOC, ' || CHR(10) ||

' HZ_PARTIES PARTY, ' || CHR(10) ||

' HZ_ORGANIZATION_PROFILES ORGP ' || CHR(10) ||

'WHERE PHONE.OWNER_TABLE_NAME(+) = 'HZ_PARTY_SITES' ' ||
CHR(10) ||
'AND PHONE.PRIMARY_FLAG(+) = 'Y' ' || CHR(10) ||

'AND PHONE.STATUS_CODE(+) <> 'I' ' || CHR(10) ||

'AND SITE.PARTY_SITE_ID = PHONE.OWNER_TABLE_ID(+) ' ||
CHR(10) ||

```

```
'AND    OPP.ADDRESS_ID = SITE.PARTY_SITE_ID  ' || CHR(10) ||  
'AND    SITE.LOCATION_ID = LOC.LOCATION_ID  ' || CHR(10) ||  
'AND    SITE.STATUS = 'A'  ' || CHR(10) ||  
'AND    OPP.CUSTOMER_ID = PARTY.PARTY_ID  ' || CHR(10) ||  
'AND    party.party_id = orgp.party_id(+)  ' || CHR(10) ||  
'AND    party.STATUS = 'A'  ' || CHR(10) ||  
'AND    nvl(orgp.effective_end_date(+),sysdate + 1) > sysdate  '  
|| CHR(10) ||  
'AND    OPP.lead_id = l_trans_object_id1  ';
```

- l_batch_total_sql :=

```

l_batch_total_sql :=
'SELECT ' || CHR(10) ||
' -1001                               source_id, ' || CHR(10) ||
' -1004                               trans_object_type_id,
' || CHR(10) ||
||
' OPP.lead_id                          trans_object_id, ' ||
CHR(10) ||
' STATUS.OPP_OPEN_STATUS_FLAG          OPEN_FLAG,
' || CHR(10) ||
' to_number(null)
trans_detail_object_id, ' ||
CHR(10) ||
||
' PARTY.PARTY_ID                       squal_num01, ' ||
CHR(10) ||
' to_number(null)                       squal_num02, ' ||
CHR(10) ||
' PARTY.PARTY_ID                       squal_num03, ' || CHR(10)
||
' opp.lead_id                          squal_num04, ' ||
CHR(10) ||
' PARTY.EMPLOYEES_TOTAL                 squal_num05, ' ||
CHR(10) ||
' ORGP.CURR_FY_POTENTIAL_REVENUE       squal_num06, ' ||
CHR(10) ||
' OPP.SOURCE_PROMOTION_ID              squal_num40, ' ||
CHR(10) ||
' OPP.TOTAL_AMOUNT                     squal_num41, ' ||
CHR(10) ||
' upper (ORGP.PREF_FUNCTIONAL_CURRENCY) squal_curc01,
' || CHR(10) ||
' upper (OPP.CURRENCY_CODE)            squal_curc07, '
|| CHR(10) ||
' upper (substr (PARTY.party_name,1,1)) squal_fc01, ' ||
CHR(10) ||
' upper (PARTY.PARTY_NAME)              squal_char01, ' ||
CHR(10) ||
' TO_CHAR (NULL)                       squal_char02, ' ||
CHR(10) ||
' TO_CHAR (NULL)                       squal_char03, ' ||
CHR(10) ||
' TO_CHAR (NULL)                       squal_char04, ' ||
CHR(10) ||
' TO_CHAR (NULL)                       squal_char05, ' ||
CHR(10) ||
' TO_CHAR (NULL)
squal_char06, ' || CHR(10)
||
||
' TO_CHAR (NULL)                       squal_char07, ' ||
CHR(10) ||
' upper (PARTY.PRIMARY_PHONE_AREA_CODE) squal_char08, '
|| CHR(10) ||
' upper (PARTY.CATEGORY_CODE)
squal_char09, ' || CHR(10)

```

```

||
' upper(party.sic_code_type||': '||party.sic_code)
squal_char10, ' ||
CHR(10) ||

' UPPER(PARTY.DUNS_NUMBER_C) squal_char11, ' ||
CHR(10) ||
' upper(OPP.CHANNEL_CODE) squal_char40, ' ||
CHR(10) ||
' upper(OPP.STATUS) squal_char41
' || CHR(10) ||
' ,UPPER(PARTY.party_type)
Q9010_PARTY_TYPE ' ||
' ,UPPER(OPP.budget_status_code)
Q9103_BUDGET_STATUS ' ||
'FROM AS_LEADS OPP, ' || CHR(10) ||

' HZ_PARTIES PARTY, ' || CHR(10) ||

' HZ_ORGANIZATION_PROFILES ORGP, ' || CHR(10) ||

' AS_STATUSES_B STATUS ' || CHR(10) ||

'WHERE OPP.ADDRESS_ID IS NULL ' || CHR(10) ||

'AND OPP.CUSTOMER_ID = PARTY.PARTY_ID ' || CHR(10) ||

'AND party.party_id = orgp.party_id(+) ' || CHR(10) ||

'AND party.STATUS = 'A' ' || CHR(10) ||

'AND nvl(orgp.effective_end_date(+),sysdate + 1) > sysdate '
|| CHR(10) ||
'AND OPP.status = STATUS.status_code ' || CHR(10) ||

'AND STATUS.opp_flag = 'Y' UNION ALL ' || CHR(10) ||

'SELECT ' || CHR(10) ||

' -1001 source_id, ' || CHR(10) ||

' -1004 trans_object_type_id, ' ||
CHR(10) ||
' OPP.LEAD_ID trans_object_id, ' ||
CHR(10) ||
' STATUS.OPP_OPEN_STATUS_FLAG OPEN_FLAG,
' || CHR(10) ||
' SITE.PARTY_SITE_ID trans_detail_object_id, '
|| CHR(10) ||
' PARTY.PARTY_ID squal_num01, ' || CHR(10) ||

' SITE.PARTY_SITE_ID squal_num02,
' || CHR(10)
||

' PARTY.PARTY_ID squal_num03, ' || CHR(10) ||

' OPP.LEAD_ID squal_num04, ' || CHR(10) ||

```

```

' PARTY.EMPLOYEES_TOTAL                                squal_num05,
' || CHR(10)
||

' ORGP.CURR_FY_POTENTIAL_REVENUE                      squal_num06, ' ||
CHR(10) ||
' OPP.SOURCE_PROMOTION_ID                            squal_num40, ' || CHR(10)
||
' OPP.TOTAL_AMOUNT                                    squal_num41,
' || CHR(10)
||

' upper(ORGP.PREF_FUNCTIONAL_CURRENCY)                squal_curc01, ' ||
CHR(10) ||
' upper(OPP.CURRENCY_CODE)                            squal_curc07, ' ||
CHR(10) ||
' upper(substr(PARTY.party_name,1,1))                 squal_fc01, ' ||
CHR(10) ||
' upper(PARTY.PARTY_NAME)                             squal_char01, ' ||
CHR(10) ||
' upper(LOC.CITY)                                     squal_char02, ' || CHR(10)
||
' upper(LOC.COUNTY)                                   squal_char03, ' ||
CHR(10) ||
' upper(LOC.STATE)                                    squal_char04, ' ||
CHR(10) ||
' upper(LOC.PROVINCE)                                 squal_char05, ' ||
CHR(10) ||
' upper(LOC.POSTAL_CODE)                             squal_char06, ' || CHR(10)
||
' upper(LOC.COUNTRY)                                 squal_char07, ' || CHR(10)
||
' upper(CNTPNT.PHONE_AREA_CODE)                      squal_char08, ' ||
CHR(10) ||
' upper(PARTY.CATEGORY_CODE)                         squal_char09, ' || CHR(10)
||
' upper(party.sic_code_type||': '||party.sic_code)   squal_char10, ' ||
CHR(10) ||

' UPPER(PARTY.DUNS_NUMBER_C)                          squal_char11, ' ||
CHR(10) ||
' upper(OPP.CHANNEL_CODE)                             squal_char40, ' || CHR(10)
||

' upper(OPP.STATUS)                                   squal_char41
' || CHR(10)
||

' ,UPPER(PARTY.party_type)
Q9010_PARTY_TYPE ' ||
' ,UPPER(OPP.budget_status_code)
Q9103_BUDGET_STATUS ' ||
'FROM AS_LEADS_ALL OPP, ' || CHR(10) ||

' HZ_CONTACT_POINTS CNTPNT, ' || CHR(10) ||

```

```

'      HZ_PARTY_SITES SITE, ' || CHR(10) ||
'      HZ_LOCATIONS LOC, ' || CHR(10) ||
'      HZ_PARTIES PARTY, ' || CHR(10) ||
'      HZ_ORGANIZATION_PROFILES ORGP, ' || CHR(10) ||
'      AS_STATUSES_B STATUS ' || CHR(10) ||
'WHERE CNTPNT.OWNER_TABLE_NAME(+) = 'HZ_PARTY_SITES' ' ||
CHR(10) ||
'AND SITE.PARTY_SITE_ID = CNTPNT.OWNER_TABLE_ID(+) ' ||
CHR(10) ||
'AND CNTPNT.PRIMARY_FLAG(+) = 'Y' ' || CHR(10) ||
'AND CNTPNT.STATUS(+) <> 'I' ' || CHR(10) ||
'AND CNTPNT.contact_point_type(+)='PHONE' ' || CHR(10) ||
'AND OPP.ADDRESS_ID = SITE.PARTY_SITE_ID ' || CHR(10) ||
'AND SITE.LOCATION_ID = LOC.LOCATION_ID ' || CHR(10) ||
'AND SITE.STATUS = 'A' ' || CHR(10) ||
'AND OPP.CUSTOMER_ID = PARTY.PARTY_ID ' || CHR(10) ||
'AND party.party_id = orgp.party_id(+) ' || CHR(10) ||
'AND party.STATUS = 'A' ' || CHR(10) ||
'AND nvl(orgp.effective_end_date(+),sysdate + 1) > sysdate '
|| CHR(10) ||
'AND OPP.status = STATUS.status_code ' || CHR(10) ||
'AND STATUS.opp_flag = 'Y' ';

```

- l_batch_incr_sql :=

```

l_batch_incr_sql :=
'SELECT ' || CHR(10) ||
' -1001          source_id, ' || CHR(10) ||
' -1004          trans_object_type_id, ' ||
CHR(10) ||
' OPP.lead_id    trans_object_id, ' || CHR(10) ||
' to_number(NULL) trans_detail_object_id, ' ||
CHR(10) ||
' STATUS.OPP_OPEN_STATUS_FLAG OPEN_FLAG, ' || CHR(10) ||
' PARTY.PARTY_ID squal_num01, ' || CHR(10) ||
' to_number(null) squal_num02, ' || CHR(10) ||
' PARTY.PARTY_ID squal_num03, ' || CHR(10) ||
' opp.lead_id    squal_num04, ' || CHR(10) ||
' PARTY.EMPLOYEES_TOTAL squal_num05, ' || CHR(10) ||
' ORGP.CURR_FY_POTENTIAL_REVENUE squal_num06, ' || CHR(10) ||
' OPP.SOURCE_PROMOTION_ID squal_num40, ' || CHR(10) ||
' OPP.TOTAL_AMOUNT squal_num41, ' || CHR(10) ||
' upper(ORGP.PREF_FUNCTIONAL_CURRENCY) squal_curc01, ' ||
CHR(10) ||
' upper(OPP.CURRENCY_CODE) squal_curc07, ' || CHR(10) ||
' upper(substr(PARTY.party_name,1,1)) squal_fc01, ' || CHR(10)
||
' upper(PARTY.PARTY_NAME) squal_char01, ' || CHR(10) ||
' TO_CHAR(NULL) squal_char02, ' || CHR(10) ||
' TO_CHAR(NULL) squal_char03, ' || CHR(10) ||
' TO_CHAR(NULL) squal_char04, ' || CHR(10) ||
' TO_CHAR(NULL) squal_char05, ' || CHR(10) ||
' TO_CHAR(NULL) squal_char06, ' || CHR(10)
||
' TO_CHAR(NULL) squal_char07, ' || CHR(10) ||
' upper(PARTY.PRIMARY_PHONE_AREA_CODE) squal_char08, ' ||
CHR(10) ||
' upper(PARTY.CATEGORY_CODE) squal_char09, ' || CHR(10)
||
' upper(party.sic_code_type||': '||party.sic_code)
squal_char10, ' ||
CHR(10) ||
' UPPER(PARTY.DUNS_NUMBER_C) squal_char11, ' || CHR(10) ||

```

```

' upper(OPP.CHANNEL_CODE)      squal_char40, ' || CHR(10) ||
' upper(OPP.STATUS)           squal_char41  ' || CHR(10)
||
' ,UPPER(PARTY.party_type)
Q9010_PARTY_TYPE ' ||
' ,UPPER(OPP.budget_status_code)
Q9103_BUDGET_STATUS ' ||
'FROM AS_LEADS OPP, ' || CHR(10) ||

' HZ_PARTIES PARTY, ' || CHR(10) ||

' HZ_ORGANIZATION_PROFILES ORGP, ' || CHR(10) ||

' AS_STATUSES_B STATUS, ' || CHR(10) ||

' AS_CHANGED_ACCOUNTS_ALL ACHNG ' || CHR(10) ||

'WHERE OPP.ADDRESS_ID IS NULL ' || CHR(10) ||

'AND OPP.CUSTOMER_ID = PARTY.PARTY_ID ' || CHR(10) ||

'AND party.party_id = orgp.party_id(+) ' || CHR(10) ||

'AND party.STATUS = 'A' ' || CHR(10) ||

'AND nvl(orgp.effective_end_date(+),sysdate + 1) > sysdate '
|| CHR(10) ||
'AND OPP.status = STATUS.status_code ' || CHR(10) ||

'AND STATUS.opp_flag = 'Y' ' || CHR(10) ||

'AND achng.lead_id = opp.lead_id ' || CHR(10) ||

'AND achng.request_id = l_REQUEST_ID UNION ALL ' || CHR(10)
||
'SELECT ' || CHR(10) ||

'-1001          source_id, ' || CHR(10) ||

'-1004          trans_object_type_id, ' || CHR(10) ||

'OPP.LEAD_ID      trans_object_id, ' || CHR(10) ||

'SITE.PARTY_SITE_ID      trans_detail_object_id, ' || CHR(10)
||
'STATUS.OPP_OPEN_STATUS_FLAG      OPEN_FLAG, ' || CHR(10)
||
'PARTY.PARTY_ID      squal_num01, ' || CHR(10) ||

'SITE.PARTY_SITE_ID      squal_num02, ' ||
CHR(10) ||
'PARTY.PARTY_ID      squal_num03, ' || CHR(10) ||

'OPP.LEAD_ID      squal_num04, ' || CHR(10) ||

'PARTY.EMPLOYEES_TOTAL      squal_num05, ' ||
CHR(10) ||
'ORGP.CURR_FY_POTENTIAL_REVENUE      squal_num06, ' || CHR(10) ||

```

```

'OPP.SOURCE_PROMOTION_ID      squal_num40, ' || CHR(10) ||

'OPP.TOTAL_AMOUNT              squal_num41, ' ||
CHR(10) ||
'upper(ORGP.PREF_FUNCTIONAL_CURRENCY) squal_curc01, ' || CHR(10)
||
'upper(OPP.CURRENCY_CODE)      squal_curc07, ' || CHR(10) ||

'upper(substr(PARTY.party_name,1,1)) squal_fc01, ' || CHR(10)
||
'upper(PARTY.PARTY_NAME)        squal_char01, ' || CHR(10) ||

'upper(LOC.CITY)                squal_char02, ' || CHR(10) ||

'upper(LOC.COUNTY)             squal_char03, ' || CHR(10) ||

'upper(LOC.STATE)              squal_char04, ' || CHR(10) ||

'upper(LOC.PROVINCE)           squal_char05, ' || CHR(10) ||

'upper(LOC.POSTAL_CODE)        squal_char06, ' || CHR(10) ||

'upper(LOC.COUNTRY)            squal_char07, ' || CHR(10) ||

'upper(CNTPNT.PHONE_AREA_CODE) squal_char08, ' || CHR(10) ||

'upper(PARTY.CATEGORY_CODE)     squal_char09, ' ||
CHR(10) ||
'upper(party.sic_code_type||': '||party.sic_code) squal_char10,
' || CHR(10)
||

'UPPER(PARTY.DUNS_NUMBER_C)     squal_char11, ' || CHR(10) ||

'upper(OPP.CHANNEL_CODE)        squal_char40, ' ||
CHR(10) ||
'upper(OPP.STATUS)              squal_char41 ' ||
CHR(10) ||
' ,UPPER(PARTY.party_type)
Q9010_PARTY_TYPE ' ||
' ,UPPER(OPP.budget_status_code)
Q9103_BUDGET_STATUS ' ||
'FROM AS_LEADS_ALL OPP, ' || CHR(10) ||

'      HZ_CONTACT_POINTS CNTPNT, ' || CHR(10) ||

'      HZ_PARTY_SITES SITE, ' || CHR(10) ||

'      HZ_LOCATIONS LOC, ' || CHR(10) ||

'      HZ_PARTIES PARTY, ' || CHR(10) ||

'      HZ_ORGANIZATION_PROFILES ORGP, ' || CHR(10) ||

'      AS_STATUSES_B STATUS, ' || CHR(10) ||

'      AS_CHANGED_ACCOUNTS_ALL ACHNG ' || CHR(10) ||

'WHERE CNTPNT.OWNER_TABLE_NAME(+) = 'HZ_PARTY_SITES' ' ||
CHR(10) ||

```

```

'AND    SITE.PARTY_SITE_ID = CNTPNT.OWNER_TABLE_ID(+)  ' ||
CHR(10) ||
'AND    CNTPNT.PRIMARY_FLAG(+) = 'Y'  ' || CHR(10) ||

'AND    CNTPNT.STATUS(+) <> 'I'  ' || CHR(10) ||

'AND    CNTPNT.contact_point_type(+)='PHONE'  ' || CHR(10) ||

'AND    OPP.ADDRESS_ID = SITE.PARTY_SITE_ID  ' || CHR(10) ||

'AND    SITE.LOCATION_ID = LOC.LOCATION_ID  ' || CHR(10) ||

'AND    SITE.STATUS = 'A'  ' || CHR(10) ||

'AND    OPP.CUSTOMER_ID = PARTY.PARTY_ID  ' || CHR(10) ||

'AND    party.party_id = orgp.party_id(+)  ' || CHR(10) ||

'AND    party.STATUS = 'A'  ' || CHR(10) ||

'AND    nvl(orgp.effective_end_date(+),sysdate + 1) > sysdate  '
|| CHR(10) ||
'AND    OPP.status = STATUS.status_code  ' || CHR(10) ||

'AND    STATUS.opp_flag = 'Y'  ' || CHR(10) ||

'AND    achng.lead_id = opp.lead_id  ' || CHR(10) ||

'AND    achng.request_id = l_REQUEST_ID  ';

```

```
l_batch_dea_sql :=
```

```
NULL;
```

- l_batch_dea_sql := NO
- l_incr_reassign_sql :=

```

l_incr_reassign_sql :=
'SELECT ' || CHR(10) ||
' -1001                source_id, ' || CHR(10) ||
' -1004                trans_object_type_id, ' ||
CHR(10) ||
' OPP.lead_id         trans_object_id, ' || CHR(10) ||
' STATUS.OPP_OPEN_STATUS_FLAG      OPEN_FLAG, ' || CHR(10)
||
' to_number(NULL)      trans_detail_object_id, ' ||
CHR(10) ||
' PARTY.PARTY_ID       squal_num01, ' || CHR(10) ||
' to_number(null)     squal_num02, ' || CHR(10) ||
' PARTY.PARTY_ID       squal_num03, ' || CHR(10) ||
' opp.lead_id         squal_num04, ' || CHR(10) ||
' PARTY.EMPLOYEES_TOTAL      squal_num05, ' || CHR(10) ||
' ORGP.CURR_FY_POTENTIAL_REVENUE    squal_num06, ' || CHR(10) ||
' OPP.SOURCE_PROMOTION_ID      squal_num40, ' || CHR(10) ||
' OPP.TOTAL_AMOUNT          squal_num41, ' || CHR(10) ||
' upper(ORGP.PREF_FUNCTIONAL_CURRENCY) squal_curc01, ' ||
CHR(10) ||
' upper(OPP.CURRENCY_CODE)        squal_curc07, ' || CHR(10) ||
' upper(substr(PARTY.party_name,1,1)) squal_fc01, ' || CHR(10)
||
' upper(PARTY.PARTY_NAME)          squal_char01, ' || CHR(10) ||
' TO_CHAR(NULL)                   squal_char02, ' || CHR(10) ||
' TO_CHAR(NULL)                   squal_char03, ' || CHR(10) ||
' TO_CHAR(NULL)                   squal_char04, ' || CHR(10) ||
' TO_CHAR(NULL)                   squal_char05, ' || CHR(10) ||
' TO_CHAR(NULL)                   squal_char06, ' ||
CHR(10) ||
' TO_CHAR(NULL)                   squal_char07, ' || CHR(10) ||
' upper(PARTY.PRIMARY_PHONE_AREA_CODE) squal_char08, ' ||
CHR(10) ||
' upper(PARTY.CATEGORY_CODE)        squal_char09, ' ||
CHR(10) ||
' upper(party.sic_code_type||': '||party.sic_code)
squal_char10, ' ||
CHR(10) ||
' UPPER(PARTY.DUNS_NUMBER_C)        squal_char11, ' || CHR(10) ||

```

```

' upper(OPP.CHANNEL_CODE)      squal_char40, ' || CHR(10) ||
' upper(OPP.STATUS)           squal_char41 ' ||
CHR(10) ||
' ,UPPER(PARTY.party_type)
Q9010_PARTY_TYPE ' ||
' ,UPPER(OPP.budget_status_code)
Q9103_BUDGET_STATUS ' ||
'FROM AS_LEADS OPP, ' || CHR(10) ||

' HZ_PARTIES PARTY, ' || CHR(10) ||

' HZ_ORGANIZATION_PROFILES ORGP, ' || CHR(10) ||

' AS_STATUSES_B STATUS, ' || CHR(10) ||

' ( select distinct ACC.lead_id lead_id ' || CHR(10) ||
' from (select distinct terr_id terr_id ' || CHR(10) ||
' from JTY_CHANGED_TERRS ' || CHR(10) ||
' where tap_request_id = l_request_id) CHG_TERR, '
|| CHR(10) ||
' AS_ACCESSES_ALL ACC, ' || CHR(10) ||
' AS_TERRITORY_ACCESSES TERR_ACC ' || CHR(10) ||
' where CHG_TERR.terr_id = TERR_ACC.territory_id ' ||
CHR(10) ||
' and TERR_ACC.access_id = acc.access_id ' || CHR(10) ||
' and acc.lead_id is not null ' || CHR(10) ||
' and acc.sales_lead_id is null ) ACHNG ' || CHR(10) ||
'WHERE OPP.ADDRESS_ID IS NULL ' || CHR(10) ||
'AND OPP.CUSTOMER_ID = PARTY.PARTY_ID ' || CHR(10) ||
'AND party.party_id = orgp.party_id(+) ' || CHR(10) ||
'AND party.STATUS = 'A' ' || CHR(10) ||
'AND nvl(orgp.effective_end_date(+),sysdate + 1) > sysdate ' ||
CHR(10) ||
'AND OPP.status = STATUS.status_code ' || CHR(10) ||
'AND STATUS.opp_flag = 'Y' ' || CHR(10) ||
'AND achng.lead_id = opp.lead_id UNION ALL ' || CHR(10) ||
'SELECT ' || CHR(10) ||

' -1001 source_id, ' || CHR(10) ||

' -1004 trans_object_type_id, ' ||
CHR(10) ||
' OPP.LEAD_ID trans_object_id, ' || CHR(10)
||

```

```

' STATUS.OPP_OPEN_STATUS_FLAG          OPEN_FLAG, ' ||
CHR(10) ||
' SITE.PARTY_SITE_ID                   trans_detail_object_id, ' ||
CHR(10) ||
' PARTY.PARTY_ID                        squal_num01, ' || CHR(10) ||

' SITE.PARTY_SITE_ID                    squal_num02, '
|| CHR(10) ||
' PARTY.PARTY_ID                        squal_num03, ' || CHR(10) ||

' OPP.LEAD_ID                          squal_num04, ' || CHR(10) ||

' PARTY.EMPLOYEES_TOTAL                  squal_num05, '
|| CHR(10) ||
' ORGP.CURR_FY_POTENTIAL_REVENUE        squal_num06, ' || CHR(10)
||
' OPP.SOURCE_PROMOTION_ID               squal_num40, ' || CHR(10) ||

' OPP.TOTAL_AMOUNT                      squal_num41, '
|| CHR(10) ||
' upper(ORGP.PREF_FUNCTIONAL_CURRENCY)   squal_curc01, ' ||
CHR(10) ||
' upper(OPP.CURRENCY_CODE)              squal_curc07, ' ||
CHR(10) ||
' upper(substr(PARTY.party_name,1,1))    squal_fc01, ' ||
CHR(10) ||
' upper(PARTY.PARTY_NAME)                squal_char01, ' || CHR(10) ||

' upper(LOC.CITY)                        squal_char02, ' || CHR(10) ||

' upper(LOC.COUNTY)                      squal_char03, ' || CHR(10)
||
' upper(LOC.STATE)                       squal_char04, ' || CHR(10)
||
' upper(LOC.PROVINCE)                    squal_char05, ' || CHR(10) ||

' upper(LOC.POSTAL_CODE)                 squal_char06, ' || CHR(10) ||

' upper(LOC.COUNTRY)                     squal_char07, ' || CHR(10) ||

' upper(CNTPNT.PHONE_AREA_CODE)         squal_char08, ' ||
CHR(10) ||
' upper(PARTY.CATEGORY_CODE)             squal_char09, '
|| CHR(10) ||
' upper(party.sic_code_type||': '||party.sic_code)
squal_char10, ' ||
CHR(10) ||

' UPPER(PARTY.DUNS_NUMBER_C)             squal_char11, ' || CHR(10)
||
' upper(OPP.CHANNEL_CODE)                 squal_char40, '
|| CHR(10) ||
' upper(OPP.STATUS)                       squal_char41 '
|| CHR(10) ||
' ,UPPER(PARTY.party_type)
Q9010_PARTY_TYPE ' ||
' ,UPPER(OPP.budget_status_code)
Q9103_BUDGET_STATUS ' ||
'FROM AS_LEADS_ALL OPP, ' || CHR(10) ||

```

```

'      HZ_CONTACT_POINTS CNTPNT, ' || CHR(10) ||
'      HZ_PARTY_SITES SITE, ' || CHR(10) ||
'      HZ_LOCATIONS LOC, ' || CHR(10) ||
'      HZ_PARTIES PARTY, ' || CHR(10) ||
'      HZ_ORGANIZATION_PROFILES ORGP, ' || CHR(10) ||
'      AS_STATUSES_B STATUS, ' || CHR(10) ||
'      ( select distinct ACC.lead_id lead_id ' || CHR(10) ||
'        from (select distinct terr_id terr_id ' || CHR(10) ||
'              from JTY_CHANGED_TERRS ' || CHR(10) ||
'              where tap_request_id = l_request_id) CHG_TERR, '
|| CHR(10) ||
'        AS_ACCESSES_ALL ACC, ' || CHR(10) ||
'        AS_TERRITORY_ACCESSES TERR_ACC ' || CHR(10) ||
'        where CHG_TERR.terr_id = TERR_ACC.territory_id ' ||
CHR(10) ||
'        and TERR_ACC.access_id = acc.access_id ' || CHR(10) ||
'        and acc.lead_id is not null ' || CHR(10) ||
'        and acc.sales_lead_id is null ) ACHNG ' || CHR(10) ||
'WHERE CNTPNT.OWNER_TABLE_NAME(+) = 'HZ_PARTY_SITES' ' ||
CHR(10) ||
'AND SITE.PARTY_SITE_ID = CNTPNT.OWNER_TABLE_ID(+) ' || CHR(10)
||
'AND CNTPNT.PRIMARY_FLAG(+) = 'Y' ' || CHR(10) ||
'AND CNTPNT.STATUS(+) <> 'I' ' || CHR(10) ||
'AND CNTPNT.contact_point_type(+)='PHONE' ' || CHR(10) ||
'AND OPP.ADDRESS_ID = SITE.PARTY_SITE_ID ' || CHR(10) ||
'AND SITE.LOCATION_ID = LOC.LOCATION_ID ' || CHR(10) ||
'AND SITE.STATUS = 'A' ' || CHR(10) ||
'AND OPP.CUSTOMER_ID = PARTY.PARTY_ID ' || CHR(10) ||
'AND party.party_id = orgp.party_id(+) ' || CHR(10) ||
'AND party.STATUS = 'A' ' || CHR(10) ||
'AND nvl(orgp.effective_end_date(+),sysdate + 1) > sysdate ' ||
CHR(10) ||
'AND OPP.status = STATUS.status_code ' || CHR(10) ||
'AND STATUS.opp_flag = 'Y' ' || CHR(10) ||

```

```
'AND achng.lead_id = opp.lead_id ';
```

2. Modify the R12OpportunityTT.sql file with the appropriate package parameters to make the SQL meta-data change.

```
JTY_TRANS_USG_PGM_SQL_PKG.Insert_Row(  
p_source_id => -1001  
,p_trans_type_id => -1004  
,p_program_name => 'SALES/OPPORTUNITY PROGRAM'  
,p_version_name => '12-JAN-06: CMA BUDGET STATUS ADDED'  
,p_real_time_sql => l_real_time_sql  
,p_batch_total_sql => l_batch_total_sql  
,p_batch_incr_sql => l_batch_incr_sql  
,p_batch_dea_sql => l_batch_dea_sql  
,p_incr_reassign_sql => l_incr_reassign_sql  
,p_use_total_for_dea_flag => null  
,p_enabled_flag => 'Y'  
,retcode => retcode  
,errbuf => errbuf);  
  
dbms_output.put_line('SALES/OPPORTUNITY PROGRAM retcode : ' ||  
retcode);  
dbms_output.put_line('SALES/OPPORTUNITY PROGRAM errbuf : ' ||  
errbuf);
```

3. Run the R12OpportunityTT.sql file.

```
SQL> @R12OpportunityTT.sql /
```

Create the Custom Matching Attribute

Create the CMA. The basis of this script is to populate all the necessary information in the following tables:

JTF_SEEDED_QUAL_ALL_B

JTF_SEEDED_QUAL_ALL_TL

JTF_QUAL_USGS_ALL

1. Ensure that there is not an existing CMA record for the unique matching attribute ID that you will use for the new CMA.

```

set serveroutput on size 999999

DECLARE

    l_real_time_sql varchar2(32000) := NULL;
    l_batch_total_sql varchar2(32000) := NULL;
    l_batch_incr_sql varchar2(32000) := NULL;
    l_batch_dea_sql varchar2(32000) := NULL;
    l_incr_reassign_sql varchar2(32000);
    retcode varchar2(250);
    errbuf varchar2(1000);

BEGIN

    BEGIN
        DELETE
        FROM jtf_seeded_qual_all_b
        WHERE seeded_qual_id = -9103;
    EXCEPTION
        WHEN NO_DATA_FOUND THEN
            NULL;
    END;

    BEGIN
        DELETE
        FROM jtf_seeded_qual_all_tl
        WHERE seeded_qual_id = -9103;
    EXCEPTION
        WHEN NO_DATA_FOUND THEN
            NULL;
    END;

    BEGIN
        DELETE
        FROM jtf_qual_usgs_all
        WHERE qual_usg_id = -9103;
    EXCEPTION
        WHEN NO_DATA_FOUND THEN
            NULL;
    END;

```

2. Create the meta-data for the CMA. Follow the comments provided in the script to enter the relevant CMA information.

```

/* The following meta-data will create the custom qualifier
** for the Lead Status.
*/
JTY_CUST_QUAL_PKG.create_qual(

    /* Unique Identifier/Primary Key */
    p_seeded_qual_id          => -9103
  ,p_name                    => 'Opportunity Budget Status
(CMA)'
  ,p_description             => 'Custom Matching Attribute for
Opportunity Budget Status'
  ,p_language                => 'US'

  ,/* Sales Usage: FK to
    JTF_SOURCES_ALL.SOURCE_ID*/
    p_source_id              => -1001

  ,/* Sales Transaction Type: FK to
    JTF_QUAL_TYPE_USGS_ALL.QUAL_TYPE_USG_ID*/
    p_trans_type_id          => -1004

  ,p_enabled_flag            => 'N'

  ,/* QUAL_RELATION_FACTOR
    This needs to be the next prime number greater than
    the value from the following SQL:

    SELECT MAX(qual_relation_factor)
    FROM jtf_qual_usgs_all

    The first 1000 primes can be found at:
    http://primes.utm.edu/lists/small/1000.txt

    Custom qualifiers should start at the 303rd prime
    which is 1999. This is to keep 1st to 302nd primes
    for product development to seed qualifiers.
    */
    p_qual_relation_factor    => 2027

  ,/* The following set of meta-data setups determine
    ** the behaviour of the matching attribute in
    ** HTML and Excel UIs: how it is displayed; what
    ** is the LOV SQL; and, what comparison operators
    ** are supported.
    */

  ,/* CONVERT_TO_ID_FLAG: displayed qualifier value is a CHAR
    but stored qualifier value is stored as an internal id */
    p_convert_to_id_flag      => 'N'

  ,/* DISPLAY_TYPE: display type on UI (NUMERIC/CHAR) */
    p_display_type            => 'CHAR'
  ,/* LOV SQL */
  ,p_html_lov_sql1           =>
    ''

  ,p_html_lov_sql2           => null
  ,p_html_lov_sql3           => null
  ,p_display_sql1            => null
  ,p_display_sql2            => null

```

```

,p_display_sql3                => null
,p_hierarchy_type              => null

,/* Is the "=" operator supported? */
p_equal_flag                   => 'Y'
,/* Is the "LIKE" operator supported? */
p_like_flag                    => 'N'
,/* Is the "BETWEEN" operator supported? */
p_between_flag                 => 'N'

/* Values table */
/* matching attribute comparison operator */
,p_comparison_operator         => 'q9103_cp'
,p_low_value_char              => 'q9103_low_value_CHAR'
,p_high_value_char             => null
,p_low_value_char_id           => null
,p_low_value_number            => null
,p_high_value_number           => null
,p_interest_type_id            => null
,p_primary_interest_code_id    => null
,p_sec_interest_code_id        => null
,p_value1_id                   => null
,p_value2_id                   => null
,p_value3_id                   => null
,p_value4_id                   => null
,p_first_char                  => null
,p_currency_code               => null

,/* Transaction Type Alias/_TRANS table column mapping */
p_qual_coll                    => 'Q9103_BUDGET_STATUS'

,/* TCA Classification for derivation */
p_alias_rule1                  => null

,/* OP_EQL FOR BATCH-MODE ASSIGNMENT:
** Since the AS_SALES_LEADS.STATUS_CODE value is not passed to
the
** assignment API, we must the PK (SALES_LEAD_ID) to get the
** STATUS_CODE value from AS_SALES_LEADS and compare to the
** territory qualifier value
*/
p_op_eql                       =>
' (A.Q9103_BUDGET_STATUS = B.q9103_low_value_CHAR AND
B.q9103_cp = '=' ) '
,p_op_like                     => null
,p_op_between                  => NULL
,p_op_common_where             => null

,p_real_time_select            =>
'SELECT DISTINCT A.trans_object_id, A.trans_detail_object_id,
A.txn_date, B.terr_id, B.absolute_rank, B.top_level_terr_id,
B.num_winners'
,p_real_time_from              => null
,p_real_time_where             =>
'WHERE ' || CHR(10) ||
' B.q9103_low_value_CHAR = A.Q9103_BUDGET_STATUS ' || CHR(10)
||
' AND B.q9103_cp = '=' ' || CHR(10) ||
' AND B.source_id = -1001 ' || CHR(10) ||
' AND A.txn_date between B.start_date and B.end_date'

```

```

        ,retcode                => retcode
        ,errbuf                 => errbuf);

dbms_output.put_line('Retcode : ' || retcode);
dbms_output.put_line('Errbuf : ' || errbuf);

ad_morg.replicate_seed_data(NULL, 'JTF', NULL);

exception
when others then
    dbms_output.put_line('Retcode : ' || retcode);
    dbms_output.put_line('Errbuf : ' || errbuf);
    raise;
end;
/

```

3. Run this script.

CMA for Oracle Collections, Customer: Customer Party Type

This is an example of creating a custom matching attribute for Sales using the Oracle Collections customer transaction and the customer party type attribute.

Modify Script 1

Modify Script 1, page A-99 to retrieve the relevant customer transaction type SQL meta-data.

1. Set the source ID corresponding to the usage (Sales or Collections). The source ID -1600 corresponds to the Collections usage. To find the desired usage ID query JTF_SOURCES_ALL.

```
p_source_id      NUMBER := -1600;
```

2. Set the transaction type ID. The ID -1602 corresponds to the Customer transaction type ID. To find the desired transaction type ID, query JTF_QUAL_TYPES_ALL

```
p_trans_type_id  NUMBER := -1602;
```

3. Run the script and save the output to a file. Running this command will save the Customer transaction type SQL meta-data to the "R12CustomerTT.sql" file.

```
SQL>spool <output filename - e.g., "d:\R12CustomerTT.sql">
SQL> set serveroutput on size 999999
SQL> @Script1.sql /

```

Modify Transaction SQL Meta-Data

Modify the transaction type SQL meta-data (R12CustomerTT.sql) to get the CMA's corresponding transaction attribute value.

1. Add the party_type attribute to each of the following SQLs:
 - l_real_time_sql :=

```

'SELECT ' || CHR(10) ||

' party.party_id
trans_object_id, ' ||
CHR(10) ||

' null
trans_detail_object_id, ' ||
CHR(10) ||

' TO_CHAR(NULL)                                squal_char02,
' || CHR(10)
||

' TO_CHAR(NULL)                                squal_char06,
' || CHR(10)
||

' TO_CHAR(NULL)                                squal_char04,
' || CHR(10)
||

' TO_CHAR(NULL)                                squal_char05,
' || CHR(10)
||

' TO_CHAR(NULL)                                squal_char03,
' || CHR(10)
||

' TO_CHAR(NULL)                                squal_char07,
' || CHR(10)
||

' party.party_id                                squal_num01,
' || CHR(10) ||
' TO_NUMBER(NULL)                              squal_num02,
' || CHR(10) ||
' upper(party.primary_phone_area_code)         squal_char08,
' || CHR(10)
||

' upper(party.party_name)                      squal_char01,
' || CHR(10)
||

' party.party_id                                squal_num03,
' || CHR(10) ||
' party.employees_total                       squal_num05,
' || CHR(10) ||
' upper(party.category_code)                  squal_char09,
' || CHR(10)
||

' party.party_id                                squal_num04,
' || CHR(10) ||
' upper(party.sic_code_type||': '||party.sic_code)
squal_char10, ' || CHR(10)
||

```

```

' orgp.CURR_FY_POTENTIAL_REVENUE          squal_num06,
' || CHR(10) ||
' upper(orgp.PREF_FUNCTIONAL_CURRENCY)    squal_curc01,
' || CHR(10)
||

' upper(party.duns_number_c)              squal_char11,
' || CHR(10)
||

' l_txn_date                             txn_date ' ||
CHR(10) ||
' ,UPPER(party.party_type)
Q9600_PARTY_TYPE ' ||
'FROM ' || CHR(10) ||

' HZ_PARTIES party, ' || CHR(10) ||

' HZ_ORGANIZATION_PROFILES ORGP ' || CHR(10) ||

'WHERE party.party_type IN ('PERSON','ORGANIZATION') ' ||
CHR(10) ||
'AND party.status='A' ' || CHR(10) ||

'AND party.party_id = orgp.party_id(+) ' || CHR(10) ||

'AND nvl(orgp.effective_end_date(+),sysdate + 1) > sysdate ' ||
CHR(10) ||
'AND party.party_id = l_trans_object_id1 UNION ALL SELECT ' ||
CHR(10) ||
' party.party_id
trans_object_id, ' ||
CHR(10) ||

' addr.party_site_id
trans_detail_object_id, ' ||
CHR(10) ||

' upper(LOC.city)                        squal_char02,
' || CHR(10)
||

' upper(LOC.postal_code)                 squal_char06,
' || CHR(10)
||

' upper(LOC.state)                       squal_char04,
' || CHR(10)
||

' upper(LOC.province)                   squal_char05,
' || CHR(10)
||

' upper(LOC.county)                     squal_char03,
' || CHR(10)
||

' upper(LOC.country)                    squal_char07,
' || CHR(10)

```

```

||

' party.party_id                                squal_num01,
' || CHR(10) ||
' addr.party_site_id                            squal_num02,
' || CHR(10) ||
' upper(phone.phone_area_code)                 squal_char08,
' || CHR(10)
||

' upper(party.party_name)                       squal_char01,
' || CHR(10)
||

' party.party_id                                squal_num03,
' || CHR(10) ||
' party.employees_total                        squal_num05,
' || CHR(10) ||
' upper(party.category_code)                   squal_char09,
' || CHR(10)
||

' party.party_id                                squal_num04,
' || CHR(10) ||
' upper(party.sic_code_type||': '||party.sic_code)
squal_char10, ' || CHR(10)
||

' orgp.CURR_FY_POTENTIAL_REVENUE                squal_num06,
' || CHR(10) ||
' upper(orgp.PREF_FUNCTIONAL_CURRENCY)          squal_curc01,
' || CHR(10)
||

' upper(party.duns_number_c)                    squal_char11,
' || CHR(10)
||

' l_txn_date                                    txn_date ' ||
CHR(10) ||
' ,UPPER(party.party_type)
Q9600_PARTY_TYPE ' ||
'FROM ' || CHR(10) ||

' HZ_CONTACT_POINTS phone, ' || CHR(10) ||

' HZ_PARTIES party, ' || CHR(10) ||

' HZ_PARTY_SITES addr, ' || CHR(10) ||

' HZ_LOCATIONS LOC, ' || CHR(10) ||

' HZ_ORGANIZATION_PROFILES ORGP ' || CHR(10) ||

'WHERE phone.owner_table_name(+) = 'HZ_PARTY_SITES' ' ||
CHR(10) ||
'AND phone.primary_flag(+) = 'Y' ' || CHR(10) ||

'AND phone.status(+) = 'A' ' || CHR(10) ||

```

```

'AND    phone.contact_point_type (+) = 'PHONE' ' || CHR(10) ||
'AND    addr.party_site_id = phone.owner_table_id(+) ' || CHR(10)
||
'AND    addr.party_id=party.party_id ' || CHR(10) ||
'AND    party.party_id = orgp.party_id(+) ' || CHR(10) ||
'AND    nvl(orgp.effective_end_date(+),sysdate + 1) > sysdate '
|| CHR(10) ||
'AND    party.party_type IN ('PERSON','ORGANIZATION') ' ||
CHR(10) ||
'AND    party.status='A' ' || CHR(10) ||
'AND    LOC.location_id = addr.location_id ' || CHR(10) ||
'AND    addr.status='A' ' || CHR(10) ||
'AND    party.party_id = l_trans_object_id1 ' || CHR(10) ||
'AND    addr.party_site_id = nvl(l_trans_object_id2,
addr.party_site_id) ';
l_batch_total_sql :=
'SELECT /*+ parallel(ORGPRO) parallel(CNTPNT) parallel(X)
use_hash(ORGPRO CNTPNT
X) */ ' || CHR(10) ||
'-1600 source_id, ' || CHR(10) ||
'-1601 trans_object_type_id, ' || CHR(10) ||
'X.party_id TRANS_OBJECT_ID, ' || CHR(10) ||
'X.party_site_id TRANS_DETAIL_OBJECT_ID, ' || CHR(10) ||
'X.party_site_id SQUAL_NUM02, ' || CHR(10) ||
'X.party_id SQUAL_NUM04, ' || CHR(10) ||
'UPPER(CNTPNT.phone_area_code) SQUAL_CHAR08, ' || CHR(10) ||
'UPPER(X.category_code) SQUAL_CHAR09, ' || CHR(10) ||
'UPPER(ORGPRO.pref_functional_currency) SQUAL_CURC01, ' ||
CHR(10) ||
'UPPER(X.city) SQUAL_CHAR02, ' || CHR(10) ||
'ORGPRO.curr_fy_potential_revenue SQUAL_NUM06, ' || CHR(10) ||
'UPPER(X.country) SQUAL_CHAR07, ' || CHR(10) ||
'UPPER(X.county) SQUAL_CHAR03, ' || CHR(10) ||
'X.party_id SQUAL_NUM01, ' || CHR(10) ||
'UPPER(X.party_name_substring) SQUAL_FC01, ' || CHR(10) ||
'UPPER(X.party_name) SQUAL_CHAR01, ' || CHR(10) ||

```

```

'X.employees_total SQUAL_NUM05, ' || CHR(10) ||
'UPPER(X.postal_code) SQUAL_CHAR06, ' || CHR(10) ||
'UPPER(X.province) SQUAL_CHAR05, ' || CHR(10) ||
'X.party_id SQUAL_NUM03, ' || CHR(10) ||
'UPPER(X.sic_code_type||': '||X.sic_code) SQUAL_CHAR10, ' ||
CHR(10) ||
'UPPER(X.state) SQUAL_CHAR04, ' || CHR(10) ||
'UPPER(X.duns_number_c) SQUAL_CHAR11 ' || CHR(10) ||
',UPPER(x.party_type) Q9600_PARTY_TYPE
' ||
'from HZ_ORGANIZATION_PROFILES ORGPRO , ' || CHR(10) ||
'HZ_CONTACT_POINTS CNTPNT, ' || CHR(10) ||
'(select /*+ parallel(PARTY) parallel(SITE) parallel(LOC)
use_hash(SITE)
use_hash(PARTY) use_hash(LOC) */ ' || CHR(10) ||
'SITE.party_site_id party_site_id, Site.party_id party_id, ' ||
CHR(10) ||
'LOC.city city, LOC.country country, ' || CHR(10) ||
'LOC.county county, LOC.state state, ' || CHR(10) ||
'LOC.province province, LOC.postal_code postal_code, ' ||
CHR(10) ||
'PARTY.employees_total employees_total, ' || CHR(10) ||
'PARTY.sic_code_type sic_code_type, ' || CHR(10) ||
'PARTY.sic_code sic_code, ' || CHR(10) ||
'upper(substr(PARTY.party_name,1,1)) party_name_substring, ' ||
CHR(10) ||
'upper(PARTY.party_name) party_name, ' || CHR(10) ||
'PARTY.category_code category_code, ' || CHR(10) ||
'''HZ_PARTY_SITES'' owner_table_name, ' || CHR(10) ||
'SITE.party_site_id owner_table_id, ' || CHR(10) ||
'PARTY.duns_number_c ' || CHR(10) ||
',PARTY.party_type party_type ' || CHR(10) ||
'from HZ_PARTY_SITES SITE, ' || CHR(10) ||
'HZ_LOCATIONS LOC, HZ_PARTIES PARTY where ' || CHR(10) ||
'SITE.status = 'A' and SITE.party_id = PARTY.party_id and ' ||
CHR(10) ||
'PARTY.party_type in ('PERSON', 'ORGANIZATION') and
PARTY.status = 'A' and
' || CHR(10) ||

```

```

'LOC.location_id = SITE.location_id ' || CHR(10) ||

'union all ' || CHR(10) ||

'select /*+ parallel(PARTY) */ to_number(NULL) party_site_id , '
|| CHR(10) ||
'PARTY.party_id party_id , ' || CHR(10) ||
'PARTY.party_type party_type, ' || CHR(10) ||

'to_char(NULL) city , to_char(NULL) country , ' || CHR(10) ||

'to_char(NULL) county , to_char(NULL) state , ' || CHR(10) ||

'to_char(NULL) province , to_char(NULL) postal_code , ' ||
CHR(10) ||
'PARTY.employees_total employees_total, ' || CHR(10) ||

'PARTY.sic_code_type sic_code_type, ' || CHR(10) ||

'PARTY.sic_code sic_code, ' || CHR(10) ||

'upper(substr(PARTY.party_name,1,1)) party_name_substring, ' ||
CHR(10) ||
'upper(PARTY.party_name) party_name, ' || CHR(10) ||

'PARTY.category_code category_code, ' || CHR(10) ||

''HZ_PARTIES'' owner_table_name, ' || CHR(10) ||

'PARTY.party_id owner_table_id, ' || CHR(10) ||

'PARTY.duns_number_c ' || CHR(10) ||

'from HZ_PARTIES PARTY ' || CHR(10) ||

'where PARTY.party_type in ('PERSON', 'ORGANIZATION') and '
|| CHR(10) ||
'PARTY.status = 'A' ) X , ' || CHR(10) ||

'AR_TRX_BAL_SUMMARY arba, ' || CHR(10) ||

'hz_cust_accounts Hzc ' || CHR(10) ||

'WHERE ' || CHR(10) ||

'CNTPNT.owner_table_name(+) = X.owner_table_name and ' || CHR(10)
||
'CNTPNT.owner_table_id(+) = X.owner_table_id and ' || CHR(10) ||

'CNTPNT.status(+)='A' and CNTPNT.primary_flag(+)='Y' and ' ||
CHR(10) ||
'CNTPNT.contact_point_type(+)='PHONE' and ' || CHR(10) ||

'ORGPRO.party_id(+) = X.party_id and
nvl(ORGPRO.effective_end_date(+),sysdate+1)
> sysdate ' || CHR(10) ||

'AND arba.CUST_ACCOUNT_ID = hzc.CUST_ACCOUNT_ID and hzc.party_id
= x.party_id
';

```

- l_batch_total_sql :=
- l_batch_incr_sql := NULL
- l_batch_dea_sql := NULL
- l_incr_reassign_sql := NULL

2. Modify the R12CustomerTT.sql file with the appropriate package parameters to make the SQL meta-data change.

```
JTY_TRANS_USG_PGM_SQL_PKG.Insert_Row(
p_source_id => -1600
,p_trans_type_id => -1601
,p_program_name => 'COLLECTIONS/CUSTOMER PROGRAM'
,p_version_name => '16-JAN-06: CMA PARTY TYPE ADDED'
,p_real_time_sql => l_real_time_sql
,p_batch_total_sql => l_batch_total_sql
,p_batch_incr_sql => l_batch_incr_sql
,p_batch_dea_sql => l_batch_dea_sql
,p_incr_reassign_sql => l_incr_reassign_sql
,p_use_total_for_dea_flag => null
,p_enabled_flag => 'Y'
,retcode => retcode
,errbuf => errbuf);

dbms_output.put_line('COLLECTIONS/CUSTOMER PROGRAM retcode : ' ||
retcode);
dbms_output.put_line('COLLECTIONS/CUSTOMER PROGRAM errbuf : ' ||
errbuf);
COMMIT;

END;

/
```

3. Run the R12CustomerTT.sql file.

```
SQL> @R12CustomerTT.sql /
```

Create the Custom Matching Attribute

Create the CMA. The basis of this script is to populate all the necessary information in the following tables:

JTF_SEEDED_QUAL_ALL_B

JTF_SEEDED_QUAL_ALL_TL

JTF_QUAL_USGS_ALL

1. Ensure that there is not an existing CMA record for the unique matching attribute ID that you will use for the new CMA.

```
set serveroutput on size 999999
```

```
DECLARE
```

```
l_real_time_sql varchar2(32000) := NULL;  
l_batch_total_sql varchar2(32000) := NULL;  
l_batch_incr_sql varchar2(32000) := NULL;  
l_batch_dea_sql varchar2(32000) := NULL;  
l_incr_reassign_sql varchar2(32000);  
retcode varchar2(250);  
errbuf varchar2(1000);
```

```
BEGIN
```

```
  BEGIN
```

```
    DELETE
```

```
    FROM jtf_seeded_qual_all_b
```

```
    WHERE seeded_qual_id = -9600;
```

```
  EXCEPTION
```

```
    WHEN NO_DATA_FOUND THEN
```

```
      NULL;
```

```
  END;
```

```
  BEGIN
```

```
    DELETE
```

```
    FROM jtf_seeded_qual_all_tl
```

```
    WHERE seeded_qual_id = -9600;
```

```
  EXCEPTION
```

```
    WHEN NO_DATA_FOUND THEN
```

```
      NULL;
```

```
  END;
```

```
  BEGIN
```

```
    DELETE
```

```
    FROM jtf_qual_usgs_all
```

```
    WHERE qual_usg_id = -9600;
```

```
  EXCEPTION
```

```
    WHEN NO_DATA_FOUND THEN
```

```
      NULL;
```

```
  END;
```

2. Create the meta-data for the CMA. Follow the comments provided in the script to enter the relevant CMA information.

```

/* The following meta-data will create the custom qualifier
** for the Lead Status.
*/
JTY_CUST_QUAL_PKG.create_qual(

    /* Unique Identifier/Primary Key */
    p_seeded_qual_id          => -9600
  ,p_name                    => 'Customer Party Type (CMA)'
  ,p_description              => 'Customer Party Type (CMA)'
  ,p_language                 => 'US'

  ,/* Sales Usage: FK to
      JTF_SOURCES_ALL.SOURCE_ID*/
    p_source_id              => -1600

  ,/* Sales Lead Transaction Type: FK to
      JTF_QUAL_TYPE_USGS_ALL.QUAL_TYPE_USG_ID*/
    p_trans_type_id         => -1601

  ,p_enabled_flag            => 'N'

  ,/* QUAL_RELATION_FACTOR
      This needs to be the next prime number greater than
      the value from the following SQL:

      SELECT MAX(qual_relation_factor)
      FROM jtf_qual_usgs_all

      The first 1000 primes can be found at:
      http://primes.utm.edu/lists/small/1000.txt

      Custom qualifiers should start at the 303rd prime
      which is 1999. This is to keep 1st to 302nd primes
      for product development to seed qualifiers.
      */
    p_qual_relation_factor   => 2011

  ,/* The following set of meta-data setups determine
      ** the behaviour of the matching attribute in
      ** HTML and Excel UIs: how it is displayed; what
      ** is the LOV SQL; and, what comparison operators
      ** are supported.
      */

  ,/* CONVERT_TO_ID_FLAG: displayed qualifier value is a CHAR
      but stored qualifier value is stored as an internal id */
    p_convert_to_id_flag     => 'N'

  ,/* DISPLAY_TYPE: display type on UI (NUMERIC/CHAR) */
    p_display_type           => 'CHAR'
  ,/* LOV SQL */
    p_html_lov_sql1         =>
    ' SELECT a.meaning col1_value, a.lookup_code col2_value ' ||
CHR(10) ||
    ' FROM ar_lookups a ' || CHR(10) ||
    ' WHERE a.lookup_type = ''PARTY_TYPE'' ' || CHR(10) ||
    ' AND a.lookup_code IN (''ORGANIZATION'', ''PERSON'') ' ||
CHR(10) ||
    ' ORDER BY col1_value '

```

```

,p_html_lov_sql2          => null
,p_html_lov_sql3          => null
,p_display_sql1           => null
,p_display_sql2           => null
,p_display_sql3           => null
,p_hierarchy_type         => null

,/* Is the "=" operator supported? */
p_equal_flag              => 'Y'
,/* Is the "LIKE" operator supported? */
p_like_flag               => 'N'
,/* Is the "BETWEEN" operator supported? */
p_between_flag            => 'N'

/* Values table */
/* matching attribute comparison operator */
,p_comparison_operator    => 'q9600_cp'
,p_low_value_char         => 'q9600_low_value_CHAR'
,p_high_value_char        => null
,p_low_value_char_id      => null
,p_low_value_number       => null
,p_high_value_number      => null
,p_interest_type_id       => null
,p_primary_interest_code_id => null
,p_sec_interest_code_id   => null
,p_value1_id              => null
,p_value2_id              => null
,p_value3_id              => null
,p_value4_id              => null
,p_first_char             => null
,p_currency_code          => null

,/* Transaction Type Alias/_TRANS table column mapping */
p_qual_coll               => 'Q9600_PARTY_TYPE'

,/* TCA Classification for derivation */
p_alias_rule1             => null

,/* OP_EQL FOR BATCH-MODE ASSIGNMENT:
** Since the AS_SALES_LEADS.STATUS_CODE value is not passed to
the
** assignment API, we must the PK (SALES_LEAD_ID) to get the
** STATUS_CODE value from AS_SALES_LEADS and compare to the
** territory qualifier value
*/
p_op_eql                  =>
' (A.Q9600_PARTY_TYPE = B.q9600_low_value_CHAR AND B.q9600_cp
= ''='') '
,p_op_like                 => null
,p_op_between              => NULL
,p_op_common_where         => null

,p_real_time_select        =>
'SELECT DISTINCT A.trans_object_id, A.trans_detail_object_id,
A.txn_date, B.terr_id, B.absolute_rank, B.top_level_terr_id,
B.num_winners'
,p_real_time_from          => null
,p_real_time_where         =>
'WHERE ' || CHR(10) ||
' B.q9600_low_value_CHAR = A.Q9600_PARTY_TYPE ' || CHR(10) ||

```

```

' AND B.q9600_cp = '=' ' || CHR(10) ||
' AND B.source_id = -1600 ' || CHR(10) ||
' AND A.txn_date between B.start_date and B.end_date'

,retcode          => retcode
,errbuf           => errbuf);

dbms_output.put_line('Retcode : ' || retcode);
dbms_output.put_line('Errbuf : ' || errbuf);

ad_morg.replicate_seed_data(NULL, 'JTF', NULL);

COMMIT;

exception
when others then
dbms_output.put_line('Retcode : ' || retcode);
dbms_output.put_line('Errbuf : ' || errbuf);
raise;
end;
/

```

3. Run this script.

Script 1

```
DECLARE

CURSOR csr_real_time_sql (
    lp_source_id          NUMBER
    , lp_trans_type_id    NUMBER
    , lp_program_name     VARCHAR2
    , lp_sql_type         VARCHAR2 ) IS
SELECT real_time_sql meta_data_SQL
FROM jty_trans_usg_pgm_sql
WHERE source_id = lp_source_id
    AND trans_type_id = lp_trans_type_id
    AND program_name LIKE lp_program_name
    AND lp_sql_type = 'real_time_sql';

CURSOR csr_batch_total_sql (
    lp_source_id          NUMBER
    , lp_trans_type_id    NUMBER
    , lp_program_name     VARCHAR2
    , lp_sql_type         VARCHAR2 ) IS
SELECT batch_total_sql meta_data_SQL
FROM jty_trans_usg_pgm_sql
WHERE source_id = lp_source_id
    AND trans_type_id = lp_trans_type_id
    AND program_name LIKE lp_program_name
    AND lp_sql_type = 'batch_total_sql';

CURSOR csr_batch_incr_sql (
    lp_source_id          NUMBER
    , lp_trans_type_id    NUMBER
    , lp_program_name     VARCHAR2
    , lp_sql_type         VARCHAR2 ) IS
SELECT batch_incr_sql meta_data_SQL
FROM jty_trans_usg_pgm_sql
WHERE source_id = lp_source_id
    AND trans_type_id = lp_trans_type_id
    AND program_name LIKE lp_program_name
    AND lp_sql_type = 'batch_incr_sql';

CURSOR csr_batch_dea_sql (
    lp_source_id          NUMBER
    , lp_trans_type_id    NUMBER
    , lp_program_name     VARCHAR2
    , lp_sql_type         VARCHAR2 ) IS
SELECT batch_dea_sql meta_data_SQL
FROM jty_trans_usg_pgm_sql
WHERE source_id = lp_source_id
    AND trans_type_id = lp_trans_type_id
    AND program_name LIKE lp_program_name
    AND lp_sql_type = 'batch_dea_sql';

CURSOR csr_incr_reassign_sql (
    lp_source_id          NUMBER
    , lp_trans_type_id    NUMBER
    , lp_program_name     VARCHAR2
    , lp_sql_type         VARCHAR2 ) IS
SELECT incr_reassign_sql meta_data_SQL
```

```

FROM jty_trans_usg_pgm_sql
  WHERE source_id = lp_source_id
     AND trans_type_id = lp_trans_type_id
     AND program_name LIKE lp_program_name
     AND lp_sql_type = 'incr_reassign_sql';

CURSOR csr_related_trans_types (
      lp_source_id      NUMBER
      , lp_trans_type_id NUMBER ) IS
SELECT qtd.qual_type_id
      --, qt.name
      , pgm.program_name
      --, pgm.version_name
FROM jty_trans_usg_pgm_sql pgm
  , jtf_qual_type_denorm_v qtd
  , jtf_qual_types_all qt
  , jtf_qual_type_usgs_all qtu
  , jtf_sources_all u
WHERE pgm.enabled_flag = 'Y'
     AND pgm.source_id = qtu.source_id
     AND pgm.trans_type_id = qtu.qual_type_id
     AND qtd.qual_type_id = qt.qual_type_id
     AND qt.qual_type_id = qtu.qual_type_id
     AND qtu.source_id = u.source_id
     AND u.source_id = lp_source_id
     AND qtd.related_id = lp_trans_type_id
ORDER BY qtd.qual_type_id, pgm.program_name;

v_clob          CLOB := NULL;
v_clob_length   NUMBER := 0;

v_line_start    NUMBER := 1;
v_line_end      NUMBER := 0; -- End of the current line which will be
read
v_line_length   NUMBER := 0; -- Length of current line which will be
read
v_line          VARCHAR2(32767);
v_last_line     VARCHAR2(1) := 'N';

v_line_number   NUMBER := 0;
p_line_number   NUMBER := 0;

p_source_id     NUMBER := -1001;
p_trans_type_id NUMBER := -1002;
p_version_name  VARCHAR2(60) := SYSDATE || ' : CMA PARTY TYPE ADDED';
v_source_id     NUMBER := NULL;
v_trans_type_id NUMBER := NULL;
v_program_name  VARCHAR2(60) := NULL;
v_sql_type      VARCHAR2(60) := NULL;

v_sql_number    NUMBER := 1;

BEGIN

dbms_output.put_line('DECLARE');
dbms_output.put_line('');
dbms_output.put_line('  l_real_time_sql varchar2(32000) := NULL; ');
dbms_output.put_line('  l_batch_total_sql varchar2(32000) := NULL; ');
dbms_output.put_line('  l_batch_incr_sql varchar2(32000) := NULL; ');
dbms_output.put_line('  l_batch_dea_sql varchar2(32000) := NULL; ');

```

```

dbms_output.put_line(' l_incr_reassign_sql varchar2(32000) := NULL; ');
dbms_output.put_line('');
dbms_output.put_line(' retcode varchar2(250); ');
dbms_output.put_line(' errbuf varchar2(1000); ');
dbms_output.put_line('');
dbms_output.put_line('BEGIN');
dbms_output.put_line('');

FOR my_csr IN csr_related_trans_types(p_source_id, p_trans_type_id)
LOOP

    v_source_id := p_source_id;
    v_trans_type_id := my_csr.qual_type_id;
    v_program_name := my_csr.program_name;
    v_sql_number := 1;

    dbms_output.put_line('/* ' || v_program_name || ' */');

    WHILE (v_sql_number <= 5) LOOP

        v_line_start      := 1;
        v_line_end        := 0;
        v_line_length     := 0;
        v_clob            := NULL;
        v_line            := NULL;

        /* Get Real Time SQL */
        IF (v_sql_number = 1) THEN

            v_sql_type := 'real_time_sql';
            OPEN csr_real_time_sql(v_source_id, v_trans_type_id,
v_program_name, v_sql_type);
            FETCH csr_real_time_sql INTO v_clob;
            CLOSE csr_real_time_sql;

            /* Get Batch Total Mode SQL */
            ELSIF (v_sql_number = 2) THEN

                v_sql_type := 'batch_total_sql';
                OPEN csr_batch_total_sql(v_source_id, v_trans_type_id,
v_program_name, v_sql_type);
                FETCH csr_batch_total_sql INTO v_clob;
                CLOSE csr_batch_total_sql;

                /* Get Batch Incremental Mode SQL */
                ELSIF (v_sql_number = 3) THEN

                    v_sql_type := 'batch_incr_sql';
                    OPEN csr_batch_incr_sql(v_source_id, v_trans_type_id,
v_program_name, v_sql_type);
                    FETCH csr_batch_incr_sql INTO v_clob;
                    CLOSE csr_batch_incr_sql;

                    /* Get Batch Mode Date Effective SQL */
                    ELSIF (v_sql_number = 4) THEN

                        v_sql_type := 'batch_dea_sql';
                        OPEN csr_batch_dea_sql(v_source_id, v_trans_type_id,
v_program_name, v_sql_type);
                        FETCH csr_batch_dea_sql INTO v_clob;

```

```

CLOSE csr_batch_dea_sql;

        /* Get Batch Mode Date Effective SQL */
        ELSIF (v_sql_number = 5) THEN

            v_sql_type := 'incr_reassign_sql';
            OPEN csr_incr_reassign_sql(v_source_id, v_trans_type_id,
v_program_name, v_sql_type);
            FETCH csr_incr_reassign_sql INTO v_clob;
            CLOSE csr_incr_reassign_sql;

        END IF;

        v_clob_length := DBMS_LOB.GETLENGTH(v_clob);

        dbms_output.put_line('');
        dbms_output.put_line('');
        dbms_output.put_line('l_' || v_sql_type || ' := ');
        --dbms_output.put_line('START:
v_line_start='||TO_CHAR(v_line_start));
        --dbms_output.put_line('LENGTH:
v_clob_length='||TO_CHAR(v_clob_length));

        IF (v_clob_length = 0) THEN
            v_line := 'NULL;';
        END IF;

        dbms_output.put_line(v_line);

        /* Write the CLOB to file in chunks, each chunk
        ** is delimited by the new-line character
        */
        WHILE (v_line_start <= v_clob_length) LOOP

            v_line_number := v_line_number + 1;

            IF (p_line_number > 0 AND
                v_line_number = p_line_number) THEN
                EXIT;
            END IF;

            /* find position of next new-line character */
            v_line_end := DBMS_LOB.INSTR(v_clob, CHR(10), v_line_start,
1);

            --dbms_output.put_line('v_line_end='||TO_CHAR(v_line_end));

            IF (v_line_end = 0) THEN
                /* Last new-line reached so remaining part of CLOB to be
                ** output is from the current line start point to the
                ** end of the CLOB.
                */
                --dbms_output.put_line('Last new line reached at ' ||
TO_CHAR(v_line_start));
                v_line_end := v_clob_length + 1;

                --dbms_output.put_line('v_line_end='||TO_CHAR(v_line_end));

                v_last_line := 'Y';
            END IF;
        END LOOP;

```

```

END IF;

        /* +1 as we want to include new-line
        ** character in the output
        */
        v_line_length := v_line_end - v_line_start + 1;
        --dbms_output.put_line('LENGTH:
v_line_length='||TO_CHAR(v_line_length));

        v_line := TO_CHAR( DBMS_LOB.SUBSTR(v_clob, v_line_length-1,
v_line_start));

        --v_line := REPLACE(v_line, ',', ' ');

        v_line := REPLACE(v_line, ' ', ' ');

        IF (v_last_line = 'N') THEN
            dbms_output.put_line(' ' || v_line || ' ');
        ELSE
            dbms_output.put_line(' ' || v_line || ' ');
        END IF;

        v_line_start := v_line_start + v_line_length;

        v_last_line := 'N';

    END LOOP;

    v_sql_number := v_sql_number + 1;

    dbms_output.put_line('');
    dbms_output.put_line('');
    --dbms_output.put_line('Number of lines =
'||TO_CHAR(v_line_number));
    --dbms_output.put_line('VERY END:
v_clob_position='||TO_CHAR(v_line_start));

    END LOOP; /* WHILE (v_sql_number <= 5) LOOP */

    dbms_output.put_line('');
    dbms_output.put_line('');
    dbms_output.put_line(' JTY_TRANS_USG_PGM_SQL_PKG.Insert_Row(
');
    dbms_output.put_line(' p_source_id => ' || p_source_id );
    dbms_output.put_line(' ,p_trans_type_id => ' ||
my_csr.qual_type_id );
    dbms_output.put_line(' ,p_program_name => ' ||
my_csr.program_name || ' ');
    dbms_output.put_line(' ,p_version_name => ' || p_version_name
|| ' ');
    dbms_output.put_line(' ,p_real_time_sql => l_real_time_sql ');
    dbms_output.put_line(' ,p_batch_total_sql => l_batch_total_sql
');
    dbms_output.put_line(' ,p_batch_incr_sql => l_batch_incr_sql
');
    dbms_output.put_line(' ,p_batch_dea_sql => l_batch_dea_sql ');
    dbms_output.put_line(' ,p_incr_reassign_sql =>
l_incr_reassign_sql ');
    dbms_output.put_line(' ,p_use_total_for_dea_flag => null ');
    dbms_output.put_line(' ,p_enabled_flag => 'Y' ');

```

```

dbms_output.put_line(' ',retcode => retcode ');
    dbms_output.put_line(' ',errbuf => errbuf); ');
    dbms_output.put_line('');
    dbms_output.put_line('');
    dbms_output.put_line('dbms_output.put_line('' ||
my_csr.program_name || ' retcode : ' || retcode);');
    dbms_output.put_line('dbms_output.put_line('' ||
my_csr.program_name || ' errbuf : ' || errbuf);');
    dbms_output.put_line('');

    END LOOP; /* OPEN csr_related_trans_types */

    dbms_output.put_line('');
    dbms_output.put_line('');
    dbms_output.put_line('COMMIT;');
    dbms_output.put_line('');
    dbms_output.put_line('END;');
    dbms_output.put_line('/');

END;
```

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